

CHAPTER 4

RESULTS

4.1 Qualitative study

4.1.1 Enumeration of useful plants

With the exclusion of ornamental plants, 818 plant species in 160 families were recorded across all 12 villages of the four ethnic groups studied (Table 3; Figure 3). The use-category based Shannon-Wiener diversity index ranged between 2.31–2.46 (Table 3). Of those useful plants, 742 were securely identified and 10 with some doubt to species, 64 to genus and two only to family level. However, all incompletely identified plants represented different species. The main reason for incomplete identification was the lack of complete specimens, *e.g.*, flowering or fruiting specimens. The *Apiaceae* sp.1 has proven to be difficult to be identified irrespective of inquiries to several taxonomic experts. Likewise, *Apiaceae* sp.2, presented in homegardens in Manee Pruek and Song Khwae never bloomed and its owner has never seen its flowers.

Voucher specimens of each species are deposited in the herbarium of Ethnobotanical Research Unit, Department of Biology, Faculty of Science, Chiang Mai University and in the Queen Sirikit Botanic Garden Herbarium (QBG), Mae Rim, Chiang Mai, Thailand. Voucher numbers of each species are listed in Appendix C

Of all used plants, the most widely used plant families were Asteraceae (45 species; 5.5% of all useful species), Euphorbiaceae (39; 4.8%), Lamiaceae (34; 4.2%), Zingiberaceae (32; 3.9%), Papilionaceae (30; 3.6%), Poaceae (27; 3.3%), Araceae (25; 3.0%), Acanthaceae (24; 2.9%), and Cucurbitaceae (20; 2.4%). All these useful plant species were classified into 10 use categories, in which the medicinal use-categories was further divided into 21 sub-categories according to Cook (1995). No uses reported were for the categories of bee plants, invertebrate food, and genetic resources.

Table 3. Number of plant family, plant species and use-category based Shannon-Wiener diversity index of useful plants reported from 12 villages studied

Ethnic group	Village	#families	# species	Use-category based Shannon-Wiener diversity index
Hmong	Khang Ho	103	293	2.39
Hmong	Manee Pruek	103	271	2.33
Hmong	Song Khwae	87	273	2.35
Mien	Huai Labaoya	106	324	2.41
Mien	Huai Sanao	101	290	2.41
Mien	Santiphap	101	303	2.39
Khamu	Huai Pook	98	290	2.40
Khamu	Huai Satang	96	304	2.44
Khamu	Nam Pan	86	240	2.33
Lua	Joon	83	233	2.31
Lua	Manee Pruek2	85	247	2.34
Lua	Toei Klang	110	338	2.46
Total		160	818	

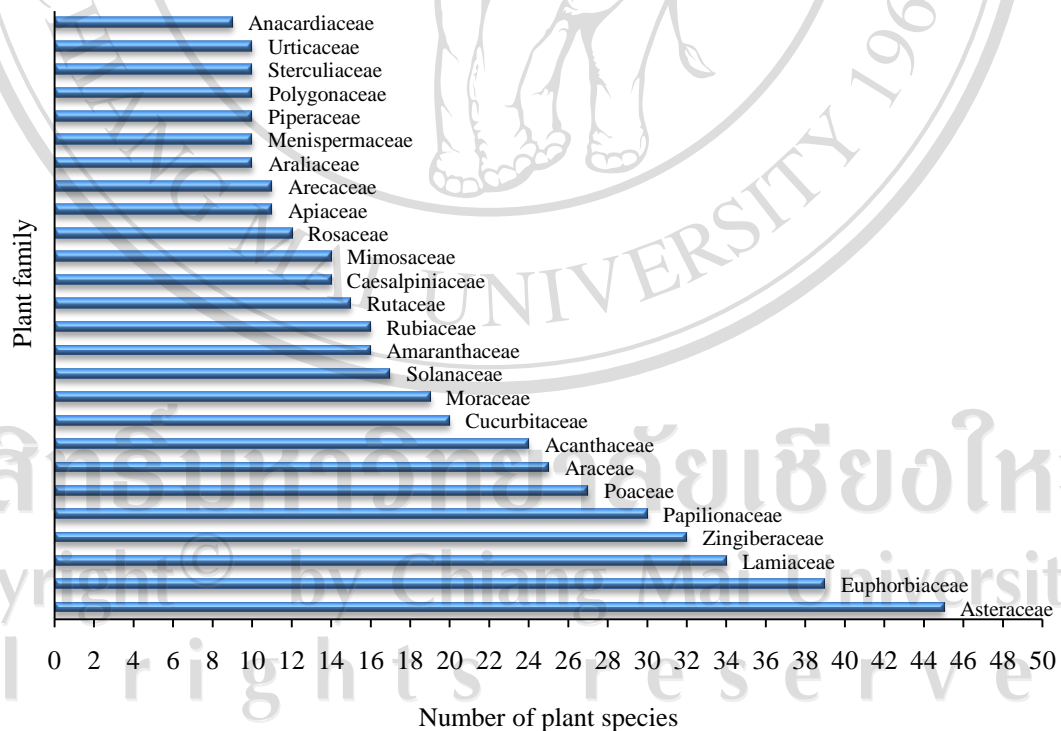


Figure 3 Number of all useful plant species in each family reported from twelve villages studied

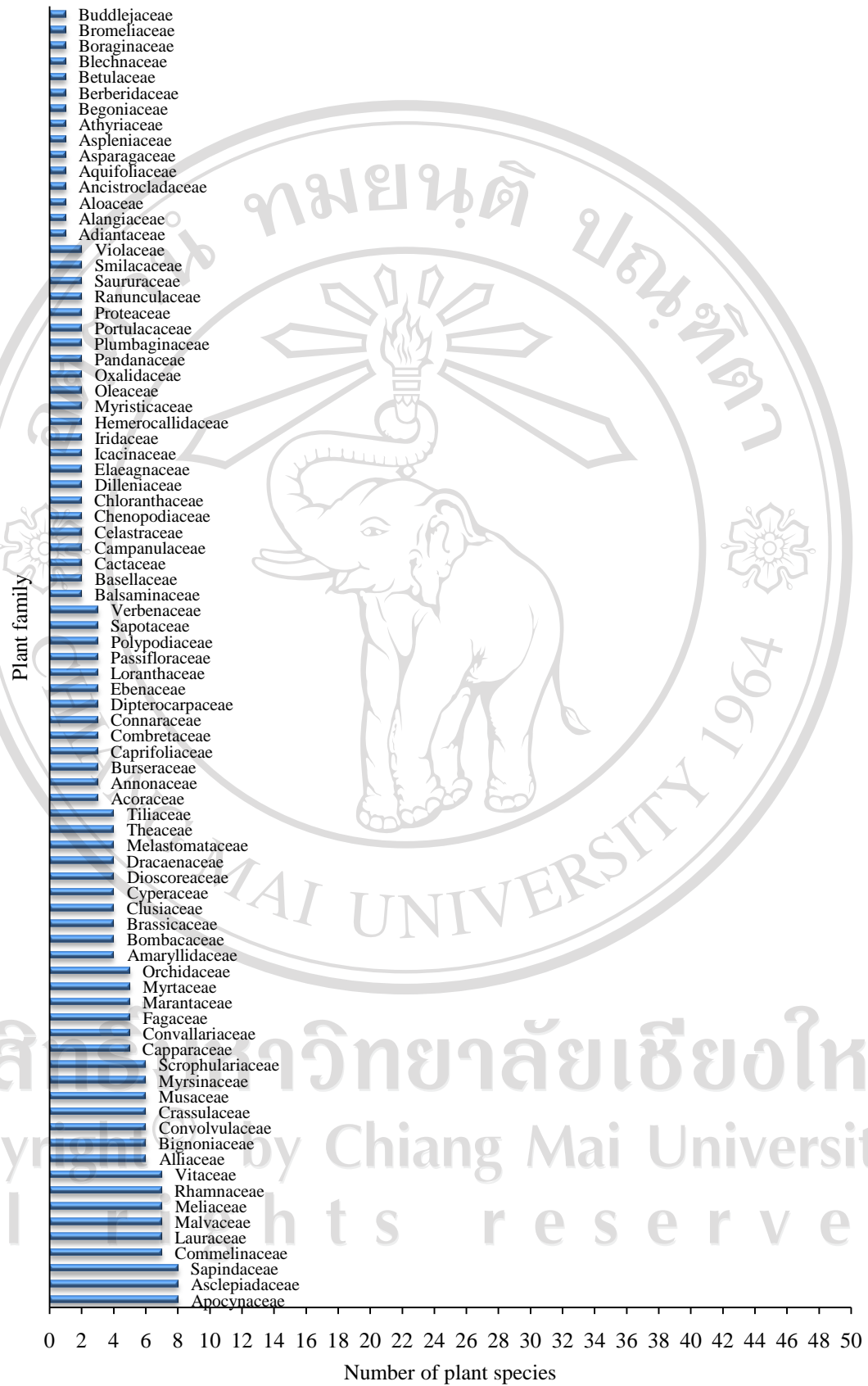


Figure 3 (continued)

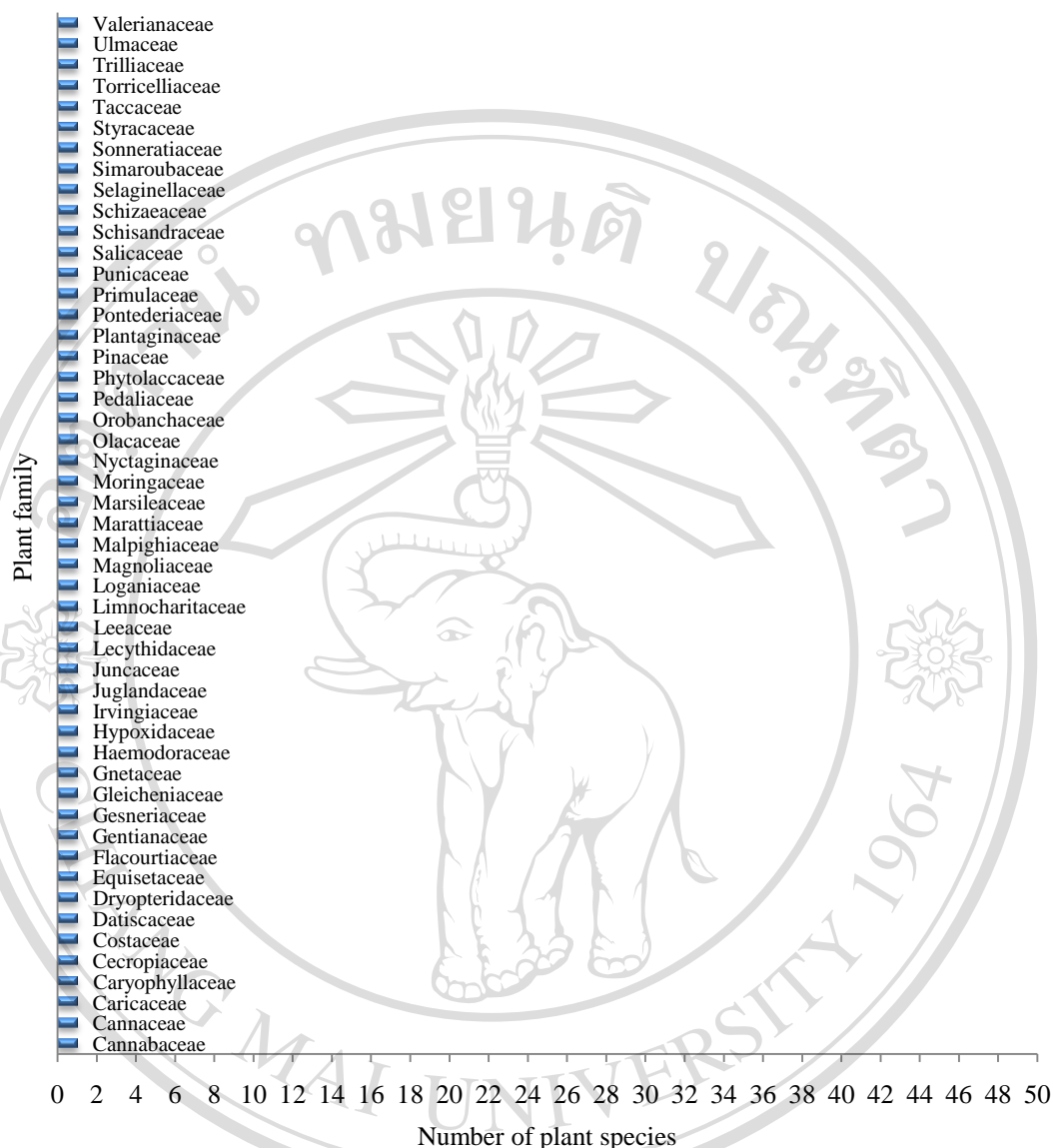


Figure 3 (continued)

4.1.1.1 Food plants

In total, 430 plant species in 110 plant families were registered as food plant across all 12 villages surveyed (Table 4; Figure 4). Of those plants, 401 were securely identified and three with some doubts to species level, 24 to genus and two only to the family level. A number of food plant species were commonly used in more than one village (Table 5). The commonly represented plant families for food plants were Asteraceae (24 species; 5.6%), Euphorbiaceae (20; 4.6%), Cucurbitaceae (19; 4.4%),

Papilionaceae (16; 3.7%), Poaceae (16; 3.7%), Lamiaceae (15; 3.5%), and Zingiberaceae (15; 3.5%).

Table 4. Number of plant families and species reported as food in each village

Ethnic group	village	#families	#species
Hmong	Khang Ho	67	153
Hmong	Manee Pruek	53	85
Hmong	Song Khwae	48	115
Mien	Huai Labaoya	70	180
Mien	Huai Sanao	71	157
Mien	Santiphap	63	133
Khamu	Huai Pook	66	153
Khamu	Huai Satang	67	183
Khamu	Nam Pan	58	142
Lua	Joon	64	145
Lua	Manee Pruek2	59	130
Lua	Toei Klang	68	171
Total		110	430

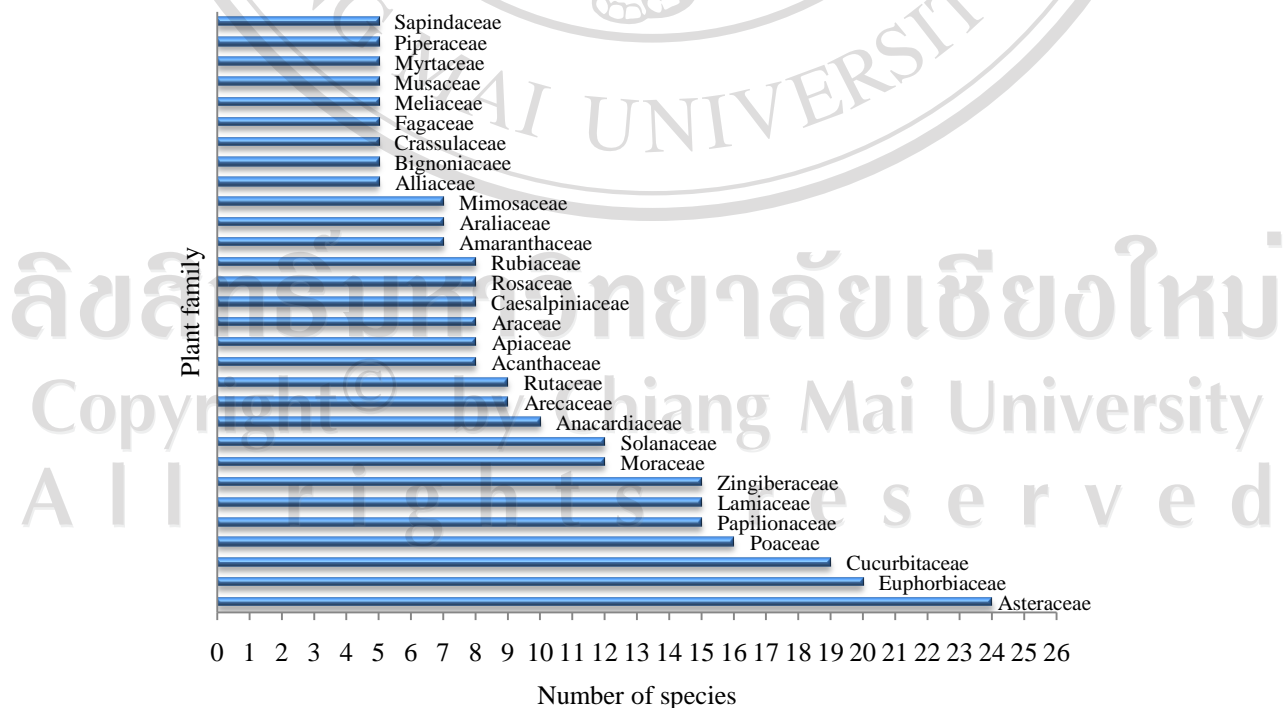


Figure 4 Number of plant species in each family reported as food in each village

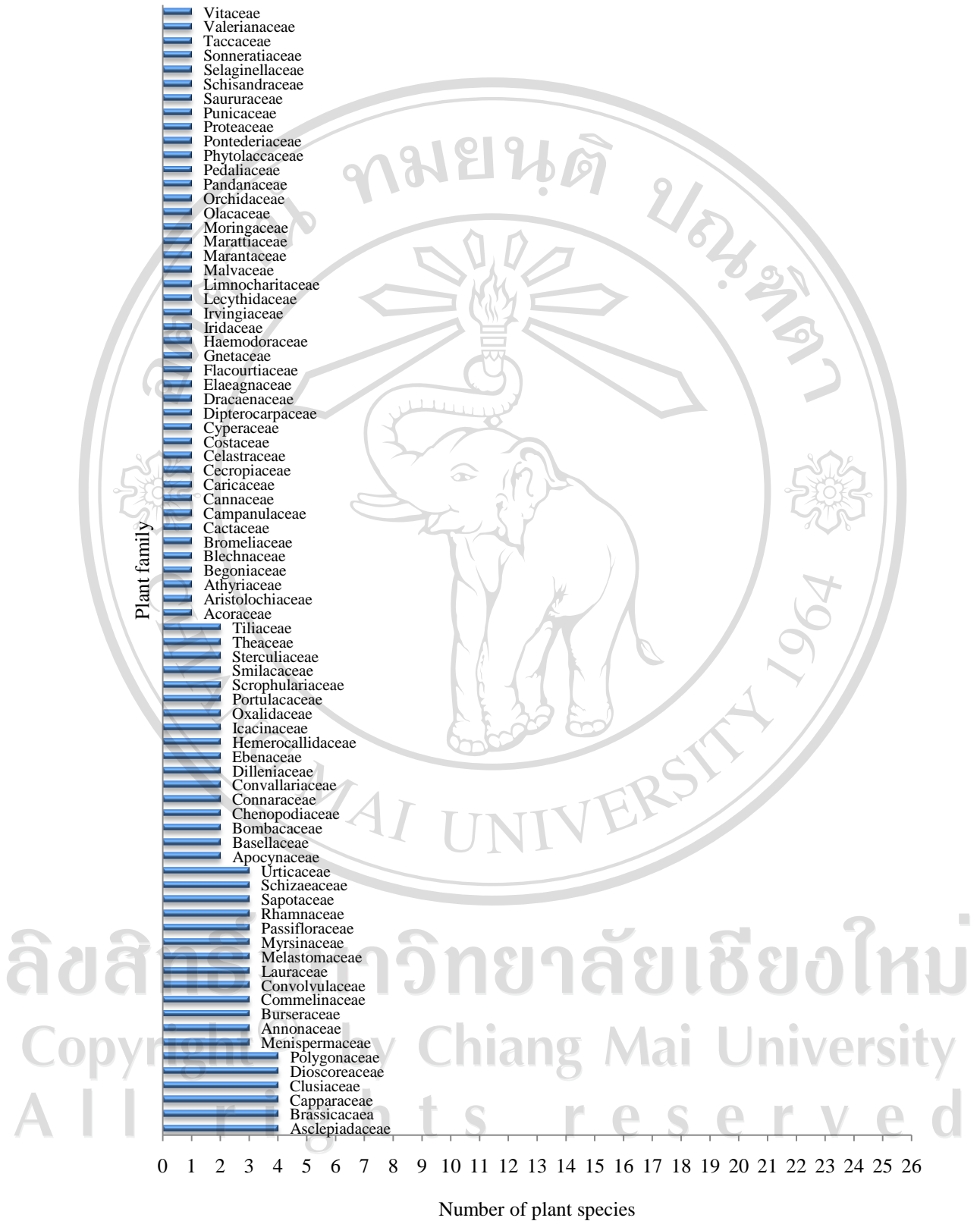


Figure 4 (continued)

Table 5. Plants used as food by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation	
Acanthaceae								
<i>Acanthus montanus</i> T.Anderson	M	HSN	D	jue jai kang	YSh	Vegetables	Fresh	
cf. <i>Eranthemum</i> sp.	K	HST	D	la riang prok	Lf	Vegetables	Cooked	
<i>Clinacanthus nutans</i> Lindau	L	JN	D	-	Lf	Vegetables	Cooked	
	H	KH	D	-	Lf	Vegetables	Cooked	
	M	HBV	D	-	Lf	Vegetables	Cooked	
	M	HSN	D	-	Lf	Vegetables	Cooked	
	M	STP	D	-	Lf	Vegetables	Cooked	
	K	HP	D	pi jae	Lf	Vegetables	Cooked	
	K	HST	D	-	Lf	Vegetables	Cooked	
	K	NP	D	pa ya yo	Lf	Vegetables	Cooked	
	<i>Dicliptera chinensis</i> Juss.	H	KH	D	tshuaj mob plaj hov	Lf	Vegetables	Cooked
					txob			
H		SK	D	tshuaj hov txob	Lf	Vegetables	Cooked	
	M	HSN	D	dia kam	Lf	Vegetables	Cooked	
<i>Pseuderanthemum palatiferum</i> (Nees) Radlk. ex Lindau	M	HSN	D	-	YLf	Vegetables	Fresh	
<i>Ruellia brittoniana</i> Leonard	H	KH	D	nkaaj	YLf	Vegetables	Cooked	
<i>Sanchezia nobilis</i> Hook.f.	H	KH	D	paaj lav nyeg	YSh	Vegetables	Cooked	
	H	MNP	D	paaj lav	YSh	Vegetables	Cooked	

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Thunbergia laurifolia</i> Lindl.	H	SK	D	paaj lav	Lf	Vegetables	Cooked
	H	SK	W	maab hwb taub	YSh/Fl	Vegetables	Cooked
	K	HST	W	lung riad	YSh/Fl	Vegetables	Cooked
	K	NP	W	lung riad	Fl/YSh	Vegetables	Cooked
	L	MNP2	W	mhue num hnae	Fl	Vegetables	Cooked
	L	TK	W	mhue num hnae	Fl	Vegetables	Cooked
	M	HSN	W	yae tam hei	Fl	Vegetables	Cooked
	M	STP	W	yae tam hei	Fl	Vegetables	Cooked
	K	HP	W	lung riad	YSh	Vegetables	Cooked
Acoraceae							
<i>Acorus calamus</i> L.	H	MNP	D	pawj a (G)/ pawj ia (W)	Lf	Condiment	Cooked
Alliaceae							
<i>Allium ascalonicum</i> L.	M	HBV	D	chong	Lf	Vegetables/Condiment	Cooked/fresh
<i>Allium cepa</i> L.	H	KH	D	-	Lf	Vegetables/Condiment	Cooked/fresh
<i>Allium chinense</i> G. Don	H	MNP	D	dlos ncej puab qab (G)/ dos ncej puab qaib (W)	Lf	Vegetables/Condiment	Cooked/fresh
	H	SK	D	tshua (G)/ dos xua (W)	Lf	Vegetables/Condiment	Cooked/fresh
	M	HSN	D	kiu	Lf	Vegetables/Condiment	Cooked/fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	L	JN	D	klu in	Lf	Vegetables/Condiment	Cooked/fresh
	L	MNP2	D	klu in	Lf	Vegetables/Condiment	Cooked/fresh
	L	TK	D	klu in	Lf	Vegetables/Condiment	Cooked/fresh
	M	HBY	D	kiu/fei kuai song	Lf	Vegetables/Condiment	Cooked/fresh
	K	HST	D	sa laab	Lf	Vegetables/Condiment	Cooked/fresh
	K	NP	D	sa laab	Lf	Vegetables/Condiment	Cooked/fresh
	M	STP	D	kiu	Lf	Vegetables/Condiment	Cooked/fresh
<i>Allium hookeri</i> Thwaites	H	MNP	D	tshua	Lf	Vegetables/Condiment	Cooked/fresh
	L	JN	D	klu brak/phak sa lab	Lf	Vegetables/Condiment	Cooked/fresh
	L	MNP2	D	klu brak/phak sa lab	Lf	Vegetables/Condiment	Cooked/fresh
	L	TK	D	klu brak/phak sa lab	Lf	Vegetables/Condiment	Cooked/fresh
<i>Allium tuberosum</i> Rottl. ex Spreng.	L	JN	D	-	Lf	Vegetables/Condiment	Cooked/fresh
	H	KH	D	tshua	Lf	Vegetables/Condiment	Cooked/fresh
	H	SK	D	tshua	Lf	Vegetables/Condiment	Cooked/fresh
	K	HST	D	sa laab	Lf	Vegetables/Condiment	Cooked/fresh
	M	HBY	D	jiao choi mao	Lf	Vegetables/Condiment	Cooked/fresh
	M	HSN	D	jiao choi mao	Lf	Vegetables/Condiment	Cooked/fresh
	M	STP	D	jiao choi mao	Lf	Vegetables/Condiment	Cooked/fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
Amaranthaceae							
<i>Alternanthera betzickiana</i> (Regel) G.Nicholson	H	KH	D	-	Lf	Vegetables	Cooked
	H	SK	D	-	Lf	Vegetables	Cooked
	M	HBV	D	dia zi	Lf	Vegetables	Cooked
	M	HSN	D	dia zi	Lf	Vegetables	Cooked
<i>Alternanthera dentata</i> (Moench) Stuhl.	H	SK	D	maab ntshaa	Lf	Vegetables	Cooked
<i>Amaranthus caudatus</i> L.	L	MNP2	W	tu to	Lf	Vegetables	Cooked
<i>Amaranthus cruentus</i> L.	L	JN	D	tu toe zo	Lf	Vegetables	Cooked
	L	MNP2	D	tu toe zo	Lf	Vegetables	Cooked
	L	TK	D	tu toe zo	Lf	Vegetables	Cooked
	H	MNP	D	txhuv ntuj lab (G)/ txhuv ntuj liab (W)	Lf	Vegetables	Cooked
	H	SK	D	txhuv ntuj lab (G)/ txhuv ntuj liab (W)	Lf	Vegetables	Cooked
<i>Amaranthus lividus</i> L.	H	SK	W	txhuv ntuj	Lf	Vegetables	Cooked
	H	KH	W	txhuv ntuj	Lf	Vegetables	Cooked
	M	HBV	W	lai lein yung	Lf	Vegetables	Cooked
	M	HSN	W	lai lein	Lf	Vegetables	Cooked
	M	STP	W	lai lein	Lf	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HP	W	la orul	Lf	Vegetables	Cooked
	K	HST	W	la orul	Lf	Vegetables	Cooked
	K	NP	W	la orul	Lf	Vegetables	Cooked
<i>Deeringia amaranthoides</i> (Lam.) Merr.	L	TK	W	tu to sa	YLf	Vegetables	Cooked
<i>Iresine herbstii</i> Hook.	H	KH	D	nkaaj lab	Lf	Vegetables	Cooked
	H	MNP	D	nkaaj lab	Lf	Vegetables	Cooked
	H	SK	D	nkaaj lab	Lf	Vegetables	Cooked
	M	HBY	D	ja hoong koon	Lf	Vegetables	Cooked
	M	HSN	D	ja hoong koon	Lf	Vegetables	Cooked
	M	STP	D	ja hoong koon	Lf	Vegetables	Cooked
Anacardiaceae							
<i>Anacardium occidentale</i> L.	M	HBY	D	muang kaai	Sd	snack food	Dried/cooked
<i>Bouea macrophylla</i> Griff.	M	HSN	D	-	Fr	Fruit	Fresh
	M	STP	D	-	Fr	Fruit	Fresh
	K	HP	D	tood prang	Fr	Fruit	Fresh
	K	HST	D	tood prang	Fr	Fruit	Fresh
	K	NP	D	tood prang	Fr	Fruit	Fresh
	L	JN	D	lum ma faang	Fr	Fruit	Fresh
	L	TK	D	lum ma faang	Fr	Fruit	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Choerospondias axillaris</i> (Roxb.) B.L.Burtt & Hill	L	MNP2	W	lum pul	Fr	Fruit	Fresh
<i>Dracontomelon dao</i> (Blanco) Merr. & Rolfe	M	HBY	W	auï piao	Sd	snack food	Dried
	H	KH	W	-	Sd	snack food	Dried
	K	HP	W	tood muk kwo	Sd	snack food	Dried
	K	HST	W	tood muk kwo	Sd	snack food	Dried
	K	NP	W	tood muk kwo	Sd	snack food	Dried
	M	STP	W	auï piao	Sd	snack food	Dried
<i>Mangifera caloneura</i> Kurz	M	HBY	W	ma mong diang	Fr	Fruit	Fresh
<i>Mangifera indica</i> L.	H	KH	D	ntsoov npuag	Fr	Fruit	Fresh
	H	MNP	D	ntsoov npuag	Fr	Fruit	Fresh
	H	SK	D	ntsoov npuag	Fr	Fruit	Fresh
	K	HP	D	tood muang	Fr	Fruit	Fresh
	K	HST	D	tood muang	Fr	Fruit	Fresh
	K	NP	D	tood muang	Fr	Fruit	Fresh
	M	HBY	D	muang	Fr	Fruit	Fresh
	M	HSN	D	muang	Fr	Fruit	Fresh
	M	STP	D	muang	Fr	Fruit	Fresh
	L	JN	D	plae muang	Fr	Fruit	Fresh
	L	MNP2	D	plae muang	Fr	Fruit	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Rhus chinensis</i> Muell.	L	TK	D	plae muang	Fr	Fruit	Fresh
	K	NP	W	tood lei yoe	Fr	snack food	Dried/mixed with salt
	L	MNP2	W	lum plae yhue	Sd	snack food	Dried/mixed with salt
<i>Spondias cytherea</i> Sonn.	K	HP	D	tood kok	Fr	Fruit	Fresh
<i>Spondias lakonensis</i> Pierre	K	HST	W	tood ue ja	Fr	Fruit	Fresh
<i>Spondias pinnata</i> Kurz	K	HP	D	tood kook	YSh/Fr	Vegetables	Fresh
	K	HST	D	tood kook	Fr	Vegetables	Fresh
	K	NP	D	tood kook	YSh/Fr	Vegetables	Fresh
	L	JN	D	plae kok	YSh	Vegetables	Fresh
	L	MNP2	D	plae kok	YSh/Fr	Vegetables	Fresh
	L	TK	D	plae kok	YSh/Fr	Vegetables	Fresh
	M	HBY	D	ma kok	YSh/Fr	Vegetables	Fresh
	M	HSN	D	ma kok	YSh/Fr	Vegetables	Fresh
	M	STP	D	ma kok	YSh/Fr	Vegetables	Fresh
	Annonaceae						
<i>Annona reticulata</i> L.	M	HBY	D	ngong gue duei	Fr	Fruit	Fresh
	H	KH	D	-	Fr	Fruit	Fresh
	L	JN	D	plae hum ngua	Fr	Fruit	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Annona squamosa</i> L.	M	HSN	D	ngong gue duei	Fr	Fruit	Fresh
	M	STP	D	ngong gue duei	Fr	Fruit	Fresh
	K	HP	D	ma lin lao/noi na lao	Fr	Fruit	Fresh
	K	HST	D	ma lin lao/noi na lao	Fr	Fruit	Fresh
	K	NP	D	ma lin lao/noi na lao	Fr	Fruit	Fresh
	H	KH	D	-	Fr	Fruit	Fresh
	K	HP	D	noi na	Fr	Fruit	Fresh
	M	HBY	D	-	Fr	Fruit	Fresh
	M	HSN	D	-	Fr	Fruit	Fresh
	K	HST	D	noi na	Fr	Fruit	Fresh
<i>Goniothalamus laoticus</i> (Finet & Gagnep.) Bân	L	JN	D	plae hum ngua	Fr	Fruit	Fresh
	M	STP	W	ta mae kiae	Fr	Fruit	Fresh
Apiaceae							
<i>Anethum graveolens</i> L.	H	KH	D	-	Lf	Vegetables	Cooked
	H	SK	D	-	Lf	Vegetables	Cooked
	K	HP	D	phak she lao	Lf	Vegetables	Cooked
	L	MNP2	D	phak bood	Lf	Vegetables	Cooked
	M	HBY	D	yian si yow	Lf	Vegetables	Cooked
	M	STP	D	-	Lf	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
Apiaceae sp.1	H	KH	D	taab kib ntsuab	Lf	Vegetables	Cooked
	H	MNP	D	taab kib ntsuab	Lf	Vegetables	Cooked
	H	SK	D	taab kib ntsuab	Lf	Vegetables	Cooked
Apiaceae sp.2	H	SK	D	tshab xqoob	Lf	Vegetables	Cooked
<i>Centella asiatica</i> (L.) Urb.	H	KH	D	gua luag qus	Lf	Vegetables	Fresh
	H	MNP	D	gua luag qus	Lf	Vegetables	Fresh
	K	HST	D	la wreln	Wp	Vegetables	Fresh
	K	NP	D	la wreln	Lf	Vegetables	Fresh
	L	MNP2	D	tu phak hnok	Lf	Vegetables	Fresh
	M	HBV	D	hia fad	Lf	Vegetables	Fresh
	M	HSN	D	hia fad	Lf	Vegetables	Fresh
	M	STP	D	hia fad	Lf	Vegetables	Fresh
	K	HP	D	la wreln	Lf	Vegetables	Fresh
	<i>Coriandrum sativum</i> L.	H	KH	D	zaub txhwb qab	Lf	Vegetables/condiment
H		MNP	D	zaub txhwb qab	Lf	Vegetables/condiment	Cooked/fresh
H		SK	D	zaub txhwb qab	Lf	Vegetables/condiment	Cooked/fresh
K		HP	D	phak chee	Lf	Vegetables/condiment	Cooked/fresh
K		HST	D	phak chee	Lf	Vegetables/condiment	Cooked/fresh
L		JN	D	phak chee	Lf	Vegetables/condiment	Cooked/fresh
L		MNP2	D	phak chee	Lf	Vegetables/condiment	Cooked/fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	L	TK	D	phak chee	Lf	Vegetables/condiment	Cooked/fresh
	M	HBY	D	yian si	Lf	Vegetables/condiment	Cooked/fresh
	M	HSN	D	yian si	Lf	Vegetables/condiment	Cooked/fresh
	M	STP	D	yian si	Lf	Vegetables/condiment	Cooked/fresh
<i>Eryngium foetidum</i> L.	L	JN	D	pom per	Lf	Vegetables	Fresh
	H	SK	D	zaub nplaig ug	Lf	Vegetables	Fresh
<i>Hydrocotyle sibthorpioides</i> Lam.	H	KH	D	guav hnug qub	Lf	Vegetables	Cooked
	H	MNP	D	guav hnug qub	Lf	Vegetables	Cooked
	H	SK	D	nplooj nub qub	Lf	Vegetables	Cooked
<i>Hydrocotyle umbellata</i> L.	K	NP	D	phak nok	Lf	Vegetables	Fresh
Apocynaceae							
<i>Aganosma marginata</i> G.Don	M	HSN	W	ngong jong hei	Lf	Tea substitute	Boiled
	L	JN	W	plae due dik	YSh	Vegetables	Cooked
<i>Amalocalyx microlobus</i> Pierre ex Spire	M	HBY	W	jae pei piao	Fr	snack food	Fresh
	H	KH	W	txwv - tooj plab	Fr	snack food	Fresh
	M	HSN	W	jae pei piao	Fr	snack food	Fresh
	K	HP	W	toe mi ring	Fr	snack food	Fresh
	L	JN	W	mhue plae waad	Fr	snack food	Fresh
	L	MNP2	W	mhue plae waad	Fr	snack food	Fresh
	L	TK	W	mhue plae waad	Fr/FI	snack food	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HST	W	plae hra hae	Fr	snack food	Fresh
Araceae							
<i>Aglaonema simplex</i> Blume	M	HBY	W	bon doe	St	Vegetables	Burned
	M	STP	W	how hab doe	St	Vegetables	Burned
	L	TK	W	plae kue sa	St	Vegetables	Burned
<i>Amorphophallus</i> sp.	H	KH	D	qos nphoom	St	Vegetables	Cooked
	H	SK	D	qos nphoom	St	Vegetables	Cooked
	K	HP	D	pik	St	Vegetables	Cooked
	K	HST	D	toe tae	Rt	Vegetables	Cooked
	K	NP	D	book	St	Vegetables	Cooked
	L	JN	D	book	St	Vegetables	Cooked
	L	MNP2	D	plae bok	Rh	Vegetables	Cooked
	L	TK	D	book	St	Vegetables	Cooked
	M	HBY	D	ta pow doi	St	Vegetables	Cooked
	M	HSN	D	ta pow doi	St	Vegetables	Cooked
<i>Colocasia esculenta</i> (L.) Schott	K	HP	D	chaloo	Co	snack food	Cooked
	K	HST	D	chaloo	Co	snack food	Cooked
	K	NP	D	chaloo	Co	snack food	Cooked
	L	JN	D	zao	Co	snack food	Cooked
	L	MNP2	D	zao	Co	snack food	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	L	TK	D	zao	Co	snack food	Cooked
	H	KH	D	qos paj ntaub	Co	snack food	Cooked
	H	MNP	D	qos paj ntaub	Co	snack food	Cooked
	H	SK	D	qos paj ntaub	Co	snack food	Cooked
	M	HBY	D	how kiae	Co	snack food	Cooked
	M	HSN	D	how kiae	Co	snack food	Cooked
	M	STP	D	how kiae	Co	snack food	Cooked
<i>Colocasia esculenta</i> (L.) Schott (variety called in Thai as “Bon”)	L	JN	D	bon	Pt/Lf	Vegetables	Cooked
	M	HBY	D	how hab	Pt/Lf	Vegetables	Cooked
	M	HSN	D	how hab	Pt/Lf	Vegetables	Cooked
<i>Colocasia gigantea</i> (Blume) Hook.f.	L	JN	D	toon	Pt	Vegetables	Cooked/Fresh
	K	HP	D	tood ka truen	Pt	Vegetables	Cooked/Fresh
	K	HST	D	tood ka truen	Pt	Vegetables	Cooked/Fresh
	K	NP	D	tood ka truen	Pt	Vegetables	Cooked/Fresh
	L	MNP2	D	piu	Pt	Vegetables	Cooked/Fresh
	L	TK	D	pyok	Pt	Vegetables	Cooked/Fresh
	H	KH	D	kav ywm	Pt	Vegetables	Cooked/Fresh
	H	MNP	D	kav ywm	Pt	Vegetables	Cooked/Fresh
	H	SK	D	kav ywm	Pt	Vegetables	Cooked/Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Lasia spinosa</i> (L.) Thwaites	M	HBY	D	kong how	Pt	Vegetables	Cooked/Fresh
	M	HSN	D	kong how	Pt	Vegetables	Cooked/Fresh
	M	STP	D	kong how	Pt	Vegetables	Cooked/Fresh
	K	HST	W	sa roe tok	YSh	Vegetables	Cooked/Fresh
	K	NP	W	sa roe tok	Lf/YSh	Vegetables	Cooked/Fresh
	L	JN	W	ba phak nham	YLf	Vegetables	Cooked/Fresh
	L	TK	W	tu phak nham	Lf/YSh	Vegetables	Cooked/Fresh
	M	HBY	W	bon yim	YLf	Vegetables	Cooked/Fresh
	K	HP	W	sa roe tok	YLf	Vegetables	Cooked/Fresh
<i>Pothos scandens</i> L.	H	SK	W	-	YLf	Vegetables	Cooked/Fresh
	M	HSN	W	ha dia ngang	Wp	Tea substitute	Boiled
Araliaceae							
<i>Acanthopanax trifoliatum</i> Merr.	L	JN	D	ba pam	YSh	Vegetables	Fresh
	K	HST	D	phak pam	Lf	Vegetables	Fresh
	K	HST	D	phak pam	YSh	Vegetables	Fresh
	K	NP	D	phak pam	YSh	Vegetables	Fresh
	L	MNP2	D	phak pam	YSh	Vegetables	Fresh
	L	TK	D	phak pam	YSh	Vegetables	Fresh
<i>Aralia armata</i> Seem.	L	TK	W	koo tong talw	YSh/Fl	Vegetables	Cooked
	L	MNP2	W	koo tong talw	YSh	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Macropanax cf. dispersum</i> (Bl.) Kuntze	H	MNP	W	-	YSh	Vegetables	Cooked
	L	MNP2	W	lum pae piae	YSh/YLf	Vegetables	Fresh
	L	TK	W	lum pae piae	YLf	Vegetables	Cooked
<i>Polyscias balfouriana</i> L.H.Bailey	L	JN	D	-	Lf	Vegetables	Fresh
<i>Polyscias fruticosa</i> Harms	K	HP	D	leb krood	Lf	Vegetables	Fresh
	K	HST	D	leb krood	Lf	Vegetables	Fresh
	K	NP	D	leb krood	Lf	Vegetables	Fresh
	L	JN	D	leb krood	Lf	Vegetables	Fresh
	L	TK	D	leb krood	Lf	Vegetables	Fresh
	M	HBY	D	-	Lf	Vegetables	Fresh
	M	HSN	D	-	YSh	Vegetables	Fresh
<i>Polyscias pinnata</i> Forst.	K	HP	D	leb krood	YSh/YLf	Vegetables	Fresh
<i>Trevesia palmata</i> Vis.	K	HST	W	tood tang pue	Yfr	Vegetables	Cooked
	K	NP	W	tood tang	Fl/Yfr	Vegetables	Cooked
	L	MNP2	W	lum plae poa	Fr/Infl	Vegetables	Cooked
	L	TK	W	lum plae poa	YFr/YLf	Vegetables	Cooked
	M	HBY	W	show fim	Fl buds	Vegetables	Cooked
	K	HP	W	tood pue	YFr	Vegetables	Cooked
	M	STP	W	show fim	Fl/Fr	Vegetables	Cooked
	L	JN	W	lum plae poa	Fl buds	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
Arecaceae							
<i>Arenga pinnata</i> Merr.	K	HST	D	tao	St	Vegetables	Cooked
	M	HBV	D	tao	Fr	Fruit	Fresh
	K	HP	D	tao	Sd	snack food	Endosperm extracted
	K	NP	D	tao	St	Vegetables	Cooked
	L	JN	D	plae tao	St	Vegetables	Cooked
	L	MNP2	D	plae tao	Sd	snack food	Endosperm extracted
	L	TK	D	plae tao	Sd	snack food	Endosperm extracted
	M	HSN	D	tao	Sd	snack food	Endosperm extracted
	M	STP	D	tao	Sd	snack food	Endosperm extracted
	<i>Calamus rotang</i> L.	H	KH	D	kav theej ab	St	Vegetables
H		SK	D	kav theej ab	St	Vegetables	Cooked
K		HST	D	plong jung	St	Vegetables	Cooked
L		JN	D	kad	St	Vegetables	Cooked
L		MNP2	D	kad	St	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Calamus</i> sp.	L	TK	D	kad	Yst	Vegetables	Cooked
	K	HP	D	plong jung	St	Vegetables	Cooked
	K	NP	D	plong jung	St	Vegetables	Cooked
	M	STP	D	dang im	Yst	Vegetables	Cooked
	H	SK	D	kav theej	St	Vegetables	Cooked
	K	HP	D	plong jik	St	Vegetables	Cooked
	K	HST	D	plong jik	Yst	Vegetables	Cooked
	K	NP	D	plong jik	St	Vegetables	Cooked
	L	JN	D	kad	St	Vegetables	Cooked
	L	TK	D	kad	St	Vegetables	Cooked
	M	HBY	D	dang sob	YSh	Vegetables	Cooked
	M	HSN	D	dang	Yst	Vegetables	Cooked
	M	STP	D	dang wei	St	Vegetables	Cooked
M	STP	D	dang	Yst	Vegetables	Cooked	
<i>Caryota gigas</i> Hahn ex Hadel	H	KH	W	txoob	St	Vegetables	Cooked
<i>Caryota mitis</i> Lour.	L	TK	W	lum chook kue	St	Vegetables	Cooked
	H	KH	D	-	St	Vegetables	Cooked
	L	JN	D	lum chook	St	Vegetables	Cooked
	L	TK	W	lum bla	St	Vegetables	Cooked
	M	HBY	W	tong kai	St	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Caryota urens</i> L.	K	HST	W	tood chook	St	Vegetables	Cooked
	K	NP	D	kueng	YSt	Vegetables	Cooked
	L	MNP2	W	lum chook	St	Vegetables	Cooked
	M	HSN	D	jong	YSt	Vegetables	Cooked
	M	STP	D	jong	St	Vegetables	Cooked
	L	TK	W	lum chook	St	Vegetables	Cooked
<i>Cocos nucifera</i> L.	K	NP	W	tood kueng	St	Vegetables	Cooked
	K	HST	W	tood kueng	YSt	Vegetables	Cooked
	H	KH	D	txwv mav poj	Fr	Fruit	Fresh
	H	SK	D	txwv mav poj	Fr	Fruit	Fresh
	K	HP	D	plae pao	Fr	Fruit	Fresh
	K	HST	D	plae pao	Fr	Fruit	Fresh
	K	NP	D	plae pao	Fr	Fruit	Fresh
	L	MNP2	D	plae pao	Fr	Fruit	Fresh
	M	HBV	D	piao long jong	Fr	Fruit	Fresh
	M	HSN	D	piao long jong	Fr	Fruit	Fresh
	M	STP	D	piao long jong	Fr	Fruit	Fresh
	L	JN	D	plae pao	Fr	Fruit	Fresh
<i>Livistona speciosa</i> Kurz	L	TK	D	plae pao	Fr	Fruit	Fresh
	H	KH	D	kuv yim	St	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	M	HBV	D	ki nom	Fr	snack food	Cooked
	M	HSN	D	ki nom	Fr	snack food	Cooked
	M	STP	D	ki nom	Fr	snack food	Cooked
	K	NP	D	ko	Fr	snack food	Cooked
	L	JN	D	ko	St	Vegetables	Cooked
	L	TK	D	ko	Fr	snack food	Cooked
	K	HST	D	tood tra thae	Fr	snack food	Cooked
<i>Salacca edulis</i> Reinw.	K	HST	D	sala	Fr	Fruit	Fresh
	H	KH	D	-	Fr	Fruit	Fresh
Aristolochiaceae							
<i>Aristolochia tagala</i> Cham.	L	TK	W	mhue peng heng	YSh/YLf	Vegetables	Cooked
Asclepiadaceae							
<i>Dregea volubilis</i> Benth. ex Hook.f	K	HST	D	muan moo	YSh	Vegetables	Cooked
	K	HP	D	muan moo	YSh	Vegetables	Cooked
	L	MNP2	D	tu phak muan	YSh	Vegetables	Cooked
	L	TK	D	tu phak muan	YSh	Vegetables	Cooked
	L	JN	D	ba muan	YSh/Fl	Vegetables	Cooked
<i>Gymnema inodorum</i> Decne.	H	KH	D	-	YSh	Vegetables	Cooked
	K	NP	D	la phak zeng	YSh	Vegetables	Cooked
	L	JN	D	be phak zeng	YSh	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	L	TK	D	phak muan noi	YSh	Vegetables	Cooked
	K	HP	D	la phak zeng	YSh	Vegetables	Cooked
	K	HST	D	la phak zeng	YSh	Vegetables	Cooked
<i>Marsdenia</i> sp.	H	MNP	W	-	Fr	snack food	Fresh
	L	MNP2	W	plae keing bua	Fr	snack food	Fresh
	L	TK	W	plae keing bua	Fr	snack food	Fresh
<i>Telosma minor</i> Craib	H	KH	W	-	YSh	Vegetables	Cooked
	K	NP	W	phak salid	YSh	Vegetables	Cooked
	L	JN	D	ba salid	YSh	Vegetables	Cooked
Asteraceae							
<i>Achillea millefolium</i> L.	H	MNP	D	suv tav ntseg (G)/suv tav ntse (W)	YSh	Vegetables	Cooked
<i>Artemisia lactiflora</i> Wall. ex DC.	M	HSN	D	dia go	Lf	Vegetables	Cooked
	M	HBV	D	dia go	Lf	Vegetables	Cooked
	H	SK	D	taab kib luj	Lf	Vegetables	Cooked
	H	KH	D	taab kib lab luj	Lf	Vegetables	Cooked
	H	MNP	D	taab kib lab luj	Lf	Vegetables	Cooked
	M	STP	D	dia go	Lf	Vegetables	Cooked
<i>Blumea lanceolaria</i> Druce	M	HBV	D	ping dia ma	YLf	Vegetables	Fresh
	M	HSN	D	ping dia ma	YLf	Tea substitute	Boiled

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HP	D	la sariam jang	YSh/YLf	Vegetables	Fresh
	L	JN	D	-	YLf	Vegetables	Fresh
	L	TK	D	pu lei sa	Lf	Vegetables	Fresh
	K	HST	D	mad tra yong	Lf	Vegetables	Fresh
	K	NP	D	mad tra yong	Lf	Vegetables	Fresh
<i>Conyza sumatrensis</i> (Retz.) E. Walker	K	NP	W	la pa lung	YSh	Vegetables	Cooked
<i>Crassocephalum crepidioides</i> (Benth.) S. Moore	K	HP	W	kun ook	YSh	Vegetables	Cooked
	K	HST	W	la muk tab	YSh	Vegetables	Cooked
	L	TK	W	yun yao	YSh	Vegetables	Cooked
	H	MNP	W	nrog rog	YSh	Vegetables	Cooked
	H	SK	W	nrog rog	YSh	Vegetables	Cooked
	M	STP	W	chiang hoong mia	YSh	Vegetables	Cooked
<i>Dendranthema indica</i> Des Moul.	H	MNP	D	taab kib miv	Lf	Vegetables	Cooked
	H	KH	D	taab kib miv	Lf	Vegetables	Cooked
	H	SK	D	taab kib miv	Lf	Vegetables	Cooked
	M	HSN	D	dia dang	Lf	Vegetables	Cooked
<i>Eupatorium fortunei</i> Turcz.	H	KH	D	tsham laj	Lf	Vegetables	Cooked
	H	MNP	D	tsham laj	Lf	Vegetables	Cooked
	H	SK	D	tsham laj	Lf	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Eupatorium stoechadosmum</i> Hance	H	KH	D	-	Lf	Vegetables	Fresh
	H	SK	D	-	Lf	Vegetables	Cooked
	K	HST	D	la thri	Lf	Vegetables	Fresh
	K	NP	D	la kri	Lf	Vegetables	Fresh
<i>Gynura bicolor</i> DC.	H	SK	D	tshuaj rog	YLf	Vegetables	Cooked
	H	KH	D	tshuaj rog	YLf	Vegetables	Cooked
	M	HBY	D	jae or mia zi	YLf	Vegetables	Cooked
	M	HSN	D	jae or mia zi	YLf	Vegetables	Cooked
	M	STP	D	jae or mia zi	YLf	Vegetables	Cooked
<i>Gynura cf. segetum</i> Merr.	H	MNP	D	tshuaj rog	Lf	Vegetables	Cooked
	H	SK	D	tshuaj rog qab	YLf	Vegetables	Cooked
	M	HSN	D	jae or jung	YLf	Vegetables	Cooked
	M	HSN	D	jae or jung	YLf	Vegetables	Cooked
<i>Gynura crepidioides</i> Benth.	M	HSN	D	jae or jung	Lf	Vegetables	Cooked
	M	HBY	D	jae or jung	YLf	Vegetables	Cooked
	M	STP	D	jae or jung	YLf	Vegetables	Cooked
<i>Gynura longifolia</i> Kerr	H	KH	D	tshuaj rog	YLf	Vegetables	Cooked
	H	SK	D	tshuaj rog	YLf	Vegetables	Cooked
	M	HBY	D	jae or mia low	YLf	Vegetables	Cooked
	M	STP	D	jae or mia low	YLf	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation	
<i>Gynura nepalensis</i> DC.	M	HSN	D	jae or mia low	Lf	Vegetables	Cooked	
	H	KH	D	tshuaj rog ntsuab	Lf	Vegetables	Cooked	
	H	SK	D	tshuaj rog ntsuab	YLf	Vegetables	Cooked	
	M	HBY	D	jae or mia pae	YLf	Vegetables	Cooked	
	M	HSN	D	jae or mia	Lf	Vegetables	Cooked	
<i>Gynura procumbens</i> Merr.	M	STP	D	jae or mia pae	YLf	Vegetables	Cooked	
	H	SK	D	tshuaj rog ntsuab	YLf	Vegetables	Cooked	
	K	NP	D	-	YLf	Vegetables	Cooked	
	L	TK	D	-	YLf	Vegetables	Cooked	
	M	HBY	D	jae or mia pae	YLf	Vegetables	Cooked	
	M	STP	D	jae or mia pae	YLf	Vegetables	Cooked	
	M	STP	D	jae or mia pae	YLf	Vegetables	Cooked	
	M	HSN	D	jae or mia pae	YLf	Vegetables	Cooked	
	<i>Gynura</i> sp.1	H	MNP	D	tshuaj rog gus	Lf	Vegetables	Cooked
	<i>Gynura</i> sp.2	H	MNP	D	tshuaj rog gus	Lf	Vegetables	Cooked
<i>Gynura</i> sp.3	M	HBY	D	jae or mia	YLf	Vegetables	Cooked	
<i>Gynura</i> sp.4	L	MNP2	W	yun mud tad	YLf	Vegetables	Cooked	
<i>Helianthus tuberosus</i> L.	H	KH	D	kauv lim	Rt	Vegetables	Cooked	
<i>Kalimeris indica</i> Sch.Bip.	H	KH	D	qhua txhais	Lf	Vegetables	Cooked	
	H	MNP	D	qhua txhais	Lf	Vegetables	Cooked	

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	H	SK	D	qhua txhais	Lf	Vegetables	Cooked
	M	HSN	D	ha dia kang	Lf	Vegetables	Cooked
	M	STP	D	ha dia kang	Lf	Vegetables	Cooked
<i>Ligularia dentata</i> (A.Gray) Hara	H	SK	D	kib tawg nees	Lf	Vegetables	Cooked
<i>Pterocypsela</i> sp.	H	KH	D	zaub nplaig nab	Lf	Vegetables	Cooked/fresh
	H	SK	D	zaub nplaig nab	Lf	Vegetables	Cooked/fresh
	K	HP	D	phak kad plia	Lf	Vegetables	Cooked/fresh
	M	HBV	D	lai mai	Lf	Vegetables	Cooked/fresh
	M	HSN	D	lai mai	Lf	Vegetables	Cooked/fresh
	M	STP	D	lai mai	Lf	Vegetables	Cooked/fresh
<i>Spilanthes acmella</i> (L.) Murr.	K	HST	D	phak ped	YSh/Lf	Vegetables	Cooked
	K	HST	D	phak ped	YSh	Vegetables	Cooked
	K	NP	D	phak ped	Lf	Vegetables	Cooked
	L	JN	D	ba plaad	YSh	Vegetables	Cooked
<i>Vernonia parishii</i> Hook.f.	L	TK	W	lum jib wib	Ylf	Vegetables	Cooked
Athyriaceae							
<i>Diplazium esculentum</i> (Retz.) Sw.	H	KH	W	zaub suab	YSh	Vegetables	Cooked
	K	HP	W	la zule	YSh/YLf	Vegetables	Cooked
	K	HST	W	la zule	YSh	Vegetables	Cooked
	K	NP	W	la zule	YSh	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	L	MNP2	W	tu chone	YSh/YLf	Vegetables	Cooked
	L	TK	W	tu chone	YSh/YLf	Vegetables	Cooked
	M	HBY	W	yai juad	YSh	Vegetables	Cooked
	M	HSN	W	yai juad	YSh	Vegetables	Cooked
Basellaceae							
<i>Anredera cordifolia</i> (Ten.) Steenis	H	KH	D	xaab txhim maab (G)/ xab txhim hmab (W)	Lf	Vegetables	Cooked
	H	MNP	D	xaab txhim maab (G)/ xab txhim hmab (W)	Lf/Blb	Vegetables	Cooked
	H	SK	D	xaab txhim maab (G)/ xab txhim hmab (W)	Lf	Vegetables	Cooked
	M	HBY	D	jian pa miao dia	Lf	Vegetables	Cooked
	M	HSN	D	dia joon	Lf	Vegetables	Cooked
	M	STP	D	dia joon	LF	Vegetables	Cooked
<i>Basella alba</i> L.	L	JN	D	phak plung	YSh	Vegetables	Cooked
	H	KH	D	maab ntsha ntsuab	Lf	Vegetables	Cooked
	H	SK	D	maab ntsha ntsuab	YSh	Vegetables	Cooked
	K	HP	D	sa ling	Lf	Vegetables	Cooked
	K	HST	D	sa ling	YSh	Vegetables	Cooked
	K	NP	D	sa ling	YSh	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	L	TK	D	phak plung	YSh	Vegetables	Cooked
	M	HSN	D	dia joon pae	YSh	Vegetables	Cooked
	M	STP	D	dia joon pae	YSh	Vegetables	Cooked
<i>Basella alba</i> L. (red variety)	M	HBY	D	dia joon zi	YSh	Vegetables	Cooked
	M	HSN	D	dia joon zi	Lf	Vegetables	Cooked
Begoniaceae							
<i>Begonia longifolia</i> Blume	H	SK	W	qaub dleg (G)/ gaub deg (W)	Lf/YSh	snack food	Fresh
	K	HST	W	jud ue chueng	Lf	Vegetables	Fresh
	L	MNP2	W	mhue chaap/tu koei	Lf/Pt	Vegetables	Fresh
	H	MNP	W	qaub dleg (G)/ gaub deg (W)	Lf	Vegetables	Fresh
Bignoniaceae							
<i>Fernandoa adenophylla</i> (Wall. ex G.Don) Steenis	L	JN	W	lum kae	Fl	Vegetables	Cooked
	H	KH	W	paaj ab	Fl	Vegetables	Cooked
	K	HST	W	tood rang jaak	Fl	Vegetables	Cooked
	M	HBY	W	diang piang	Fl	Vegetables	Cooked
	K	HP	W	tood rang jaak	Fl	Vegetables	Cooked
	L	TK	W	lum kae	Fl	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Markhamia stipulata</i> (Wall.) Seem. ex K. Schum.	L	TK	W	lum yang kae	Fl/YFr	Vegetables	Cooked
<i>Oroxylum indicum</i> (L.) Benth. ex Kurz	M	HBY	W	ta dao diang	Fl	Vegetables	Cooked
	L	JN	D	plae lid mai	Fr	Vegetables	Cooked
	M	STP	D	diang jang	Fr	Vegetables	Cooked
	H	KH	D	nplaig zaaj	Fr	Vegetables	Cooked
	K	HP	D	tood lung lha	Fr	Vegetables	Cooked
	K	HST	D	tood lung lha	Fr	Vegetables	Cooked
	M	HBY	D	diang jang	Fr	Vegetables	Cooked
	M	HSN	D	diang jang	Fr	Vegetables	Cooked
	K	NP	D	tood lung lha	Fr	Vegetables	Cooked
<i>Radermachera ignea</i> (Kurz) Steenis	K	HP	W	tood phla tao	Fl	Vegetables	Cooked
	K	HST	W	tood rang trak	Fl	Vegetables	Cooked
	M	HBY	W	diang piang dong	Fl	Vegetables	Cooked
	M	HSN	W	diang piang dong	Fl	Vegetables	Cooked
<i>Stereospermum neuranthum</i> Kurz	M	HBY	W	ta dao diang	Fl	Vegetables	Cooked
Blechnaceae							
<i>Stenochlaena palustris</i> Bedd.	M	HSN	D	yai jaud zi	YSh	Vegetables	Cooked
Bombacaceae							
<i>Durio zibethinus</i> Murr.	K	NP	D	tu rian	Fr	Fruit	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HP	D	tu rian	Fr	Fruit	Fresh
<i>Pachira aquatica</i> Aubl.	L	MNP2	D	-	Sd	snack food	Fresh
	H	KH	D	-	Sd	snack food	Fresh
Brassicaceae							
<i>Brassica juncea</i> (L.) Czern.	M	HBV	D	lai jai	Lf	Vegetables	Cooked
	M	STP	D	lai jai	Lf	Vegetables	Cooked
	H	KH	D	zaub ntsuab	Lf	Vegetables	Cooked
	H	MNP	D	zaub ntsuab	Lf	Vegetables	Cooked
	L	TK	D	phak kad	Lf	Vegetables	Cooked
	M	HSN	D	lai jai	Lf	Vegetables	Cooked
	L	JN	D	phak kad	Lf	Vegetables	Cooked
	K	HP	D	ma rhi ta loe	Lf	Vegetables	Cooked
	K	HST	D	phak kad	Lf	Vegetables	Cooked
<i>Brassica oleracea</i> L. var. <i>alboglabra</i> Bailey	M	HSN	D	lai bua	Lf	Vegetables	Cooked
<i>Raphanus sativus</i> L.	M	HSN	D	la pa doi	Rt	Vegetables	Cooked
<i>Raphanus sativus</i> L. var. <i>caudatus</i> Ale	M	STP	D	la pa doi piao	Fr/Rt	Vegetables	Cooked
	M	HSN	D	la pa doi piao	Fr	Vegetables	Cooked
Bromeliaceae							
<i>Ananas comosus</i> (L.) Merr.	M	HSN	D	lei yow	Fr	Fruit	Fresh
	M	STP	D	lei yow	Fr	Fruit	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	H	KH	D	txwv puv luj	Fr	Fruit	Fresh
	K	HP	D	plae muk kha nud	Fr	Fruit	Fresh
	K	HST	D	plae muk kha nud	Fr	Fruit	Fresh
	K	NP	D	plae muk kha nud	Fr	Fruit	Fresh
	L	JN	D	plae ka nud	Fr	Fruit	Fresh
	L	MNP2	D	plae ka nud	Fr	Fruit	Fresh
	L	TK	D	plae ka nud	Fr	Fruit	Fresh
	M	HBY	D	lei yow	Fr	Fruit	Fresh
Burseraceae							
<i>Canarium subulatum</i> Guillaumin	K	HST	W	tood keim	Fr	Fruit	Fresh
	L	TK	W	lum meng	Fr	Fruit	Fresh
	M	HBY	W	ka lan diang	Fr	Fruit	Fresh
<i>Garuga pinnata</i> Roxb.	K	HP	W	tood ja	Fr	Fruit	Fresh
	K	HST	W	tood ra hmoa	Fr	Fruit	Fresh
	M	HSN	W	jian tao ngang	Fr	Fruit	Fresh
<i>Protium serratum</i> Engl.	M	HBY	W	jian tao ngang	Fr	Fruit	Fresh
<i>Canarium</i> sp.	M	HSN	W	ka lan diang	Fr	Fruit	Fresh
Cactaceae							
<i>Hylocereus undatus</i> (Haw.) Britton & Rose	K	HP	D	kaew mung kon	Fr	Fruit	Fresh
	K	HST	D	kaew mung kon	Fr	Fruit	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	NP	D	kaew mung kon	Fr	Fruit	Fresh
	L	JN	D	keaw mung kon	Fr	Fruit	Fresh
	L	TK	D	keaw mung kon	Fr	Fruit	Fresh
	H	KH	D	keaw mung kon	Fr	Fruit	Fresh
	H	SK	D	keaw mung kon	Fr	Fruit	Fresh
	M	HSN	D	kaew mong kon	Fr	Fruit	Fresh
	M	STP	D	kaew mong kon	Fr	Fruit	Fresh
Caesalpiaceae							
<i>Bauhinia acuminata</i> L.	L	TK	D	lum palw chiao	YLf	Vegetables	Cooked
	K	HST	D	tood dok siao	YSh	Vegetables	Cooked
	L	JN	D	lum palw	YSh	Vegetables	Cooked
<i>Bauhinia purpurea</i> L.	K	HP	D	tood dok siao	YSh	Vegetables	Cooked
	K	HST	D	tood dok siao	YSh	Vegetables	Cooked
	L	MNP2	W	lum yang palw	Fl/YLf	Vegetables	Cooked
	L	JN	D	lum palw	YSh/Fl	Vegetables	Cooked
	L	TK	W	lum yang palw	YSh	Vegetables	Cooked
<i>Bauhinia variegata</i> L.	L	MNP2	W	lum yang palw	Fl	Vegetables	Cooked
	M	HSN	D	ja ae	YLf	Vegetables	Cooked
<i>Caesalpinia mimosoides</i> Lam.	H	KH	W	swv pau	YSh	Vegetables	Fresh
	L	JN	W	ba pu ya	YSh	Vegetables	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Caesalpinia sappan</i> L.	H	KH	D	txhub	St	Tea substitute	Boiled
	H	MNP	D	txhub	St	Tea substitute	Boiled
	K	NP	D	tood kwang	St	Tea substitute	Boiled
	M	HBY	D	som mua/ sing mua	St	Tea substitute	Boiled
	M	HSN	D	som mua/ sing mua	St	Tea substitute	Boiled
	M	STP	D	som mua/ sing mua	St	Tea substitute	Boiled
<i>Senna siamea</i> (Lam.) H.S.Irwin & Barneby	K	HST	D	khi lek	YSh	Vegetables	Cooked
<i>Senna tora</i> (L.) Roxb.	L	JN	W	yub hmob	YSh	Vegetables	Cooked
<i>Tamarindus indica</i> L.	H	KH	D	quav miv	Fr	Fruit	Fresh
	H	SK	D	quav miv	Fr	Fruit	Fresh
	K	HP	D	plae ue pon	Fr	Fruit	Fresh
	K	HST	D	plae ue pon	Fr	Fruit	Fresh
	K	NP	D	plae ue pon	Fr	Fruit	Fresh
	M	HBY	D	piao jang	Fr	Fruit	Fresh
	M	HSN	D	piao jang	Fr	Fruit	Fresh
	M	STP	D	piao jang	Fr	Fruit	Fresh
	L	TK	D	lum ma kam	Fr	Fruit	Fresh
	L	JN	D	lum ma kam	Fr	Fruit	Fresh
	L	MNP2	D	lum ma kam	Fr	Fruit	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
Campanulaceae							
<i>Codonopsis javanica</i> Hook.f. & Thomson	L	MNP2	W	mang ted sa	YSh	Vegetables	Cooked
	L	TK	W	mang ted sa	Rt	snack food	Fresh
	H	MNP	W		Fr/Rt	snack food	Fresh
Cannaceae							
<i>Canna indica</i> L.	H	KH	D	qos nplooj ntse lab	Rt	snack food	Cooked
	H	MNP	D	qos nplooj ntse lab	Rt	snack food	Cooked
	H	SK	D	qos nplooj ntse lab	Rt	snack food	Cooked
	M	HBY	D	frang how	Rt	snack food	Cooked
	M	HSN	D	frang how	Rt	snack food	Cooked
	L	MNP2	D	zao farang	Rt	snack food	Cooked
	L	TK	D	-	Rt	snack food	Cooked
Capparaceae							
<i>Capparis cantoniensis</i> Lour.	M	STP	W	hei im	St/Lf	Tea substitute	Boiled
<i>Capparis trisonthiae</i> Srisanga & Chayamarit	M	STP	W	pin lang	Fr	Fruit	Fresh
<i>Crateva magna</i> DC.	K	HST	W	la phak koom	Lf	Vegetables	Cooked
	K	NP	W	la phak koom	Lf	Vegetables	Cooked
	M	HBY	W	ta chan pae/zer liam	YSh	Vegetables	Cooked
<i>Stixis suaveolens</i> (Roxb.) Pierre	K	HP	W	pae tal pa nuem	Fr	Fruit	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HST	W	tood thong iar	Fr	Fruit	Fresh
	L	TK	W	mhue pa ome bua	Fr	Fruit	Fresh
	M	HBY	W	ju la tong	Fr	Fruit	Fresh
	M	STP	W	dia jan piao	Fr	Fruit	Fresh
Caricaceae							
<i>Carica papaya</i> L.	H	KH	D	maum kuab	Fr	Fruit	Fresh
	H	MNP	D	maum kuab	Fr	Fruit	Fresh
	H	SK	D	maum kuab	Fr	Fruit	Fresh
	M	HBY	D	diang kwa	Fr	Fruit	Fresh
	M	HSN	D	diang kwa	Fr	Fruit	Fresh
	M	STP	D	diang kwa	Fr	Fruit	Fresh
	K	HP	D	plae sa pao	Fr	Fruit	Fresh
	K	HST	D	plae sa pao	Fr	Fruit	Fresh
	K	NP	D	plae sa pao	Fr	Fruit	Fresh
	L	JN	D	plae kluai ted	Fr	Fruit	Fresh
	L	MNP2	D	plae kluai ted	Fr	Fruit	Fresh
	L	TK	D	plae kluai ted	Fr	Fruit	Fresh
Cecropiaceae							
<i>Poikilospermum suaveolens</i> (Blume) Merr.	M	HBY	W	puang dia tom	St	Tea substitute	Boiled

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
Celastraceae							
<i>Celastrus paniculatus</i> Willd.	L	JN	D	ba tak	YSh	Vegetables	Cooked
	K	HP	D	ma tak	YSh	Vegetables	Cooked
Chenopodiaceae							
<i>Chenopodium album</i> L.	H	MNP	D	soov	Sd	snack food	Cooked
<i>Chenopodium giganteum</i> D.Don	H	KH	D	soov	Lf	Vegetables	Cooked
Clusiaceae							
<i>Cratoxylum cochinchinense</i> Bl.	L	JN	W	lum tiu	YSh	Vegetables	Fresh
	L	MNP2	W	lum tiu	YSh	Vegetables	Fresh
<i>Cratoxylum formosum</i> (Jack) Dyer subsp. <i>pruniflorum</i> (Kurz) Gogel.	L	MNP2	W	lum tiu	YSh	Vegetables	Fresh
	K	HP	W	tood charuem	YSh	Vegetables	Fresh
	H	KH	W		YSh	Vegetables	Fresh
<i>Garcinia</i> sp.	K	HST	W	tood kwak	Fr	Fruit	Fresh
	L	TK	W	plae tub	Fr	Fruit	Fresh
	M	HBY	W	la mong dom	Fr	Fruit	Fresh
	M	HSN	W	la mong dom	Fr	Fruit	Fresh
<i>Garcinia cowa</i> Roxb. ex DC.	L	MNP2	W	lum plae byol	Fr/Lf	Fruit/Vegetable	Fresh
Combretaceae							
<i>Quisqualis indica</i> L.	M	HBY	W	hei yang	YSh	Vegetables	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
Commelinaceae							
<i>Commelina bengalensis</i> L.	K	HST	W	toe ngong	YSh	Vegetables	Cooked
	M	HBY	W	sob plaan	YSh	Vegetables	Cooked
	K	HP	W	taak ka ial	YSh	Vegetables	Cooked
<i>Commelina diffusa</i> Burm. f.	L	TK	W	yun nad	YSh	Vegetables	Cooked
<i>Tradescantia zebrina</i> Bosse	H	KH	D	zaub raws lab	Lf	Vegetables	Cooked
	M	HBY	D	sob plaan zi	Lf	Vegetables	Cooked
	M	HSN	D	sob plaan zi	Lf	Vegetables	Cooked
	M	STP	D	sob plaan zi	Lf	Vegetables	Cooked
Connaraceae							
<i>Connarus semidecandrus</i> Jack	M	HBY	W	bob jei hei	YSh	Vegetables	Cooked
	K	HST	W	tood sam ton	YSh	Vegetables	Cooked
	L	TK	W	dum mud	YSh	Vegetables	Cooked
<i>Rourea caudata</i> Planch.	L	MNP2	W	mhue plae tok ton	Fr	Fruit	Fresh
	L	TK	W	mhue plae tok ton	Fr	Fruit	Fresh
Convallariaceae							
<i>Chlorophytum nepalense</i> Baker	L	MNP2	W	yod doi/lum doi	St	Vegetables	Cooked
<i>Tupistra grandis</i> Ridl.	L	TK	W	ta hloe chode	Fl	Vegetables	Cooked
	L	MNP2	W	lum yang che chode	Fl	Vegetables	Cooked
	L	MNP2	W	lum yang che chode	Fl buds	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HP	W	nang lao	Fl	Vegetables	Cooked
Convolvulaceae							
<i>Cuscuta chinensis</i> Lam.	K	NP	W	krue kum	Wp	Vegetables	Cooked
	L	TK	W	krue mai	Wp	Vegetables	Cooked
	K	HST	W	krue kum	Wp	Vegetables	Cooked
<i>Ipomoea aquatica</i> Forssk.	H	KH	D		Un	Vegetables	Cooked
	K	HP	D	phak boong	Un	Vegetables	Cooked
	K	HST	D	phak boong	Un	Vegetables	Cooked
	L	JN	D	phak boong	Un	Vegetables	Cooked
	L	MNP2	D	phak boong	Un	Vegetables	Cooked
	L	TK	D	phak boong	Un	Vegetables	Cooked
	M	HBV	D	phak boong	Un	Vegetables	Cooked
	M	HSN	D	phak boong	Un	Vegetables	Cooked
	M	STP	D	phak boong	Un	Vegetables	Cooked
<i>Ipomoea batatas</i> (L.) Lam.	H	KH	D	qos lab	Rt	snack food	Cooked
	H	MNP	D	qos lab	Rt	snack food	Cooked
	H	SK	D	qos lab	Rt	snack food	Cooked
	K	HP	D	kwai	Rt	snack food	Cooked
	K	HST	D	kwai	Rt	snack food	Cooked
	K	NP	D	kwai	Rt	snack food	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	L	TK	D	mang ted	Rt	snack food	Cooked
	L	MNP2	D	mang ted	Rt	snack food	Cooked
	M	HBY	D	fun doi luang	Rt	snack food	Cooked
	M	HSN	D	fun doi luang	Rt	snack food	Cooked
Costaceae							
<i>Costus speciosus</i> (Koen.) Sm.	M	HBY	W	ching kuan diang	Sh	Vegetables	Cooked
Crassulaceae							
<i>Kalanchoe brasiliensis</i> Cambess.	H	SK	D	nplooj tuaj kaus luj	Lf	Vegetables	Cooked
<i>Kalanchoe laciniata</i> (L.) DC.	H	KH	D	tshuaj ntiv tub	Lf	Vegetables	Cooked
	H	SK	D	tshuaj ntiv tub	Lf	Vegetables	Cooked
	M	HBY	D	lom jang yiu	Lf	Vegetables	Cooked
	M	HSN	D	lom jang yiu	Lf	Vegetables	Cooked
	M	STP	D	lom jang yiu	Lf	Vegetables	Cooked
<i>Kalanchoe pinnata</i> (Lam.) Pers.	H	KH	D	nplooj tuaj kaus	Lf	Vegetables	Cooked
	H	SK	D	nplooj tuaj kaus	Lf	Vegetables	Cooked
	M	HBY	D	ta pa zue	Lf	Vegetables	Cooked
	K	HP	D	la pa lue ha	YLf	Vegetables	Cooked
<i>Phedimus</i> sp.	H	KH	D	sam muaj kaab	Lf	Vegetables	Cooked
	H	SK	D	sam muaj kaab	Lf	Vegetables	Cooked
<i>Sedum</i> cf. <i>sarmentosum</i> Bunge	H	SK	D	nplai zeb	Lf	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	H	KH	D	nplai zeb	Lf	Vegetables	Cooked
	H	MNP	D	nplai zeb	Lf	Vegetables	Cooked
Cucurbitaceae							
<i>Benincasa hispida</i> (Thunb.) Cogn.	H	KH	D	toob	Fr	Vegetables	Cooked
	H	SK	D	toob	Fr	Vegetables	Cooked
	M	HBY	D	sob mang	Fr	Vegetables	Cooked
	M	HSN	D	sob mang	Fr	Vegetables	Cooked
	M	STP	D	sob mang	Fr	Vegetables	Cooked
	K	NP	D	plae fuk	Fr	Vegetables	Cooked
	L	TK	D	plae luk kok	Fr	Vegetables	Cooked
	L	JN	D	plae luk kok	Fr	Vegetables	Cooked
<i>Citrullus lanatus</i> (Thunb.) Matsum. & Nakai	K	HP	D	plae ma tao	Fr	Fruit	Fresh
<i>Coccinia grandis</i> (L.) Voigt	K	HST	D	phak kab	YSh	Vegetables	Cooked
	K	NP	D	phak kab	YSh	Vegetables	Cooked
	L	JN	D	phak kab	YSh	Vegetables	Cooked
<i>Cucumis melo</i> L.	M	HBY	D	wa pen	Fr	Vegetables	Fresh
	K	HP	D	krial kon	Fr	Fruit	Fresh
<i>Cucumis sativus</i> L.	L	MNP2	D	plae kan	Fr	Vegetables	Fresh
	L	TK	D	plae kan	Fr	Vegetables	Fresh
	M	HBY	D	wa pen	Fr	Vegetables	Fresh

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Cucurbita moschata</i> Duchesne ex Poir.	K	HST	D	tang sung	Fr	Vegetables	Fresh
	L	JN	D	plae luk	Fr/YSh	Vegetables	Cooked
	L	MNP2	D	plae luk	Fr/YSh	Vegetables	Cooked
	L	TK	D	plae luk	Fr/YSh	Vegetables	Cooked
	H	KH	D	taub dlaaj	Fr/YSh	Vegetables	Cooked
	H	MNP	D	taub dlaaj	Fr/YSh	Vegetables	Cooked
	H	SK	D	taub dlaaj	Fr/YSh	Vegetables	Cooked
	M	HBV	D	fun bow	Fr/YSh	Vegetables	Cooked
	M	HSN	D	fun bow	Fr/YSh	Vegetables	Cooked
	M	STP	D	fun bow	Fr/YSh	Vegetables	Cooked
	K	HP	D	bruel phara	Fr/YSh	Vegetables	Cooked
	K	HST	D	bruel phara	Fr/YSh	Vegetables	Cooked
	K	NP	D	bruel phara	Fr/YSh	Vegetables	Cooked
<i>Gynostemma pentaphyllum</i> (Thunb.) Makino	H	SK	D	maab hmeev dlev ntsuab	Lf	Vegetables	Cooked
<i>Hodgsonia heteroclita</i> (Roxb.) Hook.f. & Thomson	H	KH	W	txwv qab rog	Sd	snack food	Burned
	H	MNP	W	txwv qab rog	Sd	snack food	Burned
	H	SK	W	txwv qab rog	Sd	snack food	Burned

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HP	W	plae ta moe	Sd	snack food	Burned
	K	HST	W	plae troe	Sd	snack food	Burned
	K	NP	W	plae koe	Sd	snack food	Burned
	L	JN	W	plae kiyo	Sd	snack food	Burned
	L	MNP2	W	plae kiyo	Sd	snack food	Burned
	L	TK	W	plae kiyo	Sd	snack food	Burned
	M	HBY	W	piao yow	Sd	snack food	Burned
	M	HSN	W	piao yow	Sd	snack food	Burned
	M	STP	W	piao yow	Sd	snack food	Burned
<i>Lagenaria siceraria</i> (Molina) Standl.	K	HST	D	num tao	Fr	Vegetables	Cooked
	H	KH	D	fwb taub	Fr	Vegetables	Cooked
<i>Luffa acutangula</i> (L.) Roxb.	H	SK	D	-	Fr	Vegetables	Cooked
	K	HST	D	ma noi	Fr	Vegetables	Cooked
	M	HBY	D	lei jae long	Fr	Vegetables	Cooked
	M	HSN	D	lei jae long	Fr	Vegetables	Cooked
	L	TK	D	plae ma noi	Fr	Vegetables	Cooked
<i>Luffa aegyptiaca</i> Mill.	H	KH	D	-	Fr	Vegetables	Cooked
	M	HBY	D	lei jae	Fr	Vegetables	Cooked
	M	HSN	D	lei jae	Fr	Vegetables	Cooked
	M	STP	D	lei jae	Fr	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Momordica charantia</i> L.	K	HP	D	ma nral	Fr	Vegetables	Cooked
	K	HST	D	buab	Fr	Vegetables	Cooked
	K	NP	D	buab	Fr	Vegetables	Cooked
	H	KH	D	maab dlib ab	Fr/YSh	Vegetables	Cooked
	H	SK	D	maab dlib ab	Fr	Vegetables	Cooked
	K	HP	D	plae ma heid	Fr	Vegetables	Cooked
	K	HST	D	plae ma heid	Fr/YSh	Vegetables	Cooked
	K	NP	D	plae ma heid	Fr	Vegetables	Cooked
	L	JN	D	ba peid	Fr/YSh	Vegetables	Cooked
	L	MNP2	D	tu yong yode	Fr	Vegetables	Cooked
	L	TK	D	tu yong yode	Fr	Vegetables	Cooked
	M	HBV	D	pa taad	Fr	Vegetables	Cooked
	M	HSN	D	pa taad	Fr	Vegetables	Cooked
M	STP	D	pa taad	Fr	Vegetables	Cooked	
<i>Momordica cochinchinensis</i> (Lour.) Spreng.	K	HP	D	sa kol	YSh	Vegetables	Cooked
<i>Sechium edule</i> (Jacq.) Sw.	H	KH	D	taub maum	Fr/YSh	Vegetables	Cooked
	H	MNP	D	taub maum	Fr/YSh	Vegetables	Cooked
	H	SK	D	taub maum	Fr/YSh	Vegetables	Cooked
	K	HST	D	fuk maew	Fr/YSh	Vegetables	Cooked
	K	NP	D	fuk maew	Fr/YSh	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	L	MNP2	D	ma noi ho	Fr/YSh	Vegetables	Cooked
	M	HBY	D	frang jia	Fr/YSh	Vegetables	Cooked
	M	HSN	D	frang jia	Fr/YSh	Vegetables	Cooked
	M	STP	D	frang jia	Fr/YSh	Vegetables	Cooked
	L	TK	D	ma noi ho	Fr/YSh	Vegetables	Cooked
<i>Solena</i> sp.	L	TK	W	mhue plae kuak dode	YSh	Vegetables	Cooked
<i>Thladiantha cordifolia</i> (Blume) Cogn.	H	MNP	W	-	YSh	Vegetables	Cooked
	L	MNP2	W	plae kan bia	Fr	Vegetables	Cooked
<i>Trichosanthes cucumerina</i> L.	H	KH	D	-	Lf	Vegetables	Cooked
	K	NP	D	plae ma noi	Lf	Vegetables	Cooked
	M	HSN	D	pa taad kam	Fr/YSh	Vegetables	Cooked
	M	STP	D	pa taad kam	Lf	Vegetables	Cooked
	M	HBY	D	pa taad kam	Lf	Vegetables	Cooked
<i>Zehneria bodinieri</i> (H.Lév.) W.J.de Wilde & Duyfjes	H	MNP	W	-	Lf	Vegetables	Cooked
Cyperaceae							
<i>Carex baccans</i> Nees	M	HSN	W	low	Wp	Tea substitute	Boiled
Dilleniaceae							
<i>Dillenia indica</i> L.	L	TK	D	plae kyoe	Clx	snack food	Fresh
<i>Dillenia parviflora</i> Griff.	M	STP	W	piao kub	Clx	snack food	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HST	W	tood ploo	Clx	snack food	Fresh
	K	NP	W	tood ploo	Clx	snack food	Fresh
	L	TK	W	plae wae	Clx	snack food	Fresh
	M	HSN	W	piao kub	Clx	snack food	Fresh
	H	SK	W	-	Clx	snack food	Fresh
Dioscoreaceae							
<i>Dioscorea alata</i> L.	H	KH	D	qos lab	Rt	snack food	Cooked
	H	MNP	D	qos	Rt	snack food	Cooked
	H	SK	D	qos maab	Rt	snack food	Cooked
	K	HST	D	kwai	Rt	snack food	Cooked
	L	JN	D	kwai thae	Rt	snack food	Cooked
	L	MNP2	D	kwai	Rt	snack food	Cooked
	L	TK	D	kwai mun pao	Rt	snack food	Cooked
	M	HBY	D	doi bian	Rt	snack food	Cooked
	M	HSN	D	doi bian	Rt	snack food	Cooked
	M	STP	D	doi bian	Rt	snack food	Cooked
	K	HP	D	kwai	Rt	snack food	Cooked
	K	NP	D	kwai	Rt	snack food	Cooked
<i>Dioscorea bulbifera</i> L.	H	KH	D	qos npua	Rt	snack food	Cooked
	M	HBY	W	doi ju	Rt	snack food	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Dioscorea esculenta</i> (Lour.) Burkill	M	HSN	W	doi ju	Rt	snack food	Cooked
	M	STP	W	doi ju	Bbl	snack food	Cooked
	K	HP	D	kwai jung	Rt	snack food	Cooked
	K	HST	D	kwai jung	Rt	snack food	Cooked
	L	JN	D	kwai on	Rt	snack food	Cooked
	L	TK	D	kwai on	Rt	snack food	Cooked
	K	NP	D	kwai jung	Rt	snack food	Cooked
	M	HBV	D	doi yim	Rt	snack food	Cooked
<i>Dioscorea pentaphylla</i> L.	M	HSN	D	doi yim	Rt	snack food	Cooked
	M	STP	D	doi yim	Rt	snack food	Cooked
	H	SK	D	qos maab	Bbl	snack food	Cooked
	K	HP	D	koo pual	Bbl	snack food	Cooked
	L	JN	D	kwai ku	Bbl	snack food	Cooked
	L	MNP2	D	kwai ku	Bbl	snack food	Cooked
	L	TK	D	kwai ku	Bbl	snack food	Cooked
	K	HST	D	kwai	Bbl	snack food	Cooked
<i>Dioscorea</i> sp.	K	NP	D	plae kon kan	Bbl	snack food	Cooked
	K	NP	D	kwai	Rt	snack food	Cooked
	L	JN	D	ba non	YSh	Vegetables	Cooked
	M	HSN	D	doi si yam	Rt	snack food	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
Dracaenaceae							
<i>Dracaena elliptica</i> Thunb.	M	HSN	W	ha dia doi	Rt	snack food	Fresh
Ebenaceae							
<i>Diospyros glandulosa</i> Lace	H	MNP	W	-	Fr	Fruit	Fresh
	L	MNP2	W	lum yheum	Fr	Fruit	Fresh
<i>Diospyros kaki</i> Thunb.	L	MNP2	D	plub	Fr	Fruit	Fresh
<i>Diospyros</i> sp.	L	MNP2	W	plae dub	Fr	Fruit	Fresh
Elaeagnaceae							
<i>Elaeagnus latifolia</i> L.	H	KH	D	-	Fr	Fruit	Fresh
	K	HST	D	plae taad ted	Fr	Fruit	Fresh
	M	HBV	D	kong kai piao	Fr	Fruit	Fresh
	M	HSN	D	kong kai piao	Fr	Fruit	Fresh
	M	STP	D	kong kai piao	Fr	Fruit	Fresh
	K	HP	D	plae taad ted	Fr	Fruit	Fresh
	K	NP	D	plae taad ted	Fr	Fruit	Fresh
	L	JN	D	plae hlod	Fr	Fruit	Fresh
	L	MNP2	D	plae plud	Fr	Fruit	Fresh
	L	TK	D	plae plud	Fr	Fruit	Fresh
Euphorbiaceae							
<i>Antidesma acidum</i> Retz.	K	HST	W	pim pong	Fr	snack food	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Antidesma sootepense</i> Craib	M	HBY	W	lai kong	Fr	Fruit	Fresh
<i>Antidesma velutinosum</i> Blume	M	STP	W	hnao jian	Fr	snack food	Fresh
<i>Baccaurea ramiflora</i> Lour.	L	JN	D	plae chal	Fr	Fruit	Fresh
	H	KH	D	txwv tuam leeb kus (G)/twiv puam leem kauv (W)	Fr	Fruit	Fresh
	H	MNP	D	txwv tuam leeb kus (G)/twiv puam leem kauv (W)	Fr	Fruit	Fresh
	K	HP	D	plae haan	Fr	Fruit	Fresh
	K	HST	D	plae haan	Fr	Fruit	Fresh
	K	NP	D	plae haan	Fr	Fruit	Fresh
	L	TK	D	plae chal	Fr	Fruit	Fresh
	M	HBY	D	lai piao	Fr	Fruit	Fresh
	M	STP	D	lai piao	Fr	Fruit	Fresh
	L	MNP2	D	plae chal	Fr	Fruit	Fresh
<i>Balakata baccata</i> (Roxb.) Esser	K	HST	W	tood prueng	Fr	Fruit	Fresh
	H	MNP	W	-	Fr	Fruit	Fresh
	H	SK	W	-	Fr	Fruit	Fresh
<i>Bischofia javanica</i> Blume	M	HSN	W	diang zui	Lf	Vegetables	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	H	KH	W	ntoos qaub	YSh	Vegetables	Fresh
<i>Cleidion javanicum</i> Blume	L	JN	D	lum ko	Sd	snack food	Cooked
<i>Codiaeum variegatum</i> Blume	K	HST	D	-	YSh	Vegetables	Cooked
	M	HSN	D	-	YSh	Vegetables	Cooked
<i>Glochidion sphaerogynum</i> Kurz	L	MNP2	W	lum tol	YSh	Vegetables	Fresh
<i>Glochidion wallichianum</i> Müll.Arg.	H	KH	D	-	YSh	Vegetables	Fresh
<i>Homonoia riparia</i> Lour.	K	NP	W	tood krai	YSh	Vegetables	Cooked
	L	JN	W	tu kai/lum krai	YSh	Vegetables	Cooked
	K	HP	W	tood krai	YLf	Vegetables	Cooked
<i>Jatropha curcas</i> L.	M	HBV	D	tong yow	YSh	Vegetables	Heated
	L	JN	D	ma hoong	YLf	Vegetables	Heated
<i>Jatropha gossypifolia</i> L.	H	SK	D	thwj qwg lab	YSh	Vegetables	Cooked
<i>Manihot esculenta</i> Crantz	H	KH	D	qos ntoos ntug	Rt	snack food	Cooked
	H	SK	D	qos ntoos ntug	Rt	snack food	Cooked
	K	HP	D	kwai tood	Rt	snack food	Cooked
	K	HST	D	kwai ho	YSh	Vegetables	Cooked
	K	NP	D	kwai ho	YSh	Vegetables	Cooked
	L	JN	D	kwai lum	YSh	Vegetables	Cooked
	L	TK	D	kwai lum	Rt	snack food	Cooked
	M	HSN	D	diang doi	Rt	snack food	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Phyllanthus acidus</i> (L.) Skeels	L	MNP2	D	kwai lum	Rt	snack food	Cooked
	H	KH	D	txwv qaub	Fr	Fruit	Fresh
	H	SK	D	txwv qaub	Fr	Fruit	Fresh
	K	HST	D	tood ma yom	Fr	Fruit	Fresh
	M	HBY	D	ma yom piao	Fr	Fruit	Fresh
	M	HSN	D	ma yom piao	Fr	Fruit	Fresh
	K	HP	D	tood ma yom	Fr	Fruit	Fresh
	K	NP	D	tood ma yom	Fr	Fruit	Fresh
	L	JN	D	plae ma yom	Fr	Fruit	Fresh
	L	TK	D	plae ma yom	Fr	Fruit	Fresh
<i>Phyllanthus emblica</i> L.	K	HST	D	tood ma kam pom	Fr	Fruit	Fresh
	L	MNP2	D	plae pom lom	Fr	Fruit	Fresh
	L	TK	D	plae ma kam pom	Fr	Fruit	Fresh
<i>Phyllanthus reticulatus</i> Poir.	K	HP	D	sa la kang pa	YSh	Vegetables	Fresh
	K	HST	D	phank dee ngua	YSh	Vegetables	Fresh
<i>Ricinus communis</i> L.	M	HBY	D	ma paung zi	YSh	Vegetables	Heated
	M	HSN	D	ma paung zi	YSh	Vegetables	Heated
<i>Sauropus androgynus</i> Merr.	K	HP	D	la phak whan	YSh	Vegetables	Cooked
	K	HST	D	la phak whan	YSh	Vegetables	Cooked
	K	NP	D	la phak whan	YSh	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	L	JN	D	phak whaan	YSh	Vegetables	Cooked
	L	TK	D	phak whaan	YSh	Vegetables	Cooked
	H	KH	D	-	YSh	Vegetables	Cooked
	H	SK	D	-	YSh	Vegetables	Cooked
<i>Sauropus thorelii</i> Beille	K	HP	D	sa liam pa	Lf	Vegetables	Cooked
Fagaceae							
<i>Castanopsis acuminatissima</i> Rehd.	L	TK	W	lum leid	Sd	snack food	Cooked
	L	MNP2	W	lum leid	Sd	snack food	Cooked
<i>Castanopsis argyrophylla</i> King ex Hook.f.	L	MNP2	W	lum plaè bao	Sd	snack food	Cooked
<i>Castanopsis diversifolia</i> King.	L	TK	W	lum sa	Sd	snack food	Cooked
<i>Castanopsis indica</i> A.DC.	H	KH	W	txwv ntseeb	Sd	snack food	Cooked
	M	HBY	W	piao juai	Sd	snack food	Cooked
	M	HSN	W	piao juai	Sd	snack food	Cooked
	L	JN	W	lum sa	Sd	snack food	Cooked
Flacourtiaceae							
<i>Flacourtia indica</i> (Burm.f.) Merr.	K	HP	W	plae ue truel	Fr	Fruit	Fresh
	K	HST	W	tood tuen	Fr	Fruit	Fresh
	M	HBY	W	ma kwen	Fr	Fruit	Fresh
Gnetaceae							
<i>Gnetum montanum</i> Markgr.	L	TK	W	mhue huai	Sd	snack food	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HST	W	tadung	Fr	snack food	Cooked
Haemodoraceae							
<i>Xiphidium caeruleum</i> Aubl.	H	KH	D	tw ntses luj	Lf	Vegetables	Cooked
Hemerocallidaceae							
<i>Dianella ensifolia</i> (L.) DC.	H	SK	D	-	Rt	Vegetables	Cooked
<i>Hemerocallis lilioasphodelus</i> L.	H	KH	D	tw ntses miv	YLf	Vegetables	Cooked
	H	MNP	D	-	Lf	Vegetables	Cooked
	H	SK	D	tw ntses miv	YLf	Vegetables	Cooked
	M	HSN	D	ha dia dao/ha dia zua	YLf	Vegetables	Cooked
	M	STP	D	ha dia dao/ha dia zua	YLf	Vegetables	Cooked
Icacinaceae							
<i>Gonocaryum lobbianum</i> (Miers) Kurz	H	KH	W	nplooj mab ab	Sd	snack food	Cooked
	K	HP	W	muk yung jid	Fr	snack food	Cooked
	K	NP	W	muk yung jid	Fr	snack food	Cooked
	L	TK	W	plae pa nong	Fr	snack food	Cooked
	K	HST	W	muk yung jid	Sd	snack food	Cooked
	M	HBY	W	ja king yung	Lf	Tea substitute	Boiled
<i>Pittosporopsis kerrii</i> Craib	K	HP	W	muk yung	Fr	snack food	Cooked
	K	HST	W	muk yung	Fr	snack food	Cooked
	M	HBY	W	piao im/diang ton im	Fr	snack food	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	M	STP	W	diang ton im	Sd	snack food	Cooked
	K	NP	W	muk yung	Fr	snack food	Cooked
	L	TK	W	plae pa yhong	Fr	snack food	Cooked
Iridaceae							
<i>Eleutherine americana</i> Merr. ex K.Heyne	H	SK	D	nplooj qhab xyab	Blb	Vegetables	Cooked
	H	KH	D	nplooj qhab xyab	Blb	Vegetables	Cooked
	H	MNP	D	nplooj qhab xyab lab	Blb	Vegetables	Cooked
Irvingiaceae							
<i>Irvingia malayana</i> Oliver ex A.Benn.	K	HST	W	tood muen	Sd	snack food	Dried
	M	HBY	W	piao tong diang	Sd	snack food	Dried
	K	HP	W	tood muen	Sd	snack food	Dried
	K	NP	W	tood muen	Sd	snack food	Dried
	L	JN	W	lum plae muen	Sd	snack food	Dried
Lamiaceae							
<i>Clerodendrum colebrookianum</i> Walp.	M	HBY	W	lei kow diang	YSh	Tea substitute	Boiled
	L	JN	D	tu kiam	YSh	Vegetables	Cooked
	L	MNP2	W	tu kiam	YSh/YLf	Vegetables	Cooked
	H	MNP	W	ntshaub tshws	YSh/YLf	Vegetables	Cooked
	L	TK	W	tu kiam	YSh	Vegetables	Cooked
<i>Clerodendrum paniculatum</i> L.	M	HBY	W	lei kow	YSh	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Clerodendrum serratum</i> (L.) Moon	L	MNP2	W	tu plung sa	Fl buds	Vegetables	Cooked
	L	TK	W	sung soi kruak	YSh/Fl	Vegetables	Cooked
<i>Clinopodium chinense</i> Kuntze	H	KH	D	tsuam noog	Lf	Vegetables	Cooked
<i>Glechoma hederacea</i> L.	H	KH	D	gua luag nyeg/lauj	Lf	Vegetables	Cooked
	K	HST	W	vaag nyeg tood lha	Fl	Snack food	Dried/Powdered/ Mixed with rice flour
<i>Mentha cordifolia</i> Opiz ex Fresen.	K	NP	D	la lub duan	Lf	Vegetables	Fresh
	H	KH	D	pum hwm	Lf	Vegetables/condiment	Fresh
	M	HBV	D	pae chid	Lf	Vegetables/condiment	Fresh
	K	HST	D	la hom duan	Lf	Vegetables/condiment	Fresh
	L	MNP2	D	tu hom duan	Lf	Vegetables/condiment	Fresh
	L	TK	D	tu hom duan	Lf	Vegetables/condiment	Fresh
	K	HP	D	la lub duan	Lf	Vegetables/condiment	Fresh
	K	SK	D	zaub txig them	Lf	Vegetables/condiment	Cooked/fresh
<i>Ocimum americanum</i> L.	K	HP	D	ntsuab la kreng	Lf	Vegetables/condiment	Cooked/fresh
	K	HST	D	la kreng	Lf	Vegetables/condiment	Cooked/fresh
	K	NP	D	la kreng	Lf	Vegetables/condiment	Cooked/fresh
	K	NP	D	la kreng	Lf	Vegetables/condiment	Cooked/fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Ocimum basilicum</i> L.	L	JN	D	or la wang	Lf	Vegetables/condiment	Cooked/fresh
	L	TK	D	or la wang	Lf	Vegetables/condiment	Cooked/fresh
	M	HBY	D	leo la pae	Lf	Vegetables/condiment	Cooked/fresh
	M	HSN	D	leo la pae	Lf	Vegetables/condiment	Cooked/fresh
	M	STP	D	leo la pae	Lf	Vegetables/condiment	Cooked/fresh
	H	KH	D	-	Lf	Vegetables/condiment	Cooked/fresh
	H	SK	D	-	Lf	Vegetables/condiment	Cooked/fresh
	L	TK	D	ho ra pa	Lf	Vegetables/condiment	Cooked/fresh
	M	HBY	D	leo la zi	Lf	Vegetables/condiment	Cooked/fresh
	M	HSN	D	leo la zi	Lf	Vegetables/condiment	Cooked/fresh
	K	HP	D	ho ra pa	Lf	Vegetables/condiment	Cooked/fresh
	K	HST	D	ho ra pa	Lf	Vegetables/condiment	Cooked/fresh
<i>Ocimum gratissimum</i> L.	K	NP	D	ho ra pa	Lf	Vegetables/condiment	Cooked/fresh
	K	HP	D	jun jo	Lf	Vegetables/condiment	Cooked/fresh
	H	SK	D	-	Lf	Vegetables/condiment	Cooked/fresh
	K	HST	D	jun jo	Lf	Vegetables/condiment	Cooked/fresh
	K	NP	D	jun jo	Lf	Vegetables/condiment	Cooked/fresh
<i>Ocimum tenuiflorum</i> L.	L	JN	D	jun jo	Lf	Vegetables/condiment	Cooked/fresh
	K	HP	D	ka prao	Lf	Vegetables	Cooked
	K	HST	D	ka prao	Lf	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	NP	D	ka prao	Lf	Vegetables	Cooked
	L	JN	D	ka prao	Lf	Vegetables	Cooked
	L	MNP2	D	ka prao	Lf	Vegetables	Cooked
	L	TK	D	ka prao	Lf	Vegetables	Cooked
	H	KH	D	zaub txig them	Lf	Vegetables	Cooked
	H	SK	D	zaub txig them	Lf	Vegetables	Cooked
	M	HBY	D	leo la	Lf	Vegetables	Cooked
	M	HSN	D	leo la	Lf	Vegetables	Cooked
	M	STP	D	leo la	Lf	Vegetables	Cooked
<i>Perilla frutescens</i> (L.) Britton	K	NP	D	nga ki mon	Sd	Cereal	Dried/cooked
	L	TK	D	nga ki mon	Sd	Cereal	Dried/cooked
<i>Plectranthus amboinensis</i> Spreng.	K	HP	D	hom duan jang	Lf	Vegetables	Fresh
	K	NP	D	hom duan jang	Lf	Vegetables	Fresh
	H	KH	D	-	Lf	Vegetables	Fresh
<i>Teucrium viscidum</i> Blume var. <i>viscidum</i>	H	KH	D	pawn tshis nyeg	Lf	Vegetables	Cooked
	H	MNP	D	pawn tshis nyeg	Lf	Vegetables	Cooked
	H	SK	D	pawn tshis nyeg	Lf	Vegetables	Cooked
<i>Vitex peduncularis</i> Wall. ex Schauer	H	SK	W	-	Lf	Vegetables	Fresh
	M	HBY	W	mai riang/zin o mia	Lf	Tea substitute	Boiled

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
Lauraceae							
<i>Litsea cubeba</i> (Lour.) Pers.	H	MNP	W	-	Fr	Vegetables	Fresh
	L	MNP2	W	lum kwer sa	Fr	Vegetables	Fresh
<i>Litsea glutinosa</i> (Lour.) C.B.Rob.	H	KH	W	-	Fr	snack food	Fresh
<i>Persea americana</i> Mill.	H	KH	D	-	Fr	Fruit	Fresh
	K	HST	D	avogadro	Fr	Fruit	Fresh
	K	NP	D	avogadro	Fr	Fruit	Fresh
	L	JN	D	avogadro	Fr	Fruit	Fresh
	L	TK	D	avogadro	Fr	Fruit	Fresh
	M	HBY	D	avogadro	Fr	Fruit	Fresh
	M	HSN	D	avogadro	Fr	Fruit	Fresh
	M	STP	D	avogadro	Fr	Fruit	Fresh
Lecythidaceae							
<i>Careya sphaerica</i> Roxb.	L	JN	W	lum pui	YSh	Vegetables	Fresh
	K	HP	W	tood pui	YLf	Vegetables	Fresh
	M	HSN	W	bue fan diang	YLf	Vegetables	Fresh
Liliaceae							
<i>Chlorophytum nepalense</i> Baker	L	TK	W	yod doi	St	Vegetables	Cooked
Limnocharitaceae							
<i>Limnocharis flava</i> Buchenau	K	HST	D	phak kun jong	YLf	Vegetables	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
Malvaceae							
<i>Hibiscus sabdariffa</i> L.	H	KH	D	-	Clx	Beverage	Boiled
	M	HSN	D	ku bood zi	Clx	Beverage	Boiled
Marantaceae							
<i>Maranta arundinacea</i> L. var. <i>arundinacea</i>	L	JN	D	-	Rt	snack food	Cooked
	H	KH	D	nplooj ntse ntsuab	Rt	snack food	Cooked
	H	MNP	D	nplooj ntse ntsuab	Rt	snack food	Cooked
	H	SK	D	nplooj ntse ntsuab	Rt	snack food	Cooked
	M	HSN	D	ta heb doi	Rt	snack food	Cooked
	M	STP	D	ta heb doi	Rt	snack food	Cooked
Marattiaceae							
<i>Angiopteris evecta</i> (Forst.) Hoffm.	M	STP	W	ma tei doi/jang tei doi	YLf	Vegetables	Cooked
	L	JN	W	ba zone	YSh	Vegetables	Cooked
Melastomataceae							
<i>Dissochaeta stipularis</i> (Blume) Backer ex Clausing	L	TK	W	plae yhoe kraul	Fr	snack food	Fresh
<i>Melastoma malabathricum</i> L.	L	JN	W	lum yok	Fr	snack food	Fresh
	L	MNP2	W	lum yok	Fr	snack food	Fresh
	M	HBY	W	koong sung	Fr	snack food	Fresh
	M	HSN	W	koong sung	Fr	snack food	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	M	STP	W	koong sung	Fr	snack food	Fresh
	H	MNP	W	txuas thoob	Fr	snack food	Fresh
<i>Memecylon caeruleum</i> Jack	L	JN	W	lum long kong	YSh	Vegetables	Fresh
Meliaceae							
<i>Azadirachta indica</i> A.Juss.	K	NP	D	tood sa riam	Infl	Vegetables	Fresh
	L	JN	D	sa rium	Infl	Vegetables	Fresh
	L	TK	D	sa rium	Infl	Vegetables	Fresh
	K	HP	D	tood sa riam	Infl	Vegetables	Fresh
	K	HST	D	tood sa riam	Infl	Vegetables	Fresh
<i>Cipadessa baccifera</i> Miq.	L	TK	W	sa liam huaia	YSh	Vegetables	Fresh
<i>Lansium domesticum</i> Corrêa	K	HP	D	long kong	Fr	Fruit	Fresh
	K	HST	D	long kong	Fr	Fruit	Fresh
	K	NP	D	long kong	Fr	Fruit	Fresh
	L	JN	D	long kong	Fr	Fruit	Fresh
<i>Sandoricum koetjape</i> Merr.	M	HBV	D	he toong doe piao	Fr	Fruit	Fresh
	H	KH	D	-	Fr	Fruit	Fresh
	K	HP	D	plae ma tong	Fr	Fruit	Fresh
	K	HST	D	plae ma tong	Fr	Fruit	Fresh
	K	NP	D	plae ma tong	Fr	Fruit	Fresh
	L	JN	D	plae ma tong	Fr	Fruit	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Toona sinensis</i> (Juss.) M.Roem.	M	HSN	D	he toong doe piao	Fr	Fruit	Fresh
	M	STP	D	he toong doe piao	Fr	Fruit	Fresh
	L	TK	D	plae ma tong	Fr	Fruit	Fresh
	H	KH	D	yuj	YSh	Vegetables	Cooked/fresh
	H	MNP	W	yuj	YSh	Vegetables	Cooked/fresh
	H	SK	D	yuj	YSh	Vegetables	Cooked/fresh
	L	MNP2	W	lum yhu	YSh	Vegetables	Cooked/fresh
	L	TK	W	lum yhu	YSh	Vegetables	Cooked/fresh
Menispermaceae							
<i>Cissampelos pareira</i> L.	M	HBY	W	ha dia doi	Lf	snack food	Agar extracted
	M	HSN	W	tong yam hei	Lf	snack food	Agar extracted
	K	HST	W	moa noi	Lf	snack food	Agar extracted
	L	JN	W	mhuw buad	Lf	snack food	Agar extracted
<i>Parabaena sagittata</i> Miers	H	MNP	W	-	YSh	Vegetables	Cooked
	H	SK	W	-	YSh	Vegetables	Cooked
	M	HBY	W	ped kwai tuai	YSh	Vegetables	Cooked
	K	HP	W	la phak nung	YSh/YLf	Vegetables	Cooked
	K	HST	W	la phak nung	YSh/YLf	Vegetables	Cooked
	K	NP	W	la phak nung	Lf/YSh	Vegetables	Cooked
	L	MNP2	W	tu phak nung	YSh/YLf	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation	
<i>Tiliacora triandra</i> Diels	M	STP	W	ped kwai tuai	YSh/YLf	Vegetables	Cooked	
	L	TK	D	tu ja nang	Lf	Vegetables	Cooked	
Mimosaceae								
<i>Acacia pennata</i> (L.) Willd. subsp. <i>insuavis</i> (Lace) I.C.Nielsen	H	KH	D	maab tsw quav	YSh	Vegetables	Cooked	
	H	SK	D	maab tsw quav	YSh	Vegetables	Cooked	
	K	HST	D	tood sara	YSh	Vegetables	Cooked	
	M	HBV	D	yim juai	YSh	Vegetables	Cooked	
	M	HSN	D	yim juai	YSh	Vegetables	Cooked	
	M	STP	D	yim juai	YSh	Vegetables	Cooked	
	L	JN	D	lum phak la	YLf	Vegetables	Cooked	
	L	MNP2	D	lum phak la	YSh	Vegetables	Cooked	
	L	TK	D	lum phak la	YSh	Vegetables	Cooked	
	K	HP	D	tood sara	YSh	Vegetables	Cooked	
	K	NP	D	tood sara	YSh	Vegetables	Cooked	
	<i>Adenanthera pavonina</i> L.	K	HST	W	klong kred	YSh	Vegetables	Cooked
	<i>Entada glandulosa</i> Pierre ex Gagnep.	H	KH	D	txwv txab tub	YSh	Vegetables	Cooked
		L	JN	D	mhue laab	YSh	Vegetables	Cooked
M		HSN	W	tung hob hei/ub ton hei	YSh	Vegetables	Cooked	

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Leucaena leucocephala</i> (Lam.) de Wit	K	NP	W	kra tin	YSh	Vegetables	Fresh
	L	JN	W	ba kra tin	YSh	Vegetables	Fresh
<i>Mimosa pudica</i> L.	H	KH	W	tshuaj tsaaj mos	Wp	Tea substitute	Boiled
<i>Pithecellobium dulce</i> (Roxb.) Benth.	K	HST	D	ma kam ted	Fr	Fruit	Fresh
<i>Xylia xylocarpa</i> Taub.	K	HST	W	klong kred	YLf	Vegetables	Cooked
Moraceae							
<i>Artocarpus heterophyllus</i> Lam.	H	KH	D	txwv plaab nyug	Fr	Fruit	Fresh
	H	MNP	D	txwv plaab nyug	Fr	Fruit	Fresh
	H	SK	D	txwv plaab nyug	Fr	Fruit	Fresh
	K	HP	D	plae muk me	Fr	Fruit	Fresh
	K	HST	D	plae muk me	Fr	Fruit	Fresh
	K	NP	D	plae muk me	Fr	Fruit	Fresh
	L	JN	D	plae mu noon	Fr	Fruit	Fresh
	L	MNP2	D	plae mu noon	Fr	Fruit	Fresh
	L	TK	D	plae mu noon	Fr	Fruit	Fresh
	M	HBV	D	ta no ni	Fr	Fruit	Fresh
	M	HSN	D	ta no ni	Fr	Fruit	Fresh
	M	STP	D	ta no ni	Fr	Fruit	Fresh
<i>Artocarpus lacucha</i> Roxb. ex Buch.-Ham.	K	HST	W	tood trik	Fr	Fruit	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	L	TK	W	lum took	Fr	Fruit	Fresh
<i>Broussonetia papyrifera</i> Vent.	K	HST	W	tood sa lae	Fr	Fruit	Fresh
	L	MNP2	W	lum sa	YSh/YLf	Vegetables	Cooked
<i>Ficus auriculata</i> Lour.	M	HBY	W	ngong yho	Fr	Fruit	Fresh
	K	HP	W	tood proone	Fr	Vegetables	Cooked
	K	HST	W	trool	Fr	Vegetables	Fresh
	L	MNP2	W	lum krul	Fr	snack food	Fresh
	L	TK	W	lum krul	YFr	Vegetables	Fresh
	H	MNP	W	txwv txua	YLf	Vegetables	Fresh
	M	STP	W	ngong yho	Fr	snack food	Fresh
<i>Ficus glaberrima</i> Blume	L	TK	W	ki ngod	YSh/YLf	Vegetables	Fresh
<i>Ficus hirta</i> Vahl	L	TK	W	plae ting teed	Fr	snack food	Fresh
	K	HST	W	ka zal kwoi	Fr	snack food	Fresh
	M	HSN	W	dia tong	Fr	snack food	Fresh
	M	STP	W	dia tong	Fr	snack food	Fresh
<i>Ficus hispida</i> L.f.	K	HP	W	tood zal/tood proone	Fr	Vegetables	Fresh
	K	HST	W	tood zal/tood proone	Fr	Vegetables	Fresh
	M	HBY	W	ngong yho	YLf	Vegetables	Fresh
	M	HSN	W	ngong yho	Fr	snack food	Fresh
<i>Ficus infectoria</i> Willd.	H	SK	D	faaj khum	YSh	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HP	D	phak hued	YSh	Vegetables	Cooked
	L	MNP2	D	lum kee	YSh	Vegetables	Fresh
<i>Ficus racemosa</i> L.	K	HP	W	tood la wa	YSh	Vegetables	Fresh
	M	HBY	W	ngong yho	YSh	Vegetables	Fresh
<i>Ficus semicordata</i> Buch.-Ham. ex Sm.	L	MNP2	W	lum tod	Fr	snack food	Fresh
	H	KH	W	txwv txua	Fr	snack food	Fresh
	K	HP	W	tood la tode	Fr	snack food	Fresh
	K	HST	W	tood la tode	Fr	snack food	Fresh
	L	JN	W	lum tod	Fr	snack food	Fresh
	M	HBY	W	sa kow diang	Fr	snack food	Fresh
	M	HSN	W	sa kow diang	Lf	Tea substitute	Boiled
	M	STP	W	sa kow diang	Fr	snack food	Fresh
	H	MNP	W	txwv txua	Fr	snack food	Fresh
<i>Ficus squamosa</i> Roxb.	K	HP	W	la wa om	Yfr	Vegetables	Fresh
<i>Morus alba</i> L.	H	KH	D	zaub kab	Fr	Fruit	Fresh
	H	MNP	D	zaub kab	Fr	Fruit	Fresh
	H	SK	D	zaub kab	Fr	Fruit	Fresh
	M	HBY	D	king go piao	Fr	Fruit	Fresh
	M	HSN	D	king go piao	Fr	Fruit	Fresh
	M	STP	D	king go piao	Fr	Fruit	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HP	D	hmon	Fr	Fruit	Fresh
Moringaceae							
<i>Moringa oleifera</i> Lam.	H	KH	D	-	Fr	Vegetables	Cooked
	L	JN	D	ma room	Fr	Vegetables	Cooked
Musaceae							
<i>Musa acuminata</i> Colla	L	MNP2	D	lum krin	Infl/ St	Vegetables	Cooked
	L	TK	D	lum krin	Fr	Fruit	Fresh
	H	KH	D	tsawb qus	Fr	Fruit	Fresh
	K	HST	D	yon roe	Infl	Vegetables	Cooked
	L	JN	D	lum krin	Fr	Fruit	Fresh
<i>Musa itinerans</i> Cheesman	H	SK	D	tsawb lab	Fr	Fruit	Fresh
	K	HP	D	troi yim	Fr	Fruit	Fresh
	K	HST	D	troi yim	Fr	Fruit	Fresh
	K	NP	D	troi yim	Fr	Fruit	Fresh
	M	HBY	D	nom jiu zi	Fr	Fruit	Fresh
	M	STP	D	nom jiu zi	Fr	Fruit	Fresh
<i>Musa nana</i> Lour.	K	HP	D	troi lan	Fr	Fruit	Fresh
	K	HST	D	troi lan	Fr	Fruit	Fresh
	K	NP	D	troi lan	Fr	Fruit	Fresh
	L	JN	D	lum kruai	Fr	Fruit	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Musa paradisiaca</i> L.	M	HBY	D	nom jiu eye	Fr	Fruit	Fresh
	M	HSN	D	nom jiu eye	Fr	Fruit	Fresh
	H	KH	D	tsawb dlub	Fr	Fruit	Fresh
	K	HP	D	troi	Fr	Fruit	Fresh
	K	HST	D	troi	Fr	Fruit	Fresh
	K	NP	D	troi	Fr	Fruit	Fresh
	L	JN	D	lum kruai	Fr	Fruit	Fresh
	L	MNP2	D	lum kruai	Fr	Fruit	Fresh
<i>Musa sapientum</i> L.	L	TK	D	lum kruai	Fr	Fruit	Fresh
	M	HSN	D	nom jiu jong	Fr	Fruit	Fresh
	H	KH	D	tsawb	Fr	Fruit	Fresh
	H	MNP	D	tsawb	Fr	Fruit	Fresh
	H	SK	D	tsawb	Fr	Fruit	Fresh
	K	HP	D	troi	Fr	Fruit	Fresh
	K	HST	D	troi	Fr	Fruit	Fresh
	K	NP	D	troi	Fr	Fruit	Fresh
	M	HBY	D	nom jiu	Fr	Fruit	Fresh
	M	HSN	D	nom jiu	Fr	Fruit	Fresh
	M	STP	D	nom jiu	Fr	Fruit	Fresh
L	JN	D	lum kruai	Fr	Fruit	Fresh	

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	L	MNP2	D	lum kruai	Fr	Fruit	Fresh
	L	TK	D	lum kruai	Fr	Fruit	Fresh
Myrsinaceae							
<i>Ardisia amherstiana</i> A.DC.	K	HP	W	klong mud lein	YSh/YLf	Vegetables	Fresh
	M	HBV	W	tong long	YLf	Vegetables	Fresh
	M	STP	W	tong long	Fr	snack food	Fresh
<i>Embelia sessiflora</i> Kurz	K	HST	W	mhue mung roi	Fr/YSh	Fruit	Fresh
	L	TK	W	mhue ngod	Fr	Fruit	Fresh
	L	MNP2	W	mhue ngod	Fr	Fruit	Fresh
	M	STP	W	tapow thow sui	Fr	Fruit	Fresh
<i>Maesa indica</i> (Roxb.) Sweet	H	MNP	W	npua tshuaj	YSh	Vegetables	Fresh
Myrtaceae							
<i>Psidium guajava</i> L.	H	KH	D	txwv cuab thoj	Fr	Fruit	Fresh
	H	MNP	D	txwv cuab thoj	Fr	Fruit	Fresh
	H	SK	D	txwv cuab thoj	Fr	Fruit	Fresh
	K	HP	D	plae kaew	Fr	Fruit	Fresh
	K	HST	D	plae kaew	Fr	Fruit	Fresh
	K	NP	D	plae kaew	Fr	Fruit	Fresh
	L	JN	D	plae keaw	Fr	Fruit	Fresh
	L	MNP2	D	plae keaw	Fr	Fruit	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	L	TK	D	plae keaw	Fr	Fruit	Fresh
	M	HBY	D	piao oi	Fr	Fruit	Fresh
	M	HSN	D	piao oi	Fr	Fruit	Fresh
	M	STP	D	piao oi	Fr	Fruit	Fresh
<i>Syzygium albiflorum</i> (Duthie ex Kurz) Bahadur & R.C.Gaur	H	MNP	D	-	Fr	Fruit	Fresh
	L	MNP2	W	lum plae bang	Fr	Fruit	Fresh
	M	HBY	W	dung dong diang	Fr	Fruit	Fresh
<i>Syzygium cumini</i> (L.) Skeels	H	SK	D	-	Fr	Fruit	Fresh
	K	HP	D	tood ma kiang	Fr	Fruit	Fresh
	M	HBY	D	dung dong diang	Fr	Fruit	Fresh
	M	STP	D	dung dong diang	Fr	Fruit	Fresh
	K	NP	D	tood ma kiang	Fr	Fruit	Fresh
	L	JN	D	lum bang	Fr	Fruit	Fresh
	L	TK	D	lum bang	Fr	Fruit	Fresh
<i>Syzygium jambos</i> (L.) Alston	H	KH	D	-	Fr	Fruit	Fresh
	H	MNP	D	-	Fr	Fruit	Fresh
	K	HP	D	chom pu	Fr	Fruit	Fresh
	K	HST	D	chom pu	Fr	Fruit	Fresh
	K	NP	D	chom pu	Fr	Fruit	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Syzygium malaccense</i> (L.) Merr. & L.M.Perry	L	TK	D	plae chom pu	Fr	Fruit	Fresh
	L	JN	D	plae chom pu	Fr	Fruit	Fresh
	M	HSN	D	chom pu	Fr	Fruit	Fresh
	K	HP	D	ma meo	Fr	Fruit	Fresh
	K	HST	D	ma meo	Fr	Fruit	Fresh
	K	NP	D	ma meo	Fr	Fruit	Fresh
	L	JN	D	plae ma meow	Fr	Fruit	Fresh
	L	TK	D	plae ma meow	Fr	Fruit	Fresh
	M	HBV	D	ma meo	Fr	Fruit	Fresh
	M	STP	D	ma meo	Fr	Fruit	Fresh
Olacaceae							
<i>Erythralum scandens</i> Blume	H	KH	D	maab tsw qej	YSh	Vegetables	Cooked
	H	SK	D	maab tsw qej	YSh	Vegetables	Cooked
	K	HP	D	krueng	YSh	Vegetables	Cooked
	K	HST	D	rer ling	YSh	Vegetables	Cooked
	K	NP	D	mhue ling	YSh	Vegetables	Cooked
	L	JN	D	ba ling	YSh	Vegetables	Cooked
	L	MNP2	D	tu ling	YSh	Vegetables	Cooked
	L	TK	D	tu ling	YSh/YLf	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	M	HBV	D	jao don hei	YSh	Vegetables	Cooked
	M	HSN	D	jao don hei	YSh	Vegetables	Cooked
	M	STP	D	jao don hei	YSh	Vegetables	Cooked
Orchidaceae							
<i>Goodyera procera</i> Hook.	K	HP	W	sa liam krang	Lf	Vegetables	Fresh
Oxalidaceae							
<i>Averrhoa carambola</i> L.	K	HP	D	plae ma fueng	Fr	Fruit	Fresh
	K	HST	D	plae ma fueng	Fr	Fruit	Fresh
	K	NP	D	plae ma fueng	Fr	Fruit	Fresh
	L	TK	D	plae keo	Fr	Fruit	Fresh
	H	KH	D	-	Fr	Fruit	Fresh
	L	JN	D	plae keo	Fr	Fruit	Fresh
	M	HSN	D	piao long	Fr	Fruit	Fresh
	M	STP	D	piao long	Fr	Fruit	Fresh
<i>Oxalis corniculata</i> L.	M	STP	W	tong sing mia	Lf	Vegetables	Cooked
Pandanaceae							
<i>Pandanus</i> sp.	K	NP	W	tood toei	St	Vegetables	Cooked
Papilionaceae							
<i>Cajanus cajan</i> (L.) Mill	K	NP	D	plae ka lang	Fr	Vegetables	Fresh
	L	JN	D	lum plae ma hae	Fr	Vegetables	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HST	D	plae ka lang	Fr	Vegetables	Fresh
	L	TK	D	lum plae ma hae	Fr	Vegetables	Fresh
	K	HP	D	plae ka lang	Fr	Vegetables	Fresh
<i>Cajanus goensis</i> Dalzell	L	MNP2	W	yang zuak	Fl	Vegetables	Fresh
	L	TK	W	yang zuak	Fl	Vegetables	Fresh
<i>Dolichos lablab</i> L.	K	HP	D	tood ue tae	Fr	Vegetables	Cooked
	K	HST	D	ma pap	Fr	Vegetables	Cooked
	L	TK	D	plae tae	Fr	Vegetables	Cooked
	M	HBY	D	tob hang	Fr	Vegetables	Cooked
	M	HSN	D	tob hang	Fr	Vegetables	Cooked
	L	JN	D	plae tae	Fr	Vegetables	Cooked
	L	MNP2	D	plae tae	Fr	Vegetables	Cooked
<i>Erythrina stricta</i> Roxb.	K	NP	W	tood tong	YSh	Vegetables	Fresh
	L	TK	W	lum klooi	YSh	Vegetables	Fresh
	L	JN	D	lum tong	YSh	Vegetables	Cooked
<i>Glycine max</i> (L.) Merr.	M	HBY	D	tob yung	Sd	Cereal	Dried/cooked
	K	NP	D	thua lueng	Sd	Cereal	Dried/cooked
<i>Millettia extensa</i> Benth. ex Baker	L	MNP2	W	mhue ome bua	Ex from	Beverage	Fresh
	M	HSN	W	ngong uan hei	St	Tea substitute	Boiled

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Pachyrhizus erosus</i> (L.) Urb.	M	STP	W	ngong uan hei	Lf	Tea substitute	Boiled
	K	HP	D	krol	Rt	snack food	Fresh
	M	STP	D	tob doi piao	Rt	snack food	Fresh
<i>Phaseolus mungo</i> L.	K	NP	D	thua dum	Sd	Cereal	Dried/cooked
	K	HST	D	thua dum	Sd	Cereal	Dried/cooked
<i>Phaseolus vulgaris</i> L.	H	KH	D	taum laa	Sd	Cereal	Dried/cooked
	H	MNP	D	taum laa	Sd	Cereal	Dried/cooked
<i>Psophocarpus tetragonolobus</i> DC.	M	HSN	D	tob zi	Sd	Cereal	Dried/cooked
	M	STP	D	tob zi	Sd	Cereal	Dried/cooked
	H	KH	D	taum kaaj ntswm	Fr	Vegetables	Cooked/fresh
	K	HST	D	thua pu	Fr	Vegetables	Cooked/fresh
	M	HSN	D	tob long	Fr	Vegetables	Cooked/fresh
	M	STP	D	tob long	Fr	Vegetables	Cooked/fresh
	K	NP	D	thua pu	Fr	Vegetables	Cooked/fresh
	M	HBV	D	diang piang	Fl	Vegetables	Cooked
<i>Sesbania grandiflora</i> (L.) Desv.	M	HSN	D	diang piang	Fl	Vegetables	Cooked
	K	HP	D	tood rang jaak	Fl	Vegetables	Cooked
	K	HST	D	tood rang jaak	Fl	Vegetables	Cooked
	K	NP	D	tood rang jaak	Fl	Vegetables	Cooked
	L	JN	D	lum dok kae	Fl	Vegetables	Cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Sesbania javanica</i> Miq.	K	HST	D	-	Fl	Vegetables	Cooked
	K	HST	D	-	Fl	Vegetables	Cooked
<i>Tadehagi triquetrum</i> (L.) H.Ohashi	L	TK	W	yun kod/tu kod	YLf	Vegetables	Cooked
	M	HBY	W	ha dia ngang	Lf	Tea substitute	Boiled
<i>Vigna umbellata</i> (Thunb.) Ohwi&Ohashi	M	HBY	D	tob zi	Sd	Cereal	Dried/cooked
<i>Vigna unguiculata</i> (L.) Walp.	H	KH	D	taum ntev	Fr	Vegetables	Cooked/fresh
	H	SK	D	taum ntev	Fr	Vegetables	Cooked/fresh
	K	HP	D	tpai wang	Fr	Vegetables	Cooked/fresh
	K	HST	D	tpai wang	Fr	Vegetables	Cooked/fresh
	K	NP	D	tpai wang	Fr	Vegetables	Cooked/fresh
	L	JN	D	-	Fr	Vegetables	Cooked/fresh
	L	MNP2	D	-	Fr	Vegetables	Cooked/fresh
	L	TK	D	-	Fr	Vegetables	Cooked/fresh
	M	HBY	D	tob dao	Fr	Vegetables	Cooked/fresh
	M	HSN	D	tob dao	Fr	Vegetables	Cooked/fresh
	M	STP	D	tob dao	Fr	Vegetables	Cooked/fresh
Passifloraceae							
<i>Passiflora edulis</i> Sims	H	KH	D	txwv tsuag taub	YSh	Vegetables	Cooked
	H	MNP	D	txwv tsuag taub	Fr	Fruit	Fresh
	H	SK	D	txwv tsuag taub	Fr	Fruit	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HST	D	plae ka tok rok	Fr/ YSh	Fruit	Fresh
	K	NP	D	plae ka tok rok	Fr	Fruit	Fresh
	L	JN	D	plae pok rok	YSh	Vegetables	Cooked
	L	MNP2	D	plae ja rod	Fr	Fruit	Fresh
	L	TK	D	plae pok rok	Fr	Fruit	Fresh
	M	HBY	D	toe yai tuai	Fr	Fruit	Fresh
	M	HSN	D	toe yai tuai	Fr	Fruit	Fresh
	M	STP	D	toe yai tuai	Fr	Fruit	Fresh
<i>Passiflora foetida</i> L.	K	HST	W	phak kab farang	Fr	Fruit	Fresh
	M	STP	W	-	Fr	Fruit	Fresh
<i>Passiflora quadrangularis</i> L.	L	TK	D	plae thua lod	Fr	Vegetables	Cooked
Pedaliaceae							
<i>Sesamum indicum</i> L.	K	HP	D	la nga hiang	Sd	Cereal	Dried/cooked
	K	NP	D	la nga hiang	Sd	Cereal	Dried/cooked
	L	JN	D	nga dum	Sd	Cereal	Dried/cooked
	M	HBY	D	za	Sd	Cereal	Dried/cooked
	M	HSN	D	za	Sd	Cereal	Dried/cooked
	M	STP	D	za	Sd	Cereal	Dried/cooked

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
Phytolaccaceae							
<i>Phytolacca americana</i> L.	H	KH	D	tshuaj kauv lim	Lf	Vegetables	Cooked
Piperaceae							
<i>Peperomia pellucida</i> (L.) Humb., Bonpl. & Kunth	L	TK	W	yun jai	Lf	Vegetables	Fresh
<i>Piper boehmeriifolium</i> Wall.	H	MNP	W	Maab saw nyiaj	Lf	Tea substitute	Boiled
<i>Piper nigrum</i> L.	M	HBV	D	ha jiu	Fr	Vegetables	Cooked/fresh
<i>Piper sarmentosum</i> Roxb.	H	KH	D	-	Lf	Vegetables	Cooked/fresh
	H	SK	D	-	Lf	Vegetables	Cooked/fresh
	K	HP	D	ba ling	Lf	Vegetables	Cooked/fresh
	K	NP	D	la pu ling	Lf	Vegetables	Cooked/fresh
	L	JN	D	tu pa ling	Lf	Vegetables	Cooked/fresh
	L	MNP2	D	tu pa ling	Lf	Vegetables	Cooked/fresh
	L	TK	D	tu pa ling	Lf	Vegetables	Cooked/fresh
	M	HSN	D	jae lao	Lf	Vegetables	Cooked/fresh
	M	STP	D	jae lao	Lf	Vegetables	Cooked/fresh
	K	HST	D	la pu ling	Lf	Vegetables	Cooked/fresh
	L	JN	D	tu pa ling	Lf	Vegetables	Cooked/fresh
	M	HBV	D	jae lao	Lf	Vegetables	Cooked/fresh
<i>Piper</i> sp.	K	HP	W	la khroa	YSh/YLf	Vegetables	Fresh

Table 5. (Continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HST	W	la khroa	Lf	Vegetables	Fresh
	K	HST	W	la khroa	Lf	Vegetables	Fresh
	L	JN	W	ba ju	YLf	Vegetables	Fresh
	L	TK	W	tu kul	YLf	Vegetables	Fresh
	M	STP	W	jae lao	YLf	Vegetables	Fresh
	M	HSN	W	jae lao	YLf	Vegetables	Fresh
	M	HBV	W	jae lao	YSh	Vegetables	Fresh
Poaceae							
<i>Bambusa nutans</i> Wall. ex Munro	K	NP	W	phai bong	Sh	Vegetables	Cooked
	L	JN	W	plai bong	Sh	Vegetables	Cooked
	L	MNP2	W	poi bong	Sh	Vegetables	Cooked
	M	HBV	W	hao bong	Sh	Vegetables	Cooked
<i>Bambusa</i> sp.	K	HST	W	phai whaan	Sh	Vegetables	Cooked
	K	NP	W	phai whaan	Sh	Vegetables	Cooked
<i>Cephalostachyum virgatum</i> Kurz	K	NP	W	phai hiae	Sh	Vegetables	Cooked
<i>Dendrocalamus giganteus</i> Munro	L	JN	D	phai poa	Sh	Vegetables	Cooked
	L	MNP2	D	phai poa	Sh	Vegetables	Cooked
	L	TK	D	phai poa	Sh	Vegetables	Cooked
	K	HP	D	phai pao	Sh	Vegetables	Cooked
	K	HST	D	phai pao	Sh	Vegetables	Cooked

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Dendrocalamus hamiltonii</i> Nees & Arn. ex Munro	M	HBY	W	hoa tok	Sh	Vegetables	Cooked
<i>Dendrocalamus membranaceus</i> Munro	K	HP	W	rang la ia	Sh	Vegetables	Cooked
<i>Dendrocalamus strictus</i> (Roxb.) Nees	M	HBY	W	hao biang	Sh	Vegetables	Cooked
<i>Eleusine indica</i> (L.) Gaertn.	K	NP	W	jud thraak traak	Yst	Vegetables	Cooked
<i>Gigantochloa albociliata</i> (Munro) Kurz	M	HBY	W	phai rai	Sh	Vegetables	Cooked
	L	MNP2	W	lum ial	Sh	Vegetables	Cooked
<i>Oryza sativa</i> L.	H	KH	D	npleg	Gr	Staple food	
	H	MNP	D	npleg	Gr	Staple food	Cooked
	H	SK	D	npleg	Gr	Staple food	Cooked
	K	HP	D	hma	Gr	Staple food	Cooked
	K	HST	D	hma	Gr	Staple food	Cooked
	K	NP	D	hma	Gr	Staple food	Cooked
	L	JN	D	za	Gr	Staple food	Cooked
	L	MNP2	D	za	Gr	Staple food	Cooked
	L	TK	D	za	Gr	Staple food	Cooked
	M	HBY	D	biao	Gr	Staple food	Cooked
	M	HSN	D	biao	Gr	Staple food	Cooked
	M	STP	D	biao	Gr	Staple food	Cooked

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Phyllostachys sulphurea</i> (Carrière) Rivière & C.Rivière	L	MNP2	D	phai lueng	Sh	Vegetables	Cooked
<i>Saccharum chinense</i> Roxb.	K	NP	D	oi dum	St	snack food	Fresh
	K	HST	D	oi dum	St	snack food	Fresh
	L	TK	D	lum mi zo	St	snack food	Fresh
	H	KH	D	quav ntsuas lab	St	snack food	Fresh
	M	HBY	D	kum jia zi/	St	snack food	Fresh
	M	HSN	D	kum jia zi/	St	snack food	Fresh
<i>Saccharum officinarum</i> L.	H	KH	D	quav ntsuas	St	snack food	Fresh
	H	MNP	D	quav ntsuas	St	snack food	Fresh
	H	SK	D	quav ntsuas	St	snack food	Fresh
	M	HBY	D	kum jia	St	snack food	Fresh
	M	HSN	D	kum jia	St	snack food	Fresh
	M	STP	D	kum jia	St	snack food	Fresh
	K	HST	D	oi	St	snack food	Fresh
	L	JN	D	lum mi	St	snack food	Fresh
	L	MNP2	D	lum mi	St	snack food	Fresh
	L	TK	D	lum mi	St	snack food	Fresh
	K	HP	D	oi	St	snack food	Fresh
	K	NP	D	oi	St	snack food	Fresh

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Sorghum vulgare</i> Pers.	H	KH	D	quav ntsuas npleg	Sd	snack food	Cooked
	H	SK	D	quav ntsuas npleg	St	snack food	Fresh
	L	TK	D	plae pi chiao	St	snack food	Fresh
	M	HSN	D	mae jia/ku lang jia	St	snack food	Fresh
	M	HBY	D	mae jia/ku lang jia	Sd	Cereal	Dried/cooked
<i>Zea mays</i> L.	H	KH	D	pob kws	Sd	Cereal	Cooked
	K	HP	D	sa li	Sd	Cereal	Cooked
	K	HST	D	sa li	Sd	Cereal	Cooked
	L	JN	D	-	Sd	Cereal	Cooked
	L	MNP2	D	-	Sd	Cereal	Cooked
	M	HSN	D	ka mhae	Sd	Cereal	Cooked
	M	STP	D	ka mhae	Sd	Cereal	Cooked
	Polygonaceae						
<i>Fagopyrum cymosum</i> (Trevir.) Meisn.	H	MNP	W	cej quab	YSh	Snack food	Fresh
	M	HSN	D	chao bong	YLf	Vegetables	Cooked
<i>Polygonum chinense</i> L.	H	SK	W	qaub guav yeeb	Lf	Vegetables	Cooked
	M	HBY	W	tapow thow sui	YLf	Vegetables	Cooked
	M	STP	W	tapow thow sui	Lf	Vegetables	Cooked
<i>Polygonum orientale</i> L.	M	HBY	D	chao	Lf	Vegetables	Cooked
<i>Rumex obtusifolius</i> L.	H	MNP	D	tau faaj lab	Lf	Vegetables	Cooked

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation	
Pontederiaceae								
<i>Monochoria hastata</i> (L.) Solms	L	MNP2	W	-	Lf	Vegetables	Cooked	
Portulacaceae								
<i>Talinum fruticosum</i> (L.) Juss.	H	KH	D	kob lwj xeeb	Lf	Vegetables	Cooked	
	H	MNP	D	kob lwj xeeb	Lf	Vegetables	Cooked	
	H	SK	D	kob lwj xeeb	Lf	Vegetables	Cooked	
	L	JN	D	-	Lf	Vegetables	Cooked	
	M	HBY	D	ka li zein	Lf	Vegetables	Cooked	
	M	HSN	D	ka li zein	Lf	Vegetables	Cooked	
	M	STP	D	ka li zein	Lf	Vegetables	Cooked	
	<i>Talinum paniculatum</i> (Jacq.) Gaertn.	H	KH	D	kob lwj xeeb	Lf	Vegetables	Cooked
		H	SK	D	kob lwj xeeb	Lf	Vegetables	Cooked
		M	HBY	D	ka li zein	Lf	Vegetables	Cooked
M		HSN	D	ka li zein	Lf	Vegetables	Cooked	
M	STP	D	ka li zein	Lf	Vegetables	Cooked		
Proteaceae								
<i>Macadamia integrifolia</i> Maiden & Betche	L	MNP2	D	-	Sd	snack food	Fresh	
	H	MNP	D	-	Sd	snack food	Fresh	
Punicaceae								
<i>Punica granatum</i> L.	K	HST	D	tub tim	Fr	Fruit	Fresh	

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	NP	D	tub tim	Fr	Fruit	Fresh
	L	JN	D	plae tub tim	Fr	Fruit	Fresh
	M	HBY	D	-	Fr	Fruit	Fresh
Rhamnaceae							
<i>Colubrina asiatica</i> (L.) Brongn.	H	KH	D	-	YSh	Vegetables	Cooked
	K	HP	D	ma rhi kan tong	YSh	Vegetables	Cooked
	K	HST	D	phak kan tong	Lf	Vegetables	Cooked
	L	JN	D	ba kan tong	YSh	Vegetables	Cooked
	M	HSN	D	-	YSh	Vegetables	Cooked
	L	TK	D	tu kan tong	YSh	Vegetables	Cooked
<i>Zizyphus jujuba</i> Lam.	K	HP	D	plae ma tun	Fr	Fruit	Fresh
	K	HST	D	plae ma tun	Fr	Fruit	Fresh
<i>Zizyphus mauritiana</i> Lam.	M	STP	D	-	Fr	Fruit	Fresh
<i>Zizyphus oenoplia</i> (L.) Mill.	L	TK	W	mhue kia kang	Fr	Fruit	Fresh
	M	HBY	W	ma tun	Fr	Fruit	Fresh
Rosaceae							
<i>Prunus domestica</i> L.	L	JN	D	look hnai	Fr	Fruit	Fresh
	L	MNP2	D	look hnai	Fr	Fruit	Fresh
<i>Prunus persica</i> (L.) Batsch	H	MNP	D	txwv dluaj	Fr	Fruit	Fresh
	L	MNP2	D	to	Fr	Fruit	Fresh

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	L	TK	D	to	Fr	Fruit	Fresh
<i>Pyrus pyrifolia</i> Nakai	H	MNP	D	-	Fr	Fruit	Fresh
	L	MNP2	D	plae sa li	Fr	Fruit	Fresh
<i>Rubus alceifolius</i> Poir.	L	MNP2	W	mhue blue	Fr	Fruit	Fresh
	L	TK	W	mhue blue zo	Fr	Fruit	Fresh
	H	MNP	W	txwv lauj tauv	Fr	Fruit	Fresh
	K	NP	W	plae tong tam	Fr	Fruit	Fresh
<i>Rubus ellipticus</i> Sm.	L	MNP2	W	mhue plae biad	Fr	Fruit	Fresh
	L	TK	W	mhue blue hueng	Fr	Fruit	Fresh
	H	MNP	W	txwv khaub tseeb	Fr	Fruit	Fresh
<i>Rubus leucanthus</i> Hance	M	STP	W	ying ko bong	Fr	Fruit	Fresh
<i>Rubus moluccanus</i> L.	K	HST	W	prai ka tam	Fr	Fruit	Fresh
	L	TK	W	mhue blue	Fr	Fruit	Fresh
<i>Rubus niveus</i> Thunb.	L	MNP2	W	mhue plae biad	Fr	Fruit	Fresh
Rubiaceae							
<i>Canthium parviflorum</i> Lam.	H	KH	W	txwv paus	Fr	snack food	Cooked
	K	HST	W	tood ue roe	Fr	snack food	Cooked
	K	NP	W	muk yung jid	Fr	snack food	Cooked
	L	JN	W	lum plae plow	Fr	snack food	Cooked
	M	HSN	W	fong che tang	Fr	snack food	Cooked

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	M	HBY	W	fong che tang	Fr	snack food	Cooked
<i>Hymenodictyon orixense</i> (Roxb.) Mabb.	K	HST	W	som kob	YLf	Vegetables	Fresh
<i>Morinda citrifolia</i> L.	H	KH	D	-	Lf	Vegetables	Cooked
	K	HST	D	-	Lf	Vegetables	Cooked
<i>Mussaenda sanderiana</i> Ridl.	M	HBY	W	ja king hei	St	Tea substitute	Boiled
<i>Paederia foetida</i> L.	L	MNP2	W	mhue pom sua	YSh	Vegetables	Fresh
<i>Paederia pilifera</i> Hook.f.	L	JN	W	mhue pom sua	YSh	Vegetables	Fresh
	L	TK	W	mhue pom sua	YSh	Vegetables	Fresh
	K	HP	W	ma rhi ou	YSh	Vegetables	Fresh
	K	HST	W	ma rhi ou	YSh	Vegetables	Fresh
	K	NP	W	ma rhi ou	YSh	Vegetables	Fresh
	M	HBY	W	ja kai chiab hei	YSh	Vegetables	Fresh
	M	STP	W	ja kai chiab hei	YSh	Vegetables	Fresh
<i>Wendlandia tinctoria</i> DC.	K	HST	W	ra ngae	YSh	Vegetables	Fresh
	L	TK	W	pong lung/kuang lang	Infl	Vegetables	Fresh
Rutaceae							
<i>Citrus aurantifolia</i> Swing.	K	HP	D	plae ma nao	Fr	Fruit	Fresh
<i>Citrus maxima</i> (Burm.) Merr.	H	KH	D	txwv maum ov	Fr	Fruit	Fresh
	H	MNP	D	txwv maum ov	Fr	Fruit	Fresh
	H	SK	D	txwv maum ov	Fr	Fruit	Fresh

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HP	D	plae ma o	Fr	Fruit	Fresh
	K	HST	D	plae ma o	Fr	Fruit	Fresh
	K	NP	D	plae ma o	Fr	Fruit	Fresh
	L	JN	D	lum plae o	Fr	Fruit	Fresh
	L	MNP2	D	lum plae o	Fr	Fruit	Fresh
	L	TK	D	lum plae o	Fr	Fruit	Fresh
	M	HBV	D	piao dom	Fr	Fruit	Fresh
	M	HSN	D	piao dom	Fr	Fruit	Fresh
	M	STP	D	piao dom	Fr	Fruit	Fresh
<i>Citrus reticulata</i> Blanco	K	HP	D	som	Fr	Fruit	Fresh
	K	HST	D	som	Fr	Fruit	Fresh
	K	NP	D	som	Fr	Fruit	Fresh
	L	JN	D	som	Fr	Fruit	Fresh
	M	STP	D	dia kum jai	Fr	Fruit	Fresh
<i>Clausena lansium</i> Skeels	H	SK	D	-	Fr	Fruit	Fresh
	M	STP	D	ma fai jeen	Fr	Fruit	Fresh
	K	HP	D	ma fai jeen	Fr	Fruit	Fresh
<i>Clausena wallichii</i> Oliv.	K	NP	W	-	YSh	Vegetables	Fresh
	L	JN	D	ba oi	YSh	Vegetables	Fresh
	K	HP	W	sa liam puai	Lf	Vegetables	Fresh

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HST	D	ra yalw	Lf	Vegetables	Fresh
	M	HBV	W	dian ton jeo	YSh	Vegetables	Fresh
<i>Euodia</i> sp.	L	JN	W	lum si fun	YLf	Vegetables	Fresh
	L	TK	W	moi cheb	YSh/YLf	Vegetables	Fresh
<i>Melicope pteleifolia</i> (Champ. ex Benth.) T.G.Hartley	L	MNP2	W	lum ode yed	YSh	Vegetables	Fresh
<i>Toddalia asiatica</i> (L.) Lam.	L	JN	D	ba dok	YSh	Vegetables	Fresh
	L	TK	D	mhue lok lak	YSh	Vegetables	Fresh
	L	MNP2	D	mhue lok lak	YSh/YLf	Vegetables	Fresh
	K	HP	D	la uem tok	Lf	Vegetables	Fresh
	K	HST	D	la uem tok	YSh/YLf	Vegetables	Fresh
Sapindaceae							
<i>Dimocarpus longan</i> Lour.	H	KH	D	-	Fr	Fruit	Fresh
	H	SK	D	-	Fr	Fruit	Fresh
	K	HP	D	plae lum yai	Fr	Fruit	Fresh
	K	HST	D	plae lum yai	Fr	Fruit	Fresh
	K	NP	D	plae lum yai	Fr	Fruit	Fresh
	L	JN	D	plae lum yai	Fr	Fruit	Fresh
	L	MNP2	D	plae lum yai	Fr	Fruit	Fresh
	L	TK	D	plae lum yai	Fr	Fruit	Fresh

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	M	HBY	D	lum yai piao	Fr	Fruit	Fresh
	M	HSN	D	lum yai piao	Fr	Fruit	Fresh
<i>Lepisanthes rubiginosa</i> (Roxb.) Leenh.	K	NP	W	plae thao oe	Fr	snack food	Fresh
	K	HST	W	plae thao oe	Fr	snack food	Fresh
	M	HBY	W	diang ai piao	Fr	snack food	Fresh
<i>Litchi chinensis</i> Sonn.	H	KH	D	-	Fr	Fruit	Fresh
	H	SK	D	-	Fr	Fruit	Fresh
	K	HP	D	lin ji	Fr	Fruit	Fresh
	K	HST	D	lin ji	Fr	Fruit	Fresh
	K	NP	D	lin ji	Fr	Fruit	Fresh
	M	HBY	D	uem si	Fr	Fruit	Fresh
	M	HSN	D	uem si	Fr	Fruit	Fresh
	M	STP	D	uem si	Fr	Fruit	Fresh
	L	JN	D	lin ji	Fr	Fruit	Fresh
	L	MNP2	D	lin ji	Fr	Fruit	Fresh
	L	TK	D	lin ji	Fr	Fruit	Fresh
<i>Nephelium hypoleucum</i> Kurz	M	HBY	W	in zi diang	Fr	Fruit	Fresh
	K	HST	W	ko lan	Fr	Fruit	Fresh
<i>Nephelium lappaceum</i> L.	H	KH	D	-	Fr	Fruit	Fresh
	K	HP	D	ngo	Fr	Fruit	Fresh

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HST	D	ngoia	Fr	Fruit	Fresh
	K	NP	D	ngoia	Fr	Fruit	Fresh
	L	JN	D	ngoia	Fr	Fruit	Fresh
	L	TK	D	ngoia	Fr	Fruit	Fresh
	M	HBY	D	ngoia	Fr	Fruit	Fresh
	M	HSN	D	ngoia	Fr	Fruit	Fresh
	M	STP	D	ngoia	Fr	Fruit	Fresh
Sapotaceae							
<i>Chrysophyllum cainito</i> L.	H	KH	D	-	Fr	Fruit	Fresh
	H	SK	D	-	Fr	Fruit	Fresh
	K	HP	D	plae apple mueng	Fr	Fruit	Fresh
	K	HST	D	plae apple mueng	Fr	Fruit	Fresh
	K	NP	D	plae apple mueng	Fr	Fruit	Fresh
	L	JN	D	plae apple muang	Fr	Fruit	Fresh
	L	TK	D	plae apple muang	Fr	Fruit	Fresh
	M	HBY	D	ju mua piao	Fr	Fruit	Fresh
	M	HSN	D	ju mua piao	Fr	Fruit	Fresh
	M	STP	D	ju mua piao	Fr	Fruit	Fresh
<i>Manilkara zapota</i> (L.) P.Royen	H	KH	D	-	Fr	Fruit	Fresh
	K	NP	D	la mood	Fr	Fruit	Fresh

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	M	HBV	D	ju mua yang	Fr	Fruit	Fresh
	M	STP	D	ju mua yang	Fr	Fruit	Fresh
	L	JN	D	la mood	Fr	Fruit	Fresh
<i>Xantolis palmeri</i> (Fernald) Baehni	K	HP	D	-	Fr	Fruit	Fresh
Saururaceae							
<i>Houttuynia cordata</i> Thunb.	H	KH	D	zaub raus nees	Lf	Vegetables	Cooked/Fresh
	H	MNP	D	zaub raus nees	Lf	Vegetables	Cooked/Fresh
	H	SK	D	zaub raus nees	Lf	Vegetables	Cooked/Fresh
	K	HP	D	kao tong	Lf	Vegetables	Fresh
	K	HST	D	wa proone	Lf	Vegetables	Fresh
	K	NP	D	la mam plu	Lf	Vegetables	Fresh
	L	JN	D	kao tong	Lf	Vegetables	Fresh
	L	TK	D	kao tong	Lf	Vegetables	Fresh
	M	HBV	D	ju mua mia	Lf	Vegetables	Fresh
	M	STP	D	ju mua mia	Lf	Vegetables	Cooked/Fresh
Schisandraceae							
<i>Kadsura ananosma</i> Kerr	L	MNP2	W	plae ploi wang	Fr	Fruit	Fresh
	L	TK	W	plae ploi wang	Fr	Fruit	Fresh
Schizaeaceae							
<i>Lygodium flexuosum</i> (L.) Sw.	L	JN	W	mhue koo walw	YSh	Vegetables	Cooked

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	L	TK	W	mhue koo walw	YSh	Vegetables	Cooked
	K	HP	W	ka ra wral	YSh	Vegetables	Cooked
	K	HST	W	ka ra wral	YSh	Vegetables	Cooked
	K	NP	W	ka ra wral	YSh	Vegetables	Cooked
	M	HBY	W	jian ta zui/fam puang hen	YSh	Vegetables	Cooked
	M	HSN	W	jian ta zui/fam puang hen	YSh	Vegetables	Cooked
<i>Lygodium polystachyum</i> Wall. ex Moore	L	JN	W	ba zone zo	YSh	Vegetables	Cooked
	L	TK	W	mhue koo walw zo	YSh	Vegetables	Cooked
	M	STP	W	jian ta zui	YSh	Vegetables	Cooked
Scrophulariaceae							
<i>Limnophila rugosa</i> Merr.	H	KH	D	siv fwj xyaab	Lf	Vegetables	Cooked
	H	MNP	D	siv fwj xyaab	Lf	Vegetables	Cooked
	H	SK	D	siv fwj xyaab	Lf	Vegetables	Cooked
Selaginellaceae							
<i>Selaginella willdenowii</i> (Desv. ex Poir.) Baker	K	HP	W	kra zule wa	YSh	Vegetables	Fresh
	L	JN	W	ba zang ke	YLf	Vegetables	Fresh

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
Smilacaceae							
<i>Smilax lanceifolia</i> Roxb.	M	STP	W	jiam yang kong	Rt	Tea substitute	Boiled
<i>Smilax ovalifolia</i> Roxb.	K	HP	D	rong long	YSh	Vegetables	Cooked
	K	HST	D	rong long	YSh	Vegetables	Cooked
	L	JN	D	mhue kum dao	YSh	Vegetables	Cooked
	M	HBY	W	jam yang kong	Rt	Tea substitute	Boiled
	M	HSN	W	jam yang kong	Rh	Tea substitute	Boiled
Solanaceae							
<i>Capsicum annuum</i> L. var. <i>acuminatum</i> Fingerh.	H	SK	D	hov txob	Fr	Vegetables	Fresh
	L	TK	D	prik	Fr	Vegetables	Fresh
<i>Capsicum frutescens</i> L.	H	KH	D	hov txob	Fr	Vegetables	Fresh
	H	MNP	D	hov txob	Fr	Vegetables	Fresh
	H	SK	D	hov txob	Fr	Vegetables	Fresh
	L	JN	D	prik	Fr	Vegetables	Fresh
	K	HST	D	prik	Fr	Vegetables	Fresh
	L	TK	D	prik	Fr	Vegetables	Fresh
<i>Lycopersicon esculentum</i> Mill.	H	KH	D	txwv lws suav	Fr	Vegetables	Cooked/Fresh
	H	SK	D	txwv lws suav	Fr	Vegetables	Cooked/Fresh
	M	HBY	D	low lang piao	Fr	Vegetables	Cooked/Fresh

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Solanum aculeatissimum</i> Jacq.	M	HSN	D	low lang piao	Fr	Vegetables	Cooked/Fresh
	M	STP	D	low lang piao	Fr	Vegetables	Cooked/Fresh
	K	NP	D	ma kue som	Fr	Vegetables	Cooked/Fresh
	L	MNP2	D	plae ma kue som	Fr	Vegetables	Cooked/Fresh
	L	TK	D	plae ma kue som	Fr	Vegetables	Cooked/Fresh
	H	KH	D	txwv lwg	Fr	Vegetables	Fresh
	M	STP	D	jia	Fr	Vegetables	Fresh
	K	HP	D	plae tang nga	Fr	Vegetables	Fresh
	K	HST	D	plae tang nga	Fr	Vegetables	Fresh
	K	NP	D	plae tang nga	Fr	Vegetables	Fresh
	L	TK	D	plae tol	Fr	Vegetables	Fresh
	L	JN	D	plae tol	Fr	Vegetables	Fresh
	L	MNP2	D	plae tol	Fr	Vegetables	Fresh
<i>Solanum aethiopicum</i> L.	H	KH	D	txwv lwg ab	Fr	Vegetables	Cooked/fresh
	H	SK	D	txwv lwg ab	Fr	Vegetables	Cooked/fresh
<i>Solanum indicum</i> L.	H	KH	D	txwv lws ab	Fr	Vegetables	Fresh
	H	MNP	D	txwv lws ab	Fr	Vegetables	Fresh
	H	SK	D	txwv lws ab	Fr	Vegetables	Fresh
	K	HP	D	plae tron jung	Fr	Vegetables	Fresh
	K	HST	D	plae tron jung	Fr	Vegetables	Fresh

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	NP	D	plae tron jung	Fr	Vegetables	Fresh
	L	JN	D	plae tol zung	Fr	Vegetables	Fresh
	L	MNP2	D	plae tol zung	Fr	Vegetables	Fresh
	L	TK	D	plae tol zung	Fr	Vegetables	Fresh
	M	HSN	D	yim piao	Fr	Vegetables	Fresh
	M	STP	D	yim piao	Fr	Vegetables	Fresh
<i>Solanum macrocarpon</i> L.	H	SK	D	txwv lwg ab	Fr	Vegetables	Cooked/fresh
	M	HSN	D	ku go piao	Fr	Vegetables	Cooked/fresh
<i>Solanum melongena</i> L.	H	KH	D	txwv lwg	Fr	Vegetables	Cooked/fresh
	H	MNP	D	txwv lwg	Fr	Vegetables	Cooked/fresh
	H	SK	D	txwv lwg	Fr	Vegetables	Cooked/fresh
	K	HP	D	plae tron	Fr	Vegetables	Cooked/fresh
	K	HST	D	plae tron	Fr	Vegetables	Cooked/fresh
	K	NP	D	plae tron	Fr	Vegetables	Cooked/fresh
	L	JN	D	plae tol	Fr	Vegetables	Cooked/fresh
	L	MNP2	D	plae tol	Fr	Vegetables	Cooked/fresh
	L	TK	D	plae tol	Fr	Vegetables	Cooked/fresh
	M	HBV	D	jia zi	Fr	Vegetables	Cooked/fresh
	M	HSN	D	jia zi	Fr	Vegetables	Cooked/fresh
	M	STP	D	jia zi	Fr	Vegetables	Cooked/fresh

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Solanum nigrum</i> L.	H	KH	D	zaub ab	Lf	Vegetables	Cooked
	H	MNP	D	zaub ab	Lf	Tea substitute	Boiled
	K	HST	D	plae tron jung	YSh	Tea substitute	Boiled
	L	JN	D	ba deed seed	YSh	Vegetables	Cooked
	L	MNP2	D	phak kok	Lf	Vegetables	Cooked
	L	TK	D	phak kok	YSh/Fr	Vegetables	Cooked
	M	HBY	D	jian piao lai	YSh/Fr	Vegetables	Cooked
	M	HSN	D	jian piao lai	YSh	Vegetables	Cooked
	M	STP	D	jian piao lai	YSh/Fr	Vegetables	Cooked
<i>Solanum spirale</i> Roxb.	K	HP	D	la krong/phak deed	Lf	Vegetables	Cooked/fresh
	K	HST	D	la krong/phak deed	Lf	Vegetables	Cooked/fresh
	K	NP	D	la krong/phak deed	Lf	Vegetables	Cooked/fresh
	L	JN	D	tu plung/phak deed	YSh	Vegetables	Cooked/fresh
	L	MNP2	D	tu plung/phak deed	Fr	Vegetables	Cooked/fresh
	L	TK	D	tu plung/phak deed	Lf	Vegetables	Cooked/fresh
	M	HBY	D	jian dia	YLf	Vegetables	Cooked/fresh
	M	HSN	D	jian dia	YSh	Vegetables	Cooked/fresh
	M	STP	D	jian dia	Lf	Vegetables	Cooked/fresh
<i>Solanum stramonifolium</i> Jacq.	L	JN	D	plae ma uek	Fr	Vegetables	Cooked/fresh
	K	HP	D	truel	Fr	Vegetables	Cooked/fresh

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Solanum torvum</i> Sw.	K	NP	D	ma uek	Fr	Vegetables	Cooked/fresh
	H	KH	D	txwv lws qus	Fr	Vegetables	Cooked/fresh
	H	SK	D	txwv lws qus	Fr	Vegetables	Cooked/fresh
	K	HP	D	plae tron	Fr	Vegetables	Cooked/fresh
	K	HST	D	len toe	Fr	Vegetables	Cooked/fresh
	K	NP	D	plae tron	Fr	Vegetables	Cooked/fresh
	L	JN	D	plae done	Fr	Vegetables	Cooked/fresh
	L	MNP2	D	plae ton	Fr	Vegetables	Cooked/fresh
	L	TK	D	plae ton tai	Fr	Vegetables	Cooked/fresh
	M	HBV	D	yim piao	Fr	Vegetables	Cooked/fresh
M	HSN	D	yim piao	Fr	Vegetables	Cooked/fresh	
M	STP	D	yim piao	Fr	Vegetables	Cooked/fresh	
Sonneratiaceae							
<i>Duabanga grandiflora</i> Walp.	K	NP	W	tood truel	Clx	Vegetables	Fresh
	L	MNP2	W	lum koob	Clx	Vegetables	Fresh
	L	TK	W	lum koob	Clx	Vegetables	Fresh
Sterculiaceae							
<i>Sterculia lanceolata</i> Cav.	H	SK	W	laum laij	Sd	snack food	Cooked
	K	NP	W	tood ma luem	Sd	snack food	Cooked
	K	HST	W	tood ma luem	Sd	snack food	Cooked

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
	K	HP	W	tood ma luem	Sd	snack food	Cooked
	L	JN	W	plae tuk lom	Sd	snack food	Cooked
	L	MNP2	W	plae tuk lom	Sd	snack food	Cooked
	L	TK	W	plae tuk lom	Sd	snack food	Cooked
	M	HBY	W	jae ton tob	Sd	snack food	Cooked
	M	STP	W	jae ton tob	Sd	snack food	Cooked
<i>Sterculia monosperma</i> Vent.	H	KH	D	-	Sd	snack food	Cooked
	L	JN	D	plae kao lud	Sd	snack food	Cooked
Taccaceae							
<i>Tacca chantrieri</i> Andre	L	MNP2	W	tu tuk	YLf	Vegetables	Cooked/fresh
	H	KH	W	nplooj qhwv yeeb	YLf	Vegetables	Cooked/fresh
	H	MNP	W	nplooj qhwv yeeb	YLf	Vegetables	Cooked/fresh
	K	NP	W	la niab lein	Lf/Fl	Vegetables	Cooked/fresh
	L	JN	W	tu tuk	YLf	Vegetables	Cooked/fresh
	L	TK	W	tu tuk	YLf/Fl	Vegetables	Cooked/fresh
	M	HBY	W	sun ta wang	YLf	Vegetables	Cooked/fresh
	M	HSN	W	sun ta wang	YLf	Vegetables	Cooked/fresh
	M	STP	W	sun ta wang	YLf	Vegetables	Cooked/fresh
	K	HP	W	tood pu wa	YLf	Vegetables	Cooked/fresh
	K	HST	W	la niab lein	Fl	Vegetables	Cooked/fresh

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation	
Theaceae								
<i>Camellia sinensis</i> (L.) Kuntze	L	TK	D	tu hiang	YLf	Vegetables	Fresh	
<i>Eurya acuminata</i> Wall.	L	MNP2	W	lum buai	Fr	snack food	Fresh	
Tiliaceae								
<i>Microcos paniculata</i> L.	H	KH	W	-	Fr	snack food	Fresh	
	L	JN	W	lum kom	Fr	snack food	Fresh	
	L	TK	W	lum kom	Fr	snack food	Fresh	
	K	HP	W	tood ma kom	Fr	snack food	Fresh	
	K	NP	W	tood ma lha	Fr	snack food	Fresh	
	M	HBY	W	ta tang	Fr	snack food	Fresh	
	M	HSN	W	ta tang	Fr	snack food	Fresh	
	M	STP	W	ta tang	Fr	snack food	Fresh	
	<i>Muntingia calabura</i> L.	H	KH	D	-	Fr	Fruit	Fresh
		H	SK	D	-	Fr	Fruit	Fresh
M		HBY	D	mhai diang	Fr	Fruit	Fresh	
M		HSN	D	mhai diang	Fr	Fruit	Fresh	
M		STP	D	mhai diang	Fr	Fruit	Fresh	
Urticaceae								
<i>Boehmeria nivea</i> Gaudich.	H	KH	D	tsaj (G)/ tsaj (W)	Lf/Rt	Vegetables	Cooked	
	H	MNP	D	tsaj (G)/ tsaj (W)	Lf	Vegetables	Cooked	

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Elatostema longipes</i> W.T.Wang	H	KH	W	nplooj ab	Lf	Vegetables	Cooked
	L	TK	W	tu pa kae	YLf	Vegetables	Cooked
<i>Elatostema</i> sp.	L	MNP2	W	tu pa kae	Lf	Vegetables	Cooked
Valerianaceae							
<i>Valeriana jatamansi</i> Jones	H	KH	D	si toj	Lf	Vegetables	Cooked
	H	MNP	D	si toj	Lf	Vegetables	Cooked
	H	SK	D	si toj	Lf	Vegetables	Cooked
	M	HSN	D	fiu hwa	Lf	Vegetables	Cooked
Vitaceae							
<i>Cayratia japonica</i> (Thunb.) Gagnep.	L	MNP2	W	mhue yhod	Rt	snack food	Cooked
Zingiberaceae							
<i>Alpinia galanga</i> Willd.	M	HBV	D	bow zung	Infl	Vegetables	Fresh
	H	KH	D	ghav lav	Infl	Vegetables	Fresh
	K	HST	D	zul	Infl	Vegetables	Cooked/Fresh
<i>Alpinia malaccensis</i> (Burm.f.) Roscoe	L	MNP2	W	lum kook	Infl	Vegetables	Cooked/Fresh
	L	TK	W	plae peid seik	Infl	Vegetables	Cooked/Fresh
	H	MNP	W	qoov	Infl	Vegetables	Fresh
	K	HST	W	brua	Infl	Vegetables	Fresh
	K	HP	W	tood ma lua	Infl	Vegetables	Fresh
	M	STP	W	la ko bua	Fr	snack food	Fresh

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Amomum dealbatum</i> Roxb.	K	HP	D	krook	Sh	Vegetables	Cooked
	K	HST	D	krook	YSh	Vegetables	Cooked
	K	NP	D	krook	Sh	Vegetables	Cooked
	L	JN	D	kook	YSh	Vegetables	Cooked
	L	TK	D	kook ja lang	Infl	Vegetables	Cooked
	M	HBY	D	la kow yaan	Sh	Vegetables	Cooked
<i>Amomum</i> sp.2	L	TK	W	lum pa jung	Sh	Vegetables	Cooked
<i>Boesenbergia rotunda</i> (L.) Mansf.	K	HP	D	-	Rt	Vegetables	Cooked
<i>Boesenbergia</i> sp.	K	HP	D	yheim	YLf	Vegetables	Cooked
	K	HST	D	rang dok soe	Lf	Vegetables	Cooked
<i>Curcuma</i> sp.	K	HST	D	rang ja krial	Fl	Vegetables	Cooked
<i>Etilingera araneosa</i> (Bak.) R.M. Sm.	H	MNP	W	qoov	Fr	Vegetables	Fresh
	K	HP	W	krang kook um	Fl	Vegetables	Fresh
	K	HST	W	rueln	Infl	Vegetables	Fresh
	K	NP	W	kook	Fl	Vegetables	Fresh
	L	TK	W	plae plei	Fr	Vegetables	Fresh
	M	HBY	W	la ko bum	Fl	Vegetables	Fresh
	M	HSN	W	la ko biang	Fr	Vegetables	Fresh
	M	STP	W	la ko bum	Fl/Fr	Vegetables	Fresh
	M	HBY	W	la ko bum	Fl	Vegetables	Fresh

Table 5. (continued)

Species name	EG	VL	PT	Local name	PU	Consumption form	Preparation
<i>Hedychium coronarium</i> J.Koenig	H	SK	D	-	Rh	Vegetables	Cooked
<i>Kaempferia galanga</i> L.	H	KH	D	pua toj	Lf	Vegetables	Cooked
<i>Zingiber</i> sp.	L	TK	W	pul	St	Vegetables	Cooked
<i>Zingiber cassumunar</i> Roxb.	K	HP	D	la koi	Fl	Vegetables	Cooked
	K	HST	D	la koi	Fl	Vegetables	Cooked
	K	NP	D	la koi	Fl	Vegetables	Cooked
<i>Zingiber kerrii</i> Craib	L	JN	D	kueng sa	Lf	Vegetables/Condiment	Cooked
	L	TK	D	kueng sa	Lf	Vegetables/Condiment	Cooked
	K	HST	D	la wae wai	Lf	Vegetables/Condiment	Cooked
<i>Zingiber officinale</i> Roscoe	K	NP	D	la wae	Rh	Vegetables	Cooked
	L	TK	D	kueng	Rh	Vegetables	Cooked
<i>Zingiber ottensii</i> Valetton	H	KH	D	qoov dlob	Rh	Vegetables	Cooked

4.1.1.2 Food additive

In total, 70 plant species in 32 plant families were registered in the category of food additives (Table 6, 7; Figure 5). Of those, 69 were identified to species, and one to the family level. The commonly represented plant families for food additive were Zingiberaceae (12 species; 17%), Lamiaceae (11; 15 %), Rutaceae (5; 7%) and Apiaceae (5; 7%).

Table 6. Number of plant families and species reported as food additive in each village

Ethnic group	Village	#families	#species
Hmong	Khang Ho	11	18
Hmong	Manee Pruek	9	19
Hmong	Song Khwae	13	21
Mien	Huai Labaoya	17	23
Mien	Huai Sanao	13	20
Mien	Santiphap	15	23
Khamu	Huai Pook	19	24
Khamu	Huai Satang	16	26
Khamu	Nam Pan	12	18
Lua	Joon	14	24
Lua	Manee Pruek2	13	19
Lua	Toei Klang	14	22
Total		32	70

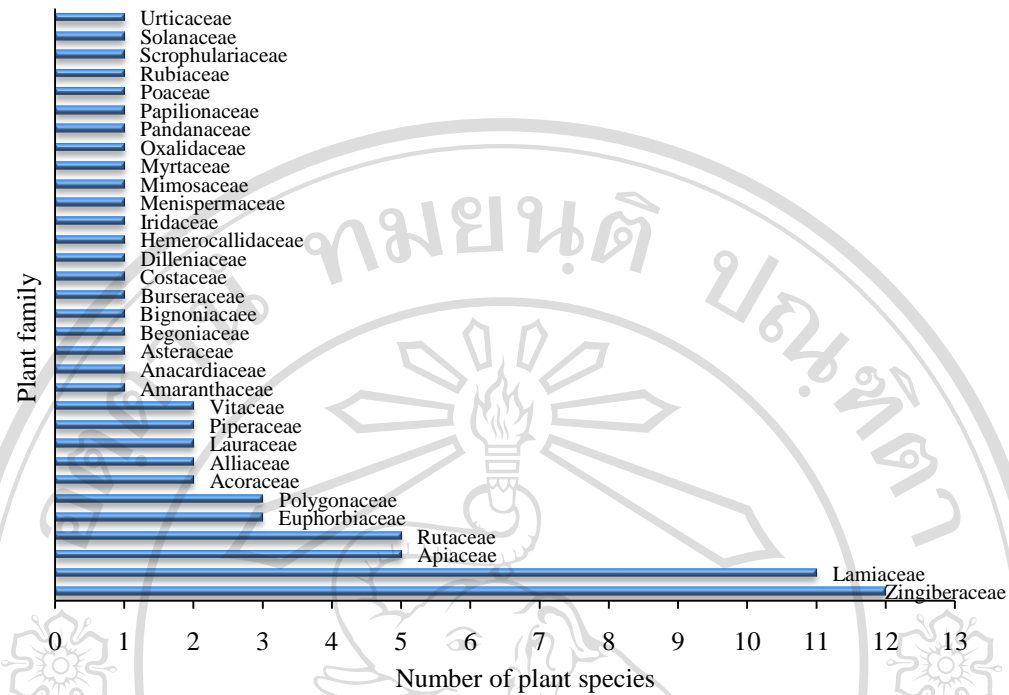


Figure 5 Number plant species in each family reported as food additive in each village

Table 7. Plants used as food additive by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	PU	Food additive types	Preparation
Acoraceae							
<i>Acorus calamus</i> L.	H	SK	D	pawj a	Lf	Odoring agent	Cooked
<i>Acorus gramineus</i> Aiton	H	MNP	D	pawj qab	Lf	Odoring agent	Cooked
	H	KH	D	pawj qab	Lf	Odoring agent	Cooked
	H	SK	D	pawj qab	Lf	Odoring agent	Cooked
	M	HSN	D	-	Lf	Odoring agent	Cooked
	M	STP	D	ka sia mun num	Lf	Odoring agent	Cooked
Alliaceae							
<i>Allium cepa</i> L.	H	KH	D	-	Blb	Spice	Cooked
<i>Allium sativum</i> L.	M	HBV	D	foon	Lf	Spice	Cooked
Amaranthaceae							
<i>Celosia argentea</i> L.	M	STP	D	ja kong koon	Fl	Colouring agent	Boiled/Soak with rice
Anacardiaceae							
<i>Rhus chinensis</i> Muell.	L	MNP2	W	lum plae yhue	Fr	Souring agent	Cooked
	L	TK	W	lum plae yhue	Fr	Souring agent	Cooked
Apiaceae							
Apiaceae sp.2	H	MNP	D	txhab xyoob	Lf	Odoring agent	Cooked
<i>Coriandrum sativum</i> L.	H	MNP	D	zaub txhwb qab	Lf	Odoring agent	Cooked
	K	HP	D	phak chee	Lf	Odoring agent	Cooked
	K	HST	D	phak chee	Lf	Odoring agent	Cooked

Table 7. (continued)

Species name	EG	VL	PT	Local name	PU	Food additive types	Preparation
<i>Eryngium foetidum</i> L.	K	NP	D	phak chee	Lf	Odoring agent	Cooked
	H	KH	D	zaub nplaig ug	Lf	Odoring agent	Cooked
	H	SK	D	zaub nplaig ug	Lf	Odoring agent	Cooked
	K	HP	D	pom per	Lf	Odoring agent	Cooked
	K	HST	D	pom per	Lf	Odoring agent	Cooked
	K	NP	D	pom per	Lf	Odoring agent	Cooked
	L	JN	D	pom per	Lf	Odoring agent	Cooked
	L	MNP2	D	pom per	Lf	Odoring agent	Cooked
	L	TK	D	pom per	Lf	Odoring agent	Cooked
	M	HBV	D	yian si yoew	Lf	Odoring agent	Cooked
<i>Oenanthe javanica</i> DC.	M	HSN	D	yian si yoew	Lf	Odoring agent	Cooked
	M	STP	D	yian si yoew	Lf	Odoring agent	Cooked
	H	MNP	W	-	Lf	Odoring agent	Cooked/fresh
	L	MNP2	W	phak chee	Lf	Odoring agent	Cooked/fresh
<i>Trachyspermum roxburghianum</i> H.Wolff	L	JN	D	tu sa bood	Lf	Odoring agent	Cooked/fresh
	K	HST	D	hom yae	Lf	Odoring agent	Cooked/fresh
	L	TK	D	tu sa bood	Lf	Odoring agent	Cooked/fresh
	M	HSN	D	yian si ngang	Lf	Odoring agent	Cooked/fresh

Table 7. (continued)

Species name	EG	VL	PT	Local name	PU	Food additive types	Preparation
Asteraceae							
<i>Spilanthes acmella</i> Murr.	H	SK	D	txwv siav	Lf	Spice	Cooked
Begoniaceae							
<i>Begonia longifolia</i> Blume	K	HP	W	la pue tuem	YSh	Souring agent	Cooked
	L	TK	W	lim koei	YSh	Souring agent	Cooked
	L	MNP2	W	tu koei	Lf/Pt	Souring agent	Cooked
	M	HSN	W	kung zui thum	Lf	Souring agent	Cooked
	M	HBV	W	kung zui thum	Lf	Souring agent	Cooked
	H	MNP	W	qaub dleg	Lf	Souring agent	Cooked
	H	SK	W	qaub dleg	Lf	Souring agent	Cooked
	M	STP	W	kung zui thum	Lf	Souring agent	Cooked
Bignoniaceae							
<i>Oroxylum indicum</i> (L.) Kurz	L	JN	D	ma lue la	Bk	Thickening agent for food called 'Laab'	Grated/mixed with 'Laab'
	K	HP	D	tood lung la	Bk	Thickening agent for food called 'Laab'	Grated/mixed with 'Laab'
Burseraceae							
<i>Garuga pinnata</i> Roxb.	K	HP	W	tood ue ja	Bk	Thickening agent for food called 'Laab'	Grated/mixed with 'Laab'

Table 7. (continued)

Species name	EG	VL	PT	Local name	PU	Food additive types	Preparation
	K	HST	W	tood ra hmoa	Bk	Thickening agent for food called 'Laab'	Grated/mixed with 'Laab'
	L	JN	D	lum moa	Bk	Thickening agent for food called 'Laab'	Grated/mixed with 'Laab'
	L	TK	W	lum mao	Bk	Thickening agent for food called 'Laab'	Grated/mixed with 'Laab'
	M	HBY	W	jian tao ngang	Bk	Thickening agent for food called 'Laab'	Grated/mixed with 'Laab'
	M	HSN	W	jian tao ngang	Bk	Thickening agent for food called 'Laab'	Grated/mixed with 'Laab'
	M	STP	W	jian tao ngang	Bk	Thickening agent for food called 'Laab'	Grated/mixed with 'Laab'
	K	NP	W	tood ra hmoa	Bk	Thickening agent for food called 'Laab'	Grated/mixed with 'Laab'
Costaceae							
<i>Costus speciosus</i> Smith	L	MNP2	W	lum pyok	YSh	Deodorant for meat	Cooked
Euphorbiaceae							
<i>Antidesma acidum</i> Retz.	K	HST	W	pim pong	Lf	Souring agent	Cooked
<i>Bischofia javanica</i> Blume	M	HBY	W	diang zui	YSh	Souring agent	Cooked
	M	STP	W	diang zui	YSh	Souring agent	Cooked

Table 7. (continued)

Species name	EG	VL	PT	Local name	PU	Food additive types	Preparation
<i>Homonoia riparia</i> Lour.	L	JN	D	lum krai	YSh	Flavouring agent	Cooked
	K	HP	W	tood krai	Bk	Thickening agent for food called 'Laab'	Grated/mixed with 'Laab'
	M	HBV	W	zer liam jow	YSh	Flavouring agent	Cooked
Hemerocallidaceae							
<i>Hemerocallis lilioasphodelus</i> L.	K	HST	D	la tueng	Lf	Odoring agent	Cooked
Iridaceae							
<i>Eleutherine americana</i> Merr. ex K. Heyne	H	SK	D	nplooj qhab xyab	Blb	Herb	Cooked
Lamiaceae							
<i>Clinopodium chinense</i> Kuntze	H	KH	D	tsuam noog	Lf	Odoring agent	Cooked
	H	MNP	D	tsuam noog	Lf	Odoring agent	Cooked
<i>Elsholtzia blanda</i> Benth.	L	MNP2	W	lum or la wang sa	Lf	Odoring agent	Cooked
<i>Elsholtzia communis</i> (Collett & Hemsl.) Diels	K	HP	D	krui	Lf	Odoring agent	Cooked
	L	JN	D	tu sa on	Lf	Odoring agent	Cooked
	L	TK	D	tu sa on	Lf	Odoring agent	Cooked
	K	HST	D	krui	Lf	Odoring agent	Cooked
<i>Elsholtzia penduliflora</i> W. W. Sm.	H	MNP	D	zaj ntshua ntuag	Lf	Odoring agent	Cooked

Table 7. (continued)

Species name	EG	VL	PT	Local name	PU	Food additive types	Preparation
	M	STP	D	la hao mia	Lf	Odoring agent	Cooked
	H	SK	D	zaj ntshua ntuag	Lf	Odoring agent	Cooked
<i>Gmelina arborea</i> Roxb.	K	HST	W	tood lha	Fr	Colouring agent	Squeezed/mixed with rice
	K	NP	W	tood lha	Fr	Colouring agent	Squeezed/mixed with rice
	L	JN	D	lum kla	Fr	Colouring agent	Squeezed/mixed with rice
	L	TK	W	lum kla	Fr	Colouring agent	Squeezed/mixed with rice
	K	HP	W	tood lha	Fr	Colouring agent	Squeezed/mixed with rice
<i>Mentha cordifolia</i> Opiz ex Fresen.	H	MNP	D	pum hwm	Lf	Odoring agent	Cooked/fresh
	H	SK	D	pum hwm	Lf	Odoring agent	Cooked/fresh
	M	HSN	D	pae chid	Lf	Odoring agent	Cooked/fresh
<i>Ocimum basilicum</i> L.	M	HSN	D	leo la zi	Lf	Odoring agent	Cooked/fresh
<i>Ocimum gratissimum</i> L.	K	NP	D	jun jo	Lf	Odoring agent	Cooked/fresh
	H	SK	D		Lf	Odoring agent	Cooked/fresh
	K	HP	D	jun jo	Lf	Odoring agent	Cooked/fresh
	K	HST	D	jun jo	Lf	Odoring agent	Cooked/fresh
	L	JN	D	jun jo	Lf	Odoring agent	Cooked/fresh
	M	HBV	D	-	Lf	Odoring agent	Cooked/fresh
<i>Orthosiphon aristatus</i> (Blume) Miq.	M	STP	D	jang zi mia/ jian ku ja	Lf	Colouring agent	Boiled/Soak with rice

Table 7. (continued)

Species name	EG	VL	PT	Local name	PU	Food additive types	Preparation
<i>Perilla frutescens</i> (L.) Britton	M	STP	D	kong fow	Lf	Deodorant for meat	Cooked
<i>Vitex peduncularis</i> Wall. ex Schauer	M	HBY	W	mai riang/zin o mia	Bk	Thickening agent for food called 'Laab'	Grated/mixed with 'Laab'
Lauraceae							
<i>Cinnamomum iners</i> Reinw. ex Blume	K	HST	D	ka juang	Bk	Odoring agent	Cooked
	L	TK	W	lum nae wai	Bk	Odoring agent	Cooked
<i>Litsea cubeba</i> (Lour.) Pers.	L	MNP2	W	lum kwer sa	Fr	Spice	Cooked
	L	TK	W	lum plae klueng	Fr	Spice	Cooked
Menispermaceae							
<i>Tiliacora triandra</i> Diels	M	HBY	D	-	Lf	Flavouring agent	Cooked
	H	KH	D	-	Lf	Flavouring agent	Cooked
	M	HSN	D	-	Lf	Flavouring agent	Cooked
	K	HP	D	phak ja nang	Lf	Flavouring agent	Cooked
	K	HST	D	phak ja nang	Lf	Flavouring agent	Cooked
	K	NP	D	phak ja nang	Lf	Flavouring agent	Cooked
	L	JN	D	phak ja nang	Lf	Flavouring agent	Cooked
Mimosaceae							
<i>Acacia concinna</i> DC.	M	HBY	D	som poi	Ysh	Souring agent	Cooked
	K	HP	D	tood poi	YSh	Souring agent	Cooked

Table 7. (continued)

Species name	EG	VL	PT	Local name	PU	Food additive types	Preparation
	K	HST	D	tood poi	Ysh	Souring agent	Cooked
	L	JN	D	som poi	Ysh	Souring agent	Cooked
Myrtaceae							
<i>Psidium guajava</i> L.	K	HP	D	plae kaew	YSh	Thickening agent for food called 'Laab'	Grated/mixed with 'Laab'
Oxalidaceae							
<i>Oxalis corniculata</i> L.	L	TK	W	yun pae liam	Lf	Souring agent	Cooked
Pandanaceae							
<i>Pandanus amaryllifolius</i> Roxb.	H	KH	D	-	Lf	Colouring/odoring agent	Pounded
	H	SK	D	-	Lf	Colouring/odoring agent	Pounded
	K	HP	D	bai toei	Lf	Colouring/odoring agent	Pounded
	K	HST	D	bai toei	Lf	Colouring/odoring agent	Pounded
	K	NP	D	bai toei	Lf	Colouring/odoring agent	Pounded
	M	HBV	D	bai toei	Lf	Colouring/odoring agent	Pounded
	M	HSN	D	bai toei	Lf	Colouring/odoring agent	Pounded
	M	STP	D	bai toei	Lf	Colouring/odoring agent	Pounded
Piperaceae							
<i>Piper interruptum</i> Opiz	H	MNP	W	maab hov txob	St	Spice	Cooked
	H	SK	W	maab hov txob	Lf/St	Spice	Cooked
	K	HP	W	la ha	St	Spice	Cooked

Table 7. (continued)

Species name	EG	VL	PT	Local name	PU	Food additive types	Preparation
	K	HST	W	la ha	St	Spice	Cooked
	K	NP	W	la ha	St	Spice	Cooked
	L	MNP2	W	kaan	St	Spice	Cooked
	M	HBY	D	ja kan	St	Spice	Cooked
	M	STP	D	ja kan	St	Spice	Cooked
	L	TK	W	sa kan	St	Spice	Cooked
<i>Piper nigrum</i> L.	H	KH	D	fwj txob	Fr	Spice	Cooked
Poaceae							
<i>Cymbopogon citratus</i> Stapf	H	KH	D	tauj qab	LfSh	Spice	Cooked
	H	MNP	D	tauj qab	LfSh	Spice	Cooked
	H	SK	D	tauj qab	LfSh	Spice	Cooked
	K	HP	D	ja krer	LfSh	Spice	Cooked
	K	HST	D	ja krer	LfSh	Spice	Cooked
	K	NP	D	ja krer	LfSh	Spice	Cooked
	L	TK	D	ja kai	LfSh	Spice	Cooked
	M	HBY	D	jaow kan	LfSh	Spice	Cooked
	M	HSN	D	jaow kan	LfSh	Spice	Cooked
	M	STP	D	jaow kan	LfSh	Spice	Cooked
	L	JN	D	ja kai	LfSh	Spice	Cooked
	L	MNP2	D	ja kai	LfSh	Spice	Cooked

Table 7. (continued)

Species name	EG	VL	PT	Local name	PU	Food additive types	Preparation
Polygonaceae							
<i>Fagopyrum cymosum</i> Meisn.	H	KH	D	cej quab/qaub dlej	Lf	Souring agent	Cooked
	H	SK	D	cej quab/qaub dlej	Lf	Souring agent	Cooked
	M	HSN	D	chao bong	Lf	Souring agent	Cooked
<i>Polygonum chinense</i> L.	M	HSN	W	kung zui thum	YSh	Odoring agent	Cooked
<i>Polygonum odoratum</i> Lour.	H	KH	D	luam laws	Lf	Odoring agent	Cooked/fresh
	H	MNP	D	luam laws	Lf	Odoring agent	Cooked/fresh
	H	SK	D	luam laws	Lf	Odoring agent	Cooked/fresh
	K	HP	D	pang chaem	Lf	Odoring agent	Cooked/fresh
	K	HST	D	chaem	Lf	Odoring agent	Cooked/fresh
	K	NP	D	chaem	Lf	Odoring agent	Cooked/fresh
	L	JN	D	phak phai	Lf	Odoring agent	Cooked/fresh
	L	MNP2	D	phak phai	Lf	Odoring agent	Cooked/fresh
	L	TK	D	phak phai	Lf	Odoring agent	Cooked/fresh
	M	HBV	D	yow	Lf	Odoring agent	Cooked/fresh
	M	HSN	D	yow	Lf	Odoring agent	Cooked/fresh
	M	STP	D	yow	Lf	Odoring agent	Cooked/fresh
Rubiaceae							
<i>Paederia pilifera</i> Hook.f.	K	HP	W	ma rhi ou	YSh	Thickening agent for food called 'Laab'	Grated/mixed with 'Laab'

Table 7. (continued)

Species name	EG	VL	PT	Local name	PU	Food additive types	Preparation
	L	TK	W	mhue pom sua	YSh	Meat tenderiser	Cooked
	K	HST	W	ma rhi ou	Lf	Preservative	Cooked
Rutaceae							
<i>Citrus aurantifolia</i> Swingle	L	MNP2	D	plae zoei	Fr	Souring agent	Cooked
	H	KH	D	-	Fr	Souring agent	Cooked
	H	MNP	D	-	Fr	Souring agent	Cooked
	M	HBV	D	ma nao	Fr	Souring agent	Cooked
	M	HSN	D	ma nao	Fr	Souring agent	Cooked
	M	STP	D	ma nao	Fr	Souring agent	Cooked
	K	HP	D	ma nap	Fr	Souring agent	Cooked
	K	HST	D	ma noa	Fr	Souring agent	Cooked
	K	NP	D	ma nao	Fr	Souring agent	Cooked
	L	JN	D	plae zoei	Fr	Souring agent	Cooked
	L	TK	D	plae zoei	Fr	Souring agent	Cooked
<i>Citrus hystrix</i> DC.	H	KH	D	-	Fr/Lf	Souring /odoring agent	Cooked/fresh
	H	MNP	D	-	Fr/Lf	Souring /odoring agent	Cooked/fresh
	K	HP	D	tood la mae	Fr/Lf	Souring /odoring agent	Cooked/fresh
	K	HST	D	ma kiu	Fr/Lf	Souring /odoring agent	Cooked/fresh
	K	NP	D	ma kiu	Fr/Lf	Souring /odoring agent	Cooked/fresh
	L	JN	D	ma kiu	Fr/Lf	Souring /odoring agent	Cooked/fresh

Table 7. (continued)

Species name	EG	VL	PT	Local name	PU	Food additive types	Preparation
	L	MNP2	D	ma kiu	Fr/Lf	Souring /odoring agent	Cooked/fresh
	L	TK	D	ma kiu	Fr/Lf	Souring /odoring agent	Cooked/fresh
	M	HSN	D	bai jiu	Fr/Lf	Souring /odoring agent	Cooked/fresh
	M	STP	D	bai jiu	Fr/Lf	Souring /odoring agent	Cooked/fresh
<i>Citrus medica</i> L.	M	HSN	D	ma nao	Fr	Souring agent	Cooked
<i>Euodia lepta</i> Merr.	L	TK	W	moi fun	Ylf	Bittering agent	Cooked
<i>Zanthoxylum acanthopodium</i> DC.	H	MNP	W	txwv saav	Sd	Spice	Cooked
<i>Zanthoxylum limonella</i> Alston	K	HST	D	ma khwaen	Fr/Sd	Spice	Cooked
	L	MNP2	W	ma kwaen	Sd	Spice	Cooked
	M	STP	W	lhoe tong	Fr	Spice	Cooked
	K	NP	D	ma khwaen	Fr/Sd	Spice	Cooked
	L	TK	W	ma kwaen	Fr	Spice	Cooked
Scrophulariaceae							
<i>Scoparia dulcis</i> L.	K	HP	W	ma rhi iab ngad	YSh	Sweetener agent	Cooked
	M	HBV	W	toe yui mia/in yu mia	Lf	Sweetener agent	Cooked
Solanaceae							
<i>Capsicum frutescens</i> L.	M	HBV	D	fun jiu	Fr	Spice	Cooked
	M	HSN	D	fun jiu	Fr	Spice	Cooked
	M	STP	D	fun jiu	Fr	Spice	Cooked

Table 7. (continued)

Species name	EG	VL	PT	Local name	PU	Food additive types	Preparation
	K	HP	D	ngai	Fr	Spice	Cooked
	K	HST	D	ngai	Fr	Spice	Cooked
	K	NP	D	ngai tai	Fr	Spice	Cooked
	L	JN	D	prik	Fr	Spice	Cooked
	L	MNP2	D	prik	Fr	Spice	Cooked
Urticaceae							
<i>Elatostema longipes</i> W.T.Wang	H	KH	W	nplooj ab	Lf	Bittering agent	Cooked
	H	SK	W	nplooj ab	Lf	Bittering agent	Cooked
Vitaceae							
<i>Cissus repens</i> Lam.	K	HP	W	la hla chiab	Lf	Souring agent	Cooked
	K	NP	W	la hla chiab	Lf	Souring agent	Cooked
	M	STP	W	kang	Lf	Souring agent	Cooked
	L	MNP2	W	mhue chaab	Lf	Souring agent	Cooked
	M	HBV	W	kang	Lf	Souring agent	Cooked
	L	TK	W	mhue chaab	Lf	Souring agent	Cooked
	L	JN	W	mhue chaab	Lf	Souring agent	Cooked
Zingiberaceae							
<i>Alpinia galanga</i> Willd.	L	JN	D	zul	Rh	Spice	Cooked
	H	KH	D	ghav lav	Rh	Spice	Cooked
	H	MNP	D	ghav lav	Rh	Spice	Cooked

Table 7. (continued)

Species name	EG	VL	PT	Local name	PU	Food additive types	Preparation
	H	SK	D	ghav lav	Rh	Spice	Cooked
	K	HP	D	zul	Rh	Spice	Cooked
	M	HBV	D	bow zung	Rh	Spice	Cooked
	M	HSN	D	bow zung	Rh	Spice	Cooked
	M	STP	D	bow zung	Rh	Spice	Cooked
	K	HST	D	zul	Rh	Spice	Cooked
	K	NP	D	zul	Rh	Spice	Cooked
	L	TK	D	zul	Rh	Spice	Cooked
	L	MNP2	D	zul	Rh	Spice	Cooked
<i>Boesenbergia thorelii</i> Loes.	H	KH	D	xaab txhwm qoov	Rt	Spice	Cooked
	H	SK	D	xaab txhwm qoov	Rt	Spice	Cooked
<i>Boesenbergia rotunda</i> (L.) Mansf.	L	TK	D	tu chial	Lf	Spice	Cooked
	L	JN	D	-	Rt	Spice	Cooked
	K	NP	D	-	Rt	Spice	Cooked
	K	HST	D	-	Rt	Spice	Cooked
<i>Curcuma longa</i> L.	H	KH	D	ghav dlaaj	Rh	Spice	Cooked
	H	MNP	D	ghav dlaaj	Rh	Spice	Cooked
	H	SK	D	ghav dlaaj	Rh	Spice	Cooked
	K	HP	D	ja krial mume	Rh	Spice	Cooked
	K	HST	D	ja krial mume	Rh	Spice	Cooked

Table 7. (continued)

Species name	EG	VL	PT	Local name	PU	Food additive types	Preparation
	K	NP	D	ja krial mume	Rh	Spice	Cooked
	L	JN	D	ploe	Rh	Spice	Cooked
	L	TK	D	ploe	Rh	Spice	Cooked
	M	HBV	D	yung jang	Rh	Spice	Cooked
	M	HSN	D	yung jang	Lf	Spice	Cooked
	M	STP	D	yung jang	Rh	Spice	Cooked
	L	MNP2	D	ploe	Rh	Spice	Cooked
<i>Curcuma mangga</i> Valetton & Zijp	H	MNP	D	ghav	Rh	Spice	Cooked
<i>Hedychium flavum</i> Roxb.	H	MNP	D	-	Rh	Odoring agent	Cooked
<i>Kaempferia parviflora</i> Wall.	L	JN	D	kra chai dum	Rt	Spice	Cooked
<i>Stahlianthus campanulatus</i> Kuntze	H	SK	D	tsawb ntug ntsuab	Lf	Odoring agent	Cooked
<i>Zingiber kerrii</i> Craib	L	JN	D	kueng sa	Lf	Odoring agent	Cooked/fresh
	L	MNP2	D	kueng sa	Lf	Odoring agent	Cooked/fresh
	K	HP	D	la wae pri	Lf	Odoring agent	Cooked/fresh
	K	HST	D	la wae wai	Lf	Odoring agent	Cooked/fresh
	K	NP	D	la wae	Lf	Odoring agent	Cooked/fresh
	M	HBV	D	zung yow	Lf	Odoring agent	Cooked/fresh
	M	STP	D	zung yow	Lf	Odoring agent	Cooked/fresh
<i>Zingiber officinale</i> Roscoe	H	KH	D	ghav	Rh	Spice	Cooked

Table 7. (continued)

Species name	EG	VL	PT	Local name	PU	Food additive types	Preparation
	H	MNP	D	ghav	Rh	Spice	Cooked
	H	SK	D	ghav	Rh	Spice	Cooked
	M	HBV	D	zung	Rh	Spice	Cooked
	M	HSN	D	zung	Rh	Spice	Cooked
	M	STP	D	zung	Rh	Spice	Cooked
	K	HP	D	la wae	Rh	Spice	Cooked
	K	HST	D	la wae	Rh	Spice	Cooked
	L	JN	D	kueng	Rh	Spice	Cooked
	H	KH	D	qoov dlub	Rh	Spice	Cooked

4.1.1.3 Animal food

A total of 24 plant species in 13 families were registered for the category of animal food (Table 8, 9; Figure 6). Of those plants, 23 were identified to species and one to genus. Many species of the family Amaranthaceae were commonly used as animal food. Most uses for animal food were reported from the Mien village, Huai Labaoya.

Table 8. Number of plant families and species reported as animal food in each village

Ethnic group	Village	#families	#species
Hmong	Khang Ho	1	1
Hmong	Manee Pruek	6	6
Hmong	Song Khwae	4	4
Mien	Huai Labaoya	10	12
Mien	Huai Sanao	5	7
Mien	Santiphap	3	3
Khamu	Huai Pook	1	1
Khamu	Huai Satang	1	1
Khamu	Nam Pan	3	3
Lua	Joon	1	1
Lua	Manee Pruek2	1	2
Lua	Toei Klang	1	1
Total		13	24

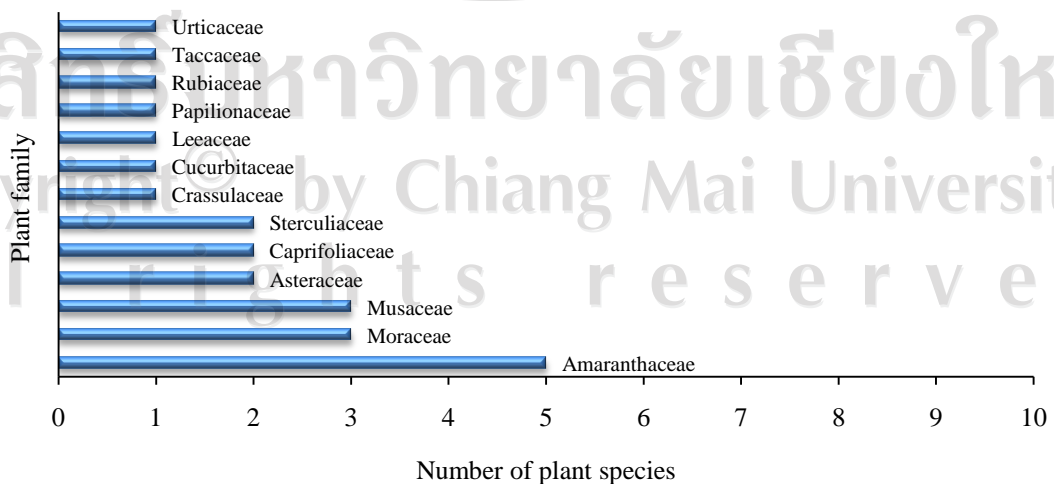


Figure 6 Number plant species in each family reported as animal food in each village

Table 9. Plants used as animal food by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	PU	Use	Preparation
Amaranthaceae							
<i>Amaranthus cruentus</i> L.	H	MNP	D	txhuv ntuj lab(G)/ txhuv ntuj liab (W)	Lf	Feeding pigs	Chopped
	H	SK	D	txhuv ntuj lab (G)/ txhuv ntuj liab (W)	Lf	Feeding pigs	Chopped
<i>Amaranthus lividus</i> L.	H	SK	W	txhuv ntuj	Lf	Feeding pigs	Chopped
	M	HBY	W	lai len	Lf	Feeding pigs	Chopped
	M	HSN	W	lai len	Lf	Feeding pigs	Chopped
<i>Amaranthus spinosus</i> L.	K	NP	W	la orul	Lf	Feeding pigs	Chopped
	K	HP	W	la orul sa la	Rt	Feeding pigs	Chopped
<i>Celosia argentea</i> L.	L	JN	W	yang pyong	Lf	Feeding pigs	Chopped
	M	HSN	W	ja kong koon	Lf	Feeding pigs	Chopped
<i>Celosia cristata</i> L.	M	HSN	W	ja kong koon	Lf	Feeding pigs	Chopped
Asteraceae							
<i>Chromolaena odorata</i> (L.) R.M.King & H.Rob.	M	HBY	W	ku ja mia	Lf	Feeding pigs	Chopped
<i>Crassocephalum crepidioides</i> (Benth.) S. Moore	L	TK	W	yun yao	Ysh	Feeding pigs/fish	Chopped
	H	MNP	W	nrog rog	Ysh	Feeding pigs	Chopped
	H	SK	W	nrog rog	Ysh	Feeding pigs	Chopped
	M	STP	W	chiang hung mia	Ysh	Feeding pigs	Chopped

Table 9. (continued)

Species name	EG	VL	PT	Local name	PU	Use	Preparation
Caprifoliaceae							
<i>Sambucus javanica</i> Reinw. ex Blume	M	HBY	W	toom yae	Fr	Feeding fish	Non-prepared
<i>Sambucus simpsonii</i> Rehder	H	KH	D	mos hav nyeg	Fr	Feeding birds	Non-prepared
	H	MNP	D	mos hav nyeg	Sd	Feeding birds	Non-prepared
Crassulaceae							
<i>Kalanchoe pinnata</i> (Lam.) Pers.	M	HBY	D	ta pa zue	Lf	Feeding pigs	Chopped/boiled
Cucurbitaceae							
<i>Thladiantha cordifolia</i> (Blume) Cogn.	H	MNP	W	-	Ysh	Feeding pigs	Chopped
Leeaceae							
<i>Leea indica</i> (Burm.f.) Merr.	M	HBY	W	toom yae ngang	Fr	Feeding fish/fish bait	Non-prepared
Moraceae							
<i>Broussonetia papyrifera</i> Vent.	K	NP	W	po sa	Lf	Feeding pigs	Chopped/boiled
	M	HBY	W	nhang	Lf	Feeding pigs	Chopped/boiled
	L	MNP2	W	po sa	Lf	Feeding pigs	Chopped/boiled
	H	SK	W	txiv	Lf	Feeding pigs	Chopped/boiled
	M	HSN	W	nhang	Lf	Feeding pigs	Chopped/boiled
<i>Ficus hispida</i> L.f.	M	HBY	W	ngong yho diang	Lf	Feeding pigs	Chopped/boiled
<i>Ficus semicordata</i> Buch.-Ham. ex Sm.	L	MNP2	W	lum tod	Ysh	Feeding pigs	Chopped/boiled
Musaceae							
<i>Ensete glaucum</i> (Roxb.) Cheesman	M	HBY	W	nom jue taang	St	Feeding pigs	Chopped/boiled

Table 9. (continued)

Species name	EG	VL	PT	Local name	PU	Use	Preparation
<i>Musa itinerans</i> Cheesman	M	STP	D	nom jiw piao zi	St	Feeding pigs	Chopped/boiled
<i>Musa sapientum</i> L.	K	NP	D		St	Feeding pigs	Chopped/boiled
	M	HBY	D	nom jiu zob	St	Feeding pigs	Chopped/boiled
Papilionaceae							
<i>Pueraria phaseoloides</i> Benth.	H	MNP	W		Lf	Feeding pigs/horses	Chopped
	M	HBY	W	ka tung Lng	Lf	Feeding horses	Chopped
	H	SK	W		Lf	Feeding pigs/horses	Chopped
	M	HSN	W	ka tung Lng	Lf	Feeding horses	Chopped
Rubiaceae							
<i>Paederia pilifera</i> Hook.f.	K	HST	W	ma rhi ou	Lf	Feeding pigs	Chopped/boiled
Sterculiaceae							
<i>Byttneria</i> sp.	M	HBY	W	hei sob	Lf	Feeding pigs	Chopped/boiled
<i>Helicteres hirsuta</i> Lour.	M	HSN	W	miao bua	Lf	Feeding pigs	Chopped/boiled
Taccaceae							
<i>Tacca chantrieri</i> André	M	HBY	W	sun ta wang	Wp	Feeding horses	Chopped
	M	HSN	W	sun ta wang	Wp	Feeding horses	Chopped
	M	STP	W	sun ta wang	Wp	Feeding horses	Chopped
Urticaceae							
<i>Boehmeria nivea</i> Gaudich.	H	MNP	D	tсаaj (G)/ tsaj (W)	Lf	Feeding pigs	Chopped/boiled

4.1.1.4 Materials

In total, 144 plant species in 71 families were registered as used for materials (Table 10; Figure 7). Of those, 135 were identified to species, and nine to genus. Plants species from the family Poaceae (8 species; 5.5%), Rubiaceae (7; 4.8%), Papilionaceae (7; 4.8%) and Euphorbiaceae (6; 4.1%) were frequently represented as plants used as materials. Uses of many plant species were frequently mentioned for constructions and fermentation agent for alcoholic drinks.

Table 10. Number of plant families and species reported as materials in each village

Ethnic group	Village	#families	#species
Hmong	Khang Ho	12	13
Hmong	Manee Pruek	7	7
Hmong	Song Khwae	7	7
Mien	Huai Labaoya	32	48
Mien	Huai Sanao	15	16
Mien	Santiphap	21	27
Khamu	Huai Pook	23	29
Khamu	Huai Satang	37	53
Khamu	Nam Pan	14	19
Lua	Joon	19	20
Lua	Manee Pruek2	23	34
Lua	Toei Klang	36	46
Total		71	144

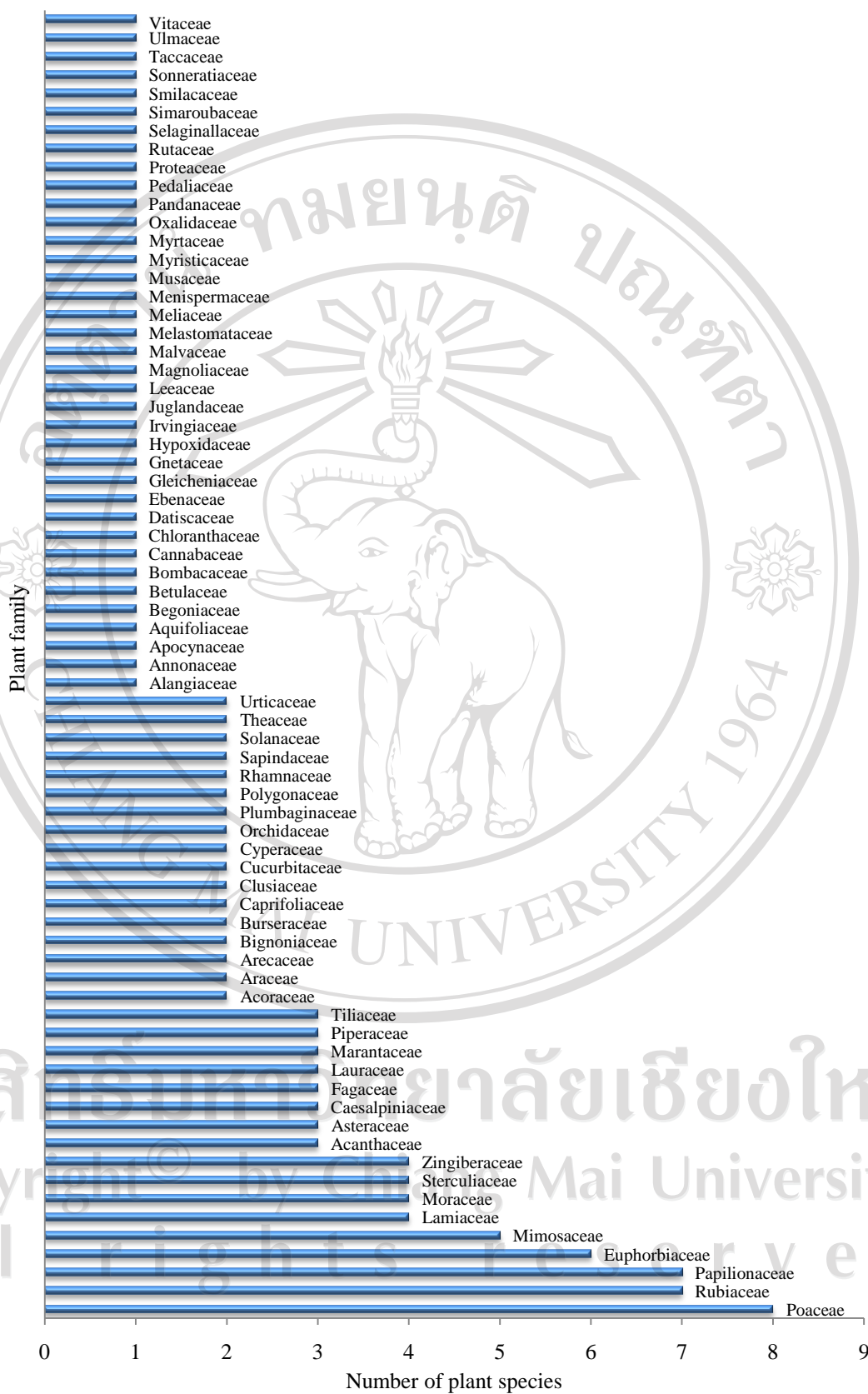


Figure 7 Number plant species in each family reported as used for materials in each village

Table 11. Plants used as materials by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
Acanthaceae							
<i>Clinacanthus nutans</i> Lindau	M	HBY	D	-	Lf	Fermentation agent: alcoholic drink	Pounded/mixed with rice flour
<i>Phlogacanthus curviflorus</i> Nees	K	NP	W	satong	Lf	Dye	Pounded/fermented
<i>Strobilanthes cusia</i> Kuntze	H	KH	D	nkaaj ntsuab	Lf	Dye	Pounded/fermented
	H	MNP	D	nkaaj ntsuab	Lf	Dye	Pounded/fermented
	H	SK	D	nkaaj ntsuab	Lf	Dye	Pounded/fermented
	K	HST	D	satong	Lf	Dye	Pounded/fermented
	K	HP	D	hom	Lf	Dye	Pounded/fermented
	L	JN	D	hom	Lf	Dye	Pounded/fermented
	M	HBY	D	yaam	Lf	Dye	Pounded/fermented
	M	HSN	D	yaam	Lf	Dye	Pounded/fermented
	M	STP	D	yaam	Lf	Dye	Pounded/fermented
Acoraceae							
<i>Acorus calamus</i> L.	L	TK	D	hang kao num	Rh	Shampoo	Pulped/soaked with water
<i>Acorus tatarinowii</i> Schott	L	TK	W	ka kao huai	Rh	Shampoo	Pulped/soaked with water
Alangiaceae							
<i>Alangium chinense</i> Rehd.	L	MNP2	W	lum yrol	St	Constructions	Sawed
	L	TK	W	lum yrol	St	Constructions	Sawed
	K	HST	W	tood yraul	St	Constructions	Sawed

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
Annonaceae							
<i>Goniothalamus laoticus</i> (Finet&Gagnep.) Bân	M	HBY	W	ta mae kiae	St	Constructions	Sawed
Apocynaceae							
<i>Alstonia scholaris</i> (L.)R.Br.	K	HST	W	tood trung	St	Houses' poles	Sawed
	M	HBY	W	fun tao diang	St	Constructions	Sawed
	M	HSN	W	fun tao diang	St	Constructions	Sawed
Aquifoliaceae							
<i>Ilex umbellulata</i> Loes.	K	HST	W	pom toon	St	Constructions	Sawed
Araceae							
<i>Pothos chinensis</i> (Raf.) Merr.	K	HST	W	plai noi	St	String	Torn/Soaked with water/grated
	L	TK	W	kroa	St	String of music instrument called 'Kroe'	Torn/Soaked with water/grated
<i>Pothos scandens</i> L.	K	HST	W	plai noi	St	Rope	Shred away the leaves
Areaceae							
<i>Calamus rotang</i> L.	K	HST	D	plong jung	St	Basketwork	Dried/torn
	K	HP	D	plong jung	St	Basketwork	Dried/torn
Calamus sp.	M	HBY	D	dang wei	Lf	Roof thatching	Thatched
<i>Livistona speciosa</i> Kurz	M	STP	D	ki nom	Lf	Roof thatching	Packed on axis

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
	H	SK	D	kuv yim	Lf	Roof thatching	Packed on axis
	K	HP	D	tood sa tae	Lf	Roof thatching	Packed on axis
	L	TK	D	ko	Lf	Roof thatching	Packed on axis
	M	HBY	D	ki nom	Lf	Roof thatching	Packed on axis
Asteraceae							
<i>Artemisia vulgaris</i> L.	H	MNP	W	suv ntswm	Lf	Starter for acupuncture	Burned/Powdered
<i>Blumea balsamifera</i> DC.	K	NP	W	tood orul	Lf	Body deodorant (herbal baths)	Decoction
	L	TK	W	lum boi	Lf	Body deodorant (herbal baths)	Decoction
<i>Blumea lanceolaria</i> (Roxb.) Druce	M	HBY	D	ping dia ma	St	Fermentation agent: alcoholic drink	Pounded/mixed with flour
	M	HSN	D	ping dia ma	Lf	Fermentation agent: alcoholic drink	Pounded/mixed with flour
	M	STP	D	ping dia ma	Lf	Fermentation agent: alcoholic drink	Pounded/mixed with flour
Begoniaceae							
<i>Begonia longifolia</i> Blume	L	TK	W	lum koei	Lf	Silverware cleanser	Pulped/boiled
Betulaceae							
<i>Betula alnoides</i> Buch.-Ham. ex D.Don	L	MNP2	W	lum zein	St	Constructions	Sawed

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
Bignoniaceae							
<i>Markhamia stipulata</i> Seem.	M	HBY	W	ta dao diang	St	Constructions	Sawed
<i>Oroxylum indicum</i> (L.) Kurz	M	HBY	D	diang jang	Fr	Constructions	Sawed
Bombacaceae							
<i>Ceiba pentandra</i> (L.) Gaertn.	L	JN	D	ngiu	Sd	Pillow stuff	Dried
	K	HP	D	ngiu	Sd	Pillow stuff	Dried
	K	HST	D	ngiu	Sd	Pillow stuff	Dried
	K	NP	D	ngiu	Sd	Pillow stuff	Dried
Burseraceae							
<i>Canarium subulatum</i> Guillaumin	K	HST	W	tood keim	St	Constructions	Sawed
<i>Garuga pinnata</i> Roxb.	K	HST	W	tood ra hmoa	St	Constructions	Sawed
Caesalpiniaceae							
<i>Afzelia xylocarpa</i> (Kurz) Craib	M	HBY	W	ma ka	St	Constructions	Sawed
<i>Caesalpinia sappan</i> L.	M	HBY	D	som mua/ sing mua	St	Coloring agent for eggs in new year celebration	Decoction/Soak with eggs
	M	HSN	D	som mua/ sing mua	St	Coloring agent for eggs in new year celebration	Decoction/Soak with eggs
<i>Senna timoriensis</i> (DC.) H.S. Irwin & Barneby	K	HST	W	tood khi lek	St	Constructions	Sawed

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
Cannabaceae							
<i>Cannabis sativa</i> L.	H	KH	D	maaj	Bk	H traditional fabric	Torn/pulped/soaked with water/boiled
	H	MNP	D	maaj	St	H traditional fabric	Torn/pulped/soaked with water/boiled
	H	SK	D	maaj	St	H traditional fabric	Torn/pulped/soaked with water/boiled
Caprifoliaceae							
<i>Sambucus javanica</i> Reinw. ex Blume	M	HBY	W	toom yae mia	Fr	Fish bait	Non-prepared
<i>Viburnum sambucinum</i> Bl. var. <i>tomentosum</i> Hallier f.	L	TK	W	yang kwuang	Fl	Ear and hair decoration	Non-prepared
Chloranthaceae							
<i>Chloranthus erectus</i> Verde.	L	TK	W	yang keid	Fl	Ear and Hair decoration	Non-prepared
	K	HP	W	hom kai	Fl	Ear and hair decoration	Non-prepared
	K	NP	W	hom kai	Fl	Ear and hair decoration	Non-prepared
Clusiaceae							
<i>Cratoxylum formosum</i> (Jack) Dyer subsp. <i>pruniflorum</i> (Kurz) Gogel.	M	HBY	W	diang ting	Lf	Bandage	Cleaned
	K	HST	W	tood charuem	St	Constructions	Sawed

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
<i>Garcinia</i> sp.	K	HST	W	lee mai kwak	St	Constructions	Sawed
Cucurbitaceae							
<i>Lagenaria siceraria</i> (Molina) Standl.	K	NP	D	om ngan	Fr	Water container	Dried
	L	JN	D	plae loon	Fr	Water container	Dried
	M	HSN	D	sob bua/ ha lo	Fr	Water container	Dried
	M	STP	D	sob bua/ ha lo	Fr	Water container	Dried
	H	KH	D	fwb taub	Fr	Water container	Dried
<i>Luffa aegyptiaca</i> Mill.	H	KH	D	taub xwb kuab	Fr	Sponge substitute	Dried
	M	HBY	D	lei jae	Fr	Sponge substitute	Dried
Cyperaceae							
<i>Scleria</i> sp.	L	JN	W	lum kid	Un	Decoration in ritual ceremony	
<i>Scleria terrestris</i> Fassett	K	HST	W	saek	St	Basketwork	Dried/torn
	L	TK	W	lum kid	St	Basketwork	Dried/torn
Datisceae							
<i>Tetrameles nudiflora</i> R.Br.	K	HP	W	tood poong	St	Constructions	Sawed
	K	HST	W	tood poong	St	Constructions	Sawed
	K	NP	W	tood poong	St	Constructions	Sawed
	L	TK	W	lum ngoon	St	Constructions	Sawed
	M	HBY	W	diang hoe	St	Constructions	Sawed

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
Ebenaceae							
<i>Diospyros glandulosa</i> Lace	L	TK	W	lum yhuem	Br	Pestle	carved
Euphorbiaceae							
<i>Balakata baccata</i> (Roxb.) Esser	K	HST	W	tood prueng	St	Constructions	Sawed
	M	HBY	W	ta doe	St	Coffin	Sawed
<i>Bischofia javanica</i> Blume	M	STP	W	diang zui	St	Water container	Graved
<i>Homonoia riparia</i> Lour.	K	HST	W	tood krai	Ysh	Soap substitute	Pulped
	K	HP	W	tood krai	Lf	Detergent	Pulped/soaked with water
<i>Macaranga denticulata</i> Müll. Arg.	K	HP	W	tood kue taak/ tong tao	St	Starter for making gunpowder	Burned/Powdered
	K	HST	W	tood rue traak	St	Constructions	Sawed
	M	HBY	W	tom pang	St	Starter for making gunpowder	Burned/Powdered
	M	STP	W	tom pang Lng	St	Starter for making gunpowder	Burned/Powdered
	L	JN	W	lum taak	Lf	Food wrapper	cleaned
	<i>Mallotus apelta</i> Müll.Arg.	L	MNP2	W	lum dad	St	Constructions
L		MNP2	W	lum dad	St	Constructions	Sawed
<i>Mallotus barbatus</i> Müll.Arg.	K	HST	W	tood rue traak	Lf	Fermentation agent: alcoholic drink	Pounded/mixed with flour

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
Fagaceae							
<i>Castanopsis cerebrina</i> (Hickel & A.Camus) Barnett	L	MNP2	W	lum dae saek	St	Constructions	Sawed
<i>Castanopsis diversifolia</i> King ex Hook.f.	L	MNP2	W	lum sa	St	Houses' poles	Sawed
<i>Castanopsis indica</i> A.DC.	L	JN	W	lum sa	St	Houses' poles	Sawed
Gleicheniaceae							
<i>Dicranopteris linearis</i> (Burm.f.) Underw.	L	TK	W	kud kum	St	Straw substitute	removed inner matter for making straw-like shape
Gnetaceae							
<i>Gnetum montanum</i> Markgr.	L	TK	W	mhue huai	Bk	String	Torn/Soaked with water/ grated
	K	HST	W	ja dung	St	String	Torn/Soaked with water/ grated
	M	HBV	W	hei muai	St	String	Torn/Soaked with water/ grated
	M	STP	W	hei muai	St	String	Torn/Soaked with water/ grated
Hypoxidaceae							
<i>Molineria capitulata</i> (Lour.) Herb.	H	MNP	W	nplooj qhab xyab	Lf	String substitute	Torn
	L	MNP2	W	lum yang pyok	Lf	String substitute	Torn

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
	M	HBY	W	nom jang	Lf	String substitute	Torn
	M	STP	W	nom jang	Lf	String substitute	Torn
Irvingiaceae							
<i>Irvingia malayana</i> Oliv. ex A.W. Benn.	K	HST	W	tood mai muen	St	Constructions	Sawed
Juglandaceae							
<i>Engelhardtia spicata</i> Blume	L	MNP2	W	lum ching	St	Constructions	Sawed
	L	TK	W	lum ching kri	St	Constructions	Sawed
Lamiaceae							
<i>Gmelina arborea</i> Roxb.	K	NP	W	tood lha	St	Container for steaming rice	Carved
	L	JN	D	lum kla	St	Container for steaming rice	Carved
	L	MNP2	W	lum kla	St	Constructions	Sawed
	K	HST	W	tood lha	St	Container for steaming rice	Carved
	L	TK	W	lum kla	St	Container for steaming rice	Carved
	M	HBY	W	ta jung kong	St	Container for steaming rice	Carved
	M	STP	W	ta jung kong	St	Constructions	Sawed
	K	HP	W	tood lha	St	Container for steaming rice	Carved
<i>Hyptis capitata</i> Jacq.	M	HBY	W	sa bung	Lf	Fermentation agent: alcoholic drink	Pounded/mixed with flour
<i>Tectona grandis</i> L.f.	K	NP	W	sak	St	Constructions	Sawed
<i>Vitex peduncularis</i> Wall. ex Schauer	K	HST	W	tood ang lang	St	Constructions	Sawed

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
Lauraceae							
<i>Litsea glutinosa</i> (Lour.) C.B. Rob.	K	HP	W	tood trool	Lf	Shampoo	Pulped/soaked with washing rice water/boiled
	L	JN	W	lum trool	Lf	Shampoo	Pulped/soaked with water
<i>Litsea</i> sp.	L	TK	W	lum choom pu	St	Constructions	Sawed
<i>Phoebe lanceolata</i> (Nees) Nees	M	HBY	W	tha tang diang	Lf	String coating agent	Pulped/wipe the string
Leeaceae							
<i>Leea indica</i> (Burm.f.) Merr.	M	HBY	W	toom yae ngang	Fr	Fish bait	Non-prepared
Liliaceae							
<i>Chlorophytum nepalense</i> Baker	L	TK	W	yod doi	St	Shampoo	Pulped/soaked with water
Magnoliaceae							
<i>Michelia alba</i> DC.	L	MNP2	W	lum jum pee	St	Constructions	Sawed
Malvaceae							
<i>Urena lobata</i> L.	L	MNP2	W	lum yun tom	Bk	String	Torn/Soaked with water/grated
	L	TK	W	lum yun tom	St	Brooms	Tied together
Marantaceae							
<i>Donax canniformis</i> K. Schum.	M	STP	W	ta heb tao	Pt	Basketwork	Dried/torn
	M	HBY	W	ta heb tao	Pt	Basketwork	Dried/torn
<i>Phrynium imbricatum</i> Roxb.	K	HST	W	la throo	Lf	Food wrapper	cleaned

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
	K	NP	W	la throo	Lf	Food wrapper	cleaned
	K	HP	W	la throo/la kran	Pt	Basketwork	Dried/torn
	L	MNP2	W	klo tae	Lf	Food wrapper	cleaned
	M	HBY	W	ta heb nom	Lf	Food wrapper	cleaned
	L	JN	W	klo rao	Lf	Food wrapper	cleaned
	L	TK	W	klo tae	Lf	Food wrapper	cleaned
	H	KH	W	nplooj ntse	Lf	Food wrapper	cleaned
	H	SK	W	nplooj ntse	Lf	Food wrapper	cleaned
	M	HSN	W	ta heb nom	Lf	Food wrapper	cleaned
	M	STP	W	ta heb nom	Lf	Food wrapper	cleaned
<i>Phrynium pedunculiferum</i> D.Fang	L	MNP2	W	klo kiao	Lf	Food wrapper	cleaned
Melastomataceae							
<i>Memecylon caeruleum</i> Jack	H	KH	W	-	St	Brooms	Tied together
	L	JN	W	lum long kong	Un	Brooms	Tied together
	M	HSN	W	diang ton kiae	St	Brooms	Tied together
Meliaceae							
<i>Toona ciliata</i> M.Roem.	K	HST	W	tood nguai	St	Constructions	Sawed
	M	HBY	W	mhua jiao diang	St	Constructions	Sawed
	L	TK	W	lum kuen	St	Constructions	Sawed
	K	HP	W	tood kra	St	Constructions	Sawed

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
Menispermaceae							
<i>Arcangelisia flava</i> Merr.	L	TK	W	mhue yhang	Rt	Dye for mesh	Pounded/boiled
Mimosaceae							
<i>Acacia comosa</i> Gagnep.	L	TK	W	mhue bian kruak	Bk	Shampoo	Pulped/soaked with water
<i>Azelia xylocarpa</i> Craib	K	HP	W	tood ka	St	Constructions	Sawed
<i>Albizia lebeck</i> (L.) Benth.	L	MNP2	W	lum zud	Bk	Dye for mesh	Pounded/boiled
<i>Entada rheedei</i> Spreng.	L	MNP2	W	mhue laab	Bk	Detergent	Torn/pulped/soaked with water
<i>Xylia xylocarpa</i> Taub.	K	HST	W	klong kred	St	Constructions	Sawed
Moraceae							
<i>Antiaris toxicaria</i> Lesch.	M	HBV	W	mian dia	Bk	Mat substitute	Pulped/soaked with water
<i>Artocarpus lacucha</i> Buch.-Ham.	K	HST	W	tood trik	St	Constructions	Sawed
<i>Broussonetia papyrifera</i> Vent.	K	HST	W	tood sa lae	Bk	Paper pulp (for selling to middleman)	Torn/Pulped/Soaked with water
	L	MNP2	W	lum sa	Bk	Paper pulp (for selling to middleman)	Torn/Pulped/Soaked with water
	H	SK	W	txiv	St	Paper pulp (for selling to middleman)	Torn/Pulped/Soaked with water
<i>Ficus semicordata</i> Buch.-Ham. ex Sm.	H	KH	W	txwv txua	Lf	Sandpapers substitutes	Non-prepared

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
	M	HBY	W	sa kow diang	Lf	Sandpapers substitutes	Non-prepared
Musaceae							
<i>Musa acuminata</i> Colla	H	KH	D	tsawb qus	Lf	Food wrapper	cleaned
	K	HP	D	troi	Lf	Food wrapper	cleaned
	K	HST	D	troi	Lf	Food wrapper	cleaned
	L	JN	D	lum krin	Lf	Food wrapper	cleaned
	M	HSN	D	nom jiu bua	Lf	Food wrapper	cleaned
Myristicaceae							
<i>Knema</i> sp.	K	HST	W	tood lai mam	St	Constructions	Sawed
	M	STP	W	diang yaam	St	Constructions	Sawed
Myrtaceae							
<i>Psidium guajava</i> L.	L	JN	D	plae kaew	YSh	Breath freshener	Non-prepared
Orchidaceae							
cf. <i>Tropidia curculigoides</i> Lindl.	L	JN	W	waan din	Rh	Skin lightener	Pounded/applied on face
<i>Cymbidium bicolor</i> Lindl.	M	HBY	D	-	Sd	Cotton substitute	
Oxalidaceae							
<i>Oxalis corniculata</i> L.	L	TK	W	yun pae liam	Lf	Silverware cleanser	Pulped/boiled
	M	STP	W	tong sing mia	Wp	Metal cleanser	Boiled
Pandanaceae							
<i>Pandanus</i> sp.	L	TK	W	tu thoi/lum thoi	Lf	Waterproof mat	Weaved

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
Papilionaceae							
<i>Butea cf. superba</i> Roxb. ex Willd.	M	HBY	W	kiam jong hei	Bk	Rope	Torn
	M	STP	W	kun diam hei	Bk	Rope	Torn
<i>Erythrina stricta</i> Roxb.	L	TK	W	lum kloï	St	Container for fermenting	Carved
						<i>Camellia sinensis</i>	
<i>Erythrina subumbrans</i> Merr.	K	HST	W	tood lue	St	Constructions	Sawed
	K	HP	W	tood lung lue	St	Constructions	Sawed
<i>Indigofera tinctoria</i> L.	H	KH	D	-	Lf	Dye	Pounded/fermented
<i>Milletia extensa</i> Benth.	L	JN	W	mhue ome bua	Bk	Rope	Torn
<i>Pterocarpus macrocarpus</i> Kurz	M	HBY	W	mai du diang	St	Constructions	Sawed
	K	HST	W	tood mai doo	St	Constructions	Sawed
<i>Pueraria phaseoloides</i> Benth.	K	HP	W	mhue piad	Bk	Weaving fibers for making net	Torn/Soaked with water/ grated
	K	HST	W	mhue piad	Bk	Weaving fibers for making net	Torn/Soaked with water/ grated
	K	NP	W	mhue piad	Bk	Weaving fibers for making net	Torn/Soaked with water/ grated
	L	MNP2	W	mhue pad	Bk	Weaving fibers for making net	Torn /Soaked with water/ grated

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
	L	TK	W	mhue pad	Bk	Weaving fibers for making net	Torn/Soaked with water/ grated
	M	HBY	W	ka tung Lng	St	Rope	Shred away the leaves
	M	STP	W	ka tung Lng	St	Rope	Shred away the leaves
Pedaliaceae							
<i>Sesamum indicum</i> L.	L	JN	D	nga dum	Lf	Shampoo	Pulped/soaked with water
Piperaceae							
<i>Piper betel</i> Blanco	K	HST	D	plu	Lf	Fermentation agent: alcoholic drink	Pounded/mixed with flour
	M	HBY	D	jae lao	Lf	Fermentation agent: alcoholic drink	Pounded/mixed with flour
	M	STP	D	jae lao	Lf	Fermentation agent: alcoholic drink	Pounded/mixed with flour
	L	TK	D	plu	Lf	Fermentation agent: alcoholic drink	Pounded/mixed with flour
<i>Piper nigrum</i> L.	M	HBY	D	ha jiu	Fr	Fermentation agent: alcoholic drink	Pounded/mixed with flour
<i>Piper</i> sp.	M	HBY	W	jae lao	Lf	Fermentation agent: alcoholic drink	Pounded/mixed with flour

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
Plumbaginaceae							
<i>Plumbago indica</i> L.	K	HP	D	pid piu yim	Rt/Lf	Fermentation agent: alcoholic drink	Pounded/mixed with flour
	K	HST	D	pid piu yim	Rt	Fermentation agent: alcoholic drink	Pounded/mixed with flour
	K	NP	D	pid piu yim	Rt	Fermentation agent: alcoholic drink	Pounded/mixed with flour
	L	TK	D	pid piu zo	Rt	Fermentation agent: alcoholic drink	Pounded/mixed with flour
<i>Plumbago zeylanica</i> L.	M	HBY	D	pae lin	Rt	Fermentation agent: alcoholic drink	Pounded/mixed with flour
	L	TK	D	pid piu khao	Rt	Fermentation agent: alcoholic drink	Pounded/mixed with flour
Poaceae							
<i>Cephalostachyum pergracile</i> Munro	K	NP	W	phai khao lam	St	Constructions	Sawed
	M	HBY	W	hlao dong hang	St	Constructions	Sawed
	L	MNP2	W	lum khao lam	St	Constructions	Sawed
<i>Cephalostachyum virgatum</i> Kurz	K	NP	W	phai hiae	St	Constructions	Sawed
	L	TK	W	lum krao	St	Constructions	Sawed
	L	MNP2	W	lum krao	St	Constructions	Sawed

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
<i>Coix lachryma-jobi</i> L.	M	HSN	W	noe a joaw	Fr	Necklace	Embroidered
<i>Dendrocalamus asper</i> Backer ex K.Heyne	K	HP	W	phai tong	St	Constructions	Sawed
	K	HST	W	phai tong	St	Constructions	Sawed
<i>Dendrocalamus hamiltonii</i> Nees & Arn. ex Munro	K	HP	W	phai hok	St	Constructions	Sawed
	K	NP	W	phai hok	St	Constructions	Sawed
	L	TK	W	poi juei	St	Constructions	Sawed
	M	HBV	W	hao tok	St	Constructions	Sawed
<i>Dendrocalamus strictus</i> Nees	L	JN	W	phai zang	St	Constructions	Sawed
<i>Saccharum arundinaceum</i> Retz.	K	HST	D	thrang	St	Axis for <i>Imperata</i>	Dried
						<i>cylindrica</i> thatching	
<i>Thyrsostachys siamensis</i> Gamble	K	HP	W	phai huak	St	Constructions	Sawed
	K	NP	W	phai huak	St	Constructions	Sawed
	H	KH	W	xyoob	St	Constructions	Sawed
	L	JN	W	phai huak	St	Constructions	Sawed
	M	HSN	W	hao	St	Constructions	Sawed
	M	STP	W	hao	St	Constructions	Sawed
<i>Thysanolaena latifolia</i> Honda	K	HST	W	phai huak	St	Constructions	Sawed
	H	MNP	W	tauj qws tshuab	Infl	Brooms	Tied together
	H	SK	W	tauj qws tshuab	Infl	Brooms	Tied together

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
	K	HST	W	tarl	Infl	Brooms	Tied together
	L	MNP2	W	yhu	Infl	Brooms	Tied together
	M	STP	W	nom yhao fan	Infl	Brooms	Tied together
Polygonaceae							
<i>Fallopia forbesii</i> (Hance) Yonekura & H. Ohashi	M	HBY	D	pong lin	Lf/Rt	Fermentation agent: alcoholic drink	Pounded/mixed with flour
	M	HSN	D	pong lin	Rt	Fermentation agent: alcoholic drink	Pounded/mixed with flour
	M	STP	D	pong lin	Rt	Fermentation agent: alcoholic drink	Pounded/mixed with flour
<i>Polygonum odoratum</i> Lour.	M	HBY	D	yow	Lf	Fermentation agent: alcoholic drink	Pounded/mixed with flour
Proteaceae							
<i>Helicia formosana</i> Hemsl.	L	MNP2	W	lum plae muk dam	St	Constructions	Sawed
Rhamnaceae							
<i>Gouania javanica</i> Miq.	L	MNP2	W	-	Lf	Detergent	Pulped/soaked with water
<i>Gouania leptostachya</i> DC.	K	HP	W	la pra nuem ma raad	Lf	Detergent	Pulped/soaked with water
Rubiaceae							
<i>Anthocephalus chinensis</i> (Lam.) A.Rich ex Walp.	K	HST	W	tood kwang	St	Constructions	Sawed

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
<i>Hedyotis capitellata</i> Wall. ex G.Don	L	TK	W	mhue yang ud naew	Fl	Hair decoration	Non-prepared
<i>Morinda angustifolia</i> Roxb.	K	HP	W	tood chaluk	Rt	Dye	Pounded with limestone
	K	HST	W	tood chaluk	Rt	Dye	Pounded with Curcuma longa
<i>Mussaenda sanderiana</i> Ridl.	K	HST	W	hra yha	Rt	Insect glue	Pounded/water dilution
<i>Rubia crassipes</i> Coll. & Hemsl.	L	TK	W	-	St	Fermentation agent; alcoholic drink	Pounded/mixed with flour
<i>Uncaria</i> sp.	L	TK	W	mhue wuk jao	Bk	String	Torn/Soaked with water/grated
<i>Wendlandia tinctoria</i> (Roxb.) DC.	L	MNP2	W	lum bLng	St	Constructions	Sawed
Rutaceae							
<i>Citrus hystrix</i> DC.	L	JN	D	ma kiu	Fr	Shampoo	Pulped/soaked with washing rice water
Sapindaceae							
<i>Nephelium hypoleucum</i> Kurz	K	HST	W	ko lan	St	Constructions	Sawed
<i>Sapindus rarak</i> DC.	L	MNP2	W	plae muk zuk	Sd	Detergent	Pulped/soaked with water
Selaginallaceae							
<i>Selaginella willdenowii</i> (Desv. ex Poir.) Baker	H	SK	W	suab	Lf	Hen's nest	Non-prepared

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
Simaroubaceae							
<i>Harrisonia perforata</i> Merr.	M	HSN	W	hei kim/ja biao bong mia	St	Handle of the knife	Carved
	L	JN	W	lum sa tao	St	Handle of the knife	Carved
Smilacaceae							
<i>Smilax ovalifolia</i> Roxb.	M	HBV	W	jiam yang kong	Rt	Dye	Pounded/boiled
Solanaceae							
<i>Solanum erianthum</i> D.Don	K	HP	W	tood zood	St	Starter for making gunpowder	Burned/Powdered
	H	KH	W	ntoo zes qab	St	Starter for making gunpowder	Burned/Powdered
	K	HST	W	tood zood	Lf	Fermentation agent: alcoholic drink	Pounded/mixed with flour
	K	NP	W	tood zood	Lf	Fermentation agent: alcoholic drink	Pounded/mixed with flour
	L	TK	W	lum phak pam pa	Lf	Fermentation agent: alcoholic drink	Pounded/mixed with flour
	L	TK	W	lum phak pam pa	St	Starter for making gunpowder	Burned/Powdered

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
	M	HBY	W	tin hoong ja	St	Starter for making gunpowder	Burned/Powdered
	M	HSN	W	tin hoong ja	Lf	Fermentation agent: alcoholic drink	Pounded/mixed with flour
	M	STP	W	tin hoong ja	St	Starter for making gunpowder	Burned/Powdered
<i>Solanum torvum</i> Sw.	K	HST	D	len toe	St	Starter for making gunpowder	Burned/Powdered
Sonneratiaceae							
<i>Duabanga grandiflora</i> Walp.	L	MNP2	W	lum koob	St	Constructions	Sawed
	L	TK	W	lum koob	St	Constructions	Sawed
	M	HBY	W	mhua kwai diang	St	Constructions	Sawed
	K	HST	W	tue rue	St	Constructions	Sawed
Sterculiaceae							
<i>Byttneria andamanensis</i> Kurz	M	HSN	W	jia yhu hei	St	Traditional Mien paper pulp	Torn/Pulped/Soaked with water
	M	STP	W	jia yhu hei	St/Lf	Traditional Mien paper pulp	Torn/Pulped/Soaked with water
<i>Pterospermum</i> sp.	M	HBY	W	ta mui	St	Constructions	Sawed
	M	STP	W	ta mui diang	St	Constructions	Sawed

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
<i>Sterculia lanceolata</i> Cav.	L	TK	W	lum plae tuk lom	Bk	Rope	Torn
<i>Sterculia pexa</i> Pierre	M	HBY	W	po kwai	St	Rope	Torn
	K	HP	W	tood po tong	Bk	Rope	Torn
Taccaceae							
<i>Tacca chantrieri</i> André	H	MNP	W	nplooj qhvw yeeb	Lf	Food wrapper	cleaned
	L	TK	W	tu tuk	Lf	Food wrapper	cleaned
	M	HBY	W	sun ta wang	Rt	Fermentation agent: alcoholic drink	Pounded/mixed with flour
Theaceae							
<i>Eurya acuminata</i> DC.	L	TK	W	lum buai	St	Constructions	Sawed
	L	TK	W	lum buai	St	Constructions	Sawed
	L	MNP2	W	lum buai	St	Constructions	Sawed
<i>Schima wallichii</i> (DC.) Korth.	K	HST	W	tood trool	St	Constructions	Sawed
	L	MNP2	W	lum kio	St	Constructions	Sawed
	L	TK	W	lum kio	St	Constructions	Sawed
Tiliaceae							
<i>Grewia eriocarpa</i> Juss.	K	HST	W	yhaab	Bk	Rope	Torn
<i>Microcos paniculata</i> L.	M	STP	W	ta tang	Fr	Fake bullet for kids	Non-prepared
<i>Triumfetta pilosa</i> Roth	M	STP	W	koo bood	St	String	Torn/soaked with water

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
Ulmaceae							
<i>Trema orientalis</i> (L.) Blume	L	MNP2	W	lum talw	St	Constructions	Sawed
	L	TK	W	lum talw	Bk	Rope	Torn/twisted
	K	HST	W	tood ue ta	St	Constructions	Sawed
Urticaceae							
<i>Boehmeria nivea</i> (L.) Gaudich.	K	HST	D	tood pan	Bk	String	Torn/Soaked with water/ grated
	K	NP	D	tood pan	Bk	String	Torn/Soaked with water/ grated
	L	MNP2	D	lum pan	Bk	String	Torn/Soaked with water/ grated
	H	KH	D	tsaaj	Bk	String	Torn/Soaked with water/ grated
	H	MNP	D	tsaaj	Bk	String	Torn/Soaked with water/ grated
	M	HBV	D	doe	Bk	String	Torn/Soaked with water/ grated
	M	HSN	D	doe	St	String	Torn/Soaked with water/ grated

Table 11. (continued)

Species name	EG	VL	PT	Local name	PU	Uses	Preparation
	M	STP	D	doe	Bk	String	Torn/Soaked with water/ grated
<i>Elatostema repens</i> (Lour.) Hallier f.	K	HP	W	-	Lf	Shampoo	Pulped/soaked with water
Vitaceae							
<i>Cissus repens</i> Lam.	M	STP	W	kang	Un	Silverware cleanser	Pulped/boiled
	H	KH	W	maab quab	Un	Silverware cleanser	Pulped/boiled
	M	HSN	W	kang	Un	Silverware cleanser	Pulped/boiled
Zingiberaceae							
<i>Alpinia galanga</i> Willd.	L	TK	D	zul	Rh	Fermentation agent: alcoholic drink	Pounded/mixed with flour
	K	HST	D	zul	Lf	Fermentation agent: alcoholic drink	Pounded/mixed with flour
<i>Amomum biflorum</i> Jack	K	HST	D	tood tron	Rh	Shampoo	Pulped/soaked with water
	K	HP	D	hnang	Rt	Perfume for hair oil	Pulped/mixed with oil
<i>Amomum dealbatum</i> Roxb.	L	JN	D	kook	Lf	Food wrapper	cleaned
	L	TK	D	kook ja lang	Lf	Food wrapper	cleaned
<i>Hedychium coronarium</i> J.Koenig	L	MNP2	D	yang pyok	Fl	Hair decoration	Non-prepared
	L	TK	D	yang pyok	Fl	Hair decoration	Non-prepared

4.1.1.5 Fuel

Thirty-two species in 23 families were reported for the category of fuels (Table 12; Figure 8). Of those, 30 were identified to species, and two to genus level. The most commonly represented plant family reported for fuels was Euphorbiaceae (7 species; 21.9%).

Table 12. Number of plant families and species reported as fuels in each village

Ethnic group	Village	#families	#species
Hmong	Khang Ho	1	1
Hmong	Manee Pruek	1	1
Hmong	Song Khwae	4	4
Mien	Huai Labaoya	2	3
Mien	Huai Sanao	6	7
Mien	Santiphap	10	13
Khamu	Huai Pook	1	2
Khamu	Huai Satang	3	3
Khamu	Nam Pan	9	12
Lua	Joon	1	1
Lua	Manee Pruek ²	8	10
Lua	Toei Klang	2	2
Total		23	32

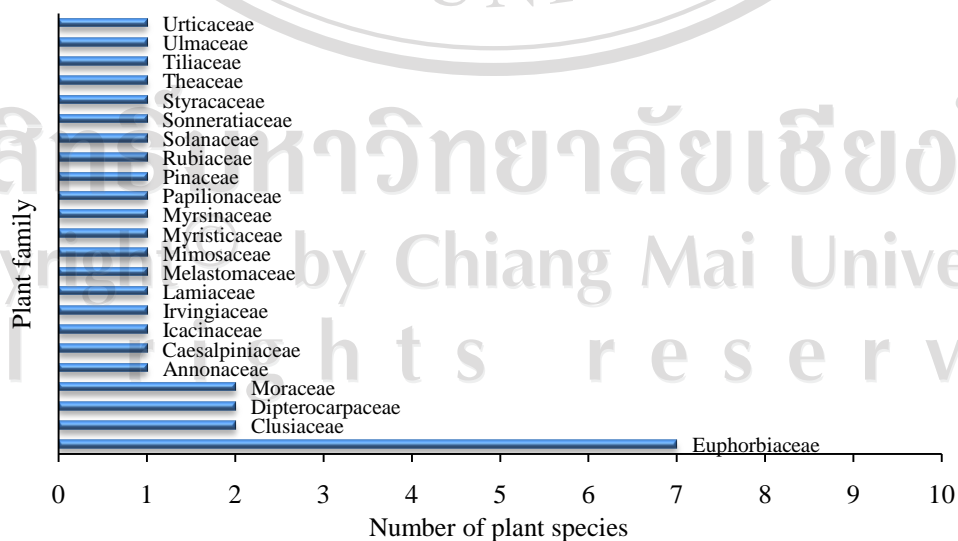


Figure 8 Number plant species in each family reported as fuels in each village

Table 13. Plants used as fuels by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	PU	Type of fuels	Preparation
Annonaceae							
<i>Goniothalamus laoticus</i> (Finet&Gagnep.) Bân	M	HBV	W	ta mae kiae	St/Br	Cooking fuel	Dried
Caesalpiniaceae							
<i>Senna timoriensis</i> (DC.) Irwin & Barneby	K	HST	W	tood khi lek	St/Br	Cooking fuel	Dried
Clusiaceae							
<i>Cratoxylum cochinchinense</i> (Lour.) Blume	K	HST	W	tood charuem	St/Br	Cooking fuel	Dried
	M	HSN	W	diang ting	St/Br	Cooking fuel	Dried
<i>Cratoxylum formosum</i> (Jack) Dyer subsp. <i>pruniflorum</i> (Kurz) Gogel.	L	MNP2	W	lum tiu	St/Br	Cooking fuel	Dried
	L	TK	W	lum tiu	St/Br	Cooking fuel	Dried
	M	STP	W	diang ting	St/Br	Cooking fuel	Dried
	K	NP	W	tood charuem	St/Br	Cooking fuel	Dried
	H	MNP	W	-	St/Br	Cooking fuel	Dried
	H	SK	W	-	St/Br	Cooking fuel	Dried
	M	HBV	W	diang ting	St/Br	Cooking fuel	Dried
	M	HSN	W	diang ting	St/Br	Cooking fuel	Dried
H	KH	W	-	St/Br	Cooking fuel	Dried	
Dipterocarpaceae							
<i>Dipterocarpus obtusifolius</i> Teijsm. ex Miq.	M	STP	W	diang yow	St/Br	Lighting fuels	Dried
<i>Shorea siamensis</i> Miq.	M	HBV	W	rung	St/Br	Cooking fuel	Dried

Table 13. (continued)

Species name	EG	VL	PT	Local name	PU	Type of fuels	Preparation
Euphorbiaceae							
<i>Aporosa villosa</i> (Wall. ex Lindl.) Baill.	K	HST	W	mued khon	St/Br	Cooking fuel	Dried
	M	HBY	W	lai kong	St/Br	Cooking fuel	Dried
<i>Croton roxburghii</i> N.P. Balakr.	K	HST	W	tood tong plao	St/Br	Cooking fuel	Dried
	K	HP	W	tood plao	St/Br	Cooking fuel	Dried
<i>Macaranga denticulata</i> Müll.Arg.	K	NP	W	tood rue traak	St/Br	Cooking fuel	Dried
	K	HST	W	tood rue traak	St/Br	Cooking fuel	Dried
	L	MNP2	W	lum hlang	St/Br	Cooking fuel	Dried
	M	HBY	W	tom pang luang	St/Br	Cooking fuel	Dried
	M	STP	W	tom pang luang	St/Br	Cooking fuel	Dried
<i>Macaranga triloba</i> Müll.Arg.	M	HBY	W	tom pang mao	St/Br	Cooking fuel	Dried
<i>Mallotus apelta</i> Müll.Arg.	L	MNP2	W	lum dad	St/Br	Cooking fuel	Dried
	M	HBY	W	ka dud pae	St/Br	Cooking fuel	Dried
	M	STP	W	ka dud	St/Br	Cooking fuel	Dried
<i>Phyllanthus emblica</i> L.	K	HST	W	ma kam pom	St/Br	Cooking fuel	Dried
	L	MNP2	W	plae ma kam pom	St/Br	Cooking fuel	Dried
<i>Ricinus communis</i> L.	K	HP	W	tood salang/ salang yim	St/Br	Lighting fuels	Dried
Icacinaceae							
<i>Gonocaryum lobbianum</i> (Miers) Kurz	M	HBY	W	ja king yung	St/Br	Cooking fuel	Dried

Table 13. (continued)

Species name	EG	VL	PT	Local name	PU	Type of fuels	Preparation
Irvingiaceae							
<i>Irvingia malayana</i> Oliv. ex A.W. Benn.	K	HST	W	tood mai muen	St/Br	Cooking fuel	Dried
Lamiaceae							
<i>Vitex peduncularis</i> Wall. ex Schauer	K	HST	W	tood ang lang	St/Br	Cooking fuel	Dried
	M	HBY	W	mai riang/zin o mia	St/Br	Cooking fuel	Dried
Melastomataceae							
<i>Melastoma malabathricum</i> L.	L	MNP2	W	lum yok	St/Br	Cooking fuel	Dried
Mimosaceae							
<i>Samanea saman</i> (Jacq.) Merr.	M	HBY	W	mai chum cha	St/Br	Cooking fuel	Dried
Moraceae							
<i>Broussonetia papyrifera</i> (L.) Vent.	K	NP	W	po sa	St/Br	Cooking fuel	Dried
	L	MNP2	W	lum sa	St/Br	Cooking fuel	Dried
<i>Ficus semicordata</i> Buch.-Ham. ex Sm.	K	HST	W	lha tode	St/Br	Cooking fuel	Dried
Myristicaceae							
<i>Knema</i> sp.	M	HBY	W	diang yaam	St/Br	Cooking fuel	Dried
	K	HST	W	tood lai mam	St/Br	Cooking fuel	Dried
Myrsinaceae							
<i>Maesa ramentacea</i> (Roxb.) A.DC.	K	HST	W	tood ngei	St/Br	Cooking fuel	Dried
	M	STP	W	jian tai za	St/Br	Cooking fuel	Dried

Table 13. (continued)

Species name	EG	VL	PT	Local name	PU	Type of fuels	Preparation
Papilionaceae							
<i>Dalbergia</i> sp.	L	JN	W	lum ngang	St/Br	Cooking fuel	Dried
<i>Pterocarpus macrocarpus</i> Kurz	M	HBV	W	mai du diang	St/Br	Cooking fuel	Dried
Pinaceae							
<i>Pinus kesiya</i> Royle ex Gordon	H	MNP	W	-	St/Br	Cooking fuel	Dried
	L	MNP2	W	lum son	St/Br	Lighting fuels	Dried
Rubiaceae							
<i>Wendlandia tinctoria</i> (Roxb.) DC.	K	HST	W	tood ra ngae	St/Br	Cooking fuel	Dried
	L	TK	W	lum bluang	St/Br		Dried
Solanaceae							
<i>Solanum erianthum</i> D.Don	M	STP	W	tin hoong ja	St/Br	Cooking fuel	Dried
Sonneratiaceae							
<i>Duabanga grandiflora</i> Walp.	L	MNP2	W	lum koob	St/Br	Cooking fuel	Dried
Styracaceae							
<i>Styrax benzoides</i> Craib	M	HSN	W	diang bua	St/Br	Cooking fuel	Dried
Theaceae							
<i>Schima wallichii</i> (DC.) Korth.	L	MNP2	W	lum kio	St/Br	Cooking fuel	Dried
Tiliaceae							
<i>Grewia eriocarpa</i> Juss.	M	HBV	W	ta tang	St/Br	Cooking fuel	Dried

Table 13. (continued)

Species name	EG	VL	PT	Local name	PU	Type of fuels	Preparation
Ulmaceae							
<i>Trema orientalis</i> (L.) Blume	L	MNP2	W	lum tarl	St/Br	Cooking fuel	Dried
	H	MNP	W	-	St/Br	Cooking fuel	Dried
	M	STP	W	mai diang	St/Br	Cooking fuel	Dried
Urticaceae							
<i>Debregeasia longifolia</i> Wedd.	H	MNP	W	npla	St/Br	Cooking fuel	Dried

4.1.1.6 Social uses

In total, 94 plant species in 48 families were reported for social uses across all 12 villages of the four groups (Table 14; Figure 9). Of those, 86 were identified to species, seven to genus level and one to only family level. The commonly represented plant families reported for social uses were Zingiberaceae (8 species; 8.5%), Euphorbiaceae (6; 6.4%), Araceae (6; 6.4%), and Asteraceae (5; 5.3%). Most of plants registered in this category were used in ritual ceremonies.

Table 14. Number of plant families and species reported for social uses in each village

Ethnic group	Village	#families	#species
Hmong	Khang Ho	4	5
Hmong	Manee Pruek	2	2
Hmong	Song Khwae	9	10
Mien	Huai Labaoya	9	11
Mien	Huai Sanao	8	9
Mien	Santiphap	4	4
Khamu	Huai Pook	22	26
Khamu	Huai Satang	17	19
Khamu	Nam Pan	10	12
Lua	Joon	9	10
Lua	Manee Pruek2	12	12
Lua	Toei Klang	19	36
Total		48	94

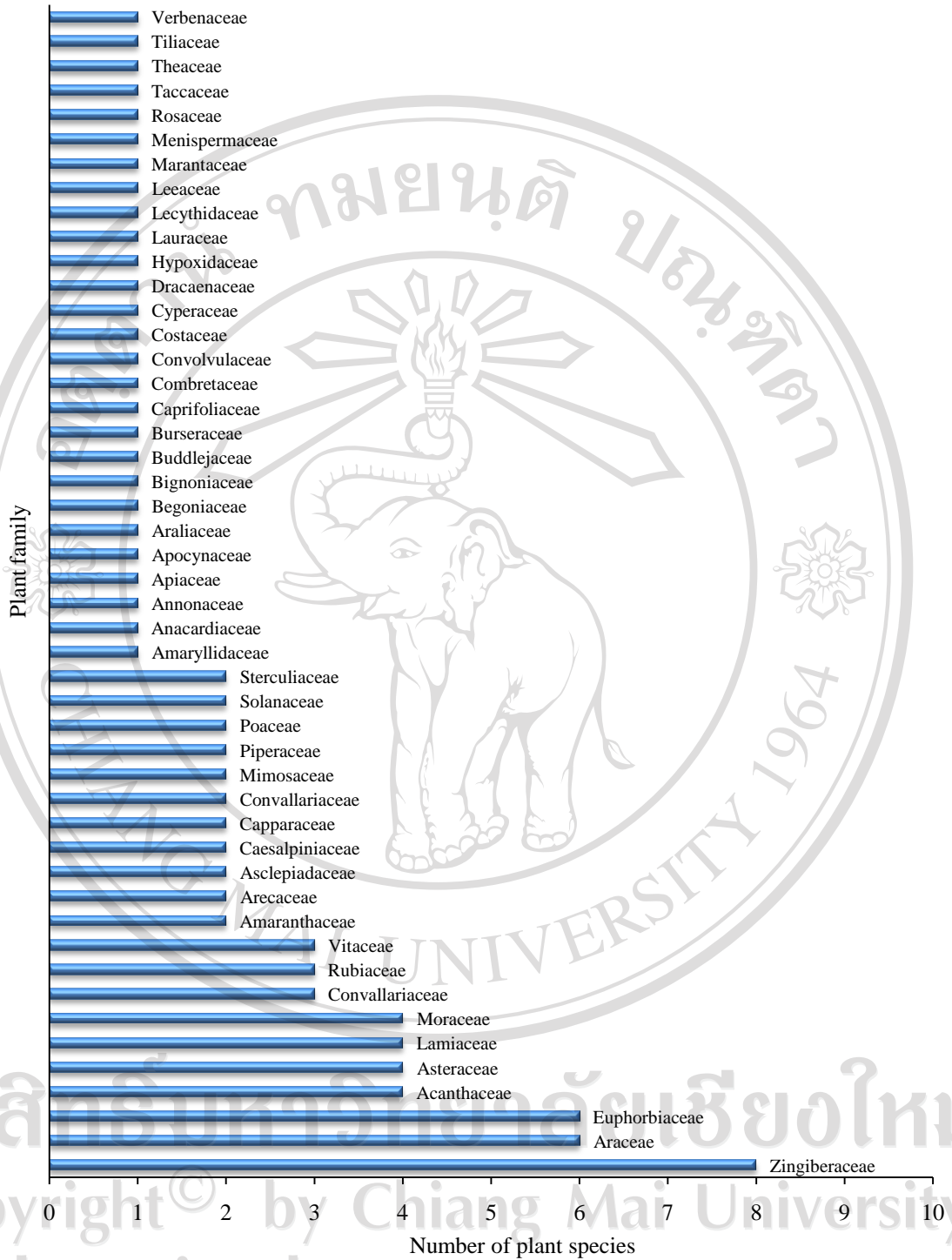


Figure 9 Number plant species in each family reported for social uses in each village

Table 15. Plants reported for social uses by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
Acanthaceae							
<i>Acanthus montanus</i> T. Anderson	H	SK	D	tshuaj nplaig tsuv	Wp	Warding off evil spirits	Planted around residence area
<i>Justicia gendarussa</i> Burm.f.	K	HP	D	la parod	Lf/Infl	Ritual plant used for offering to spirits	non-prepared
	K	HST	D	la parod	Lf	Ritual plant used for warding off evil spirits	tied with bamboo sign and attached to the house
	K	NP	D	la parod	Lf	Ritual plants used for offering to spirits in ritual ceremonies	non-prepared
	L	TK	D	lum baya	Wp	Ritual plant used for offering the 'land lord'	non-prepared
<i>Strobilanthes cusia</i> Kuntze	L	TK	D	hom	Lf	Ritual plant used in rice harvesting ceremony	non-prepared
<i>Thunbergia laurifolia</i> Lindl.	L	TK	W	mhue hnum nae	St	Magic sacred plant help protecting from snakes	Taken whenever trekking
Amaranthaceae							
<i>Celosia argentea</i> L.	L	TK	D	yang pyong	Infl	Ritual plant used in rice harvesting ceremony	tied with wood stick and attached to rice storage
	K	NP	D	rang rol	Fl	Ritual plant used in Khamu new year ceremony	non-prepared

Table 15. (continued)

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
	L	JN	D	yang pyong	Fl	Ritual plant used in rice harvesting ceremony	tied with wood stick and attached to rice storage
	L	MNP2	D	yang pyong	Fl	Ritual plant used in rice harvesting ceremonies	put into the rice storage
	K	HP	D	rang rol	Infl	Ritual plant used in rice harvesting ceremony	tied with wood stick
	K	HST	D	rang rol	Fl	Ritual plant used in rice harvesting ceremony	tied with wood stick
<i>Gomphrena globosa</i> L.	L	TK	D	dok dai	Fl	Ritual plant used in rice-related ceremonies	tied with wood stick
Amaryllidaceae							
<i>Zephyranthes rosea</i> Lindl.	K	NP	D	rang rol	Fl	Ritual plant used in rice harvesting ceremony	non-prepared
Anacardiaceae							
<i>Spondias lakonensis</i> Pierre	K	HST	W	tood ue ja	Lf	Masticatories	Steamed/wrap with salt
Annonaceae							
<i>Goniothalamus laoticus</i> (Finet&Gagnep.) Bân	M	HBV	W	ta mae kiae	St	Ritual plant used in 'bridge offering' ceremony of the Mien to prolong life	sawed
Apiaceae							
Apiaceae sp.2	H	SK	D	txhab xyoob	Lf/Rt	Warding off evil spirits	attached with body

Table 15. (continued)

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
Apocynaceae							
<i>Alstonia scholaris</i> (L.)R.Br.	M	HSN	W	fun tao diang	St	Sacred plant used in ceremony for matriculation of Mien boys	sawed and make as a chair for a boy to sit on
Araceae							
<i>Aglaonema simplex</i> Blume	L	TK	W	plae kue sa	Lf	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony
<i>Alocasia cucullata</i> (Loureiro) G.Don	L	TK	D	-	Lf	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony
<i>Amorphophallus</i> sp.	L	TK	W	pyok	Lf	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony
<i>Homalomena</i> sp.	L	TK	W	lum kiang	Lf	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony
<i>Pothos scandens</i> L.	K	HP	W	la chal	Wp	Ritual plant used for offering spirits	non-prepared
<i>Typhonium</i> sp.	K	HP	W	whaan pa	Lf	Ritual plant used for offering to spirits	non-prepared
Araliaceae							
<i>Aralia armata</i> Seem.	L	TK	W	lum tong talw	Ysh/ Infl	Ritual plant used in rice harvesting ceremony	put into the rice storage
Areaceae							
<i>Areca catechu</i> L.	K	NP	D	tood plae	Fr	Masticatories with betel leaves	Slided/dried
	K	HP	D	tood plae	Fr	Masticatories	Slided/dried

Table 15. (continued)

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
	K	HST	D	tood plae	Fr	Ritual plant used in ritual ceremony	dried/slided into thin pieces
	L	TK	D	hmaak	Fr	Masticatories	Slided/dried
<i>Calamus</i> sp.	K	HP	D	plong jik	St	Ritual plants used in housewarming	attached with first pole of the new house
Asclepiadaceae							
<i>Calotropis gigantea</i> (L.) W.T.Aiton	K	HST	D	hug	Fl	Ritual plant used in rice harvesting ceremony	non-prepared
<i>Dischidia nummularia</i> R.Br.	K	HP	D	-	Lf	Warding off evil spirits	dried/put in "sa-tuang" in exorcise ritual
Asteraceae							
<i>Blumea balsamifera</i> DC.	K	HP	W	tood orul	Lf	Used for spraying holy water to ward off evil spirits	Soaked with holy water
	K	NP	W	tood orul	Lf	Used for spraying holy water to ward off evil spirits	Soaked with holy water
	K	HST	W	tood orul	Lf	Used for spraying holy water to ward off evil spirits	Soaked with holy water
	L	JN	W	lum boi	Lf	Ritual plants used in housewarming	attached with first pole of the new house
	L	MNP2	W	lum boi	Lf	Ritual plant used in housewarming	attached with first pole of the new house

Table 15. (continued)

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
	L	TK	W	lum boi	Lf	Warding off evil spirits	tied with bamboo sign and attached to the house
<i>Eupatorium makinoi</i> T. Kawahara & Yahara	L	TK	D	yung kee	Infl	Ritual plants used for offering to spirits in ritual ceremonies	non-prepared
<i>Laggera pterodonta</i> (DC.) Sch.Bip. ex Oliv.	L	TK	W	lum peid/tu peid	Lf	Ritual plant used in rice harvesting ceremony	Attached with sickle at the first time to harvest rice
<i>Microglossa pyrifolia</i> Kuntze	L	TK	W	mhue nal	Fl	Ritual plant used in rice harvesting ceremony	non-prepared
Begoniaceae							
<i>Begonia longifolia</i> Blume	K	NP	W	la rueng chueng	Lf	Masticatories	wrap with salt
Bignoniaceae							
<i>Oroxylum indicum</i> (L.) Kurz	M	HBY	D	diang jang	St	Ritual plant used in 'bridge offering' ceremony of the Mien to prolong life	sawed
Buddlejaceae							
<i>Buddleja asiatica</i> Lour.	K	HP	W	tood pai rang	Fl	Ritual plant used in rice harvesting ceremony	tied with wood stick
	K	HST	W	tood pai rang	Fl	Ritual plant used in rice harvesting ceremony	tied with wood stick
	M	HBY	W	pin piao mia	Fl	Ritual plant used for offering to spirits	non-prepared

Table 15. (continued)

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
	M	HSN	W	pin piao mia	Fl	Ritual plant used in Mien new year ceremony	non-prepared
	K	NP	W	tood pai rang	Fl	Ritual plant used in Khamu new year ceremony	non-prepared
	M	STP	W	pin piao mia	Fl	Ritual plant used for offering to spirits in Mien new year ceremony	non-prepared
Burseraceae							
<i>Garuga pinnata</i> Roxb.	K	HP	W	tood ja	Ylf	Masticatories	Steamed/wrap with salt
Caesalpinaceae							
<i>Caesalpinia decapetala</i> (Roth) Alston	L	JN	W	hnam leb meo	Lf	Used for spraying holy water to ward off evil spirits	Soaked with holy water
<i>Caesalpinia sappan</i> L.	M	HBY	D	som mua/ sing mua	St	Ritual plants used as representative to disappeared death body	carves as human shape
Capparaceae							
<i>Capparis zeylanica</i> L.	L	JN	W	lan phi pai	Lf	Used for spraying holy water to ward off evil spirits	Soaked with holy water
	L	TK	W	lan phi pai	Lf	Warding off evil spirits	tied with <i>Acacia concinna</i> and attach to the house
	K	HP	W	tood ue traal katae	Lf	Used for spraying holy water to ward off evil spirits	Soaked with holy water

Table 15. (continued)

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
<i>Stixis suaveolens</i> (Roxb.) Pierre	K	HP	W	taal pa nuem	Lf	Ritual plant used for warding off evil spirits	tied with <i>Blumea balsamifera</i> and <i>Ficus hispida</i> and attached to the house
Caprifoliaceae							
<i>Sambucus javanica</i> Reinw. ex Blume	L	MNP2	W	lum plae ma kwan kruai	Fl	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony
Combretaceae							
<i>Quisqualis indica</i> L.	H	SK	W	-	Lf	Warding off evil spirits	Planted around residence area non-prepared
	K	HST	W	rang zung	Fl	Ritual plant used in ritual ceremony	
Convallariaceae							
<i>Chlorophytum nepalense</i> Baker	L	TK	W	yod doi	Lf/Infl	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony
<i>Peliosanthes</i> sp.	L	TK	W	ta hlo chee	Wp	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony
<i>Tupistra grandis</i> Ridl.	L	TK	W	tha hlo chode	Lf	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony
Convolvulaceae							
<i>Argyreia wallichii</i> Choisy	K	HP	W	tood pood	Lf	Ritual plant used in rice harvesting ceremony	non-prepared

Table 15. (continued)

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
Costaceae							
<i>Costus speciosus</i> Sm.	H	SK	W	qus nqeej	Lf/St	Warding off evil spirits	attached with body
Cyperaceae							
<i>Kyllinga nemoralis</i> (Forst.) Dandy ex Hutch. & Dalziel	H	KH	W	-	Rt	Warding off evil spirits for spiritual- caused illness	cooked with chicken soup and served to patient
Dracaenaceae							
<i>Cordyline fruticosa</i> (L.) A.Chev.	K	HP	D	plae ta hloe	Lf	Used for offering buddha image	non-prepared
Euphorbiaceae							
<i>Balakata baccata</i> (Roxb.) Esser	M	HBV	W	ta doe diang	St	Ritual plant used in 'bridge offering' ceremony of the Mien to prolong life	sawed
	M	STP	W	ta doe diang	St	Ritual plant used in 'bridge offering' ceremony of the Mien to prolong life	sawed
<i>Bischofia javanica</i> Blume	L	TK	W	lum pai pau	Ylf	Masticatories	Steamed/wrap with salt
	K	HP	W	tood proo ka ial	Ylf	Masticatories	Steamed/wrap with salt
	K	HST	W	tood la tuem	Ylf	Masticatories	Steamed/wrap with salt
<i>Croton roxburghii</i> N.P.Balacr.	M	HBV	W	ta doe pae	St	Ritual plant used in 'bridge offering' ceremony of the Mien to prolong life	sawed
<i>Jatropha gossypifolia</i> L.	H	KH	D	thwj qwg lab	Wp	Warding off evil spirits	Planted around residence area
	H	SK	D	thwj qwg lab	Wp	Warding off evil spirits	Planted around residence area

Table 15. (continued)

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
<i>Macaranga denticulata</i> Müll. Arg.	K	HP	W	tood kue taak/ tong tao	Lf	Ritual plant used in housewarming	put into the hole of the poles at first time that a new house was built
	K	HST	W	tood rue traak	Lf	Ritual plant used in housewarming	put into the hole of the poles at first time that a new house was built
<i>Mallotus barbatus</i> Müll. Arg.	L	TK	W	tong tao	Lf	Ritual plant used in rice harvesting ceremony	non-prepared
	L	MNP2	W	lum satao	Lf	Ritual plant used in rice harvesting ceremonies	put into the rice storage
Hypoxidaceae							
<i>Molineria capitulata</i> (Lour.) Herb.	K	HP	W	tood laak paak	Lf	Food container in ritual ceremonies related to birth	Folded
Lamiaceae							
<i>Callicarpa arborea</i> Roxb.	L	MNP2	W	lum kae	Bk	Masticatories (with betel leaves and nut)	Pulped/dried
<i>Clerodendrum paniculatum</i> L.	L	JN	W	samoot zo	Fl	Ritual plant used in rice harvesting ceremony	non-prepared
<i>Gmelina arborea</i> Roxb.	M	HSN	D	ta jung kong	St	Ritual plant used in 'bridge offering' ceremony of the Mien to prolong life	sawed

Table 15. (continued)

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
	M	STP	W	ta jung kong	St	Ritual plant used in 'bridge offering' ceremony of the Mien to prolong life	sawed
<i>Plectranthus amboinicus</i> (Lour.) Spreng.	H	SK	D	-	Lf	Warding off evil spirits	attached with body
Lauraceae							
<i>Litsea glutinosa</i> (Lour.) C.B.Rob.	K	HP	W	tood trool	Lf	Ritual plant used in rice harvesting ceremonies	put into the rice storage
	M	HBV	W	ta hoe	St	Ritual plant used in 'bridge offering' ceremony of the Mien to prolong life	sawed
	M	HSN	W	ta hoe	St	Ritual plant used in 'bridge offering' ceremony of the Mien to prolong life	sawed
	K	HST	W	tood trool	Lf	Ritual plant used in rice harvesting ceremony	put into the rice storage
Lecythidaceae							
<i>Careya sphaerica</i> Roxb.	K	HST	W	la hmood	Ylf	Masticatories	Steamed/wrap with salt
Leeaceae							
<i>Leea indica</i> (Burm.f.) Merr.	L	MNP2	W	-	Fr	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony
	L	TK	W	plae wal	Infr	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony

Table 15. (continued)

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
Marantaceae							
<i>Phrynium imbricatum</i> Roxb.	L	TK	W	klo tae	Lf	Food container in ritual ceremonies	Folded
Menispermaceae							
<i>Tinospora sinensis</i> (Lour.) Merr.	K	HP	D	ma tui poke	Aerial Rt	Warding off evil spirits for treating spiritual-caused colic in babies	tied around babies' arms and legs
Mimosaceae							
<i>Acacia concinna</i> DC.	L	TK	D	som poi	Leafy Br	Warding off evil spirits	tied with <i>Capparis zeylanica</i> and attach to the house
	K	HP	D	tood poi	Sd	Warding off evil spirits	dried/put in "sa-tuang" in exorcise ritual
<i>Mimosa pudica</i> L.	H	KH	W	tshuaj tsaaj mos	Wp	Warding off evil spirits	attached with body
	H	MNP	W	tshuaj tsaaj mos	Wp	Ward off evil spirits	attached with body
	H	SK	W	tshuaj tsaaj mos	Wp	Warding off evil spirits	attached with body
	K	HST	W	la hla yheib	Wp	Warding off evil spirits	Cold infusion/baths
Moraceae							
<i>Artocarpus heterophyllus</i> Lam.	L	TK	D	-	Lf	Ritual plant used in rice harvesting ceremony	non-prepared
<i>Artocarpus lakoocha</i> Roxb.	K	HST	W	tood trik	Bk	Masticatories (with betel leaves and nut)	Pulped/dried

Table 15. (continued)

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
	K	NP	W	tood trik	Bk	Masticatories (with betel leaves and nut)	Pulped/dried
	L	JN	W	lum took	Bk	Masticatories (with betel leaves and nut)	Pulped/dried
	L	TK	W	lum took	Bk	Masticatories (with betel leaves and nut)	Pulped/dried
	M	HSN	W	low piao	Bk	Masticatories (with betel leaves and nut)	Pulped/dried
<i>Ficus hispida</i> L.f.	K	HP	W	tood chal	Fr	Warding off evil spirits	dried/put in "sa-tuang" in exorcise ritual
<i>Ficus infectoria</i> Roxb.	K	HST	W	chari phak hues	Lf	Masticatories	Steamed/wrap with salt
Piperaceae							
<i>Piper betel</i> Blanco	K	HP	D	plu	Lf	Masticatories	Wrap to limestone and betel nut
	K	NP	D	plu	Lf	Masticatories	Wrap to limestone and betel nut
	L	JN	D	tu plu	Lf	Masticatories	Wrap to limestone and betel nut
	L	MNP2	D	tu plu	Lf	Masticatories	Wrap to limestone and betel nut

Table 15. (continued)

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
<i>Piper</i> sp.	L	TK	W	tu kul	Lf	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony
Poaceae							
<i>Cephalostachyum virgatum</i> Kurz	L	TK	W	hia	St	Making L traditional musical instrument called 'Pri'	sawed
<i>Saccharum arundinaceum</i> Retz.	M	HSN	D	ba dao	Infl	Ritual plant used for warding off evil spirits	tied with wood stick
Rosaceae							
<i>Agrimonia nepalensis</i> D.Don	H	SK	D	cos kev nyeg	Wp	Warding off evil spirits	Planted around residence area
Rubiaceae							
<i>Hymenodictyon orixense</i> (Roxb.) Mabb.	K	HST	W	som kob	Ylf	Masticatories	Steamed/wrap with salt
	K	HP	W	som kob	Lf	Masticatories	Steamed/wrap with salt
<i>Mussaenda sanderiana</i> Ridl.	L	MNP2	W	-	Fl	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony
<i>Schizomussaenda dehiscens</i> (Craib) H.L.Li	L	TK	W	bong lai	Infl	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony
Solanaceae							
<i>Nicotiana tabaccum</i> L.	L	MNP2	D	ya joke	Lf	Tobacco	Dried/Finely chopped
	H	SK	D	luam yeeb	Lf	Tobacco	Dried/Finely chopped

Table 15. (continued)

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
	M	HBY	D	inn biad	Lf	Tobacco	Dried/Finely chopped
	L	TK	D	ya joke	Lf	Tobacco	Dried/Finely chopped
<i>Solanum erianthum</i> D.Don	M	HBY	W	tin hoong ja	Br	Ritual plant used in spiritual ceremonies	non-prepared
Sterculiaceae							
<i>Pterospermum acerifolium</i> (L.) Willd.	M	HBY	W	ta mui diang	St	Ritual plant used in 'bridge offering' ceremony of the Mien to prolong life	sawed
	M	HSN	W	ta mui diang	St	Ritual plant used in 'bridge offering' ceremony of the Mien to prolong life	sawed
	M	STP	W	ta mui diang	St	Ritual plant used in 'bridge offering' ceremony of the Mien to prolong life	sawed
<i>Pterospermum semisagittatum</i> Buch.-Ham. ex Roxb.	K	HST	W	tood ngaad	Bk	Masticatories (with betel leaves and nut)	Pulped/dried
Taccaceae							
<i>Tacca chantrieri</i> Andre	L	MNP2	W	tu tuk	Lf/Infl	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony
	L	TK	W	tu tuk	Lf	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony

Table 15. (continued)

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
Theaceae							
<i>Camellia sinensis</i> (L.) Kuntze	L	MNP2	D	tu hiang	Lf	Masticatories	Steamed/fermented/wrap with salt
	L	JN	D	tu hiang	Lf	Masticatories	Steamed/fermented/wrap with salt
	L	MNP2	D	ti hiang	Lf	Masticatories	Steamed/fermented/wrap with salt
Tiliaceae							
<i>Microcos paniculata</i> L.	M	HBV	W	ta tang diang	St	Ritual plant used in 'bridge offering' ceremony of the Mien to prolong life	sawed
Verbenaceae							
<i>Congea tomentosa</i> Roxb.	K	HP	W	rang chung	Fl	Sacred used in holy water	put into holy water
Vitaceae							
<i>Cayratia</i> sp.	L	TK	W	mhue ter ya	Fr	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony
<i>Cissus discolor</i> Blume	L	MNP2	W	mhue chaad	Un	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony
	L	TK	W	mhue chaad	Un	Ritual plant used in 'sa-lode' ceremony	tied together with other plants used in 'sa-lode' ceremony
<i>Cissus sicyoides</i> L.	K	HST	W	ted sa liab	Lf	Masticatories	Steamed/wrap with salt

Table 15. (continued)

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
Zingiberaceae							
<i>Amomum biflorum</i> Jack	L	TK	D	lum kham	Rt	Used in holy wate as odoring agent	put into holy water
<i>Etilingera elatior</i> (Jack) R.M.Sm.	L	JN	D	-	Fl	Ritual plant used in ritual ceremony	non-prepared
<i>Hedychium coronarium</i> J. Koenig	K	NP	D	rang ta hein	Fl	Ritual plant used for ritual ceremonies	non-prepared
<i>Hedychium spicatum</i> Sm.	K	NP	D	rang ta hein	Infl	Ritual plants used for offering to spirits in ritual ceremonies	non-prepared
<i>Kaempferia galanga</i> L.	H	KH	D	pua toj	Lf	Warding off evil spirits	attached with body/pound and apply over body
<i>Kaempferia rotunda</i> L.	L	TK	D	whaan	Wp	Ritual plant used in rice growing ceremony to warding off evil spirit from rice fields	planted around the rice field
<i>Zingiber cassumunar</i> Roxb.	H	KH	D	qhav dlaab	Rh	Sacred plant used for warding off evil spirit for spiritual-caused illness	Pounded and use as liniment apply over body of patient
	H	MNP	D	qhav dlaab	Rh	Sacred plant used for warding off evil spirit for spiritual-caused illness	Pounded and use as liniment apply over body of patient
	K	HP	D	la koi	Rh	Warding off evil spirits	attached with body/used as amulet

Table 15. (continued)

Species name	EG	VL	PT	local name	PU	Social use types	Preparation
	K	HST	D	la koi	Rh	Warding off evil spirits	attached with body/used as amulet
	K	NP	D	la koi	Rh	Warding off evil spirits	attached with body/used as amulet
	L	JN	D	pei	Rh	Sacred plant used for warding off evil spirit for spiritual-caused illness	Pounded and use as liniment apply over body of patient
	M	HSN	D	-	Rh	Sacred plant used for warding off evil spirit for spiritual-caused illness	Pounded and use as liniment apply over body of patient

4.1.1.7 Vertebrate poisons

A total of 18 plant species in 13 families were mentioned as poisonous for vertebrates (Table 16; Figure 10). No uses for vertebrate poisons were reported from the lowland Joon village of the Lua. Of those species registered in this use-category, 17 were completely identified to species and one only to genus level. Most plants registered were for fish poisons of which many plant species from Papilionaceae (3 species; 16.7%), Apiaceae (2; 11.1%), and Mimosaceae (2; 11.1%) were used.

Table 16. Number of plant families and species reported as used for vertebrate poisons in each village

Ethnic group	Village	#families	#species
Hmong	Khang Ho	4	4
Hmong	Manee Pruek	2	2
Hmong	Song Khwae	1	1
Mien	Huai Labaoya	7	8
Mien	Huai Sanao	2	2
Mien	Santiphap	7	8
Khamu	Huai Pook	1	1
Khamu	Huai Satang	3	3
Khamu	Nam Pan	1	1
Lua	Manee Pruek2	3	3
Lua	Toei Klang	7	8
Total		13	18

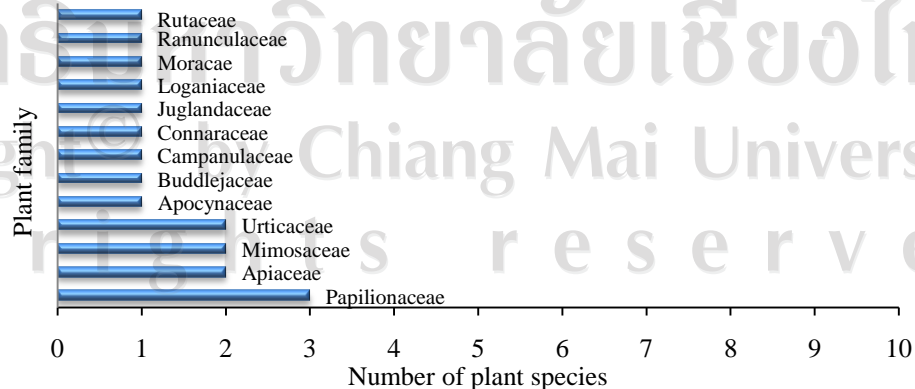


Figure 10 Number plant species in each family reported as used for vertebrate poisons in each village

Table 17. Plants used for vertebrate poisons by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	PU	Use of poisons	Preparation
Apiaceae							
<i>Hydrocotyle javanica</i> Thunb.	M	HBY	W	hia faad	Wp	Fish poison	Pulped/throw into the pool
	L	TK	W	phak nok jang	Wp	Fish poison	Pulped/throw into the pool
	M	STP	W	faad tu biao	Wp	Fish poison	Pulped/throw into the pool
<i>Hydrocotyle sibthorpioides</i> Lam.	M	HBY	D	fad mhuan	Wp	Fish poison	Pulped/throw into the pool
	M	HSN	D	fad mhuan	Wp	Fish poison	Pulped/throw into the pool
Apocynaceae							
<i>Rauvolfia serpentina</i> Benth. ex Kurz	K	HP	W	ya yhom	Rt	Irritation to skin	Do not touch
Buddlejaceae							
<i>Buddleja asiatica</i> Lour.	L	TK	W	tu kon	Lf	Fishing	Pulped/throw into the pool
	M	HBY	W	pin piao mia	Lf	Fish poison	Pulped/throw into the pool
	M	STP	W	pin piao mia	Lf	Fish poison	Pulped/throw into the pool
Campanulaceae							
<i>Lobelia nicotianaefolia</i> Heyne	L	TK	W	-	Wp	Suicide	non-prepared/eaten
Connaraceae							
<i>Cnestis palala</i> (Lour.) Merr.	K	HST	W	plun mun pueng	Rt	Dog poison	Mixed with dog food
Juglandaceae							
<i>Engelhardtia spicata</i> Blume	L	TK	W	lum ching kri	Bk	Fish poison	Pulped/throw into the pool

Table 17. (continued)

Species name	EG	VL	PT	Local name	PU	Use of poisons	Preparation
Loganiaceae							
<i>Gelsemium elegans</i> (Gardn. & Champ.) Benth.	L	MNP2	W	mhue kae	Ysh	Suicide	non-prepared/eaten
	L	TK	W	mhue kae	YSh	Dog poison	Mixed with dog food
	H	KH	W	tshuaj noj tuag	Ysh	Suicide	non-prepared/eaten
	M	HBY	W	yung meo	YSh	Suicide	Eaten
	M	STP	W	yung meo	YSh	Suicide	Eaten
	H	MNP	W	tshuaj noj tuag	YSh	Suicide	non-prepared/eaten
Mimosaceae							
<i>Acacia comosa</i> Gagnep.	L	TK	W	mhue bian kruak	Bk	Fish poison	Pulped/throw into the pool
	M	HBY	W	yim long	Bk	Fish poison	Pulped/throw into the pool
	M	STP	W	yim long	Bk	Fish poison	Pulped/throw into the pool
<i>Acacia pennata</i> (L.) Willd.	L	TK	W	mhue bian zo	Bk	Fish poison	Pulped/throw into the pool
Moraceae							
<i>Antiaris toxicaria</i> Lesch.	K	HST	W	tood jae	Ex (latex)	Arrows/spears	Non-prepared
	H	KH	W	-	Ex (latex)	Arrows/spears	Non-prepared
	M	HBY	W	mian dia diang	Ex (latex)	Arrows/spears	Non-prepared
	M	STP	W	mian dia diang	Ex (latex)	Arrows/spears	Non-prepared
Papilionaceae							
<i>Derris elliptica</i> Benth.	H	KH	W	maab hleb	Rt	Fishing	Pulped/throw into the pool

Table 17. (continued)

Species name	EG	VL	PT	Local name	PU	Use of poisons	Preparation
	H	SK	W	maab hleb	Rt	Fishing	Pulped/throw into the pool
	H	MNP	W	maab hleb	Rt	Fishing	Pulped/throw into the pool
	K	HST	W	mhue hlai	Bk	Fish poison	Pulped/throw into the pool
	K	NP	W	mhue hlai	Bk	Fish poison	Pulped/throw into the pool
	L	MNP2	W	mhue kyo	Rt	Fishing	Pulped/throw into the pool
	M	HBY	W	hloe kon mang	Rt	Fishing	Pulped/throw into the pool
	M	HSN	W	hloe kon bua	Rt	Fishing	Pulped/throw into the pool
	M	STP	W	hloe kon bua	Rt	Fishing	Pulped/throw into the pool
<i>Derris scandens</i> (Roxb.) Benth.	L	TK	W	mhue hlai	Bk	Fish poison	Pulped/throw into the pool
<i>Mucuna pruriens</i> (L.) DC.	M	STP	W	ka tung chob	Fr	Irritation to skin	Do not touch
Ranunculaceae							
<i>Aconitum</i> sp.	H	KH	D	kuab ib	Rt	Suicide	non-prepared/eaten
Rutaceae							
<i>Zanthoxylum acanthopodium</i> DC.	L	MNP2	W	lum phak pam	St	Fish poison	Pulped/throw into the pool
Urticaceae							
<i>Dendrocnide basirotunda</i> (C.Y.Wu) Chew	M	HBY	W	diang tun mian	Lf	Irritation to skin	Do not touch
<i>Laportea interrupta</i> (L.) Chew	M	STP	W	diang tun mian	Wp	Irritation to skin	Do not touch

4.1.1.8 Non-vertebrate poisons

Use-reports related to non-vertebrate poisons were given in nine villages, which excluded Khang Ho and Song Khwae villages of the Hmong and Huai Sanao village of the Mien. In total, 26 plant species in 15 families were registered in this use-category (Table 18; Figure 11). Of those, 25 were completely identified to species and one only to genus level. Most of the species used for non-vertebrate poisons were from the family Asteraceae (5 species; 19.2%) and Rutaceae (3; 11.5%). The main use for this category was reported for non-vertebrate repellent.

Table 18. Number of plant families and species reported as used for non-vertebrate poisons in each village

Ethnic group	Village	#families	#species
Hmong	Manee Pruek	4	4
Mien	Huai Labaoya	2	2
Mien	Santiphap	1	1
Khamu	Huai Pook	5	7
Khamu	Huai Satang	1	1
Khamu	Nam Pan	1	1
Lua	Joon	1	1
Lua	Manee Pruek2	4	4
Lua	Toei Klang	8	9
Total		15	26

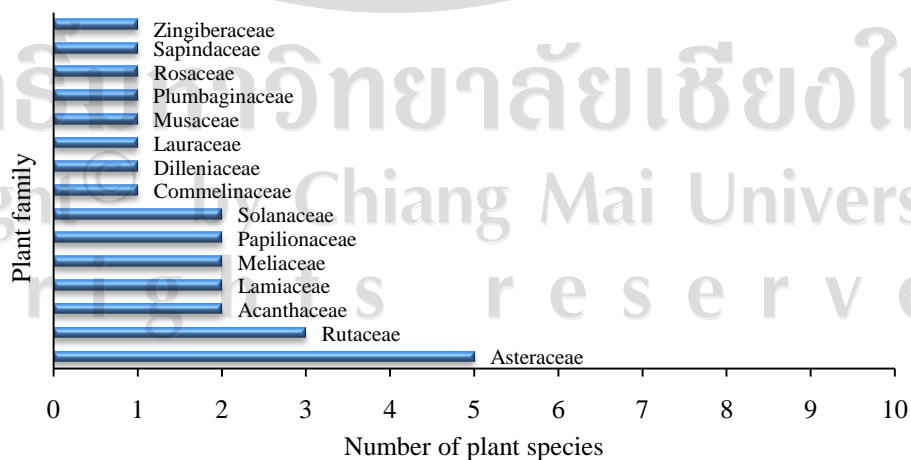


Figure 11 Number of plant species in each family reported as used for non-vertebrate poisons in each village

Table 19. Plants used for non-vertebrate poisons by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	PU	Preparation	Use	Specific non-vertebrates affected	Effect of poisons
Acanthaceae									
<i>Dicliptera roxburghiana</i> Nees	K	HP	W	la iak kra-ial tul	Un	Non-prepared	Put in chicken coops	Chicken' parasites (<i>Dermanyssus</i> spp.)	Repellent
<i>Thunbergia laurifolia</i> Lindl.	L	JN	W	hmue num nae	St	Pulped	Tied around animal's neck	Slugs (in animal's respiratory tract)	Repellent
Asteraceae									
<i>Artemisia verlotiorum</i> Lamotte	L	TK	D	dok kum sa	Lf	Pounded	Lotions	Mosquitoes	Repellent
<i>Bidens pilosa</i> L.	K	HP	W	la iak kra-ial tul	Un	Non-prepared	Put in chicken coops	Chicken' parasites (<i>Dermanyssus</i> spp.)	Repellent
<i>Blumea balsamifera</i> DC.	L	TK	W	lum boi	Lf	Non-prepared	Put in chicken coops	Chicken' parasites (<i>Dermanyssus</i> spp.)	Repellent
<i>Kalimeris indica</i> Sch.Bip.	H	MNP	D	ghua txhais	Lf	Pounded with <i>Chromolaena odorata</i> /water diluted	Spray	Insects	Death (insecticide)
<i>Laggera crispata</i> (Vahl) Hepper & J.R.I.Wood	K	HP	W	tood jued uei	Un	Non-prepared	Put in chicken coops	Chicken' parasites (<i>Dermanyssus</i> spp.)	Repellent

Table 19. (continued)

Species name	EG	VL	PT	Local name	PU	Preparation	Use	Specific non-vertebrates affected	Effect of poisons
Commelinaceae									
<i>Porandra scandens</i> D.Y.Hong	M	HBY	W	toong pud kang mia	Ysh	Non-prepared	Fed to animals	Worms (in animals' wound)	Death
Dilleniaceae									
<i>Dillenia parviflora</i> Griff.	M	HBY	W	piao kub	Clx	Pounded/water diluted	Hair wash	Louses	Death
	K	HP	W	tood pru	Bk	Pounded	Lotions	Mosquitoes	Repellent
Lamiaceae									
<i>Elsholtzia blanda</i> Benth.	L	TK	W	tu phak ping	Un/Sd	Non-prepared	Put in chicken coops	Grain weevil	Repellent
<i>Hyptis capitata</i> Jacq.	K	HP	W	la iak kra-ial tul	Un	Non-prepared	Put in chicken coops	Chicken' parasites (<i>Dermanyssus</i> spp.)	Repellent
Lauraceae									
<i>Litsea cubeba</i> (Lour.) Pers.	L	TK	W	ja kai kueng	Lf	Pounded with <i>Clausena excavata</i> / Water diluted/fermented for 1 month	Spray	Insects	Death (insecticide)

Table 19. (continued)

Species name	EG	VL	PT	Local name	PU	Preparation	Use	Specific non-vertebrates affected	Effect of poisons
Meliaceae									
<i>Azadirachta indica</i> A.Juss.	K	HST	D	sa liam	Lf	Pounded/water diluted/fermented	Spray	Insects	Death (insecticide)
<i>Toona sinensis</i> (Juss.) M. Roem.	L	MNP2	W	lum yhu	Lf	Non-prepared	Put in chicken coops	Chicken' parasites (<i>Dermanyssus</i> spp.)	Repellent
	L	TK	W	lum yhu	Lf	Non-prepared	Put in chicken coops	Chicken' parasites (<i>Dermanyssus</i> spp.)	Repellent
Musaceae									
<i>Musa acuminata</i> Colla	L	MNP2	D	krin yhong yhong	Ex	Non-prepared		Slugs	Death
Papilionaceae									
<i>Flemingia stricta</i> Roxb.	K	HP	W	tood ue kae choa	Lf	Pounded/squeezed	Ear drop	Hailstone (in animals' auditory canal)	Repellent
<i>Tadehagi triquetrum</i> (DC.) Ohashi	K	NP	W	la tok ngrol	Lf	Non-prepared	Spread in the containers	Worms (in fermented fish containers)	Death

Table 19. (continued)

Species name	EG	VL	PT	Local name	PU	Preparation	Use	Specific non-vertebrates affected	Effect of poisons
Plumbaginaceae									
<i>Plumbago zeylanica</i> L.	M	STP	W	pae lin	Lf	Decoction	Spray	Plant weeds	Death (Pesticide)
Rosaceae									
<i>Prunus persica</i> (L.) Batsch	H	MNP	D	txwv dluaj	Lf	Pounded	Hair mask	Louses	Death
Rutaceae									
<i>Clausena excavata</i> Burm.f.	L	TK	W	sa liam oi	Lf	Pounded with <i>Litsea cubeba</i> /water diluted/ fermented for 1 month	Spray	Insects	Death (insecticide)
<i>Clausena</i> sp.	H	MNP	W	-	Lf	Pounded/water diluted	hair wash	Louses	Death
<i>Melicope pteleifolia</i> (Champ. ex Benth.) T.G.Hartley	L	MNP2	W	lum ode yed	Lf	Decoction	Spray	Insects	Death (insecticide)
Sapindaceae									
<i>Sapindus rarak</i> DC.	L	MNP2	W	ma sak	Sd	Pounded/water diluted	hair wash	Louses	Death

Table 19. (continued)

Species name	EG	VL	PT	Local name	PU	Preparation	Use	Specific non-vertebrates affected	Effect of poisons
Solanaceae									
<i>Nicotiana tabacum</i> L.	H	MNP	D	luam yeeb	Lf	Pounded	Lotions	Slugs	Repellent
<i>Solanum erianthum</i> D.Don	L	TK	W	tu pam sa	Lf	Non-prepared	Put in chicken coops	Chicken' parasites (<i>Dermanyssus</i> spp.)	Repellent
Zingiberaceae									
<i>Kaempferia rotunda</i> L.	L	TK	D	whaan ial	Rh	Non-prepared	Put in chicken coops	Chicken' parasites (<i>Dermanyssus</i> spp.)	Repellent

4.1.1.9 Environmental uses

Two hundreds and eleven plant species in 71 families were mentioned for environmental uses. Of those, 195 species (92.4%) were used for ornamental purposes. Most of the plant species registered in this use-category represented were from the families Euphorbiaceae (16 species; 7.6%) and Orchidaceae (13; 6.2%). There were only 16 plants species in 14 families, reported from nine villages that were planted or conserved for other environmental uses such as shade and soil erosion control. The information showed here in Table 20 and Figure 12 were only for such other environmental uses, apart from ornamentation.

Table 20. Number of plant families and species reported for environmental uses in each village

Ethnic group	Village	#families	#species
Hmong	Khang Ho	4	4
Hmong	Manee Pruek	2	2
Hmong	Song Khwae	0	0
Mien	Huai Labaoya	0	0
Mien	Huai Sanao	0	0
Mien	Santiphap	1	1
Khamu	Huai Pook	2	2
Khamu	Huai Satang	3	3
Khamu	Nam Pan	2	2
Lua	Joon	3	3
Lua	Manee Pruek2	4	4
Lua	Toei Klang	3	3
Total		14	16

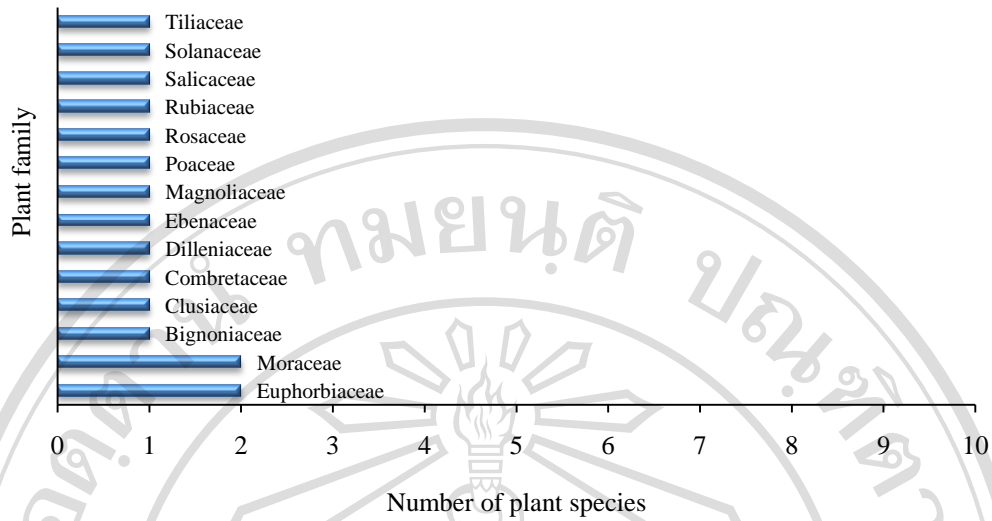


Figure 12 Number of plant species in each family reported as used for environmental purposes in each village

Table 21. Plants reported for environmental uses by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Scientific name	EG	VL	PT	Local name	PU	Specific environmental uses
Bignoniaceae						
<i>Fernandoa adenophylla</i> (Wall. ex G.Don) Steenis	H	KH	W	Pajj ab	Wp	Shade
Clusiaceae						
<i>Cratoxylum formosum</i> Dyer ssp. <i>pruniforum</i> Gogel.	L	JN	W	lum tiu	Wp	Shaed
Combretaceae						
<i>Terminalia catappa</i> L.	K	HST	D	tood hu kwang	Wp	Shade
Dilleniaceae						
<i>Dillenia aurea</i> Sm.	K	HST	W	tood san	Wp	Shade
Ebenaceae						
<i>Diospyros glandulosa</i> Lace	H	MNP	W	-	Wp	Shade
	L	MNP2	W	lum yhuem	Wp	Shade
Euphorbiaceae						
<i>Cleidion javanicum</i> Blume	L	JN	D	lum ko	Wp	Shade
<i>Macaranga denticulata</i> Müll.Arg.	K	NP	D	tood rue traak	Wp	Shade
Magnoliaceae						
<i>Michelia champaca</i> L.	L	TK	D	lum champa	Wp	Shade
Moraceae						
<i>Ficus callosa</i> Willd.	K	HP	D	-	Wp	Shade
<i>Ficus semicordata</i> Buch.-Ham. ex Sm.	H	KH	W	-	Wp	Shade

Table 21. (continued)

Scientific name	EG	VL	PT	Local name	PU	Specific environmental uses
Poaceae						
<i>Vetiveria zizanioides</i> Nash	K	HP	D	ya faak	Wp	Soil erosion control
	L	MNP2	D	ya faak	Wp	Soil erosion control
Rosaceae						
<i>Prunus cerasoides</i> D.Don	H	MNP	D	raws	Wp	Shade
	L	MNP2	D	lum zein	Wp	Shade
	L	TK	D	lum zein	Wp	Shade
Rubiaceae						
<i>Morinda citrifolia</i> L.	H	KH	D	-	Wp	Shade
Salicaceae						
<i>Salix tetrasperma</i> Roxb.	L	MNP2	D	lum ki yai noon	Wp	Soil erosion control
Solanaceae						
<i>Solanum erianthum</i> D.Don	M	STP	W	tin hoong ja	Wp	Shade
Tiliaceae						
<i>Muntingia calabura</i> L.	H	KH	D	ta kob	Wp	Shade
	K	HST	D	tood ta kob	Wp	Shade
	K	NP	D	tood ta kob	Wp	Shade
	L	JN	D	lum ta kob	Wp	Shade
	L	TK	D	lum ta kob	Wp	Shade

Medicinal plants

Following Cook (1995), a number of medicinal plants were registered in 21 medicinal use-categories excluding the categories of unspecified medicinal disorders, metabolic system disorders, and immune-system disorders. The fidelity level for a particular plant species in each medicinal use-category is the proportions of all use-reports in such use-category to all use-reports mentioned for all medicinal use-categories for such plant species.

4.1.1.10 Medicines: Abnormalities

Uses related to the category of abnormalities were reported from eight villages, but not from Huai Pook and Haui Satang village of the Khamu nor from Manee Pruek 2 and Toei Klang of the Lua (Table 22). Among the eight villages, Huai Sanao had the highest ICF value (1.00) due to the agreement concerning a single use for a single species by two informants. Khang Ho, Santiphap and Nam Pan have the ICF value 0, resulting from different uses of three different plant species. The ICF value could not be calculated for Joon village of the Lua as there was only a single use reported from only one informant.

In total, 16 plant species in 13 families were registered in this category (Figure 13). Of those, 15 were securely identified and one with some doubt (cf., *Tropidia curculigoides*) to species level. Only a single plant species was reported for most families except the Papilionaceae and Urticaceae to which three and two species that were used to treat abnormalities were allocated. Fidelity level of each plant species registered in the category were also calculated for each village (Table 23). Many plants species in this category had 100% fidelity level. However, it is important to note that medicinal use for many of these plants was only reported from one informant. Notably, many species were used to treat oedemas (16 use-reports; 89% of all use-reports).

Table 22. ICF values and number of plant families and species used to treat abnormalities in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Khang Ho	2	2	2	0.00
Hmong	Manee Pruek	2	2	5	0.75
Hmong	Song Khwae	4	4	7	0.50
Mien	Huai Labaoya	2	2	4	0.67
Mien	Huai Sanao	1	1	2	1.00
Mien	Santiphap	3	3	3	0.00
Khamu	Nam Pan	2	2	2	0.00
Lua	Joon	1	1	1	-
Total		13	16		

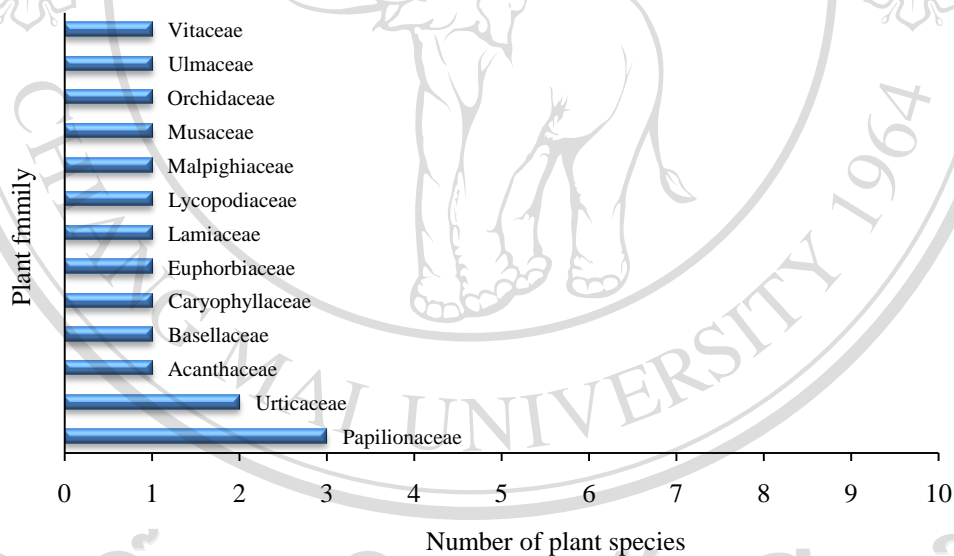


Figure 13 Number plant species in each family used to treat abnormalities in each village

Table 23. Medicinal plants used to treat abnormalities by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Acanthaceae										
<i>Acanthus montanus</i> T.Anderson	H	SK	D	tshuaj nplaig tsuv	100	1	Oedemas (swelling)	Lf	Decoction	Potions
Basellaceae										
<i>Anredera cordifolia</i> (Ten.) Steenis	M	STP	D	dia joon	25	1	Dysfunction	Lf/Bbl	Cooked with chicken	Eaten as food
Caryophyllaceae										
<i>Drymaria diandra</i> Blume	H	KH	W	taum moj qus/ taum moj dlaab	100	1	Oedemas (swelling)	Lf	Pulped	Poultice
Euphorbiaceae										
<i>Jatropha curcas</i> L.	H	SK	D	thwj qwg	50	1	Oedemas (swelling)	Lf	Pulped	Poultice
Lamiaceae										
<i>Vitex peduncularis</i> Wall. ex Schauer	M	HBV	W	mai riang/ zin o mia	20	3	Oedemas (swelling)	Lf/Bk	Decoction	Baths
Lycopodiaceae										
<i>Lycopodium cernuum</i> L.	H	SK	W	suab	100	1	Oedemas (swelling)	Wp	Decoction	Baths

Table 23. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Malpigiaceae										
<i>Aspidopterys tomentosa</i> (Blume) Juss.	M	HBV	W	ka sia fia	8	1	Oedemas (swelling)	Un	Decoction	Baths
Musaceae										
<i>Ensete glauca</i> Roxb.	K	NP	W	ka joong	100	1	Oedemas (swelling)	St	Pulped/cold infusion	Baths
Orchidaceae										
cf. <i>Tropidia curculigoides</i> Lindl.	L	JN	W	-	50	1	Oedemas (swelling)	Lf	Heated	Plaster
Papilionaceae										
<i>Crotalaria assamica</i> Bth.	M	STP	W	dia oe	25	1	Oedemas (swelling)	Un	Decoction	Baths
<i>Crotalaria pallida</i> Ait.	M	HSN	W	dia oe	100	2	Oedemas (swelling)	Rt	Decoction	Potions
<i>Phylacium bracteosum</i> Benn.	K	NP	W	loob lib	14	1	Oedemas (swelling)	Un	Decoction	Baths/potions
Ulmaceae										
<i>Trema orientalis</i> (L.) Blume	H	KH	W	-	100	1	Oedemas (swelling)	St	Decoction	Baths
Urticaceae										
<i>Boehmeria nivea</i> Gaudich.	H	MNP	D	tsaaj	22	2	Oedemas (swelling)	Lf	Decoction	Baths/wash

Table 23. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
	H	SK	D	tsaaj	50	2	Shudder	Lf	Decoction	Baths
	H	SK	D	tsaaj	50	2	Oedemas (swelling)	Lf/St	Decoction/ Pulped	Potions/Poultice
<i>Elatostema sessile</i> J.R.Forst. & G.Forst.	M	STP	W	-	50	1	Oedemas (swelling)	Wp	Decoction	Potions
Vitaceae										
<i>Cissus discolor</i> Blume	H	MNP	W	-	60	3	Oedemas (swelling)	Lf	Pulped	Poultice

4.1.1.11 Medicines: Blood system disorders

Uses related to the category of blood system disorders were reported from nine villages, but not from the three Khamu villages (Table 24). Among the nine villages, Joon village has the highest ICF value (1.00), resulting from the reports of a single use for a single species by five informants. All three Hmong villages had low ICF value compared to the remaining villages.

In total 34 plant species in 27 families were reported as used for treating blood system disorders (Table 24, Figure 14). Of those, 30 were securely identified and one with some doubt to species, and three to genus level. Three species were from the Amaranthaceae and Araceae, making them the most commonly represented plant families.

The most frequently mentioned blood system disorders treated by these plants were pale skin/anemia (25 use-reports; 50%) and blood tonic (25 use-reports; 25%), respectively. Interestingly, many Amaranthaceae were used for blood tonic in many villages. Likewise, many Araceae were salient for treating pale skin/anemia.

Table 24. ICF values and number of plant families and species used to treat blood system disorders in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Khang Ho	7	8	13	0.42
Hmong	Manee Pruek	4	5	7	0.33
Hmong	Song Khwae	9	11	18	0.41
Mien	Huai Labaoya	10	10	38	0.76
Mien	Huai Sanao	6	6	19	0.72
Mien	Santiphap	2	2	12	0.91
Lua	Joon	1	1	5	1.00
Lua	Manee Pruek2	3	3	16	0.87
Lua	Toei Klang	2	2	3	0.50
Total		27	34		

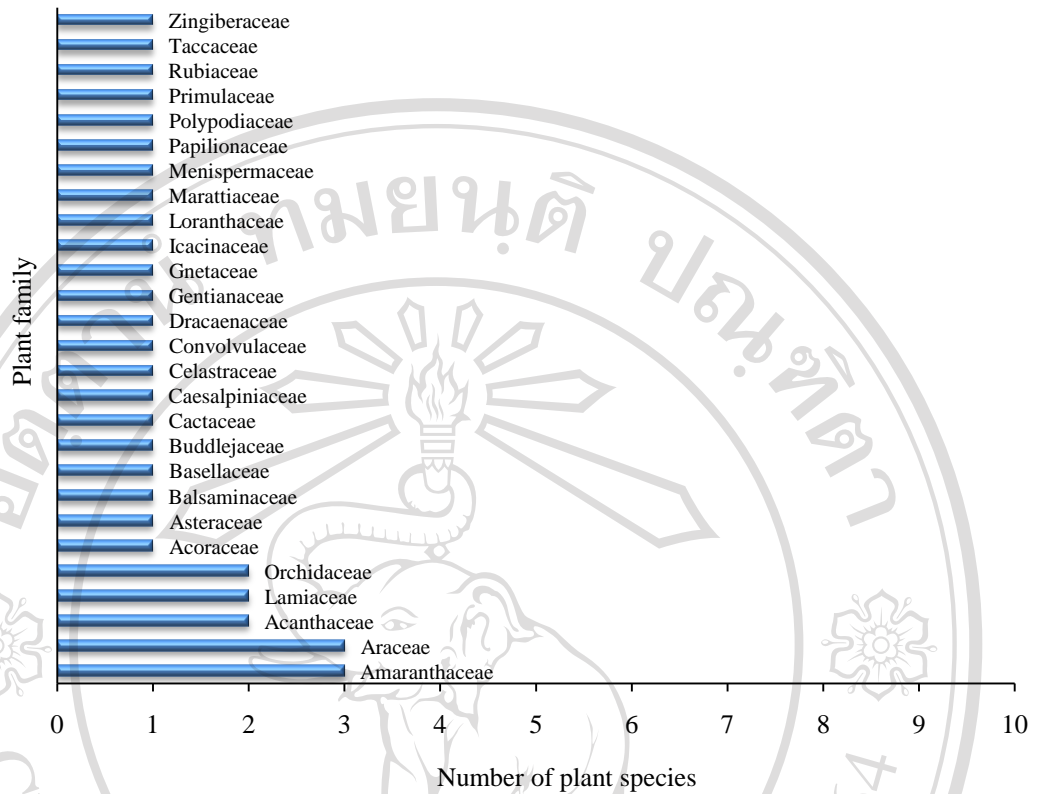


Figure 14 Number plant species in each family used to treat blood system disorders in each village

Table 25. Medicinal plants used to treat blood system disorders by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Acanthaceae										
<i>Dicliptera chinensis</i> Juss.	H	KH	D	tshuaj hov txob	33.3	1	Pale skin/ Anemia	Lf	Cooked with chicken soup	Eaten as food
<i>Sanchezia nobilis</i> Hook.f.	H	SK	D	paaj lav	16.7	1	Blood tonic	Lf	Cooked with chicken soup	Eaten as food
Acoraceae										
<i>Acorus gramineus</i> Soland.	H	SK	D	pawj qab	100.0	1	Blood tonic	Lf	Cooked with chicken soup	Eaten as food
Amaranthaceae										
<i>Amaranthus cruentus</i> L.	H	SK	D	txhuv ntuj lab	83.3	1	Blood tonic	Lf	Cooked	Eaten as food
	H	SK	D	txhuv ntuj lab	83.3	4	Blood tonic	Lf	Cooked with chicken soup/ Decoction	Eaten as food/potions
<i>Celosia argentea</i> L.	H	SK	D	paaj lauv qab	100.0	1	Pale skin/ Anemia	Lf	Cooked	Eaten as food
<i>Iresine herbstii</i> Hook.	H	KH	D	nkaaj lab	6.7	2	Blood tonic	Lf	Cooked with chicken soup	Eaten as food
	H	MNP	D	nkaaj lab	18.7	3	Blood tonic	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	nkaaj lab	22.2	2	Blood tonic	Lf	Cooked with chicken soup	Eaten as food
	L	TK	D	tu yang zo	100.0	1	Blood tonic	Lf	Decoction	Potions
	M	HBV	D	ja hoong koon	15.4	2	Blood tonic	Lf	Cooked with chicken soup	Eaten as food

Table 25. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Araceae										
<i>Alocasia cucullata</i> (Loureiro) G.Don	H	KH	D	teeb ntsuab	50.0	1	Pale skin/Anemia	Pt	Pulped/heated	Poultice over abdominal area
<i>Alocasia macrorhiza</i> Schott	H	KH	D	qos tsuv	100.0	1	Pale skin/Anemia	Pt	Pulped/heated	Poultice over abdominal area
<i>Pothos scandens</i> L.	H	KH	W	kooj ntsuag neeg	25.0	1	Pale skin/Anemia	Wp	Pulped/heated	Poultice over abdominal area
Asteraceae										
<i>Artemisia vulgaris</i> L.	H	MNP	W	suv ntswm	8.3	1	Pale skin/Anemia	Lf	Heated	Poultice over abdominal area
Balsaminaceae										
<i>Impatiens balsamina</i> L.	H	SK	D	paaj nti ntuav	10.0	1	Blood tonic	Lf	Decoction	Potions
Basellaceae										
<i>Basella rubra</i> L.	M	HBV	D	dia joon si	25.0	1	Blood tonic	Lf	Cooked with chicken soup	Eaten as food
Buddlejaceae										
<i>Buddleja asiatica</i> Lour.	H	SK	W	paaj tshuas	100.0	1	Pale skin/Anemia	Rt	Decoction	Potions

Table 25. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Cactaceae										
<i>Opuntia</i> sp.	M	HBY	D	pang dia	50.0	1	Pale skin/ Anemia	Lf	Finely chopped/ cooked with eggs	Eaten as food
Caesalpinaceae										
<i>Caesalpinia sappan</i> L.	L	JN	D	faang	100.0	5	Blood tonic	St	Decoction	Potions
	H	KH	D	txhub	11.1	1	Blood tonic	St	Decoction	Potions
	M	HBY	D	som mua/ sing mua	66.7	8	Blood tonic	St	Decoction	Potions
	M	HSN	D	som mua/ sing mua	28.6	2	Blood tonic	St	Decoction	Potions
Celastraceae										
<i>Euonymus</i> sp.	M	STP	W	diang ton zo	40.0	4	Blood tonic	Un	Decoction	Potions
Convolvulaceae										
<i>Cuscuta chinensis</i> Lam.	M	HSN	W	mua phan tang	100.0	5	Pale skin/ Anemia	St	Decoction	Potions
Dracaenaceae										
<i>Sansevieria roxburghiana</i> Schult.	M	HBY	D	ha dia nang	20.0	2	Pale skin/ Anemia	Lf	Decoction	Potions

Table 25. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Gentianaceae										
<i>Canscora andrographioides</i> Clarke	L	MNP2	W	kong saden	100.0	10	Blood tonic	Wp	Mixed with alcohol	Potions
Gnetaceae										
<i>Gnetum montanum</i> Markgr.	M	HSN	W	hei muai	25.0	1	Pale skin/ Anemia	Un	Decoction	Baths
Icacinaceae										
<i>Gonocaryum lobbianum</i> (Miers) Kurz	M	HBV	W	ja king yung	11.1	1	Pale skin/ Anemia	Rt	Decoction	Potions
Lamiaceae										
<i>Clerodendrum chinense</i> (Osbeck) Mabb.	H	MNP	W	ntshaub tshws lab	100.0	1	Pale skin/ Anemia	Lf	Pulped/heated	Poultice over abdominal area
<i>Perilla frutescens</i> (L.) Britton	H	MNP	D	naav lab	33.3	1	Pale skin/ Anemia	Lf	Mixed with oil/ heated	Massage over abdominal area
	H	SK	D	naav lab	100.0	1	Pale skin/ Anemia	Lf	Mixed with oil/ heated	Massage over abdominal area
Loranthaceae										
<i>Helixanthera parasitica</i> Lour.	L	MNP2	W	tuk tae	50.0	3	Blood tonic	St	Decoction	Potions

Table 25. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Marattiaceae										
<i>Angiopteris evecta</i> (Forst.) Hoffm.	M	HBY	W	ma tei doi	100.0	1	Pale skin/ Anemia	Sp	Cold infusion	Potions
Menispermaceae										
<i>Stephania pierrei</i> Diels	H	SK	D	maab ntshaa	100.0	3	Blood tonic	Rt	Cooked with chicken soup/ Decoction	Eaten as food/potions
	M	HBY	D	poong mao doi	90.0	18	Blood tonic	Ysh /Rt	Cooked with chicken soup	Eaten as food
	M	HSN	D	poong mao doi	50.0	7	Blood tonic	Rt	Cooked with chicken soup/ Decoction	Eaten as food/potions
Orchidaceae										
<i>Dendrobium aphyllum</i> Roxb.	M	HSN	D	yang pang dia	100.0	3	Pale skin/ Anemia	Lf	Decoction	Potions
<i>Vanilla planifolia</i> Andr.	L	TK	W	paang	100.0	2	Pale skin/ Anemia	Lf	Heated	Plaster over abdominal area
Papilionaceae										
<i>Butea cf. superba</i> Roxb.	H	MNP	W	maab ntshaa	100.0	1	Blood tonic	St	Decoction	Potions
	L	MNP2	W	mhue doo	21.4	3	Blood tonic	St	Decoction	Potions
	M	HBY	W	kiam jong hei	50.0	1	Blood tonic	St	Decoction	Potions

Table 25. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Polypodiaceae										
<i>Platyserium</i> sp.	H	KH	D	ncua dlaav	11.1	1	Pale skin/ Anemia	Lf	Pulped	Poultice over abdominal area
Primulaceae										
<i>Lysimachia christinae</i> Hance	H	KH	D	qua luag lab	33.3	4	Pale skin/ Anemia	Wp	Cooked with chicken soup/ Decoction	Eaten as food/potions
Rubiaceae										
<i>Morinda angustifolia</i> Roxb.	H	KH	W	tshuaj twm qus	50.0	1	Pale skin/ Anemia	Rt	Decoction	Potions
	M	HBV	W	whang ken	15.0	3	Pale skin/ Anemia	Rt	Decoction	Potions
	M	HSN	W	whang ken	50.0	1	Pale skin/ Anemia	St	Decoction	Potions
	M	STP	W	whang ken	88.9	8	Pale skin/ Anemia	Rt	Decoction	Potions
Taccaceae										
<i>Tacca chantrieri</i> André	H	SK	W	nplooj qhwv yeeb	14.3	1	Pale skin/ Anemia	Lf	Pulped	Poultice over abdominal area/

Table 25. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Zingiberaceae										
<i>Kaempferia rotunda</i> L.	H	SK	D	saab txhwm	5.0	1	Blood tonic	Rh	Non-prepared	Eaten raw

4.1.1.12 Medicines: Circulatory system disorder

Uses related to the category of circulatory system disorders were reported from all 12 villages of the four ethnic groups studied. Santiphap and Manee Pruek2 have the highest ICF value (1.00) due to the reports of a single use for a single species by two and three informants, respectively (Table 26). The ICF value could not be calculated for Nam Pan, Joon and Toei Klang as, for each village, there was only a single use reported for a single species from only one informant.

A total of 33 plant species in 29 families were registered in this use-category (Table 26, Figure 15). Of these plants, 32 were securely identified and one with some doubt to species level. There were no commonly represent plant families for this category as only one or two plant species were allocated to each plant family.

Medicinal use of many plant species was exclusively for treating circulatory system disorders, evidenced by their 100% fidelity level. Despite plants species used for this use-category vary from village to village; it was found that many species were commonly used to treat the same disorders in many villages; *e.g.*, hypertension (26 use-reports; 60.5%) and haemorrhoids (8 use-reports; 18.6%).

Table 26. ICF values and number of plant families and species used to treat circulatory system disorders in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Khang Ho	3	3	4	0.33
Hmong	Manee Pruek	9	9	23	0.64
Hmong	Song Khwae	5	5	8	0.43
Mien	Huai Labaoya	7	7	9	0.25
Mien	Huai Sanao	7	7	21	0.70
Mien	Santiphap	1	1	2	1.00
Khamu	Huai Pook	2	2	3	0.50
Khamu	Huai Satang	3	4	6	0.40
Khamu	Nam Pan	1	1	1	-
Lua	Joon	1	1	1	-
Lua	Manee Pruek2	1	1	3	1.00
Lua	Toei Klang	1	1	1	-
Total		29	33		

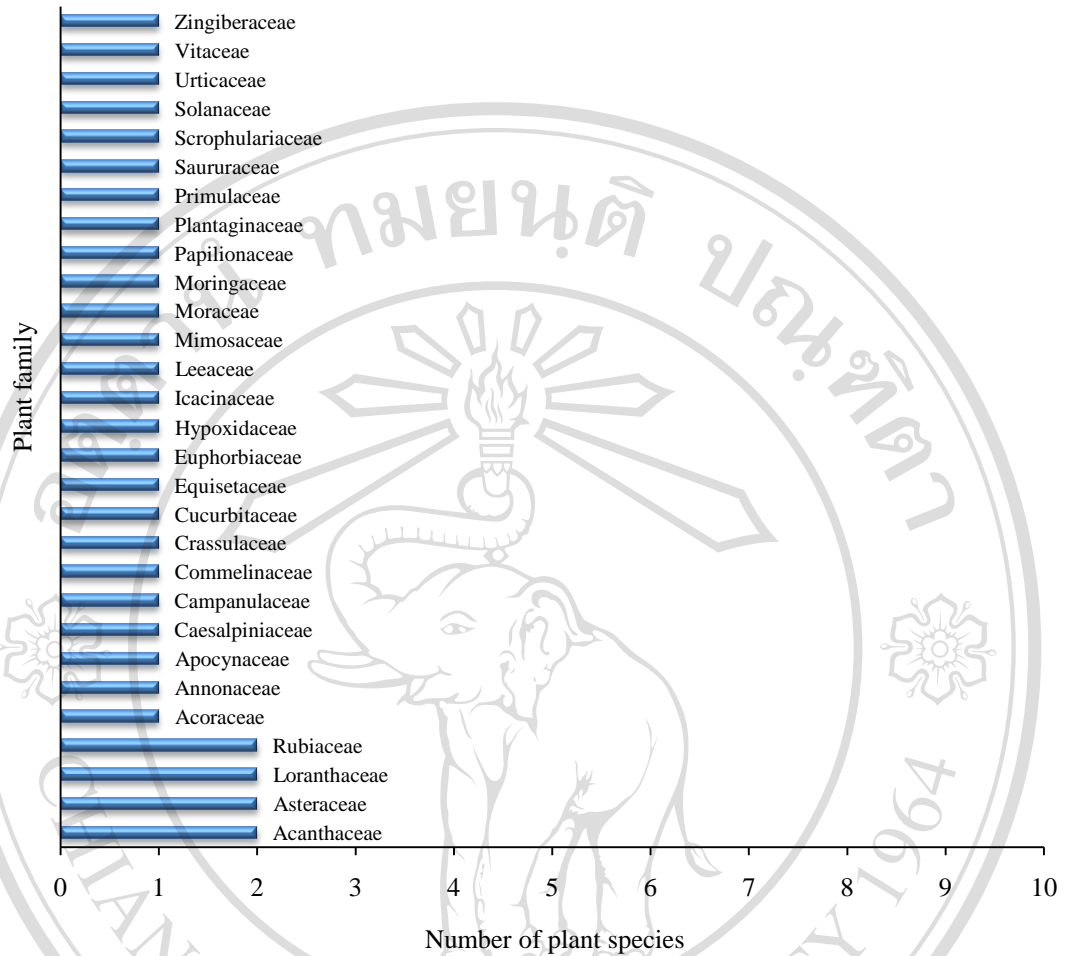


Figure 15 Number plant species in each family used to treat circulatory system disorders in each village

Table 27. Medicinal plants used to treat circulatory system disorders by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Acanthaceae										
<i>Pseuderanthemum palatiferum</i> (Nees) Radlk. ex Lindau	K	HST	D	-	50.0	1	Hypertension	Lf	Non-prepared	Eaten as vegetable
	M	HBV	D	-	100.0	2	Hypertension	Lf	Non-prepared	Eaten as vegetable
	M	HSN	D	-	30.0	3	Hypertension	Lf	Non-prepared	Eaten as vegetable
<i>Thunbergia laurifolia</i> Lindl.	H	SK	W	maab hwb taub	11.1	1	Hypertension	St	Decoction	Potions
	K	HP	W	lung riad	15.4	2	Hypertension	St	Decoction	Potions
Acoraceae										
<i>Acorus gramineus</i> Soland.	H	KH	D	pawj qab	100.0	1	Cardiac tonic	Lf	Cooked with chicken soup/eggs	Eaten as vegetable
Annonaceae										
cf. <i>Fissistigma fulgens</i> Merr.	H	MNP	W	-	100.0	1	Hypertension	St	Decoction	Potions
Apocynaceae										
<i>Tabernaemontana pandacaqui</i> Poir.	H	MNP	W	kaum taw qab	75.0	3	Hypertension	St	Decoction	Potions
Asteraceae										
<i>Gynura nepalensis</i> Decoction.	H	SK	D	tshuaj rog ntsuab	6.7	1	Hypertension	Lf	Decoction	Eaten as vegetable

Table 27. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Gynura procumbens</i> Merr.	K	NP	D	-	100.0	1	Hypertension	Lf	Non-prepared	Eaten as vegetable
	L	JN	D	-	50.0	1	Hypertension	Lf	Non-prepared	Eaten as vegetable
Caesalpiniaceae										
<i>Caesalpinia sappan</i> L.	M	HB	D	som mua/sing mua	16.7	2	Hypertension	Sd	Decoction/Pd	Potions/powders
Campanulaceae										
<i>Codonopsis javanica</i> Hook.f. & Thomson	H	MNP	W	-	81.8	9	Cardiac tonic	Rh/ Wp	Cooked with chicken soup/ Decoction	Eaten as vegetable/potions
Commelinaceae										
<i>Murdannia loriformis</i> (Hassk.) Rao Rolla & Kammathy	M	HSN	D	-	100.0	1	Hemorrhoids	Lf	Finely chopped/ cooked with eggs	Eaten as food
Crassulaceae										
<i>Kalanchoe laciniata</i> (L.) Decoction.	H	SK	D	tshuaj ntiv tub	4.8	1	Cardiac tonic	Lf	Finely chopped/ cooked with eggs	Eaten as food
Cucurbitaceae										
<i>Gynostemma pentaphyllum</i> (Thunb.) Makino	H	SK	W	maab hmeev dlev ntsuab	50.0	1	Hypertension	Lf	Decoction	Potions

Table 27. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	H	MNP	W	maab hmeev dlev ntsuab	100.0	1	Hypertension	Un	Decoction	Potions
Equisetaceae										
<i>Equisetum debile</i> Roxb. ex Vaucher	M	STP	W	pae tob	18.2	2	Hemorrhoids	Wp	Decoction	Potions
Euphorbiaceae										
<i>Euphorbia tirucalli</i> L.	M	HSN	D	-	100.0	4	Hemorrhoids	St	Pulped	Insert into anus
Hypoxidaceae										
<i>Molineria capitulata</i> (Lour.) Herb.	K	HP	W	-	100.0	1	Cardiovascular stimulant	Rt	Decoction	Potions
Icacinaeae										
<i>Gonocaryum lobbianum</i> (Miers) Kurz	M	HBV	W	ja king yung	11.1	1	Hypertension	Fr	Burned	Eaten as food
Leeaceae										
<i>Leea indica</i> (Burm.f.) Merr.	H	MNP	W	qab ib	25.0	1	Hypertension	Rt	Decoction	Potions
Loranthaceae										
<i>Dendrophthoe pentandra</i> (L.) Miq.	M	HSN	W	diang zang za	100.0	4	Improve blood circulation	St	Decoction	Potions

Table 27. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Helixanthera parasitica</i> Lour.	L	MNP2	W	tuk tae	50.0	3	Rheumatic heart disease	St	Decoction	Potions
Mimosaceae										
<i>Mimosa pudica</i> L.	H	MNP	W	tshuaj tsaaj mos	75.0	3	Hypertension	Wp	Decoction	Potions
	K	HST	W	yheib	100.0	2	Hypertension	Wp	Decoction	Potions
	M	HBV	W	mian yob	6.3	1	Hypertension	Wp	Decoction	Potions
Moraceae										
<i>Ficus hirta</i> Vahl	H	MNP	W	-	100.0	1	Hypertension	Rt	Decoction	Potions
Moringaceae										
<i>Moringa oleifera</i> Lam.	H	KH	D	-	100.0	1	Hypertension	Lf	Dried/Powdered	Tablet
Papilionaceae										
<i>Tadehagi triquetrum</i> (L.) H.Ohashi	L	TK	W	yun kod/tu kod	50.0	1	Hemorrhoids	Rt	Decoction with <i>Melastoma malabathricum</i>	Potions
Plantaginaceae										
<i>Plantago major</i> L.	M	HSN	D	hang jei mia	100.0	2	Cardiac tonic	Wp	Cooked with chicken soup/eggs	Eaten as food

Table 27. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Primulaceae										
<i>Lysimachia christinae</i> Hance	H	MNP	W	qua luag lab	9.1	1	Cardiovascular stimulant	Lf	Decoction	Potions
Rubiaceae										
<i>Hymenodictyon orixense</i> (Roxb.) Mabb.	K	HST	D	som kob	100.0	1	Hemorrhoids	Lf	Grated/cold infusion	Potions
<i>Morinda angustifolia</i> Roxb.	H	SK	W	tshuaj twm qus	50.0	4	Hypertension	Rt	Decoction	Potions
	K	HST	W	tood chaluk	100.0	2	Hypertension	Rt	Decoction	Potions
Saururaceae										
<i>Houttuynia cordata</i> Thunb.	M	HBV	D	ju mua mia	100.0	1	Hypertension	Lf	Non-prepared	Eaten as vegetable
Scrophulariaceae										
<i>Scoparia dulcis</i> L.	M	HSN	W	toe yui mia	20.0	1	Hypertension	Wp	Dried/decoction	Potions
Solanaceae										
<i>Solanum spirale</i> Roxb.	M	HBV	D	jian dia	20.0	1	Hypertension	Fr	Non-prepared	Eaten as vegetable
Urticaceae										
<i>Elatostema longipes</i> W.T.Wang	H	MNP	W	nplooj ab	60.0	3	Hypertension	Lf	Cooked with meat	Eaten as food
Vitaceae										
<i>Cissus quadrangularis</i> L.	M	HBV	D	-	100.0	1	Hemorrhoids	St	Pulped	Insert into anus

Table 27. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	M	HSN	D	-	100.0	6	Hemorrhoids	St	Non-prepared	stuff in banana and eat
Zingiberaceae										
<i>Kaempferia parviflora</i> Wall.	H	KH	D	ghav ntshaav	18.2	2	Cardiac tonic	Rh	Mixed with alcohol	Potions

4.1.1.13 Medicines: Digestive system disorders

Uses related to the category of digestive system disorders were reported from all 12 villages of the four ethnic groups. The villages Huai Satang and Santiphap have the relatively low ICF with value of 0.48 and 0.53, respectively.

In total, 196 plant species in 83 families were reported for treating digestive system disorders (Table 28; Figure 16). Of those, 189 were completely identified to species, six to genus and one only to family level. A number of medicinal plant used in this use-category were from the family Zingiberaceae (15 species; 7.6%), Euphorbiaceae (15; 7.6%), Asteraceae (15; 7.6%), and Lamiaceae (12; 6.1%). It was also found that the Hmong used a large variety of plants to treat digestive system disorders compared to other ethnic groups. The frequently reported disorders were stomachache (132 use-reports; 31.7%), diarrhoea (102; 24.5%), gastric ulcers (45; 10.8%), flatulence (42; 10.1%), and toothache (31; 7.5%).

Table 28. ICF values and number of plant families and species used to treat digestive system disorders in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Khang Ho	34	58	244	0.77
Hmong	Manee Pruek	39	64	217	0.71
Hmong	Song Khwae	29	52	185	0.62
Mien	Huai Labaoya	18	21	91	0.78
Mien	Huai Sanao	11	15	42	0.66
Mien	Santiphap	16	20	41	0.53
Khamu	Huai Pook	18	22	88	0.76
Khamu	Huai Satang	10	12	22	0.48
Khamu	Nam Pan	10	15	47	0.70
Lua	Joon	11	15	59	0.76
Lua	Manee Pruek2	14	18	82	0.79
Lua	Toei Klang	16	19	59	0.69
Total		83	196		

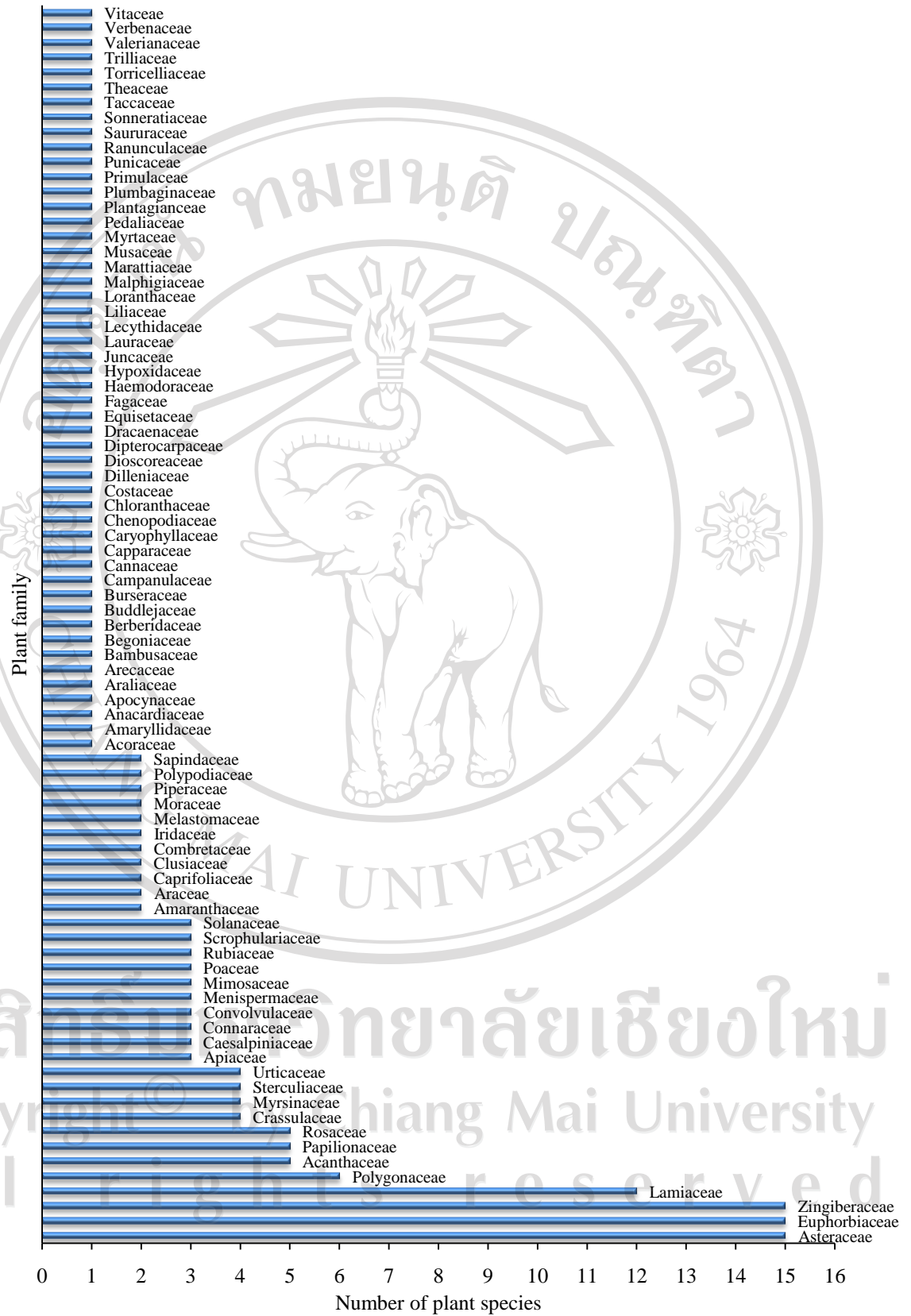


Figure 16 Number plant species in each family used to treat digestive system disorders in each village

Table 29. Medicinal plants used to treat digestive system disorders by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Acanthaceae										
<i>Andrographis paniculata</i> Nees	H	SK	D	tshuaj ab	33.3	1	Stomachache	Lf	Decoction	Potions
	K	HST	D	fa ta lai jone	50.0	1	Stomachache	Lf	Decoction	Potions
<i>Dicliptera chinensis</i> Juss.	H	SK	D	tshuaj hov txob	50.0	1	Stomachache	Lf	Cooked with chicken soup	Eaten as food
<i>Lepidagathis incurva</i> Buch.-Ham. ex D.Don	H	KH	D	tshuaj kem mov nplaum	90.9	9	Indigestion	Lf	Hot infusion	Potions
	H	KH	D	tshuaj kem mov nplaum	90.9	1	Stomachache	Un	Decoction	Potions
	H	MNP	W	tshuaj kem mov nplaum	100.0	3	Indigestion	Wp	Decoction	Potions
	H	SK	W	tshuaj kem mov nplaum	100.0	7	Indigestion	Rt	Decoction	Potions
<i>Strobilanthes cusia</i> Kuntze	M	HBY	D	yaam	4.2	1	White furry tongue	Lf	Pounded with rice	Poultice at palm and feet
<i>Thunbergia laurifolia</i> Lindl.	H	SK	W	maab hwb taub	11.1	1	Stomachache	Rt	Decoction	Potions
	M	HBY	W	yae tam hei	50.0	3	Gastric ulcers	St	Decoction	Potions
	M	STP	W	yae tam hei	11.8	2	Gastric ulcers	St	Decoction	Potions

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Acoraceae										
<i>Acorus calamus</i> L.	H	KH	D	pawj a	90.9	2	Stomachache	Lf	Decoction	Potions
	H	KH	D	pawj a	90.9	8	Indigestion	Rt	Decoction	Potions
	H	MNP	D	pawj a	100.0	5	Stomachache	Rh	Decoction	Potions
	H	MNP	D	pawj a	100.0	5	Indigestion	Rh	Decoction	Potions
	H	MNP	D	pawj a	100.0	1	Gastric ulcers	Rh	Decoction	Potions
	H	SK	D	pawj a	75.0	1	Indigestion	Rh	Dried/chopped	Powders
	H	SK	D	pawj a	75.0	4	Gastric ulcers	Rh	Decoction	Potions
	H	SK	D	pawj a	75.0	1	Diarrhoea	Rh	Decoction	Potions
	H	SK	D	pawj a	75.0	3	Stomachache	Rh	Decoction	Potions
Amaranthaceae										
<i>Cyathula officinalis</i> K.C.Kuan	H	MNP	D	nrhaab cos	28.6	2	Indigestion	Lf	Decoction	Potions
<i>Cyathula prostrata</i> Blume	H	MNP	W	-	75.0	3	Indigestion	Wp	Decoction	Potions
Amaryllidaceae										
<i>Crinum amabile</i> Donn	H	MNP	D	twm xam	14.3	1	Diarrhoea	Lf	Decoction	Potions
Anacardiaceae										
<i>Rhus chinensis</i> Muell.	H	MNP	W	txwv cev	33.3	1	Diarrhoea (Dysentery)	Ga	Decoction	Potions

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Apiaceae										
Apiaceae sp.1	H	KH	D	taab kib ntsuab	3.0	1	Flatulence	Lf	Decoction	Potions
	H	MNP	D	taab kib ntsuab	20.0	2	Gastric ulcers	Lf	Cooked with chicken	Eaten as food
	H	MNP	D	taab kib ntsuab	20.0	1	Acid regurgitation	Lf	Hot infusion	Potions
<i>Centella asiatica</i> (L.) Urb.	M	HSN	D	hia fad/ ngong kao paung	100.0	1	Aphthous ulcer	Lf	Decoction	Potions
	L	MNP2	D	phak nok	100.0	3	Aphthous ulcer	Lf	Decoction	Potions
<i>Hydrocotyle javanica</i> Thunb.	H	MNP	W	lauj vaag qus	100.0	1	Stomachache	Lf	Decoction	Potions
	H	MNP	W	lauj vaag qus	100.0	3	Toothache	Wp	Decoction	Potions/Mouth wash
Apocynaceae										
<i>Plumeria acuminata</i> Ait.	L	JN	D	mai joom pa	100.0	2	Stomachache	Ysh	Heated	Eaten with food
Araceae										
<i>Alocasia cucullata</i> (Loureiro) G.Don	M	STP	D	how hab doa	100.0	1	Flatulence	Co	Pulped/heated	Poultice over abdominal area
<i>Lasia spinosa</i> (L.) Thwaites	K	HST	W	sa roe tok	100.0	1	Laxative	Ysh	Non-prepared	Eaten raw

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Araliaceae										
<i>Tetrapanax papyrifer</i> (Hooker) K. Koch	H	MNP	D	thoob huab	58.8	9	Constipation	Rt	Decoction	Potions
	H	MNP	D	thoob huab	58.8	1	Flatulence	Rt	Decoction	Potions
Areceaceae										
<i>Calamus</i> sp.	M	HBV	D	dang wei/ dang im	11.1	1	Stomachache	Rt	Decoction	Potions
Asteraceae										
<i>Ageratum conyzoides</i> L.	L	JN	W	yun oi	33.3	1	Stomachache	Rt	Decoction	Potions
<i>Artemisia verlotiorum</i> Lamotte	H	KH	D	suv ntswm	10.0	1	Stomachache	Lf	Heated	Plaster over abdominal area
	H	KH	D	suv ntswm	10.0	1	Flatulence	Lf	Mixed with oil/heated	Massage over abdominal area
	H	SK	D	suv ntswm	22.2	1	Stomachache	Lf	Pulped/heated	Poultice over abdominal area
	H	SK	D	suv ntswm	22.2	1	Flatulence	YLf	Finely chopped/cooked with eggs	Eaten as food

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
<i>Blumea balsamifera</i> DC.	M	HBY	W	ma im bua	77.3	7	Stomachache	Lf	Pulped/cold infusion	Potions
	M	HBY	W	ma im bua	77.3	10	Diarrhoea	YLf	Pulped/cold infusion	Potions
	H	KH	W	xaab yeeb qus	5.6	1	Stomachache	Lf	Decoction	Potions
	M	HSN	W	ma im bua	60.0	3	Diarrhoea	Lf	Pulped/cold infusion/decoction	Potions
	M	STP	W	ma im bua	30.0	3	Diarrhoea	St	Decoction	Potions
<i>Blumea densiflora</i> DC.	H	MNP	W	xaab yeeb qus	100.0	2	Toothache	Rt	Cooked with chicken (with <i>Melastoma malabathricum</i>)	Eaten as food
	H	KH	D	ntiv zoov	40.0	2	Flatulence	Lf	Decoction	Potions
<i>Chromolaena odorata</i> (L.) R.M.King & H.Rob.	H	KH	W	nrog dawb hau	10.0	1	Gastric ulcers	Lf	Non-prepared	Eaten raw
	M	HBY	W	ku ja mia	5.9	2	Gastric ulcers	St/Rt	Decoction	Potions
	M	STP	W	ku ja mia	22.2	2	Gastric ulcers	Rt	Decoction	Potions

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
<i>Dichrocephala integrifolia</i> Kuntze	H	KH	W	cos kev qus	33.3	1	Stomachache	Wp	Decoction	Potions
	H	MNP	W	cos kev qus	100.0	1	Diarrhoea	Lf	Finely chopped/ cooked with eggs	Eaten as food
<i>Eclipta prostrata</i> L.	H	MNP	W	cos kev qus	100.0	5	Indigestion	Wp	Decoction	Potions
	K	HST	W	hom kiao	100.0	1	Diarrhoea (Dysentery)	Wp	Cold infusion with <i>Zingiber cassumunar</i>	Potions
<i>Elephantopus scaber</i> L.	K	HST	W	hom kiao	100.0	2	Stomachache	Rt	Decoction	Potions
	H	KH	W	yig nqeeb	57.1	4	Stomachache	Rt	Decoction	Potions
	H	SK	W	yig nqeeb	25.0	1	Stomachache	Wp	Decoction	Potions
	M	HSN	W	dia kuai	50.0	1	Stomachache	Lf	Pulpled/heated	Poultice over abdominal area
<i>Gynura procumbens</i> Merr.	H	SK	D	tshuaj rog ntsuab	33.3	1	Laxative	Lf	Cooked with chicken soup	Eaten as food
<i>Kalimeris indica</i> Sch.Bip.	H	KH	D	qhua txhais	73.1	2	Diarrhoea	Lf	Cooked with chicken soup	Eaten as food
	H	KH	D	qhua txhais	73.1	17	Diarrhoea	Lf	Decoction	Potions

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
	H	MNP	D	qhua txhais	72.7	8	Diarrhoea	Lf	Decoction	Potions
	H	SK	D	qhua txhais	81.8	7	Diarrhoea	Lf	Decoction	Potions
	H	SK	D	qhua txhais	81.8	1	Flatulence	Lf	Decoction	Potions
	H	SK	D	qhua txhais	81.8	1	Vomiting	Lf	Decoction	Potions
<i>Ligularia dentata</i> (A.Gray) Hara	H	MNP	D	kib tawg nees	28.6	2	Stomachache	Lf	Pulped/heated	Poultice over abdominal area
<i>Spilanthes acmella</i> (L.) Murray	K	HP	D	kla ode/phak ped	33.3	1	Toothache	Rt	Pulpled	Pastil
	H	MNP	W	txwv siav	100.0	4	Toothache	Lf	Pounded	Poultice
<i>Synedrella nodiflora</i> Gaertn.	H	MNP	W	txhab qoob	100.0	1	Toothache	Rt	Decoction	Potions
<i>Vernonia cinerea</i> (L.) Less.	H	KH	W	-	33.3	1	Aphthous ulcer	Wp	Non-prepared	Eaten raw
Bambusaceae										
<i>Cephalostachyum pergracile</i> Munro	H	SK	W	xyoob	100.0	1	Vomiting	Yst	Hot infusion	Potions
Begoniaceae										
<i>Begonia longifolia</i> Blume	M	STP	W	koong zui pain	100.0	2	Diarrhoea	Lf	Finely chopped/ cooked with eggs	Eaten as food

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Berberidaceae										
<i>Mahonia siamensis</i> Takeda	L	TK	W	ploe lum	100.0	2	Diarrhoea	St	Grate/cold infusion	Potions
	H	MNP	W	-	14.3	1	Diarrhoea	St	Decoction	Potions
Buddlejaceae										
<i>Buddleja asiatica</i> Lour.	M	HBV	W	pin piao diang	66.7	2	Toothache/ Caries	Bk	Pulpled	Pastil
Burseraceae										
<i>Garuga pinnata</i> Roxb.	K	NP	W	tood ra hmoa	66.7	4	Diarrhoea	Bk	Decoction	Potions
	M	HBV	W	jiang tao ngang	100.0	1	Gastric ulcers	Bk	Decoction	Potions
	M	STP	W	jian tao ngang	100.0	1	Diarrhoea	Bk	Decoction	Potions
Caesalpinaceae										
<i>Caesalpinia decapetala</i> (Roth) Alston	L	JN	W	nham leb maew	27.3	3	Diarrhoea	Rt	Decoction	Potions
<i>Caesalpinia sappan</i> L.	M	HBV	D	som mua/ sing mua	8.3	1	Diarrhoea	St	Decoction	Potions
<i>Senna alata</i> (L.) Roxb.	H	KH	W	-	28.6	2	Gastric ulcers	Un	Decoction	Potions

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Campanulaceae										
<i>Codonopsis javanica</i> Hook.f. & Thomson	H	MNP	W	kab hub	9.1	1	Toothache	Ex	Soaked with cotton	Plaster
Cannaceae										
<i>Canna indica</i> L.	H	KH	D	nplooj ntse lab	100.0	11	Stomachache	Sd	Dried	Tablet
	H	MNP	D	nplooj ntse lab	75.0	3	Stomachache	Sd	Dried/Pulped/ Cold infusion	Potions
	H	SK	D	nplooj ntse lab	100.0	4	Stomachache	Sd	Pulped	Tablet
Capparaceae										
<i>Crateva magna</i> DC.	K	HP	W	tood lun taak	100.0	2	Flatulence	Ysh	Non-prepared	Eaten raw
Caprifoliaceae										
<i>Sambucus javanica</i> Reinw. ex Bl.	M	STP	W	toom yae mia	6.7	1	Diarrhoea	Rt	Decoction	Potions
<i>Sambucus simpsonii</i> Rehder	H	SK	W	mos hav nyeg	22.2	2	Stomachache	Lf	Heated	Paster over abdominal area
Caryophyllaceae										
<i>Drymaria diandra</i> Blume	H	SK	W	taum moj qus/ taum moj dlaab	33.3	1	Flatulence	Lf	Cooked with chicken soup/ pulped	Eaten as food/Poultice

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Chenopodiaceae										
<i>Chenopodium giganteum</i> D.Don	H	KH	D	soov	0.0	0	Stomachache	Lf	Cooked with chicken soup	Eaten as food
Chloranthaceae										
<i>Chloranthus erectus</i> (Buch.-Ham.) Verdc.	H	MNP	W	ntub yag	3.7	1	Toothache	Lf	Finely chopped/cooked with eggs	Eaten as food
Clusiaceae										
<i>Cratoxylum cochinchinense</i> Bl.	L	JN	W	lum tiu	100.0	4	Stomachache	Bk/Ysh	Non-prepared	Eaten raw
<i>Cratoxylum formosum</i> (Jack) Dyer subsp. <i>pruniflorum</i> (Kurz) Gogel.	L	JN	W	lum tiu buad	100.0	4	Stomachache	YLf	Non-prepared	Eaten raw
	L	JN	W	lum tiu buad	100.0	2	Aphthous ulcer	Ysh	Non-prepared	Pastil
	K	HP	W	tood charuem	60.0	6	Diarrhoea	Ysh	Non-prepared	Eaten raw
	H	KH	W	-	100.0	9	Diarrhoea	Ysh	Decoction	Potions
	H	KH	W	-	100.0	1	Aphthous ulcer	Ysh	Non-prepared	Pastil

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Combretaceae										
<i>Anogeissus acuminata</i> (Roxb. ex DC.) Wall. ex Guillem. & Perr.	H	SK	W	-	100.0	1	Gum ache	Lf	Non-prepared	Pastil
<i>Combretum punctatum</i> Blume var. <i>squamosum</i> (Roxb. ex G. Don) M.Gangop. & Chakrab.	L	TK	W	mhue han	100.0	2	Stomachache	Rt	Grated/cold infusion	Potions
Connaraceae										
<i>Cnestis palala</i> (Lour.) Merr.	K	HST	W	plune mun plueng	100.0	2	Stomachache	Rt	Decoction	Potions
<i>Connarus semidecandrus</i> Jack	H	KH	W	-	100.0	1	Stomachache	Rt	Decoction	Potions
	M	STP	W	bob jei hei	20.0	2	Diarrhoea	YLf	Non-prepared	Eaten raw
	K	HST	W	tood sam ton	100.0	1	Diarrhoea	Rt	Decoction with <i>Zingiber cassumunar</i>	Potions
	L	TK	W	dub mud	100.0	1	Stomachache	Rt	Dried/grated/ decoction	Potions
<i>Rourea caudata</i> Planch.	M	HBV	W	bob jei hei	15.4	2	Diarrhoea	Un	Decoction	Potions
	L	TK	W	plae tok tol	100.0	2	Diarrhoea	Rt	Grated/cold infusion	Potions

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Convolvulaceae										
<i>Cuscuta chinensis</i> Lam.	H	MNP	W	quab ntswg tshem	50.0	1	Constipation for pigs	St	Chopped	Mixed with animal food
<i>Ipomoea batatas</i> (L.) Lam.	H	KH	D	qos lab	100.0	1	Constipation	Un	Decoction	Potions
<i>Ipomoea muricata</i> Cav.	H	SK	D	tshua xam yum	100.0	2	Flatulence	Sd	Pounded/hot infusion	Potions
Costaceae										
<i>Costus speciosus</i> (J.Koenig) Sm.	H	SK	W	qus nqeej	12.5	1	Toothache	Rt	Decoction	Potions
Crassulaceae										
<i>Kalanchoe brasiliensis</i> Larrañaga	H	SK	D	nplooj tuaj kaus luj	100.0	1	Flatulence	Lf	Decoction	Potions
	H	SK	D	nplooj tuaj kaus luj	100.0	1	Diarrhoea	Lf	Finely chopped/ cooked with eggs	Eaten as food
<i>Kalanchoe laciniata</i> (L.) DC.	H	KH	D	tshuaj ntiv tub	29.4	5	Stomachache	Lf	Decoction	Potions
	H	KH	D	tshuaj ntiv tub	29.4	2	Diarrhoea	Lf	Grated/hot infusion	Potions
	H	KH	D	tshuaj ntiv tub	29.4	3	Stomachache	Lf	non-prepared	eaten raw
	H	SK	D	tshuaj ntiv tub	4.8	1	Stomachache	Lf	Hot infusion	Potions

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
<i>Kalanchoe pinnata</i> (Lam.) Pers.	H	KH	D	nplooj tuaj kaus	30.8	1	Flatulence	Lf	Finely chopped/ cooked with eggs	Eaten as food
	H	KH	D	nplooj tuaj kaus	30.8	1	Constipation	Lf	Finely chopped/ cooked with eggs	Eaten as food
	H	KH	D	nplooj tuaj kaus	30.8	2	Stomachache	Lf	Pulped/hot infusion	Potions
	H	MNP	D	nplooj tuaj kaus	50.0	2	Diarrhoea	Lf	Hot infusion	Potions
	H	SK	D	nplooj tuaj kaus	30.0	3	Stomachache	Lf	Decoction	Potions
<i>Sedum cf. sarmentosum</i> Bunge	H	SK	D	nplai zeb	33.3	2	Stomachache	Lf	Dried/powdered	Powders
Dilleniaceae										
<i>Dillenia parviflora</i> Griff.	M	HBV	W	piao kub	60.0	3	Diarrhoea	Bk	Decoction	Potions
Dioscoreaceae										
<i>Dioscorea bulbifera</i> L.	H	MNP	D	qos npua nyeg	100.0	1	Diarrhoea	Bbl	Cold infusion	Potions
Dipterocarpaceae										
<i>Hopea odorata</i> Roxb.	K	HP	W	tood ue kan	100.0	4	Toothache	Bk	Pulped	Pastil
	K	NP	W	tood mai kan	100.0	3	Toothache/Gum ache	Bk	Pulped	Pastil

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Dracaenaceae										
<i>Dracaena loureiri</i> Gagnep.	H	MNP	D	-	100.0	2	Diarrhoea (Dysentery)	Ex	Decoction	Potions
Equisetaceae										
<i>Equisetum debile</i> Roxb. ex Vaucher	H	KH	W	-	100.0	1	Flatulence	Wp	Decoction	Potions
Euphorbiaceae										
<i>Acalypha kerrii</i> Craib	K	NP	D	tood khang poi	100.0	2	Aphthous ulcer	Un	Cold infusion	Mouth wash
<i>Bischofia javanica</i> Blume	M	HBV	W	diang zui	100.0	2	Diarrhoea	Bk	Decoction	Potions
	M	STP	W	diang zui	100.0	1	Diarrhoea	Bk	Decoction	Potions
	H	MNP	W	toob qaub	100.0	2	Diarrhoea	Bk	Decoction	Potions
	H	SK	W	toob qaub	100.0	1	Diarrhoea	Bk	Decoction	Potions
	L	JN	W	lum khang	100.0	5	Aphthous ulcer/ Toothache	Ysh	Non-prepared	Pastil
<i>Croton roxburghii</i> N.P. Balakr.	L	JN	W	lum plao	26.7	4	Aphthous ulcer	Rs	Non-prepared	Liniment
<i>Euphorbia neriifolia</i> L.	H	SK	D	xeeb leej tsaav	16.7	1	Stomachache	Ex	Mixed with alcohol	Potions
<i>Glochidion</i> sp.	L	TK	W	lum tloei	100.0	1	Diarrhoea	Bk	Decoction	Potions

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
<i>Homonoia riparia</i> Lour.	K	NP	W	tood krai	14.3	1	Gastro- Esophageal Reflux Disease	Rt	Cold infusion	Potions
<i>Jatropha curcas</i> L.	K	HP	W	tood krai	18.2	2	Diarrhoea	Ysh	Decoction	Potions
	M	STP	D	tong yow	100.0	1	Toothache	Ex	Non-prepared	Liniment
<i>Jatropha gossypifolia</i> L.	H	KH	D	thwj qwg lab	100.0	1	Stomachache	Ysh	Decoction	Potions
<i>Jatropha podagrica</i> Hook.	M	HSN	D	chun tae puang	50.0	2	Stomachache	St	Decoction	Potions
<i>Macaranga triloba</i> Müll.Arg.	H	SK	W	naav	100.0	1	Diarrhoea	Ex	Hot infusion	Potions
<i>Mallotus barbatus</i> Müll.Arg.	K	NP	W	tood thaak	100.0	1	Diarrhoea/Flatulence	Rt	Decoction	Potions
<i>Phyllanthus emblica</i> L.	L	MNP2	W	ma kam pom	100.0	1	Toothache/Gumache	Bk	Grated	Poultice
<i>Phyllanthus urinaria</i> L.	K	HP	W	la mai poe tae	100.0	3	Toothache	Wp	Decoction	Mouth wash
	K	HST	W	la mai poe tae	100.0	1	Toothache	Rt	Pulped	Pastil
<i>Ricinus communis</i> L.	K	HST	D	tood muk hoong	100.0	2	Laxative	Sd	Oil extract/hot infusion	Potions
	H	KH	D	taw dlaav lab	100.0	1	Diarrhoea	Ysh	Decoction	Potions
	H	SK	D	taw dlaav lab	50.0	1	Gastric ulcers	Rt	Decoction	Potions

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Fagaceae										
<i>Castanopsis diversifolia</i> King ex Hook.f.	L	MNP2	W	lum sa	100.0	1	Diarrhoea	Bk	Decoction	Potions
Haemodoraceae										
<i>Xiphidium caeruleum</i> Aubl.	H	SK	D	tw ntses luj	85.7	3	Stomachache	Lf	Decoction	Potions
	H	SK	D	tw ntses luj	85.7	3	Indigestion	Rt/St	Decoction	Potions
	H	KH	D	tw ntses luj	78.9	4	Indigestion	Lf	Decoction	Potions
	H	KH	D	tw ntses luj	78.9	2	Diarrhoea	Lf	Decoction	Potions
	H	KH	D	tw ntses luj	78.9	2	Indigestion	Lf	Hot infusion	Potions
	H	KH	D	tw ntses luj	78.9	7	Stomachache	Lf	Hot infusion	Potions
	H	MNP	D	tw ntses luj	40.0	3	Indigestion	Lf	Decoction	Potions
	H	MNP	D	tw ntses luj	40.0	1	Stomachache	Lf/Rt	Hot infusion	Potions
Hypoxidaceae										
<i>Molineria capitulata</i> (Lour.) Herb.	H	SK	W	nplooj qhab xyab	100.0	1	Diarrhoea	Rt	Cooked with chicken soup	Eaten as food
Iridaceae										
<i>Belamcanda chinensis</i> DC.	H	SK	D	tw ntses	100.0	1	Flatulence	Lf	Hot infusion	Potions
<i>Eleutherine americana</i> Merr. ex K.Heyne	H	SK	D	nplooj qhab xyab lab	66.7	1	Stomachache	Rh	Cooked with chicken soup	Eaten as food

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
	H	SK	D	nplooj qhab xyab lab	66.7	1	Diarrhoea	Rh	Pulped/hot infusion	Potions
	H	KH	D	nplooj qhab xyab lab	22.2	2	Stomachache	Rh	Decoction	Potions
	H	SK	D	nplooj qhab xyab lab	50.0	1	Stomachache	Blb	Decoction	Potions
	H	SK	D	nplooj qhab xyab lab	50.0	1	Toothache	Blb	Pounded	Pastil
Juncaceae										
<i>Juncus effusus</i> L.	M	STP	D	tung zow	16.7	4	Stomachache	Rt	Decoction	Potions
Lamiaceae										
<i>Anisomeles indica</i> Kuntze	M	STP	D	kong fow	30.0	3	Gastric ulcers	Un	Decoction	Potions
<i>Callicarpa arborea</i> Roxb.	L	MNP2	W	lum kae	100.0	6	Stomachache	Bk	Decoction	Potions
<i>Clerodendrum colebrookianum</i> Walp.	H	MNP	W	ntshaub tshws	100.0	2	Stomachache	Lf	Pulped/diluted with alcohol/heated	Poultice over abdominal area
<i>Clerodendrum viscosum</i> Vent.	H	SK	W	ntshaub tshws	50.0	1	Stomachache	Rt	Decoction	Potions
<i>Glechoma hederacae</i> L.	H	SK	D	gua luag/lauj vaag nyeg	100.0	1	Gastric ulcers	Lf	Cooked with chicken soup	Eaten as food

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
	H	KH	D	gua luag/lauj vaag nyeg	50.0	1	Toothache	Lf	Pounded	Pastil
	H	MNP	D	gua luag/lauj vaag nyeg	50.0	1	Aphthous ulcer	Lf	Decoction	Potions
	H	MNP	D	gua luag/lauj vaag nyeg	50.0	1	Diarrhoea	Lf	Decoction	Potions
<i>Gmelina arborea</i> Roxb.	M	HBV	W	ta jung kong	40.9	1	Gastric ulcers	Bk	Decoction	Potions
	M	HSN	D	ta jung kong	27.3	3	Gastric ulcers	Bk	Decoction	Potions
<i>Leonurus artemisia</i> (Lour.) S.Y.Hu	H	SK	D	-	50.0	2	Stomachache	Rt	Decoction	Potions
<i>Ocimum americanum</i> L.	K	HP	D	-	57.1	4	Flatulence	Lf	Grated	Liniment
<i>Orthosiphon aristatus</i> (Blume) Miq.	M	STP	D	jian ku ja	20.0	1	Gastric ulcers	Lf	Decoction	Potions
<i>Perilla frutescens</i> (L.) Britton	H	KH	D	naav lab	92.3	11	Flatulence	Lf	Mixed with oil/heated	Massage over abdominal area
<i>Plectranthus amboinensis</i> Spreng.	H	KH	D	-	100.0	1	Gastric ulcers	Lf	Non-prepared	Eaten as vegetable
<i>Teucrium viscidum</i> Blume var. <i>viscidum</i>	H	KH	D	pawn tshis nyeg	14.3	3	Stomachache	Lf	Cooked with chicken soup	Eaten as food

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
	H	MNP	D	pawn tshis nyeg	8.3	1	Stomachache	Lf	Finely chopped/ cooked with eggs	Eaten as food
	H	SK	D	pawn tshis nyeg	18.2	1	Diarrhoea	Lf	Decoction	Potions
	H	SK	D	pawn tshis nyeg	18.2	1	Stomachache	Lf	Decoction	Potions
Lauraceae										
<i>Phoebe lanceolata</i> (Nees) Nees	L	TK	W	lum nang	100.0	2	Nausea	Bk	Cold infusion	Potions
Lecythidaceae										
<i>Careya sphaerica</i> Roxb.	K	HP	W	tood pui	100.0	2	Stomachache	YLf	Non-prepared	Eaten raw
	M	HSN	W	bue fan diang	100.0	3	Diarrhoea	Bk	Decoction/hot infusion	Potions
Leeaceae										
<i>Leea indica</i> (Burm.f.) Merr.	H	MNP	W	qab ib	75.0	3	Diarrhoea	Rt	Decoction	Potions
	H	SK	W	qab ib	50.0	1	Vomiting	Pt	Pulped/hot infusion	Potions
	M	STP	W	toom yae ngang	100.0	2	Diarrhoea	Rt	Decoction	Potions
Liliaceae										
<i>Chlorophytum nepalense</i> Baker	H	MNP	W	-	100.0	1	Diarrhoea	St	Decoction	Potions
	L	TK	W	yod doi	5.9	1	Stomachache	St	Cooked	Eaten as food

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
	L	MNP2	W	yod doi/lum doi	100.0	11	Diarrhoea	St	Decoction	Potions
Loranthaceae										
<i>cf. Scurrula parasitica</i>	L	JN	W	tuk tae	50.0	1	Diarrhoea	Wp	Decoction	Potions
Malphiaceae										
<i>Aspidopterys tomentosa</i> (Blume) Juss.	M	HBV	W	ka sia fia	91.7	11	Diarrhoea	St	Decoction	Potions
Marattiaceae										
<i>Angiopteris evecta</i> (Forst.) Hoffm.	M	STP	W	ma tei doi/ jang tei doi	33.3	1	Gastric ulcers	Sp	Cold infusion	Potions
Melastomataceae										
<i>Melastoma malabathricum</i> L.	L	MNP2	W	lum yok	35.0	7	Diarrhoea (Dysentery)	Rt	Decoction	Potions
	L	TK	W	lum yok	100.0	4	Diarrhoea (Dysentery)	Rt	Decoction	Potions
	H	MNP	W	tsuam thoob	100.0	4	Stomachache	Rt	Decoction	Potions
	H	MNP	W	tsuam thoob	100.0	1	Gastric ulcers	Rt	Decoction	Potions
	H	MNP	W	tsuam thoob	100.0	3	Constipation	Rt	Decoction	Potions
	H	MNP	W	tsuam thoob	100.0	1	Toothache	Rt	Decoction	Potions

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
<i>Osbeckia stellata</i> Buch.-Ham. ex D.Don	H	MNP	W	tsuam thoob	100.0	3	Constipation	Rt	Decoction	Potions
Menispermaceae										
<i>Cissampelos pareira</i> L.	L	TK	W	mhue ngud	40.0	4	Stomachache	Rt	Decoction	Potions
<i>Stephania pierrei</i> Diels	M	HBY	D	poong mao doi	10.0	1	Flatulence	Rh	Decoction	Potions
	M	HBY	D	poong mao doi	10.0	1	Gastric ulcers	Rh	Pounded/cold infusion	Potions
<i>Tinospora crispa</i> (L.) Hook.f. & Thomson	L	MNP2	D	-	100.0	1	Diarrhoea	St	Decoction	Potions
	H	KH	D	-	50.0	1	Gastric ulcers	St	Decoction	Potions
Mimosaceae										
<i>Acacia concinna</i> DC.	K	HP	D	tood poi	100.0	2	Diarrhoea	Rt	Decoction (with rice)	Potions
<i>Entada glandulosa</i> Pierre ex Gagnep.	H	KH	W	txwv txab tub	11.1	1	Diarrhoea	Sd	Hot infusion	Potions
<i>Entada rheedei</i> Spreng.	K	HST	W	plae laab	100.0	1	Vomiting	Sd	Burned/hot infusion	Potions

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Moraceae										
<i>Ficus hispida</i> L.f.	K	NP	W	due pong	100.0	1	Diarrhoea	Fr	Cold infusion with <i>Imperata cylindrica</i>	Potions
<i>Ficus subulata</i> Blume	H	SK	W	-	33.3	1	Diarrhoea	Lf	Hot infusion	Potions
Musaceae										
<i>Musa sapientum</i> L.	H	KH	D	tsawb	100.0	1	Diarrhoea	Rh	Pounded/squeezed	Potions
Myrsinaceae										
<i>Ardisia amherstiana</i> A.DC.	K	HP	W	klong mud lein	75.0	6	Diarrhoea	Rt	Decoction	Potions
<i>Embelia sessiliflora</i> Kurz	L	MNP2	W	mhue ngod	75.0	3	Diarrhoea	St	Decoction	Potions
<i>Maesa glomerata</i> K.Larsen & C.M.Hu	M	HSN	W	jian tai za	100.0	1	Stomachache	Rt	Decoction	Potions
<i>Maesa indica</i> (Roxb.) Sweet	H	MNP	W	npua tshuaj	16.7	1	Stomachache	Lf	Finely chopped/cooked with eggs	Eaten as food
Myrtaceae										
<i>Psidium guajava</i> L.	H	KH	D	txwv cuab thoj	100.0	4	Diarrhoea	Lf	Decoction	Potions

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
	H	MNP	D	txwv cuab thoj	100.0	2	Diarrhoea	Lf/Rt	Decoction	Potions
	H	SK	D	txwv cuab thoj	100.0	3	Diarrhoea	Lf	Cold infusion	Potions
	K	HP	D	tood ma kaew	100.0	10	Diarrhoea	Lf	Cold infusion	Potions
	L	JN	D	plae kaew	100.0	9	Diarrhoea	Lf	Cold infusion	Potions
	L	MNP2	D	plae kaew	100.0	7	Diarrhoea	Lf	Cold infusion	Potions
	L	TK	D	plae kaew	100.0	7	Diarrhoea	Lf	Cold infusion	Potions
	M	HBV	D	piao oi	100.0	17	Diarrhoea	Lf	Cold infusion	Potions
	M	HSN	D	piao oi	100.0	2	Diarrhoea	Lf	Decoction	Potions
	M	STP	D	piao oi	100.0	6	Diarrhoea	Lf	non-prepared	Eaten raw
Papilionaceae										
<i>Butea cf. superba</i> Roxb.	L	MNP2	W	mhue doo	50.0	7	Diarrhoea	St	Decoction	Potions
	L	TK	W	mhue doo	83.3	5	Diarrhoea	St	Decoction	Potions
<i>Phylacium bracteosum</i> Benn.	L	MNP2	W	lub lib	38.5	5	Aphthous ulcer	Un	Decoction	Potions
<i>Sesbania grandiflora</i> (L.) Pers.	K	HP	D	tood lang jaak	100.0	5	Toothache	Bk	Pulped/ decoction	Mouth wash
	K	NP	D	tood lang jaak	100.0	5	Toothache	Bk	Pulped	Pastil
<i>Sophora flavescens</i> Aiton	H	MNP	D	vuam kheev	90.9	3	Gastric ulcers	Rt	Decoction	Potions
	H	MNP	D	vuam kheev	90.9	7	Stomachache	Rt	Dried/chopped	Powders
	H	SK	D	vuam kheev	100.0	1	Stomachache	Rt	Dried/chopped	Powders

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
<i>Tadehagi triquetrum</i> (L.) H. Ohashi	H	KH	D	vuam kheev	100.0	1	Stomachache	Rt	Decoction	Potions
	K	HP	W	la tok ngrol	40.0	2	Stomachache	Rt	Decoction	Potions
	K	HST	W	la tok ngrol	50.0	2	Stomachache	Rt	Decoction	Potions
Pedaliaceae										
<i>Sesamum indicum</i> L.	L	JN	D	nga	100.0	2	Stomachache	Rt	Decoction	Potions
Piperaceae										
<i>Piper boehmeriifolium</i> Wall.	H	MNP	W	maab saw nyiaj	4.8	1	Cholecystitis	Un	Decoction	Potions
<i>Piper sarmentosum</i> Roxb.	K	HP	D	la pa ring	100.0	2	Toothache	Rt	Pulped	Pastil
Plantagiaceae										
<i>Plantago major</i> L.	H	KH	D	zaub ntswg npua	15.4	1	Diarrhoea	Lf	Decoction	Potions
	H	KH	D	zaub ntswg npua	15.4	1	Toothache	Wp	Decoction	Potions
	H	MNP	W	zaub ntswg npua	20.0	1	Liver pain	Wp	Decoction	Potions
Plumbaginaceae										
<i>Plumbago zeylanica</i> L.	H	KH	D	-	28.6	1	Toothache	Lf	Cooked with chicken soup	Eaten as food
	H	KH	D	kuab ib maab	28.6	1	Stomachache	Lf	Decoction	Potions
	H	SK	W	-	16.7	1	Stomachache	Lf	Decoction	Potions
	H	SK	W	kuab ib maab	16.7	1	Toothache	Lf	Pulped	Liniment

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
	M	HSN	D	pae lin	66.7	2	Stomachache	Lf	Decoction	Potions
Poaceae										
<i>Imperata cylindrica</i> (L.)P. Beauv.	K	NP	W	la lueng yueng	100.0	1	Diarrhoea	Lfv	Cold infusion with <i>Ficus hispida</i>	Potions
<i>Saccharum chinensis</i> Roxb.	H	KH	D	quav ntsuas lab	100.0	1	Stomachache	St	Non-prepared/ decoction	Eaten raw/ potions
<i>Thysanolaena latifolia</i> Honda	L	MNP2	W	yu	100.0	2	Apthous ulcer	Yst	Peeled of	Eaten raw
Polygonaceae										
<i>Fallopia forbesii</i> (Hance) Yonekura & H. Ohashi	H	KH	D	qaub pees	75.0	6	Stomachache	Rt/St	Decoction	Potions
	H	MNP	D	qaub pees	100.0	11	Diarrhoea (Dysentery)	Rt	Decoction	Potions
	H	SK	D	qaub pees	57.1	1	Stomachache	Rt/Lf	Decoction	Potions
	H	SK	D	qaub pees	57.1	3	Diarrhoea	Wp	Decoction	Potions
	M	HBV	D	pong lin	6.7	1	Diarrhoea	Rt	Decoction	Potions
	M	HSN	D	pong lin	83.3	5	Stomachache	Lf	Decoction	Potions
	M	STP	D	pong lin	10.0	1	Gastric ulcers	Rt	Mixed with alcohol	Potions

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
<i>Muehlenbeckia platyclada</i> (F. V. Muell.) Meisn.	H	KH	D	tshuaj laum kib tshooj	100.0	1	Flatulence	Lf	Finely chopped /cooked with eggs	Eaten as food
<i>Polygonum multiflorum</i> Thunb.	H	MNP	W	qos lab qus	90.0	2	Flatulence	Rt	Decoction	Potions
	H	MNP	W	qos lab qus	90.0	1	Diarrhoea	Rt	Dried/powdered	Powders
	H	MNP	W	qos lab qus	90.0	6	Stomachache	Rt	Dried/powdered	Powders
<i>Rumex crispus</i> L.	H	KH	D	tuam faaj	100.0	1	Toothache	Rt	Pounded	Poultice
	H	MNP	W	tuam faaj	50.0	1	Toothache	Lf	Decoction	Potions
	H	MNP	W	tuam faaj	50.0	1	Gum ache	Lf	Non-prepared	Pastil
<i>Rumex obtusifolius</i> L.	H	MNP	D	tuam faaj lab	100.0	1	Flatulence	Lf	Decoction	Potions
<i>Fagopyrum cymosum</i> (Trevir.) Meisn.	H	KH	D	cej quab	100.0	5	Stomachache	Lf/Rt	Decoction	Potions
	H	SK	D	cej quab	50.0	1	Stomachache	Rt	Decoction	Potions
Polypodiaceae										
<i>Phymatosorus scolopendria</i> (Burm.f.) Pic.Serm.	M	STP	W	yai wei	33.3	1	Stomachache	Lf	Decoction	Potions
<i>Platyserium</i> sp.	H	KH	D	ncua dlaav	22.2	2	Flatulence	Lf	Pulped	Paster over abdominal area

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Primulaceae										
<i>Lysimachia christinae</i> Hance	H	MNP	W	qua luag lab	54.5	4	Cholecystitis	Wp	Decoction	Potions
Punicaceae										
<i>Punica granatum</i> L.	K	HP	D	tood kong kang	100.0	3	Diarrhoea	Fr	Decoction	Potions
	M	HBV	D	-	100.0	1	Diarrhoea	Lf	Decoction	Potions
Ranunculaceae										
<i>Thalictrum foliolosum</i> DC.	H	MNP	W	-	40.0	1	Stomachache	Rt	Decoction	Potions
	H	MNP	W	-	40.0	3	Diarrhoea	Rt	Decoction	Potions
Rosaceae										
<i>Agrimonia nepalensis</i> D.Don	H	KH	D	cos kev nyeg	42.9	5	Stomachache	Rt/Lf	Cooked with chicken/Hot infusion	Eaten as food/Potions
	H	KH	D	cos kev nyeg	42.9	1	Indigestion	Wp	Decoction	Potions
	H	MNP	D	cos kev nyeg	90.0	2	Dysphagia	Lf	Decoction	Potions
	H	MNP	D	cos kev nyeg	90.0	7	Indigestion	Wp	Decoction	Potions
	H	MNP	D	suab nplai	22.2	2	Diarrhoea (Dysentery)	Rt	Decoction	Potions
<i>Rosa</i> sp.	H	MNP	D	suab nplai	22.2	2	Diarrhoea (Dysentery)	Rt	Decoction	Potions
<i>Rubus alceifolius</i> Poir.	L	TK	W	mhue blue zo	100.0	4	Diarrhoea	Rt	Grated/cold infusion	Potions

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
	L	TK	W	mhe blue zo	100.0	3	Flatulence	Ysh/ Yst	Peeled of	Eaten raw
<i>Rubus blepharoneurus</i> Card.	H	MNP	W	txwv lauj tauv	100.0	1	Constipation	Rt	Decoction	Potions
<i>Rubus ellipticus</i> J.E.Smith	H	MNP	W	txwv lauj tauv	100.0	2	Constipation	Rt	Decoction	Potions
	L	TK	W	mhe blue heung	100.0	3	Diarrhoea	Rt	Decoction	Potions
Rubiaceae										
<i>Morinda angustifolia</i> Roxb.	H	SK	W	tshuaj twm qus	12.5	1	Stomachache	Rt	Decoction	Potions
	K	HP	W	tood chaluk	100.0	4	Gastric ulcers	Rt	Decoction	Potions
	M	HBV	W	whang ken	80.0	16	Gastric ulcers	Rt	Decoction	Potions
<i>Paederia foetida</i> L.	L	MNP2	W	mhue pom sua	23.1	6	Flatulence	Ysh	Non-prepared	Eaten raw
<i>Paederia pilifera</i> Hook.f.	K	HP	W	ma rhi ou	100.0	1	Stomachache	Ysh	Non-prepared	Eaten raw
	K	HP	W	ma rhi ou	100.0	12	Flatulence	Bbl	Grate/cold infusion	Liniment
	L	TK	W	mhue pom sua	50.0	3	Flatulence/Stomachache	Bbl	Grate/cold infusion	Potions
	K	HST	W	ma rhi ou	100.0	3	Flatulence	Ysh	Non-prepared	Eaten raw
	K	NP	W	ma rhi ou	83.3	5	Flatulence/Stomachache	Ysh	Non-prepared	Eaten raw
	L	JN	W	mhue pom sua	50.0	7	Flatulence	Ysh	Non-prepared	Eaten raw

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Sapindaceae										
<i>Cardiospermum halicacabum</i> L.	H	KH	D	-	23.8	1	Gastric ulcers	Un	Decoction	Potions
	H	KH	D	-	23.8	4	Toothache	Ysh	Finely chopped/ cooked with eggs	Eaten as food
<i>Lepisanthes rubiginosa</i> (Roxb.) Leenh.	K	HP	W	tood yom yron	100.0	2	Constipation	Rt	Hot infusion	Potions
Saururaceae										
<i>Saururus chinensis</i> Hort. ex Loudon	H	SK	D	-	100.0	1	Stomachache	Lf	Hot infusion	Potions
Scrophulariaceae										
<i>Lindernia crustacea</i> (L.) F.Muell.	H	MNP	W	noog tsuam luj	100.0	1	Gastric ulcers	Wp	Decoction	Potions
<i>Scoparia dulcis</i> L.	H	KH	W	txhwb miv	100.0	3	Aphthous ulcer	Lf	Non-prepared	Pastil
	H	MNP	W	txhwb miv	80.0	4	Aphthous ulcer	Lf	Non-prepared	Pastil
	H	SK	W	txhwb miv	66.7	2	Aphthous ulcer	Lf	Non-prepared	Pastil
	L	TK	W	-	100.0	2	Toothache/ Gum ache	Lf	Non-prepared	Pastil
	M	HSN	W	toe yui mia	80.0	3	Aphthous ulcer	Lf	Non-prepared	Pastil
M	HSN	W	toe yui mia	80.0	1	Toothache	Lf	Pounded	Poultice	

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
<i>Torenia asiatica</i> L.	H	SK	D	noog tsuam luj	50.0	1	Stomachache	Wp	Decoction	Potions
	H	SK	D	noog tsuam luj	50.0	1	Constipation	Wp	Decoction	Potions
Solanaceae										
<i>Datura fastuosa</i> L.	H	KH	D	-	100.0	1	Toothache	Sd	Burned	Smoke
<i>Solanum erianthum</i> D.Don	H	KH	W	ntoo zes qab	100.0	1	Stomachache	Lf	Pulpled/heated	Poultice over abdominal area
	H	KH	W	ntoo zes qab	100.0	1	Flatulence	Rt	Decoction	Potions
	H	SK	W	ntoo zes qab	50.0	1	Stomachache	Rt	Decoction	Potions
<i>Solanum spirale</i> Roxb.	L	JN	D	tu plung	100.0	2	Flatulence	Ysh	Heated	Eaten with food
Sonneratiaceae										
<i>Duabanga grandiflora</i> Walp.	K	HP	W	chom pu pri	100.0	2	Aphthous ulcer	Bk	Heated/ decoction	Potions
Sterculiaceae										
<i>Helicteres elongata</i> Wall. ex Boj.	L	TK	W	lum ngud	33.3	4	Diarrhoea	Rt	Decoction	Potions
	K	HST	W	tood thrun	75.0	3	Stomachache	Rt	Non-prepared	Eaten raw
<i>Helicteres isora</i> L.	H	KH	D	-	50.0	2	Stomachache	Fr	Decoction	Potions
<i>Sterculia lanceolata</i> Cav.	H	SK	W	lauj lais	100.0	1	Flatulence	Rt	Decoction	Potions

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Taccaceae										
<i>Tacca chantrieri</i> André	H	SK	W	nplooj qhwv yeeb	14.3	1	Diarrhoea	Rt	Cooked with chicken soup	Eaten as food
	L	MNP2	W	tu tuk	100.0	4	Gastric ulcers	St	Decoction	Potions
	L	MNP2	W	tu tuk	100.0	4	Stomachache	Wp	Decoction	Potions
	M	HBV	W	sun ta wang	14.3	2	Gastric ulcers	Rt	Decoction	Potions
Theaceae										
<i>Camellia sinensis</i> (L.) Kuntze	L	TK	D	tu hiang	100.0	4	Diarrhoea	Lf	Decoction	Potions
	K	HP	D	miang	100.0	2	Diarrhoea	Lf	Decoction	Potions
Toricelliaceae										
<i>Toricellia angulata</i> Oliv.	H	MNP	D	ntsaws taub	3.3	1	Stomachache	Lf	Heated	Paster over abdominal area
Trilliaceae										
<i>Paris polyphylla</i> Sm.	H	MNP	w	tshuaj theem	18.2	2	Stomachache	Rh	Dried/powdered	Powders
Urticaceae										
<i>Boehmeria nivea</i> Gaudich.	H	KH	D	tsaaj	58.3	3	Jaundice	Lf	Decoction	Potions
	H	KH	D	tsaaj	58.3	4	Stomachache	Lf	Hot infusion	Potions
<i>Elatostema longipes</i> W.T.Wang	H	MNP	W	nplooj ab	40.0	2	Aphthous ulcer	Lf	Non-prepared	Pastil

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
<i>Elatostema repens</i> (Lour.) Hallier f. & H.Schroet.	K	NP	W	la on tuk	100.0	10	Diarrhoea	Wp	Decoction	Potions/Baths
<i>Elatostema</i> sp.	H	KH	W	nplooj ab	100.0	2	White furry tongue	Lf	Non-prepared	Pastil
Valerianaceae										
<i>Valeriana jatamansi</i> Jones	H	MNP	D	si toj	11.1	1	Gastric ulcers	Lf	Cooked with chicken soup	Eaten as food
Verbenaceae										
<i>Verbena officinalis</i> L.	H	KH	D	kaab laug rog	11.1	1	Stomachache	Lf	Hot infusion	Potions
	H	KH	D	kaab laug rog	11.1	1	Indigestion	Wp	Decoction	Potions
	H	MNP	W	kaab laug rog	16.7	2	Indigestion	Wp	Decoction	Potions
Vitaceae										
<i>Cissus repens</i> Lam.	K	NP	W	krue som poon	25.0	2	Diarrhoea	Lf	Steamed	Eaten with salt
Zingiberaceae										
<i>Alpinia speciosa</i> K.Schum.	L	TK	W	plae peid	100.0	4	Gastric ulcers/ Diarrhoea	Rh	Non-prepared/ pulped/cold infusion	Potions
	K	NP	W	lhua	100.0	1	Diarrhoea	Rh	Decoction	Potions
<i>Amomum dealbatum</i> Roxb.	K	NP	D	kook	100.0	2	Stomachache	St	Non-prepared	Eaten raw

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
<i>Boesenbergia cf. thorelii</i> Loes.	H	SK	D	xaab txhwm qoov	100.0	1	Stomachache	Rt	Non-prepared	Eaten raw
<i>Curcuma aeruginosa</i> Roxb.	K	HP	D	koi hiang	60.0	3	Stomachache	Rh	Decoction/ Mixed with alcohol	Potions
	L	JN	D	pløe yum	100.0	1	Stomachache		Decoction/ Mixed with alcohol	Potions
	L	MNP2	D	pløe yum	100.0	3	Flatulence	Rh	Decoction/ Mixed with alcohol	Potions
	L	TK	D	pløe yum	100.0	1	Stomachache	Rh	Mixed with alcohol	Potions
	M	HBY	D	zung kiae	100.0	2	Gastric ulcers	Rh	Decoction	Potions
	M	STP	D	zung kiae	100.0	2	Gastric ulcers	Rh	Mixed with alcohol	Potions
	M	STP	D	zung kiae	100.0	2	Stomachache	Rh	Mixed with alcohol	Potions
M	HBY	D	zung kiae	100.0	1	Gastric ulcers	Rh	Mixed with alcohol	Potions	

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
<i>Curcuma comosa</i> Roxb.	H	KH	D	-	40.0	1	Stomachache	Rh	Dried/powdered	Powders
	H	KH	D	saab txhwm	40.0	1	Gastric ulcers	Rh	Non-prepared	Eaten raw
<i>Curcuma longa</i> L.	H	MNP	D	ghav dlaaj	100.0	1	Gastric ulcers	Rh	Non-prepared	Eaten raw
<i>Curcuma</i> sp.	H	MNP	D	-	100.0	1	Stomachache	Rh	Dried/powdered	Powders
	H	MNP	D	-	100.0	1	Gastric ulcers	Rh	Dried/powdered	Powders
	H	SK	D	-	100.0	2	Stomachache	Rh	Dried/powdered	Powders
	L	JN	D	-	100.0	1	Stomachache	Rh	Pulped/heated	Poultice over abdominal area
	L	MNP2	D	-	100.0	1	Stomachache	Rh	Dried/powdered	Powders
	M	HSN	D	tom sa zung	100.0	1	Stomachache	Rh	Finely chopped/ cooked with eggs	Eaten as food
<i>Curcuma zedoaria</i> (Bergius) Roscoe	H	MNP	D	-	100.0	1	Gastric ulcers	Rh	Dried/powdered	Powders
	M	HSN	D	jian dia zung	50.0	1	Stomachache	Rh	Finely chopped/ cooked with eggs	Eaten as food
<i>Hedychium spicatum</i> Sm.	H	MNP	W	-	100.0	1	Diarrhoea	St	Cooked with chicken soup	Eaten as food

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
<i>Kaempferia galanga</i> L.	H	KH	D	pua toj	85.7	12	Stomachache	Rh	Non-prepared	Eaten raw
	H	MNP	D	pua toj	66.7	2	Stomachache	Rh	Non-prepared	Eaten raw
	H	SK	D	pua toj	66.7	1	Constipation	Rh	Decoction	Potions
	H	SK	D	pua toj	66.7	1	Stomachache	Rh	Decoction	Potions
<i>Kaempferia parviflora</i> Wall.	H	KH	D	ghav ntshaav	81.8	9	Stomachache	Rh	Decoction	Potions
	H	MNP	D	ghav ntshaav	80.0	4	Stomachache	Rh	Pounded/hot infusion	Potions
	H	SK	D	ghav ntshaav	100.0	1	Bloody stool	Rh	Decoction	Potions
	M	HBV	D	zung kiae	100.0	2	Stomachache	Rh	Pounded/hot infusion	Potions
	M	HSN	D	zung kiae	78.6	3	Stomachache	Rh	Decoction	Potions
	M	HSN	D	zung kiae	78.6	8	Gastric ulcers	Rh	Mixed with alcohol	Potions
	M	STP	D	zung kiae	100.0	2	Gastric ulcers	Rh	Mixed with alcohol	Potions
	M	STP	D	zung kiae	100.0	2	Gastric ulcers	Rh	Mixed with alcohol	Potions
<i>Kaempferia rotunda</i> L.	H	KH	D	saab txhwm	82.4	14	Stomachache	Rh	Decoction	Potions
	H	MNP	D	saab txhwm	80.0	5	Gastric ulcers	Rh	Non-prepared	Eaten raw
	H	MNP	D	saab txhwm	80.0	7	Stomachache	Rh	Pounded/hot infusion	Potions

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
<i>Stahlianthus campanulatus</i> Kuntze	H	SK	D	saab txhwm	80.0	1	Diarrhoea	Rh	Non-prepared	Eaten raw
	H	SK	D	saab txhwm	80.0	15	Stomachache	Rh	Pulped/hot infusion	Potions
	L	MNP2	D	-	100.0	3	Stomachache	Rh	Non-prepared	Eaten raw
	M	HSN	D	fam ched doi	40.0	2	Stomachache	Rh	Dried/powdered	Powders
	H	KH	D	tsawb ntug ntsuab	80.0	2	Flatulence	Rh	Dried/powdered	Powders
	H	KH	D	tsawb ntug ntsuab	80.0	6	Stomachache	Rh	Non-prepared	Eaten raw
	H	MNP	D	tsawb ntug ntsuab	100.0	5	Flatulence	Rh	Non-prepared	Eaten raw
	H	MNP	D	tsawb ntug ntsuab	100.0	6	Stomachache		Dried/powdered	Powders
	L	MNP2	D	-	100.0	4	Stomachache	Rh	Non-prepared	Eaten raw
	H	SK	D	tsawb ntug ntsuab	100.0	1	Gastric ulcers	Rh	Decoction	Potions
<i>Stahlianthus involucratus</i> (King) Craib ex Loes.	H	SK	D	tsawb ntug ntsuab	100.0	1	Diarrhoea	Rh	Decoction	Potions
	H	SK	D	tsawb ntug ntsuab	100.0	1	Flatulence	Rh	Dried/powdered	Powders
	H	SK	D	tsawb ntug ntsuab	100.0	12	Stomachache	Rh	Non-prepared	Eaten raw
	H	KH	D	tsawb ntug lab	90.0	5	Constipation	Rh	Decoction	Potions
	H	KH	D	tsawb ntug lab	90.0	3	Stomachache	Rh	Non-prepared	Eaten raw
	H	KH	D	tsawb ntug lab	90.0	1	Diarrhoea	Rh	Pounded	Eaten raw

Table 29. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
<i>Zingiber cassumunar</i> Roxb.	H	MNP	D	tsawb ntug lab	100.0	7	Stomachache	Rh	Non-prepared	Eaten raw
	H	SK	D	tsawb ntug lab	100.0	1	Diarrhoea	Rh	Decoction	Potions
	H	SK	D	tsawb ntug lab	100.0	1	Stomachache	Rh	Non-prepared	Eaten raw
	H	KH	D	qhav dlaab	100.0	2	Diarrhoea	Rh	Non-prepared	Eaten raw
	H	MNP	D	qhav dlaab	16.7	1	Stomachache	Rh	Non-prepared	Eaten raw
<i>Zingiber ottensii</i> Valetton	K	HP	D	la koi	72.7	8	Flatulence	Rh	Pulped	Liniment
	K	HST	D	la koi	100.0	2	Diarrhoea	Rh	Cold infusion	Potions
	H	KH	D	qoov dlub	33.3	1	Stomachache	Rh	Decoction	Potions
	K	NP	D	la koi hiang	100.0	1	Stomachache	Rh	Decoction	Potions
	L	JN	D	pei hiang	100.0	1	Flatulence	Rh	Cold infusion	Potions
	L	JN	D	pei hiang	100.0	1	Stomachache	Rh	Cold infusion	Potions
	K	NP	D	la koi	80.0	2	Bloody feces	Rh	Decoction	Potions
	K	NP	D	la koi	80.0	6	Flatulence	Rh	Decoction	Potions
	L	JN	D	pei	90.0	8	Flatulence	Rh	Cold infusion	Potions
	L	JN	D	pei	90.0	1	Constipation	Rh	Sharpened	Inserted in anus
L	MNP2	D	pei	100.0	3	Gastric ulcers	Rh	Dried/powdered	Powders	

4.1.1.14 Medicines: Endocrine system disorders

Uses related to the category of endocrine system disorders were reported from nine villages, but not from Huai Pook and Nam Pan of the Khamu and Manee Pruek2 of the Lua (Table30).The Hmong village, Khang Ho, had the highest ICF value (0.57) whereas Song Khwae, Joon and Huai Satang had 0.00 ICF value. An ICF value could not be calculated for Manee Pruek, Huai Labaoya and Santiphap as there was only a single use reported for a single species from only one informant in these villages.

There were in total 14 plant species in 11 families registered in this category (Table 30; Figure 17). All of those were completely identified to species level. Of those, 13 were used for treating diabetes mellitus. There were no commonly represented plant families in this category as only one or two plant species were allocated in each of the uses.

Table 30. ICF values and number of plant families and species used to treat endocrine system disorders in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Khang Ho	4	4	8	0.57
Hmong	Manee Pruek	1	1	1	-
Hmong	Song Khwae	2	2	2	0.00
Mien	Huai Labaoya	1	1	1	-
Mien	Huai Sanao	3	4	7	0.50
Mien	Santiphap	1	1	1	-
Khamu	Huai Satang	2	2	2	0.00
Lua	Joon	3	3	3	0.00
Lua	Toei Klang	3	3	5	0.50
Total		11	14		

Copyright© by Chiang Mai University

All rights reserved

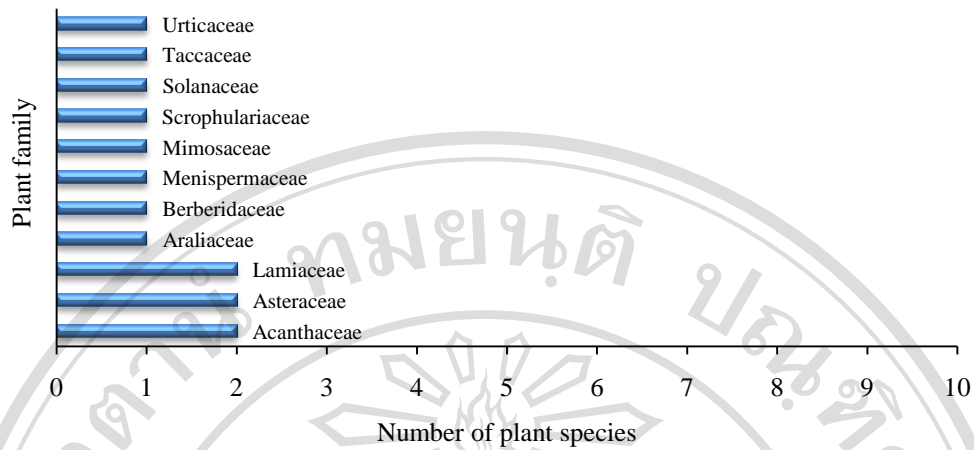


Figure 17 Number plant species in each family used to treat endocrine system disorders in each village

Table 31. Medicinal plants used to treat endocrine system disorders by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Acanthaceae										
<i>Andrographis paniculata</i> Nees	M	HSN	D	dia im	16.7	1	Diabetes mellitus	Lf	Decoction	Potions
<i>Pseuderanthemum palatiferum</i> (Nees) Radlk. ex Lindau	H	KH	D	-	66.7	4	Diabetes mellitus	Lf	non-prepared	Eaten as vegetable
	K	HST	D	-	50.0	1	Diabetes mellitus	Lf	non-prepared	Eaten as vegetable
	M	HSN	D	-	40.0	4	Diabetes mellitus	Lf	non-prepared	Eaten as vegetable
Araliaceae										
<i>Trevesia palmata</i> Vis.	L	TK	W	plae pao/tong talw	100.0	2	Diabetes mellitus	YFr	Steamed	Eaten as food
	M	STP	W	show fim diang	100.0	1	Diabetes mellitus	St	Decoction	Potions
Asteraceae										
<i>Gynura nepalensis</i> DC.	H	KH	D	tshuaj rog ntsuab	4.3	1	Diabetes mellitus	Lf	non-prepared	Eaten as vegetable
<i>Gynura procumbens</i> Merr.	K	HST	D	-	50.0	1	Diabetes mellitus	Lf	non-prepared	Eaten as vegetable
	L	JN	D	-	50.0	1	Diabetes mellitus	Lf	non-prepared	Eaten as vegetable
Berberidaceae										
<i>Mahonia siamensis</i> Takeda	H	MNP	W	-	14.3	1	Diabetes mellitus	St	Decoction	Potions

Table 31. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Lamiaceae										
<i>Clerodendrum colebrookianum</i> Walp.	L	JN	D	tu kiam	100.0	1	Goitre	Lf	Heated	Plaster over neck
	L	TK	W	tu kiam	100.0	2	Goitre	Lf	Heated	Plaster over neck
<i>Orthosiphon aristatus</i> (Blume) Miq.	M	HSN	D	jang zi mia/ jian ku ja	50.0	1	Diabetes mellitus	Lf	Decoction	Potions
Menispermaceae										
<i>Tinospora crispa</i> (L.) Hook.f. & Thomson	L	JN	D	-	100.0	1	Diabetes mellitus	St	Decoction	Potions
	H	SK	D	-	100.0	1	Diabetes mellitus	St	Decoction	Potions
	M	HSN	D	-	50.0	1	Diabetes mellitus	St	Decoction	Potions
Mimosaceae										
<i>Mimosa pudica</i> L.	H	KH	W	tshuaj tsaaj mos	100.0	1	Diabetes mellitus	Wp	Decoction	Potions
Scrophulariaceae										
<i>Scoparia dulcis</i> L.	M	HBV	w	toe yui mia	50.0	1	Diabetes mellitus	Wp	Decoction	Potions
Solanaceae										
<i>Solanum indicum</i> L.	H	KH	D	txwv lws ab	100.0	2	Diabetes mellitus	Fr	non-prepared	Eaten as vegetable

Table 31. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Taccaceae										
<i>Tacca chantrieri</i> André	H	SK	W	nplooj qhwv yeeb	14.3	1	Diabetes mellitus	Rh	Decoction	Potions
Urticaceae										
<i>Elatostema repens</i> (Lour.) Hallier f.	L	TK	W	tu pa kae	100.0	1	Diabetes mellitus	Lf	Decoction	Potions

4.1.1.15 Medicines: Genitourinary system disorders

Uses related to the category of genitourinary system disorders were reported from all 12 villages. High ICF values were found across 11 villages but Joon village of the Lua had the ICF value of 0.00, resulting from different uses of three different plant species.

In total, 144 plant species in 72 families were reported for treating genitourinary system disorders (Table 32, Figure 18). Of those, 132 were completely identified to species, 11 to genus and one only to family level. The commonly represented plant families reported in this use-category were Lamiaceae (11 species; 7.6 %) and Asteraceae (10; 6.9 %). There were many plant species, with a fidelity level of 100%, for which medicinal uses were only reported for treating genitourinary system disorders. The frequently reported disorders were urethral stones (75 use-reports; 27.7%), dysuria (73; 26.9%), dysmenorrhoea (35; 12.9%), and amenorrhoea (32; 11.8%), respectively.

Table 32. ICF values and number of plant families and species used to treat genitourinary system disorders in each village

Ethnic group	Village	#families	#species	#use-reports	ICF value
Hmong	Khang Ho	24	33	121	0.73
Hmong	Manee Pruek	36	43	145	0.71
Hmong	Song Khwae	18	24	53	0.56
Mien	Huai Labaoya	15	17	60	0.73
Mien	Huai Sanao	11	14	37	0.64
Mien	Santiphap	24	34	96	0.65
Khamu	Huai Pook	5	7	20	0.68
Khamu	Huai Satang	3	4	10	0.67
Khamu	Nam Pan	9	9	35	0.76
Lua	Joon	3	3	3	0.00
Lua	Manee Pruek 2	7	7	25	0.75
Lua	Toei Klang	12	14	32	0.58
Total		72	144		

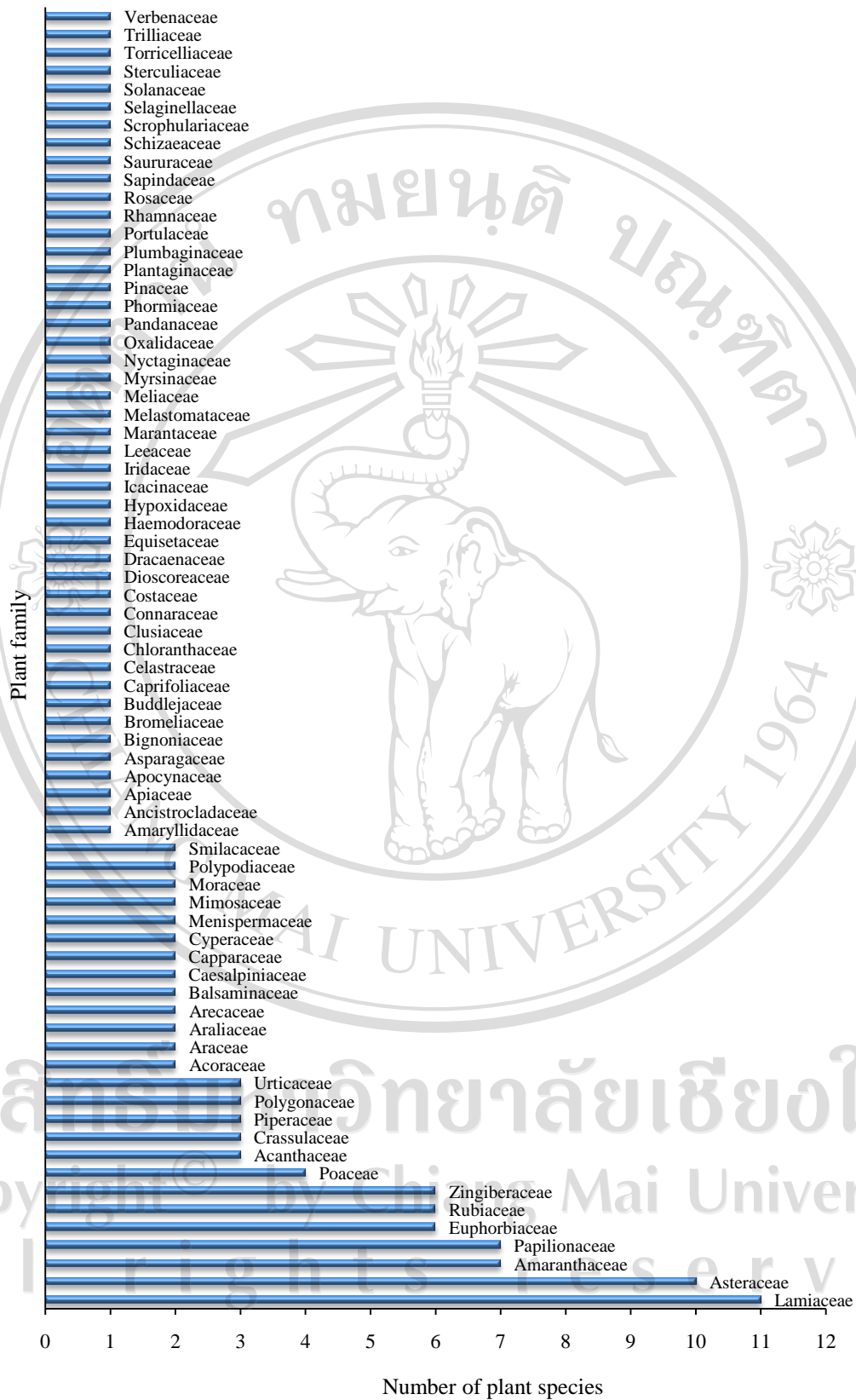


Figure 18 Number plant species in each family used to treat genitourinary system disorders in each village

Table 33. Medicinal plants used to treat genitourinary system disorders by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Acanthaceae										
<i>Clinacanthus nutans</i> Lindau	M	HSN	D	-	100.0	1	Urethral stones	Un	Decoction	Potions
<i>Rhinacanthus nasutus</i> Kuntze	H	SK	D	-	66.7	2	Urethral stones	Lf	Decoctions	Potions
<i>Thunbergia coccinea</i> Wall.	H	MNP	W	maab hwb taub	100.0	2	Dyspareunia	Rt	Decoction	Potions
<i>Thunbergia laurifolia</i> Lindl.	M	STP	W	yae tam hei	23.5	4	Dysuria	St	Decoction	Potions
Acoraceae										
<i>Acorus calamus</i> L.	M	STP	D	sum pow	11.1	1	Dysmennorrhoea	Rt	Decoctions	Potions
<i>Acorus gramineus</i> Aiton	M	STP	D	ka sia moon num	100.0	6	Menorrhagia	Lf	Decoctions	Potions
	M	STP	D	ka sia moon num	100.0	5	Dysmennorrhoea/ Menorrhagia/ Postpartum pain	Lf	Decoctions	Potions
Amaranthaceae										
<i>Achyranthes longifolia</i> Makino	H	KH	D	zaub ceg nyuj lab	100.0	12	Dysmennorrhoea/ Female infertility	Un	Decoction/ Cooked with chicken soup	Potions
	H	MNP	D	zaub ceg nyuj lab	93.3	1	Dysuria	Rt	Decoction	Potions
	H	MNP	D	zaub ceg nyuj lab	93.3	13	Dysmennorrhoea	Un/Wp	Decoctions	Potions
	H	SK	D	zaub ceg nyuj lab	100.0	8	Dysmennorrhoea	Rt/Lf	Decoctions	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Celosia argentea</i> L.	H	SK	D	zaub ceg nyuj lab	100.0	1	Amenorrhoea	Un	Decoction	Potions
	H	MNP	D	paaj lauv qab	100.0	2	Amenorrhoea	Rt	Decoction	Potions
	L	TK	D	yang pyong ola shua	100.0	2	Amenorrhoea	Rt	Decoctions	Potions
<i>Cyathula officinalis</i> K.C.Kuan	H	KH	D	nrhaab cos	100.0	1	Dysmenorrhoea	Lf	Decoction	Potions
	H	MNP	D	nrhaab cos	71.4	5	Dysmenorrhoea	Lf	Decoction	Potions
<i>Cyathula prostrata</i> (L.) Blume	K	NP	W	ya kwaui ngu	100.0	1	Dysuria	Wp		Potions
<i>Gomphrena globosa</i> L.	H	KH	D		100.0	3	Dysmenorrhoea/ Amenorrhoea	Rt	Decoction	Potions
<i>Iresine herbstii</i> Hook.	H	MNP	D	nkaaj lab	12.5	2	Dysmenorrhoea	Lf	Decoction	Potions
	M	HSN	D	ja hoong koon	5.3	1	Dysuria	Lf	Decoctions	Potions
Amaryllidaceae										
<i>Zephyranthes rosea</i> Lindl.	M	STP	D	lai yam	100.0	1	Dysmenorrhoea	Blb	Decoction	Potions
Ancistrocladaceae										
<i>Ancistrocladus tectorius</i> (Lour.) Merr.	M	STP	W	jai mon dia	7.7	1	Menorrhagia	St/Lf	Decoctions	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Apiaceae										
Apiaceae sp.1	H	MNP	D	taab kib ntsuab/ nkoj ntsuab	6.7	1	Dysmenorrhoea	Lf	Hot infusion	Potions
Apocynaceae										
<i>Plumeria acuminata</i> Ait.	K	NP	D	-	100.0	3	Urethral stones	St	Burned/cold infusion	Potions
Araceae										
<i>Alocasia cucullata</i> (Loureiro) G.Don	H	MNP	D	teeb qus	33.3	1	Dysmenorrhoea	Rh	Decoction	Potions
<i>Pothos scandens</i> L.	M	HBV	W	ha dia ngang	21.4	3	Dysuria	St	Decoctions	Potions
Araliaceae										
<i>Tetrapanax papyrifer</i> (Hooker) K. Koch	H	MNP	D	thoob huab	41.2	3	Dysuria/ Urethral stones	Rt	Decoction	Potions
	H	MNP	D	thoob huab	41.2	4	Urethral stones	Rt	Decoction	Potions
<i>Trevesia palmata</i> Vis.	H	MNP	W	-	100.0	1	Dysuria	Rt	Decoction	Potions
Arecaceae										
<i>Areca</i> sp.	L	MNP2	W	lum mhoo sa	100.0	3	Contraceptive	Rt	Decoction	Potions
<i>Livistona speciosa</i> Kurz	H	MNP	D	kuv yim	100.0	1	Contraceptive	Pt	Decoction	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Asparagaceae										
<i>Asparagus filicinus</i> Buch.-Ham. ex D.Don	H	MNP	W	-	90.9	10	Dysuria	Rt	Decoction	Potions
Asteraceae										
<i>Artemisia verlotiorum</i> Lamotte	H	SK	D	suv ntswm	22.2	1	Dysuria	Lf	Decoction	Potions
	H	SK	D	suv ntswm	22.2	1	Amenorrhoea	YLf	Finely chopped/ cooked with eggs	Eaten as food
<i>Blumea balsamifera</i> DC.	M	STP	W	ma im bua	10.0	1	Urethral stones	Rt	Decoctions	Potions
<i>Blumea lanceolaria</i> (Roxb.) Druce	H	KH	D	ntiv zoov	40.0	1	Female infertility	Lf	Decoction	Potions
	H	KH	D	ntiv zoov	40.0	1	Cervicitis	Lf	Pulped/ Hot infusion	Potions
	H	KH	D	ntiv zoov	40.0	0		Lf	Pulped/ Hot infusion	Potions
<i>Conyza sumatrensis</i> (Retz.) E.Walker	H	SK	W	-	100.0	1	Female infertility	Rt	Decoction	Potions
<i>Elephantopus scaber</i> L.	H	KH	D	yig nqeeb	28.6	2	Dysuria	Rt	Decoction	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Gynura longifolia</i> Kerr	H	SK	D	tshuaj rog lab	5.9	1	Dysuria	Lf	Cooked with chicken soup	Eaten as food
<i>Gynura</i> sp.4	L	MNP2	W	yun mud tad	100.0	5	Dysmenorrhoea	Wp/Rt	Decoctions	Potions
<i>Ixeris japonica</i> Nakai	H	SK	D	-	100.0	1	Dysmenorrhoea	Lf	Hot infusion	Potions
<i>Kalimeris indica</i> Sch.Bip.	M	HSN	D	ha dia kang	4.3	1	Dysuria	Un/Rt	Decoction	Potions
<i>Vernonia parishii</i> Hook.f.	H	KH	W	tshuaj kaus ntsawv	10.0	1	Male impotence	Rt	Decoction	Potions
Balsaminaceae										
<i>Impatiens balsamina</i> L.	H	KH	D	paaj nti ntuav (G)/paj co nti (W)	53.8	7	Dysmenorrhoea/ Amenorrhoea	Rt	Decoctions	Potions
	H	SK	D	paaj nti ntuav (G)/paj co nti (W)	40.0	4	Amenorrhoea	Rt/Lf	Decoction	Potions
<i>Impatiens violaeiflora</i> Hook. f.	H	MNP	W	paaj nti ntuav (G)/paj co nti (W)	57.1	1	Dysmenorrhoea	Rt	Decoction	Potions
	H	MNP	W	paaj nti ntuav (G)/paj co nti (W)	57.1	3	Amenorrhoea	Rt/Wp	Decoctions	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Bignoniaceae										
<i>Oroxylum indicum</i> (L.) Kurz	K	NP	D	tood lung la	100.0	1	Haematuria	Bk	Applied with salt/heated/cold infusion	Wash
Bromeliaceae										
<i>Ananas comosus</i> (L.) Merr.	K	HP	D	tood ma ka nud	100.0	3	Urethral stones	Rt	Decoction	Potions
Buddlejaceae										
<i>Buddleja asiatica</i> L.	H	KH	D	paaj tshuas	100.0	1	Contraceptive	Un	Decoction	Potions
	H	MNP	W	paaj tshuas	50.0	1	Urethral stones	Wp	Decoction	Potions
Caesalpinaceae										
<i>Caesalpinia sappan</i> L.	H	KH	D	txhub	44.4	2	Dysmenorrhoea	St	Decoction	Potions
	H	KH	D	txhub	44.4	2	Dysuria	St	Decoctions	Potions
	H	SK	D	txhub	100.0	1	Dysuria	St	Decoctions	Potions
	K	HST	D	faang	33.3	2	Urethral stones	St	Decoction	Potions
	K	NP	D	tood kwang	100.0	6	Urethral stones	St	Decoction	Potions
	K	NP	D	tood kwang	100.0	1	Dysuria	St	Decoction	Potions
	M	HBV	D	som mua/ sing mua	8.3	1	Dysuria	St	Decoction	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	M	HSN	D	som mua/ sing mua	57.1	2	Urethral stones	St	Decoctions	Potions
	M	HSN	D	som mua/ sing mua	57.1	1	Dysuria/ Urethral stones	St	Decoctions	Potions
	M	HSN	D	som mua/ sing mua	57.1	1	Menorrhagia	St	Decoctions	Potions
<i>Cassia fistula</i> L.	K	HST	D	tood kroon	100.0	2	Urethral stones	St	Decoction	Potions
Capparaceae										
<i>Capparis trisonthiae</i> Srisanga&Chayamarit	M	STP	W	pin lang	57.1	8	urethral stones/ Haematuria	Un	Decoction	Potions
<i>Stixis suaveolens</i> (Roxb.) Pierre	M	STP	W	dia jan piao	100.0	5	Leukorrhoea	St	Decoctions	Potions
Caprifoliaceae										
<i>Sambucus javanica</i> Reinw. ex Blume	M	HBV	W	toom yae mia	12.0	2	Urethral stones	Lf	Decoction	Potions
	M	HBV	W	toom yae mia	12.0	1	Dysuria	Lf/St	Decoction	Potions
Celastraceae										
<i>Euonymus</i> sp.	M	HBV	W	diang ton zo	100.0	6	Kidney detoxicant	Lf	Decoction	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	M	HBY	W	diang ton zo	100.0	9	Dysuria	Rt/St	Decoction/ Mixed with alcohol	Potions
	M	HBY	W	diang ton zo	100.0	1	Urethral stones	Un	Decoctions	Potions
	M	STP	W	diang ton zo	60.0	6	Urethral stones	St/Lf	Decoctions	Potions
Chloranthaceae										
<i>Chloranthus erectus</i> (Buch.-Ham.) Verdc.	H	MNP	W	ntub yag	40.7	1	Female infertility	Rt	Decoction	Potions
	H	MNP	W	ntub yag	40.7	7	Dysmenorrhoea	Rt	Decoction	Potions
	H	MNP	W	ntub yag	40.7	3	Dysmenorrhoea/ Amenorrhoea	Rt	Decoction	Potions
	L	TK	W	yang geid	50.0	5	Haematuria	Rt	Decoctions	Potions
Clusiaceae										
<i>Cratoxylum formosum</i> (Jack) Dyer subsp. <i>pruniflorum</i> (Kurz) Gogel.	M	HBY	W	diang ting	33.3	2	Female infertility	St/Lf	Decoction	Potions/Baths
Connaraceae										
<i>Connarus semidecandrus</i> Jack	M	STP	W	bob jei hei	20.0	2	Urethral stones	St/Lf	Decoction	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Costaceae										
<i>Costus speciosus</i> (J.Koenig) Sm.	H	KH	W	qus nqeej	75.0	6	Dysuria	St	Decoction	Potions
	H	MNP	W	qus nqeej	100.0	4	Dysuria	Rt	Decoctions	Potions
	H	SK	W	qus nqeej	87.5	2	Amenorrhoea	Rt	Decoction	Potions
	H	SK	W	qus nqeej	87.5	5	Dysuria	St	Decoction	Potions
	K	NP	W	nral ya	60.0	6	Urethral stones	St	Decoction	Potions
	L	MNP2	W	lum pyok	100.0	9	Dysuria	Rt/St	Decoctions	Potions
	L	TK	W	lum pyok	20.0	1	Dysuria	St	Decoction	Potions
	M	STP	W	ching kuan diang	20.0	1	Urethral stones	St	Decoction	Potions
	M	STP	W	ching kuan diang	20.0	1	Dysmenorrhoea	St	Decoctions	Potions
Crassulaceae										
<i>Kalanchoe laciniata</i> (L.) DC.	H	KH	D	tshuaj ntiv tub	3.0	1	Amenorrhoea	Lf	Decoction	Potions
	H	SK	D	tshuaj ntiv tub	19.0	1	Female infertility	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	tshuaj ntiv tub	19.0	1	Urethral stones	Lf	Decoction/Cooked with chicken soup	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	H	SK	D	tshuaj ntiv tub	19.0	2	Dysmenorrhoea/ Amenorrhoea	Lf	Decoctions	Potions
<i>Kalanchoe pinnata</i> (Lam.) Pers.	H	KH	D	nplooj tuaj kaus	15.4	2	Amenorrhoea	Lf	Decoction	Potions
<i>Sedum cf. sarmentosum</i> Bunge	H	SK	D	nplai zeb	16.7	1	Amenorrhoea	Lf	Cooked with chicken soup	Eaten as food
Cyperaceae										
<i>Carex baccans</i> Nees	H	MNP	W	rog luj	50.0	1	Dysuria	Rt	Decoction	Potions
	H	MNP	W	rog luj	50.0	2	Amenorrhoea	Rt	Decoctions	Potions
<i>Kyllinga nemoralis</i> (Forst.) Dandy ex Hutch. & Dalziel	H	KH	W	-	37.5	3	Male impotence	Wp	Dried/decoction	Potions
	H	MNP	W	-	25.0	1	Dysmenorrhoea/ Amenorrhoea	Wp	Decoctions	Potions
Dioscoreaceae										
<i>Dioscorea bulbifera</i> L.	H	KH	D	qos npua nyeg	64.3	2	Testis swelling (for newborn baby)	Bbl	Pounded	Poultice
	H	KH	D	qos npua nyeg	64.3	7	Scrotal hernia	Bbl	Pulped	Liniment
	M	HSN	W	doi ju	100.0	1	Scrotal hernia	Bbl	Pulped/heated	Poultice

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Dracaenaceae										
<i>Cordyline fruticosa</i> (L.) A. Chev.	H	SK	D	-	100.0	1	Dysuria	Lf	Decoction	Potions
Equisetaceae										
<i>Equisetum debile</i> Roxb. ex Vaucher	H	MNP	W	-	100.0	1	Dysuria	Wp	Decoctions	Potions
	K	HP	W	ya tod bong	100.0	2	Urethral stones	Wp	Decoction	Potions
	K	HST	W	ya tod bong	100.0	3	Urethral stones	Wp	Decoction	Potions
	K	NP	W	tood ting yong/ ya tod bong	100.0	6	Urethral stones	Wp	Decoction	Potions
	K	NP	W	tood ting yong/ ya tod bong	100.0	1	Dysuria	Wp	Decoction	Potions
	L	JN	W	ya tod bong	33.3	1	Urethral stones	St	Decoction	Potions
	M	HBV	W	pae tob	100.0	1	Dysuria	Wp	Decoctions	Potions
	M	STP	W	pae tob	18.2	1	Urethral stones	Wp	Decoctions	Potions
	M	STP	W	pae tob	18.2	1	Prolapsed uterus	Wp	Decoctions	Potions
Euphorbiaceae										
<i>Codiaeum variegatum</i> Blume	H	KH	D	-	50.0	1	Kidney disease	Lf	Decoctions	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Croton roxburghii</i> N.P. Balakr.	M	STP	W	ta doe pae	18.2	2	Urethral stones	Rt	Decoctions	Potions
<i>Croton</i> sp.	M	STP	W	ka dud pae	100.0	4	Dysuria	Lf/St	Decoction	Potions
<i>Homonoia riparia</i> Lour.	M	HSN	W	zer liam kiae	100.0	3	Dysuria	St	Decoction	Potions
<i>Phyllanthus amarus</i> Schumach.	H	SK	W	-	25.0	1	Female infertility	Wp	Decoction	Potions
	H	SK	W	-	25.0	1	Amenorrhoea	Wp	Decoction	Potions
<i>Ricinus communis</i> L.	H	MNP	D	taw dlaav lab	28.6	2	Prolapsed uterus	Lf	Heated	Plaster over forehead
Haemodoraceae										
<i>Xiphidium caeruleum</i> Aubl.	H	SK	D	tw ntses luj	14.3	1	Amenorrhoea	Lf	Decoction	Potions
	H	MNP	D	tw ntses luj	10.0	1	Dysuria	Lf	Decoctions	Potions
Hypoxidaceae										
<i>Molineria capitulata</i> (Lour.) Herbert	M	STP	W	nom jang	100.0	1	Urethral stones	Rt	Decoction	Potions
Icacinaceae										
<i>Gonocaryum lobbianum</i> (Miers) Kurz	M	HBV	W	ja king yung	11.1	1	Urethral stones	St	Decoction	Potions
Iridaceae										

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Eleutherine americana</i> Merr. ex K.Heyne	H	KH	D	nplooj qhab xyab	77.8	7	Dysuria	Rh	Decoctions	Potions
	H	MNP	D	nplooj qhab xyab	50.0	4	Dysuria	Rh	Decoctions	Potions
Lamiaceae										
<i>Callicarpa longifolia</i> Lam.	L	TK	W	plae ma pud zo	100.0	5	Urethral stones	Rt	Decoction	Potions
	L	TK	W	plae ma pud zo	100.0	2	Kidney disease	Rt	Decoctions	Potions
<i>Callicarpa rubella</i> Lindl.	L	TK	W	plae ma pud kruak	100.0	2	Urethral stones	Rt	Decoction	Potions
<i>Clerodendrum paniculatum</i> L.	M	HSN	W	lei ko	100.0	3	Menorrhagia	St	Decoctions	Potions
<i>Clerodendrum serratum</i> (L.) Moon	L	MNP2	W	tu plung sa	7.7	1	Dysuria	Rt	Decoctions	Potions
<i>Clerodendrum viscosum</i> Vent.	M	HSN	W	lei ko	100.0	1	Menorrhagia	Rt	Decoctions	Potions
<i>Gomphostemma</i> sp.	M	STP	W	sia mian dia	100.0	8	Dysmenorrhoea/ Amenorrhoea/ Leukorrhoea	Wp	Decoction	Potions
<i>Leonurus artemisia</i> (Lour.) S.Y.Hu	H	SK	D	-	50.0	2	Pelvic pain	Rt	Decoction	Potions
<i>Orthosiphon aristatus</i> (Blume) Miq.	H	KH	D	-	86.7	2	Urethral stones/ Kidney detoxicant	Lf	Decoction	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Plectranthus amboinensis</i> Spreng.	H	KH	D	-	86.7	11	Kidney detoxicant	Lf	Decoction/ Cooked with chicken soup	Potions
	H	SK	D	-	16.7	1	Kidney detoxicant	Lf	Cooked with chicken soup	Eaten as food
	K	NP	D	-	100.0	1	Kidney disease	Lf	Decoction	Potions
	L	JN	D	-	100.0	1	Urethral stones	Un	Decoction	Potions
	M	HSN	D	-	50.0	1	Kidney disease	Lf	Decoctions	Potions
	H	SK	D	-	50.0	1	Pelvic pain	Lf	Decoction/ Cooked with chicken soup	Potions
<i>Teucrium viscidum</i> Blume var. <i>viscidum</i>	H	KH	D	pawn tshis nyeg	9.5	1	Dysmenorrhoea/ Amenorrhoea	Lf	Finely chopped/ cooked with eggs	Eaten as food
<i>Vitex peduncularis</i> Wall. ex Schauer	H	KH	D	pawn tshis nyeg	9.5	1	Dysuria	Un	Decoctions	Potions
	H	MNP	D	pawn tshis nyeg	8.3	1	Urethral stones	Wp	Decoction	Potions
<i>Vitex peduncularis</i> Wall. ex Schauer	M	HBV	W	mai riang/ zin o mia	6.7	1	Kidney detoxicant	Lf/St	Decoction	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	M	HBY	W	mai riang/ zin o mia	13.3	2	Kidney disease (swelling)	St/Rt	Decoction	Potions
	M	HBY	W	mai riang/ zin o mia	60.0	9	Urethral stones	Bk	Decoction	Potions
Leeaceae										
<i>Leea indica</i> (Burm.f.) Merr.	M	HBY	W	toom yae ngang	60.0	3	Dysuria/Urethral stones	Rt	Decoction	Potions
	H	SK	W	qab ib	50.0	1	Dysmenorrhoea	Rt	Decoctions	Potions
	H	KH	W	qab ib	75.0	3	Dysuria	Rt	Decoctions	Potions
Marantaceae										
<i>Maranta arundinacea</i> L. var. <i>arundinacea</i>	H	KH	D	nplooj ntse ntsuab	66.7	2	Male impotence	Rt	Cooked with chicken soup	Eaten as food
	H	MNP	D	nplooj ntse ntsuab	50.0	1	Dysuria	Rh	Decoctions	Potions
Melastomataceae										
<i>Dissochaeta stipularis</i> (Blume) Backer ex Clausen	M	STP	W	hia chao	25.0	1	Urethral stones	St	Decoction with <i>Mussaenda sanderiana</i>	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Meliaceae										
<i>Toona sinensis</i> (Juss.) M. Roem.	H	MNP	W	yuj	3.7	1	Urethral stones	Bk	Decoction	Potions
Menispermaceae										
<i>Arcangelisia flava</i> Merr.	M	STP	W	dia jan hob	25.0	1	Prolapsed uterus	Un	Decoctions	Potions
<i>Stephania pierrei</i> Diels	M	HSN	D	poong mao doi	50.0	2	Dysmenorrhoea	Rh	Decoction	Potions
	M	HSN	D	poong mao doi	50.0	5	Menorrhagia	Rh	Pounded/Cooked with eggs	Eaten as food
Mimosaceae										
<i>Entada glandulosa</i> Pierre ex Gagnep.	H	KH	W	txwv txab tub	77.8	2	Urethral stones	Sd	Dried/powdered	Powders
	H	KH	W	txwv txab tub	77.8	4	Dyspareunia	Sd	Pulped/Hot infusion	Potions
	H	KH	W	txwv txab tub	77.8	1	Dysuria	Sd	Pulped/Hot infusion	Potions
<i>Entada rheedei</i> Spreng.	K	HP	W	plae laab	100.0	2	Urethral stones	Sd	Grated with limewater	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Moraceae										
<i>Ficus hirta</i> Vahl	M	STP	W	dia tong yang	100.0	4	Dysuria/Urethral stones	Rt	Decoction	Potions
<i>Ficus squamosa</i> Roxb.	M	STP	W	zer liam kiae	50.0	3	Dysmenorrhoea/ Amenorrhoea/ Leukorrhoea	St/Lf	Decoctions	Potions
Myrsinaceae										
<i>Ardisia amherstiana</i> A.DC.	M	HBV	W	tong long	100.0	4	Urethral stones	St	Decoction with <i>Euonymus</i> sp.	Potions
Nyctaginaceae										
<i>Mirabilis jalapa</i> L.	L	TK	D	lum yam	100.0	1	Menorrhagia	Rt	Decoction	Potions
	H	KH	D	paaj kuab tub sab	100.0	1	Dysmenorrhoea	Lf	Cooked with chicken soup	Eaten as food
	H	KH	D	paaj kuab tub sab	100.0	8	Amenorrhoea	Lf/Rt	Decoction	Potions
	H	MNP	D	paaj kuab tub sab	77.8	3	Leukorrhoea	Rt	Decoctions	Potions
	H	MNP	D	paaj kuab tub sab	77.8	4	Dysmenorrhoea/ Amenorrhoea	Rt	Decoctions	Potions
H	SK	D	paaj kuab tub sab	42.9	1	Amenorrhoea	Rt	Decoction	Potions	

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	H	SK	D	paaj kuab tub sab	42.9	2	Dysmenorrhoea	Rt	Decoction	Potions
Oxalidaceae										
<i>Averrhoa carambola</i> L.	M	HBV	D	piao long	100.0	1	Dysuria	St/Fr	Decoction/ Mixed with alcohol	Potions
	K	HP	D	tood kan	100.0	1	Dysuria	Rt	Decoction	Potions
	L	TK	D	plae keo	100.0	2	Kidney disease	St	Decoction	Potions
Pandanaceae										
<i>Pandanus</i> sp.	M	HBV	W	hia lei yow	50.0	1	Kidney detoxicant	Lf/Fr	Decoction	Potions
	M	STP	W	hia lei yow	100.0	1	Urethral stones	Lf/St	Decoctions	Potions
Papilionaceae										
<i>Butea</i> cf. <i>superba</i> Roxb.	L	TK	W	mhue doo	16.7	1	Dysuria	St	Decoction	Potions
<i>Flemingia macrophylla</i> (Willd.) Kuntze ex Prain	M	STP	W	yam jua mia	33.3	2	Dysuria/Urethral stones	Rt/St	Decoctions	Potions
<i>Flemingia stricta</i> Roxb.	M	HBV	W	ha dia	16.7	1	Dysuria	Wp	Decoctions	Potions
<i>Millettia extensa</i> Benth. ex Baker	L	MNP2	W	mhue ome bua	8.3	1	Dysuria	Rt	Decoction	Potions
	L	TK	W	mhue ome bua	16.7	1	Dysuria	St	Decoctions	Potions
<i>Phylacium bracteosum</i> Benn.	L	JN	W	lub lib	100.0	1	Urethral stones	Un	Decoction	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	H	MNP	W	-	100.0	3	Dysuria	St	Decoctions	Potions
<i>Sophora flavescens</i> Aiton	H	MNP	D	vuam kheev	9.1	1	Dysmenorrhoea	Rt	Dried/chopped	Powdered
<i>Tadehagi triquetrum</i> (L.) H. Ohashi	H	KH	W	kooj ntsuag neeg	100.0	2	Urethral stones	Rt	Decoction	Potions
Phormiaceae										
<i>Dianella ensifolia</i> Red.	L	TK	W	tu toi ngua	71.4	5	Dysuria	Rt	Decoction with rice	Potions
Pinaceae										
<i>Pinus kesiya</i> Royle ex Gordon	H	MNP	W	-	100.0	1	Contraceptive	Cn	Decoction	Potions
Piperaceae										
<i>Piper boehmerifolium</i> Wall.	H	MNP	W	maab saw nyiaj	76.2	1	Kidney Stones	Rt	Decoction	Potions
	H	MNP	W	maab saw nyiaj	76.2	9	Dysmenorrhoea/ Amenorrhoea/ Female infertility	Rt	Decoction	Potions
	H	MNP	W	maab saw nyiaj	76.2	2	Female infertility	Rt	Decoction	Potions
	H	MNP	W	maab saw nyiaj	76.2	1	Urethral stones	Rt	Decoction	Potions
	H	MNP	W	maab saw nyiaj	76.2	1	Cervicitis	Rt	Decoctions	Potions
	H	MNP	W	maab saw nyiaj	76.2	2	Pelvic pain	Rt	Decoction	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Piper interruptum</i> Opiz	L	TK	W	sa kan	100.0	1	Haematuria	St	Decoction	Potions
<i>Piper</i> sp.2	H	MNP	W	maab saw nyiaj	100.0	3	Dysmenorrhoea	Rt	Decoctions	Potions
Plantaginaceae										
<i>Plantago major</i> L.	H	MNP	W	zaub ntswg npua	40.0	2	Dysuria	Un/Wp	Decoction	Potions
	H	MNP	W	zaub ntswg npua	40.0	1	Urethral stones	Wp	Decoctions	Potions
	H	MNP	W	zaub ntswg npua	40.0	1	Haematuria	Wp	Decoctions	Potions
Plumbaginaceae										
<i>Plumbago zeylanica</i> L.	H	KH	D	kuab ib maab	57.1	1	Menorrhagia	Lf	Decoction	Potions
	H	KH	D	kuab ib maab	57.1	1	Dysmenorrhoea	Rt	Decoction	Potions
	H	KH	D	kuab ib maab	57.1	1	Male impotence	Rt	Decoction	Potions
	H	KH	D	kuab ib maab	57.1	1	Amenorrhoea	Wp	Decoction	Potions
	H	SK	D	kuab ib maab	16.7	1	Kidney disease	Lf	Decoctions	Potions
	H	SK	D	kuab ib maab	16.7	1	Dysuria	Rt	Decoction	Potions
Poaceae										
<i>Coix lachryma-jobi</i> L.	L	TK	W	plae pi tan	100.0	2	Urethral stones	Rt	Decoction	Potions
	H	MNP	W	ntseb ntsaug	28.6	3	Dysuria	Rt	Decoction	Potions
	H	MNP	W	ntseb ntsaug	28.6	1	Amenorrhoea	Rt/Wp	Decoctions	Potions
	M	STP	W	noe a jaow	57.1	4	Urethral stones	Rt	Decoctions	Potions
	K	HP	W	tood sapae ha	100.0	6	Urethral stones	Rt	Decoction	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	K	NP	W	plae phi	100.0	6	Urethral stones	Rt	Decoction	Potions
	K	NP	W	plae phi	100.0	1	Dysuria	Rt	Decoction	Potions
	K	HST	W	tood ue tae	100.0	1	Urethral stones	Rt	Decoction	Potions
	K	HST	W	tood ue tae	100.0	2	Urethral stones	Rt	Decoction	Potions
<i>Imperata cylindrica</i> (L.) P. Beauv.	L	MNP2	W	tein	100.0	3	Dysuria/ Urethral stones	Rt	Decoction	Potions
<i>Oryza sativa</i> L.	K	HP	D	khao	100.0	3	Urethral stones	Sd	Decoction	Potions
<i>Saccharum officinarum</i> L.	K	HP	D	-	100.0	3	Urethral stones/ dysuria	Rt	Decoction	Potions
Polygonaceae										
<i>Fallopia forbesii</i> (Hance) Yonekura & H. Ohashi	H	KH	D	qaub pees	12.5	1	Amenorrhoea	Rt/๗	Decoction	Potions
	H	SK	D	qaub pees	42.9	1	Dysuria	Rt	Decoction	Potions
	H	SK	D	qaub pees	42.9	2	Amenorrhoea	Wp	Decoction	Potions
	M	HBV	D	pong lin	46.7	4	Dysuria	Lf/Rt	Decoctions	Potions
	M	HBV	D	pong lin	46.7	3	Haematuria	Lf/Rt	Decoctions	Potions
	M	STP	D	pong lin	10.0	1	Urethral stones	Rt	Decoction	Potions
<i>Polygonum chinense</i> L.	M	STP	W	tapow thow zui	100.0	1	Urethral stones	Lf	Decoction	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Polygonum multiflorum</i> Thunb.	H	MNP	W	qos lab qus	10.0	1	Dysmenorrhoea	Rt	Decoctions	Potions
Polypodiaceae										
<i>Phymatosorus scolopendria</i> (Burm.f.) Pic.Serm.	M	STP	W	yai wei	33.3	1	Urethral stones	Lf	Decoctions	Potions
<i>Platyserium</i> sp.	H	KH	D	ncua dlaav	22.2	1	Urethral stones	Lf	Decoction	Potions
	H	KH	D	ncua dlaav	22.2	1	Dysuria	Lf	Decoctions	Potions
Portulacaceae										
<i>Talinum fruticosum</i> (L.) Juss.	H	MNP	D	kob lwj xeeb	75.0	3	Pollakiuria	Lf	Decoction	Potions
Rhamnaceae										
<i>Gouania leptostachya</i> DC.	H	MNP	W	-	42.9	3	Leukorrhoea	Rt	Decoctions	Potions
Rosaceae										
<i>Rosa</i> sp.	H	MNP	D	suab nplai	22.2	1	Leukorrhoea	Rt	Decoction	Potions
	H	MNP	D	suab nplai	22.2	1	Dysmenorrhoea/ Amenorrhoea	Rt	Decoctions	Potions
Rubiaceae										
<i>Hedyotis hedyotideia</i> (DC.) Merr.	M	STP	W	ja king yung	100.0	1	Urethral stones	Un	Decoction	Potions
<i>Morinda angustifolia</i> Roxb.	H	SK	W	tshuaj twm qus	12.5	1	Urethral stones	Rt	Decoctions	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	M	HBY	W	whang ken	5.0	0	Cystitis	Rt	Decoction	Potions
	M	HBY	W	whang ken	5.0	1	Dysmenorrhoea	Rt	Decoctions	Potions
	M	STP	W	whang ken	11.1	1	Urethral stones	Rt	Decoctions	Potions
<i>Mussaenda sanderiana</i> Ridl.	M	HSN	W	ja king diang	100.0	2	Dysuria	St	Decoctions	Potions
	M	STP	W	ja king hei	100.0	4	Urethral stones	St/Lf	Decoction	Potions
<i>Mycetia gracilis</i> Craib	M	HSN	W	ying kwai pui mia	100.0	2	Leukorrhoea	Un	Decoction	Potions
<i>Rubia crassipes</i> Coll.& Hemsl.	H	MNP	W	maab txhwm nees	87.5	3	Urethral stones	St	Decoctions	Potions
	H	MNP	W	maab txhwm nees	87.5	3	Dysuria	St	Decoctions	Potions
	H	MNP	W	maab txhwm nees	87.5	1	Male impotence	St	Decoctions	Potions
<i>Schizomussaenda dehiscens</i> Craib	M	HBY	W	ja king diang	75.0	2	Cystitis	RT	Decoction	Potions
	M	HBY	W	ja king diang	75.0	1	Dysuria	St	Decoctions	Potions
	M	STP	W	ja king diang	100.0	3	Urethral stones	Rt	Decoction	Potions
<i>Uncaria</i> sp.	M	STP	W	dim tiu hei	100.0	4	Urethral stones	Un	Decoction	Potions
	H	MNP	W	maab qub yaag	14.3	1	Dysuria	St/Rt	Decoctions	Potions
Sapindaceae										
<i>Cardiospermum halicacabum</i> L.	H	KH	D		19.0	3	Benign prostatic hyperplasia	Un	Decoctions	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	H	KH	D	-	19.0	1	Scrotal hernia	Un	Pulped/heated	Poultice
Saururaceae										
<i>Houttuynia cordata</i> Thunb.	H	MNP	D	zaub raus nees	37.5	3	Pelvic pain	Wp	Decoction	Potions
Schizaeaceae										
<i>Lygodium flexuosum</i> (L.) Sw.	L	MNP2	W	kuwal	100.0	3	Dysuria/Urethral stones	Wp	Decoction	Potions
Scrophulariaceae										
<i>Torenia asiatica</i> L.	H	SK	W	noog tsuam luj	25.0	1	Dysuria	Wp	Decoction	Potions
Selaginellaceae										
<i>Selaginella willdenowii</i> (Desv. ex Poir.) Baker	H	SK	W	suab	100.0	1	Dysuria	Wp	Decoctions	Potions
Smilacaceae										
<i>Smilax lanceifolia</i> Roxb.	L	TK	W	mhue kwai yen	33.3	1	Haematuria	Rh	Decoction	Potions
<i>Smilax ovalifolia</i> Roxb.	H	KH	W	maab siv ghov	37.5	1	Dysuria	Rt	Decoctions	Potions
	H	KH	W	maab siv ghov	37.5	2	Urethral stones	Un	Decoction	Potions
Solanaceae										
<i>Solanum erianthum</i> D.Don	M	HSN	W	tin hong ja	100.0	1	Dysuria	St	Decoction	Potions
	M	STP	W	tin hong ja	40.0	2	Urethral stones	Rt	Decoction	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Sterculiaceae										
<i>Sterculia lanceolata</i> Cav.	L	TK	W	lum plae tuk lom	100.0	1	Dysuria	St	Decoction	Potions
Toricelliaceae										
<i>Toricellia angulata</i> Oliv.	H	MNP	D	ntsaws taub	3.3	1	Dysmenorrhoea	Lf	Non-prepared	Eaten raw
Trilliaceae										
<i>Paris polyphylla</i> Sm.	H	MNP	W	tshuaj theem	9.1	1	Male impotence	Rh	Mixed with alcohol	Potions
Urticaceae										
<i>Boehmeria nivea</i> Gaudich.	H	MNP	D	tsaaj	11.1	1	Male impotence	Lf	Cooked with chicken soup	Eaten as food
<i>Dendrocnide basirotunda</i> (C.Y.Wu) Chew	M	HSN	W	diang tun mian	100.0	3	Leukorrhoea	St	Decoctions	Potions
	M	HSN	W	diang tun mian mang	100.0	3	Prolapsed uterus	St	Decoctions	Potions
<i>Elatostema repens</i> (Lour.) Hallier f. & H.Schroet.	M	HSN	W	piam thong mia	100.0	3	Menorrhagia	Wp	Decoctions	Potions
Verbenaceae										
<i>Verbena officinalis</i> L.	H	KH	D	kaab laug rog	5.6	1	Dysmenorrhoea	Wp	Decoction	Potions

Table 33. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	H	MNP	W	kaab laug rog	8.3	1	Dysmenorrhoea/ Amenorrhoea	Wp	Decoctions	Potions
Zingiberaceae										
<i>Alpinia galanga</i> Willd.	K	NP	D	zul	100.0	2	Amenorrhoea	Rh	Decoctions	Potions
<i>Kaempferia galanga</i> L.	H	KH	D	pua toj	7.1	1	Urethral stones	Rh	Non-prepared	Eaten raw
	H	MNP	D	pua toj	33.3	1	Dysuria	Rh	Non-prepared	Eaten raw
<i>Amomum</i> sp.1	M	STP	W	sa ko	100.0	3	Urethral stones	Rh	Decoction	Potions
<i>Curcuma comosa</i> Roxb.	H	KH	D	-	20.0	1	Pelvic pain/ Prolapsed uterus	Rh	Pounded/ hot infusion	Potions
<i>Stahlianthus campanulatus</i> Kuntze	H	KH	D	tsawb ntug ntsuab	20.0	2	Dysuria	Rh	Pulped/ hot infusion	Potions
<i>Stahlianthus involucratus</i> (King) Craib ex Loes.	H	KH	D	tsawb ntug lab	10.0	1	Dysuria	Rh	Pounded/ hot infusion	Potions

4.1.1.16 Medicines: Ill-defined symptoms

Uses related to the category of ill-defined symptoms were reported from 11 villages, but not from the Toei Klnag village of the Lua (Table 34). Manee Pruek of the Hmong and Manee Pruek2 of the Lua had the highest ICF value of 1.00 due to consensus related to the single use for single species reported by three and 11 informants, respectively. The Hmong village Song Khwae had the lowest ICF value (0.00), resulting from different uses reported for three different plant species.

In total, 25 plant species in 19 families were reported for treating ill-defined symptoms (Figure 19). All of those were completely identified to species level. Only few species were allocated to each of the plant families and Asteraceae provides three species (12 %) which is the largest number. Medicinal uses of many plant species were only reported for treating ill-defined symptoms, evidenced by their fidelity level of 100%. The frequently mentioned symptoms were fatigue (14 use-reports; 46.7%), dizziness (11; 36.7%) and fainting (10; 33.3%).

Table 34. ICF values and number of plant families and species used to treat ill-defined symptoms in each village

Ethnic group	Village	# families	# species	#use-report	ICF value
Hmong	Khang Ho	3	3	8	0.71
Hmong	Manee Pruek	1	1	3	1.00
Hmong	Song Khwae	3	3	3	0.00
Mien	Huai Labaoya	4	5	16	0.73
Mien	Huai Sanao	2	2	3	0.50
Mien	Santiphap	3	3	6	0.60
Khamu	Huai Pook	3	3	5	0.50
Khamu	Huai Satang	2	2	4	0.67
Khamu	Nam Pan	2	2	4	0.67
Lua	Joon	3	3	9	0.75
Lua	Manee Pruek2	1	1	11	1.00
Total		19	25		

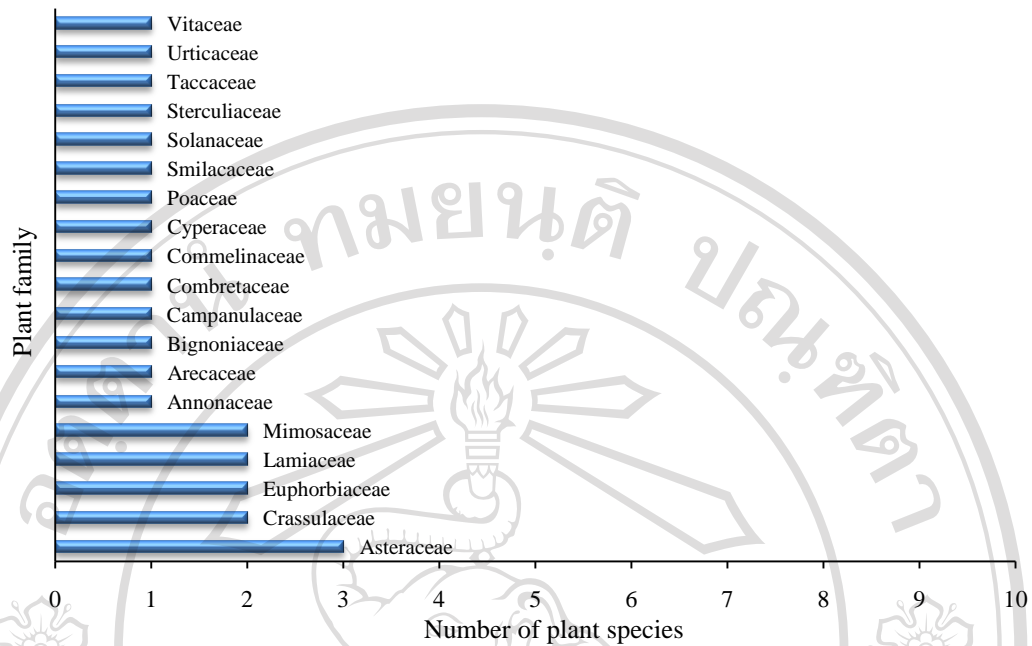


Figure 19 Number plant species in each family used to treat ill-defined symptoms in each village

Table 35. Medicinal plants used to treat ill-defined symptoms by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Annonaceae										
<i>Goniothalamus laoticus</i> (Finet & Gagnep.) Bân	M	HSN	W	tom cha dia	100.0	1	Fatigue	St	Decoction	Potions
Arecaceae										
<i>Livistona speciosa</i> Kurz	L	JN	D	ko	100.0	1	Dizziness	Lf	Cold infusion with young bamboo shoot	Potions
	L	JN	D	ko	100.0	3	Fainting	Pt	Decoction	Potions
Asteraceae										
<i>Artemisia lactiflora</i> Wall.ex DC.	H	SK	D	taab kib lab luj	33.3	1	Fatigue	Lf	Finely chopped/cooked with eggs	Eaten as food
<i>Artemisia verlotiorum</i> Lamotte	M	HSN	D	kong mon dia/la ngoi mia	100.0	2	Fainting	Lf	Grated	Smell
<i>Vernonia cinerea</i> (L.) Less.	M	STP	W	yang pang dia	100.0	3	Malaise/fatigue	Wp	Decoction	Potions
Bignoniaceae										
<i>Oroxylum indicum</i> (L.) Kurz	K	HP	D	tood lung la	100.0	2	Dizziness	Pd	Grated/cold infusion	Potions

Table 35. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Campanulaceae										
<i>Codonopsis javanica</i> Hook.f &Thomson	L	MNP2	W	mang ted	100.0	11	Fatigue	Rt	non-prepared	Eaten raw
Combretaceae										
<i>Quisqualis indica</i> L.	M	STP	W	hei yang	100.0	2	Malaise/ fatigue	St/Lf	Decoction	Bath
Commelinaceae										
<i>Commelina bengalensis</i> L.	M	HBY	W	sob plaan	14.3	1	Malaise/ fatigue	Ysh	Decoction	Potions
Crassulaceae										
<i>Kalanchoe laciniata</i> (L.) DC.	M	HBY	D	lom jang yiu	25.0	4	Fainting		Decoction/cooked with chicken soup	Potions/ eaten as food
<i>Kalanchoe pinnata</i> (Lam.) Pers.	M	HBY	D	ta pa zue	14.3	2	Malaise	Lf	Pulpled/cold infusion	Potions
Cyperaceae										
<i>Kyllinga nemoralis</i> (Forst.) Dandy ex Hutch. & Dalziel	H	KH	W	-	62.5	1	Dizziness/ fainting	Wp	Decoction	Potions
	H	KH	W	-	62.5	4	Malaise/ fatigue	Wp	Decoction/cooked with chicken soup	Potions/ eaten as food

Table 35. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Euphorbiaceae										
<i>Croton roxburghii</i> N.P. Balakr.	K	HST	W	tood tong plao	28.6	2	Fatigue	Lf	Decoction	Bath
<i>Homonoia riparia</i> Lour.	K	NP	W	tood krai	28.6	2	Dizziness/ fainting	Bk	Cold infusion with <i>Saccarum chinensis</i>	Potions
Lamiaceae										
<i>Ocimum tenuiflorum</i> L.	L	JN	D	ka prao	100.0	1	Dizziness	Lf	Pulped/cold infusion	Spray over head
<i>Teucrium viscidum</i> Blume var. <i>viscidum</i>	H	SK	D	pawn tshis nyeg	9.1	1	Malaise/ fatigue	Wp/Rt	Decoction	Potions
Mimosaceae										
<i>Entada glandulosa</i> Pierre ex Gagnep.	L	JN	W	mhue laab	100.0	4	Dizziness/ fainting	Ysh	Decoction with <i>Livistona speciosa</i>	Potions
<i>Mimosa pudica</i> L.	M	HBV	W	mian yob	50.0	8	Dizziness/ fainting	Wp	Decoction	Potions

Table 35. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Poaceae										
<i>Saccharum officinarum</i> L.	K	NP	D	-	100.0	2	Dizziness/ fainting	Nbd	Decoction/cold infusion with <i>Homonoia riparia</i>	Potions
Smilacaceae										
<i>Smilax ovalifolia</i> Roxb.	K	HP	W	hrong long	33.3	2	Fatigue	Rt	Decoction	Potions
Solanaceae										
<i>Solanum spirale</i> Roxb.	K	HP	D	la krong	11.1	1	Dizziness	Lf	Decoction with <i>Cymbopogon citratius</i>	Vapor roasting
Sterculiaceae										
<i>Helicteres isora</i> L.	H	KH	D	-	50.0	2	Dizziness	Fr	Hot infusion	Potions
Taccaceae										
<i>Tacca chantrieri</i> André	M	HBV	W	sun ta wang	7.1	1	Malaise/ fatigue	Rt	Decoction	Potions
	M	STP	W	sun ta wang	6.3	1	Fatigue	Rt	Decoction	Potions
Urticaceae										
<i>Boehmeria nivea</i> Gaudich.	H	KH	D	tsaaj	8.3	1	Fainting	Lf	Decoction	Bath

Table 35. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
	H	MNP	D	tsaaj	33.3	3	Fatigue/ fainting	Lf/Rt	Decoction	Potions
	H	SK	D	tsaaj	12.5	1	Dizziness	Lf	Cooked with chicken soup	Eaten as food
Vitaceae <i>Cissus repens</i> Lam.	K	HST	W	ted sa liab	100.0	2	Fatigue	St	Decoction	Bath

4.1.1.17 Medicines: Infections/Infestations

Uses related to the category of infections/infestations were reported from all 12 villages and high ICF value were found across all villages (Table 36)

In total, 126 plant species in 66 families were registered in this category (Table 36, Figure 20). Of those, 112 were securely identified and three with some doubt to species, nine to genus and two only to family level. The commonly represented plant families reported for this use-category were Asteraceae (12 species; 9.5%) and Lamiaceae (10; 7.9%). Like plants registered in other medicinal use-categories, there were many species, with a fidelity level of 100%, of which medicinal uses were only reported for treating disorders related to infections/infestations. The frequently reported infectious disorders were common ailments such as fever (87 use-reports; 38.5%), ringworm (27; 11.9%), tinea pedis (26; 11.5%), and cold (25; 11.1%) respectively.

Table 36. ICF values and number of plant families and species used to treat infections/infestations in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Khang Ho	20	26	103	0.75
Hmong	Manee Pruek	26	33	111	0.71
Hmong	Song Khwae	16	17	69	0.76
Mien	Huai Labaoya	16	19	89	0.80
Mien	Huai Sanao	11	14	41	0.68
Mien	Santiphap	14	16	68	0.78
Khamu	Huai Pook	16	22	77	0.72
Khamu	Huai Satang	6	7	16	0.60
Khamu	Nam Pan	11	14	80	0.84
Lua	Joon	6	6	17	0.69
Lua	Manee Pruek 2	15	19	92	0.80
Lua	Toei Klang	11	13	36	0.66
Total		66	126		

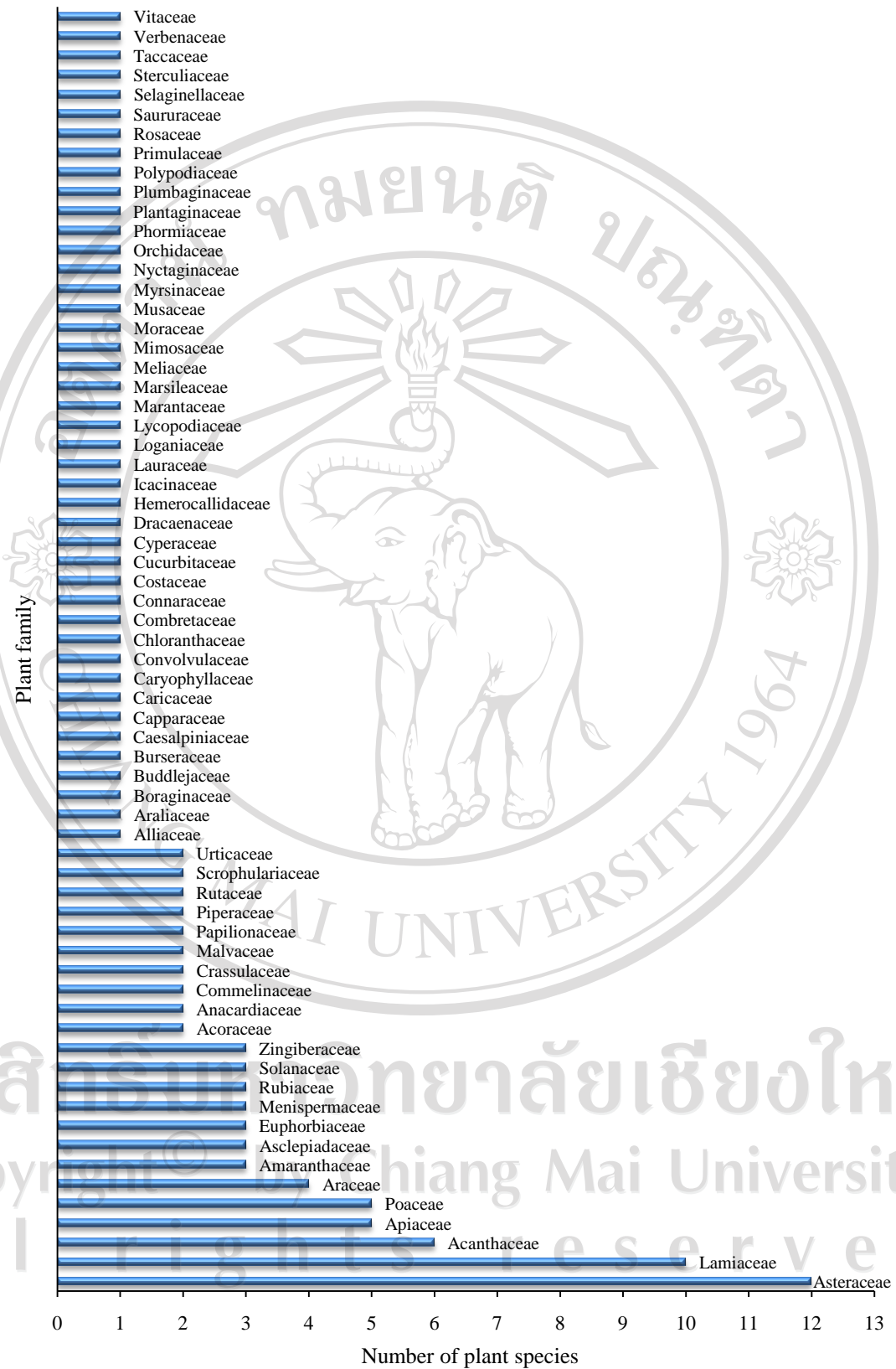


Figure 20 Number plant species in each family used to treat infections/infestations in each village

Table 37. Medicinal plants used to treat infections/infestations by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Acanthaceae										
<i>Acanthus montanus</i> T. Anderson	M	HSN	D	jue jai kang	100.0	3	Shingles (Herpes zoster)	Lf	Pounded	Liniment
<i>Andrographis paniculata</i> Nees	M	HSN	D	dia im	16.7	1	Influenza	Lf	Dried/powdered	Powdered
<i>Clinacanthus nutans</i> Lindau	K	HST	D	-	50.0	1	Fever	Lf	non-prepared	Eaten
	K	HP	D	-	100.0	1	Shingles (Herpes zoster)	Lf	Pounded with rice	Liniment
<i>Dicliptera roxburghiana</i> Nees	M	HBV	W	-	100.0	1	Ringworm (Tinea)	Un	Decoction	Bath/wash
<i>Strobilanthes cusia</i> Kuntze	H	KH	D	nkaaj ntsuab	88.2	5	Fever	Lf	Pounded with rice	Poultice over palm
	H	KH	D	nkaaj ntsuab	88.2	10	Fever	Lf	Pounded/heated	Poultice at palm and feet
	H	MNP	D	nkaaj ntsuab	69.2	1	Fever	Lf	Pounded	Poultice around the feet
	H	MNP	D	nkaaj ntsuab	69.2	6	Fever	Lf	Pounded with rice	Poultice at palm and feet

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
	H	MNP	D	nkaaj ntsuab	69.2	2	Cold	Lf	Pulped/Pounded	Poultice over palm
	H	SK	D	nkaaj ntsuab	66.7	6	Fever	Lf	Pounded	Poultice at palm
	K	HP	D	satong	75.0	6	Fever	Lf	Pounded with salt	Poultice at palm and feet
	K	HST	D	satong	80.0	4	Fever	Lf	Pounded	Poultice at palm and feet
	K	NP	D	satong	72.7	8	Fever	Lf	Pounded	Poultice at palm and feet
	L	MNP2	D	lum hom	100.0	3	Fever	Lf	Pounded	Poultice around the feet
	L	TK	D	lum hom	100.0	3	Fever	Lf	Pounded	Poultice at palm and feet
	M	HBY	D	yaam	95.8	23	Fever	Lf	Pounded with salt, rice/mixed with alcohol	Poultice at palm and feet
	M	HSN	D	yaam	88.9	8	Fever	Lf	Pounded	Poultice over palm

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
	M	STP	D	yaam	100.0	11	Fever	Lf	Pounded	Poultice around the feet
<i>Strobilanthes</i> sp.	L	MNP2	W	lum hom	100.0	3	Fever	Un	Decoction	Baths
Acoraceae										
<i>Acorus calamus</i> L.	K	HP	D	ja krer om	100.0	7	Fever	Lf	Pounded	Poultice over forehead
	K	NP	D	hang kao/ sa krue krang	72.7	8	Fever/Cold	Lf	Pounded	Poultice over forehead
<i>Acorus tatarinowii</i> Schott	K	HP	W	je krer om	100.0	2	Fever	Lf	Pounded	Poultice over forehead
Alliaceae										
<i>Allium sativum</i> L.	H	KH	D	-	100.0	2	Ringworm (Tinea)	Blb	Pounded/ mixed with alcohol	Liniment
Amaranthaceae										
<i>Amaranthus cruentus</i> L.	H	SK	D	txhuv ntuj lab	16.7	1	Plague (for chicken)	Lf	Pulped/cold infusion	Potions
<i>Cyathula prostrata</i> Blume	H	KH	W	-	33.3	1	Tinea pedis	Wp	Decoction	Wash

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
<i>Iresine cf. diffusa</i>	K	HP	W	la yuk ngad	100.0	1	Onychomycosis (<i>Tinea unguium</i>)	Lf	Pounded/ mixed with alcohol	Poultice
Anacardiaceae										
<i>Rhus chinensis</i> Muell.	H	MNP	W	txwv cev	33.3	1	Fever/Chicken pox	Lf	Decoction with <i>Toona sinensis</i>	Roasting
<i>Spondias pinnata</i> (L.f.) Kurz	L	JN	D	ma kok	100.0	1	<i>Tinea pedis</i>	Bk	Cold infusion	Wash
Apiaceae										
Apiaceae sp.1	H	KH	D	taab kib ntsuab	6.1	2	Fever	Lf	Pounded	Poultice over forehead
Apiaceae sp.2	H	SK	D	tshab xqoob	25.0	1	Fever	Lf/Rt	Decoction	Potions
<i>Coriandrum sativum</i> L.	H	KH	D	zaub txhwb qab	100.0	2	Fever	Sd	Decoction/vaporiz ed	Roasting
	H	MNP	D	zaub txhwb qab	100.0	2	Influenza	Lf	Decoction with <i>Toona sinensis</i>	Roasting
	H	MNP	D	zaub txhwb qab	100.0	2	Measles	Lf	Decoction with <i>Toona sinensis</i>	Wipe
<i>Hydrocotyle javanica</i> Thunb.	L	MNP2	W	phak nhok jang	100.0	7	Ringworm (<i>Tinea</i>)	Lf	Pounded/ mixed with ash	Liniment

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
<i>Hydrocotyle sibthorpioides</i> Lam.	M	HBV	D	fad mhuan	18.8	3	Cold		Finely chopped/ cooked with eggs	Eaten as food
	H	MNP	D	guav hnug qub	66.7	2	Hepatitis	Lf	Finely chopped/ cooked with eggs	Eaten as food
	M	HSN	D	fad mhuan	33.3	3	Cold	Lf	Finely chopped/ cooked with eggs	Eaten as food
	L	MNP2	D	phak nhok jang	100.0	1	Ringworm (Tinea)	Lf	Pounded with <i>Allium sativum</i>	Liniment
Araceae										
<i>Alocasia cucullata</i> (Loureiro) G.Don	H	SK	D	teeb qus	25.0	1	Fever	Lf	Heated	Plaster over forehead
<i>Aglaonema</i> sp.	L	MNP2	W	lum plae bon kle	100.0	3	Shingles (Herpes zoster)	Wp	Pounded/wrapped with fabric	Plaster
<i>Pothos chinensis</i> (Raf.) Merr.	H	SK	W	kooj ntsuag neeg	16.7	1	Fever	St	Pulped	Poultice over palm
<i>Pothos scandens</i> L.	M	HSN	W	ha dia ngang	9.1	1	Fever	Wp	Decoction	Potions
Araliaceae										
<i>Macropanax</i> cf. <i>dispermus</i> Kuntze	L	MNP2	W	lum pae piae	54.5	6	Fever	Bk	Decoction/mixed with chaff/molded	Tablet

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Asclepiadaceae										
<i>Telosma minor</i> Craib	K	HP	W	la salid	0.0	5	Fever	Un	Pulped	Tie around wrist and ankle
<i>Calotropis gigantea</i> (L.) W.T. Aiton	K	HP	D	rung ka	66.7	4	Ringworm (Tinea)	Ex	Non-prepared	Liniment
<i>Hoya diversifolia</i> Blume	K	HP	D	bia la mei jang	100.0	2	Ringworm (Tinea)	Lf	Pounded	Liniment
	M	HBV	D	-	100.0	2	Cold	Wp	Decoction	Potions
Asteraceae										
<i>Ageratum conyzoides</i> L.	K	NP	W	-	100.0	1	Tinea pedis	Wp	Decoction	Wash
	L	JN	W	yun oi	66.7	2	Fever	Rt	Decoction with <i>Imperata cylindrica</i>	Potions
	L	MNP2	W	yun oi	100.0	3	Cold	Wp	Decoction with <i>Rhus chinensis</i>	Potions
	M	HSN	W	fun fong mia	100.0	1	Cold	Wp	Decoction with <i>Cymbopogon citratius</i>	Baths
	H	KH	W	pwm tshis qus	50.0	1	Cold	Wp	Decoction	Potions

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
<i>Artemisia verlotiorum</i> Lamotte	H	MNP	W	pwm tshis qus	87.5	7	Cold	Rt	Decoction	Potions
	H	KH	D	suv ntswm	45.0	9	Fever	Lf	Finely chopped/ cooked with eggs	Eaten as food
	H	SK	D	suv ntswm	11.1	1	Fever	Lf	Pulped	Poultice over palm
<i>Artemisia vulgaris</i> L.	H	KH	D	suv ntswm	80.0	1	Fever	Lf	Finely chopped/ cooked with eggs	Eaten as food
	H	KH	D	suv ntswm	80.0	3	Fever	Lf	Finely chopped/ cooked with eggs	Eaten as food
	H	MNP	W	suv ntswm	41.7	5	Fever	Lf	Finely chopped/ cooked with eggs	Eaten as food
<i>Bidens pilosa</i> L.	H	MNP	W	txhab qoob	62.5	5	Cold	Rt	Decoction with <i>Ageratum conyzoides</i> , <i>Commelina diffusa</i>	Potions
<i>Blumea balsamifera</i> (L.) DC.	M	HBV	W	ma im bua	4.5	1	Plague (for pigs or chicken)	Lf	Pulped/ cold infusion	Potions

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
<i>Conyza sumatrensis</i> (Retz.) E.Walker	L	MNP2	W	yun yao	100.0	3	Cold	Wp	Decoction	Potions
<i>Eclipta prostrata</i> L.	L	TK	W	hom kiao	100.0	2	Fever	Wp	Decoction/ vaporized	Roasting
<i>Elephantopus scaber</i> L.	M	HSN	W	dia kuai	50.0	1	Malaria	Wp	Decoction	Potions
<i>Kalimeris indica</i> Sch.Bip.	H	MNP	D	qhua txhais	9.1	1	Fever	Lf	Decoction	Potions
<i>Laggera pterodonta</i> (DC.) Sch.Bip. ex Oliv.	L	MNP2	W	yun jee ya	100.0	4	Cold	Wp	Decoction with <i>Urena lobata</i> , <i>Biden pilosa</i>	Potions
<i>Pseudelephantopus spicatus</i> (Juss. ex Aubl.) C.F.Baker	K	HP	W	la kok sa	100.0	2	Tinea pedis	Wp	Decoction	Wash
	M	HBV	W	pu juang dia	100.0	2	Fever	Lf	Decoction	Potions
<i>Vernonia cinerea</i> (L.) Less.	H	KH	W	-	66.7	1	Fever	Wp	Decoction	Potions
	H	KH	W	-	66.7	1	Chicken pox	Wp	Decoction	Potions
	L	TK	W	yun jai	100.0	1	Fever	Wp	Decoction	Potions
Boraginaceae										
<i>Tournefortia montana</i> Lour.	K	NP	W	-	100.0	1	Shingles (Herpes zoster)	Lf	Pounded	Poultice

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Buddlejaceae										
<i>Buddleja asiatica</i> L.	H	MNP	W	paaj tshuas	50.0	1	Venereal diseases	Rt	Decoction	Potions
Burseraceae										
<i>Garuga pinnata</i> Roxb.	K	HST	W	tood hra mhoe	100.0	3	Tinea pedis	Bk	Pounded/cold infusion	Wash
Caesalpinaceae										
<i>Senna alata</i> (L.) Roxb.	H	KH	W	-	28.6	2	Ringworm (Tinea)	Lf	Pounded	Liniment
	H	SK	W	-	100.0	1	Ringworm (Tinea)/ Anthelmintic	Lf	Pounded	Liniment
	K	HP	W	la lub muen	100.0	3	Ringworm (Tinea)	Lf	Pounded/mixed with <i>Solanm indicum</i>	Liniment
	K	NP	W	la lub muen	100.0	9	Ringworm (Tinea)	Lf	Pounded	Liniment
	K	HST	W	la lub muen	100.0	3	Ringworm (Tinea)	Lf	Chewed	Liniment

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Capparaceae										
<i>Capparis trisonthiae</i> Srisanga&Chayamarit	M	STP	W	pin lang	42.9	6	AIDS	Un	Decoction	Potions
Caricaceae										
<i>Carica papaya</i> L.	H	KH	D	maum kuab	33.3	2	Fever	Lf	Decoction with <i>Toona sinensis</i>	Roasting
	H	SK	D	maum kuab	100.0	1	Fever	Lf	Pounded	Poultice at palm
Caryophyllaceae										
<i>Drymaria diandra</i> Blume	H	MNP	W	taum moj qus/ taum moj dlaab	66.7	1	Fever	Wp	Dried/ cooked with pork	Eaten as food
	H	MNP	W	taum moj qus/ taum moj dlaab	66.7	1	Malaria	Wp	Pounded with <i>Capsicum</i> <i>frutescens</i> , <i>Eryngium</i> <i>foetidum</i>	Poultice at wrist and feet
Chloranthaceae										
<i>Chloranthus erectus</i> (Buch.- Ham.) Verdc.	H	SK	W	ntub yag	71.4	5	Measles	Rt	Decoction	Potions

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Combretaceae										
<i>Quisqualis indica</i> L.	L	TK	W	yang mhung	100.0	2	Anthelmintic (Ascariasis)	Rt	Decoction	Potions
Commelinaceae										
<i>Floscopa scandens</i> Lour.	M	STP	W	tom sob plaan	25.0	1	Fever	Un	Decoction	Potions
<i>Tradescantia zebrina</i> Bosse	H	SK	D	zaub raws lab	100.0	1	Shingles (Herpes zoster)	Lf	Pounded	Liniment
Connaraceae										
<i>Cnestis palala</i> Merr.	K	HP	W	tood hun ja eb	50.0	2	Leprosy (for dogs)	Lf	Pounded/ squeezed	Liniment
Convolvulaceae										
<i>Merremia vitifolia</i> Haller f.	M	HSN	W	ju jao mian mia	100.0	1	Anthelmintic	Un	Decoction	Potions
Costaceae										
<i>Costus speciosus</i> (J. Koenig) Sm.	M	STP	W	ching kuan diang	20.0	2	Tinea pedis	St	Pounded	Poultice
Crassulaceae										
<i>Kalanchoe pinnata</i> (Lam.) Pers.	H	KH	D	nplooj tuaj kaus	7.7	1	Fever	Lf	Finely chopped/ cooked with eggs	Eaten as food

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
	H	KH	D	nplooj tuaj kaus	7.7	1	Tinea pedis	Lf	Pounded	Poultice
	M	HBV	D	ta pa zue	85.7	12	Plague (for chicken)	Lf	Pulped/ cold infusion	Potions
	M	HSN	D	ta pa zue	30.8	4	Plague (for chicken)	Lf	Pulped/ cold infusion	Potions
	M	STP	D	ta pa zue	100.0	1	Plague (for chicken)	Lf	Pulped/ cold infusion	Potions
<i>Sedum cf. sarmentosum</i> Bunge	H	KH	D	nplai zeb	25.0	3	Fever	Lf	Finely chopped/ cooked with eggs	Eaten as food
Cucurbitaceae										
<i>Momordica cochinchinensis</i> (Lour.) Spreng.	L	MNP2	D	plae luk aak	100.0	3	Ringworm (Tinea)	Arl	Pounded	Liniment
Cyperaceae										
<i>Kyllinga nemoralis</i> (Forst.) Dandy ex Hutch. & Dalziel	H	SK	W	-	100.0	1	Fever	Wp	Decoction	Potions
Dracaenaceae										
<i>Sansevieria roxburghiana</i> Schult.f.	H	SK	D	-	50.0	1	Fever	Lf	Decoction	Bath

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Euphorbiaceae										
<i>Glochidion</i> sp.	L	TK	W	lum plae yalw ka	100.0	1	Anthelmintic (Ascariasis)	Ysh	Cooked	Eaten as food
<i>Homonoia riparia</i> Lour.	K	NP	W	tood kraai	57.1	4	Chicken pox	Rt	Decoction with <i>Cymbepogon citratus</i> , <i>Solanum spirale</i>	Baths
<i>Jatropha curcas</i> L.	K	HP	D	tood ma hoong	100.0	5	Tinea pedis	Ex	Non-prepared	Liniment
Hemerocallidaceae										
<i>Hemerocallis lilioasphodelus</i> L.	M	STP	D	ha dia dao/ha dia zua	13.3	2	Cold	Lf	Cooked with chicken soup	Eaten as food
Icacinaceae										
<i>Gonocaryum lobbianum</i> (Miers) Kurz	M	HBV	W	ja king yung	11.1	1	Ringworm (Tinea)	Ylf	Pounded	Liniment
Lamiaceae										
<i>Ajuga</i> sp.2	K	NP	W	thum	100.0	2	Tinea pedis	Wp	Decoction	Wash
<i>Callicarpa rubella</i> Lindl.	H	MNP	W	-	75.0	3	Venereal diseases	Rt	Decoction	Potions
<i>Clerodendrum serratum</i> (L.) Moon	L	MNP2	W	tu plung sa	23.1	3	Malaria	Rt/ Wp	Decoction	Potions

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
<i>Clerodendrum serratum</i> (L.) Moon	L	MNP2	W	tu plung sa	69.2	9	Fever	Rt	Decoction	Potions
<i>Elsholtzia penduliflora</i> W.W.Sm.	M	STP	D	la hao mia	100.0	2	Cold	Lf	Non-prepared/ cooked with chicken soup	Smell/eaten as food
<i>Glechoma hederacea</i> L.	H	MNP	D	gua luag/lauj vaag nyeg	50.0	2	Cold	Lf	Finely chopped/ cooked with eggs	Eaten as food
<i>Gmelina arborea</i> Roxb.	H	MNP	W	ntshaub	100.0	4	Tinea pedis	Bk	Grated	Poultice
	K	NP	W	tood lha	100.0	8	Tinea pedis	Bk	Decoction	Wash
	L	JN	D	lum kla	100.0	7	Tinea pedis	Lf/Bk	Pulped/heated	Poultice
	H	KH	D	ntshaub	100.0	10	Tinea pedis	Bk	Pounded	Liniment
	K	HST	W	tood lha	100.0	2	Tinea pedis	Bk	Decoction	Wash
	L	TK	W	lum kla	100.0	5	Tinea pedis	Bk	Grated/heated with <i>Zingiber cassumunar</i>	Poultice
	M	HBV	W	ta jung kong	59.1	13	Tinea pedis	Bk	Grated/squeezed	Liniment
M	HSN	D	ta jung kong	72.7	8	Tinea pedis	Bk	Decoction	Wash/Liniment	
M	STP	W	ta jung kong	100.0	11	Tinea pedis	Bk	Decoction	Wash	
K	HP	W	tood lha	100.0	8	Tinea pedis	Bk	Grated/squeezed	Liniment	

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
<i>Hyptis capitata</i> Jacq.	M	HBV	W	sa bung	66.7	2	Plague (for chicken)	Lf	Pounded/ cold infusion	Potions
<i>Orthosiphon aristatus</i> (Blume) Miq.	H	SK	D	-	16.7	1	Hepatitis	Lf	Decoction	Potions
	M	STP	D	jang zi mia/ jian ku ja	40.0	2	Fever	Lf	Decoction	Potions
<i>Plectranthus amboinensis</i> Spreng.	K	HP	D	hom duan jang	100.0	6	Fever	Lf	Pounded	Poultice over forehead
	K	NP	D	hom duan jang	100.0	10	Fever	Lf	Pounded with <i>Piper betel</i> , <i>Zanthoxylum</i> <i>limonella</i>	Poultice at forehead
<i>Teucrium viscidum</i> Blume var. <i>viscidum</i>	H	KH	D	pawn tshis nyeg	19.0	4	Fever/ Chicken pox	Lf	Finely chopped/ cooked with eggs	Eaten as food
	H	MNP	D	pawn tshis nyeg	8.3	1	Fever	Lf	Decoction/Soaked with fabric	Wipe
Lauraceae										
<i>Cinnamomum iners</i> Reinw. ex Blume	L	MNP2	W	lum nae wai	42.1	8	Cold		Decoction	Potions

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Loganiaceae										
<i>Gelsemium elegans</i> (Gardn. & Champ.) Benth.	H	MNP	W	tshuaj noj tuag	66.7	1	Ringworm (Tinea)	Rt	Decoction	Wash
	H	MNP	W	tshuaj noj tuag	66.7	1	Venereal diseases (female)	Rt	Decoction/ vaporized	Roasting
Lycopodiaceae										
<i>Lycopodium cernuum</i> L.	H	MNP	W	suab qus	100.0	3	Hepatitis	St	Decoction	Potions
	L	MNP2	W	yun jai	100.0	3	Hepatitis	Wp	Decoction	Potions
Malvaceae										
<i>Sida rhombifolia</i> L.	K	NP	W	ya khud	100.0	7	Fever	Rt	Cold infusion with <i>Eleusine indica</i>	Potions
<i>Urena lobata</i> L.	H	MNP	W	-	100.0	1	Gonorrhoea	Rt	Decoction	Potions
	L	MNP2	W	lum yun tom	100.0	1	Cold	Wp	Decoction with <i>Laggera pterodonta</i> , <i>Biden pilosa</i>	Potions

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Marantaceae										
<i>Maranta arundinacea</i> L. var. <i>arundinacea</i>	H	KH	D	nplooj ntse ntsuab	33.3	1	Fever	Rt	Decoction	Potions
Marsileaceae										
<i>Marsilea crenata</i> C.Presl	K	HP	W	la wal	100.0	1	Fever	Wp	Cold infusion with <i>Eleusine indica</i> . <i>Cymbopogon citratus</i>	Potions
Meliaceae										
<i>Toona sinensis</i> (Juss.) M.Roem.	H	KH	D	yuj	100.0	8	Chicken pox	Lf	Decoction	Baths
	H	SK	D	yuj	97.2	21	Chicken pox	Lf	Decoction/ Cooked with chicken soup	Baths/eaten as food
	H	SK	D	yuj	97.2	14	Fever/Dengue	Lf/Bk	Decoction/ Cooked with chicken soup	Baths/eaten as food

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
	H	MNP	W	yuj	40.7	3	Fever/Cold	Lf	Decoction	Potions
	H	MNP	W	yuj	40.7	1	Influenza	Lf	Decoction with <i>Coriandrum sativum</i> , <i>Cymbopogon citratus</i> , <i>carica papaya</i> , <i>Prunus persica</i>	Roasting
	H	MNP	W	yuj	40.7	1	Measles	Lf	Decoction with <i>Coriandrum sativum</i> , <i>Cymbopogon citratus</i> , <i>carica papaya</i> , <i>Prunus persica</i>	Baths
	H	MNP	W	yuj	40.7	6	Chicken pox	Lf	Decoction/Cooked with chicken soup	Baths/eaten as food

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Menispermaceae										
<i>Cissampelos pareira</i> L.	L	TK	W	mhue ngud	40.0	4	Fever	Rt	Grated/cold infusion	Potions
<i>Stephania</i> sp.	M	HBY	W	kang jin doi	100.0	10	Ringworm (Tinea)	Rh	Pounded	Liniment
	M	HSN	W	kang jin doi	100.0	2	Ringworm (Tinea)	Rh	Pounded	Liniment
	M	STP	W	kang jin doi	100.0	7	Ringworm (Tinea)	Rh	Decoction	Wash
<i>Tinospora crispa</i> (L.) Miers ex Hook.f. & Thomson	H	KH	D	-	50.0	1	Plague (for pigs)	St	Chopped	Mixed with animal food
Mimosaceae										
<i>Mimosa pudica</i> L.	M	HBY	W	mian yob	31.3	5	Fever	Wp	Decoction	Potions
	M	STP	W	mian yob	100.0	3	Fever	Wp	Decoction	Potions
Moraceae										
<i>Ficus squamosa</i> Roxb.	K	HP	W	la wa om	100.0	2	Fever	Rt	Decoction	Potions
Musaceae										
<i>Musa sapientum</i> L.	M	HSN	D	nom jiu	100.0	1	Shingles (Herpes zoster)	Infl (Ex)	Non-prepared	Liniment

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Myrsinaceae										
<i>Maesa indica</i> (Roxb.) Sweet	H	MNP	W	npua tshuaj	50.0	3	Tinea pedis	Lf	Pounded/cold infusion	Wash
Nyctaginaceae										
<i>Mirabilis jalapa</i> L.	H	MNP	D	paaj kuab tub sab	11.1	1	Hepatitis	Rt	Decoction	Potions
Orchidaceae										
<i>Goodyera procera</i> Hook.	K	HP	W	sa liam krang	100.0	1	Anthelmintic (Tapeworm infections)	Lf	non-prepared	Eaten
Papilionaceae										
<i>Psophocarpus tetragonolobus</i> DC.	H	KH	D	taum dlaab txwv	100.0	2	Fever	Fr	Decoction	Potions
<i>Tadehagi triquetrum</i> (L.) H. Ohashi	M	HBV	W	ha dia ngang	100.0	1	Cold	Lf	Decoction	Potions
Phormiaceae										
<i>Dianella ensifolia</i> Red.	L	MNP2	W	tu toi ngua	100.0	10	Cold	Wp	Decoction	Potions

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Piperaceae										
<i>Peperomia</i> sp.	M	HBV	W	jang pen mia	100.0	1	Ringworm (Tinea)	Lf	Pounded	Liniment
<i>Piper boehmeriifolium</i> Wall.	H	MNP	W	maab saw nyiaj	9.5	2	Hepatitis	Un	Decoction	Potions
Plantaginaceae										
<i>Plantago major</i> L.	H	KH	D	zaub ntswg npua	23.1	3	Fever	Lf	Finely chopped/ cooked with eggs	Eaten as food
Plumbaginaceae										
<i>Plumbago zeylanica</i> L.	H	MNP	S	kuab ib maab	100.0	1	Malaria	Lf	Pounded	Poultice at palm
	H	SK	W	kuab ib maab	41.7	5	Malaria	Lf	Pounded/wrapped by fabric	Plaster over palm
	K	HP	W	pid piu khao	100.0	1	Ringworm (Tinea)	Lf	Pounded	Liniment
Poaceae										
<i>Coix lachryma-jobi</i> L.	H	MNP	W	ntseb ntsaug	71.4	10	Anthelmintic (Ascariasis)	Rt	Decoction	Potions
<i>Cymbopogon citratus</i> Stapf.	K	NP	D	ja krer	100.0	2	Chicken pox	St	Cold infusion with <i>Solanum spirale</i>	Potions

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
<i>Eleusine indica</i> (L.) Gaertn.	K	HP	D	ja krer	100.0	2	Cold	Lf Sh	Heated/cold infusion in rice washing water	Potions
	L	TK	D	ja kai	100.0	2	Fever	Lf Sh	Pounded with <i>Solanum spirale</i> and straw	Poultice over forehead
	K	HP	W	jid thraak traak	100.0	7	Fever	Wp	Cold infusion with <i>Cymbopogon</i> <i>citratatus</i> , <i>Solanum</i> <i>spirale</i>	Potions
	K	HST	W	jid thraak traak	33.3	1	Fever	Rt	Cold infusion	Potions
	K	NP	W	jid thraak traak	100.0	10	Fever	Rt	Cold infusion with <i>Sida rhombifolia</i>	Potions
<i>Imperata cylindrica</i> (L.) P.Beauv.	L	TK	W	yun pak kwai	100.0	4	Fever	Wp	Decoction	Potions
	L	JN	W	tein	100.0	3	Fever	Rt	Decoction with <i>Ageratum</i> <i>conyzoides</i>	Potions

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
<i>Saccharum chinensis</i> Roxb.	M	HSN	D	kum jia zi	40.0	2	Cold	St	Decoction	Potions
Polypodiaceae										
<i>Drynaria quercifolia</i> (L.) J.Sm.	M	HBV	D	yai wei	50.0	5	Shingles (Herpes zoster)	St	Heated/ cold infusion	Wash
	M	HSN	D	jue jai kang	100.0	5	Shingles (Herpes zoster)		Decoction	Wash
Primulaceae										
<i>Lysimachia christinae</i> Hance	H	MNP	W	qua luag lab	54.5	2	Hepatitis	Wp	Decoction	Potions
	H	KH	D	qua luag lab	16.7	2	Hepatitis B	Wp	Decoction	Potions
Rosaceae										
<i>Rubus leucanthus</i> Hance	L	TK	W	mhue blue kiao	100.0	1	Malaria	Rt	Decoction	Potions
Rubiaceae										
<i>Paederia foetida</i> L.	L	MNP2	W	mhue pom zua	38.5	10	Fever	Un	Pounded	Tie around head
<i>Paederia pilifera</i> Hook.f.	M	STP	W	ja kai chiab hei	100.0	2	Fever	Lf	Finely chopped/ cooked with eggs	Eaten as food
	H	SK	W	maab tsw npaum	100.0	5	Fever	St	Pulped	Poultice at palm and feet
	K	NP	W	ma rhi ou	16.7	1	Fever	St	Pulped	Tie around ankle

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
	L	JN	W	mhue pom zua	21.4	3	Fever	St	Pulped	Tie around wrist and ankle
<i>Schizomussaenda dehiscens</i> (Craib) H.L.Li	H	MNP	W	paaj npoog npaig	40.0	2	Chicken pox	Rt	Decoction	Potions
	M	HBV	W	ja king diang	25.0	1	Fever	St	Decoction	Potions
Rutaceae										
<i>Melicope pteleifolia</i> (Champ. ex Benth.) T.G.Hartley	H	MNP	W	-	50.0	1	Meningitis	St	Decoction	Potions
	L	MNP2	W	lum ode yed	100.0	7	Fever	St	Decoction	Potions
<i>Zanthoxylum limonella</i> Alston	K	HP	D	tood tyong	100.0	1	Fever	Sd	Pounded/heated	Liniment
Sapindaceae										
<i>Cardiospermum halicacabum</i> L.	H	KH	D	-	9.5	2	Tinea pedis	Un	Decoction	Wash
Saururaceae										
<i>Houttuynia cordata</i> Thunb.	H	KH	D	zaub raus nees	43.5	10	Fever	Lf	Finely chopped/ cooked with eggs	Eaten as food
	H	MNP	D	zaub raus nees	50.0	4	Cold	Lf	Finely chopped/ cooked with eggs	Eaten as food

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
	H	SK	D	zaub raus nees	33.3	2	Fever	Lf	Finely chopped/ cooked with eggs	Eaten as food
	M	STP	D	ju mua mia	100.0	2	Fever	Lf	Finely chopped/ cooked with eggs	Eaten as food
	M	STP	D	ju mua mia	100.0	1	Cold	Lf	non-prepared	Eaten as vegetable
Scrophulariaceae										
<i>Torenia asiatica</i> L.	M	STP	W	kwu kwai	25.0	1	Tinea pedis	Wp	Decoction	Wash
<i>Picria fel-terrae</i> Lour.	M	HBV	D	kwu kwai	14.3	1	Fever	Lf	Decoction	Potions
<i>Lindernia ruellioides</i> (Colsmann) Pennell	H	MNP	W	nplooj nav kaw	50.0	1	Hepatitis	Wp	Decoction	Potions
Selaginellaceae										
<i>Selaginella willdenowii</i> (Desv. ex Poir.) Baker	H	KH	W	suab	100.0	1	Shingles (Herpes zoster)	Wp	Decoction	Wash
	H	KH	W	suab	100.0	1	Ringworm (Tinea)	Wp	Decoction	Wash
	H	MNP	W	suab	87.5	3	Hepatitis	Wp	Decoction	Potions
	H	MNP	W	suab	87.5	4	Tinea pedis	Wp	Pounded	Poultice around the feet

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Solanaceae										
<i>Solanum indicum</i> L.	L	MNP2	D	plae tron zung	50.0	3	Ringworm (Tinea)	Fr	Pulped/mixed with ash	Liniment
<i>Solanum nigrum</i> L.	M	HBY	D	jian piao lai	100.0	2	Anthelmintic	Lf	Decoction	Potions
<i>Solanum spirale</i> Roxb.	K	HP	D	la krong/phak deed	88.9	8	Fever	Lf	Cold infusion with <i>Cymbopogon citratus</i> , <i>Eleusine indica</i>	Potions
	K	HST	D	la krong/phak deed	100.0	2	Fever	Lf	Cold infusion with <i>Eleusine indica</i>	Potions
	K	NP	D	la krong/phak deed	100.0	8	Chicken pox	Lf	Cold infusion with <i>Cymbopogon citratus</i>	Potions
	K	NP	D	la krong/phak deed	100.0	1	Fever	Rt	Cold infusion	Potions
	L	TK	D	tu plung	100.0	5	Fever	Lf	Decoction with <i>Eleusine indica</i>	Potions

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Sterculiaceae										
<i>Helicteres elongata</i> Wall. ex Boj.	L	TK	W	lum ngud	33.3	4	Fever	Rt	Decoction with <i>Cissamapelos</i> <i>peireri</i>	Potions
Taccaceae										
<i>Tacca chantrieri</i> André	M	STP	W	sun ta wang	31.3	5	Plague (for horses)	Rt	Pounded/ cold infusion	Potions
Urticaceae										
<i>Debregeasia longifolia</i> Wedd.	H	MNP	W		100.0	1	Ringworm (Tinea)	Lf/Bk	Decoction	Wash
<i>Elatostema repens</i> (Lour.) Hallier f. & H.Schroet.	M	HBV	W	piam thong mia	18.8	3	Ringworm (Tinea)	Lf	Pounded	Liniment
	M	STP	W	piam thong mia	100.0	2	Tinea pedis	Wp	Pounded	Liniment
	M	STP	W	piam thong mia	100.0	7	Ringworm (Tinea)	Wp	Pounded	Liniment
Verbenaceae										
<i>Verbena officinalis</i> L.	H	KH	D	kaab laug rog	55.6	10	Tinea pedis	Wp	Decoction	Wash
	H	MNP	W	kaab laug rog	58.3	7	Tinea pedis	Wp	Decoction	Wash

Table 37. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Vitaceae										
<i>Cissus discolor</i> Blume	H	MNP	W	-	20.0	1	Ringworm (Tinea)	Lf	Pounded	Liniment
	L	MNP2	W	mhue chad	22.2	2	Ringworm (Tinea)	Lf	Pounded	Liniment
Zingiberaceae										
<i>Alpinia galanga</i> Willd.	H	KH	D	ghav lav	100.0	1	Ringworm (Tinea)	Rh	Pounded/ mixed with alcohol	Liniment
<i>Amomum</i> sp.2	L	TK	W	lum pa jung	100.0	2	Anthelmintic (Ascariasis)	Ysh	non-prepared	Eaten
<i>Zingiber cassumunar</i> Roxb.	H	MNP	D	qhav dlaab	66.7	1	Cold	Rh	Pounded	Poultice over forehead
	H	MNP	D	qhav dlaab	66.7	3	Fever	Rh	Pounded	Poultice over forehead
	L	JN	D	pei	10.0	1	Anthelmintic (Gnathostomiasis)	Rh	Decoction	Potions

4.1.1.18 Medicines: Inflammation

Uses related to the category of inflammation were reported from only three villages (Table 38). Manee Pruek and Huai Pook had the highest ICF value (0.67) among the three villages. ICF value could not be calculated for Huai Satang as there was only a single use for a single species reported by only one informant in this village.

In total, five plant species in four families were registered in this category (Figure 21). Commonly represented plant families for this category could not be determined as only one or two plant species were allocated to each of them. All plants were used as anti-inflammatory and there were no common use-reports among all this three villages.

Table 38. ICF values and number of plant families and species used to treat inflammation in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Manee Pruek	2	2	4	0.67
Khamu	Huai Pook	2	2	4	0.67
Khamu	Huai Satang	1	1	1	-
Total		4	5		

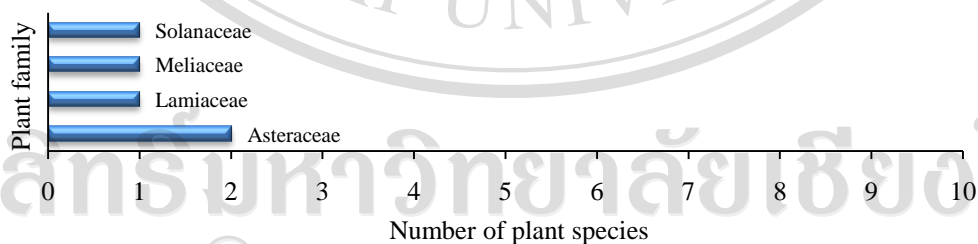


Figure 21 Number of plant species in each family used to treat inflammation in each village

Table 39. Medicinal plants used to treat inflammation by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Asteraceae										
<i>Gynura procumbens</i> Merr.	K	HST	D	-	50.0	1	Anti-inflammatory	Lf	Non-prepared	Eaten raw
<i>Inula cappa</i> (Buch.-Ham. ex D.Don) DC.	H	MNP	W	-	50.0	3	Anti-inflammatory	Lf	Decoction	Potions
Lamiaceae										
<i>Clerodendrum viscosum</i> Vent.	K	HP	W	ting chamoot	100.0	2	Anti-inflammation (for newborns' umbilical cord)	Lf	Dried/burned/ powdered	Liniment
Meliaceae										
<i>Sandoricum koetjape</i> Merr.	K	HP	D	ma tong	100.0	2	Anti-inflammatory	Bk	Heated/ decoction	Potions
Solanaceae										
<i>Nicotiana tabacum</i> L.	H	MNP	D	luam yeeb	14.3	1	Anti-inflammatory	Lf	Pulped	Poultice

4.1.1.19 Medicines: Injuries

Uses related to the category of injuries were reported from all 12 villages. Among the villages, Song Khwae had the lowest ICF value (0.34) whereas relatively high ICF values were found across the remaining 11 villages (Table 40).

In total, 104 plant species in 62 families were reported for treating injuries (Figure 22). Of those, 99 were completely identified to species, five to genus. Commonly represented plant families in this use-category were Euphorbiaceae (8 species; 7.7%) and Lamiaceae (7; 6.7%). Like plants registered in other medicinal use-categories, many species, with a fidelity level of 100%, were only reported for treating disorders in the category of injuries. The frequently reported disorders were wounds including rotten wounds (82 use-reports; 40%), burns (34; 16.6%), abscesses (32; 15.6%), and bruises (30; 14.6%), respectively.

Table 40. ICF values and number of plant families and species used to treat injuries in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Khang Ho	16	20	58	0.67
Hmong	Manee Pruek	24	33	78	0.58
Hmong	Song Khwae	25	32	48	0.34
Khamu	Huai Labaoya	15	19	82	0.83
Khamu	Huai Sanao	16	18	40	0.56
Khamu	Santiphap	11	12	34	0.67
Mien	Huai Pook	13	15	74	0.75
Mien	Huai Satang	7	8	15	0.50
Mien	Nam Pan	11	11	49	0.79
Lua	Joon	6	9	32	0.74
Lua	Manee Pruek 2	5	5	30	0.86
Lua	Toei Klang	6	6	14	0.62
Total		62	104		

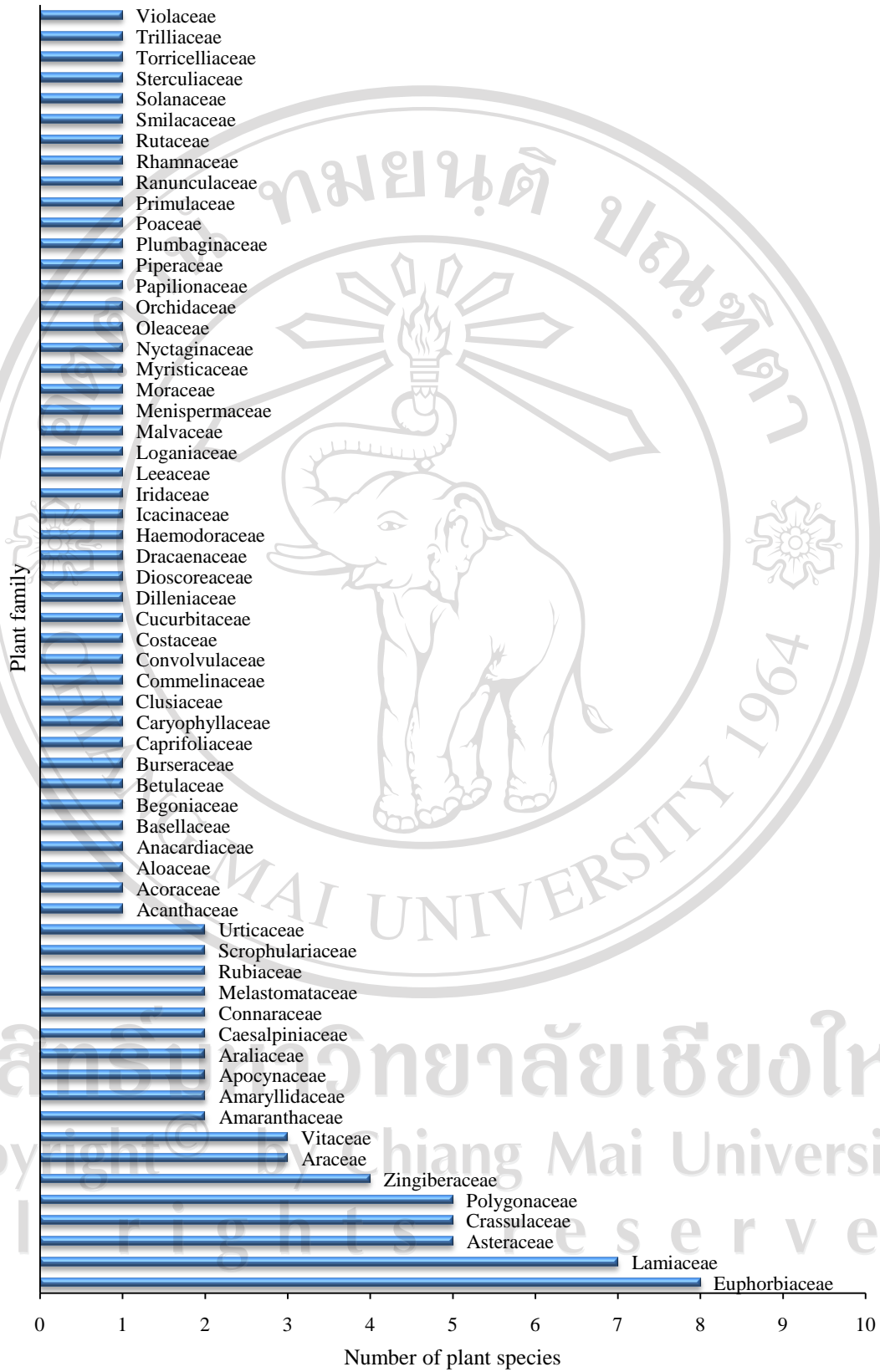


Figure 22 Number plant species in each family used to treat injuries in each village

Table 41. Medicinal plants used to treat injuries by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Acanthaceae										
<i>Thunbergia laurifolia</i> Lindl.	H	SK	W	maab hwb taub	11.1	1	Bites (by centipede)	Lf	Pounded	Liniment
Acoraceae										
<i>Acorus calamus</i> L.	K	NP	D	hang kao/ sa krue kang	9.1	1	Burns	Lf	Pounded	Liniment
Aloaceae										
<i>Aloe vera</i> L.	H	KH	D	tshuaj kub nyiab	100.0	5	Burns	Lf	Peeled off	Plaster
	H	SK	D	tshuaj kub nyiab	100.0	2	Burns	Lf	Peeled off	Plaster
	H	SK	D	tshuaj kub nyiab	100.0	1	Wounds	Lf	Peeled off	Plaster
	K	HP	D	ta hang jo ra kae	100.0	5	Burns	Lf	Peeled off	Plaster
	K	HST	D	wan hang jo ra kae	100.0	2	Burns	Lf	Peeled off	Plaster
	M	HBV	D	-	100.0	1	Burns	Lf	Peeled off	Plaster
	M	HBV	D	tom pua dia	100.0	7	Burns	Lf	Peeled off	Plaster
	M	HSN	D	-	100.0	5	Burns	Lf	Peeled off	Plaster
	K	NP	D	wan hang jo ra kae	100.0	6	Burns	Lf	Peeled off	Plaster
	L	JN	D	wan hang jo ra kae	100.0	3	Burns	Lf	Peeled off	Plaster

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Amaranthaceae										
<i>Amaranthus spinosus</i> L.	K	HP	W	la orul sa la	100.0	3	Abscesses	Rt	Decoction	Liniment
<i>Cyathula prostrata</i> Blume	H	KH	W	-	66.7	2	Blisters	Lf	Pounded	Poultice
Amaryllidaceae										
<i>Crinum amabile</i> Donn	H	MNP	D	twm xam	71.4	5	Bruises	Lf	Pulped	Plaster
	H	SK	D	twm xam	33.3	1	Bruises	Lf	Pulped	Plaster
	M	HSN	D	hia phoon/ tom dia zung	50.0	1	Bruises	Lf	Pulped	Plaster
<i>Crinum asiaticum</i> L.	L	JN	D	wan hang jo ra kae	25.0	1	Rotten wounds	Lf	Pounded	Poultice
Anacardiaceae										
<i>Rhus chinensis</i> Muell.	H	MNP	W	txwv cev	33.3	1	Blisters	Rt	Decoction	Wash
Apocynaceae										
<i>Alstonia scholaris</i> (L.)R.Br.	M	STP	D	fun tao diang	100.0	1	Wounds (Anti-bleeding)	Ex	Non-prepared	Liniment
<i>Thevetia peruviana</i> K. Schum.	K	HP	D	-	100.0	1	Wounds	Ex	Non-prepared	Liniment

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Araceae										
<i>Aglaonema simplex</i> Blume	M	HSN	W	how hab dow	100.0	1	Abscesses	Pt	Pounded/ heated	Poultice
	H	SK	W	-	100.0	1	Abscesses	St	Pounded	Poultice
<i>Alocasia cucullata</i> (Loureiro) G.Don	H	MNP	D	teeb qus	33.3	1	Rotten wounds	Rh	Pounded	Poultice
<i>Alocasia macrorrhiza</i> (L.) Schott	H	MNP	W	qos tsuv	100.0	2	Rotten wounds	Rh	Pounded	Liniment
	H	MNP	W	qos tsuv	100.0	4	Abscesses	Rt	Pounded	Poultice
Araliaceae										
<i>Aralia armata</i> Seem.	M	STP	W	show fim diang/yim piao	100.0	2	Rotten wounds	Un	Decoction	Wash
<i>Schefflera</i> sp.1	H	MNP	D	faaj khum maab	25.0	1	Rotten wounds	YLf	Non-prepared	Feed as animal food
Asteraceae										
<i>Ageratum conyzoides</i> L.	H	SK	W	pwm tshis qus	100.0	3	Wounds (Anti-bleeding)	Lf	Pounded	Liniment
	H	MNP	W	pwm tshis qus	12.5	1	Wounds (Anti-bleeding)	Lf	Pounded	Liniment

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Blumea balsamifera</i> (L.) DC.	K	NP	W	tood orul	16.7	1	Wounds	Lf	Pounded	Poultice
<i>Chromolaena odorata</i> (L.) R.M.King & H.Rob.	K	NP	W	ya pae	100.0	11	Wounds (Anti-bleeding)	Lf	Pounded	Poultice
	L	JN	W	be ya wai	100.0	9	Wounds (Anti-bleeding)	Lf	Pounded	Poultice
	L	TK	W	yun bong wai	100.0	5	Wounds (Anti-bleeding)	Lf	Pounded	Poultice
	K	HST	W	ya pae	100.0	2	Wounds (Anti-bleeding)	Lf	Pounded	Poultice
	H	SK	W	nrog dawb hau (G)/paj pov cai (W)	100.0	4	Wounds (Anti-bleeding)	Lf	Pounded	Poultice
	H	KH	W	nrog dawb hau (G)/paj pov cai (W)	90.0	9	Wounds (Anti-bleeding)	Lf	Pounded	Poultice
	H	MNP	W	nrog dawb hau (G)/paj pov cai (W)	100.0	2	Wounds (Anti-bleeding)	Lf	Pounded	Poultice

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
	K	HST	W	ya pae	100.0	2	Wounds (Anti-bleeding)	Lf	Pounded	Poultice
	M	HBV	W	ku ja mia	91.2	31	Wounds (Anti-bleeding)	Lf	Pounded	Poultice
	M	HSN	W	ku ja mia	80.0	4	Wounds (Anti-bleeding)	Lf	Pounded	Poultice
	M	STP	W	ku ja mia	66.7	6	Wounds (Anti-bleeding)	Lf	Pounded	Poultice
	K	HP	W	yung wai	53.3	8	Wounds (Anti-bleeding)	Lf	Pounded	Poultice
<i>Eupatorium fortunei</i> Turcz.	H	MNP	D	tsham laj	100.0	2	Wounds (Anti-bleeding)	Lf	Pounded	Poultice
<i>Microglossa pyrifolia</i> Kuntze	H	MNP	W	pov cai nstuab	50.0	3	Bites (by bloodsuckers)	Lf	Pounded	Poultice
	H	MNP	W	pov cai nstuab	50.0	2	Wounds (Anti-bleeding)	Lf	Pounded	Poultice
Basellaceae										
<i>Anredera cordifolia</i> (Ten.) Steenis	H	SK	D	saab txhim maab	18.2	2	Bruises	Lf	Pounded	Poultice

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
	M	HSN	D	fam ched low/ jian pa miao dia	12.5	1	Bruises	Lf	Pounded	Poultice
Begoniaceae										
<i>Begonia longifolia</i> Blume	H	MNP	W	qaub dleg	100.0	1	Blisters	Lf	Pounded	Poultice
Betulaceae										
<i>Betula alnoides</i> Buch.-Ham. ex D.Don	L	TK	W	lum zein	16.7	1	Wounds	Bk	Grated	Poultice
Burseraceae										
<i>Garuga pinnata</i> Roxb.	K	NP	W	tood ra hmao	33.3	2	Abscesses	Bk	Decoction	Wash
Caesalpinaceae										
<i>Caesalpinia sappan</i> L.	M	HSN	D	som mua/ sing mua	14.3	1	Internal bruises	St	Decoction	Potions
<i>Senna alata</i> (L.) Roxb.	H	KH	W	-	14.3	1	Abscesses	Lf	Pounded	Poultice
Caprifoliaceae										
<i>Sambucus javanica</i> Reinw. ex Blume	K	HP	W	la kon pria	100.0	7	Bruises	Lf	Heated/Pounded with <i>Sesamum indicum</i>	Massage
	H	SK	W	mos hav qus	100.0	1	Blisters	Lf	Pounded	Poultice

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Caryophyllaceae										
<i>Drymaria diandra</i> Blume	H	MNP	W	taum moj qus/ taum moj dlaab	33.3	1	Burns	Lf	Pounded	Liniment
	H	SK	W	taum moj qus/ taum moj dlaab	33.3	1	Wounds	Lf	Pounded	Poultice
Clusiaceae										
<i>Cratoxylum formosum</i> (Jack) Dyer subsp. <i>pruniflorum</i> (Kurz) Gogel.	M	HBY	W	diang ting	66.7	4	Wounds	Ex	Non-prepared	Liniment
Commelinaceae										
<i>Callisia repens</i> L.	H	SK	D	-	100.0	1	Wounds	Lf	Pounded	Poultice
Connaraceae										
<i>Cnestis palala</i> Merr.	K	HP	W	tood krang oul	50.0	2	Wounds (Anti-bleeding)	Lf	Pounded	Poultice
<i>Connarus semidecandrus</i> Jack	M	HBY	W	bob jei hei	15.4	2	Burns/Blisters	Lf	Decoction	Wash
Convolvulaceae										
<i>Argyrea</i> sp.	M	STP	W	toong pood kang mia	100.0	3	Rotten wounds	Un	Decoction	Wash

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Costaceae										
<i>Costus speciosus</i> (J. Koenig) Sm.	H	KH	W	qus nqeej	12.5	1	Abscesses	Rt	Pounded/heated	Poultice
Crassulaceae										
<i>Kalanchoe brasiliensis</i> Larrañaga	M	HBV	D	-	100.0	1	Burns	Lf	Pounded	Liniment
<i>Kalanchoe integra</i> Kuntze	M	HSN	D	ta pa zue	100.0	1	Bruises	Lf	Pounded	Poultice
<i>Kalanchoe laciniata</i> (L.) DC.	H	KH	D	tshuaj ntiv tub	3.0	1	Wounds	Lf	Pounded	Liniment
<i>Kalanchoe pinnata</i> (Lam.) Pers.	H	KH	D	nplooj tuaj kaus	23.1	1	Blisters	Lf	Pounded	Poultice
	H	KH	D	nplooj tuaj kaus	23.1	2	Bruises	Lf	Pounded	Poultice
	H	SK	D	nplooj tuaj kaus	50.0	3	Wounds	Lf	Pounded	Liniment
							(Anti-bleeding)			
	H	SK	D	nplooj tuaj kaus	50.0	2	Abscesses	Lf	Pounded	Poultice
	M	HSN	D	ta pa zue	30.8	4	Bruises	Lf	Pounded	Poultice
	K	HP	D	la pa rue ha	100.0	9	Burns	Lf	Pounded	Liniment
	K	HST	D	tood la rik	33.3	1	Bruises	Lf	Pounded	Poultice
	L	JN	D	-	100.0	1	Burns	Lf	Pounded	Poultice

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Sedum cf. sarmentosum</i> Bunge	H	MNP	D	nplai zeb	60.0	3	Bruises	Lf	Pounded	Poultice
Cucurbitaceae										
<i>Cucurbita moschata</i> Duchesne	H	MNP	D	taub dlaaj	100.0	1	Boils	Arl	Non-prepared	Liniment
Dilleniaceae										
<i>Dillenia parviflora</i> Griff.	K	HP	W	tood proo	100.0	2	Rotten wounds	Bk	Grated/mixed with salz	Poultice
Dioscoreaceae										
<i>Dioscorea bulbifera</i> L.	H	KH	D	qos npua nyeg	7.1	1	Blisters	Bbl	Pounded	Liniment
	M	STP	W	doi ju	100.0	3	Rotten wounds	Bbl	Pounded	Poultice
Dracaenaceae										
<i>Sansevieria roxburghiana</i> Schult.f.	H	SK	D	-	50.0	1	Bites (by snakes)	Lf	Pounded	Poultice
	M	STP	D	ha dia nang	100.0	1	Bites (by snakes/centipede)	Lf	Pounded	Poultice
Euphorbiaceae										
<i>Croton roxburghii</i> N.P. Balakr.	K	HP	W	tood plao	23.8	5	Wounds	Ex	Non-prepared	Liniment

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
	L	JN	W	lum plao	33.3	3	Wounds	Ex	Non-prepared	Liniment
	L	JN	W	lum plao	33.3	2	Bruises	Lf	Heated	Plaster
	L	MNP2	W	lum due pae	100.0	3	Wounds	Lf	Pounded	Liniment
	M	HBY	W	ta doe pae	17.6	3	Wounds	Ex	Non-prepared	Liniment
<i>Euphorbia tirucalli</i> L.	H	SK	D	-	100.0	1	Burns	Ex	Non-prepared	Liniment
<i>Jatropha curcas</i> L.	H	KH	D	thwj qwg	100.0	2	Burns	Ex	Non-prepared	Liniment
	H	MNP	D	thwj qwg	100.0	4	Burns	Ex	Non-prepared	Liniment
	H	SK	D	thwj qwg	50.0	1	Blisters	Ex	Non-prepared	Liniment
<i>Jatropha gossypifolia</i> L.	L	JN	D	-	100.0	1		Ex	Non-prepared	Liniment
<i>Jatropha multifida</i> L.	H	KH	D	-	100.0	12	Wounds	Ex	Non-prepared	Liniment
	H	SK	D	-	100.0	1	Wounds	Ex	Non-prepared	Liniment
	M	HBY	D	-	71.4	5	Wounds	Ex	Non-prepared	Liniment
	M	HSN	D	-	100.0	3	Wounds	Ex	Non-prepared	Liniment
	M	STP	D	-	100.0	4	Wounds	Ex	Non-prepared	Liniment
	K	HST	D	wan roi pad	100.0	3	Wounds	Ex	Non-prepared	Liniment
	K	NP	D	-	100.0	9	Wounds	Ex	Non-prepared	Liniment
	K	HP	D	-	100.0	7	Wounds	Ex	Non-prepared	Liniment
	L	JN	D	lum zi ta pae	100.0	7	Wounds	Ex	Non-prepared	Liniment
	L	TK	D	-	100.0	2	Wounds	Ex	Non-prepared	Liniment

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Jatropha podagrica</i> Hook.	K	HP	D	-	100.0	1		Ex	Non-prepared	Liniment
	K	HST	D	-	100.0	1		Ex	Non-prepared	Liniment
	H	KH	D	-	100.0	2	Wounds	Ex	Non-prepared	Liniment
	M	HSN	D	-	50.0	2	Wounds	Ex	Non-prepared	Liniment
	L	JN	D	-	100.0	3	Burns	Ex	Non-prepared	Liniment
<i>Pedilanthus tithymaloides</i> (L.) Poit.	K	HP	D	-	100.0	1	Bites (by centipede)	Lf	Pounded	Liniment
<i>Phyllanthus reticulatus</i> Poir.	K	HP	D	sa la kang pa	100.0	2	Abscesses	Lf	Pounded	Poultice
Haemodoraceae										
<i>Xiphidium caeruleum</i> Aubl.	H	KH	D	tw ntses luj	5.3	1	Bruises	Lf	Finely chopped/ cooked with eggs	Eaten as food
Icacinaeae										
<i>Gonocaryum lobbianum</i> (Miers) Kurz	M	HBV	W	ja king yung	22.2	2	Wounds	Ex	Non-prepared	Liniment
Iridaceae										
<i>Eleutherine americana</i> Merr. ex K. Heyne	H	SK	D	nplooj qhab xyab	33.3	1	Bruises	Blb	Pounded	Poultice

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
	H	SK	D	nplooj qhab xyab	25.0	1	Wounds	Blb	Pounded	Poultice
	K	HST	D	wan fai mai	50.0	2	Burns	Blb	Pounded	Liniment
	K	NP	D	-	50.0	2	Wounds	Blb	Decoction	Wash
	L	TK	D	wan fai	100.0	2	Wounds/Burns	Blb	Pounded/ mixed with <i>Kaempferia rotunda</i>	Liniment
	M	HSN	D	nom jang	16.7	1	Wounds (Anti-bleeding)	Blb	Pounded	Liniment
Lamiaceae										
<i>Callicarpa rubella</i> Lindl.	H	MNP	W	-	25.0	1	Bites (by bloodsuckers)	Lf	Fried with oil/wrapped by fabric	ประคบ
<i>Clerodendrum paniculatum</i> L.	L	JN	W	samoot zo	40.0	2	Bruises	Lf	Pounded/ heated	Poultice
<i>Clerodendrum viscosum</i> Vent.	H	SK	W	ntshaub tshws	50.0	1	Burns/Blisters	Lf	Pounded	Poultice
<i>Ocimum americanum</i> L.	K	HP	D	la kreng	42.9	3	Burns	Lf	Pounded	Liniment

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Perilla frutescens</i> (L.) Britton	H	KH	D	naav	7.7	1	Burns	Lf	Pounded	Liniment
<i>Plectranthus amboinensis</i> Spreng.	H	SK	D	-	50.0	1	Bruises	Lf	Decoction	Potions
<i>Teucrium viscidum</i> Blume var. <i>viscidum</i>	H	SK	D	pawn tshis nyeg	9.1	1	Bruises	Lf	Pounded/ heated	Poultice
Leeaceae										
<i>Leea indica</i> (Burm.f.) Merr.	H	KH	W	qab ib	25.0	1	Wounds	Lf	Pounded	Poultice
	K	HP	W	tood trang ole	100.0	2	Wounds (Anti-bleeding)	Lf	Pounded	Liniment
Loganiaceae										
<i>Gelsemium elegans</i> (Gardn. & Champ.) Benth.	L	MNP2	W	mhue kae	100.0	3	Rotten wounds	Ysh	Pounded	Liniment
Malvaceae										
<i>Sida cordata</i> (Burm.f.) Borss. Waalk.	K	HP	W	cha ong che ta ai	100.0	3	Abscesses	Lf	Pounded	Poultice
Melastomataceae										
<i>Melastoma malabathricum</i> L.	L	MNP2	W	lum yok	65.0	13	Wounds (Anti-bleeding)	Lf	Pounded	Poultice

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Osbeckia stellata</i> Buch.-Ham. ex D.Don	L	MNP2	W	lum yok	100.0	4	Wounds	Lf	Pounded/mixed with salt	Poultice
Menispermaceae										
<i>Tinospora sinensis</i> (Lour.) Merr.	M	HBY	D	-	100.0	2	Bruises	St	Decoction	Baths
Moraceae										
<i>Morus macroura</i> Miq.	H	MNP	W	-	50.0	1	Abscesses	Ex	Non-prepared	Liniment
Myristicaceae										
<i>Knema</i> sp.	M	HBY	W	diang yaam	100.0	1	Wounds	Ex	Non-prepared	Liniment
Nyctaginaceae										
<i>Mirabilis jalapa</i> L.	H	SK	D	paaj kuab tub sab	28.6	2	Bruises	Lf	Decoction	Potions
Oleaceae										
<i>Jasminum nervosum</i> Lour.	H	SK	W	-	100.0	1	Burns	Lf	Pounded	Liniment
	M	HSN	W	ju jiam mia	100.0	3	Wounds	Lf	Pounded	Liniment
Orchidaceae										
<i>Cymbidium bicolor</i> Lindl.	H	KH	D	-	100.0	1	Burns	Sd	Non-prepared	Liniment

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Papilionaceae										
<i>Tadehagi triquetrum</i> (L.) H. Ohashi	K	HP	W	la tok ngrol	60.0	3	Rotten wounds	Lf	Pounded	Poultice
	K	HST	W	la tok ngrol	50.0	1	Rotten wounds	Rt	Pounded	Poultice
	K	NP	W	la tok ngrol	100.0	8	Rotten wounds	Lf	Pounded	Poultice
	L	TK	W	yun kod/tu kod	100.0	2	Rotten wounds	Lf	Pounded	Poultice
Piperaceae										
<i>Peperomia pellucida</i> Kunth	H	SK	W		100.0	1	Blisters	Wp	Pounded	Poultice
	M	HSN	W	piam thong mia	100.0	1	Bites (by bloodsuckers)	Wp	Pounded	Liniment
Plumbaginaceae										
<i>Plumbago zeylanica</i> L.	H	SK	W	kuab ib maab	8.3	1	Burns	Lf	Pounded	Poultice
	M	STP	W	pae lin	9.1	1	Bruises	LF	Mixed with alcohol	Potions
Poaceae										
<i>Eragrostis tenella</i> (L.) P.Beauv. ex Roem. & Schult.	H	SK	W		100.0	1	Blisters	Lf	Pounded	Poultice

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Polygonaceae										
<i>Fagopyrum cymosum</i> (Trevir.) Meisn.	H	MNP	W	cej quab	100.0	3	Wounds	Lf	Finedly chopped /cooked with eggs	Eaten as food
	H	SK	D	cej quab	50.0	1	Abscesses	Lf	Pounded	Poultice
<i>Fallopia forbesii</i> (Hance) Yonekura & H. Ohashi	H	KH	D	qaub pees	12.5	1	Burns/Blisters	Lf	Pounded	Poultice
	M	HBV	D	pong lin	20.0	3	Bruises	Lf	Pounded with <i>Crinum amabile</i>	Poultice
	M	HSN	D	pong lin	16.7	1	Bruises	Lf	Pounded	Poultice
	M	STP	D	pong lin	80.0	8	Bruises	Lf	Pounded	Poultice
<i>Muehlenbeckia platyclada</i> (F. V. Muell.) Meisn.	H	MNP	D	tshuaj laum kib tshooj	100.0	1	Bites (by centipede)	Lf	Pounded	Poultice
	H	SK	D	tshuaj laum kib tshooj	100.0	2	Bites (by centipede)	Lf	Pounded	Liniment
<i>Polygonum chinense</i> L.	H	MNP	W	qaub guav yeeb	100.0	1	Burns	Lf	Pounded	Poultice
	H	KH	W	qaub guav yeeb	100.0	6	Burns	Lf	Pounded	Liniment
<i>Rumex crispus</i> L.	H	MNP	W	tuam faaj	50.0	2	Abscesses	Lf	Pounded	Poultice
	H	SK	D	tuam faaj	50.0	1	Wounds	Lf	Pounded	Poultice

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Primulaceae										
<i>Lysimachia christinae</i> Hance	H	MNP	W	qua luag lab	9.1	1	Abscesses	Lf	Pounded	Poultice
Ranunculaceae										
<i>Aconitum</i> sp.	H	MNP	D	kuab ib	33.3	1	Bruises	Rt	Mixed with alcohol	Potions
Rhamnaceae										
<i>Gouania leptostachya</i> DC.	H	MNP	W	-	57.1	1	Wounds	Lf	Pounded	Liniment
	H	MNP	W	-	57.1	3	Abscesses	Lf	Pounded	Poultice
Rubiaceae										
<i>Mitragyna speciosa</i> Korth.	K	NP	W	tood long loa	100.0	1	Wounds	Bk	Decoction	Wash
<i>Morinda angustifolia</i> Roxb.	H	SK	W	tshuaj twm qus	12.5	1	Rotten wounds	Lf	Pounded	Poultice
Rutaceae										
<i>Euodia</i> sp.	M	STP	W	sun tha yia	100.0	3	Wounds	Lf	Pounded/cold infusion	Wash
	M	HSN	W	diang ton kub	100.0	2	Wounds	Lf	Pounded	Liniment
Scrophulariaceae										
<i>Lindernia ruellioides</i> (Colsmann) Pennell	H	SK	W	nplooj nav kaw	100.0	1	Abscesses	Lf	Pounded	Poultice

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Limnophila rugosa</i> Merr.	H	MNP	D	siv fwj xyaab	50.0	1	Internal bruises	Lf	Cooked with chicken soup	Eaten as food
Smilacaceae										
<i>Smilax ovalifolia</i> Roxb.	H	KH	W	maab siv ghov	62.5	2	Abscesses	Ex	Non-prepared	Liniment
	H	KH	W	maab siv ghov	62.5	1	Scars	Ex	Non-prepared	Liniment
	H	KH	W	maab siv ghov	62.5	2	Wounds	Ex	Non-prepared	Liniment
	H	MNP	W	maab siv ghov	100.0	1	Burns	Ex	Non-prepared	Liniment
	H	MNP	W	maab siv ghov	100.0	1	Scars	Ex	Non-prepared	Liniment
	M	HBV	W	jiam yang kong	71.4	15	Scars	Ex	Non-prepared	Liniment
Solanaceae										
<i>Solanum erianthum</i> D.Don	H	SK	W	ntoo zes qab	50.0	1	Wounds	Lf	Pounded	Poultice
Sterculiaceae										
<i>Helicteres elongata</i> Wall. ex Bojer	K	HST	W	tood trhun	25.0	1	Abscesses	Rt	Pulped	Liniment
Toricelliaceae										
<i>Toricellia angulata</i> Oliv.	H	MNP	D	ntsaws taub	43.3	13	Bruises	Lf	Cooked with chicken soup	Eaten as food
Trilliaceae										
<i>Paris polyphylla</i> Sm.	H	MNP	W	tshuaj theem	27.3	3	Bites (by snakes)	Rh	Pounded	Poultice

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Urticaceae										
<i>Boehmeria nivea</i> Gaudich.	H	KH	D	tsaaj	8.3	1	Abscesses	Rt	Pounded	Poultice
	H	MNP	D	tsaaj	33.3	3	Abscesses	Rt	Pounded	Poultice
	K	NP	D	tood pan	50.0	1	Abscesses	Rt	Pounded	Poultice
	M	HBY	D	doe	100.0	1	Abscesses	Rt	Pounded	Poultice
	M	HSN	D	doe	100.0	5	Abscesses	Rt	Pounded	Poultice
	M	STP	D	doe	100.0	2	Abscesses	Rt	Pounded	Poultice
<i>Elatostema repens</i> (Lour.) Hallier f. & H.Schroet.	H	SK	W	-	66.7	1	Abscesses	Lf	Pounded	Poultice
	H	SK	W	-	66.7	1	Abscesses	Lf	Pounded	Poultice
	M	HBY	W	piam thong mia	43.8	7	Bites (from bloodsuckers)	Lf	Heated/grated/ squeezed	Liniment
Violaceae										
<i>Viola curvistylis</i> Boissieu ex Gagnep.	H	MNP	W	tshuaj nqu	12.5	1	Abscesses	Lf	Pounded	Poultice
Vitaceae										
<i>Cayratia japonica</i> (Thunb.) Gagnep.	K	HP	W	tood la chiab	100.0	7	Abscesses	Lf	Pounded	Poultice
<i>Cissus discolor</i> Blume	H	MNP	W	-	20.0	1	Abscesses	Lf	Pounded	Poultice

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Cissus repens</i> Lam.	L	MNP2	W	mhue chaab	77.8	7	Abscesses	Wp	Pounded/heated	Poultice
	K	NP	W	krue som poon	75.0	6	Abscesses	Rt	Pounded	Poultice
	M	HBV	W	kang	100.0	2	Abscesses	Lf	Pounded	Poultice
	M	HSN	W	kang	100.0	1	Abscesses	Lf	Pounded/heated	Poultice
Zingiberaceae										
<i>Curcuma longa</i> L.	K	HP	D	ja krial moom	100.0	3	Bites (non-venomous)	Rh	Pounded	Poultice
<i>Hedychium flavum</i> Roxb.	H	MNP	D	-	100.0	1	Bruises	Rh	Pounded	Poultice
<i>Kaempferia parviflora</i> Wall.	H	MNP	D	ghav ntshaav	20.0	1	Bruises	Rh	cooked with chicken soup	Eaten as food
<i>Kaempferia rotunda</i> L.	H	KH	D	saab txhwm	11.8	2	Wounds	Rh	Pounded	Liniment
	H	MNP	D	saab txhwm	20.0	1	Bruises	Rh	cooked with chicken soup	Eaten as food
	H	MNP	D	saab txhwm	20.0	2	Wounds (Anti-bleeding)	Rh	Pounded	Poultice
	H	SK	D	saab txhwm	5.0	1	Wounds	Rh	Pounded	Poultice
	K	NP	D	-	100.0	1	Burns	Rh	Pounded	Liniment
L	TK	D	whaan ial	100.0	2	Burns/wounds	Rh	Pounded	Liniment	
M	HSN	D	fam ched doi	60.0	1	Wounds	Rh	Pounded	Liniment	

Table 41. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
	M	HSN	D	fam ched doi	60.0	2	Wounds (Anti-bleeding)	Rh	Pounded	Poultice

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
 Copyright© by Chiang Mai University
 All rights reserved

4.1.1.20 Medicines: Mental disorders

Use-reports related to the category of mental disorders were reported from all three villages of the Hmong and two villages of the Mien (Table 42). The Hmong village Khang Ho and the Mien village Huai Labaoya had the highest ICF value (1.00) due to the reports of single use for a single species by two informants in each village. Manee Pruek had the lowest ICF value (0.00), resulting from different uses reported for two different plant species. ICF value could not be calculated for Song Khwae and Huai Sanao as, for each village, there was only a single use reported for a single species from only one informant.

There were in total only three plants species in three families registered in this category (Figure 23), and, as such, the commonly represented plant families could not be determined. All three species were completely identified to species level. Of six use-reports, the frequently mentioned disorders were hyposomnia and shock with two use-reports (33.3%) for each.

Table 42. ICF values and number of plant families and species used to treat mental disorders in each village

Ethnic group	Village	# families	# species	#use-report	ICF value
Hmong	Khang Ho	1	1	2	1.00
Hmong	Manee Pruek	2	2	2	0.00
Hmong	Song Khwae	1	1	1	-
Mien	Huai Labaoya	1	1	2	1.00
Mien	Huai Sanao	1	1	1	-
Total		3	3		

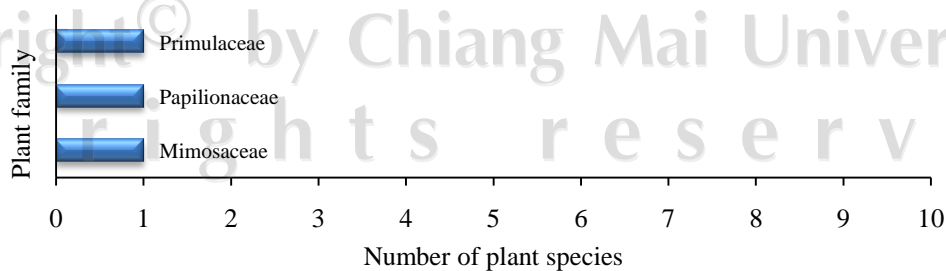


Figure 23 Number of plant species in each family used to treat mental disorders in each village

Table 43. Medicinal plants used to treat mental disorders by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Rout of Administration
Mimosaceae										
<i>Mimosa pudica</i> L.	H	MNP	W	tshuaj tsaaj mos	25.0	1	Insanity	Wp	Cooked with chicken	Eaten as food
	M	HBV	W	mian yob	12.5	2	Hyposomnia (Insomnia)	Wp	Cooked with chicken	Eaten as food
	M	HSN	W	mian yob	100.0	1	Hypersomnia	Wp	Cooked with chicken	Eaten as food
Papilionaceae										
<i>Erythrina</i> sp.	H	MNP	W	paaj ntsha	100.0	1	Hyposomnia (Insomnia)	Lf	Decoction	Potions
Primulaceae										
<i>Lysimachia christinae</i> Hance	H	KH	D	qua luag lab	16.7	2	Shock	Wp	Cooked with chicken	Eaten as food
	H	SK	D	qua luag lab	50.0	1	Shock	Wp	Cooked with chicken	Eaten as food

4.1.1.21 Medicines: Muscular-skeletal system disorders

Use-reports related to the category of muscular-skeletal system disorders were reported from all 12 villages. The villages Khang Ho, Song Khwae and Huai Satang had relatively low ICF values (Table 44).

In total, 164 plant species in 80 families were reported for this category (Figure 24). Of those, 142 were securely identified and six with some doubt to species, 15 to genus and one only to family level. The commonly represented plant families registered in this use-category were Acanthaceae (11 species; 6.7%), Asteraceae (9; 5.5%), Lamiaceae (8; 4.8%) and Zingiberaceae (7; 4.3%). Like plants registered in other medicinal use-categories, many species were only reported for treating muscular-skeletal system disorders, evidenced by the fidelity level of 100%. The frequently reported disorders were muscle pain (myalgia; 108 use-reports; 34.7%), arthralgia (52; 16.7%), fractures (52; 16.7%), and lumbago (40; 12.9%).

Table 44. ICF values and number of plant families and species used to treat muscular-skeletal system disorders in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Khang Ho	24	35	66	0.48
Hmong	Manee Pruek	24	32	105	0.70
Hmong	Song Khwae	26	39	70	0.45
Mien	Huai Labaoya	22	24	80	0.71
Mien	Huai Sanao	16	19	51	0.64
Mien	Santiphap	34	46	157	0.71
Khamu	Huai Pook	10	12	33	0.66
Khamu	Huai Satang	13	14	25	0.46
Khamu	Nam Pan	5	7	26	0.76
Lua	Joon	10	11	31	0.67
Lua	Manee Pruek 2	10	10	77	0.88
Lua	Toei Klang	11	14	44	0.70
Total		80	164		

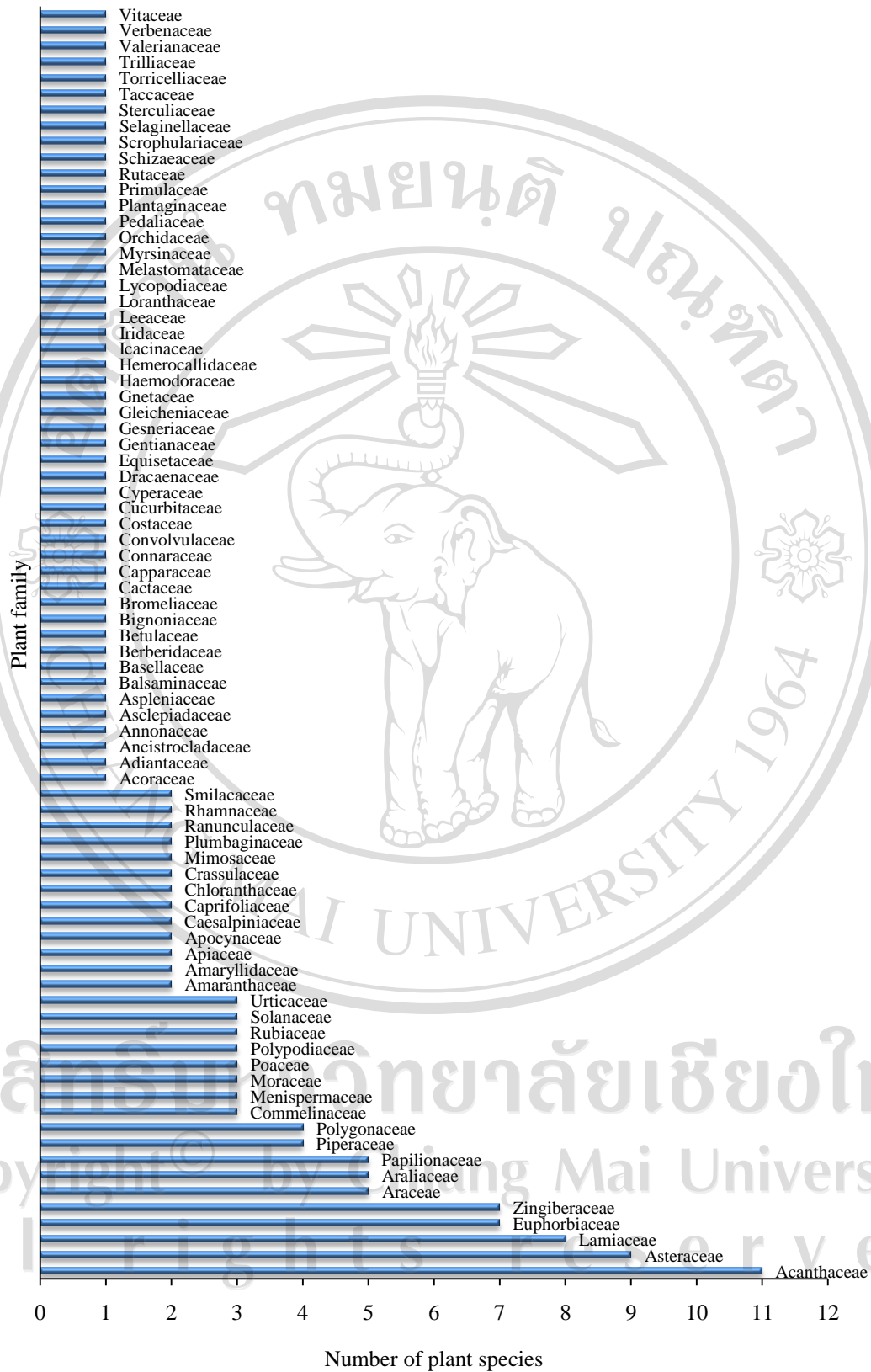


Figure 24 Number plant species in each family used to treat muscular-skeletal system disorders in each village

Table 45. Medicinal plants used to treat muscular-skeletal system disorders by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Acanthaceae										
<i>Acanthus montanus</i> T. Anderson	K	NP	D	-	100.0	1	Cramp	Lf	Decoction	Wash
<i>Barleria strigosa</i> Willd.	M	STP	W	dia yaam	100.0	3	Arthralgia	Wp	Decoction	Potions
<i>Dicliptera chinensis</i> Juss.	H	KH	D	tshuaj hov txob	33.3	1	Muscle pain (myalgia)	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	tshuaj hov txob	50.0	1	Lumbago	Lf	Cooked with chicken soup	Eaten as food
<i>Justicia gendarussa</i> Burm.f.	H	KH	D	nkaaj dlob	100.0	2	Fractures	Lf	Pounded	Poultice
	H	MNP	D	nkaaj dlob	100.0	2	Fractures	Lf	Pounded	Poultice
	H	MNP	D	nkaaj dlob	100.0	1	Fractures	Lf	Pounded	Poultice
	H	SK	D	nkaaj dlob	50.0	2	Fractures	Lf	Pounded	Poultice
	K	HP	D	la parod	100.0	6	Sprains (Strains)	Lf	Pounded	Poultice
	L	JN	D	yang tian	100.0	2	Muscle pain (myalgia)	Lf	Pounded	Poultice
	M	HBV	D	dia zung	100.0	3	Arthralgia/Fractures	Lf	Pounded	Poultice
	M	STP	D	dia zung	88.2	9	Fractures/Sprains (Strains)	Lf	Pounded	Poultice
M	STP	D	dia zung	88.2	2	Fractures/Arthralgia	Lf	Pounded	Poultice	

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Justicia ventricosa</i> Wall.	M	STP	D	dia zung	88.2	4	Arthralgia/Fractures	Lf	Pounded	Poultice
	H	SK	D		100.0	1	Arthralgia	Lf	Pounded	Poultice
<i>Phlogacanthus curviflorus</i> Nees	H	MNP	W	paaj lav	100.0	3	Sprains (Strains)	Lf	Pounded/mixed with alcohol	Poultice
	K	NP	W	satong	100.0	2	Cramp	Lf	Pounded	Poultice
<i>Pseuderanthemum palatiferum</i> (Nees) Radlk. ex Lindau	M	HSN	D	-	20.0	2	Fractures	Lf	Pounded	Poultice
<i>Rhinacanthus nasutus</i> Kuntze	H	SK	D	-	33.3	1	Muscle pain (myalgia)	Lf	Cooked with chicken soup	Eaten as food
<i>Sanchezia nobilis</i> Hook.f.	H	KH	D	paaj lav	100.0	3	Muscle pain (myalgia)	Ysh	Cooked with chicken soup	Eaten as food
	H	MNP	D	paaj lav	66.7	3	Fractures	Lf	Pounded	Poultice
	H	MNP	D	paaj lav	66.7	1	Lumbago	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	paaj lav	83.3	4	Lumbago	Lf	Pounded	Poultice
<i>Strobilanthes cusia</i> Kuntze	H	SK	D	paaj lav	83.3	1	Sprains (strains)	Lf	Pounded	Poultice
	H	SK	D	paaj lav	83.3	1	Sprains (strains)	Lf	Pounded	Poultice
	H	KH	D	nkaaj ntsuab	11.8	2	Fractures/Arthralgia	Lf	Pounded	Poultice

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	H	MNP	D	nkaaj ntsuab	30.8	4	Fractures/Sprains (Strains)	Lf	Pounded/heated/ mixed with alcohol	Poultice
	H	SK	D	nkaaj ntsuab	33.3	3	Fractures	Lf	Pounded	Poultice
	K	HP	D	hom	25.0	2	Muscle pains (myalgia)	Lf	Pounded	Poultice
	K	HST	D	satong	20.0	1	Muscle pains (myalgia)	Lf	Pounded/ decoction/ vaporized	Roasting
	K	NP	D	satong	27.3	2	Arthralgia	Lf	Pounded	Poultice
	K	NP	D	satong	27.3	1	Muscle pains (myalgia)	Lf	Pounded	Poultice
	M	HSN	D	yaam	11.1	1	Muscle pains (myalgia)	Lf	Pounded	Poultice
<i>Thunbergia laurifolia</i> Lindl.	M	STP	W	yae tam hei	5.9	1	Cramp	St	Decoction	Baths
Acoraceae										
<i>Acorus calamus</i> L.	K	HST	D	ja kler om	66.7	2	Muscle pain (myalgia)	Wp	Decoction	Potions
Adiantaceae										
<i>Adiantum philippense</i> L.	H	SK	W	suab	100.0	1	Muscle pain (myalgia)	Wp	Cooked with chicken soup	Eaten as food

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Amaranthaceae										
<i>Alternanthera bettzickiana</i> (Regel) G.Nicholson	H	KH	D	-	100.0	1	Lumbago	Lf	Cooked with chicken soup	Eaten as food
<i>Cyathula prostrata</i> Blume	H	SK	W	-	50.0	1	Muscle pain (myalgia)	Wp	Pounded	Poultice
Amaryllidaceae										
<i>Crinum amabile</i> Donn	H	KH	D	twm xam	100.0	2	Arthralgia	Lf	Cooked with chicken soup	Eaten as food
	H	KH	D	twm xam	100.0	8	Fractures	Lf	Pulped/heated	Plaster
	H	MNP	D	twm xam	14.3	1	Sprains (Strains)	Lf	Pulped/heated	Plaster
	H	SK	D	twm xam	66.7	1	Fractures	Lf	Pulped/heated	Plaster
	H	SK	D	twm xam	66.7	1	Sprains (Strains)	Lf	Pulped/heated	Plaster
	K	HP	D	la tub tim	100.0	7	Dislocations	Lf	Pulped/heated	Plaster
	L	JN	D	-	100.0	2	Arthralgia	Lf	Pulped/heated	Plaster
	M	HBY	D	dia zung	87.5	10	Fractures	Lf	Pulped/heated	Plaster
	M	HBY	D	dia zung	87.5	4	Arthralgia	Lf	Pulped/heated	Plaster
	M	HSN	D	dia zung	50.0	1	Arthralgia	Lf	Pulped/heated	Plaster
	M	STP	D	dia zung	100.0	3	Arthralgia	Lf	Pulped/heated	Plaster
	M	STP	D	dia zung	100.0	4	Fractures	Lf	Pulped/heated	Plaster
<i>Crinum asiaticum</i> L.	H	KH	D	twm xam	100.0	1	Fractures	Lf	Pulped/heated	Plaster

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	H	MNP	D	twm xam	50.0	1	Fractures	Lf	Pulped/heated	Plaster
	H	MNP	D	twm xam	50.0	1	Sprains (Strains)	Lf	Pulped/heated	Plaster
	H	SK	D	twm xam	100.0	2	Fractures	Lf	Pulped/heated	Plaster
	K	HP	D	la tub tim	100.0	1	Muscle pain (myalgia)	Lf	Pulped/heated	Plaster
	K	HST	D	-	100.0	1	Sprains (Strains)	Lf	Pulped/heated	Plaster
	L	JN	D	-	75.0	3	Muscle pain (myalgia)	Lf	Pulped/heated	Plaster
	M	HSN	D	dia zung	100.0	2	Arthralgia/Fractures	Lf	Pulped/heated	Plaster
	M	HSN	D	dia zung	100.0	3	Fractures	Lf	Pulped/heated	Plaster
Ancistrocladaceae										
<i>Ancistrocladus tectorius</i> (Lour.) Merr.	M	STP	W	jai mon dia	53.8	7	Lumbago	Un	Decoction	Baths
Annonaceae										
<i>Goniothalamus laoticus</i> (Finet & Gagnep.) Bân	L	JN	W	lum pa noi	100.0	3	Muscle pain (myalgia)	Rt	Decoction	Potions
Apiaceae										
Apiaceae sp.2	H	MNP	D	tshab xqoob	50.0	1	Lumbago	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	tshab xqoob	75.0	3	Muscle pain (myalgia)	Lf/Rt	Mixed with alcohol	Potions

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Hydrocotyle sibthorpioides</i> Lam.	H	KH	D	guav hnug qub	100.0	1	Chest discomfort (Chest pain)	Lf	Finely chopped/ cooked with eggs	Eaten as food
	H	KH	D	guav hnug qub	100.0	1	Muscle pain (myalgia)	Lf	Finely chopped/ cooked with eggs	Eaten as food
Apocynaceae										
<i>Aganosma marginata</i> (Roxb.) G.Don	M	HSN	W	ngong jong hei	28.6	2	Lumbago	Un	Decoction	Potions
<i>Tabernaemontana pandacaqui</i> Poir.	H	MNP	W	kaum taw qab	25.0	1	Lumbago	Lf	Pounded/heated	Hot bed
	L	MNP2	W	lum ode yade	100.0	3	Muscle pains (myalgia)/ Arthralgia	Lf	Pounded/heated	Poultice
Araceae										
<i>Alocasia cucullata</i> (Loureiro) G.Don	H	MNP	D	teeb qus	33.3	1	Muscle pain (myalgia)	Pt	Pulped/heated	Plaster
	H	SK	D	teeb ntsuab/ teeb qus	25.0	1	Arthralgia	Pt	Pulped/heated	Plaster
<i>Monstera</i> sp.	H	MNP	W	-	100.0	1	Muscle pain (myalgia)	Lf	Pounded	Poultice

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Pothos chinensis</i> (Raf.) Merr.	H	MNP	W	-	100.0	2	Cramp	Pt	Pounded/heated	Poultice
	H	MNP	W	-	100.0	1	Arthralgia	Rt	Decoction	Potions
	H	SK	W	koj ntsuag neeg	33.3	1	Muscle pain (myalgia)	Lf	Decoction	Potions
	H	SK	W	koj ntsuag neeg	33.3	1	Fractures/Sprains (Strains)	St	Pounded	Poultice
	L	MNP2	W	lum pu wa	100.0	3	Arthralgia	Wp	Decoction	Potions
<i>Pothos scandens</i> L.	L	TK	W	khroa	100.0	1	Muscle pain (myalgia)	St	Decoction	Lotions
	H	KH	W	koj ntsuag neeg	75.0	3	Cramp	Wp	Decoction	Potions
<i>Rhaphidophora</i> sp.	H	SK	W	-	100.0	1	Fractures	Lf	Pounded/heated	Poultice
Araliaceae										
<i>Macropanax</i> cf. <i>dispermus</i> Kuntze	M	STP	W	ou ja pee	100.0	2	Muscle pain (myalgia)	Un	Decoction	Baths
<i>Polyscias fruticosa</i> Harms	M	STP	W	ou ja pee	100.0	2	Arthralgia	Un	Decoction	Potions
	H	SK	D	-	100.0	1	Arthralgia	Lf	Pounded/heated	Poultice
<i>Schefflera</i> sp.1	H	MNP	D	-	75.0	3	Sprains (Strains)/ Gouty arthritis	Lf	Pounded/heated/ mixed with alcohol	Poultice

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Schefflera</i> sp.2	M	HSN	D	ou ja pee	25.0	3	Muscle pains (myalgia)	Un	Decoction	Baths
<i>Trevesia palmata</i> Vis.	M	HSN	W	show fim	100.0	3	Muscle pain (myalgia)	Rt	Decoction	Baths
Arecaceae										
<i>Calamus</i> sp.	M	HBY	D	dang wei	11.1	1	Muscle pain (myalgia)	Rt	Decoction	Potions
Asclepiadaceae										
<i>Dischidia nummularia</i> R.Br.	M	HBY	D	-	100.0	1	Fractures	Lf	Pounded	Poultice
Aspleniaceae										
<i>Asplenium nidus</i> L.	H	KH	W	suab	100.0	2	Lumbago	Lf	Pulped	Plaster
Asteraceae										
<i>Artemisia verlotiorum</i> Lamotte	H	KH	D	suv ntswm	10.0	2	Arthralgia	Lf	Pulped/heated	Plaster
<i>Bidens pilosa</i> L.	M	STP	W	toom yae	100.0	1	Cramp	Wp	Decoction	Bath
<i>Blumea balsamifera</i> DC.	H	KH	W	xaab yeeb qus	5.6	1	Muscle pain (myalgia)	Lf	Pulped/heated	Poultice
	L	MNP2	W	lum boi	100.0	7	Arthralgia/Dislocations	Lf	Pulped/heated	Poultice
	M	STP	W	ma im bua	30.0	3	Muscle pain (myalgia)	Un	Decoction	Bath
<i>Blumea lanceolaria</i> (Roxb.) Druce	H	KH	D	ntiv zoov	20.0	1	Muscle pain (myalgia)	Lf	Decoction	Potions
	H	MNP	W	-	100.0	2	Sciatica	Wp	Decoction	Potions

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Eclipta prostrata</i> (L.) L.	K	NP	W	hom kiao	100.0	1	Cramp	Lf	Pounded with <i>Strobilanthes cusia</i>	Poultice
<i>Elephantopus scaber</i> L.	L	TK	W	doe mai ru lom	100.0	3	Muscle pain (myalgia)	Wp	Decoction	Potions
<i>Gynura nepalensis</i> DC.	H	SK	D	tshuaj rog ntsuab	20.0	3	Lumbago	Lf	Cooked with chicken soup	Eaten as food
<i>Pseudelephantopus spicatus</i> (Juss. ex Aubl.) C.F.Baker	L	TK	W	-	100.0	1	Muscle pain (myalgia)	Wp	Decoction	Potions
<i>Vernonia parishii</i> Hook.f.	M	HBV	W	jai mon dia	100.0	2	Lumbago	Rt	Decoction	Potions
Balsaminaceae										
<i>Impatiens balsamina</i> L.	H	KH	D	paaj nti ntuav	15.4	2	Lumbago	Wp	Decoction	Potions
Basellaceae										
<i>Anredera cordifolia</i> (Ten.) Steenis	H	KH	D	saab txhim maab	5.3	1	Muscle pain (myalgia)	Bbl	Cooked with chicken soup	Eaten as food
	M	HSN	D	dia joon	12.5	1	Arthralgia	Lf	Pounded	Poultice
Berberidaceae										
<i>Mahonia siamensis</i> Takeda	H	MNP	W	-	71.4	1	Fractures	Lf	Pounded	Poultice

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	H	MNP	W	-	71.4	3	Ligament sprains	Lf	Pounded	Poultice
	H	MNP	W	-	71.4	1	Sciatica	St	Decoction	Potions
Betulaceae										
<i>Betula alnoides</i> Buch.-Ham.	H	MNP	W	ntsaws ntsuab	100.0	1	Muscle strengthening	Bk	Mixed with alcohol	Potions
	L	MNP2	W	lum zein	100.0	9	Muscle strengthening	Bk	Decoction	Potions
	L	TK	W	lum zein	83.3	5	Muscle strengthening	Bk	Mixed with alcohol	Potions
Bignoniaceae										
<i>Pauldopia ghorta</i> (Buch.-Ham. ex G.Don) Steenis	H	MNP	W	paaj ab miv	100.0	1	Fractures/Arthralgia	Lf	Pounded/mixed with alcohol/heated	Poultice
Bromeliaceae										
<i>Ananas comosus</i> (L.) Merr.	M	HBV	D	lei yow	100.0	1	Lumbago	Fr	Non-prepared	Eaten
Cactaceae										
<i>Opuntia</i> sp.	M	HBV	D	-	50.0	1	Arthralgia	Lf	Heated	Plaster
Caesalpinaceae										
<i>Bauhinia</i> cf. <i>sirindhorniae</i> K.Larsen & S.S.Larsen	M	STP	W	bin diao hei	100.0	9	Muscle pain (myalgia)	St	Decoction	Bath

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Caesalpinia sappan</i> L.	K	HST	D	faang	44.4	4	Muscle pain (myalgia)	St	Decoction	Potions
Capparaceae										
<i>Capparis cantoniensis</i> Lour.	M	STP	W	hei im	100.0	2	Muscle pain (myalgia)	Un	Decoction	Baths
Caprifoliaceae										
<i>Sambucus javanica</i> Reinw. ex Bl.	M	STP	W	toom yae mia	93.3	9	Fractures	Lf	Pounded/heated	Poultice
	M	STP	W	toom yae mia	93.3	5	Muscle pain (myalgia)	St	Decoction	Baths
	L	MNP2	W	lum plaek kan kruak	100.0	9	Muscle pain (myalgia)/Arthralgia	Lf	Pounded/heated	Poultice
	L	TK	W	bri ial	100.0	2	Lumbago	Lf	Heated/spread	Hot bed
	L	TK	W	bri ial	100.0	4	Muscle pain (myalgia)/Arthralgia	Lf	Pounded	Poultice
	M	HBY	W	toom yae mia	40.0	5	Fractures	Lf	Pounded	Poultice
	M	HBY	W	toom yae mia	40.0	4	Arthralgia	Lf	Pounded/mixed with alcohol	Poultice
	M	HBY	W	toom yae mia	40.0	1	Muscle pain (myalgia)	Un	Decoction	Baths

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Sambucus simpsonii</i> Rehder	H	MNP	W	mos hav qus	100.0	1	Fractures	Lf	Pounded	Poultice
	H	MNP	W	mos hav qus	100.0	1	Sprains (Strains)	Lf	Pounded	Poultice
	H	MNP	D	mos hav nyeg	100.0	9	Sprains (Strains)	Lf	Pounded	Poultice
	H	KH	D	mos hav nyeg	100.0	5	Fractures	Lf	Cooked with chicken soup	Eaten as food
	H	KH	D	mos hav nyeg	100.0	1	Muscle pain (myalgia)	Un	Decoction	Baths
	H	MNP	D	mos hav nyeg	100.0	1	Muscle pain (myalgia)/Arthralgia	Lf	Pounded	Poultice
	H	MNP	D	mos hav nyeg	100.0	2	Sprains (strains)	Lf	Pounded	Poultice
	H	SK	D	mos hav nyeg	77.8	7	Fractures/Arthralgia	Lf	Pounded	Poultice
	M	HSN	D	toom yae	76.9	10	Fractures/Arthralgia	Lf	Pounded/ mixed with alcohol/heated	Poultice

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Chloranthaceae										
<i>Chloranthus erectus</i> (Buch.-Ham.) Verdc.	H	SK	W	ntub yag	28.6	2	Arthralgia	Lf	Pounded	Poultice
	H	MNP	W	ntub yag	33.3	3	Fractures	Lf	Pounded	Poultice
	H	MNP	W	ntub yag	33.3	6	Muscle pain (myalgia)	Rt/St	Decoction	Potions
	L	TK	W	yang geid	50.0	5	Lumbago	Rt	Decoction with rice	Potions
<i>Chloranthus nervosus</i> Collett & Hemsl.	L	TK	D	pong jee	100.0	2	Muscle fatigue		Decoction	Wash
Commelinaceae										
<i>Callisia repens</i> L.	H	KH	D		50.0	2	Lumbago	Wp	Decoction	Potions
<i>Pollia secundiflora</i> (Blume) Bakh.f.	M	STP	W	tom sob plaan	100.0	1	Muscle pain (myalgia)	Wp	Decoction	Baths
<i>Tradescantia zebrina</i> Bosse	M	STP	D	sob plaan zi	25.0	2	Muscle pain (myalgia)	Wp	Mixed with alcohol	Potions
Connaraceae										
<i>Connarus semidecandrus</i> Jack	M	HBV	W	bob jei hei	30.8	4	Muscle pain (myalgia)/ Muscle strengthening		Decoction	Potions

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Convolvulaceae										
<i>Cuscuta chinensis</i> Lam.	H	SK	W	quab ntswg tshem	100.0	1	Arthralgia	Wp	Finely chopped/ cooked with eggs	Eaten as food
	H	MNP	W	quab ntswg tshem	50.0	1	Arthralgia	St	Pulped	Poultice
Costaceae										
<i>Costus speciosus</i> (J. Koenig) Sm.	H	KH	W	qus nqeej	12.5	1	Muscle pain (myalgia)	Rt	Decoction	Potions
	M	HSN	W	ching kuan diang	100.0	6	Muscle pain (myalgia)	Un	Decoction	Baths
	M	STP	W	ching kuan diang	10.0	1	Cramp	Un	Decoction	Baths
Crassulaceae										
<i>Kalanchoe pinnata</i> (Lam.) Pers.	H	KH	D	nplooj tuaj kaus	15.4	2	Muscle pain (myalgia)	Lf	Pounded	Poultice
	H	MNP	D	nplooj tuaj kaus	25.0	1	Fractures	Lf	Pounded	Poultice

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	H	SK	D	nplooj tuaj kaus	20.0	1	Cramp	Lf	Pounded	Poultice
	H	SK	D	nplooj tuaj kaus	20.0	1	Fractures	Lf	Pounded	Poultice
	K	NP	D	tood la rik	100.0	9	Sprains (Strains)	Lf	Pounded/heated	Poultice
	M	HSN	D	ta pa zue	38.5	5	Sprains (Strains)/Arthralgia	Lf	Pounded/heated	Poultice
	K	HST	D	tood la rik	66.7	2	Sprains (Strains)	Lf	Pounded	Poultice
	K	NP	D	tood la rik	100.0	1	Sprains (Strains)	Lf	Pounded/heated	Poultice
<i>Sedum cf. sarmentosum</i> Bunge	H	KH	D	nplai zeb	8.3	1	Muscle pain (myalgia)	Lf	Finely chopped/ cooked with eggs	Eaten as food
Cucurbitaceae										
<i>Hodgsonia heteroclita</i> (Roxb.) Hook.f. & Thomson	H	SK	W	txwv qab rog	100.0	1	Lumbago	Rt	Decoction	Potions
Cyperaceae										
<i>Carex baccans</i> Nees	M	STP	W	low	66.7	1	Muscle pain (myalgia)	Wp	Decoction	Wash
	M	STP	W	low	66.7	1	Arthralgia	Wp	Decoction	Potions

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Dracaenaceae										
<i>Dracaena loureiri</i> Gagnep.	H	KH	D	-	100.0	1	Muscle pain (myalgia)	Lf	Decoction	Potions
Equisetaceae										
<i>Equisetum debile</i> Roxb. ex Vaucher	M	HSN	W	pae tob	100.0	1	Lumbago	Wp	Decoction	Potions
Euphorbiaceae										
<i>Codiaeum variegatum</i> Blume	H	KH	D	-	50.0	1	Arthralgia	Lf	Pounded/heated	Poultice
<i>Croton roxburghii</i> N.P. Balakr.	K	HP	W	tood plao	14.3	3	Muscle pain (myalgia)	Lf	Pounded/heated	Plaster
	L	JN	W	lum plao	13.3	2	Muscle pain (myalgia)	St	Decoction	Potions
	M	HBY	W	ta doe pae	5.9	1	Cramp	Un	Decoction	Baths
<i>Jatropha gossypifolia</i> L.	H	SK	D	thwj qwg lab	100.0	1	Fractures	Lf	Pounded	Poultice
<i>Jatropha multifida</i> L.	M	HBY	D	-	28.6	2	Arthralgia	Lf	Pounded	Poultice
<i>Mallotus apelta</i> Müll.Arg.	M	STP	W	ou ja pee	100.0	1	Muscle pain (myalgia)	Un	Decoction	Baths
<i>Phyllanthus reticulatus</i> Poir.	M	STP	W	hia dia zung	100.0	4	Fractures	Lf	Pounded/heated	Poultice
<i>Ricinus communis</i> L.	H	SK	D	taw dlaav lab	50.0	1	Sciatica	Lf	Heated	Plaster

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Gentianaceae										
<i>Canscora andrographioides</i> Griff. ex C.B.Clarke	L	TK	W	kong saden	100.0	5	Muscle pain (myalgia)/Muscle strengthening	Wp	Mixed with alcohol	Potions
Gesneriaceae										
<i>Didymocarpus</i> sp.	L	TK	W	lai ken	100.0	1	Arthralgia	Lf	Pounded/heated	Poultice
Gleicheniaceae										
<i>Dicranopteris linearis</i> (Burm.f.) Underw.	H	MNP	W	tshuaj kaav thooj	100.0	3	Muscle fatigue	Lf	Decoction	Wash
Gnetaceae										
<i>Gnetum montanum</i> Markgr.	M	HBV	W	hei muai	25.0	1	Ligament sprains	Rt	Decoction	Potions
	M	HSN	W	hei muai	75.0	3	Muscle pain (myalgia)	Un	Decoction	Baths
	M	STP	W	hei muai	100.0	2	Muscle pain (myalgia)	Un	Decoction	Baths
Haemodoraceae										
<i>Xiphidium caeruleum</i> Aubl.	H	KH	D	tw ntses luj	5.3	1	Lumbago	Lf	Cooked with chicken soup	Eaten as food
Hemerocallidaceae										
<i>Hemerocallis lilioasphodelus</i> L.	H	SK	D	tw ntses miv	25.0	1	Muscle pain (myalgia)	Lf	Cooked with chicken soup	Eaten as food

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Icacinaceae										
<i>Gonocaryum lobbianum</i> (Miers) Kurz	M	HBV	W	ja king yung	11.1	1	Muscle pain (myalgia)	St	Decoction	Potions
	M	STP	W	jian tai za	40.0	2	Muscle pain (myalgia)	Un	Decoction	Baths
Iridaceae										
<i>Eleutherine americana</i> Merr. ex K.Heyne	L	MNP2	D	som zo	22.2	2	Lumbago	Blb	Mixed with alcohol	Potions
	K	HST	D	ja krial ha	50.0	1	Muscle strengthening	Blb	Mixed with alcohol	Potions
	M	STP	D	nom jang	100.0	3	Chest discomfort (Chest pain)	Blb	Mixed with alcohol	Potions
Lamiaceae										
<i>Ajuga cf. reptans</i> L.	H	SK	D	tshuaj ab	66.7	1	Muscle pain (myalgia)	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	tshuaj ab	66.7	1	Lumbago	Lf	Finely chopped/ cooked with eggs	Eaten as food

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Ajuga</i> sp.	H	KH	D	tshuaj pog ntxoov/ tshuaj ab	100.0	1	Muscle pain (myalgia)	Lf	Cooked with chicken soup	Eaten as food
	H	MNP	D	tshuaj pog ntxoov/ tshuaj ab	83.3	3	Muscle pain (myalgia)	Lf	Finely chopped/ cooked with eggs	Eaten as food
	H	MNP	D	tshuaj pog ntxoov/ tshuaj ab	83.3	4	Lumbago	Rt	Decoction	Potions
	H	MNP	D	tshuaj pog ntxoov/tshu aj ab	83.3	3	Dislocations	Wp	Pulped/mixed with alcohol	Poultice
	H	SK	D	tshuaj pog ntxoov/tshu aj ab	75.0	3	Muscle pain (myalgia)	LF	Cooked with chicken soup	Eaten as food
<i>Gomphostemma</i> sp.	M	HSN	W	-	100.0	1	Muscle pain (myalgia)/Arthralgia	Lf	Pounded	Poultice
<i>Clerodendrum viscosum</i> Vent.	H	KH	W	ntshaub tshws	100.0	1	Fractures	Lf	Pounded	Poultice

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	K	HST	W	tood sa prao	100.0	1	Muscle pain (myalgia)	Lf	Pounded/ decoction/ vaporized	Roasting
<i>Glechoma hederacea</i> L.	H	KH	D	gua luag nyeg/lauj vaag nyeg	50.0	1	Chest discomfort (Chest pain)	Lf	Cooked with chicken soup	Eaten as food
<i>Hyptis capitata</i> Jacq.	M	STP	W	hia jang yung	100.0	1	Cramp	Wp	Decoction	Baths
<i>Orthosiphon aristatus</i> (Blume) Miq.	H	SK	D	-	66.7	4	Lumbago	Lf	Cooked with chicken soup	Eaten as food
	M	STP	D	jang zi mia/ jian ku ja	20.0	1	Arthralgia	Lf	Pounded	Poultice
<i>Perilla frutescens</i> (L.) Britton	H	MNP	D	naav lab	66.7	2	Muscle pain (myalgia)	Lf	Pulped/ fried in oil	Massage
Leeaceae										
<i>Leea indica</i> (Burm.f.) Merr.	M	HBY	W	toom yae ngang	20.0	1	Muscle pain (myalgia)	St	Decoction	Baths
	H	KH	W	qab ib	25.0	1	Muscle pain (myalgia)	St	Decoction	Potions

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Loranthaceae										
<i>cf. Scurrula parasitica</i> L.	L	JN	W	diang zang za	50.0	1	Chest discomfort (Chest pain)	Wp	Decoction	Potions
Lycopodiaceae										
<i>Lycopodium cernuum</i> L.	H	KH	W	suab	40.0	2	Chest discomfort (Chest pain)	Un	Finely chopped/ cooked with eggs	Eaten as food
Melastomataceae										
<i>Dissochaeta stipularis</i> (Blume) Backer ex Clausen	M	STP	W	hia chao	75.0	3	Cramp	St	Decoction	Baths
Menispermaceae										
<i>Arcangelisia flava</i> Merr.	M	STP	W	dia jan hob	75.0	3	Sprains (Strains)	Un	Decoction	Potions
<i>Parabaena sagittata</i> Miers ex Hook.f. & Thomson	K	HP	W	la phak nung	100.0	2	Muscle pain (myalgia)	St	Decoction	Potions
<i>Pericampylus</i> sp.	M	STP	W	-	100.0	3	Muscle strengthening	St	Mixed with alcohol	Potions
Mimosaceae										
<i>Entada rheedei</i> Spreng.	M	STP	W	tung hob hei	100.0	3	Muscle pain (myalgia)	St	Decoction	Baths
<i>Mimosa pudica</i> L.	K	HP	W	la pun yob	100.0	2	Lumbago	Wp	Decoction	Potions

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Moraceae										
<i>Ficus benjamina</i> L.	H	SK	W	faaj khum	100.0	1	Fractures	Lf	Pounded/ wrapped with fabric	Plaster
<i>Ficus hispida</i> L.f.	K	HP	W	-	100.0	2	Muscle pain (myalgia)	Lf	Pounded	Poutice
<i>Ficus subulata</i> Blume	H	SK	W	-	66.7	1	Fractures	Lf	Pounded	Poutice
	H	SK	W	-	66.7	1	Lumbago	Lf	Pounded	Poutice
Myrsinaceae										
<i>Ardisia amherstiana</i> A.DC.	K	HP	W	klong mud lein	12.5	1	Muscle pain (myalgia)	Lf	Pounded/heated	Poultice
	M	STP	W	tong long	100.0	1	Cramp	Un	Decoction	Bath
Orchidaceae										
<i>Cymbidium bicolor</i> Lindl.	M	STP	D	-	100.0	2	Muscle pain (myalgia)	Lf	Decoction	Baths
Papilionaceae										
<i>Butea cf. superba</i> Roxb.	L	MNP2	W	mhue doo	28.6	4	Muscle pain (myalgia)	St	Decoction	Potions
<i>Erythrina subumbrans</i> Merr.	M	HSN	W	diang kim	100.0	1	Fractures	Bk	Pounded	Poultice
<i>Flemingia macrophylla</i> (Willd.) Kuntze ex Prain	M	STP	W	yaam jua mia	66.7	4	Muscle pain (myalgia)/ Arthralgia	Wp	Decoction	Baths

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Millettia extensa</i> Benth. ex Baker	K	HST	W	mhue moo traak	100.0	2	Muscle strengthening	Rt	Decoction	Potions
	K	HST	W	mhue moo traak	100.0	3	Muscle strengthening	St	Decoction	Potions
	K	NP	W	mhue moo traak	100.0	7	Muscle strengthening	St	Decoction	Potions
	L	JN	W	mhue ome bua	100.0	9	Muscle strengthening	St	Decoction	Potions
	L	MNP2	W	mhue ome bua	91.7	11	Muscle strengthening/Muscle pain (myalgia)	St	Decoction	Potions
	L	TK	W	mhue ome bua	83.3	5	Muscle strengthening/Muscle pain (myalgia)	St	Mixed with alcohol	Potions
<i>Phylacium bracteosum</i> Benn.	M	STP	W	ngong uan hei	100.0	5	Muscle pain (myalgia)	St	Decoction	Potions
	L	TK	W	mhue lub lib	60.0	3	Muscle pain (myalgia)	Un	Decoction	Potions
	L	MNP2	W	mhue lub lib	61.5	8	Lumbago	Un	Decoction	Potions

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Pedaliaceae										
<i>Sesamum indicum</i> L.	K	HP	D	la nga hiang	100.0	1	Muscle pain (myalgia)	Sd	Pounded with <i>Plantago major</i>	Poultice
Piperaceae										
<i>Piper boehmeriifolium</i> Wall.	H	MNP	W	maab saw nyiaj	9.5	1	Lumbago	Rt	Decoction	Potions
	H	MNP	W	maab saw nyiaj	9.5	1	Muscle pain (myalgia)	Lf	Pounded	Poultice
<i>Piper chaba</i> Hunter	K	HST	D	prik noi	100.0	1	Lumbago	Fr	Decoction	Potions
<i>Piper interruptum</i> Opiz	H	SK	D	maab hov txhob	100.0	1	Arthralgia/Fractures	Lf	Pounded/ mixed with alcohol/heated	Poultice
	M	STP	W	jae lao	100.0	1	Muscle pain (myalgia)/ Arthralgia	St	Mixed with alcohol	Potions
Plantaginaceae										
<i>Plantago major</i> L.	K	HP	D	en yued	100.0	3	Muscle pain (myalgia)	Wp	Pounded/heated	Poultice
	K	HST	D	en yued	100.0	2	Muscle pain (myalgia)	Lf	Pounded/ decoction/ vaporized	Roasting

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	K	NP	D	en yued	100.0	2	Sprains (Strains)	Lf	Decoction	Baths
	L	JN	D	ya en yued	100.0	5	Muscle pain (myalgia)	Wp/ Lf	Pounded	Massage
	L	TK	W	ya yang yued	100.0	2	Ligament sprains	Lf	Pounded	Poultice
	L	TK	W	ya yang yued	100.0	1	Cramp	Wp	Pounded	Massage
Plumbaginaceae										
<i>Plumbago indica</i> L.	K	HST	D	pid piu dang	100.0	1	Lumbago	Rt/Lf	Decoction	Potions
<i>Plumbago zeylanica</i> L.	H	SK	W	kuab ib maab	8.3	1	Muscle strengthening	Rt/St	Mixed with alcohol	Potions
	M	HBV	D	pae lin	80.0	8	Fractures	Lf	Pounded	Poultice
	M	STP	W	pae lin	90.9	8	Arthralgia/ Sprains (Strains)	Lf	Decoction	Wash
	M	STP	W	pae lin	90.9	2	Muscle pain (myalgia)	Lf	Pounded/heated	Poultice
Poaceae										
<i>Coix lachryma-jobi</i> L.	M	STP	W	noe a joaw	42.9	3	Muscle pain (myalgia)	Wp	Decoction	Baths
<i>Cymbopogon citratus</i> Stapf	M	HBV	D	jaow kan	100.0	3	Fractures	Lf	Pounded with <i>Crinum amabile</i>	Poultice

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Imperata cylindrica</i> (L.) P. Beauv.	M	HSN	D	jaow kan	100.0	1	Fractures	Lf	Pulped	Poultice
	H	SK	W	-	100.0	1	Muscle fatigue	Rt	Decoction	Baths
Polygonaceae										
<i>Fallopia forbesii</i> (Hance) Yonekura & H. Ohashi	M	HBV	D	pong lin	13.3	1	Arthralgia	Lf	Pounded	Liniment
	M	HBV	D	pong lin	13.3	1	Lumbago	Lf/Rt	Pounded/mixed with alcohol	Potions
<i>Polygonum orientale</i> L.	M	HBV	D	-	100.0	2	Muscle pain (myalgia)	Lf	Pounded/heated	Poultice
<i>Polygonum chinense</i> L.	H	SK	D	qaub guav yeeb	100.0	1	Lumbago	Lf	Cooked with chicken soup	Eaten as food
<i>Rumex crispus</i> L.	H	SK	D	tuam faaj	50.0	1	Arthralgia	Lf	Cooked with chicken soup	Eaten as food
Polypodiaceae										
<i>Drynaria quercifolia</i> (L.) J.Sm.	H	MNP	W	suab ntoo	100.0	1	Fractures	St	Pounded	Poultice
<i>Phymatosorus scolopendria</i> (Burm.f.) Pic. Serm.	M	STP	W	yai	33.3	1	Muscle pain (myalgia)	Lf	Decoction	Baths

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Platycerium</i> sp.	H	KH	D	ncua dlaav	33.3	3	Fractures	Lf	Pounded/mixed with alcohol	Poultice
	H	SK	D	ncua dlaav	100.0	1	Muscle pain (myalgia)	Lf	Decoction	Potions
	M	HSN	D	dom jang puang	20.0	1	Fractures	Lf	Pounded	Poultice
	M	STP	D	dom jang puang	25.0	1	Cramp	Lf	Decoction	Potions
Primulaceae										
<i>Lysimachia christinae</i> Hance	H	SK	D	qua luag lab	50.0	1	Chest discomfort (Chest pain)	Wp	Cooked with chicken soup	Eaten as food
Ranunculaceae										
<i>Aconitum</i> sp.	H	MNP	D	kuab ib	66.7	2	Muscle pain (myalgia)	Rt	Mixed with alcohol	Potions
<i>Thalictrum foliolosum</i> DC.	H	MNP	W	-	10.0	1	Lumbago	Rt	Decoction	Potions
Rhamnaceae										
<i>Gouania leptostachya</i> DC.	M	HSN	W	puang dia yao	60.0	3	Ligament sprains	Un	Decoction	Potions
.	M	STP	W	puang dia yao	50.0	7	Cramp	Un	Decoction	Baths

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Zizyphus oenopia</i> (L.) Mill.	M	STP	W	ta kang fo	100.0	1	Arthralgia	Un	Decoction	Potions
Rubiaceae										
<i>Morinda angustifolia</i> Roxb.	H	KH	W	tshuaj twm qus	50.0	1	Muscle pain (myalgia)	Rt	Cooked with chicken soup	Eaten as food
<i>Rubia crassipes</i> Coll.& Hemsl.	L	MNP2	W	ja kan zo	30.8	4	Muscle strengthening	Wp	Decoction	Potions
<i>Uncaria</i> sp.	H	MNP	W	maab qub yaag	57.1	3	Sprains (sprains)	Lf	Pounded/heated	Poultice
	H	MNP	W	maab qub yaag	57.1	1	Arthralgia	Rt	Decoction	Potions
Rutaceae										
<i>Euodia</i> sp.	H	KH	W	-	100.0	1	Fractures	Lf	Pounded/heated	Poultice
Schizaeaceae										
<i>Lygodium polystachyum</i> Wall. ex Moore	L	JN	W	ba zone zo	100.0	2	Muscle pain (myalgia)	Un	Decoction	Potions
	M	STP	W	pa miao nom hoon	100.0	3	Muscle pain (myalgia)	Un	Decoction	Baths

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Scrophulariaceae										
<i>Limnophila rugosa</i> Merr.	H	SK	D	siv fwj xyaab	100.0	1	Chest discomfort (Chest pain)	Lf	Cooked with chicken soup	Eaten as food
Selaginellaceae										
<i>Selaginella wilddenowii</i> (Desv. ex Poir.) Baker	M	HBY	W	puang dia	4.8	1	Cramp	Wp	Decoction	Baths
	M	STP	W	ab kong zing	13.3	2	Muscle pain (myalgia)	Wp	Decoction	Wash
Smilacaceae										
<i>Smilax lanceifolia</i> Roxb.	L	JN	W	mhue kwai yen	100.0	1	Muscle strengthening	Rt	Mixed with alcohol	Potions
	L	MNP2	W	mhue kwai yen	100.0	11	Muscle strengthening/ Muscle pain (myalgia)	Rh	Mixed with alcohol	Potions
	L	TK	W	mhue kwai yen	66.7	2	Muscle strengthening	Rh	Mixed with alcohol	Potions
<i>Smilax ovalifolia</i> Roxb.	M	HBY	W	jiam yang kong	19.0	1	Muscle pain (myalgia)	Rt	Decoction	Potions
	M	HBY	W	jiam yang kong	19.0	2	Arthralgia	Rt	Decoction	Potions

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	M	HBY	W	jiam yang kong	19.0	1	Cramp	St	Decoction	Potions
Solanaceae										
<i>Solanum erianthum</i> D.Don	M	STP	W	tin hoong ja	40.0	2	Muscle pain (myalgia)	St	Decoction	Baths
<i>Solanum indicum</i> L.	L	MNP2	D	plae tol zung	50.0	3	Fractures	Fr	Pounded	Poultice
<i>Solanum spirale</i> Roxb.	M	HBY	D	jian dia	20.0	1	Sciatica	Lf	Pounded	Poultice
Sterculiaceae										
<i>Byttneria andamanensis</i> Kurz	M	STP	W	jia yoo hei	100.0	4	Muscle pain (myalgia)	Un	Decoction	Baths
Taccaceae										
<i>Tacca chantrieri</i> André	H	MNP	W	nplooj qhwv yeeb	50.0	1	Gouty arthritis	Rt	Decoction	Potions
	K	HST	W	la niab lein	40.0	2	Muscle pains (myalgia)	Rt	Decoction	Potions
	L	JN	W	tu tak	33.3	1	Lumbago	Rh	Decoction	Potions
	M	HBY	W	sun ta wang	71.4	10	Lumbago	Rh	Mixed with alcohol	Potions
	M	STP	W	sun ta wang	62.5	8	Muscle strengthening	Rt	Mixed with alcohol	Potions
	M	STP	W	sun ta wang	62.5	2	Muscle pains (myalgia)	Wp	Decoction	Baths

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Toricelliaceae										
<i>Toricellia angulata</i> Oliv.	H	SK	D	ntsaws taub	100.0	2	Lumbago	Lf	Pounded	Poultice
	H	MNP	D	ntsaws taub	46.7	1	Muscle pain (myalgia)	Lf	Cooked with chicken soup	Eaten as food
	H	MNP	D	ntsaws taub	46.7	1	Arthralgia	Lf	Pounded	Poultice
	H	MNP	D	ntsaws taub	46.7	9	Fractures/ Sprains (Strains)	Rt/Lf	Decoction	Potions
	H	MNP	D	ntsaws taub	46.7	3	Lumbago	Rt/Lf	Decoction	Potions
Trilliaceae										
<i>Paris polyphylla</i> Sm.	L	TK	W	pong wa	100.0	2	Muscle fatigue	Wp	Decoction	Potions
Urticaceae										
<i>Boehmeria nivea</i> Gaudich.	H	KH	D	tσαaj	8.3	1	Lumbago	Lf	Decoction	Baths
<i>Elatostema longipes</i> W.T.Wang	H	MNP	W	nplooj ab	100.0	3	Muscle fatigue	Lf	Decoction	Baths
<i>Elatostema sessile</i> J.R.Forst. & G.Forst.	M	STP	W	-	50.0	1	Muscle pain (myalgia)	Wp	Decoction	Baths
Valerianaceae										
<i>Valeriana jatamansi</i> Jones	H	MNP	D	si toj	11.1	1	Sciatica	Lf	Decoction	Potions

Table 45. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Verbenaceae										
<i>Sphenodesme pentandra</i> Jack.	M	STP	W	hob uam hei	100.0	1	Muscle pains (myalgia)	St	Decoction	Baths
	M	HBY	W	-	100.0	2	Muscle pains (myalgia)	St	Dried/decoction	Potions
Vitaceae										
<i>Cissus sicyoides</i> L.	M	HBY	D	pua jan mia	100.0	4	Ligament sprains	Wp	Decoction	Baths
Zingiberaceae										
<i>Alpinia galanga</i> Willd.	K	HST	D	zal	100.0	1	Muscle pain (myalgia)	Lf	Decoction	Roasting
<i>Amomum biflorum</i> Jack	K	HST	D	tood tron	100.0	1	Arthralgia	Rt	Decoction	Potions
<i>Curcuma zedoaria</i> (Bergius) Roscoe	M	HSN	D	jian dia zung	50.0	1	Dislocations	Rh	Pounded/heated/ mixed with alcohol	Poultice
<i>Hedychium flavum</i> Roxb.	H	KH	D	qoov	100.0	2	Lumbago	Ysh	Cooked with chicken soup	Eaten as food
<i>Kaempferia rotunda</i> L.	H	KH	D	xaab txhwm	5.9	1	Muscle pain (myalgia)	Rh	Pounded	Poultice
	H	SK	D	xaab txhwm	10.0	2	Lumbago	Rh	Cooked with chicken soup	Eaten as food
<i>Zingiber cassumunar</i> Roxb.	K	HP	D	la koi	27.3	3	Muscle pain (myalgia)	Rh	Pounded/heated	Poultice
<i>Zingiber ottensii</i> Valetton	H	KH	D	qoov dlub	66.7	2	Lumbago	Rh	Pounded	Poultice

4.1.1.22 Medicines: Neoplasm

Use-reports related to the category of neoplasm were reported from only seven villages (Table 46). The Mien village Santiphap and Lua village Manee Pruek2 had the highest ICF value (1.00) due to the reports of a single use for a single species by seven and two informants, respectively. Huai Sanao and Song Khwae had the lowest ICF value (0.00), resulting from different uses reported for two different plant species. ICF value could not be calculated for Manee Pruek and Huai Pook as, for each village, there was only a single use reported for a single species from only one informant.

In total, nine plant species in nine families were reported for treating neoplasm (Figure 25). Eight species were completely identified to species and one only to genus level. There were no commonly represented plant families used in this use-category as only a single species was allocated to each of the nine plant families. Many plant species were mentioned for anti-cancer some of which were only medicinally reported for this category, evidenced by the 100% of fidelity level.

Table 46. ICF values and number of plant families and species used to treat neoplasm in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Khang Ho	2	2	3	0.50
Hmong	Manee Pruek	1	1	1	-
Hmong	Song Khwae	2	2	2	0.00
Mien	Huai Sanao	2	2	2	0.00
Mien	Santiphap	1	1	7	1.00
Khamu	Huai Pook	1	1	1	-
Lua	Manee Pruek 2	1	1	2	1.00
Total		9	9		

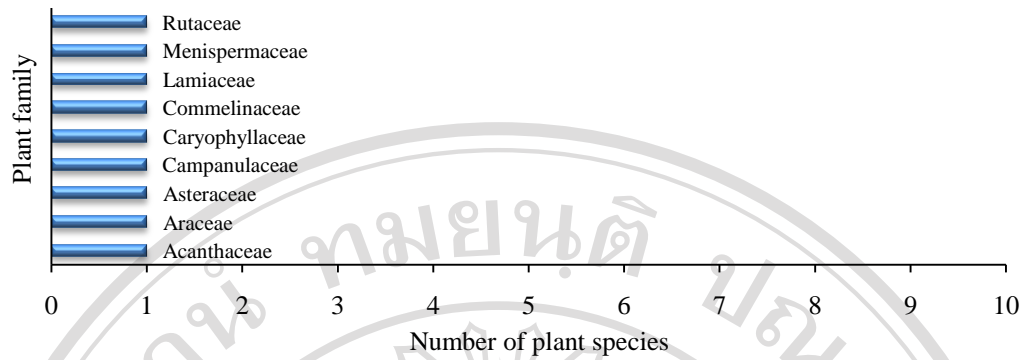


Figure 25 Number plant species in each family used to treat neoplasms in each village

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
 Copyright© by Chiang Mai University
 All rights reserved

Table 47. Medicinal plants used to treat neoplasm by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Acanthaceae										
<i>Pseuderanthemum palatiferum</i> (Nees) Radlk. ex Lindau	H	KH	D	-	33.3	2	Anti-cancer	Lf	Decoction	Potions
	M	HSN	D	-	10.0	1	Anti-cancer	Lf	Decoction	Potions
Araceae										
<i>Amorphophallus</i> sp.	L	MNP2	W	plae bok	100.0	2	Anti-cancer	Co	Decoction	Potions
Asteraceae										
<i>Gynura procumbens</i> Merr.	K	HP	D	-	100.0	1	Anti-cancer	Lf	non-prepared	Eaten as vegetable
Campanulaceae										
<i>Lobelia nicotianifolia</i> B.Heyne	H	KH	W	-	100.0	1	Cervix cancer	Wp	Decoction	Potions
Caryophyllaceae										
<i>Drymaria diandra</i> Blume	H	SK	W	taum moj qus/ taum moj dlaab	33.3	1	Binign neoplasms	Un	Cooked with chicken soup	Eaten as food
Commelinaceae										
<i>Murdannia loriformis</i> (Hassk.) Rao Rolla & Kammathy	H	SK	D	-	100.0	1	Anti-cancer	Un	Decoction	Potions
Lamiaceae										
<i>Anisomeles indica</i> Kuntze	M	STP	D	kong fow	70.0	7	Anti-cancer	St/Rt	Decoction	Potions

Table 47. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Menispermaceae										
<i>Tinospora crispa</i> (L.) Miers ex Hook.f. & Thomson	M	HSN	D	hei koon	50.0	1	Anti-cancer	St	Decoction	Potions
Rutaceae										
<i>Zanthoxylum acanthopodium</i> DC.	H	MNP	W	txwv saav	100.0	1	Anti-cancer	St	Decoction	Potions

4.1.1.23 Medicines: Nervous system disorders

Use-reports related to the category of nervous system disorders were reported from only seven villages (Table 48). Huai Pook village of the Khamu and Joon village of the Lua had the highest ICF value (1.00) due to the agreement about a single use for a single species between two informants in each village. Huai Labaoya has the lowest ICF value (0.00), resulting from different uses reported for four different plant species. ICF value could not be calculated for Manee Pruek, Song Khwae and Manee Pruek 2 as, for each village, there was only single use reported for a single species from only one informant.

In total, 13 plant species in 12 families were reported for treating nervous system disorders (Figure 26). All of these were completely identified to species level. Like those plants used in the category of neoplasm, there were no commonly represented plant families used in this category. The most frequently mentioned disorder was convulsions (10 use-reports; 71.4%).

Table 48. ICF values and number of plant families and species used to treat nervous system disorders in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Manee Pruek	1	1	1	-
Hmong	Song Khwae	1	1	1	-
Mien	Huai Labaoya	4	4	4	0.00
Khamu	Huai Pook	1	1	2	1.00
Khamu	Nam Pan	5	5	8	0.43
Lua	Joon	1	1	2	1.00
Lua	Manee Pruek2	1	1	1	-
Total		12	13		

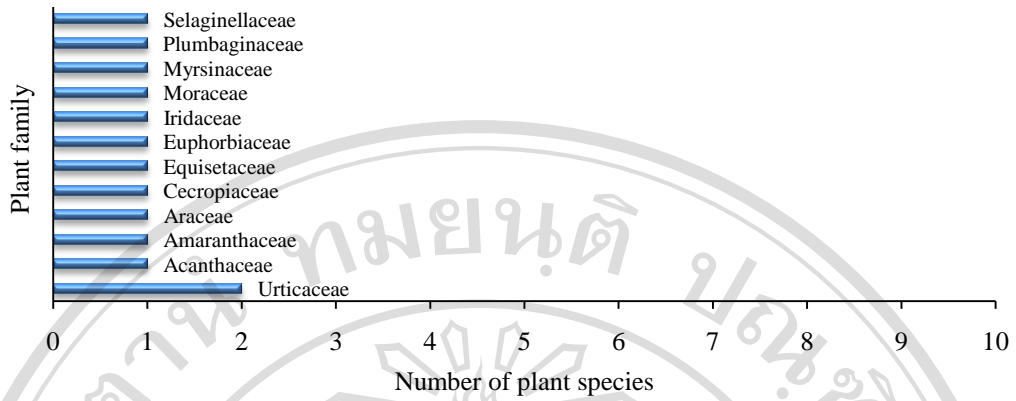
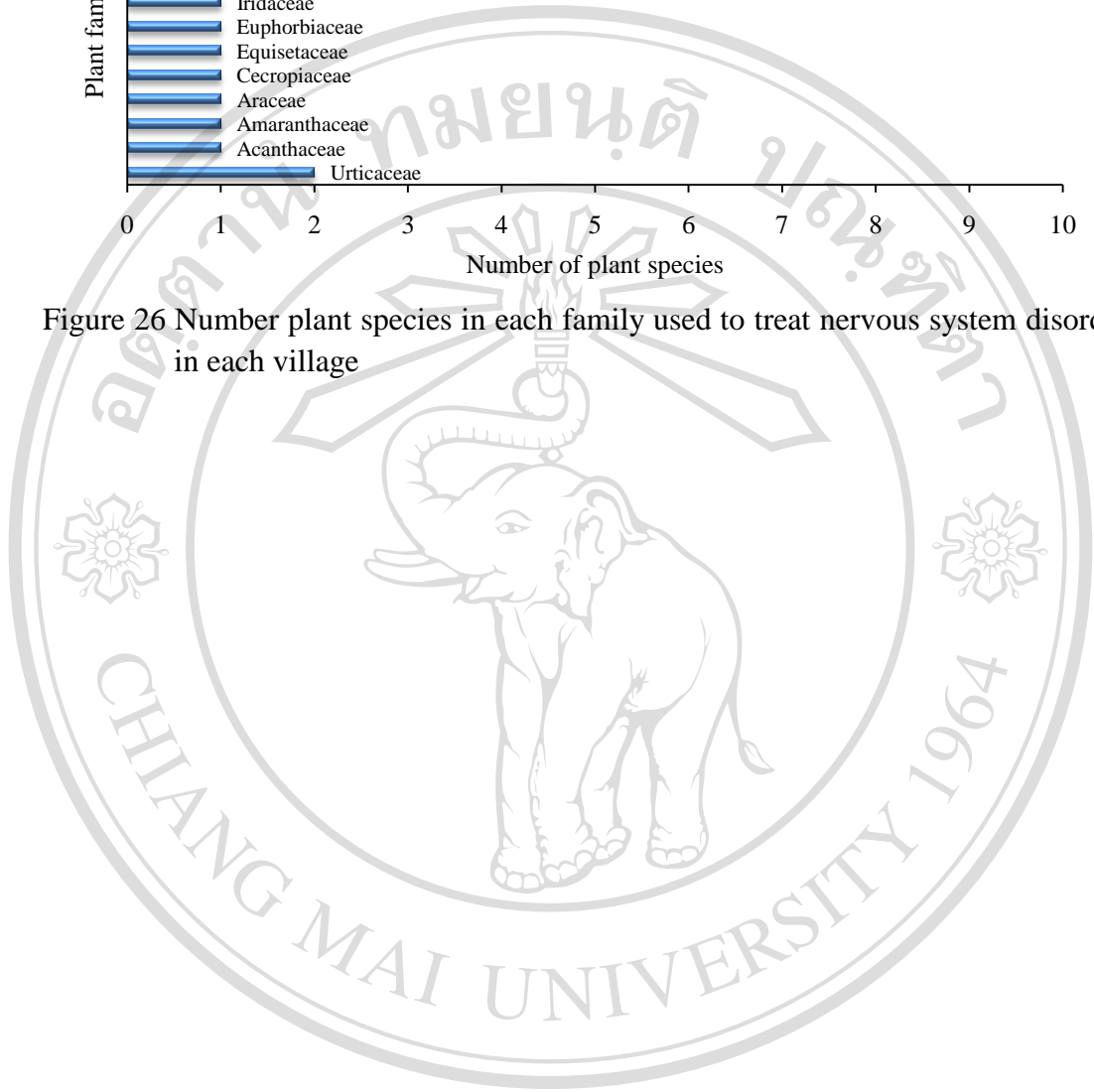


Figure 26 Number plant species in each family used to treat nervous system disorders in each village



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
 Copyright© by Chiang Mai University
 All rights reserved

Table 49. Medicinal plants used to treat nervous system disorders by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Acanthaceae										
<i>Thunbergia laurifolia</i> Lindl.	K	NP	W	lung riad	10.0	1	Convulsions	Lf	Pounded	Pat from upper body toward the toe
	K	HP	W	lung riad	15.4	2	Convulsions	St/Lf	Pulped	Tie around wrist and ankle
Amaranthaceae										
<i>Cyathula prostrata</i> Blume	H	SK	W	tshuj vwm	50.0	1	Epilepsy	Wp	Pulped	Poultice
Araceae										
<i>Colocasia gigantea</i> (Blume) Hook.f.	K	NP	D	eng	100.0	1	Convulsions	Co	Pounded	Pat from upper body toward the toe
Cecropiaceae										
<i>Poikilospermum suaveolens</i> (Blume) Merr.	M	HBV	W	puang dia	16.7	1	Epilepsy	Lf/St	Decoction	Bath
Equisetaceae										
<i>Equisetum debile</i> Roxb. ex Vaucher	L	JN	W	ya tod bong	66.7	2	Stroke	Wp	Decoction	Potions
Euphorbiaceae										
<i>Ricinus communis</i> L.	M	HBV	D	ma paung zi	25.0	1	Convulsions	Ysh	Decoction	Potions

Table 49. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Iridaceae										
<i>Eleutherine americana</i> Merr. ex K.Heyne	M	HBV	D	nom jang	33.3	1	Prevention of convulsions	Lf	Decoction	Potions
Moraceae										
<i>Streblus asper</i> Lour.	K	NP	D	tood khoi	100.0	1	Convulsions	Lf	Pounded	Pat from upper body toward the toe
Myrsinaceae										
<i>Embelia sessiliflora</i> Kurz	L	MNP2	W	mhue ngod	25.0	1	Convulsions	Rt	Decoction	Potions
Plumbaginaceae										
<i>Plumbago indica</i> L.	K	NP	D	pid piu dang	100.0	4	Convulsions	Rt	Grated/ diluted with limewater	Lotions
Selaginellaceae										
<i>Selaginella willdenowii</i> (Desv.ex Poir) Baker	M	HBV	W	puang dia	4.8	1	Convulsions	St	Decoction	Potions
Urticaceae										
<i>Boehmeria nivea</i> (L.) Gaudich.	K	NP	D	tood paan	50.0	1	Convulsions	Rt	Pounded	Pat from upper body toward the toe
<i>Elatostema repens</i> (Lour.) Hallier f. & H.Schroet.	H	MNP	W	-	100.0	1	Stroke	Wp	Decoction	Bath

4.1.1.24 Medicines: Nutritional disorders

Use-reports related to the category of nutritional disorders were reported from all 12 villages. High agreements in plant knowledge related to nutritional disorders were found in many villages as they had high ICF values. However, the ICF value could not be calculated for Joon village of the Lua, due to the single use reported for a single species from only one informant in this village (Table 50).

In total, 54 plant species in 37 families were registered in this category (Figure 27). Of those, 50 were securely identified and one with some doubt to species, two to genus and one only to family level. The most commonly represented plant family in this use-category was Asteraceae (8 species; 14.8%), especially the genus *Gynura* of which four species were reported. Like plants registered in other medicinal use-categories, the medicinal use(s) of many plant species were registered only in this category, evidenced by the fidelity level of 100 %. Most of the plants were mentioned for tonic (97 use-reports; 76.9%) and appetite stimulant (20; 15.9%). Most plants used as tonic were culinary herbs that were also registered in the category of food plants.

Table 50. ICF values and number of plant families and species used to treat nutritional disorders in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Khang Ho	17	23	241	0.91
Hmong	Manee Pruek	13	17	89	0.82
Hmong	Song Khwae	10	17	144	0.89
Mien	Huai Labaoya	7	14	159	0.92
Mien	Huai Sanao	11	18	142	0.88
Mien	Santiphap	7	14	63	0.79
Khamu	Huai Pook	4	6	11	0.50
Khamu	Huai Satang	4	4	6	0.40
Khamu	Nam Pan	2	2	7	0.83
Lua	Joon	1	1	1	-
Lua	Manee Pruek2	2	2	6	0.80
Lua	Toei Klang	5	5	15	0.71
Total		37	54		

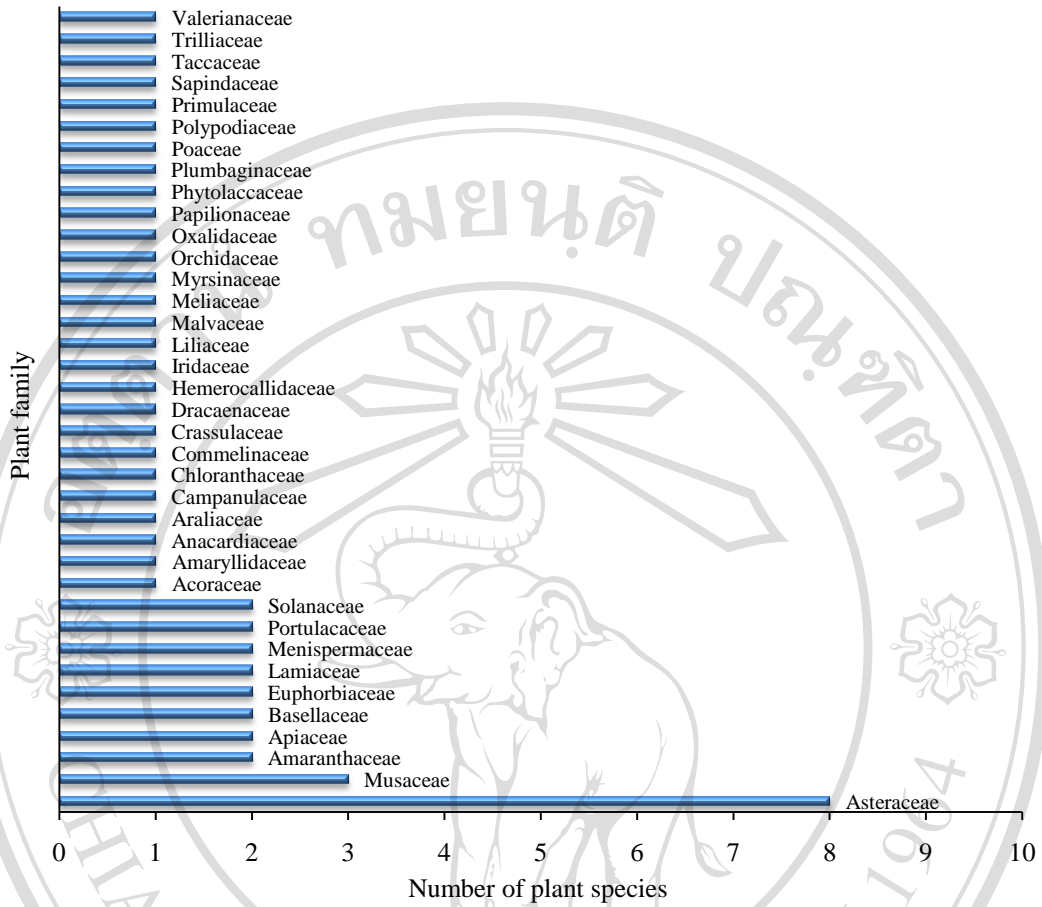


Figure 27 Number plant species in each family used to treat nutritional disorders in each village

Table 51. Medicinal plants used to treat nutritional disorders by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Acoraceae										
<i>Acorus calamus</i> L.	H	KH	D	pawj a	9.1	1	Tonic	Lf	Cooked with chicken soup	Eaten as food
Amaranthaceae										
<i>Alternanthera betzickiana</i> (Regel) G.Nicholson	M	HSN	D	dia zi	50.0	1	Tonic	Lf	Cooked with chicken soup	Eaten as food
<i>Iresine herbstii</i> Hook.	H	KH	D	nkaaj lab	93.3	28	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	MNP	D	nkaaj lab	68.8	11	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	nkaaj lab	77.8	7	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HBV	D	ja hong koon	84.6	11	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HSN	D	ja hong koon	94.7	18	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	STP	D	ja hong koon	100.0	10	Tonic	Lf	Cooked with chicken soup	Eaten as food

Table 51. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Amaryllidaceae										
<i>Zephyranthes rosea</i> Lindl.	M	HSN	D	jiao soi	100.0	1	Tonic	Lf	Cooked with chicken soup	Eaten as food
Anacardiaceae										
<i>Spondias pinnata</i> (L.f.) Kurz	L	TK	D	plae kok	100.0	1	Appetite stimulant	Bk	Grated/decoction	Potions
Apiaceae										
<i>Anethum graveolens</i> L.	H	SK	D	-	100.0	1	Appetite stimulant	Lf	Non-prepared	Eaten as vegetable
Apiaceae sp.1	H	KH	D	taab kib ntsuab	21.2	7	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	MNP	D	taab kib ntsuab/ nkoj ntsuab	6.7	1	Appetite stimulant	Lf	Decoction	Potions
Araliaceae										
<i>Aralia armata</i> Seem.	L	TK	W	lum tong talw	100.0	3	Appetite stimulant/ Malnutrition	Ysh	Cooked	Eaten as food

Table 51. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Asteraceae										
<i>Artemisia lactiflora</i> Wall. ex DC.	H	KH	D	taab kib lab luj	100.0	44	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	MNP	D	taab kib lab luj	80.0	16	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	taab kib lab luj	100.0	26	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HBY	D	dia go	100.0	11	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HSN	D	dia go	100.0	10	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	STP	D	dia go	100.0	12	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HBY	D	dia go	100.0	6	Tonic	Lf	Cooked with chicken soup	Eaten as food
<i>Dendranthema indica</i> Des Moul.	H	KH	D	taab kib miv	100.0	16	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	MNP	D	taab kib miv	36.0	9	Tonic	Lf	Cooked with chicken soup	Eaten as food

Table 51. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Gynura bicolor</i> DC.	H	SK	D	taab kib miv	100.0	20	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HSN	D	dia dang	100.0	5	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	KH	D	tshuaj rog lab luj	100.0	19	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	MNP	D	tshuaj rog lab luj	100.0	6	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	tshuaj rog lab luj	100.0	9	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HBY	D	jae or mia zi	100.0	2	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HBY	D	jae or mia zi	100.0	9	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HSN	D	jae or mia zi	100.0	17	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	STP	D	jae or mia zi	100.0	4	Tonic	Lf	Cooked with chicken soup	Eaten as food

Table 51. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Gynura longifolia</i> Kerr	H	KH	D	tshuaj rog lab	100.0	22	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	tshuaj rog lab	94.1	16	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HBY	D	jae or mia low	100.0	15	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HSN	D	jae or mia low	100.0	12	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	STP	D	jae or mia low	100.0	4	Tonic	Lf	Cooked with chicken soup	Eaten as food
<i>Gynura nepalensis</i> DC.	H	KH	D	tshuaj rog ntsuab	95.7	22	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	tshuaj rog ntsuab	73.3	11	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HBY	D	jae or mia pae	100.0	12	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HSN	D	jae or mia pae	100.0	8	Tonic	Lf	Cooked with chicken soup	Eaten as food

Table 51. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Gynura procumbens</i> Merr.	M	STP	D	jae or mia pae	100.0	4	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	tshuaj rog ntsuab	66.7	2	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HBV	D	jae or mia pae	100.0	6	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HSN	D	jae or mia pae	100.0	7	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HSN	D	jae or mia pae	100.0	3	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	STP	D	jae or mia pae	100.0	2	Tonic	Lf	Cooked with chicken soup	Eaten as food
<i>Kalimeris indica</i> Sch.Bip.	H	KH	D	qhua txhais	23.1	6	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	MNP	D	qhua txhais	18.2	2	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	qhua txhais	9.1	1	Tonic	Lf	Cooked with chicken soup	Eaten as food

Table 51. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
	M	HBY	D	ha dia kang	53.6	15	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HSN	D	ha dia kang	47.8	11	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	STP	D	ha dia kang	15.4	2	Tonic	Lf	Cooked with chicken soup	Eaten as food
<i>Ligularia dentata</i> (A.Gray) Hara	H	MNP	D	kib tawg nees	71.4	5	Tonic	Lf	Cooked with chicken soup	Eaten as food
Basellaceae										
<i>Anredera cordifolia</i> (Ten.) Steenis	H	KH	D	saab txhim maab	68.4	13	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	MNP	D	saab txhim maab	300.0	3	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	saab txhim maab	81.8	9	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HBY	D	fam ched low/ jian pa miao dia	100.0	8	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HSN	D	fam ched low/ jian pa miao dia	75.0	6	Tonic	Lf	Cooked with chicken soup	Eaten as food

Table 51. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Basella alba</i> L.	M	STP	D	fam ched low/ jian pa miao dia	75.0	3	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	STP	D	dia joon	100.0	2	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HBV	D	dia joon	75.0	3	Tonic	Lf	Cooked with chicken soup	Eaten as food
Campanulaceae										
<i>Codonopsis javanica</i> Hook.f. & Thomson	H	MNP	W	-	9.1	1	Tonic	Rh	Cooked with chicken soup	Eaten as food
Chloranthaceae										
<i>Chloranthus erectus</i> (Buch.- Ham.) Verdc.	K	NP	W	hom kai	12.5	1	Appetite stimulant	Rt	Cooked with chicken soup	Eaten as food
Commelinaceae										
<i>Tradescantia zebrina</i> Bosse	H	KH	D	zaub raws lab	90.0	9	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HBV	D	sob plaan zi	54.5	12	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HSN	D	sob plaan zi	70.0	14	Tonic	Lf	Cooked with chicken soup	Eaten as food

Table 51. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
	M	STP	D	sob plaan zi	75.0	6	Tonic	Lf	Cooked with chicken soup	Eaten as food
Crassulaceae										
<i>Kalanchoe laciniata</i> (L.) DC.	H	KH	D	tshuaj ntiv tub	42.4	14	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	tshuaj ntiv tub	66.7	14	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HBV	D	lom jang yiu	75.0	12	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HSN	D	lom jang yiu	50.0	1	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	STP	D	lom jang yiu	100.0	1	Tonic	Lf	Cooked with chicken soup	Eaten as food
Dracaenaceae										
<i>Dracaena elliptica</i> Thunb.	L	TK	W	yod dalw	100.0	4	Appetite stimulant	Rt	Decoction	Potions

Table 51. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Euphorbiaceae										
<i>Acalypha kerrii</i>	K	HP	D	khang poi	100.0	3	Malnutrition	St	Decoction with <i>Ensete glauca</i> , <i>Physalis angulata</i>	Potions
<i>Croton roxburghii</i> N.P. Balakr.	H	KH	W	-	100.0	1	Malnutrition	Lf	Decoction	Bath
	K	HST	W	tood tong plao	14.3	1	VitaminB2 deficiency	Ex	Non-prepared	Liniment
Hemerocallidaceae										
<i>Hemerocallis lilioasphodelus</i> L.	H	KH	D	tw ntses miv	84.6	11	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	MNP	D	tw ntses miv	100.0	4	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	tw ntses miv	75.0	3	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HBV	D	ha dia dao/ ha dia zua	31.8	14	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HSN	D	ha dia dao/ ha dia zua	52.6	10	Tonic	Lf	Cooked with chicken soup	Eaten as food

Table 51. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
	M	STP	D	ha dia dao/ ha dia zua	33.3	5	Tonic	Lf	Cooked with chicken soup	Eaten as food
Iridaceae										
<i>Eleutherine americana</i> Merr. ex K.Heyne	M	HSN	D	nom jang	33.3	2	Tonic	Wp	Cooked with chicken soup	Eaten as food
Lamiaceae										
<i>Ajuga</i> sp.1	H	SK	D	tshuaj pog ntxoov/tshuaj ab	25.0	1	Tonic	Lf	Cooked with chicken soup	Eaten as food
<i>Orthosiphon aristatus</i> (Blume) Miq.	H	KH	D	-	13.3	2	Tonic	Lf	Cooked with chicken soup	Eaten as food
Liliaceae										
<i>Chlorophytum nepalense</i> Baker	L	TK	W	yod doi	94.1	5	Appetite stimulant	St	Cooked with chicken soup	Eaten as food
Malvaceae										
<i>Sida rhombifolia</i> L.	K	HST	W	ya khud	100.0	2	Appetite stimulant	Rt	Cold infusion with <i>Spondias pinnata</i> , <i>Eluesine indica</i>	Potions

Table 51. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Meliaceae										
<i>Toona sinensis</i> (Juss.) M.Roem.	H	MNP	W	yuj	55.6	15	Appetite stimulant	Ysh	Cooked	Eaten as food
Menispermaceae										
<i>Stephania pierrei</i> Diels	H	KH	D	maab ntshaa	50.0	1	Tonic	Lf/ Rt	Decoction	Potions
<i>Tinospora sinensis</i> (Lour.) Merr.	K	HST	D	ma tui poke	100.0	1	Tonic (for chicken)	St	Cold infusion	Potions
Musaceae										
<i>Ensete glauca</i> Roxb.	K	HP	W	troi kjung	66.7	2	Malnutrition	St	Cooked with chicken soup	Eaten as food
<i>Musa itinerans</i> Cheesman	K	HP	D	troi kwruan	100.0	2	Malnutrition	St	Pounded/squeezed	Massage over abdominal area
<i>Musa nana</i> Lour.	K	HP	D	troi lan	100.0	2	Malnutrition	St	Pounded/squeezed	Massage over abdominal area
Myrsinaceae										
<i>Ardisia amherstiana</i> A.DC.	K	HP	W	klong mud lein	12.5	1	Appetite stimulant	St	Decoction	Potions

Table 51. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Orchidaceae										
<i>cf. Tropidia curculigoides</i> Lindl.	L	JN	W	-	50.0	1	Appetite stimulant	Rt	Cooked with chicken soup	Eaten as food
Oxalidaceae										
<i>Oxalis corniculata</i> L.	L	MNP2	W	yun sud	100.0	3	Vitamin deficiency	Wp	Decoction	Potions
Papilionaceae										
<i>Phylacium bracteosum</i> Benn.	L	TK	W	mhue lub lib	40.0	2	Appetite stimulant	Wp	Decoction	Potions
	K	NP	W	lub lib	85.7	6	Appetite stimulant	Un	Decoction	Potions
Phytolaccaceae										
<i>Phytolacca americana</i> L.	H	KH	D	tshuaj kauv lim	100.0	1	Tonic	Lf	Cooked with chicken soup	Eaten as food
Plumbaginaceae										
<i>Plumbago zeylanica</i> L.	H	KH	D	kuab ib maab	14.3	1	Appetite stimulant	Lf	Non-prepared	Eaten as vegetable

Table 51. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Poaceae										
<i>Eleusine indica</i> (L.) Gaertn.	K	HST	W	jid thraak traak	66.7	2	Appetite stimulant	Rt	Cold infusion with <i>Spondias pinnata</i>	Potions
Polypodiaceae										
<i>Platyserium</i> sp.	H	KH	D	ncua dlaav	11.1	1	Appetite stimulant	Lf	Cooked with chicken soup	Eaten as food
Portulacaceae										
<i>Talinum fruticosum</i> (L.) Juss.	H	KH	D	kob lwj xeeb	100.0	10	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	MNP	D	kob lwj xeeb	25.0	1	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	kob lwj xeeb	100.0	10	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HBV	D	ka li zein	100.0	14	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HSN	D	ka li zein	100.0	12	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	STP	D	ka li zein	100.0	4	Tonic	Lf	Cooked with chicken soup	Eaten as food

Table 51. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Talinum paniculatum</i> (Jacq.) Gaertn.	H	KH	D	kob lwj xeeb	100.0	8	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	kob lwj xeeb	100.0	11	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HBV	D	ka li zein	100.0	9	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	STP	D	ka li zein	100.0	4	Tonic	Lf	Cooked with chicken soup	Eaten as food
Primulaceae										
<i>Lysimachia christinae</i> Hance	H	MNP	W	qua luag lab	9.1	1	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	KH	D	qua luag lab	8.3	1	Tonic	Lf	Cooked with chicken soup	Eaten as food
Sapindaceae										
<i>Lepisanthes rubiginosa</i> (Roxb.) Leenh.	H	SK	W	-	100.0	1	Appetite stimulant	Rt	Decoction	Potions
Solanaceae										
<i>Physalis angulata</i> L.	K	HP	W	sa lume	100.0	1	Malnutrition	Wp	Pounded with <i>Ensete glauca</i>	Massage over abdominal area

Table 51. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Solanum spirale</i> Roxb.	M	HSN	D	jian dia	100.0	1	Appetite stimulant	Lf	Finely chopped/ cooked with eggs	Potions
Taccaceae										
<i>Tacca chantrieri</i> André	H	MNP	W	nplooj qhwv yeeb	50.0	1	Tonic	Rt	Cooked with chicken soup	Eaten as food
Trilliaceae										
<i>Paris polyphylla</i> Sm.	H	MNP	W	tshuaj theem	45.5	5	Appetite stimulant	Rh	Dried/powdered	Potions
	L	MNP2	W	-	100.0	3	Appetite stimulant	Rh	Dried/powdered	Potions
Valerianaceae										
<i>Valeriana jatamansi</i> Jones	H	KH	D	si toj	100.0	3	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	MNP	D	si toj	77.8	7	Tonic	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	si toj	100.0	2	Tonic	Lf	Cooked with chicken soup	Eaten as food
	M	HSN	D	fiu hwa	60.0	3	Tonic	Lf	Cooked with chicken soup	Eaten as food

4.1.1.25 Medicines: Pain

Use-reports related to the category of pains were reported from 10 villages, but not from two villages of the Khamu, Huai Satang and Nam Pan (Table 52). High agreements in plant knowledge related to nutritional disorders were found in many villages evidenced by their high values of ICF; particularly all three Mien villages for which the high ICF values can be attributed to the intensive use of *Juncus effusus*.

In total, 23 plant species from 13 plant families were registered in this category (Table 52; Figure 28). Of those, 19 were securely identified and one with some doubt to species and three to genus level. The family Asteraceae was represented by the largest number of species in this use-category (4 species; 17.4%). Many plant species, those with 100% fidelity level, were only reported in this category. Most of plants were used for treating headache (31 use-reports; 86%).

Table 52. ICF values and number of plant families and species used to treat pain in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Khang Ho	2	4	24	0.87
Hmong	Manee Pruek	5	8	18	0.59
Hmong	Song Khwae	4	6	9	0.38
Mien	Huai Labaoya	2	3	26	0.92
Mien	Huai Sanao	1	1	15	1.00
Mien	Santiphap	2	2	22	0.95
Khamu	Huai Pook	1	1	2	1.00
Lua	Joon	3	3	9	0.75
Lua	Manee Pruek 2	4	2	19	0.94
Lua	Toei Klang	5	5	13	0.67
Total		13	23		

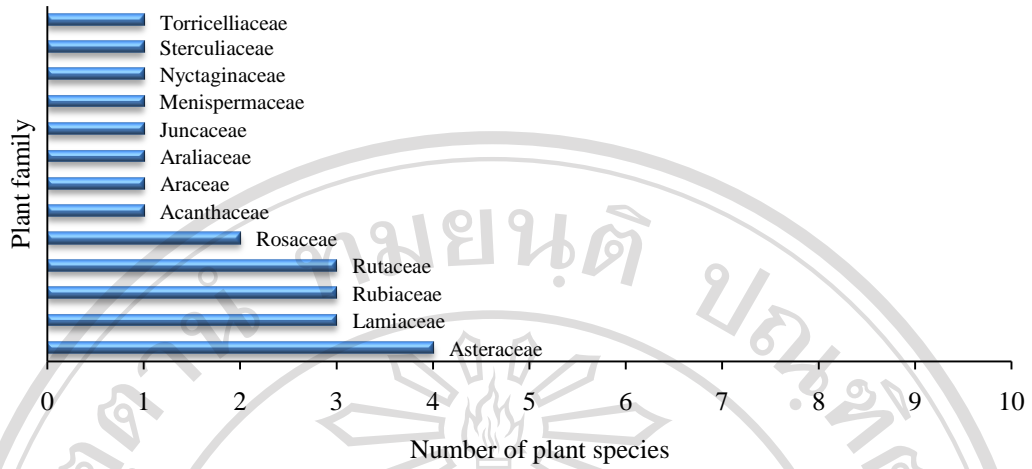


Figure 28 Number plant species in each family used to treat pain in each village

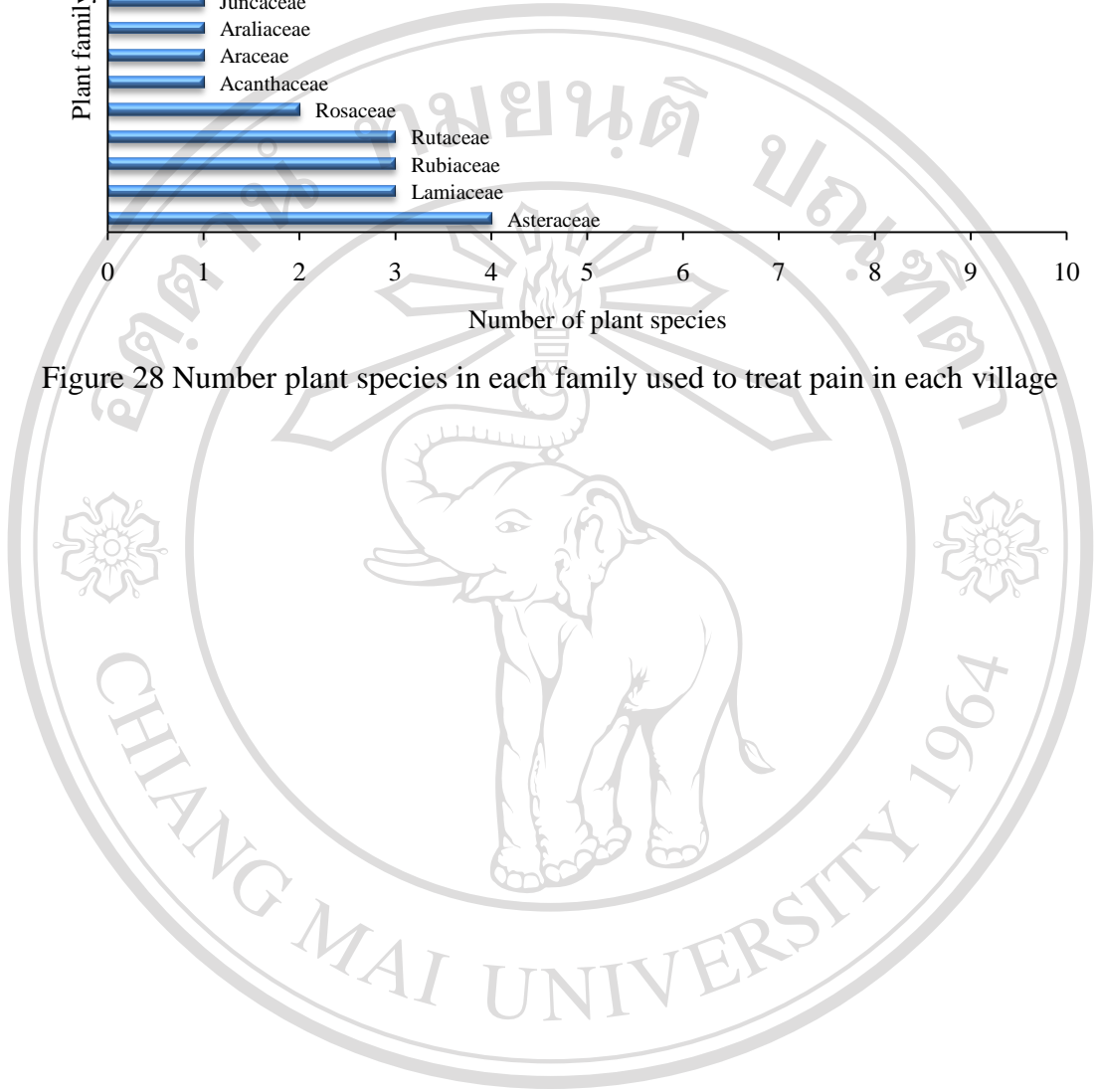


Table 53. Medicinal plants used to treat pain by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Acanthaceae										
<i>Barleria lupulina</i> Lindl.	K	HP	D	wan deng	100.0	2	Analgesic	Lf	Pounded/diluted with alcohol	Liniment
Araceae										
<i>Alocasia cucullata</i> (Loureiro) G.Don	H	SK	D	teeb qus/ teeb ntsuab	25.0	1	Headache	Pt	Pounded/wrapped with frabic/heated	Plaster over forehead
Araliaceae										
<i>Macropanax cf. dispersum</i> Kuntze	L	MNP2	W	lum pae piae	45.5	5	Headache	Bk	Decoction/mixed with chaff/molded	Tablet
Asteraceae										
<i>Artemisia verlotiorum</i> Lamotte	H	KH	D	suv ntswm	25.0	5	Headache	Lf	Heated	Plaster over forehead
	H	SK	D	suv ntswm	33.3	3	Headache	Lf	Pulped/Heated	Plaster over forehead
	M	HBV	D	kong mon	100.0	3	Headache	Lf	Pulped	Plaster over forehead
<i>Artemisia vulgaris</i> L.	L	MNP2	W	-	100.0	3	Analgesic for acupuncture	Lf	Dried/rolled with paper/Burned	Stab over the acupuncture area
	H	KH	D	suv ntswm	20.0	1	Headache	Lf	Heated	Plaster over forehead
	H	MNP	W	suv ntswm	33.3	4	Headache	Lf	Pulped/heated	Plaster over forehead

Table 53. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
<i>Blumea balsamifera</i> DC.	H	SK	W	suv ntswm	100.0	1	Headache	Lf	Pulped	Plaster over forehead
	L	TK	W	lum boi	55.6	5	Headache	Lf	Heated	Plaster over forehead
	M	HBY	W	ma im bua	4.5	1	Headache	Lf	Heated	Plaster over forehead
	H	KH	W	xaab yeeb qus	83.3	15	Headache	Lf	Heated	Plaster over forehead
	H	SK	W	xaab yeeb qus	100.0	1	Headache	Lf	Heated	Plaster over forehead
	M	STP	W	ma im bua	20.0	2	Headache	Lf	heated	Paster over forehead
	H	MNP	W	xaab yeeb qus	63.6	7	Headache	Lf	Heated	Plaster over forehead
<i>Tithonia diversifolia</i> A. Gray	H	MNP	W	paaj dlaaj	100.0	1	Headache	Lf	Pulped/heated	Plaster over forehead
Juncaceae										
<i>Juncus effusus</i> L.	M	HBY	D	tung zow	100.0	22	Analgesic	Lf	Dried/soaked with oil/burned	Stab at painful area
	M	HSN	D	tung zow	100.0	15	Analgesic	Lf	Dried/soaked with oil/burned	Stab at painful area
	M	STP	D	tung zow	83.3	20	Analgesic	Lf	Dried/soaked with oil/burned	Stab at painful area

Table 53. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Lamiaceae										
<i>Clerodendrum paniculatum</i> L.	L	JN	W	samoot zo	60.0	3	Headache	Lf	Heated	Plaster over forehead
<i>Elsholtzia penduliflora</i> W. W. Smith	H	MNP	D	zaj ntshua ntuag	100.0	1	Headache	Lf	Heated	Plaster over forehead
<i>Teucrium viscidum</i> Blume var. <i>viscidum</i>	L	TK	W	yun oi yum	100.0	1	Headache	Wp	Pounded/wrapped with black fabric/ heated	Plaster over forehead
Menispermaceae										
<i>Cissampelos pareira</i> L.	L	TK	W	mhue ngud	20.0	2	Headache	Rt	Grated/decoction	Potions
Nyctaginaceae										
<i>Mirabilis jalapa</i> L.	H	SK	D	paaj kuab tub sab	28.6	2	Headache	Lf	Pulped/Heated	Plaster over forehead
Rosaceae										
<i>Agrimonia nepalensis</i> D.Don	H	KH	D	cos kev nyeg	21.4	3	Headache	Lf	Decoction	Potions
<i>Prunus cerasoides</i> D.Don	L	MNP2	D	lum zein	100.0	1	Headache	Bk	Grated	Smell

Table 53. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Rubiaceae										
<i>Paederia foetida</i> L.	L	MNP2	W	mhue pom zua	38.5	10	Headache	St/Lf	Pulped	Tie around head
<i>Paederia pilifera</i> Hook.f.	L	TK	W	mhue pom zua	50.0	3	Headache	St	Pulped	Tie around head
	L	JN	W	mhue pom zua	28.6	4	Headache	St	Pulped	Tie around head
<i>Uncaria</i> sp.	H	MNP	W	maab qub yaag	28.6	2	Headache	Rt/St	Decoction	Potions
Rutaceae										
<i>Clausena</i> sp.	H	MNP	W	-	100.0	1	Headache	Lf	Heated	Plaster over forehead
<i>Euodia</i> sp.	L	JN	W	lum si fun	25.0	2	Headache	Lf	Heated	Plaster over forehead
<i>Melicope pteleifolia</i> (Champ. ex Benth.) T.G.Hartley	H	MNP	W	-	50.0	1	Headache	Lf	Heated	Plaster over forehead
Sterculiaceae										
<i>Helicteres elongata</i> Wall. ex Boj.	L	TK	W	lum ngud	16.7	2	Headache	Rt	Decoction with <i>Cissampelos pareira</i>	Potions

Table 53. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Toricelliaceae										
<i>Toricellia angulata</i> Oliv.	H	MNP	D	ntsaws taub	3.3	1	Headache	Lf	Heated	Plaster over forehead

4.1.1.26 Medicines: Poisonings

Use-reports related to the category of poisonings were reported from all 12 villages. Toei Klang village of the Lua had the highest ICF values (1.00) due to the agreement about a single use for a single species from three informants in this village (Table 54). Relatively high ICF values were also found across all other 11 villages.

In total, 36 plant species in 51 families were registered in this category (Figure 29). Of those, 31 were securely identified and one with some doubt to species, three to genus level and one to only family level. Most plants were from the family of Asteraceae (6 species; 16.7%) and Acanthaceae (4; 11.1%). Many plant species, those with 100% fidelity level, were only reported in this category. Most of the plants were used for treating food poisonings (43 use-reports; 50.1%), poisonings due to bites and stings (14; 16.5%) as well as detoxicant/antidote (17; 20%).

Table 54. ICF values and number of plant families and species used to treat poisonings in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Khang Ho	12	16	38	0.59
Hmong	Manee Pruek	9	11	32	0.68
Hmong	Song Khwae	11	12	27	0.58
Mien	Huai Labaoya	6	7	39	0.84
Mien	Huai Sanao	3	3	18	0.88
Mien	Santiphap	2	2	22	0.95
Khamu	Huai Pook	6	7	36	0.83
Khamu	Huai Satang	4	4	10	0.67
Khamu	Nam Pan	6	7	19	0.67
Lua	Joon	3	3	7	0.67
Lua	Manee Pruek 2	3	4	10	0.67
Lua	Toei Klang	1	1	3	1.00
Total		36	51		

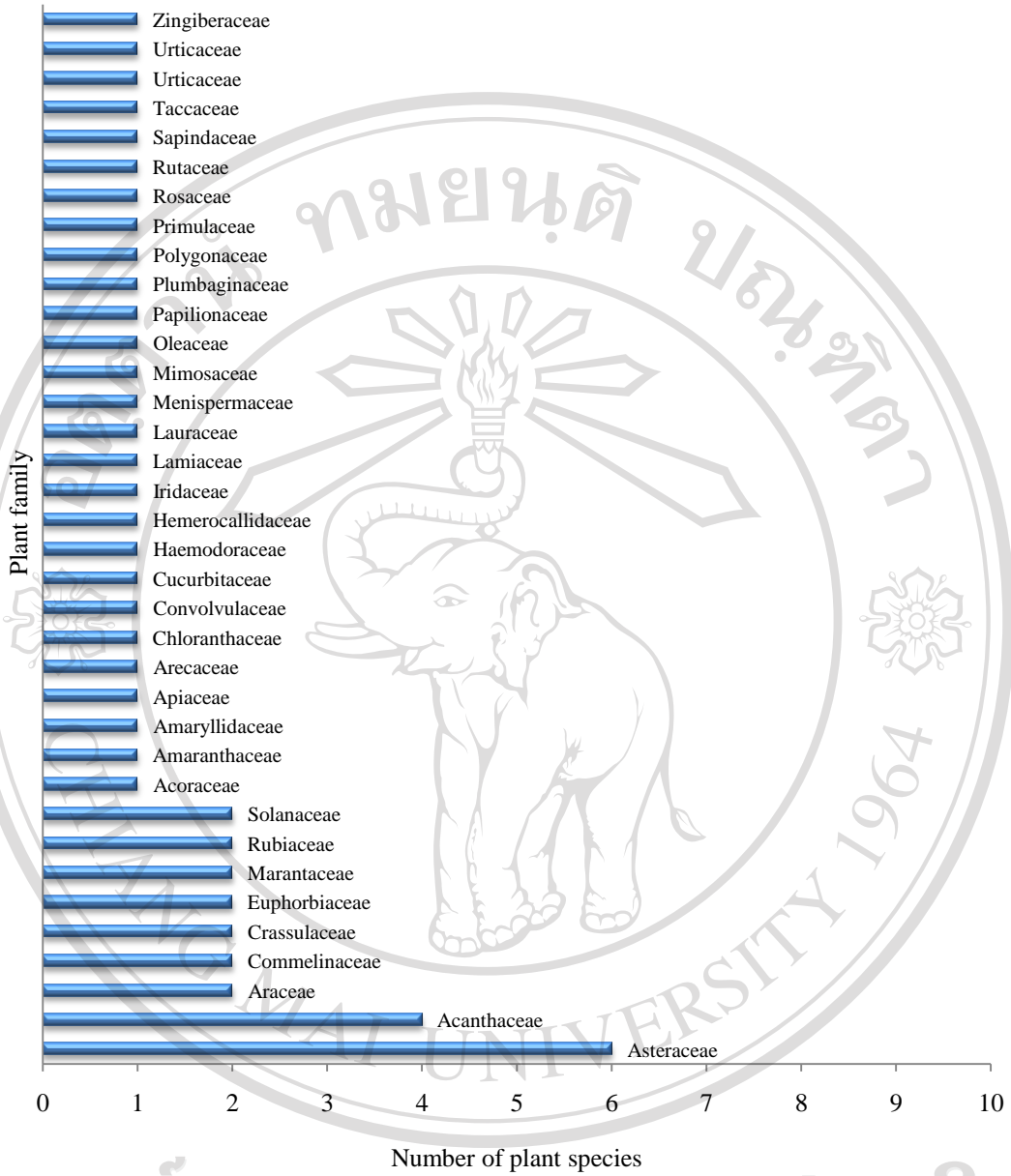


Figure 29 Number plant species in each family used to treat poisonings in each village

Table 55. Medicinal plants used to treat poisonings by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Acanthaceae										
<i>Dicliptera chinensis</i> Juss.	H	KH	D	nplooj hov txob	33.3	1	food poisoning	Lf	Cooked with chicken soup	Eaten as food
<i>Justicia gendarussa</i> Burm.f.	H	SK	D	nkaaj dlub	25.0	1	Poisonings due to bites and stings	Lf	Pounded	Poultice
<i>Thunbergia laurifolia</i> Lindl.	H	SK	W	maab hwb taub	66.7	6	Intoxication due to alcohol	St	Decoction	Potions
	H	KH	W	maab hwb taub	100.0	2	Detoxicant	St	Decoction	Potions
	H	KH	W	maab hwb taub	100.0	2	food poisoning	St	Decoction	Potions
	K	HST	W	lung riad	100.0	3	Intoxication due to alcohol	St	Non-prepared	Chewed
	K	HST	W	lung riad	100.0	2	Poisonings due to snake bites	St	Pulped	Tie above the snake bite
	K	HP	W	lung riad	69.2	6	Detoxicant	St	Decoction	Potions
	K	HP	W	lung riad	69.2	3	Poisonings due to snake bites	St	Pulped	Tie above the snake bite
	K	NP	W	lung riad	90.0	9	food poisoning	St	Decoction	Potions

Table 55. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	L	JN	W	mhue hnum nae	100.0	1	Intoxication due to alcohol	St	Decoction	Potions
	M	HBY	W	yae tam hei	50.0	1	Detoxicant	St	Decoction	Potions
	M	HBY	W	yae tam hei	50.0	2	Poisonings due to snake bites	St	Pulped	Tie above the snake bite
	M	HSN	W	yae tam hei	100.0	8	Detoxicant	St	Decoction	Potions
	M	STP	W	yae tam hei	47.1	7	Detoxicant	St	Decoction	Potions
	M	STP	W	yae tam hei	47.1	1	Poisonings due to snake bites	Ysh	Non-prepared	Chewed
<i>Thunbergia</i> sp.	H	MNP	W	maab hwb taub	100.0	2	Intoxication due to alcohol	Rt	Decoction	Potions
Acoraceae										
<i>Acorus calamus</i> L.	H	SK	D	pawj a	25.0	3	food poisoning	Lf	Cooked with chicken	Eaten as food
	K	HST	D	hang kao	33.3	1	food poisoning	Lf/ Rt	Decoction with <i>Tiliacora triandra</i>	Potions
Amaranthaceae										
<i>Gomphrena globosa</i> L.	K	NP	D	dok ka lom	100.0	1	food poisoning	Rt	Grated/cold	Potions

Table 55. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Amaryllidaceae										
<i>Phaedranassa</i> sp.	K	HST	D	-	100.0	1	food poisoning	Blb	Decoction	Potions
Apiaceae										
<i>Apiaceae</i> sp.1	H	MNP	D	taab kib ntsuab	6.7	1	food poisoning	Lf	Pulped/hot infusion	Potions
	H	SK	D	taab kib ntsuab	11.1	1	food poisoning	Lf	Cooked with chicken soup	Eaten as food
Araceae										
<i>Alocasia cucullata</i> (Loureiro) G. Don	H	KH	D	teeb qus	50.0	1	Poisonings due to bites and stings	Pt	Pulped/heated	Poultice
<i>Colocasia esculenta</i> (L.) Schott	M	HBY	D	how hab	100.0	2	Poisonings due to bites and stings	Ex	Non-prepared	Liniment
Arecaceae										
<i>Calamus</i> sp.	M	HBY	D	dang wei/	11.1	1	Poisonings due to bites and stings	Lf	Pounded	Poultice
Asteraceae										
<i>Ageratum conyzoides</i> L.	H	KH	W	pwm tshis qus	50.0	1	Poisonings due to bites and stings	Lf	Pounded	Liniment

Table 55. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Bidens pilosa</i> L.	H	MNP	W	txhab qoob	37.5	3	Poisonings due to snake bites	Lf	Pulped	Tie above the snake bite
<i>Chromolaena odorata</i> (L.) R.M.King & H.Rob.	L	MNP2	W	yun bong wai	100.0	3	Poisonings due to snake bites	Lf	Non-prepared	Eaten with lamonade or <i>Tamarindus indicus</i>
<i>Dichrocephala integrifolia</i> Kuntze	H	KH	W	cos kev qus	66.7	2	food poisoning	Wp	Decoction	Potions
<i>Microglossa pyrifolia</i> Kuntze	H	MNP	W	pov cai nstuab	40.0	4	Opium poisonings	Rt	Decoction	Potions
<i>Vernonia parishii</i> Hook.f.	H	KH	W	tshuaj kaus ntsawv	90.0	9	Intoxication due to alcohol/drug/ Detoxicant	Rt	Decoction	Potions
	H	MNP	W	tshuaj kaus ntsawv	100.0	8	Detoxicant (Antidote)	Bk	Grated/hot infusion	Potions
	L	JN	W	lum jib wib	100.0	4	Detoxicant (Antidote)	Rt	Decoction	Potions
	L	MNP2	W	lum jib wib	100.0	3	Detoxicant	Rt	Decoction	Potions

Table 55. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Chloranthaceae										
<i>Chloranthus erectus</i> Verde.	K	NP	W	hom kai	12.5	1	food poisoning	Rt	Decoction	Potions
Commelinaceae										
<i>Commelina bengalensis</i> L.	M	HBY	W	sob plaan	57.1	4	food poisoning	Ysh	Cooked	Eaten as food
<i>Tradescantia zebrina</i> Bosse	M	HBY	D	sob plaan zi	45.5	10	food poisoning	Lf	Decoction	Potions
	M	HSN	D	sob plaan zi	10.0	2	food poisoning	Lf	Cooked with chicken soup	Eaten as food
Convolvulaceae										
<i>Ipomoea muricata</i> (L.) Jacq.	M	HBY	D	pae jae	100.0	18	Detoxicant	Sd	Pulped/ cold infusion	Potions
	M	STP	D	pae jae	100.0	14	Detoxicant	Sd	Pulped/ cold infusion	Potions
	M	HSN	D	pae jae	100.0	8	Detoxicant	Sd	Pulped/ cold infusion	Potions
Crassulaceae										
<i>Kalanchoe laciniata</i> (L.) DC.	H	KH	D	tshuaj ntiv tub	21.2	7	food poisoning	Lf	Pulped/ hot infusion	Potions
<i>Sedum cf. sarmentosum</i> Bunge	H	KH	D	nplai zeb	8.3	1	food poisoning	Lf	Finely chopped/ cooked with eggs	Eaten as food

Table 55. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Cucurbitaceae										
<i>Zehneria bodinieri</i> (H.Lév.) W.J.de Wilde & Duyfjes	H	MNP	W	-	100.0	1	Poisonings due to bites and stings	Lf	Pounded	Poultice
Euphorbiaceae										
<i>Euphorbia tirucalli</i> L.	K	HP	D	-	100.0	2	Poisonings due to snake bites	St	Pounded	Poultice
<i>Homonoia riparia</i> Lour.	K	HP	W	tood krai	81.8	6	Detoxicant	Rt	Decoction	Potions
	K	HP	W	tood krai	81.8	3	food poisoning	YLf	Non-prepared	Eaten with food
Haemodoraceae										
<i>Xiphidium caeruleum</i> Aubl.	H	KH	D	tw ntses luj	5.3	1	food poisoning	Lf	Decoction	Potions
	H	MNP	D	tw ntses luj	40.0	4	food poisoning	Rt	Decoction	Potions
Hemerocallidaceae										
<i>Hemerocallis lilioasphodelus</i> L.	H	KH	D	tw ntses miv	15.4	2	food poisoning	Lf	Cooked with chicken soup	Eaten as food
Iridaceae										
<i>Eleutherine americana</i> Merr. ex K.Heyne	H	MNP	D	nplooj qhab xyab	50.0	4	Poisonings due to bites and stings	Rh	Pounded	Poultice
	H	SK	D	nplooj qhab xyab	25.0	1	food poisoning	Rh	Decoction	Potions

Table 55. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Lamiaceae										
<i>Teucrium viscidum</i> Blume	H	KH	D	pawn tshis	9.5	2	food poisoning	Wp	Decoction	Potions
var. <i>viscidum</i>	H	MNP	D	nyeg pawn tshis nyeg	8.3	1	food poisoning	Rt	Decoction	Potions
Lauraceae										
<i>Cinnamomum iners</i> Reinw. ex Blume	L	MNP2	W	lum nae wai	15.8	3	food poisoning	Ysh	Non-prepared	Eaten
Marantaceae										
<i>Maranta arundinacea</i> L. var. <i>arundinacea</i>	H	MNP	D	nplooj ntse ntsuab	50.0	1	Intoxication due to alcohol	Rt	Pulped/ cold infusion	Potions
	H	SK	D	nplooj ntse ntsuab	100.0	1	Intoxication due to alcohol	Rt	Decoction	Potions
<i>Stachyphrynium spicatum</i> K. Schum.	K	HP	W	la throo yral	100.0	6	Detoxicant	Rt	Decoction	Potions
Menispermaceae										
<i>Arcangelisia flava</i> Merr.	L	MNP2	W	mhue berberlin	100.0	1	food poisoning	Rt	Decoction	Potions

Table 55. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Mimosaceae										
<i>Entada glandulosa</i> Pierre ex Gagnep.	H	KH	W	txwv txab tub	11.1	1	food poisoning	Sd	Decoction	Potions
Oleaceae										
<i>Jasminum sambac</i> [Soland.]	K	NP	D	mali	100.0	2	food poisoning	Rt	Grated/cold infusion	Potions
Papilionaceae										
<i>Cajanus cajan</i> (L.) Millsp.	K	HP	D	ma hae	100.0	2	Detoxicant	Lf	Decoction	Potions
Plumbaginaceae										
<i>Plumbago zeylanica</i> L.	M	HBV	D	pae lin	10.0	1	Detoxicant	Lf	Decoction	Potions
Polygonaceae										
<i>Muehlenbeckia platyclada</i> (F.Muell.) Meisn.	K	HP	D	tung ib	100.0	3	Poisoning due to centipede stings	Lf	Pounded	Poultice
Primulaceae										
<i>Lysimachia christinae</i> Hance	H	KH	D	qua luag lab	8.3	1	food poisoning	Lf	Finely chopped/cooked with eggs	Eaten as food
Rosaceae										
<i>Agrimonia nepalensis</i> D.Don	H	KH	D	cos kev nyeg	21.4	2	food poisoning	Lf	Decoction	Potions
	H	KH	D	cos kev nyeg	21.4	1	food poisoning	Lf	Hot infusion	Potions

Table 55. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	H	MNP	D	cos kev nyeg	10.0	1	food poisoning	Lf	Decoction	Potions
	H	SK	D	cos kev nyeg	100.0	4	food poisoning	Lf	Decoction	Potions
Rubiaceae										
<i>Morinda angustifolia</i> Roxb.	H	SK	W	tshuaj twm qus	12.5	1	Detoxicant	Rt	Decoction	Potions
<i>Schizomussaenda dehiscens</i> (Craib) H.L.Li	H	MNP	W	paaj npoog npaig	60.0	3	Opium poisonings	Rt	Decoction	Potions
Rutaceae										
<i>Psilopeganum sinense</i> Hemsley	H	SK	D	-	50.0	1	Intoxication due to alcohol	Un	Decoction	Potions
Sapindaceae										
<i>Cardiospermum</i> <i>halicacabum</i> L.	H	KH	D	-	4.8	1	food poisoning	St	Decoction	Potions
Solanaceae										
<i>Solanum indicum</i> L.	K	NP	D	plae tron jung	100.0	1	food poisoning	Rt	Grated/cold infusion	Potions
<i>Solanum melongena</i> L.	K	NP	D	plae tron	100.0	1	food poisoning	Rt	Grated/cold infusion	Potions

Table 55. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Taccaceae										
<i>Tacca chantrieri</i> André	H	SK	W	nplooj qhwv yeeb	57.1	4	food poisoning	Rh	Decoction	Potions
	K	HP	W	tood pu wa	100.0	5	food poisoning	Rh	Decoction with <i>Stachyphrynium spicatum</i>	Potions
	K	HST	W	la niab lein	60.0	3	Food poisonings	Rh	Grated/cold infusion	Potions
	K	NP	W	le niab lein	100.0	4	food poisoning	Rh	Grated/cold infusion	Potions
	L	JN	W	tu tak	66.7	2	food poisoning	Rh	Grated/cold infusion	Potions
	L	TK	W	tu tak	100.0	3	food poisoning	Rh	Grated/cold infusion	Potions
Urticaceae										
<i>Boehmeria nivea</i> Gaudich.	H	SK	D	tsaaj	37.5	3	food poisoning	Lf	Decoction	Potions
<i>Laportea interrupta</i> (L.) Chew	H	KH	W	zaub kig	100.0	1	food poisoning	Wp	Decoction	Potions

Table 55. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Zingiberaceae										
<i>Kaempferia galanga</i> L.	H	SK	D	pua toj	33.3	1	food poisoning	Rh	Decoction	Potions

4.1.1.27 Medicines: Pregnancy/Birth/Puerperium disorders

Use-reports related to the category of pregnancy/birth/puerperium disorders were reported from all 12 villages. Relatively high ICF values were found across all villages (Table56).

In total, 135 plant species in 70 families were used to treat pregnancy/birth/puerperium disorders (Figure 30). Of those, 124 were identified to species, nine to genus and two to only family level. The commonly represented plant families reported for this use-category were Asteraceae (12 species; 8.9%), Euphorbiaceae (6; 4.4%) and Zingiberaceae (6; 4.4%). Medicinal use(s) of many species were especially for pregnancy/birth/puerperium disorders, as they had fidelity levels of 100%. Most plants were used for postpartum recovery (89 use-reports; 41%), mostly in form of herbal bathing.

Table 56. ICF values and number of plant families and species used to treat pregnancy/birth/puerperium disorders in each village

Ethnic group	Village	#family	#species	#use-report	ICF value
Hmong	Khang Ho	11	14	59	0.78
Hmong	Manee Pruek	18	25	59	0.59
Hmong	Song Khwae	8	10	33	0.72
Mien	Huai Labaoya	36	49	153	0.68
Mien	Huai Sanao	26	34	112	0.70
Mien	Santiphap	22	25	91	0.73
Khamu	Huai Pook	14	17	56	0.71
Khamu	Huai Satang	5	5	16	0.73
Khamu	Nam Pan	4	6	21	0.75
Lua	Joon	2	2	7	0.83
Lua	Manee Pruek 2	6	6	32	0.84
Lua	Toei Klang	9	10	21	0.55
	Total	70	135		

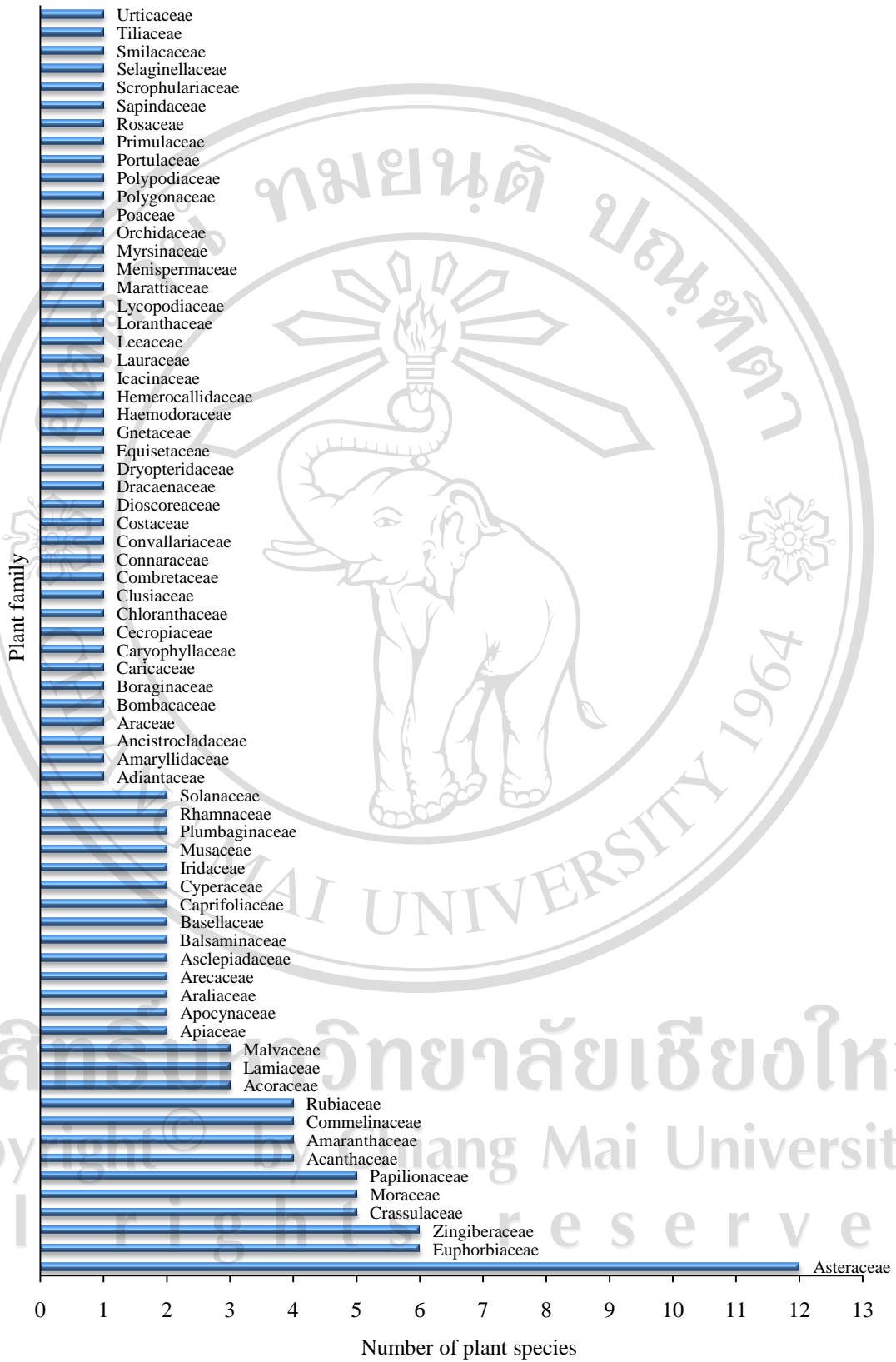


Figure 30 Number of plant species in each family used to treat pregnancy/birth/ puerperium disorders in each village

Table 57. Medicinal plants used to treat pregnancy/birth/puerperium disorders by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Acanthaceae										
<i>Andrographis paniculata</i> Nees	M	HSN	D	dia im	16.7	1	Postpartum recovery	Lf	Cooked with chicken soup	Eaten as food
<i>Justicia gendarussa</i> Burm.f.	M	STP	D	dia zung	11.8	2	Postpartum recovery	St/Lf	Decoction	Baths
<i>Phlogacanthus curviflorus</i> Nees	L	TK	W	zung zoi zo	50.0	2	Postpartum vaginal wounds	Lf	Heated	Used as mattress
	L	TK	W	zung zoi zo	50.0	2	Postpartum blues	Rt	Decoction	Potions
<i>Sanchezia nobilis</i> Hook.f.	H	MNP	D	paaj lav	33.3	2	Fetal stabilization	Lf	Cooked with chicken soup	Eaten as food
Acoraceae										
<i>Acorus calamus</i> L.	M	HBV	D	sum pow	100.0	14	Postpartum recovery	Lf	Decoction	Baths
	M	HSN	D	sum pow	75.0	3	Postpartum recovery	Wp/Lf	Decoction	Baths
	M	STP	D	sum pow	88.9	8	Postpartum recovery	Wp	Decoction	Baths
<i>Acorus gramineus</i> Aiton	H	MNP	D	pawj qab	100.0	1	Postpartum recovery (promoting expulsion of postpartum discharge)	Lf	Cooked with chicken soup	Eaten as food

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Acorus tatarinowii</i> Schott	M	HBY	W	sum pow	100.0	1	Postpartum recovery	Lf	Decoction	Baths
Adiantaceae										
<i>Adiantum philippense</i> L.	L	TK	W	lae mium	100.0	1	Postpartum recovery (Postpartum bleeding)	Wp	Decoction	Potions
Amaranthaceae										
<i>Achyranthes longifolia</i> Makino	H	MNP	D	zaub ceg nyuj lab	6.7	1	Postpartum recovery (inducing uterus shrinking)	Lf/Wp	Decoction	Potions
<i>Alternanthera bettzickiana</i> (Regel) G.Nicholson	M	HSN	D	dia zi	50.0	1	Postpartum recovery	Lf	Cooked with chicken soup	Eaten as food
<i>Celosia argentea</i> L.	M	HBY	D	ja kong koon	100.0	3	Postpartum recovery	Lf	Decoction	Baths
	M	HSN	D	ja kong koon	100.0	1	Postpartum recovery	LF	Decoction	Baths
	M	STP	D	ja kong koon	100.0	3	Postpartum recovery	Lf	Decoction	Baths
<i>Celosia cristata</i> L.	M	HBY	D	ja kong koon	100.0	1	Postpartum recovery	Lf	Decoction	Baths
Amaryllidaceae										
<i>Crinum amabile</i> Donn	M	HBY	D	tom dia zung	12.5	2	Postpartum recovery	Lf	Decoction	Baths

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Ancistrocladaceae										
<i>Ancistrocladus tectorius</i> (Lour.) Merr.	M	STP	W	jai mon dia	38.5	5	Postpartum recovery	Un	Decoction	Potions
Apiaceae										
Apiaceae sp.1	H	KH	D	taab kib ntsuab	69.7	22	Fetal stabilization/ morning sickness	Lf	Finely chopped/ cooked with eggs	Eaten as food
	H	KH	D	taab kib ntsuab	69.7	1	anti-abortion	Lf	Finely chopped/ cooked with eggs	Eaten as food
	H	MNP	D	taab kib ntsuab	60.0	9	Fetal stabilization/ morning sickness	Lf	Finely chopped/ cooked with eggs	Eaten as food
	H	SK	D	taab kib ntsuab/nkoj ntsuab	88.9	8	Fetal stabilization/ morning sickness	Lf	Finely chopped/ cooked with eggs	Eaten as food
Apiaceae sp.2	H	MNP	D	tshab xqoob	50.0	1	Postpartum recovery (inducing uterus shrinking)	Lf	Cooked with chicken soup	Eaten as food

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Apocynaceae										
<i>Aganosma marginata</i> G.Don	M	HSN	W	ngong jong hei	71.4	5	Postpartum recovery	Un	Decoction	Baths
	M	HBY	W	ngong jong hei	100.0	1	Postpartum recovery	St	Decoction	Baths
	M	STP	W	ngong jong hei	100.0	1	Postpartum recovery	St	Decoction	Baths
<i>Alstonia scholaris</i> (L.)R.Br.	H	SK	D	-	100.0	1	Lactation stimulant	Ex	Cooked with chicken soup	Eaten as food
Araceae										
<i>Pothos scandens</i> L.	M	HSN	W	ha dia ngang	9.1	1	Postpartum recovery	Wp	Decoction	Baths
Araliaceae										
<i>Aralia armata</i> Seem.	L	MNP2	W	koo tong talw	100.0	9	Postpartum blues	Ysh	Cooked	Eaten as food
<i>Schefflera</i> sp.2	M	HBY	D	ou ja pee	100.0	4	Postpartum recovery	Un	Decoction	Baths
	M	HSN	D	ou ja pee	75.0	9	Postpartum recovery	Un	Decoction	Baths
Arecaceae										
<i>Calamus rotang</i> L.	K	HP	D	plong jung	100.0	1	Postpartum pain	Rt	Decoction	Potions
<i>Calamus</i> sp.	M	HBY	D	dang wei	55.6	5	Anti-abortion	Rt	Decoction with <i>Eleusine indica</i>	Potions
<i>Livistona speciosa</i> Kurz	M	HBY	D	ki nom	100.0	1	Anti-abortion	Rt	Decoction with <i>Eleusine indica</i>	Potions

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Asclepiadaceae										
<i>Dischidia oiantha</i> Schltr.	M	HSN	D	dia jom hmuan	100.0	2	Postpartum recovery (promoting expulsion of postpartum discharge)	Wp	Cooked with chicken soup	Eaten as food
<i>Calotropis gigantea</i> (L.) W.T.Aiton	K	HP	D	rung ka	33.3	2	Postpartum blues	Un	Decoction	Baths
	M	HBV	D	fun yaw mia	100.0	7	Lactation stimulant	Lf	Cooked with chicken soup	Eaten as food
Asteraceae										
<i>Artemisia lactiflora</i> Wall. ex DC.	H	MNP	D	taab kib lab luj	20.0	4	Postpartum recovery (promoting expulsion of postpartum discharge)	Lf	Cooked with chicken soup	Eaten as food
<i>Artemisia vulgaris</i> L.	K	NP	D	-	100.0	1	Postpartum blues	Lf	Decoction	Potions
<i>Blumea aromatica</i> DC.	H	MNP	W	-	100.0	1	Abortion	Rt/Lf	Decoction	Potions
<i>Blumea balsamifera</i> DC.	M	HBV	W	ma im bua	13.6	3	Postpartum recovery (inducing uterus shrinking)	Lf	Pulped/ cold infusion	Potions

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
	K	HST	W	tood ta orul	100.0	3	Postpartum recovery	Un	Decoction	Baths
	L	JN	W	lum boi	60.0	3	Postpartum recovery (promoting expulsion of postpartum discharge)	Lf	Heated	Massage over abdominal area
	M	HSN	W	ma im bua	40.0	2	Postpartum recovery	Un	Decoction	Baths
	H	MNP	W	xaab yeeb qus	9.1	1	Abortion	Lf	Heated	Plaster over abdominal area
<i>Chromolaena odorata</i> (L.) R.M.King & H.Rob.	M	HBV	W	ku ja mia	2.9	1	Postpartum recovery	Un	Decoction	Baths
	M	HSN	W	ku ja mia	20.0	1	Postpartum recovery	Un	Decoction	Baths
<i>Dendranthema indica</i> Des Moul.	H	MNP	D	taab kib miv	66.7	2	Morning sickness	Lf	Finely chopped/ cooked with eggs	Eaten as food
<i>Dichrocephala integrifolia</i> Kuntze	K	NP	W	tood krong lue	100.0	2	Postpartum blues	Wp	Decoction/vapor ized	Roasting
<i>Eupatorium stoechadosmum</i> Hance	K	NP	D	la kri yim	100.0	3	Postpartum blues	Lf	Decoction	Potions

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Gynura cf. segetum</i> Merr.	H	SK	D	tshuaj rog qab	100.0	1	Postpartum recovery (promoting expulsion of postpartum discharge)	Lf	Decoction	Potions
<i>Gynura crepidioides</i> Benth.	M	HSN	D	jae or mia	100.0	2	Postpartum recovery	Lf	Cooked with chicken soup	Eaten as food
<i>Spilanthes acmella</i> (L.) Murray	K	HP	D	phak ped	66.7	2	Postpartum blues	Lf	Decoction	Baths
<i>Pterocypsela</i> sp.	M	HBV	D	lai mai	100.0	3	Postpartum recovery	Lf	Cooked with chicken soup	Eaten as food
Balsaminaceae										
<i>Impatiens balsamina</i> L.	H	KH	D	paaj nti ntuav (G)/ paj co nti (W)	30.8	1	Postpartum recovery (inducing placenta delivery)	Lf	Pulped/hot infusion	Potions
	H	KH	D	paaj nti ntuav (G)/ paj co nti (W)	30.8	1	Abortion	Lf	Pulped/hot infusion	Potions

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
	H	KH	D	paaj nti ntuav (G)/ paj co nti (W)	30.8	2	Labour induction	Rt/Lf	Decoction	Potions
	H	SK	D	paaj nti ntuav (G)/ paj co nti (W)	50.0	5	Labour induction	Rt/Lf	Pulped/hot infusion	Potions
	H	MNP	D	paaj nti ntuav (G)/ paj co nti (W)	100.0	1	Labour induction	Lf	Pulped/hot infusion	Potions
<i>Impatiens violaeiflora</i> Hook. f.	H	MNP	W	paaj nti ntuav (G)/ paj co nti (W)	42.9	2	Labour induction	Lf	Pulped/hot infusion	Potions
	H	MNP	W	paaj nti ntuav (G)/ paj co nti (W)	42.9	1	Postpartum recovery (promoting expulsion of postpartum discharge)	Rt	Decoction	Potions
Basellaceae										
<i>Anredera cordifolia</i> (Ten.) Steenis	H	KH	D	saab txhim maab	26.3	5	Lactation stimulant	Lf	Cooked with chicken soup	Eaten as food

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Basella alba</i> L.	L	TK	D	phak plung	100.0	2	Labour induction	Lf	Cold infusion with <i>Pleocnemia submembranacea</i> , <i>Parabaena sagittata</i> , <i>Angiopteris evecta</i>	Potions
Bombacaceae										
<i>Bombax ceiba</i> L.	K	HP	W	tood ngiu	100.0	2	Labour induction	Bk	Cold infusion with <i>Angiopteris evecta</i>	Potions
Boraginaceae										
<i>Cynoglossum furcatum</i> Wall.	H	MNP	W	-	100.0	3	Morning sickness	Rt	Decoction	Potions
Caprifoliaceae										
<i>Sambucus javanica</i> Reinw. ex Blume	M	HBV	W	toom yae mia	48.0	12	Postpartum recovery	Un	Decoction	Baths
<i>Sambucus simpsonii</i> Rehder	M	HSN	D	toom yae mia	23.1	3	Postpartum recovery	Lf	Decoction	Baths
Caricaceae										
<i>Carica papaya</i> L.	H	KH	D	maum kuab	66.7	4	Lactation stimulant	Rt	Cooked with chicken soup	Eaten as food

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
	H	MNP	D	maum kuab	100.0	3	Lactation stimulant	Rt/ Fr	Cooked with chicken soup	Eaten as food
Caryophyllaceae										
<i>Drymaria diandra</i> Blume	M	STP	W	dia hmao	100.0	1	Abortion	Lf	Pulped/heated	Poultice over abdominal area
Cecropiaceae										
<i>Poikilospermum suaveolens</i> (Blume) Merr.	K	HP	W	ma hang om	100.0	2	Postpartum recovery	Un	Decoction	Baths
	M	HBV	W	puang dia tom	83.3	5	Postpartum recovery (inducing uterus shrinking)	St	Decoction	Baths
	M	HSN	W	puang dia tom	100.0	2	Postpartum recovery	St	Decoction	Potions
	M	STP	W	puang dia tom	100.0	6	Postpartum recovery	St	Decoction	Baths
Chloranthaceae										
<i>Chloranthus erectus</i> (Buch.-Ham.) Verdc.	H	MNP	W	ntub yag	7.4	2	Postpartum recovery (inducing uterus shrinking)	Rt	Decoction	Potions
	K	NP	W	hom kai	75.0	6	Postpartum blues	Rt	Decoction	Potions

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Clusiaceae										
<i>Cratoxylum formosum</i> (Jack) Dyer subsp. <i>pruniflorum</i> (Kurz) Gogel.	K	HP	W	tood chruem chala	40.0	4	Postpartum vaginal wounds	St	Dried	Used as fuel/roasting
Combretaceae										
<i>Quisqualis indica</i> L.	M	HBY	W	hei yang	100.0	1	Anti-abortion	St	Decoction	Potions
Commelinaceae										
<i>Commelina bengalensis</i> L.	M	HBY	W	sob plaan	28.6	2	Postpartum recovery	Lf	Decoction	Baths
	K	HP	W	taak ka ial	100.0	7	Postpartum recovery (promoting expulsion of postpartum discharge)	Ysh	Cooked	Eaten as food
<i>Commelina</i> sp.	M	HBY	W	sob plaan yang	100.0	1	Postpartum recovery	Wp	Decoction	Baths
<i>Floscopa scandens</i> Lour.	M	STP	W	tom sob plaan	75.0	3	Postpartum recovery	Wp	Decoction	Baths
<i>Tradescantia zebrina</i> Bosse	M	HSN	D	sob plaan zi	20.0	4	Postpartum recovery	Lf	Cooked with chicken soup	Eaten as food
Connaraceae										
<i>Connarus semidecandrus</i> Jack	M	STP	W	bob jei hei	60.0	6	Postpartum recovery	Un	Decoction	Baths
	M	HBY	W	bob jei hei	38.5	5	Postpartum recovery	St	Decoction	Baths

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Convallariaceae										
<i>Liriope</i> sp.	M	HBY	D	jiao choi ngang	100.0	2	Postpartum pain	Lf	Decoction	Potions
	M	HSN	D	jiao choi ngang	50.0	1	Postpartum pain	Wp	Decoction	Potions
Costaceae										
<i>Costus speciosus</i> (J. Koenig) Sm.	M	HBY	W	ching kuan diang	100.0	1	Postpartum recovery	St	Decoction	Baths
Crassulaceae										
<i>Kalanchoe integra</i> Kuntze	H	KH	D	nplooj tuaj kaus	100.0	1	Fetal stabilization	Lf	Gathered at dawn/ non-prepared	Suck for sap from leaves
<i>Kalanchoe laciniata</i> (L.) DC.	H	SK	D	tshuaj ntiv tub	4.8	1	Fetal stabilization/ morning sickness	Lf	Finely chopped/ cooked with eggs	Eaten as food
<i>Kalanchoe pinnata</i> (Lam.) Pers.	H	MNP	D	nplooj tuaj kaus	25.0	1	Morning sickness	Lf	Cooked with chicken soup	Eaten as food

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Phedimus</i> sp.	H	SK	D	sam muaj kaab	100.0	1	Fetal stabilization/ morning sickness	Lf	Finely chopped/ cooked with eggs	Eaten as food
<i>Sedum</i> cf. <i>sarmentosum</i> Bunge	H	SK	D	nplai zeb	50.0	3	Fetal stabilization/ morning sickness	Lf	Finely chopped/ cooked with eggs	Eaten as food
	H	KH	D	nplai zeb	50.0	6	Fetal stabilization/ morning sickness	Lf	Finely chopped/ cooked with eggs	Eaten as food
	H	MNP	D	nplai zeb	40.0	2	Morning sickness	Lf	Pulped/hot infusion	Potions
Cyperaceae										
<i>Carex baccans</i> Nees	H	MNP	W	rog luj	50.0	3	Postpartum recovery (inducing uterus shrinking)	Rt	Decoction	Potions
<i>Kyllinga nemoralis</i> (Forst.) Dandy ex Hutch. & Dalziel	H	MNP	W	-	75.0	3	Postpartum recovery (promoting expulsion of postpartum discharge)	Wp	Decoction	Potions

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Dioscoreaceae										
<i>Dioscorea bulbifera</i> L.	H	KH	D	qos npua nyeg	28.6	4	Fetal stabilization	Bbl	Finely chopped/ cooked with eggs	Eaten as food
Dracaenaceae										
<i>Sansevieria roxburghiana</i> Schult.	M	HBV	D	ha dia nang	10.0	1	Postpartum recovery	Lf	Decoction	Baths
	M	HSN	D	ha dia nang	100.0	1	Postpartum recovery	Lf	Decoction	Baths
Dryopteridaceae										
<i>Pleocnemia submembranacea</i> (Hayata) Tagawa & K.Iwats.	L	MNP2	W	lum to zone	100.0	3	Labour induction	St	Cold infusion	Potions
	L	TK	W	zone payode	100.0	3	Labour induction	St	Cold infusion	Potions
Equisetaceae										
<i>Equisetum debile</i> Roxb. ex Vaucher	M	STP	W	pae tob	63.6	7	Postpartum recovery	Wp	Decoction	Baths
Euphorbiaceae										
<i>Croton roxburghii</i> N.P. Balakr.	K	HP	W	tood plao	47.6	5	Postpartum recovery	Bk/Lf	Decoction	Baths

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
	K	HP	W	tood plao	47.6	4	Postpartum vaginal wounds	St	Decoction	Baths
	K	HP	W	tood plao	47.6	1	Postpartum vaginal wounds	St	Dried	Use as fuel/Roasing
	K	HST	W	tood tong plao	57.1	4	Postpartum recovery	Lf	Decoction	Baths
	L	JN	W	lum plao	26.7	4	Postpartum recovery (promoting expulsion of postpartum discharge)	Lf	Heated	Plaster over abdominal area
	M	HBY	W	ta doe pae	76.5	13	Postpartum recovery	Un	Decoction	Baths
	M	HSN	W	diang biad	100.0	7	Postpartum recovery	Un	Decoction	Baths
	M	STP	W	ta doe pae	81.8	9	Postpartum recovery	St	Decoction	Baths
<i>Euphorbia hirta</i> L.	H	KH	W		100.0	1	Lactation stimulant	Wp	Cooked with chicken soup	Eaten as food
<i>Euphorbia neriifolia</i> L.	H	KH	D	xeeb leej tsaav	100.0	1	Lactation stimulant	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	xeeb leej tsaav	83.3	5	Lactation stimulant	Lf	Cooked with chicken soup	Eaten as food
<i>Homonoia riparia</i> Lour.	H	SK	W	-	100.0	1	Abortion	St	Decoction	Potions

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Pedilanthus tithymaloides</i> (L.) Poit.	H	KH	D	-	100.0	2	Lactation stimulant	Ysh	Cooked with chicken soup	Eaten as food
<i>Ricinus communis</i> L.	H	MNP	D	taw dlaav lab	71.4	1	Labour induction	Lf	Heated	Plaster around feet
	H	MNP	D	taw dlaav lab	71.4	3	Postpartum recovery (promoting expulsion of postpartum discharge)	Lf	Heated	Plaster around feet
	H	MNP	D	taw dlaav lab	71.4	1	Abortion	Lf	Heated/ decoction with <i>Impatiens violaeiflora</i>	Plaster around feet/Potions
	M	HBY	D	ma paung zi	75.0	3	Postpartum recovery	St	Decoction	Baths
	M	HSN	D	ma paung zi	100.0	6	Postpartum recovery	Lf	Decoction	Baths
	L	MNP2	D	plae hoong	100.0	3	Labour induction	Lf	Heated	Plaster around feet

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Gnetaceae										
<i>Gnetum montanum</i> Markgr.	M	HBY	W	hei muai	75.0	3	Postpartum recovery (inducing uterus shrinking)	St	Decoction	Potions
Haemodoraceae										
<i>Xiphidium caeruleum</i> Aubl.	M	HSN	D	dia kiu	100.0	14	Labour induction/Abortion	Lf	Decoction	Potions
	H	MNP	D	tw ntses luj	10.0	1	Abortion	Lf	Decoction	Potions
Hemerocallidaceae										
<i>Hemerocallis lilioasphodelus</i> L.	M	HSN	D	ha dia dao/ha dia zua	5.3	1	Postpartum recovery	Lf	Cooked with chicken soup	Eaten as food
Icacinaeae										
<i>Gonocaryum lobbianum</i> (Miers) Kurz	M	HBY	W	ja king yung	22.2	2	Postpartum recovery (inducing uterus shrinking)	St	Decoction	Baths
	M	STP	W	jian tai za	60.0	3	Postpartum recovery	St	Decoction	Baths
Iridaceae										
<i>Belamcanda chinensis</i> [DC.]	M	HSN	D	dia kiu	100.0	1	Labour induction	Lf	Decoction	Potions

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Eleutherine americana</i> Merr. ex K.Heyne	L	MNP2	W	som zo	77.8	7	Postpartum recovery	Rh	Cooked with chicken soup	Eaten as food
	M	HSN	D	nom jang	33.3	1	Lactation stimulant	Blb	Cooked with chicken soup	Eaten as food
	M	HSN	D	nom jang	33.3	1	Postpartum recovery	Wp	Decoction	Baths
Lamiaceae										
<i>Clerodendrum paniculatum</i> L.	M	HBV	W	lai ko zi	100.0	1	Postpartum recovery	Lf	Decoction	Baths
<i>Teucrium viscidum</i> Blume var. <i>viscidum</i>	H	KH	D	pawn tshis nyeg	9.5	2	Morning sickness	Lf	Cooked with chicken soup	Eaten as food
	H	SK	D	pawn tshis nyeg	63.6	7	Fetal stabilization	Lf	Finely chopped/ cooked with eggs	Eaten as food
<i>Vitex peduncularis</i> Wall.	K	HP	W	tood tok ngon	100.0	2	Postpartum vaginal wounds	St	Dried	Used as fuel/roasting
Lauraceae										
<i>Phoebe lanceolata</i> (Nees) Nees	M	HBV	W	ta tang mia	100.0	2	Postpartum recovery (inducing uretus shrinking)	Bk	Decoction	Baths

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Leeaceae										
<i>Leea indica</i> (Burm.f.) Merr.	M	HBY	W	toom yae ngang	20.0	1	Postpartum recovery	Un	Decoction	Baths
	M	HSN	W	toom yae ngang	100.0	2	Postpartum recovery	Un	Decoction	Baths
Loranthaceae										
<i>cf. Scurrula parasitica</i> L.	M	HSN	W	diang zang za	100.0	3	Postpartum pain	St	Decoction	Potions
Lycopodiaceae										
<i>Lycopodium cernuum</i> L.	M	STP	W	ab kong zing	100.0	2	Postpartum recovery	Wp	Decoction	Baths
Malvaceae										
<i>Hibiscus rosa-sinensis</i> L.	M	STP	D	-	100.0	2	Postpartum recovery	Lf	Decoction	Baths
<i>Sida rhombifolia</i> L.	M	HBY	W	kon jian	100.0	1	Anti-abortion	Rt	Decoction	Potions
	M	HSN	W	kon jian	100.0	7	Anti-abortion	Rt	Decoction	Potions
	M	STP	W	kon jian	100.0	2	Anti-abortion	Rt	Decoction	Potions
<i>Urena lobata</i> L.	M	HBY	W	kon jian	100.0	2	Anti-abortion	Rt	Decoction with <i>Eleusine indica</i>	Potions
	M	HSN	W	kon jian	100.0	7	Anti-abortion	Rt	Decoction with <i>Eleusine indica</i>	Potions

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
	M	STP	W	kon jian	100.0	2	Anti-abortion	Rt	Decoction with <i>Eleusine indica</i>	Potions
Marattiaceae										
<i>Angiopteris evecta</i> (Forst.) Hoffm.	K	HP	W	tood a/kib ma lom	100.0	6	Labour induction	Sp	Cold infusion	Potions
	K	NP	W	tood a/kib ma lom	100.0	7	Postpartum blues	Sp	Decoction	Potions
	L	TK	W	kib ma lom	100.0	2	Labour induction	Sp	Cold infusion with <i>Pleocnemia submembranacea</i> , <i>Parabaena sagittata</i> , <i>Basella alba</i>	Potions
Menispermaceae										
<i>Parabaena sagittata</i> Miers ex Hook.f. & Thomson	L	TK	W	tu phak nung	100.0	1	Labour induction	Ylf	Cooked	Eaten as food
Moraceae										
<i>Ficus hirta</i> Vahl	M	HBV	W	dia tong yang	100.0	1	Postpartum recovery	St	Decoction	Baths
<i>Ficus hispida</i> L.f.	M	STP	W	ngong yaw	100.0	1	Postpartum recovery	Lf	Decoction	Baths

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
<i>Ficus ichnopoda</i> Miq.	M	HBY	W	zer lium kiae	100.0	2	Postpartum recovery	Lf	Decoction	Baths
<i>Ficus semicordata</i> Buch.-Ham. ex Sm.	M	HBY	W	sa kwo diang	100.0	2	Postpartum recovery (inducing uterus shrinking)	Un	Decoction	Potions
<i>Ficus squamosa</i> Roxb.	M	HBY	W	zer lium kiae	100.0	1	Postpartum recovery	Un	Decoction	Baths
	M	STP	W	zer lium kiae	50.0	3	Postpartum recovery	Un	Decoction	Baths
Musaceae										
<i>Ensete glauca</i> Roxb.	K	HP	W	troi kjung	33.3	1	Lactation stimulant	Infl	Cooked	Eaten as food
<i>Musa sapientum</i> L.	K	HP	D	troi teeb	100.0	4	Lactation stimulant	Infl	Cooked with chicken soup	Eaten as food
Myrsinaceae										
<i>Maesa glomerata</i> K.Larsen & C.M.Hu	K	HST	W	kob dong	100.0	1	Postpartum recovery (promoting expulsion of postpartum discharge)	Rt	Decoction	Potions
	K	HST	W	kob dong	100.0	2	Lactation stimulant	Rt	Decoction	Potions
	M	HBY	W	-	100.0	1	Postpartum recovery	St	Decoction	Baths
	K	HST	W	kob dong	100.0	1	Postpartum blues	Rt	Decoction	Potions

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Orchidaceae										
<i>Dendrobium aphyllum</i> Roxb.	M	STP	D	yang pang dia	100.0	1	Postpartum recovery	Wp	Decoction	Baths
Papilionaceae										
<i>Butea cf. superba</i> Roxb.	M	HBY	W	kiam jong hei	50.0	1	Postpartum recovery	St	Decoction	Baths
	M	HSN	W	kian jong hei	0.3	2	Postpartum recovery	St	Decoction	Baths
<i>Crotalaria assamica</i> Bth.	M	STP	W	dia oe	75.0	3	Postpartum recovery	Un	Decoction	Baths
<i>Flemingia stricta</i> Roxb.	M	HSN	W	dia ngang pae	100.0	2	Postpartum recovery	Wp	Decoction	Baths
	M	HBY	W	ha dia	33.3	2	Postpartum recovery	Wp	Decoction	Baths
<i>Tadehagi triquetrum</i> (L.) H. Ohashi	M	HSN	W	ha dia ngang	100.0	1	Postpartum recovery	Lf	Decoction	Baths
Plumbaginaceae										
<i>Plumbago indica</i> L.	L	TK	D	lum pid piu	100.0	3	Labour induction	Rt	Decoction	Potions
<i>Plumbago zeylanica</i> L.	L	TK	D	lum pid piu	100.0	2	Labour induction	Rt	Decoction	Potions
	M	HBY	D	pae lin	10.0	1	Postpartum recovery	Lf	Decoction	Baths
	M	HSN	D	pae lin	33.3	1	Postpartum recovery	Lf	Decoction	Baths
Poaceae										
<i>Eleusine indica</i> (L.) Gaertn.	M	STP	W	ta chan	100.0	9	Anti-abortion	Wp	Decoction	Potions
	M	HSN	W	ta chan	100.0	9	Anti-abortion	Wp	Decoction	Potions
	M	HBY	W	ta chan	100.0	20	Anti-abortion	Rt	Decoction	Potions

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Polygonaceae										
<i>Fallopia forbesii</i> (Hance) Yonekura & H. Ohashi	M	HBY	D	pong lin	13.3	2	Abortion	Rt	Decoction	Potions
Polypodiaceae										
<i>Platyserium</i> sp.	M	HBY	D	dom jang puang	75.0	3	Postpartum recovery	Lf	Decoction	Baths
	M	HSN	D	dom jang puang	80.0	4	Postpartum recovery	Lf	Decoction	Baths
	M	STP	D	dom jang puang	50.0	2	Postpartum recovery	Lf	Decoction	Baths
Portulacaceae										
<i>Talinum paniculatum</i> (Jacq.) Gaertn.	M	HSN	D	ka li zein	100.0	1	Postpartum recovery	Lf	Cooked with chicken soup	Eaten as food
Primulaceae										
<i>Lysimachia christinae</i> Hance	H	MNP	W	qua luag lab	18.2	1	Anti-abortion	Wp	Decoction	Potions
	H	MNP	W	qua luag lab	18.2	1	Morning sickness	Wp	Decoction	Potions
	H	KH	D	qua luag lab	16.7	2	Fetal stabilization	Lf	Decoction	Potions

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Rhamnaceae										
<i>Gouania leptostachya</i> DC.	K	HP	W	la pranuem marad	100.0	3	Postpartum blues	Un	Decoction	Baths
	M	STP	W	puang dia yao	50.0	7	Postpartum recovery	Un	Decoction	Baths
	M	HBY	W	puang dia yao	100.0	3	Postpartum recovery	St	Decoction	Baths
<i>Ventilago denticulata</i> Willd.	M	HSN	W	dia wui	100.0	3	Postpartum recovery	St	Decoction	Baths
Rosaceae										
<i>Rosa</i> sp.	H	MNP	D	suab nplai	55.6	5	Postpartum pain	Rt	Cooked with chicken soup	Eaten as food
Rubiaceae										
<i>Mussaenda sanderiana</i> Ridl.	M	HBY	W	ja king hei	100.0	1	Postpartum recovery	St	Decoction	Baths
<i>Mycetia gracilis</i> Craib	K	HST	W	kob plane	100.0	3	Lactation stimulant	Rt	Decoction	Potions
<i>Rubia crassipes</i> Coll. & Hemsl.	H	MNP	W	maab txhwm nees	12.5	1	Postpartum recovery (inducing uretus shrinking)	St	Decoction	Potions
	L	MNP2	W	ja kan zo	69.2	9	Postpartum recovery	Wp	Decoction	Potions
<i>Uncaria</i> sp.	M	HBY	W	dim tiu hei	100.0	2	Postpartum recovery	St	Decoction	Baths

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Sapindaceae										
<i>Allophyllus cobbe</i> (L.) Rausch.	L	TK	W	ya ton diao	100.0	1	Postpartum recovery	Lf	Cooked	Eaten as food
Scrophulariaceae										
<i>Limnophila rugosa</i> Merr.	H	MNP	D	siv fwj xyaab	50.0	1	Postpartum pain	Lf	Cooked with chicken soup	Eaten as food
Selaginellaceae										
<i>Selaginella willdenowii</i> (Desv. ex Poir.) Baker	M	HBY	W	ab kong zing	9.5	2	Postpartum recovery	Wp	Decoction	Baths
Smilacaceae										
<i>Smilax ovalifolia</i> Roxb.	K	HP	W	hrong long	66.7	4	Postpartum bleeding/ Postpartum recovery (promoting expulsion of postpartum discharge)	Rt	Decoction	Potions
	M	HBY	W	jiam yang kong	4.8	1	Anti-abortion	Rt	Decoction with <i>Eleusine indica</i>	Potions

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
Solanaceae										
<i>Solanum erianthum</i> D.Don	M	HBY	W	tin hoong ja	100.0	2	Postpartum recovery (inducing uretus shrinking)	Lf	Decoction	Baths
<i>Solanum spirale</i> Roxb.	L	MNP2	D	tu plung/ phak deed	100.0	1	Postpartum recovery	Lf	Cooked with chicken soup	Eaten as food
Tiliaceae										
<i>Triumfetta pilosa</i> Roth	M	STP	W	koo bud	100.0	1	Labour induction	Wp	Decoction	Potions
Urticaceae										
<i>Boehmeria nivea</i> Gaudich.	K	HST	D	tood pan	100.0	2	Postpartum blues	Rt	Decoction	Potions
	H	KH	D	tsaaj	16.7	2	Postpartum recovery	Lf	Decoction	Baths
Zingiberaceae										
<i>Alpinia galanga</i> Willd.	K	HP	D	zul	100.0	2	Postpartum recovery	Lf	Decoction	Baths
<i>Curcuma aeruginosa</i> Roxb.	H	MNP	D	qoov	100.0	1	Postpartum pain	Rh	Decoction	Potions
	K	HP	D	koi hiang	40.0	2	Postpartum recovery	Rh	Decoction	Baths
<i>Curcuma comosa</i> Roxb.	H	KH	D	-	40.0	1	Labour pain	Rh	Decoction	Potions

Table 57. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Rout of Administration
	H	KH	D	-	40.0	1	Postpartum recovery (inducing uterus shrinking)	Rh	Decoction	Potions
	K	HP	D	-	100.0	2	Postpartum recovery (inducing uterus shrinking)	Rh	Decoction	Baths
<i>Hedychium coccineum</i> Buch.-Ham. ex Sm.	L	TK	D	lum pyok zo	100.0	2	Labour induction	Rh	Decoction	Potions
<i>Zingiber cassumunar</i> Roxb.	K	NP	D	la koi	20.0	2	Postpartum pain	Rh	Decoction	Potions
<i>Zingiber officinale</i> Roscoe	M	STP	D	zung	66.7	2	Postpartum recovery	Rh	Decoction	Potions

4.1.1.28 Medicines: Respiratory system disorders

Use-reports related to the category of respiratory system disorders were reported from all 12 villages. Among the villages, Toei Klang and Huai Satang had low ICF values of 0.36 and 0.40, respectively (Table58).

In total, 96 plant species in 52 families were registered in the category of respiratory system disorders (Figure 31). Of those, 88 were securely identified and two with some doubt to species, and six to genus level. The most commonly represented plant families reported for this use-category were Asteraceae (7 species; 7.1%) and Lamiaceae (10; 10.1%). Many species were used only in this category as they had fidelity level values of 100%. The most frequently mentioned disorder was cough which has 117 use-reports, constituted 70.1% of all uses reported. Interestingly, the Hmong and the Mien shared traditional practices related to treating cough by cooking many plant species with steamed eggs and eat this mixture as food.

Table 58. ICF values and number of plant families and species used to treat respiratory system disorders in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Khang Ho	15	23	57	0.61
Hmong	Manee Pruek	15	19	43	0.57
Hmong	Song Khwae	15	24	47	0.50
Mien	Huai Labaoya	17	20	124	0.85
Mien	Huai Sanao	14	16	62	0.75
Mien	Santiphap	15	20	81	0.76
Khamu	Huai Pook	4	5	21	0.80
Khamu	Huai Satang	4	4	6	0.40
Khamu	Nam Pan	5	6	15	0.64
Lua	Joon	4	4	8	0.57
Lua	Manee Pruek2	7	9	47	0.83
Lua	Toei Klang	9	10	15	0.36
Total		52	96		

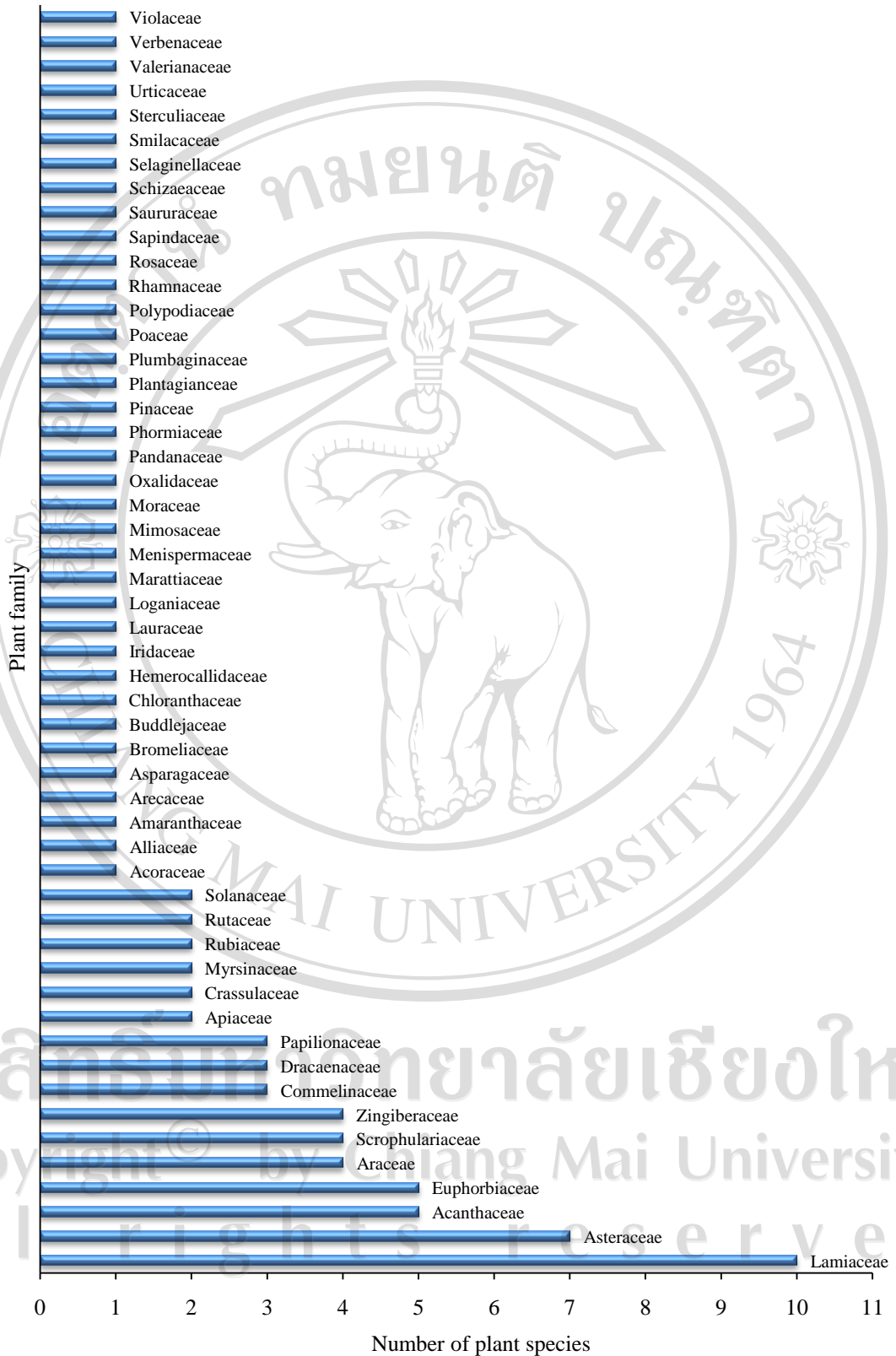


Figure 31 Number of plant species in each family used to treat respiratory system disorders in each village

Table 59. Medicinal plants used to treat respiratory system disorders by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Acanthaceae										
<i>Andrographis paniculata</i> Nees	H	KH	D	tshuaj ab	100.0	1	Cough	Lf	Decoction	Potions
	H	SK	D	tshuaj ab	66.7	2	Cough	Lf	Decoction	Potions
	L	TK	D	fa ta lai jone	100.0	1	Cough	Lf	Decoction	Potions
	M	HSN	D	dia im	50.0	3	Cough	Lf	Decoction	Potions
	M	STP	D	dia im	100.0	1	Asthma	Lf	Decoction	Potions
<i>Justicia gendarussa</i> Burm.f.	H	SK	D	nkaaj dlub	25.0	1	Cough	Lf	Decoction	Potions
<i>Lepidagathis incurva</i> Buch.-Ham. ex D.Don	H	KH	W	tshuaj kem	9.1	1	Cough	Un	Decoction	Potions
				mov nplaum						
<i>Ruellia tuberosa</i> L.	H	SK	W	-	100.0	1	Cough	Wp	Decoction	Potions
<i>Thunbergia laurifolia</i> Lindl.	M	STP	W	yae tam hei	11.8	2	Asthma	St	Decoction	Potions
Acoraceae										
<i>Acorus calamus</i> L.	K	NP	D	hang kao/sa	18.2	2	Cough	Rh	Pulped	Cold infusion
	M	HSN	D	krue kang sum pow	25.0	1	Nasal congestion	Rt	Chopped	Amulet

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Alliaceae										
<i>Allium sativum</i> L.	L	JN	D	ka tiam	100.0	1	Nasal congestion	Rh	Pounded/mixed	Liniment over forehead
Amaranthaceae										
<i>Alternanthera bettzickiana</i> (Regel) G.Nicholson	M	HBY	D	dia zi	100.0	1	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
Apiaceae										
<i>Centella asiatica</i> (L.) Urb.	M	HBY	D	hia fad	100.0	2	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
	M	STP	D	hia fad/ ngong kao paung	100.0	3	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
<i>Hydrocotyle sibthorpioides</i> Lam.	H	MNP	D	guav hnug qub	33.3	1	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
	H	SK	D	guav hnug qub	100.0	1	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
	M	HBY	D	fad mhuan	81.3	13	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	M	HSN	D	fad mhuan	66.7	6	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
Araceae										
<i>Alocasia cucullata</i> (Loureiro) G. Don	H	SK	D	teeb nqug	25.0	1	Asthma	Pt	Pounded/heated	Poultice over chest
<i>Homalomena</i> sp.	H	KH	D	teeb lab	100.0	1	Pneumonia	Lf	Cooked with chicken soup	Eaten as food
	H	SK	W	teeb qus	100.0	1	Cough	Co	Decoction	Potions
<i>Pothos chinensis</i> (Raf.) Merr.	H	SK	W		50.0	3	Cough	Lf	Decoction	Potions
	M	HBY	W	ha dia ngang	100.0	2	Cough	Wp	Decoction	Potions
<i>Pothos scandens</i> L.	M	HBY	W	ha dia ngang	78.6	11	Cough	St	Decoction	Potions
	M	HSN	D	ha dia ngang	81.8	9	Cough	St/Lf	Decoction	Potions
	M	STP	W	ha dia ngang	100.0	14	Cough	St	Decoction	Potions
Areaceae										
<i>Calamus</i> sp.	M	HBY	D	dang wei	11.1	1	Cough	Rt	Decoction	Potions
Asparagaceae										
<i>Asparagus filicinus</i> Buch.-Ham. ex D.Don	H	MNP	W	-	9.1	1	Cough	Lf	Cold infusion	Potions

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Asteraceae										
<i>Artemisia verlotiorum</i> Lamotte	H	KH	D	suv ntswm	10.0	1	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
	H	KH	D	suv ntswm	10.0	1	Sore throat	Lf	Finely chopped/ Cooked with eggs	Eaten as food
	H	SK	D	suv ntswm	11.1	1	Cough	YLf	Finely chopped/ Cooked with eggs	Eaten as food
<i>Artemisia vulgaris</i> L.	H	MNP	W	suv ntswm	16.7	2	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
<i>Blumea balsamifera</i> DC.	K	HP	W	tood orul	100.0	7	Epistaxis (nose bleed)	Lf	Finely chopped/ dried	smoke
	K	NP	W	tood orul	83.3	5	Epistaxis (nose bleed)	Lf	Pulped	stuff in nostril
	L	TK	W	lum boi	44.4	4	Epistaxis (nose bleed)	Lf	Finely chopped/dried	smoke
	H	KH	W	xaab yeeb qus	5.6	1	Cough	YLf	Finely chopped/ Cooked with eggs	Eaten as food
	L	JN	W	lum boi	40.0	2	Epistaxis (nose bleed)	Lf	Pulped	stuff in nostril

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Chromolaena odorata</i> (L.) R.M.King & H.Rob.	M	STP	W	ma im bua	10.0	1	Epistaxis (nose bleed)	Lf	Pulped	stuff in nostril
	M	STP	W	ku ja mia	11.1	1	Cough	Rt	Decoction	Potions
	K	HP	W	yung wai	46.7	7	Epistaxis (nose bleed)	Lf	Pulped	stuff in nostril
<i>Elephantopus scaber</i> L.	K	NP	W	sa krue chine	100.0	4	Cough	Rt	Heated/cold infusion	Potions
	H	KH	D	yig nqeeb	14.3	1	Cough	Rt	Decoction	Potions
	H	SK	D	yig nqeeb	75.0	2	Cough	Rt	Decoction	Potions
	K	HST	D	ya sam sib song rak	100.0	1	Asthma	Rt	Decoction	Potions
<i>Inula cappa</i> (Buch.-Ham. ex D.Don) DC.	H	MNP	W	-	50.0	3	Cough	Wp	Decoction	Potions
	L	MNP2	W	lum tu moi	100.0	9	Cough	Wp	Decoctions	Potions
<i>Kalimeris indica</i> Sch.Bip.	H	KH	D	pae qhua txhais	3.8	1	Phlegm/ sputum	Lf	Decoction	Potions
	H	SK	D	qhua txhais	9.1	1	Asthma	Lf	Decoction	Potions

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	M	HBY	D	ha dia kang	46.4	13	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
	M	HSN	D	ha dia kang	47.8	11	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
	M	STP	D	ha dia kang	84.6	11	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
Bromeliaceae										
<i>Ananas comosus</i> (L.) Merr.	K	NP	D	plae ma ka nud	100.0	1	Cough	Lf	Pulped/Cold infusion	Potions
Buddlejaceae										
<i>Buddleja asiatica</i> Lour.	M	HBY	D	pin piao mia	33.3	1	Cough	YLf	Finely chopped/ Cooked with eggs	Eaten as food
Chloranthaceae										
<i>Chloranthus erectus</i> (Buch.- Ham.) Verdc.	H	MNP	W	ntub yag	14.8	4	Cough	Wp/Rt	Decoction	Potions
Commelinaceae										
<i>Callisia repens</i> L.	H	KH	W	-	50.0	2	Cough		Finely chopped/ Cooked with eggs	Eaten as food

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Commelina diffusa</i> Burm. f.	H	MNP	W	-	100.0	1	Nasal congestion	Wp	Decoction with <i>Ageratum conyzoides</i>	Potions
<i>Tradescantia zebrina</i> Bosse	H	KH	D	zaub raws lab	10.0	1	Hiccoughs	Lf	Decoction	Potions
Crassulaceae										
<i>Kalanchoe laciniata</i> (L.) DC.	M	HSN	D	lom jang yiu	50.0	1	Pneumonia	Lf	Cooked with chicken soup	Eaten as food
<i>Sedum cf. sarmentosum</i> Bunge	H	KH	D	-	8.3	1	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
Cyperaceae										
<i>Carex baccans</i> Nees	M	STP	W	low	33.3	1	Pneumonia	Lf	Decoction	Potions
<i>Kyllinga nemoralis</i> (Forst.) Dandy ex Hutch. & Dalziel	L	MNP2	W	-	100.0	3	Asthma	Wp	Decoction	Potions
Dracaenaceae										
<i>Dracaena elliptica</i> Thunb.	M	HBV	W	ha dia doi	100.0	11	Cough	Rt	Decoction	Potions
	M	STP	W	ha dia doi	100.0	9	Cough	Rt	Peeled	Eaten as food
<i>Dracaena fragrans</i> Ker Gawl.	L	JN	D	wad sa na	100.0	1	Epistaxis (nose bleed)	Lf	Dried/rolled	smoke

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Sansevieria roxburghiana</i> Schult.	M	HBV	D	ha dia nang	70.0	7	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
Euphorbiaceae										
<i>Breynia retusa</i> (Dennst.) Alston	H	MNP	W	-	100.0	3	Cough	Ysh	Finely chopped/ Cooked with eggs	Eaten as food
<i>Cleidion javanicum</i> Blume	K	HST	W	tood lha jung hual	100.0	1	Sore throat	Bk	Grated	Pastil
<i>Euphorbia hirta</i> L.	M	STP	W	yuai mia	100.0	3	Cough	Wp	Decoction with <i>Phyllanthus</i> <i>urinaria</i>	Potions
<i>Phyllanthus amarus</i> Schumach.	H	KH	W	-	100.0	1	Cough	Wp	Decoction	Potions
	H	SK	W	-	75.0	6	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
	M	STP	W	pu ha dia	100.0	2	Cough	Wp	Decoction with <i>Euphorbia hirta</i>	Potions
<i>Sauropus spatulifolius</i> Beille	H	KH	D	-	100.0	1	Asthma	Lf	Decoctions	Potions
Hemerocallidaceae										
<i>Hemerocallis lilioasphodelus</i> L.	M	HBV	D	ha dia dao/ha dia zua	67.7	21	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	M	HSN	D	ha dia dao/ha dia zua	42.1	8	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
	M	STP	D	ha dia dao/ha dia zua	53.3	8	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
Iridaceae										
<i>Eleutherine americana</i> Merr. ex K. Heyne	K	NP	D	-	50.0	2	Tuberculosis	Rh	non-prepared	Eaten as food
	M	HBV	D	nom jang	66.7	2	Cough	Blb	Decoction	Potions
	M	HSN	D	nom jang	16.7	1	Cough	Rh	Decoction	Potions
Lamiaceae										
<i>Ajuga cf. reptans</i> L.	H	SK	D	tshuaj ab	33.3	1	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
<i>Ajuga</i> sp.1	H	MNP	D	tshuaj pog ntxoov/tshuaj ab	16.7	2	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
<i>Ajuga</i> sp.2	H	KH	D	tshuaj nqu	100.0	1	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Callicarpa rubella</i> Lindl.	L	MNP2	W	lum kak	100.0	6	Tuberculosis /Bloody cough	Rt/Wp	Decoction	Potions
<i>Elsholtzia blanda</i> Benth.	H	MNP	W	-	100.0	3	Nasal congestion	Wp	Pounded/decoction	Smell/potions
<i>Mentha arvensis</i> L.	H	SK	D	tshuaj nqu	100.0	2	Nasal congestion	Lf	Grated	Smell
	H	SK	D	tshuaj nqu	100.0	1	Cough	Lf	Decoction	Potions
	L	MNP2	D	-	100.0	1	Nasal congestion	Lf	Grated	Smell
	L	TK	D	-	100.0	1	Nasal congestion	Lf	Grated	Smell
<i>Microtoena insuavis</i> (Hance) Prain ex Briq.	L	TK	W	ya kum bong	100.0	1	Asthma	Rt	Decoction	Potions
<i>Orthosiphon aristatus</i> (Blume) Miq.	M	HBV	D	jang zi mia/ jian ku ja	100.0	3	Cough	Lf	Decoction	Potions
	M	STP	D	jang zi mia/ jian ku ja	20.0	1	Cough	Lf	Decoction	Potions
<i>Perilla frutescens</i> (L.) Britton	M	STP	D	kong fow	100.0	2	Cough	Lf	Decoction	Potions

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
<i>Teucrium viscidum</i> Blume var. <i>viscidum</i>	H	KH	D	pawn tshis nyeg	38.1	8	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
	H	MNP	D	pawn tshis nyeg	66.7	8	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
Lauraceae										
<i>Cinnamomum iners</i> Reinw. ex Blume	L	MNP2	W	lum nae wai	42.1	8	Cough	Bk	Decoction	Potions
<i>Litsea cubeba</i> (Lour.) Pers.	L	TK	W	lum plaе klueng	100.0	1	Cough	Fr	non-prepared	Eaten as food
Loganiaceae										
<i>Gelsemium elegans</i> (Gardn. & Champ.) Benth.	H	MNP	W	tshuaj noj tuag	33.3	1	Tuberculosis	Lf	Finely chopped/dried	Smoke
Marattiaceae										
<i>Angiopteris evecta</i> (Forst.) Hoffm.	M	STP	W	ma tei doi/jang tei doi	66.7	2	Cough	Sp	Decoction	Potions
Menispermaceae										
<i>Cissampelos pareira</i> L.	M	HBV	W	ha dia doi	100.0	1	Cough	Rh	Decoction	Potions

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Mimosaceae										
<i>Mimosa pudica</i> L.	H	SK	W	-	100.0	1	Cough	Lf	Finely chopped	Eaten as food
Moraceae										
<i>Ficus hispida</i> L.f.	K	HST	W	tood ka chal	100.0	1	Sore throat	St	Cold infusion	Potions
Myrsinaceae										
<i>Embelia pulchella</i> Mez	L	MNP2	W	ya pod	100.0	7	Cough	Rt	Decoction	Potions
<i>Maesa indica</i> (Roxb.) Sweet	L	MNP2	W	-	100.0	3	Asthma	Rt/Wp	Decoction	Potions
Oxalidaceae										
<i>Oxalis corniculata</i> L.	H	MNP	W	-	100.0	1	Cough	Wp	Decoction	Potions
	H	SK	W	-	100.0	1	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
Pandanaceae										
<i>Pandanus</i> sp.	M	HBY	W	hia lei yow	50.0	1	Sore throat	St	Decoction	Potions
Papilionaceae										
<i>Desmodium velutinum</i> (Willd.) DC.	K	HP	W	ya tuek maew	0.0	1	Asthma	Lf	Burned/cold infusion	Liniment over clavicle
<i>Flemingia stricta</i> Roxb.	M	HBY	W	ha dia	50.0	3	Cough	Wp	Dried/decoctions	Potions
<i>Tadehagi triquetrum</i> (L.) H. Ohashi	L	TK	W	yun kod/tu kod	50.0	1	Cough	Wp	Decoction	Potions

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Phormiaceae										
<i>Dianella ensifolia</i> Red.	L	TK	W	tu toi ngua	28.6	2	Tuberculosis /Bloody cough	Wp	Decoction	Potions
Pinaceae										
<i>Pinus kesiya</i> Royle ex Gordon	L	MNP2	W	lum son	100.0	3	Asthma	Ex (resin)	Burned/cold infusion	Potions
Plantagiaceae										
<i>Plantago major</i> L.	H	KH	D	zaub ntswg npua	61.5	8	Cough		Finely chopped/ Cooked with eggs	Eaten as food
	H	SK	D	zaub ntswg npua	88.9	8	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
Plumbaginaceae										
<i>Plumbago zeylanica</i> L.	H	SK	W	kuab ib maab	8.3	1	Cough	Lf	Decoction	Potions
Poaceae										
<i>Saccharum chinensis</i> Roxb.	K	NP	D	oi dum	100.0	1	Tuberculosis /Bloody cough	Node with bud	Decoction with <i>Zingiber cassumunar</i>	Potions

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Polypodiaceae										
<i>Platyserium</i> sp.	M	HSN	D	kum jia zi	60.0	3	Cough	St	Decoction	Potions
Rhamnaceae										
<i>Gouania leptostachya</i> DC.	M	HSN	W	puang dia yao	40.0	2	Cough	St	Decoction	Potions
Rosaceae										
<i>Agrimonia nepalensis</i> D.Don	H	MNP	D	cos kev nyeg	10.0	1	Epistaxis (nose bleed)	Wp	Decoction	Potions
Rubiaceae										
<i>Paederia foetida</i> L.	H	MNP	W	-	100.0	1	Cough	St	Decoction	Potions
<i>Uncaria</i> sp.	M	HSN	W	dim tiu hei	100.0	1	Cough	St	Decoction	Potions
Rutaceae										
<i>Citrus aurantifolia</i> Swing.	K	HP	D	ma noa	100.0	2	Sore throat	Fr	Mixed with <i>Zingiber officinale</i>	Potions
<i>Psilopeganum sinense</i> Hemsley	H	KH	D	-	100.0	1	Cough	Lf	Decoction	Potions
	H	SK	D	-	50.0	1	Cough	St/Lf	Decoction	Potions

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Sapindaceae										
<i>Cardiospermum halicacabum</i> L.	H	KH	D	-	4.8	1	Cough	Ysh	Finely chopped/ Cooked with eggs	Eaten as food
Saururaceae										
<i>Houttuynia cordata</i> Thunb.	H	KH	D	zaub raus nees	56.5	11	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
	H	KH	D	zaub raus nees	56.5	1	Cough	Lf	Decoction	Potions
	H	MNP	D	zaub raus nees	12.5	1	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
	H	SK	D	zaub raus nees	66.7	2	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
	H	SK	D	zaub raus nees	66.7	3	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
Schizaeaceae										
<i>Lygodium flexuosum</i> (L.) Sw.	H	KH	W	suab	33.3	1	Cough	Rt	Decoction	Potions
	H	SK	W	suab	100.0	1	Cough	Rt/St	Decoction	Potions

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Scrophulariaceae										
<i>Lindernia ruellioides</i> (Colsmann) Pennell	H	KH	W	nplooj nav kaw	100.0	3	Cough	Wp	Decoction	Potions
	H	MNP	W	nplooj nav kaw	50.0	1	Cough	Wp	Decoction	Potions
<i>Picria fel-terrae</i> Lour.	M	HBY	D	kwu kwai	85.7	7	Cough	Lf	Decoction	Potions
<i>Scoparia dulcis</i> L.	H	MNP	W	-	20.0	1	Cough	Rt	Decoction	Potions
	H	SK	W	-	33.3	1	Cough	Rt	Decoction	Potions
<i>Torenia asiatica</i> L.	H	SK	D	noog tsuam luj	25.0	1	Cough	Wp	Decoction	Potions
	M	STP	W	kwu kwai	75.0	3	Cough	Wp	Decoction	Potions
Selaginellaceae										
<i>Selaginella willdenowii</i> (Desv. ex Poir.) Baker	M	HBY	W	ab kong zing	81.0	17	Voice loss	Wp	Decoction	Potions
	M	STP	W	ab kong zing	80.0	12	Voice loss	Wp	Decoction	Potions
	M	HSN	W	ab kong zing	100.0	6	Voice loss	Wp	Decoction	Potions
Smilacaceae										
<i>Smilax ovalifolia</i> A.DC.	L	TK	W	mhue dong	100.0	1	Tuberculosis	Rt	Decoction/cold infusion	Potions

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	K	HST	W	rong long	100.0	3	Cough	St	Decoction	Potions
Solanaceae										
<i>Solanum erianthum</i> D.Don	M	STP	W	tin hoong ja	20.0	1	Asthma	Rt	Decoction	Potions
<i>Solanum spirale</i> Roxb.	M	HBY	D	jian dia	60.0	3	Cough	Lf	Finely chopped/ Cooked with eggs	Eaten as food
Sterculiaceae										
<i>Helicteres elongata</i> Wall. ex Boj.	L	TK	W	lum ngud	16.7	2	Cough	Rt	Decoctions	Potions
Urticaceae										
<i>Elatostema repens</i> (Lour.) Hallier f. & H.Schroet.	H	SK	W	-	33.3	1	Asthma	Wp	Decoction	Potions
Valerianaceae										
<i>Valeriana jatamansi</i> Jones	M	HSN	D	fiu hwa	40.0	1	Asthma	Lf	Decoction	Potions
	M	HSN	D	fiu hwa	40.0	1	Cough	Lf	Cooked with chicken soup	Eaten as food
Verbenaceae										
<i>Congea tomentosa</i> Roxb.	L	JN	W	mhue on	100.0	4	Nasal congestion	Ex	non-prepared	Potions
	L	TK	W	mhue on	100.0	1	Voice loss	Ex	non-prepared	Potions

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
Violaceae										
<i>Viola curvistylis</i> Boissieu ex Gagnep.	H	KH	W	zaub ntswg npua	100.0	2	Cough	Wp	Decoction	Potions
	H	MNP	W	tshuaj nqu	87.5	7	Pneumonia/ Asthma	Wp	Cooked with pig's lung	Eaten as food
	L	MNP2	W	yun hom	100.0	4	Cough	Wp	Decoction	Potions
Zingiberaceae										
<i>Curcuma aeruginosa</i> Roxb.	M	HSN	D	zung kiae	100.0	1	Cough	Rh	Finely chopped/ Cooked with eggs	Eaten as food
<i>Kaempferia galanga</i> L.	H	KH	D	pua toj	7.1	1	Cough	Rh	Finely chopped/ Cooked with eggs	Eaten as food
<i>Kaempferia parviflora</i> Wall.	M	HSN	D	zung kiae	21.4	3	Cough	Rh	Finely chopped/ Cooked with eggs	Eaten as food
<i>Zingiber officinale</i> Roscoe	H	KH	D	ghav	100.0	1	Sore throat	Rh	Pounded/heated	Poultice over neck
	H	KH	D	ghav	100.0	4	Cough	Rh	Decoction	Potions
	H	MNP	D	ghav	100.0	1	Cough	Rh	Decoction	Potions
	H	SK	D	ghav	100.0	2	Cough	Rh	Decoction	Potions
	K	HP	D	la wae	100.0	4	Cough	Rh	Decoction	Potions

Table 59. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder (s) treated	PU	Preparation	Route of Administration
	M	HBY	D	zung	100.0	4	Cough	Rh	Pounded/heated	Poultice over neck
	M	HSN	D	zung	100.0	4	Cough	Rh	Decoction with <i>Saccharum officinarum</i>	Potions
	M	STP	D	zung	33.3	1	Cough	Rh	Pounded/heated	Poultice over neck

4.1.1.29 Medicines: Sensory system disorders

Use-reports related to the category of sensory system disorders were reported from 11 villages but not from Huai Satang village of the Khamu (Table 60). High agreements about plant use knowledge related to this category were found in many villages as shown by their high ICF values. Huai Pook had the highest ICF value (1.00), resulting from the agreement of a single use of a single species between two informants in this village. Huai Labaoya had the lowest ICF value (0.00) due to the report of different uses for two different plant species. ICF value could not be calculated for Huai Sanao village of the Mien as there was only a single use reported for a single species from only one informant in this village.

In total, 15 plant species from 14 plant families were mentioned across 11 villages, (Figure 32). All species were completely identified to species level. There were no commonly represented plant families used in this category but two species were from Mimosaceae whereas the other families were represented by a single species. Like in other categories, some plant species were specific to the treatment of sensory system disorders as their fidelity level were 100%. The most frequently mentioned disorders were conjunctivitis (pink eyes) and tinnitus which each has eight use-reports, constituting 30.8% of all uses reported.

Table 60. ICF values and number of plant families and species used to treat sensory system disorders in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Khang Ho	3	3	6	0.60
Hmong	Manee Pruek	3	3	8	0.71
Hmong	Song Khwae	2	2	11	0.90
Mien	Huai Labaoya	2	2	2	0.00
Mien	Huai Sanao	1	1	1	-
Mien	Santiphap	2	2	6	0.80
Khamu	Huai Pook	1	1	2	1.00
Khamu	Nam Pan	2	2	3	0.50
Lua	Joon	3	3	20	0.89
Lua	Manee Pruek 2	3	3	11	0.80
Lua	Toei Klang	2	2	8	0.86
Total		14	15		

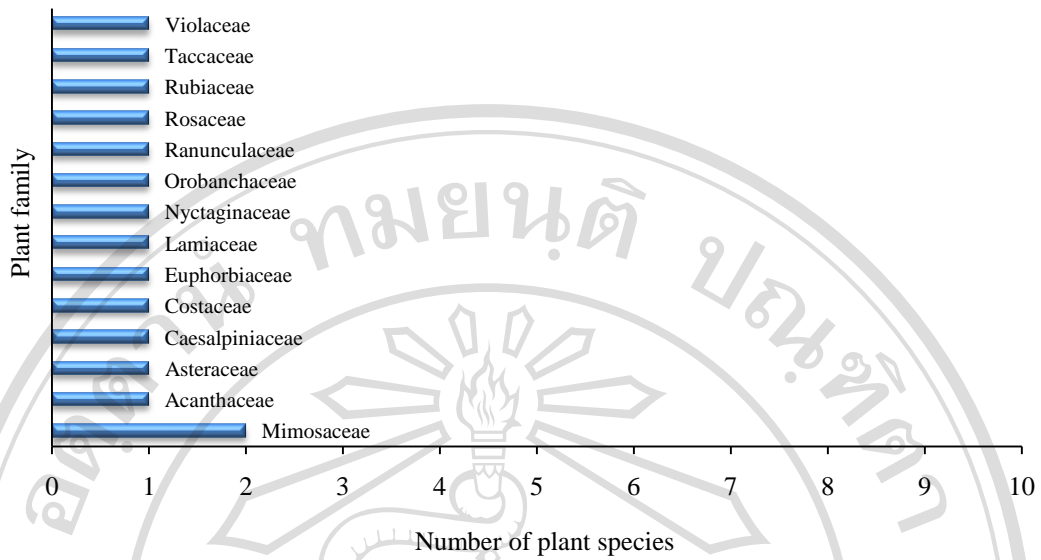


Figure 32 Number of plant species in each family used to treat sensory system disorders in each village

Table 61. Medicinal plants used to treat sensory system disorders by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Acanthaceae										
<i>Thunbergia laurifolia</i> Lindl.	L	MNP2	W	mhue hnum nae	100.0	1	Tinnitus	YSt	Heated	Blew to ear
	L	TK	W	mhue hnum nae	100.0	4	Tinnitus	YSt	Heated	Blew to ear
Asteraceae										
<i>Bidens pilosa</i> L.	H	KH	W	txhab qoob	100.0	1	Visual disturbance	Lf	Decoction	Eye wash
Caesalpinaceae										
<i>Caesalpinia decapetala</i> (Roth) Alston	L	JN	W	hnam leb maew	72.7	8	Conjunctivitis (Pink eyes)	Un	Decoction	Eye wash
Costaceae										
<i>Costus speciosus</i> (J. Koenig) Sm.	K	NP	W	nral ya	20.0	2	Otosclerosis	St	Pulped/heated/squeezed	Ear drop
	L	JN	W	lum pyok/lum mi soi	100.0	9	Otosclerosis	St	Pulped/heated/squeezed	Ear drop
	L	TK	W	pyok	80.0	4	Otosclerosis	St	Pulped/heated/squeezed	Ear drop
	M	STP	W	ching kuan diang	50.0	5	Otosclerosis	St	Pulped/heated/squeezed	Ear drop

Table 61. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Euphorbiaceae										
<i>Ricinus communis</i> L.	K	HP	D	tood salang/ salang yim	100.0	2	Tinnitus	Pt	Heated	Blew to ear
	K	NP	D	hoong kaew	100.0	1	Tinnitus	Pt	Heated	Blew to ear
	L	JN	D	ma hoong dang	100.0	3	Tinnitus	Pt	Heated	Blew to ear
Lamiaceae										
<i>Ocimum americanum</i> L.	L	MNP2	D	ou la wang	100.0	3	Eye irritation (due to dust)	Sd	non-prepared	Eye drop
Mimosaceae										
<i>Albizia lebbek</i> (L.) Benth.	H	MNP	W	-	100.0	2	Conjunctivitis (Pink eyes)	Bk	Decoction	Eye wash
	H	SK	W	-	100.0	5	Conjunctivitis (Pink eyes)	Bk	Decoction	Eye wash
	L	MNP2	W	lum zud	100.0	7	Conjunctivitis (Pink eyes)	Bk	Pulped/ hot infusion	Eye wash
<i>Archidendron clypearia</i> (Jack) I. C. Nielsen	M	STP	W	ziad lae yung	100.0	1	Visual disturbance	Lf	Decoction	Eye wash
Nyctaginaceae										
<i>Mirabilis jalapa</i> L.	H	MNP	D	paaj kuab tub sab	11.1	1	Tinnitus	Fl	Burned/powdered	Ear drop

Table 61. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Orobanchaceae										
<i>Aeginetia indica</i> Roxb.	M	HBY	W	nom chang	100.0	1	Otosclerosis	St	Pulped/Squeezed	Ear drop
Ranunculaceae										
<i>Thalictrum foliolosum</i> DC.	H	MNP	W	-	50.0	5	Conjunctivitis (Pink eyes)	Rt	Decoction	Eye drop
Rosaceae										
<i>Agrimonia nepalensis</i> D.Don	H	KH	D	cos kev nyeg	14.3	1	Eyes irrigation	Lf	Decoction	Eye drop
	H	KH	D	cos kev nyeg	14.3	1	Conjunctivitis (Pink eyes)	Lf	Decoction	Eye drop
Rubiaceae										
<i>Morinda angustifolia</i> Roxb.	M	HSN	W	whang ken	50.0	1	Visual disturbance	Rt	Decoction	Potions
Taccaceae										
<i>Tacca chantrieri</i> André	M	HBY	W	sun ta wang	7.1	1	Otosclerosis	Lf/ Infl	Decoction	Ear drop
Violaceae										
<i>Viola inconspicua</i> Blume	H	KH	D	tshuaj teev ghov muag	100.0	3	Conjunctivitis (Pink eyes)	Lf	Pulped/ cold infusion	Eye drop
	H	SK	D	tshuaj teev ghov muag	100.0	5	Conjunctivitis (Pink eyes)	Lf	Pulped/ cold infusion	Eye drop

Table 61. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
	H	SK	D	tshuaj teev ghov muag	100.0	1	Visual disturbance	Lf	Pulped/ cold infusion	Eye drop

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
 Copyright© by Chiang Mai University
 All rights reserved

4.1.1.30 Medicines: Skin/Subcutaneous cellular tissue disorders

Use-reports related to the category of skin/subcutaneous cellular tissue disorders were reported from all 12 villages. Nam Pan and Huai Pook have the highest ICF value (1.00), resulting from the agreement about a single use of a single species between two and three informants in these villages, respectively. Song Khwae has the lowest ICF value (0.00) due to the report of different uses for six different plant species. The ICF value could not be calculated for Huai Satang village of the Khamu as there was only a single use reported for a single species from only one informant in this village. Of the remaining villages, relatively high ICF values were found among Khang Ho, Huai Labaoya, Joon and Manee Pruek2 (Table 62).

In total, 44 plant species in 37 families were registered for treatment of skin/subcutaneous cellular tissue disorders from all 12 villages (Figure 33). Of those, 41 were completely identified to species level, three to genus. The most commonly represented plant families could not be determined for this category. A number of plant species were reported specifically in the treatment of sensory system disorders as their fidelity level were 100%. Most of the plants registered were used to treat itching (25 use-reports; 43.9%) and rashes (13; 22.8%).

Table 62. ICF values and number of plant families and species used to treat skin/subcutaneous cellular tissue system disorders in each village

Ethnic group	Village	#families	#species	#use-report	ICF value
Hmong	Khang Ho	9	9	21	0.60
Hmong	Manee Pruek	11	12	22	0.48
Hmong	Song Khwae	6	6	6	0.00
Mien	Huai Labaoya	8	9	23	0.64
Mien	Huai Sanao	3	3	4	0.33
Mien	Santiphap	3	3	5	0.50
Khamu	Huai Pook	1	1	3	1.00
Khamu	Huai Satang	1	1	1	-
Khamu	Nam Pan	1	1	2	1.00
Lua	Joon	2	2	12	0.91
Lua	Manee Pruek 2	1	2	4	0.67
Lua	Toei Klang	6	6	10	0.44
Total		37	44		

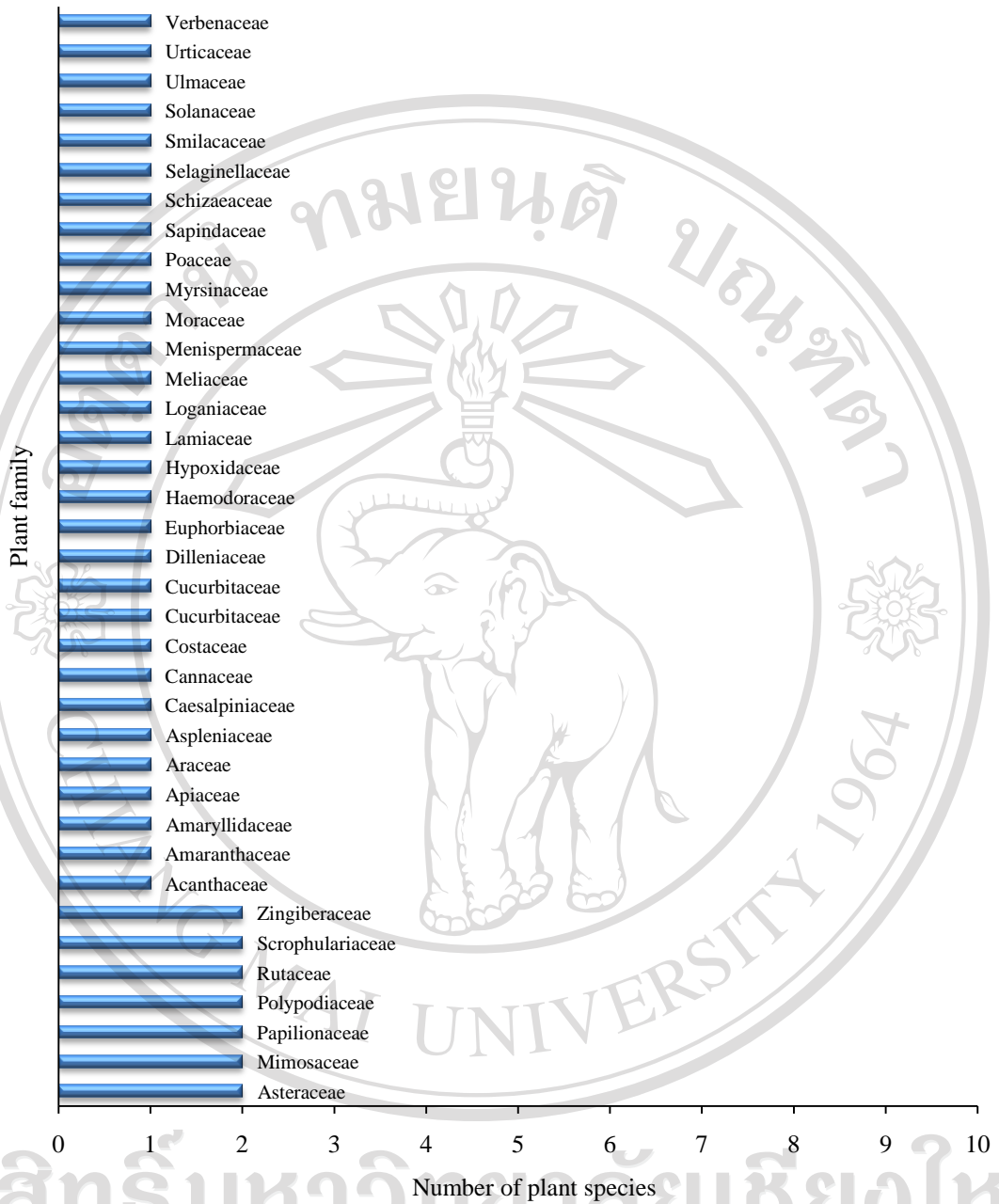


Figure 33 Number of plant species in each family used to treat skin/subcutaneous cellular tissue disorders system disorders in each village

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
 Copyright © by Chiang Mai University
 All rights reserved

Table 63. Medicinal plants used to treat skin/subcutaneous cellular tissue system disorders by the Hmong, Mien, Khamu and Lua in twelve villages in Nan province

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Acanthaceae										
<i>Barleria lupulina</i> Lindl.	H	KH	D	-	100.0	1	Sores	Lf	Pounded	Liniment
Amaranthaceae										
<i>Cyathula prostrata</i> Blume	H	MNP	W	-	25.0	1	Irritation (due to hairy caterpillar)	Lf	Pounded	Poultice
	M	HSN	W	sin siad dia	100.0	1	Itching (Pruritus)	Wp	Decoction	Bath
Amaryllidaceae										
<i>Crinum asiaticum</i> L.	H	MNP	D	twm xam	50.0	2	Itching (Pruritus)	Lf	Pounded	Liniment
Apiaceae										
<i>Eryngium foetidum</i> L.	H	SK	D	zaub nplaig ug	100.0	1	Rashes	Lf	Decoction	Liniment
Araceae										
<i>Aglaonema</i> sp.	H	MNP	W	-	100.0	1	Irritation (due to hairy caterpillar)	Pt/St	Pounded/heated	Poultice
Aspleniaceae										
<i>Asplenium nidus</i> L.	M	STP	W	yai wei	100.0	1	Dandruff	Lf	Decoction	Hair wash
Asteraceae										
<i>Blumea balsamifera</i> DC.	H	MNP	D	xaab yeeb qus	27.3	3	Itching (Pruritus)	Lf	Decoction	Bath

Table 63. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
<i>Microglossa pyrifolia</i> Kuntze	H	MNP	W	pov cai nstuab	10.0	1	Rashes	Lf	Decoction	Wash
	H	SK	W	pov cai nstuab	100.0	1	Rashes	Lf	Decoction	lotions
Caesalpiniaceae										
<i>Senna alata</i> (L.) Roxb.	H	KH	D	-	28.6	2	Baldness/hair loss	Lf	Pulped	Hair wash
Cannaceae										
<i>Canna edulis</i> Ker Gawl.	H	MNP	D	nplooj ntse lab	25.0	1	Irritation	Rh	Pounded	Poultice
Costaceae										
<i>Costus speciosus</i> (J. Koenig) Sm.	K	NP	W	nral ya	20.0	2	Irritation (due to <i>Gluta usitata</i> resin)	St	Decoction	Wash
Cucurbitaceae										
<i>Gymnopetalum integrifolium</i> (Roxb.) Kurz	L	TK	W	ma noi khom	100.0	1	Itching (Pruritus)	Fr	Pounded/ cold infusion	lotions
<i>Gynostemma pentaphyllum</i> (Thunb.) Makino	H	SK	W	maab hmeev dlev nstuab	50.0	1	Itching (Pruritus)	Lf	Pounded	Liniment
Dilleniaceae										
<i>Dillenia parviflora</i> Griff.	M	HBV	W	piao kub	40.0	2	Irritation (due to hairy caterpillar)	Lf	Pounded	Liniment

Table 63. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Euphorbiaceae										
<i>Croton roxburghii</i> N.P. Balakr.	K	HP	W	tood plao	14.3	3	Rashes	Bk	Decoction/ cold infusion	Bath/Liniment
Haemodoraceae										
<i>Xiphidium caeruleum</i> Aubl.	H	KH	D	tw ntses luj	5.3	1	Itching (Pruritus)	Lf	Decoction	Bath
Hypoxidaceae										
<i>Molineria capitulata</i> (Lour.) Herb.	L	TK	W	tu prual	100.0	2	Dandruff	Rt	Finely chopped/ cold infusion	Hair wash
Lamiaceae										
<i>Hyptis capitata</i> Jacq.	M	HBV	W	sa bung	33.3	1	Itching (Pruritus)	Lf	Decoction	Wash
Loganiaceae										
<i>Gelsemium elegans</i> (Gardn. & Champ.) Benth.	H	KH	W	tshuaj noj tuag	100.0	1	Itching (Pruritus)	Wp	Decoction	Wash
Meliaceae										
<i>Toona sinensis</i> (Juss.) M.Roem.	H	SK	D	yuj	2.8	1	Itching (Pruritus)	Ysh	Decoction	Bath
	L	TK	W	lum yu	100.0	1	Pustules	Lf	Grated	Liniment

Table 63. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Menispermaceae										
<i>Stephania pierrei</i> Diels	H	KH	D	maab ntshaa/ plab liab	50.0	1	Itching (Pruritus)	Lf	Decoction	Bath
Mimosaceae										
<i>Acacia comosa</i> Gagnep.	L	MNP2	W	mhue sa koi	100.0	3	Dandruff	Bk	Pulped	Hair wash
<i>Acacia pennata</i> (L.) Willd. subsp. <i>insuavis</i> (Lace) I.C. Nielsen	L	JN	D	lum phak la	100.0	6	Rashes	Lf/St	Decoction	Bath
	L	MNP2	D	lum phak la	100.0	1	Itching (Pruritus)	Lf	Decoction	Bath
	L	TK	D	lum phak la	100.0	1	Pustules	Bk	Grated	Liniment
Moraceae										
<i>Morus macroura</i> Miq.	H	MNP	W	-	50.0	1	Rashes (at infants' head)	Ex	Non-prepared	Liniment
Myrsinaceae										
<i>Maesa indica</i> (Roxb.) Sweet	H	MNP	W	npua tshuaj/ tshuaj kab yeeb	33.3	2	Rashes	Lf	Pounded	Liniment
Papilionaceae										
<i>Derris elliptica</i> Benth.	H	KH	W	maab hleb	100.0	1	Itching (Pruritus)	Rt	Pounded/heated	Liniment

Table 63. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
<i>Pueraria phaseoloides</i> Benth.	M	HSN	W	ka tung luang	100.0	1	Rashes	Un	Decoction	Bath
Poaceae										
<i>Oryza sativa</i> L.	M	HBY	D	biao	100.0	1	Dandruff	Str	Burned/ cold infusion	Hair wash
Polypodiaceae										
<i>Drynaria quercifolia</i> (L.) J.Sm.	M	HBY	D	jue jai kang/yai wei	50.0	2	Irritation (due to hairy caterpillar)		Powdered	Liniment
	M	HBY	D	jue jai kang/yai wei	50.0	3	Itching (Pruritus)		Decoction	Bath
<i>Platyserium</i> sp.	M	HBY	D	dom jang puang	25.0	1	Itching (Pruritus)	Lf	Decoction	Bath
Rutaceae										
<i>Clausena excavata</i> Burm.f.	H	SK	W	-	100.0	1	Itching (Pruritus)	Lf	Decoction	Bath
<i>Euodia leptota</i> Merr	L	TK	W	moi fun	100.0	4	Rashes	Lf	Pounded/mixed with <i>Zingiber</i> <i>cassumanar</i> /heated	Lotions
<i>Euodia</i> sp.	L	JN	W	lum si fun	75.0	6	Rashes	St/Lf	Grated/decoction	Liniment/Bath

Table 63. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Sapindaceae										
<i>Cardiospermum halicacabum</i> L.	H	KH	D	-	38.1	8	Itching (Pruritus)	Lf	Decoction/ pounded	Wash/liniment
Schizaeaceae										
<i>Lygodium flexuosum</i> (L.) Sw.	M	HBY	W	jian ta zui	100.0	2	Rashes	Lf	Decoction	Wash
Scrophulariaceae										
<i>Lindernia ruellioides</i> (Colsm.) Pennell	K	HST	W	sa ong kok	100.0	1	Irritation (due to hairy caterpillar)	Wp	Pounded/mixed with <i>Zingiber cassumunar</i> /heated	Poultice
<i>Scoparia dulcis</i> L.	M	HBY	W	toe yui mia	50.0	1	Warts	Lf	Pounded	Liniment
Selaginellaceae										
<i>Selaginella willdenowii</i> (Desv. ex Poir.) Baker	M	STP	W	ab kong zing	6.7	1	Itching (Pruritus)	Wp	Decoction	Wash/liniment
	H	MNP1	W	suab	12.5	1	Rashes (at infants' head)	Wp	Decoction	Hair wash

Table 63. (continued)

Species name	EG	VL	PT	Local name	FL (%)	#URs	Disorder(s) treated	PU	Preparation	Route of Administration
Smilacaceae										
<i>Smilax ovalifolia</i> Roxb.	M	HBV	W	jiam yang kong	4.8	1	Warts	Ex	Non-prepared	Liniment
Solanaceae										
<i>Nicotiana tabacum</i> L.	H	MNP	D	luam yeeb	85.7	6	Itching (Pruritus)	Lf	Pounded	Liniment
	H	SK	D	luam yeeb	100.0	1	Itching (Pruritus)	Lf	Pounded	Liniment
Ulmaceae										
<i>Trema orientalis</i> (L.) Blume	M	HSN	W	mhai diang	100.0	2	Itching (Pruritus)	St	Decoction	Bath
Urticaceae										
<i>Elatostema repens</i> (Lour.) Hallier f. & H.Schroet.	M	HBV	W	piam thong mia	37.5	6	Itching (Pruritus)	Wp	Pounded/ decoction	Liniment/wash
Verbenaceae										
<i>Verbena officinalis</i> L.	H	KH	D	kaab laug rog	27.8	5	Rashes	Un	Decoction	Wash
	H	MNP	W	kaab laug rog	16.7	2	Itching (Pruritus)	Lf	Pounded	Liniment
Zingiberaceae										
<i>Curcuma longa</i> L.	H	KH	D	ghav dlaaj	100.0	1	Itching (Pruritus)	Rh	Non-prepared	Liniment
<i>Zingiber cassumunar</i> Roxb.	H	MNP	D	qhav dlaab	16.7	1	Irritation (due to hairy caterpillar)	Rh	Shopped/ mix with ash	Liniment
	L	TK	D	pei	100.0	1	Itching (Pruritus)	Rh	Non-prepared	Liniment
	M	STP	D	-	100.0	3	Irritation (due to hairy caterpillar)	Rh	Pounded/heated	Poultice

4.2 Quantitative Study

4.2.1 Informant Consensus Factor (ICF) and Fidelity Level (FL)

As parts of the quantitative study, the values of ICF of each village for a particular use-category as well as the FL of a medicinal plant for its use(s) in each use-category were already included in the qualitative part of this chapter.

4.2.2 Cultural Importance index (CI)

The Cultural Importance index (CI) was calculated for all medicinal plants, from which 30 species with high CI value in each village (Tables 64-75) were raised as the domain of a questionnaire (Appendix 1).

Table 64. Thirty species with high CI value raised as the domain of a questionnaire in Khang Ho village (Hmong)

Plant no.	Plant name	CI value	Figure#
		Min-Max	
1	<i>Achyranthes longifolia</i>	0.13	86G
2	<i>Acorus calamus</i>	0.12	87A-B
3	<i>Agrimonia nepalensis</i>	0.16	87F-G
4	Apiaceae sp.1	0.38	89D
5	<i>Blumea balsamifera</i>	0.20	91A
6	<i>Boehmeria nivea</i>	0.13	92A
7	<i>Costus speciosus</i>	0.09	96A
8	<i>Cratoxylum formosum</i> subsp. <i>pruniflorum</i>	0.12	96B
9	<i>Elephantopus scaber</i>	0.08	97L
10	<i>Eleutherine americana</i>	0.10	97H-J
11	<i>Entada glandulosa</i>	0.10	98D
12	<i>Fallopia forbesii</i>	0.09	98G
13	<i>Gmelina arborea</i>	0.12	99C
14	<i>Impatiens balsamina</i>	0.15	102A
15	<i>Kaempferia galanga</i>	0.16	103D
16	<i>Kaempferia rotunda</i>	0.18	103B-C
17	<i>Kalanchoe laciniata</i>	0.31	103F
18	<i>Kalimeris indica</i>	0.24	103E

Table 64. (continued)

Plant no.	Plant name	CI value	Figure#
19	<i>Lepidagathis incurva</i>	0.12	103J
20	<i>Lysimachia christinae</i>	0.14	104F
21	<i>Mirabilis jalapa</i>	0.09	104J
22	<i>Plantago major</i>	0.15	106L
23	<i>Plumbago zeylanica</i>	0.08	107A
24	<i>Smilax ovalifolia</i>	0.09	109H
25	<i>Stahlianthus campanulatus</i>	0.12	110D
26	<i>Strobilanthes cusia</i>	0.20	84A
27	<i>Teucrium viscidum</i>	0.22	110K
28	<i>Toona sinensis</i>	0.09	111C
29	<i>Vernonia parishii</i>	0.12	112G
30	<i>Xiphidium caeruleum</i>	0.24	113E

Table 65. Thirty species with high CI value raised as the domain of questionnaire in Manee Pruek village (Hmong)

Plant no.	Plant name	CI value	Figure#
	Min-Max	0.01-0.31	
1	<i>Achyranthes longifolia</i>	0.17	86G
2	<i>Acorus calamus</i>	0.12	87A-B
3	<i>Agrimonia nepalensis</i>	0.11	87F-G
4	Apiaceae sp.1	0.11	89D
5	<i>Artemisia vulgaris</i>	0.13	90B
6	<i>Asparagus filicinus</i>	0.12	90F
7	<i>Boehmeria nivea</i>	0.10	92A
8	<i>Codonopsis javanica</i>	0.12	95B-C
9	<i>Coix lachrymal-jobi</i>	0.14	95F
10	<i>Fallopia forbesii</i>	0.13	98G
11	<i>Impatiens violaeiflora</i>	0.09	102B
12	<i>Kaempferia rotunda</i>	0.17	103B-C
13	<i>Kalimeris indica</i>	0.09	103E
14	<i>Lysimachia christinae</i>	0.12	104F
15	<i>Melastoma malabathricum</i>	0.10	104D-E

Table 65. (continued)

Plant no.	Plant name	CI value	Figure#
16	<i>Mirabilis jalapa</i>	0.10	104J
17	<i>Paris polyphylla</i>	0.10	105E
18	<i>Polygonum multiflorum</i>	0.11	107C
19	<i>Rubia crassipes</i>	0.12	-
20	<i>Sambucus simpsonii</i>	0.13	108M
21	<i>Sophora flavescens</i>	0.11	109J-K
22	<i>Stahlianthus campanulatus</i>	0.10	110D
23	<i>Strobilanthes cusia</i>	0.14	84A
24	<i>Tetrapanax papyrifera</i>	0.15	111A
25	<i>Teucrium viscidum</i> var. <i>viscidum</i>	0.12	110K
26	<i>Thalictrum foliolosum</i>	0.11	111I-J
27	<i>Toona sinensis</i>	0.31	111C
28	<i>Verbena officinalis</i>	0.12	112D
29	<i>Vernonia parishii</i>	0.09	112G
30	<i>Xiphidium caeruleum</i>	0.10	113E

Table 66. Thirty species with high CI value raised as the domain of questionnaire in Song Khwae village (Hmong)

Plant no.	Plant name	CI value	Figure#
		Min-Max	0.01-0.27
1	<i>Achyranthes longifolia</i>	0.12	86G
2	<i>Acorus calamus</i>	0.16	87A-B
3	<i>Agrimonia nepalensis</i>	0.08	87F-G
4	<i>Albizia lebbek</i>	0.07	-
5	Apiaceae sp.1	0.12	89D
6	<i>Boehmeria nivea</i>	0.12	92A
7	<i>Chloranthus erectus</i>	0.09	94A
8	<i>Costus speciosus</i>	0.11	96A
9	<i>Elephantopus scaber</i>	0.05	97L
10	<i>Eleutherine americana</i>	0.11	97H-J
11	<i>Euphorbia nerifolia</i>	0.08	-
12	<i>Fallopia forbesii</i>	0.09	98G

Table 66. (continued)

Plant no.	Plant name	CI value	Figure#
13	<i>Impatiens balsamina</i>	0.13	102A
14	<i>Kaempferia rotunda</i>	0.27	103B-C
15	<i>Kalimeris indica</i>	0.13	103E
16	<i>Lepidagathis incurva</i>	0.09	103J
17	<i>Mirabilis jalapa</i>	0.09	104J
18	<i>Morinda angustifolia</i>	0.11	105A-B
19	<i>Paederia pilifera</i>	0.07	105J
20	<i>Phyllanthus amarus</i>	0.11	106D
21	<i>Plantago major</i>	0.12	106L
22	<i>Plumbago zeylanica</i>	0.16	107A
23	<i>Sambucus simpsonii</i>	0.12	108M
24	<i>Stahlianthus campanulatus</i>	0.20	110D
25	<i>Strobilanthes cusia</i>	0.12	84A
26	<i>Tacca chantrieri</i>	0.09	110G
27	<i>Teucrium viscidum</i> var. <i>viscidum</i>	0.15	110K
28	<i>Thunbergia laurifolia</i>	0.11	111G
29	<i>Viola inconspicua</i>	0.08	113A-C
30	<i>Xiphidium caeruleum</i>	0.09	113E

Table 67. Thirty species with high CI value raised as the domain of questionnaire in Huai Labaoya village (Mien)

Plant no.	Plant name	CI value	Figure#
		Min-Max	0.01-0.47
1	<i>Acorus calamus</i>	0.21	87A-B
2	<i>Aspidopterys tomentosa</i>	0.14	90G
3	<i>Blumea balsamifera</i>	0.29	91A
4	<i>Caesalpinia sappan</i>	0.17	92D
5	<i>Chromolaena odorata</i>	0.47	94C
6	<i>Connarus semidecandrus</i>	0.15	-
7	<i>Croton roxburghii</i>	0.22	95G
8	<i>Dracaena elliptica</i>	0.15	97G
9	<i>Elatostema repens</i>	0.21	97F

Table 67. (continued)

Plant no.	Plant name	CI value	Figure#
10	<i>Eleusine indica</i>	0.26	97K
11	<i>Euonymus sp.</i>	0.21	99A
12	<i>Fallopia forbesii</i>	0.17	98G
13	<i>Gmelina arborea</i>	0.19	99C
14	<i>Hemerocallis lilioasphodelus</i>	0.29	101F-G
15	<i>Hydrocotyle sibthorpioides</i>	0.21	101D
16	<i>Ipomoea muricata</i>	0.24	102E-F
17	<i>Juncus effusus</i>	0.28	102H
18	<i>Kalanchoe laciniata</i>	0.22	103F
19	<i>Mimosa pudica</i>	0.15	-
20	<i>Morinda angustifolia</i>	0.25	105A-B
21	<i>Pothos scandens</i>	0.19	107G
22	<i>Psidium guajava</i>	0.24	-
23	<i>Sambucus javanica</i>	0.24	108L
24	<i>Selaginella willdenowii</i>	0.24	109E
25	<i>Smilax ovalifolia</i>	0.17	109H
26	<i>Stephania pierrei</i>	0.24	110E
27	<i>Strobilanthes cusia</i>	0.29	84A
28	<i>Tacca chantrieri</i>	0.15	110G
29	<i>Tradescantia zebrina</i>	0.18	-
30	<i>Vitex peduncularis</i>	0.15	113D

Table 68. Thirty species with high CI value raised as the domain of questionnaire in Huai Sanao village (Mien)

Plant no.	Plant name	CI value		Figure#
		Min-Max	0.02-0.25	
1	<i>Acorus calamus</i>		0.07	87A-B
2	<i>Blumea balsamifera</i>		0.08	91A
3	<i>Boehmeria nivea</i>		0.08	92A
4	<i>Caesalpinia sappan</i>		0.12	92D
5	<i>Costus speciosus</i>		0.10	96A
6	<i>Croton roxburghii</i>		0.12	95G

Table 68. (continued)

Plant no.	Plant name	CI value	Figure#
7	<i>Drynaria quercifolia</i>	0.08	-
8	<i>Elatostema repens</i>	0.05	97F
9	<i>Elephantopus scaber</i>	0.03	97L
10	<i>Eleusine indica</i>	0.15	97K
11	<i>Eleutherine americana</i>	0.12	97H-J
12	<i>Fallopia forbesii</i>	0.10	98G
13	<i>Gmelina arborea</i>	0.18	99C
14	<i>Gouania leptostachya</i>	0.08	-
15	<i>Hemerocallis lilioasphodelus</i>	0.15	101F-G
16	<i>Hydrocotyle sibthorpioides</i>	0.15	101D
17	<i>Ipomoea muricata</i>	0.13	102E-F
18	<i>Juncus effusus</i>	0.25	102H
19	<i>Kaempferia parviflora</i>	0.23	-
20	<i>Kaempferia rotunda</i>	0.08	103B-C
21	<i>Kalimeris indica</i>	0.20	103E
22	<i>Plumbago zeylanica</i>	0.05	107A
23	<i>Pothos scandens</i>	0.18	107G
24	<i>Sambucus simpsonii</i>	0.21	108M
25	<i>Selaginella willdenowii</i>	0.10	109E
26	<i>Stephania pierrei</i>	0.23	110E
27	<i>Strobilanthes cusia</i>	0.15	84A
28	<i>Thunbergia laurifolia</i>	0.13	111G
29	<i>Urena lobata</i>	0.12	112E
30	<i>Xiphidium caeruleum</i>	0.23	113E

Table 69. Thirty species with high CI value raised as the domain of questionnaire in Santiphap village (Mien)

Plant no.	Plant name	CI value	Figure#
		Min-Max	0.02-0.57
1	<i>Acorus calamus</i>	0.21	87A-B
2	<i>Ancistrocladus tectorius</i>	0.31	89A
3	<i>Anisomeles indica</i>	0.24	89B
4	<i>Blumea balsamifera</i>	0.24	91A

Table 69. (continued)

Plant no.	Plant name	CI value	Figure#
5	<i>Capparis trisonthiae</i>	0.33	93C-D
6	<i>Coix lachrymal-jobi</i>	0.17	95F
7	<i>Connarus semidecandrus</i>	0.24	-
8	<i>Costus speciosus</i>	0.24	96A
9	<i>Croton roxburghii</i>	0.26	95G
10	<i>Dracaena elliptica</i>	0.21	97G
11	<i>Elatostema repens</i>	0.21	97F
12	<i>Eleusine indica</i>	0.21	97K
13	<i>Equisetum debile</i>	0.26	97M
14	<i>Euonymus</i> sp.	0.24	99A
15	<i>Fallopia forbesii</i>	0.24	98G
16	<i>Gmelina arborea</i>	0.29	99C
17	<i>Gouania leptostachya</i>	0.33	-
18	<i>Hemerocallis lilioasphodelus</i>	0.24	101F-G
19	<i>Ipomoea muricata</i>	0.33	102E-F
20	<i>Juncus effusus</i>	0.57	102H
21	<i>Justicia gendarussa</i>	0.33	103A
22	<i>Kalimeris indica</i>	0.29	103E
23	<i>Morinda angustifolia</i>	0.21	105A-B
24	<i>Plumbago zeylanica</i>	0.26	107A
25	<i>Pothos scandens</i>	0.33	107G
26	<i>Sambucus javanica</i>	0.36	108L
27	<i>Selaginella willdenowii</i>	0.36	109E
28	<i>Strobilanthes cusia</i>	0.26	84A
29	<i>Tacca chantrieri</i>	0.38	110G
30	<i>Thunbergia laurifolia</i>	0.41	111G

Table 70. Thirty species with high CI value raised as the domain of questionnaire in Huai Pook village (Khamu)

Plant no.	Plant name	CI value	Figure#
		Min-Max	
		0.03-0.66	
1	<i>Acorus calamus</i>	0.22	87A-B

Table 70. (continued)

Plant no.	Plant name	CI value	Figure#
2	<i>Angiopteris evecta</i>	0.19	-
3	<i>Ardisia amherstiana</i>	0.25	-
4	<i>Blumea balsamifera</i>	0.22	91A
5	<i>Cayratia japonica</i>	0.22	-
6	<i>Chromolaena odorata</i>	0.47	94C
7	<i>Coix lachrymal-jobi</i>	0.19	95F
8	<i>Commelina benghalensis</i>	0.22	-
9	<i>Cratoxylum formosum</i> ssp. <i>pruniform</i>	0.31	96B
10	<i>Crinum amabile</i>	0.22	95H
11	<i>Croton roxburghii</i>	0.66	95G
12	<i>Eleusine indica</i>	0.22	97K
13	<i>Gmelina arborea</i>	0.25	99C
14	<i>Homonoia riparia</i>	0.34	-
15	<i>Jatropha multifida</i>	0.22	-
16	<i>Justicia gendarussa</i>	0.19	103A
17	<i>Kalanchoe pinnata</i>	0.28	103G
18	<i>Morinda angustifolia</i>	0.13	105A-B
19	<i>Paederia pilifera</i>	0.41	105J
20	<i>Plectranthus amboinicus</i>	0.19	106M-N
21	<i>Psidium guajava</i>	0.31	-
22	<i>Sambucus javanica</i>	0.22	108L
23	<i>Sesbania grandiflora</i>	0.16	-
24	<i>Smilax ovalifolia</i>	0.19	109H
25	<i>Solanum spirale</i>	0.28	109I
26	<i>Stachyphrynium spicatum</i>	0.19	109M
27	<i>Strobilanthes cusia</i>	0.25	84A
28	<i>Tacca chantrieri</i>	0.16	110G
29	<i>Thunbergia laurifolia</i>	0.41	111G
30	<i>Zingiber cassumunar</i>	0.34	113F-G

Table 71. Thirty species with high CI value raised as the domain of questionnaire in Huai Satang village (Khamu)

Plant no.	Plant name	CI value	Figure#
		Min-Max	
		0.06-0.41	
1	<i>Acorus calamus</i>	0.18	87A-B
2	<i>Blumea balsamifera</i>	0.18	91A
3	<i>Boehmeria nivea</i>	0.12	92A
4	<i>Caesalpinia sappan</i>	0.35	92D
5	<i>Chromolaena odorata</i>	0.24	94C
6	<i>Cissus repens</i>	0.12	94F
7	<i>Coix lacryma-jobi</i>	0.18	95F
8	<i>Croton roxburghii</i>	0.41	95G
9	<i>Eclipta prostrata</i>	0.18	-
10	<i>Eleusine indica</i>	0.18	97K
11	<i>Eleutherine americana</i>	0.18	97H-J
12	<i>Equisetum debile</i>	0.18	97M
13	<i>Garuga pinnata</i>	0.18	-
14	<i>Gmelina arborea</i>	0.12	99C
15	<i>Helicteres elongata</i>	0.24	101A
16	<i>Kalanchoe pinnata</i>	0.18	103G
17	<i>Maesa glomerata</i>	0.18	-
18	<i>Millettia extensa</i>	0.29	104I
19	<i>Morinda angustifolia</i>	0.12	105A-B
20	<i>Mycetia gracilis</i>	0.18	-
21	<i>Paederia pilifera</i>	0.18	105J
22	<i>Senna alata</i>	0.18	-
23	<i>Sida rhombifolia</i>	0.12	109F
24	<i>Smilax ovalifolia</i>	0.18	109H
25	<i>Solanum spirale</i>	0.12	109I
26	<i>Strobilanthes cusia</i>	0.29	84A
27	<i>Tacca chantrieri</i>	0.29	110G
28	<i>Tadehagi triquetrum</i>	0.18	110H
29	<i>Thunbergia laurifolia</i>	0.29	111G
30	<i>Zingiber cassumunar</i>	0.12	113F-G

Table 72. Thirty species with high CI value raised as the domain of questionnaire in Nam Pan village (Khamu)

Plant no.	Plant name	CI value		Figure#
		Min-Max	0.03-0.32	
1	<i>Acorus calamus</i>		0.32	87A-B
2	<i>Angiopteris evecta</i>		0.21	-
3	<i>Blumea balsamifera</i>		0.18	91A
4	<i>Caesalpinia sappan</i>		0.21	92D
5	<i>Chloranthus erectus</i>		0.24	94A
6	<i>Chromolaena odorata</i>		0.32	94C
7	<i>Cissus repens</i>		0.24	94F
8	<i>Coix lachrymal-jobi</i>		0.21	95F
9	<i>Costus speciosus</i>		0.29	96A
10	<i>Elatostema repens</i>		0.30	97F
11	<i>Elephantopus scaber</i>		0.12	97L
12	<i>Eleusine indica</i>		0.29	97K
13	<i>Eleutherine americana</i>		0.12	97H-J
14	<i>Equisetum debile</i>		0.21	97M
15	<i>Gmelina arborea</i>		0.24	99C
16	<i>Homonoia riparia</i>		0.21	-
17	<i>Jatropha multifida</i>		0.27	-
18	<i>Kalanchoe pinnata</i>		0.29	103G
19	<i>Paederia pilifera</i>		0.18	105J
20	<i>Plectranthus amboinicus</i>		0.29	106M-N
21	<i>Plumbago indica</i>		0.12	-
22	<i>Senna alata</i>		0.24	-
23	<i>Sesbania grandiflora</i>		0.15	-
24	<i>Sida rhombifolia</i>		0.21	109F
25	<i>Solanum spirale</i>		0.27	109I
26	<i>Strobilanthes cusia</i>		0.29	84A
27	<i>Tacca chantrieri</i>		0.12	110G
28	<i>Tadehagi triquetrum</i>		0.24	110H
29	<i>Thunbergia laurifolia</i>		0.29	111G
30	<i>Zingiber cassumunar</i>		0.29	113F-G

Table 73. Thirty species with high CI value raised as the domain of questionnaire in Joon village (Lua)

Plant no.	Plant name	CI value	Figure#
		Min-Max	
		0.03-0.47	
1	<i>Acacia pennata</i> subsp. <i>insuavis</i>	0.19	-
2	<i>Ageratum conyzoides</i>	0.09	-
3	<i>Blumea balsamifera</i>	0.16	91A
4	<i>Breynia glauca</i>	0.16	-
5	<i>Caesalpinia decapetala</i>	0.34	-
6	<i>Caesalpinia sappan</i>	0.16	92D
7	<i>Chromolaena odorata</i>	0.28	94C
8	<i>Clerodendrum paniculatum</i>	0.16	-
9	<i>Congea tomentosa</i>	0.13	-
10	<i>Costus speciosus</i>	0.28	96A
11	<i>Cratoxylum formosum</i> subsp. <i>pruniflorum</i>	0.19	96B
12	<i>Crinum asiaticum</i>	0.09	-
13	<i>Croton roxburghii</i>	0.47	95G
14	<i>Entada glandulosa</i>	0.13	98D
15	<i>Equisetum debile</i>	0.09	97M
16	<i>Euodia</i> sp.	0.25	-
17	<i>Gmelina arborea</i>	0.22	99C
18	<i>Imperata cylindrica</i>	0.09	-
19	<i>Jatropha multifida</i>	0.19	-
20	<i>Livistona speciosa</i>	0.13	81A
21	<i>Lygodium polystachyum</i>	0.06	104B
22	<i>Millettia extensa</i>	0.28	104I
23	<i>Paederia pilifera</i>	0.44	105J
24	<i>Plantago major</i>	0.16	106L
25	<i>Psidium guajava</i>	0.28	-
26	<i>Ricinus communis</i>	0.09	-
27	<i>Sesamum indicum</i>	0.06	-
28	<i>Tacca chantrieri</i>	0.09	110G
29	<i>Vernonia parishii</i>	0.13	112G
30	<i>Zingiber cassumunar</i>	0.31	113F-G

Table 74. Thirty species with high CI value raised as the domain of questionnaire in Manee Pruek 2 village (Lua)

Plant no.	Plant name	CI value	Figure#
	Min-Max	0.03-0.67	
1	<i>Albizia lebbbeck</i>	0.23	-
2	<i>Aralia armata</i>	0.30	89C
3	<i>Betula alnoides</i>	0.30	-
4	<i>Blumea balsamifera</i>	0.23	91A
5	<i>Butea cf. superba</i>	0.47	91D
6	<i>Callicarpa arborea</i>	0.20	-
7	<i>Callicarpa rubella</i>	0.20	92C
8	<i>Canscora andrographioides</i>	0.33	95E
9	<i>Chlorophytum nepalense</i>	0.37	92E
10	<i>Cinnamomum iners</i>	0.37	94H
11	<i>Cissus discolor</i>	0.30	94E
12	<i>Clerodendrum serratum</i>	0.43	95A
13	<i>Codonopsis javanica</i>	0.37	95B-C
14	<i>Costus speciosus</i>	0.30	96A
15	<i>Dianella ensifolia</i>	0.33	-
16	<i>Eleutherine americana</i>	0.33	97H-J
17	<i>Embelia pulchella</i>	0.23	-
18	<i>Inula cappa</i>	0.30	-
19	<i>Laggera pterodonta</i>	0.13	-
20	<i>Macropanax sp.</i>	0.37	-
21	<i>Melastoma malabathricum</i>	0.67	104D-E
22	<i>Melicope pteleifolia</i>	0.23	-
23	<i>Millettia extensa</i>	0.40	-
24	<i>Paederia foetida</i>	0.33	-
25	<i>Phylacium bracteosum</i>	0.43	-
26	<i>Rubia crassipes</i>	0.43	-
27	<i>Sambucus javanica</i>	0.30	108L
28	<i>Smilax lanceifolia</i>	0.37	-
29	<i>Tacca chantrieri</i>	0.27	110G
30	<i>Gynura sp.4</i>	0.17	-

Table 75. Thirty species with high CI value raised as the domain of questionnaire in Toei Klang village (Lua)

Plant no.	Plant name	CI value	Figure#
		Min-Max	
		0.05-0.95	
1	<i>Alpinia speciosa</i>	0.20	-
2	<i>Aralia armata</i>	0.15	89C
3	<i>Betula alnoides</i>	0.30	-
4	<i>Blumea balsamifera</i>	0.40	91A
5	<i>Butea cf. superba</i>	0.30	91D
6	<i>Callicarpa longifolia</i>	0.35	-
7	<i>Chloranthus erectus</i>	0.30	94A
8	<i>Chlorophytum nepalense</i>	0.30	92E
9	<i>Cissampelos pareira</i>	0.75	-
10	<i>Conscora andrographioides</i>	0.25	-
11	<i>Costus speciosus</i>	0.25	96A
12	<i>Dianella ensifolia</i>	0.50	96D
13	<i>Dracaena elliptica</i>	0.20	97G
14	<i>Eleusine indica</i>	0.20	97K
15	<i>Euodia lepta</i>	0.20	-
16	<i>Helicteres elongata</i>	0.95	101A
17	<i>Mahonia siammensis</i>	0.10	-
18	<i>Melastoma malabathricum</i>	0.20	104D-E
19	<i>Millettia extensa</i>	0.10	104I
20	<i>Paederia pilifera</i>	0.40	105J
21	<i>Paris polyphylla</i>	0.10	105E
22	<i>Phlogacanthus curviflorus</i>	0.20	106C
23	<i>Plantago major</i>	0.15	106L
24	<i>Pleocnemia submembranacea</i>	0.15	-
25	<i>Rubus alceifolius</i>	0.35	108J
26	<i>Sambucus javanica</i>	0.30	108L
27	<i>Solanum spirale</i>	0.25	109I
28	<i>Tacca chantrieri</i>	0.15	110G
29	<i>Tadehagi triquetrum</i>	0.15	110H
30	<i>Thunbergia laurifolia</i>	0.20	111G

4.2.3 Culturally important plant species

Medicinal plant species with high cultural importance (high CI values) for which the knowledge related to them for treating particular disorders is exclusively shared by all three villages of each ethnic group are considered “culturally important species”. The culturally important species of the Lua could not be determined because of the lack of shared knowledge among the informants in the Lua villages. The culturally important species and their cultural use(s) of the Hmong, Mien and Khamu are shown in Tables 76–78.

In the case of *Impatiens balsamina* and *Impatiens violaeiflora* the Hmong considered them as a single ethnospecies, called ‘paaj ntin tuav’. *Impatiens violaeiflora* is wild and common around the highland Hmong village Manee Pruek and not found in the two lowland Hmong villages whereas *Impatiens balsamina* is more common in the lowland. However, these two species are used for the same purpose. For this reason, these two botanical species are treated as one ethnospecies, following the criteria of Hanazaki *et al.*, (2000).

Table 76. Twelve culturally important plant species of the Hmong

Plant name	Cultural use(s)	Figure#
<i>Achyranthes longifolia</i>	Dysmenorrhoea	86G
<i>Acorus calamus</i>	Stomachache	87A-B
<i>Agrimonia nepalensis</i>	Food poisoning	87F-G
<i>Apiaceae</i> sp.1	Morning sickness, fetal stabilization	89D
<i>Houttuynia cordata</i>	Cough	101H
<i>Impatiens balsamina/Impatiens violaeiflora</i>	Amenorrhoea, labour induction	102A-B
<i>Kaempferia rotunda</i>	Stomachache	103B-C
<i>Kalimeris indica</i>	Diarrhoea for newborn baby	103E
<i>Mirabilis jalapa</i>	Amenorrhoea, dysmenorrhoea	104J
<i>Stahlianthus campanulatus</i>	Diarrhoea, stomachache	110D
<i>Teucrium viscidum</i> var. <i>viscidum</i>	Stomachache	110K
<i>Xiphidium caeruleum</i>	Stomachache, indigestion	113E

Table 77. Nine culturally important plant species of the Mien

Plant name	Cultural use(s)	Figure#
<i>Acorus calamus</i>	Postpartum recovery	87A-B
<i>Elatostema repens</i>	Ringworm/Tinea pedis	97F
<i>Eleusine indica</i>	Anti-abortion	97K
<i>Hemerocallis lilioasphodelus</i>	Cough	101F-G
<i>Ipomoea muricata</i>	Antidote	102E-F
<i>Juncus effusus</i>	Pain	102H
<i>Kalimeris indica</i>	Cough	103E
<i>Pothos scandens</i>	Cough	107G
<i>Selaginella willdenowii</i>	Voice loss	109E

Table 78. Five culturally important plant species of the Khamu

Plant name	Cultural use(s)	Figure#
<i>Eleusine indica</i>	Fever	97K
<i>Kalanchoe pinnata</i>	Muscle sprains (Strains)	103G
<i>Paederia pilifera</i>	Flatulence	105J
<i>Solanum spirale</i>	Fever	109I
<i>Zingiber cassumunar</i>	Flatulence	113F-G

4.2.4 Shared culture of plant use between groups

Medicinal plants with high CI values that were used in villages of different groups to treat similar disorders were considered as shared culture of plant uses among them (Table 79).

Table 79. Shared culture of plant uses among ethnic groups

Plant name	Shared culture of plant use (s)	Ethnic group which share the culture	Figure#
<i>Blumea balsamifera</i>	Epistaxis (nose bleed), headache	Four groups	91A
<i>Boehmeria nivea</i>	Abscess	Hmong, Mien, Khamu	92A
<i>Caesalpinia sappan</i>	Dysuria	Hmong, Mien, Khamu	92D
<i>Chromolaena odorata</i>	stop bleeding	Four groups	94C

Table 79. (continued)

Plant name	Shared culture of plant use (s)	Ethnic group which share the culture	Figure#
<i>Coix lachryma-jobi</i>	urethral stone	Hmong, Mien, Khamu	95F
<i>Costus speciosus</i>	Dysuria	Four groups	96A
<i>Croton roxburghii</i>	Postpartum recovery	Mien, Khamu, Lua	95G
<i>Equisetum debile</i>	Dysuria, urethral stone	Mien, Khamu, Lua	97M
<i>Fallopia forbesii</i>	Diarrhoea, stomachache	Hmong, Mien	98G
<i>Gmelina arborea</i>	Tinea pedis	Four groups	99C
<i>Millettia extensa</i>	Muscle strengthening, Muscle pain	Mien, Khamu, Lua	104I
<i>Psidium guajava</i>	Diarrhoea	Four groups	-
<i>Sambucus javanica</i>	Fracture, muscle pain	Mien, Khamu, Lua	108L
<i>Sambucus simpsonii</i>	Fracture, muscle pain	Hmong, Mien	108M
<i>Strobilanthes cusia</i>	Fever	Hmong, Mien, Khamu	84A
<i>Tacca chantrieri</i>	Food poisoning	Khamu, Lua	110G
<i>Tadehagi triquetrum</i>	Rotten wounds of animal	Khamu, Lua	110H
<i>Thunbergia laurifolia</i>	Antidote	Four groups	111G
<i>Vernonia parishii</i>	Antidote	Hmong, Lua	112G

4.2.5 Study of knowledge erosion

A total of 725 informants (378 females/347 males) were interviewed using the questionnaire regarding their knowledge and use of 30 medicinal plants raised as the domain of interview for each of the villages. The number of informants in each age range for each village was demonstrated in Chapter 3 (Table 2).

4.2.5.1 Prevalence of knowledge and use

The average number of plants for which medicinal knowledge was known to all informants in each village as well as number of plants actually used by them are listed in Table 80. Toei Klang village of the Lua and Manee Pruek of the Hmong had the two highest average numbers of known and actually used medicinal plants. In each village, the variation among individuals was large when compared to average number of medicinal plants known and actually used by the informants as it was indicated by their values of standard variation.

In all villages, the numbers of medicinal plants known and actually used by each informant were positively correlated with their age (Table 80; Spearman's rank correlation coefficient, $p < 0.05$). Older informants knew and used more medicinal plants than the younger ones. The educational level of informants significantly decreased with increasing informant age (Spearman's rank correlation coefficient, $p < 0.05$). The more educated informants knew and used fewer medicinal plants; thus, the number of known and actually used species reported by each informant was negatively correlated with informant educational level (Spearman's rank correlation coefficient, $p < 0.05$).

4.2.5.2 Knowledge and actual uses

Overall, 21,750 questions were asked to the 725 informants in the 12 villages at the beginning of the questionnaire interview. The questions were concerned about whether they knew/had seen or used a particular plant. Only 8,567 (39%) answers were given for plants that they knew medicinal uses of and of them 6,431 (29%) were plants that they actually used. Plant knowledge that was not used any more (2,136 answers; 10%) was only known to the informants from hearing about them. Of the 1,800–1,860 questions asked to all informants in each village the proportions of answers indicating knowledge and actual uses of medicinal plants are shown in Figure 34. Statistical analyses pointed to significant differences between number of known medicinal plants and those actually used in all villages (Table 80; Wilcoxon Signed Ranks test, $p = 0.00$)

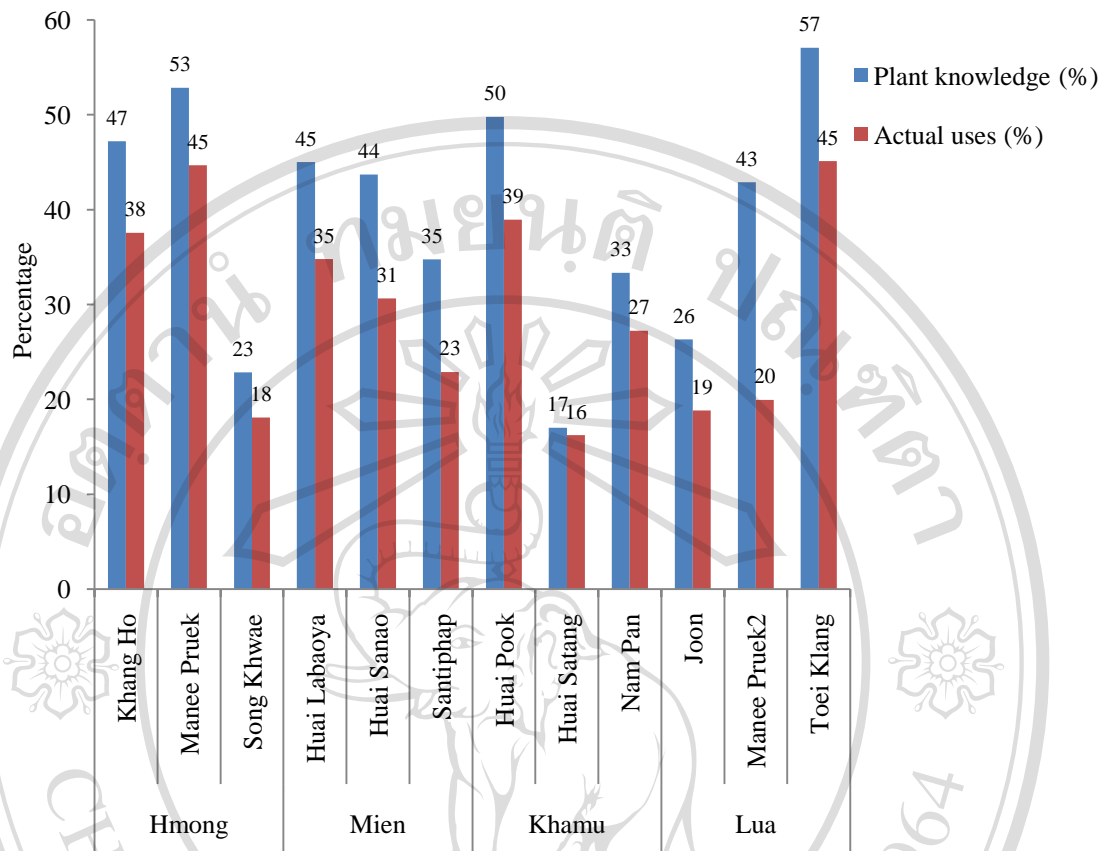


Figure 34 Percentage of responses regarding plant knowledge and actual use of medicinal plants compared to all questions asked in questionnaire interviews in each village

4.2.5.3 Frequency of actual uses

Of the plants actually used, the frequency of use was primarily given as “rarely” or “occasionally,” and they were mostly related to plants that had not been used for a long time, usually longer ago than five years (Figures 35-36). The “occasionally” refers to “used when needed.” In most villages, frequency of “rarely” was the highest among the other kind of *frequency of use* but Manee Pruek, Song Khwae and Huai Satang had the higher frequency of “occasionally.” Manee Pruek and Huai Satang also had higher proportion of “recent use” than “past use” whereas it was found that, in the other villages, proportions of “past use” were higher.

Table 80. Average number of medicinal plants known and actually used by informants in each village

Village	Average #of medicinal plants known	Average #of medicinal plants actually used	Spearman's rank correlation coefficient of interviewees'					Wilcoxon Signed Ranks Test: #of known medicinal plants vs. actually used plants
			Age vs. # of known medicinal plants	Age vs. # of actually used medicinal plants	Educational level vs. # of known medicinal plants	Educational level vs. # of actually used medicinal plants	Educational level vs. Age	
Khang Ho	14.17 ± 8.2	11.27 ± 7.9	r=-0.88; p=0.00	r=0.87; p=0.00	r=-0.72; p=0.00	r=-0.71; p=0.00	r=-0.75; p=0.00	p=0.00 'significant'
Manee Pruek	15.85 ±10.2	13.4 ± 9.5	r=0.67; p=0.00	r=0.68; p=0.00	r=-0.60; p=0.00	r=-0.61; p=0.00	r=-0.78; p=0.00	p=0.00 'significant'
Song Khwae	6.85 ± 7.7	5.43 ± 7.2	r=0.57; p=0.00	r=0.54; p=0.00	r=-0.50; p=0.00	r=-0.44; p=0.00	r=-0.75; p=0.00	p=0.00 'significant'
Huai Labaoya	13.5 ± 8.1	10.44 ± 7.0	r=0.72; p=0.00	r=0.74; p=0.00	r=-0.64; p=0.00	r=-0.66; p=0.00	r=-0.72; p=0.00	p=0.00 'significant'
Huai Sanao	13.11 ± 7.3	9.2 ± 7.2	r=0.66; p=0.00	r=0.78; p=0.00	r=-0.64; p=0.00	r=-0.73; p=0.00	r=-0.76; p=0.00	p=0.00 'significant'
Santiphap	10.43 ± 6.2	6.87 ± 5.7	r=0.61; p=0.00	r=0.76; p=0.00	r=-0.58; p=0.00	r=-0.67; p=0.00	r=-0.79; p=0.00	p=0.00 'significant'
Huai Pook	14.93 ± 5.2	11.68 ± 5.1	r=0.64; p=0.00	r=0.62; p=0.00	r=-0.47; p=0.00	r=-0.46; p=0.00	r=-0.81; p=0.00	p=0.00 'significant'
Huai Satang	5.1 ± 6.8	4.87 ± 6.5	r=0.87; p=0.00	r=0.87; p=0.00	r=-0.78; p=0.00	r=-0.78; p=0.00	r=-0.83; p=0.00	p=0.006 'significant'
Nam Pan	10 ± 7.1	8.17 ± 6.1	r=0.79; p=0.00	r=0.81; p=0.00	r=-0.68; p=0.00	r=-0.70; p=0.00	r=-0.84; p=0.00	p=0.00 'significant'
Joon	7.9 ± 4.8	5.65 ± 3.8	r=0.68; p=0.00	r=0.71; p=0.00	r=-0.64; p=0.00	r=-0.66; p=0.00	r=-0.81; p=0.00	p=0.00 'significant'
Manee Pruek 2	12.87 ± 4.7	5.98 ± 4.9	r=0.59; p=0.00	r=0.48; p=0.00	r=-0.51; p=0.00	r=-0.28; p=0.00	r=-0.79; p=0.00	p=0.00 significant'
Toei Klang	17.12 ± 5.7	13.53 ± 5.6	r=0.60; p=0.00	r=0.68; p=0.00	r=-0.59; p=0.00	r=-0.60; p=0.00	r=-0.85; p=0.00	p=0.00 'significant'

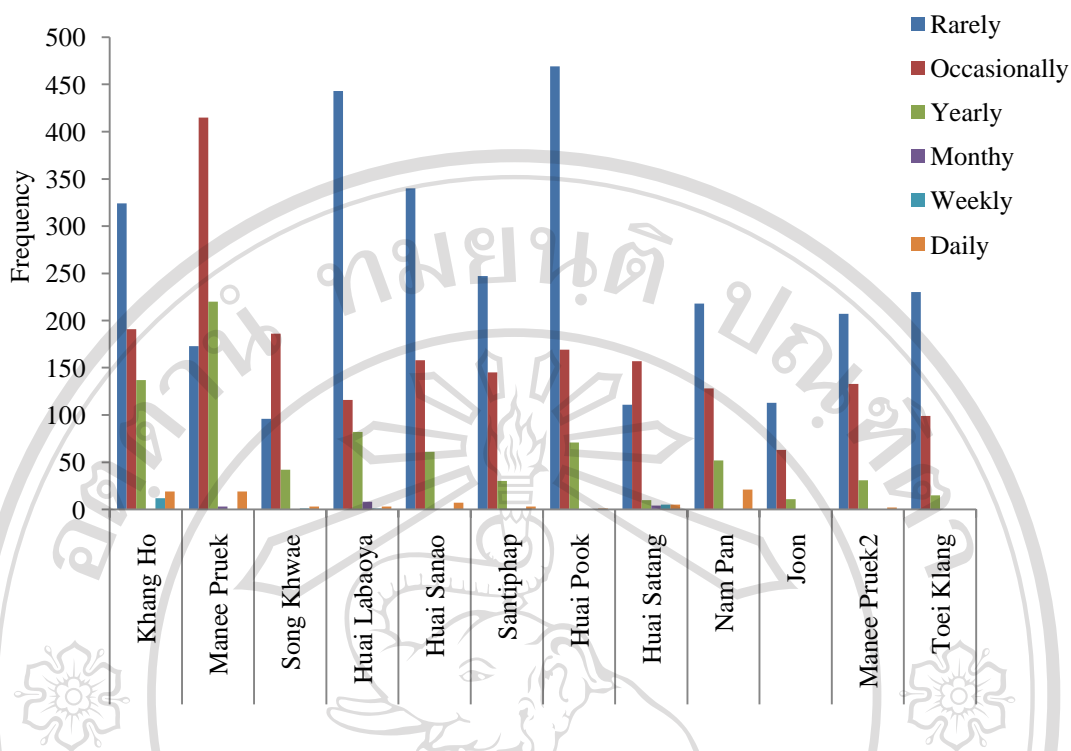


Figure 35 Frequency of actual uses of medicinal plants reported in questionnaire interviews

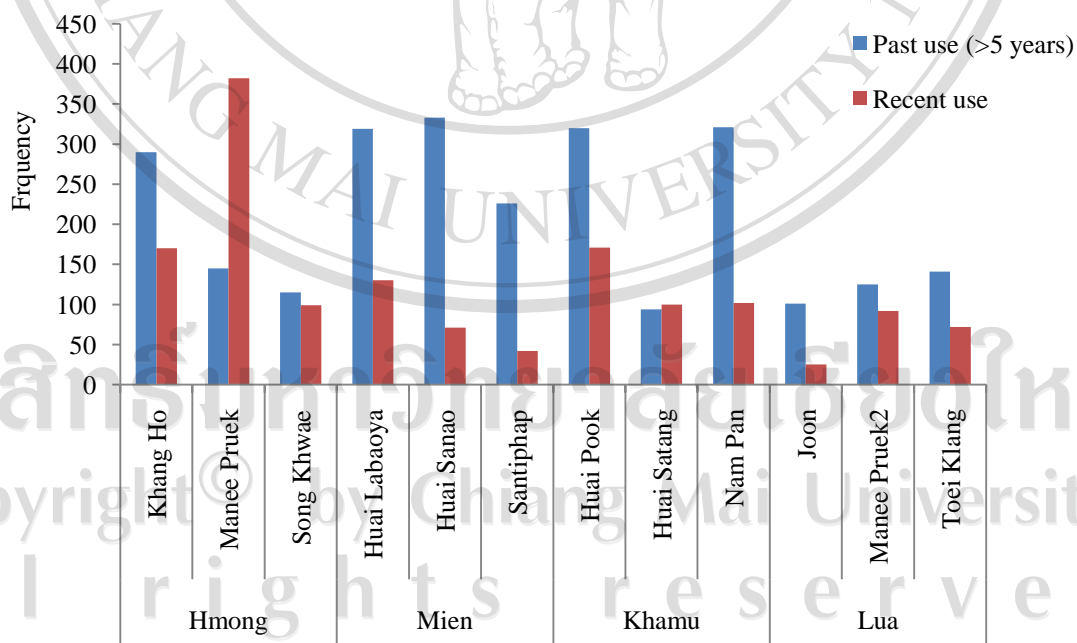


Figure 36 Frequency of past and recent uses of medicinal plants reported in questionnaire interviews

4.2.5.4 Unknown medicinal plants

Of the plants for which their medicinal use(s) were unknown to the informants in each village, the proportion of plants which had been seen by the informants even if they did not know their local name is higher than those which had never been seen by them (Figure 37).

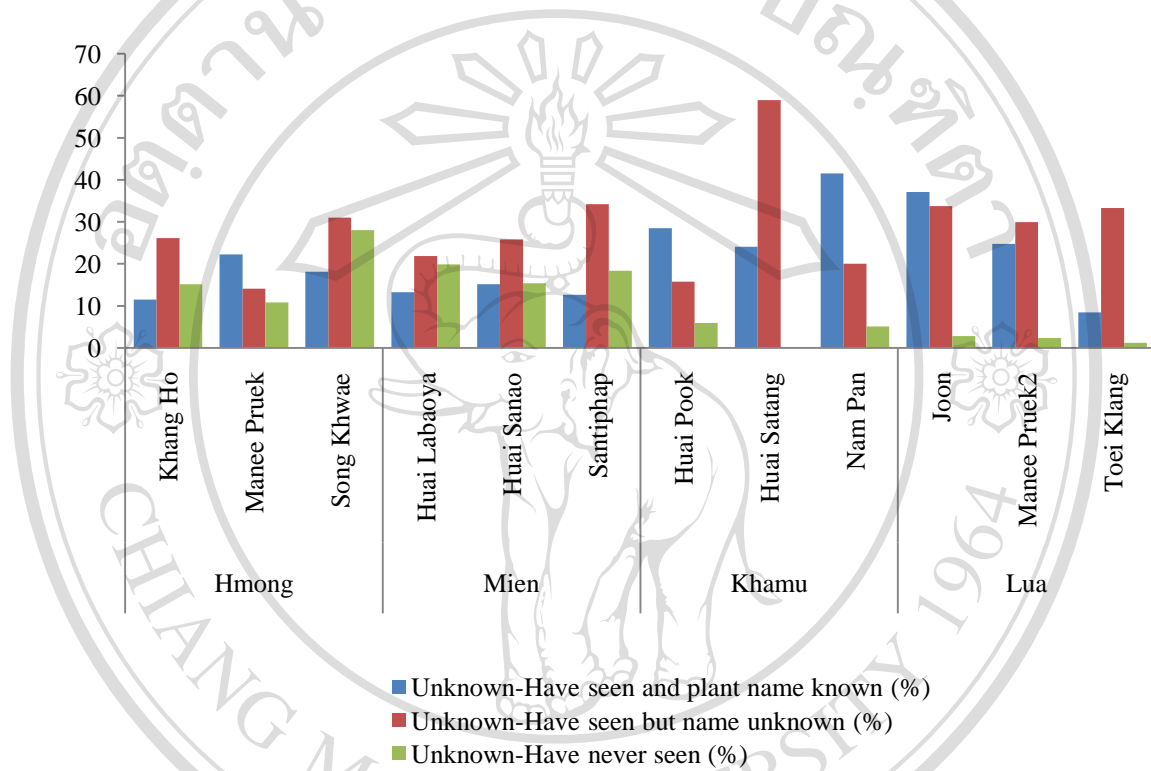


Figure 37 Percentage of three cases of informants' experiences related to plants for which they do not know the medicinal use.

4.3 Comparative study

4.3.1 Comparison of species composition of all used plants

Dendrogram topology of a Cluster Analysis based on Jaccard Similarity Coefficient and the presence/absence data matrix of all plant used in all 12 villages showed cultural clusters of all three Hmong villages as well as the three Mien villages and the two highland Lua villages Manee Pruek 2 and Toei Klang. All plants used by the three Hmong villages varied most and were distinct from the nine villages of other ethnic groups. Composition of used plants was more similar between the two lowland Hmong villages Khang Ho and Song Khwae. Among the other nine villages, the two highland villages of the Lua, Toei Klang and Manee Pruek 2, were most distinct whereas used plants composition of the lowland Lua village Joon was more similar to the three Khamu villages, particularly the Nam Pan village (Figure 38).

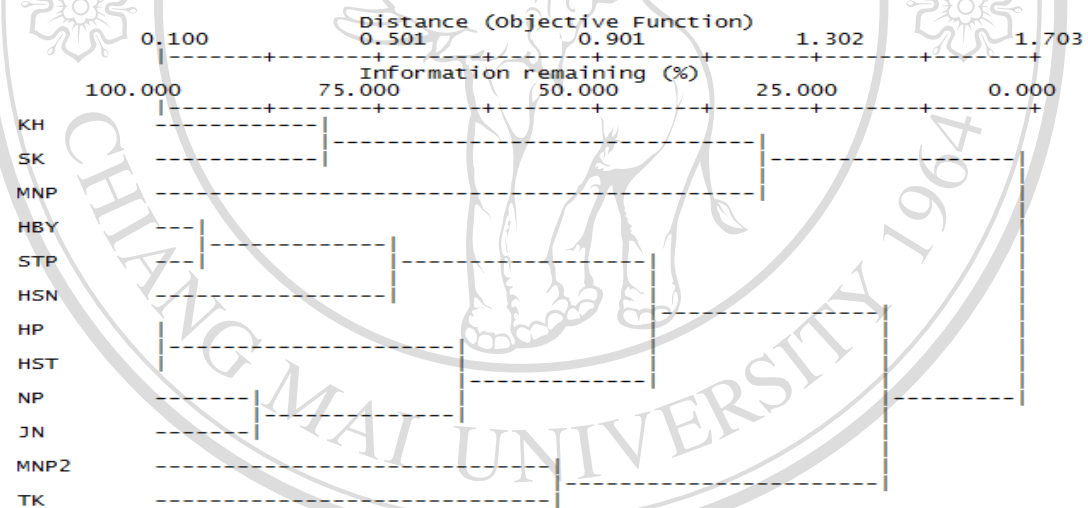


Figure 38 Dendrogram topology for comparison of all used plant composition among all villages studied

4.3.2 Comparison of species composition of wild plants

When classifying all plants used in the 12 villages based on whether the plant is wild or domesticated, the dendrogram topology of Cluster Analysis based on the presence/absence matrix of wild plants used by all villages and Jaccard similarity coefficient indicated explicitly that species composition of wild plants used by all three highland village (Manee Pruek, Manee Pruek 2, Toei Klang) were distinct from other villages located in lower altitudes. Wild plant species compositions used by the

nine lowland villages were grouped within a cultural boundary with the two remaining Hmong village, Khang Ho and Song Khwae, as being the most distinct. All three villages of the Mien and Khamu were clustered together on the same branch with the lowland Lua village, Joon, as an out-group (Figure 39).

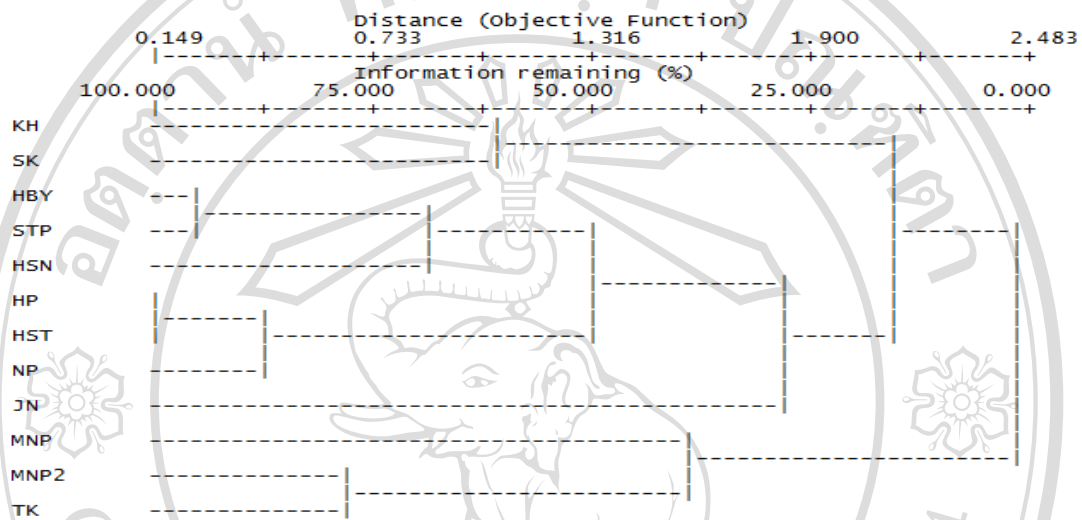


Figure 39 Dendrogram topology for comparison of wild used plant composition among all villages studied

4.3.3 Comparison of species composition of domesticated plants

The dendrogram topology of a Cluster Analysis based on the presence/absence matrix for domesticated plants used by all villages and Jaccard similarity coefficient showed that species composition of domesticated plants of the highland villages Manee Pruek of the Hmong and Manee Pruek 2 of the Lua, which are located at 1,252 m above sea level, vary most and were distinct from other villages including two villages of the same ethnic group. In spite of the same elevation of villages' location, floristic similarity of domesticated plants found in these two villages is low. They, therefore, were distinctly branched out as two out-groups. Among the 10 villages located at lower altitude, species compositions were more similar between the two Hmong villages which, in turn, were more similar to all three Mien villages than they were to the other village of the Lua and Khamu. Among the Lua and Khamu villages, floristic composition found in the Lua village Joon is more similar to the Khamu

villages than it was to another Lua village Toei Klang, which is located at 800 m above sea level and has more distinct composition of domesticated plants (Figure 40).

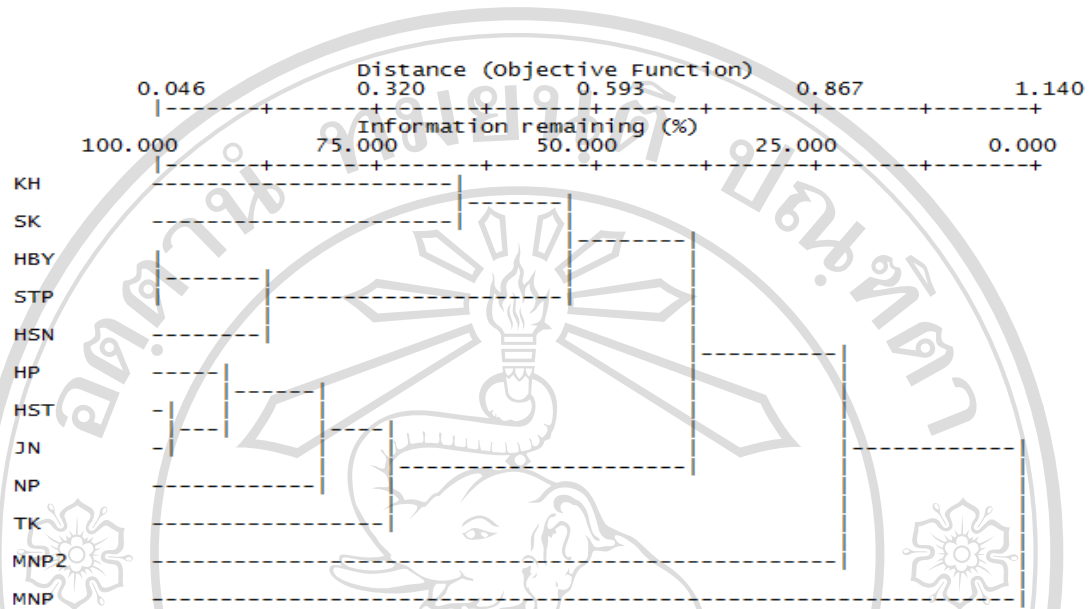


Figure 40 Dendrogram topology for comparison of domesticated used plant composition among all villages studied

4.3.4 Comparison of plant uses based on use-category

Despite the similarities of plant species composition selected for uses by each ethnic group that were detected, the actual compositions of species used for each category vary from one village of a group to others. Comparisons of plants species allocated to each use-category among all 12 villages of the four ethnic groups, by means of cluster analysis based on Jaccard similarity coefficient and presence/absence matrix of used species, yielded the following results.

4.3.4.1 Food

The significant result of dendrogram topology, yielded from cluster analysis based on presence/absence matrix of plant species used for food by all 12 villages, showed that there were difference in food species composition between the highlands and lowland villages. Two highland Hmong and Lua villages, Manee Pruek and Manee Pruek 2, shared similarity in food species compositions. Among the 10 lower-altitudinal villages, two Hmong villages were clustered together and so were the three

Mien villages. The food plants used by the three Khamu and other two Lua villages shared similarity. Still, the Joon village of the Lua was more similar to Nam Pan village of the Khamu than to another Lua village, Toei Klang, which was isolated from the others (Figure 41).

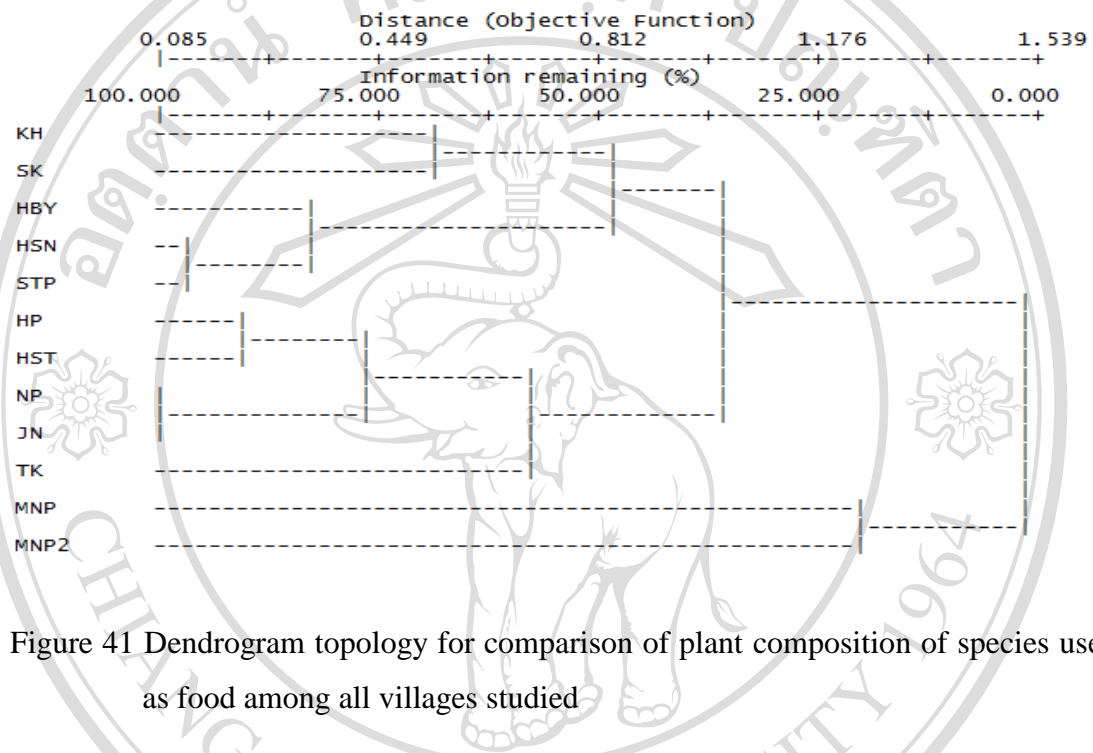


Figure 41 Dendrogram topology for comparison of plant composition of species used as food among all villages studied

4.3.4.2 Food additives

The dendrogram topology resulting from cluster analysis of plants used as food additives distinctly showed an isolated cluster of the three Hmong villages that was separated from the other villages. Plants used as food additives by two Mien villages, Huai Sanao and Santiphap, were more similar whereas another Mien village, HuaiLabaoya, shared more similarity to the adjacent HuaiPook village and Nam Pan village of the Khamu. Likewise, the two highland Lua villages, Manee Pruek and Toei Klang, shared more similarity whereas the lowland Joon village of an identical group was more similar to Huai Satang village of the Khamu (Figure 42).

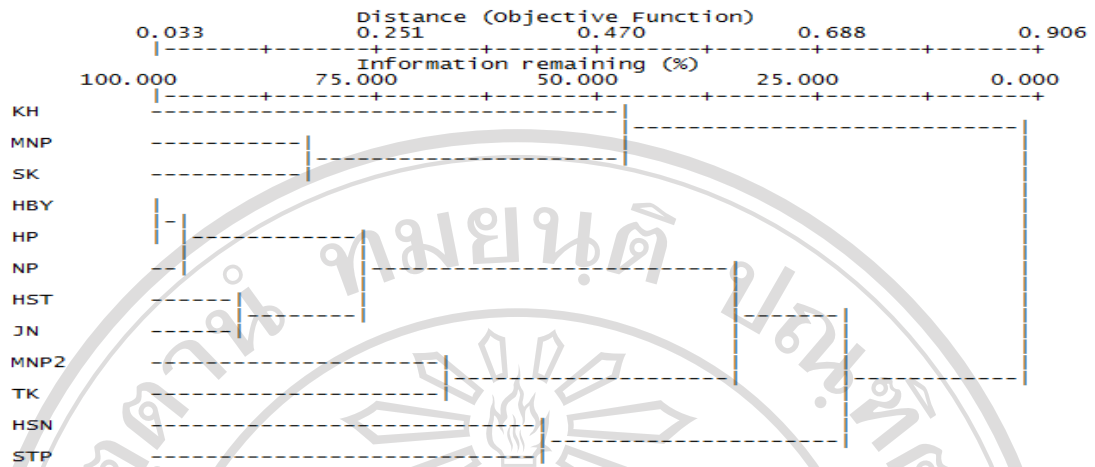


Figure 42 Dendrogram topology for comparison of plant composition of species used as food additive among all villages studied

4.3.4.3 Animal food

The dendrogram topology resulting from a cluster analysis showed similarity of plants used as animal food between villages of the same ethnic group, for instance, Manee Pruek and Song Khwae villages of the Hmong as well as Huai Labaoya and Huai Sanao villages of the Mien. Similarity was also detected between villages of different ethnic groups such as Santiphap and Toei Klang village of the Mien and Lua, respectively. For the rest of villages there was low similarity of animal food plants (Figure 43).

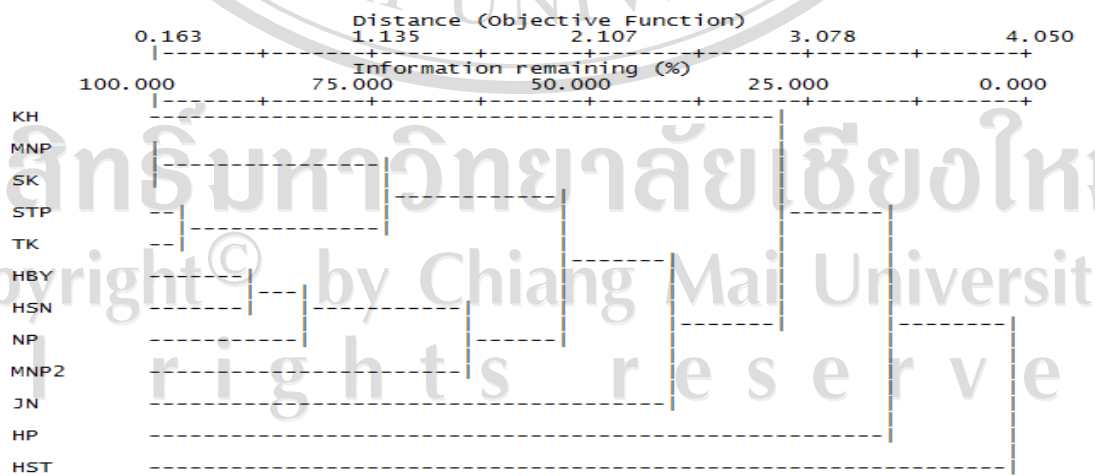


Figure 43 Dendrogram topology for comparison of plant composition for species used for animal food among all villages studied

4.3.4.4 Materials

From the dendrogram topology, the highland villages of the Lua, Manee Pruek 2 and Toei Klang shared similarity in species composition for species used for materials and they differ most from other villages. In contrast, the lowland Joon village of the same ethnic group shared more similarity to the three of Khamu villages. Among the Khamu villages, high similarity of plant species was detected between Huai Pook and Nam Pan villages which also in turn shared similarity with Huai Satang village of the same ethnic group. Species composition for plants used by the two Hmong villages, Manee Pruek and Song Khwae, were more similar and distinct compared to another Hmong village, Khang Ho, which was more similar and clustered together with the three Mien villages (Figure 44).

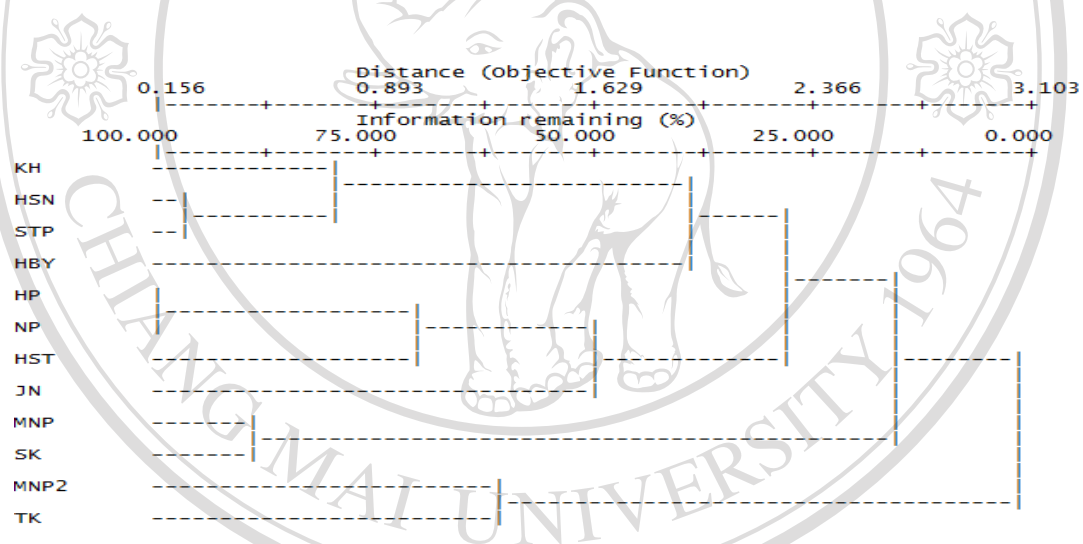


Figure 44 Dendrogram topology for comparison of plant composition for species used as materials among all villages studied

4.3.4.5 Fuels

From the dendrogram, similarity of fuel plants used among the same ethnic group was only detected among the Hmong for which the two lowland Khang Ho and Song Khwae shared more similarity whereas the highland Manee Pruek village was more similar to the highland Manee Pruek 2 of the Lua. Among the remaining villages, neither cultural nor altitudinal clusters were detected (Figure 45).

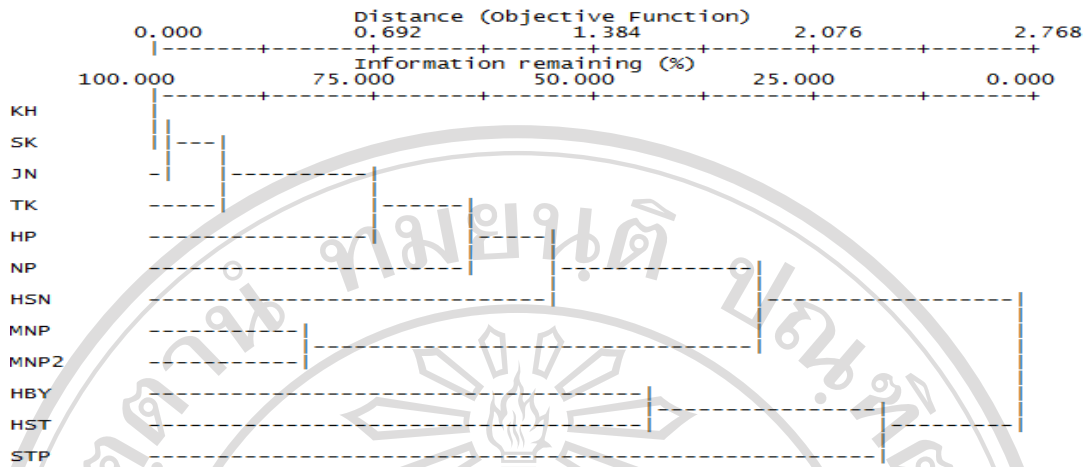


Figure 45 Dendrogram topology for comparison of plant composition for species used for fuels among all villages studied

4.3.4.6 Social uses

The significant result from dendrogram topology yielded from cluster analysis of species composition for species used for social purpose showed that there were two main branches. The first branch was for the Hmong and Mien village in which all three villages of the same ethnic group were clustered. The other branch was for the Khamu and Lua villages in which the Toei Klang village of the Lua was most distinct and branched as out-group whereas the other two Lua villages were more similar and in turn shared similarities with all three Khamu villages which were grouped together (Figure 46).

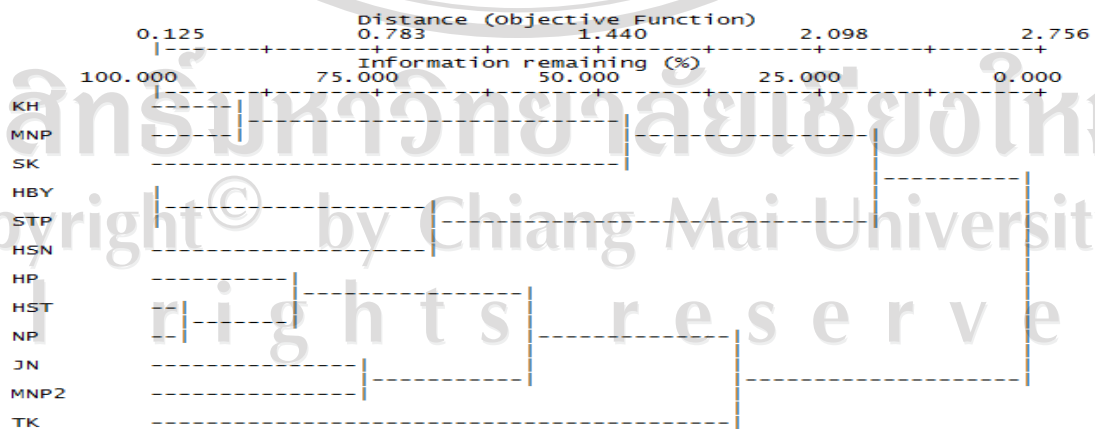


Figure 46 Dendrogram topology for comparison of plant composition reported for species used for social purposes among all villages studied.

4.3.4.7 Vertebrate poisons

From the dendrogram topology, high similarity of plants used for vertebrate poisons were detected among the two Hmong villages, Manee Pruek and Khang Ho, and in turn they shared relatively high similarity with another Hmong villages, Song Khwae which also shared high similarity with the lowland Joon villages of the Lua. Besides, high similarities were also detected among other villages of the same ethnic group such as Huai Satang and Nam Pan villages of the Khamu as well as Huai Labaoya and Santiphap of the Mien, respectively. There were no altitudinal clusters detected among all villages (Fig 47).

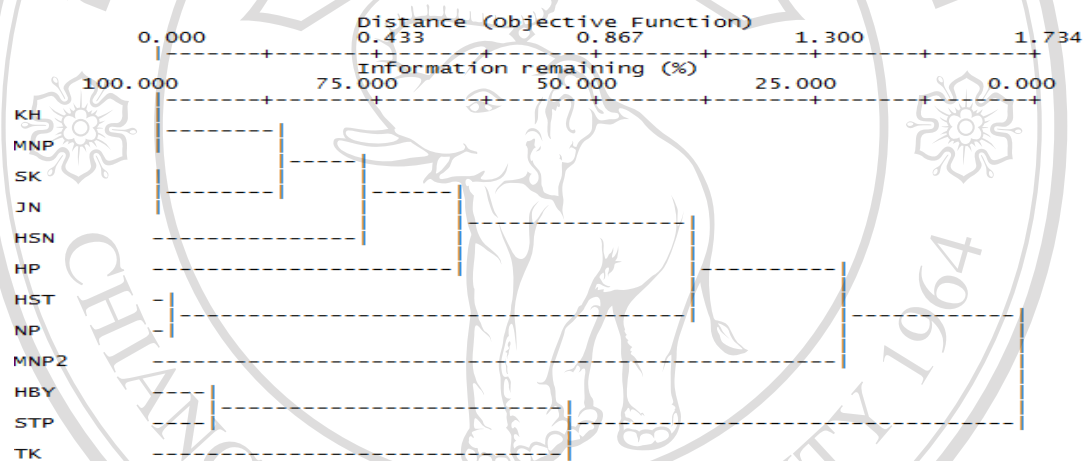


Figure 47 Dendrogram topology for comparison of plant composition for species used for vertebrate poisons among all villages studied

4.3.4.8 Non-vertebrate poisons

As there were no plants used for non-vertebrate poisons from Huai Sanao village of the Mien, and Khang Ho and Song Khwae village of the Hmong, these villages were excluded from the analysis. Among the remaining villages, the dendrogram topology showed that there were high similarity among the three highland villages, Manee Pruek, Manee Pruek 2 and Toei Klang. Besides, the adjacent villages, Huai Labaoya of the Mien and Huai Pook of the Khamu share more similarity compared to the other villages among which no cultural clusters were detected (Figure 48).

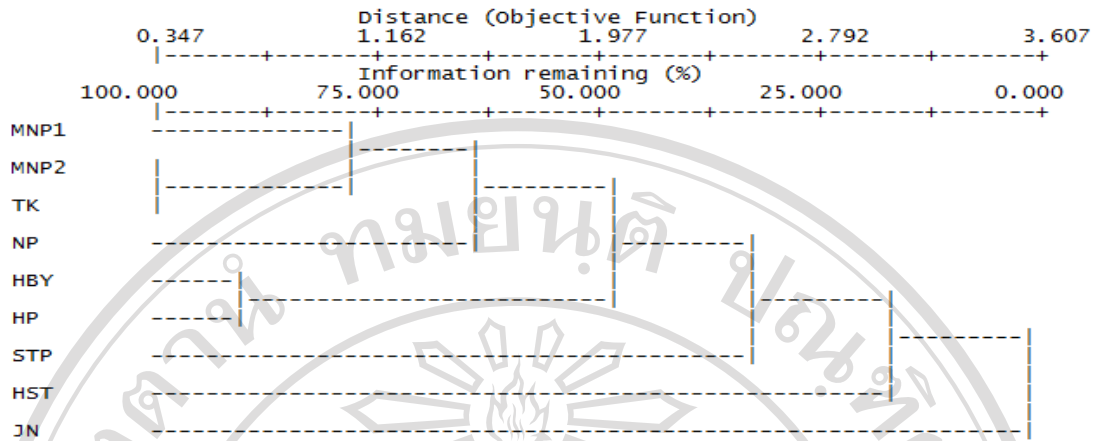


Figure 48 Dendrogram topology for comparison of plant composition for species used for non-vertebrate poisons among all villages studied

4.3.4.9 Environmental uses

From the dendrogram, the Hmong and Mien villages were clustered on the same branch and so were the Khamu and Lua villages. Among six villages of the Khamu and Lua, the five lowland villages were highly similar, especially Joon and Toei Klang of the Lua as well as Huai Satang and Nam Pan of the Khamu, whereas the highland Manee Pruek 2 was most distinct and shared low similarity among them. Among the Hmong and Mien, there were, nevertheless, similarities within the same ethnic group; between Huai Sanao and Santiphap as well as Manee Pruek and Song Khwae, although the detected similarities were low (Figure 49).

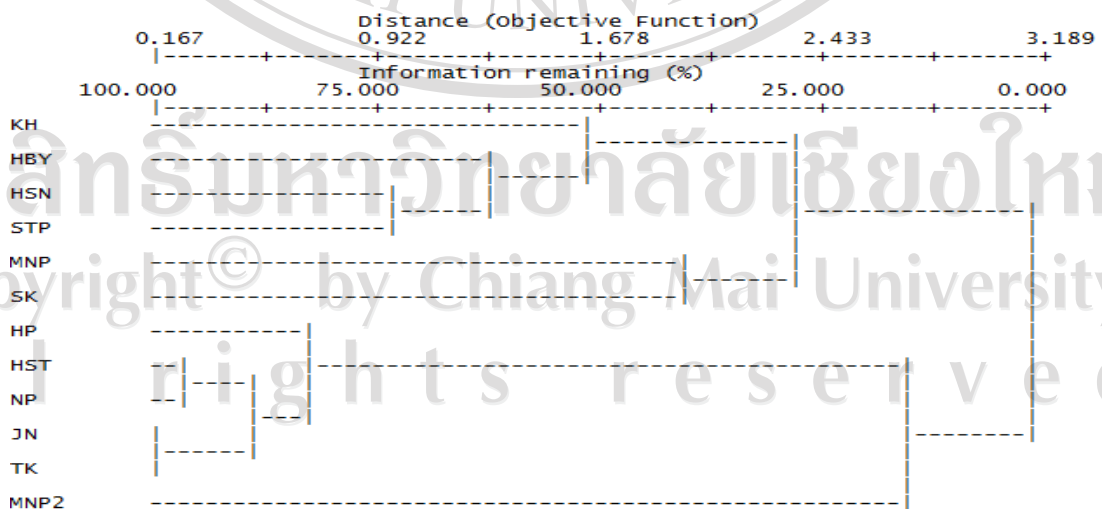


Figure 49 Dendrogram topology for comparison of plant composition for species used for environmental purposes among all villages studied

4.3.4.10 Medicines: Abnormalities

The four villages that had no plant uses reported for abnormalities, Huai Pook and Huai Satang of the Khamu including Manee Pruek 2 and Toei Klang of the Lua, were excluded from the cluster analysis. The dendrogram topology of the eight remaining villages showed high similarity among three villages of the Hmong and there were no clustering patterns, cultural or altitudinal, among the remaining villages (Figure 50).

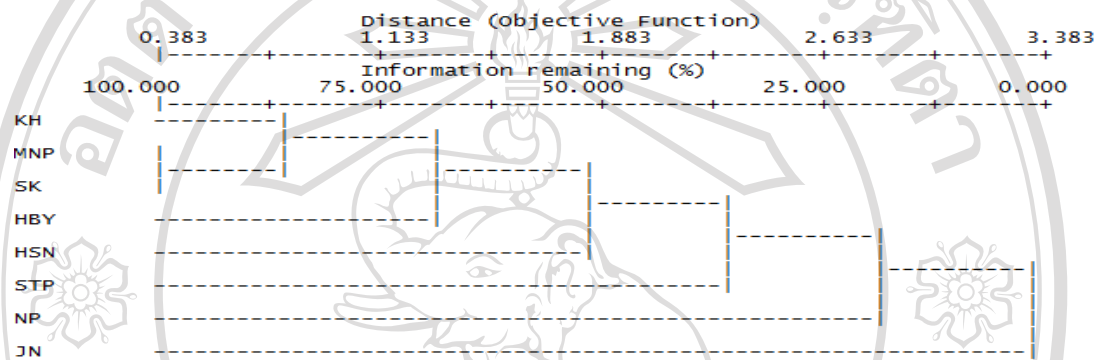


Figure 50 Dendrogram topology for comparison of medicinal plant composition for species used to treat abnormalities among all villages studied

4.3.4.11 Medicines: Blood system disorders

All three villages of the Khamu were excluded from the cluster analysis. The dendrogram topology of the nine remaining villages showed that similarity was higher among villages of the Hmong and the Mien than it was among villages of the Lua. All three Mien villages were more similar and clustered on the same branch and so were two villages of the Hmong, Manee Pruek and Song Khwae (Figure 51).

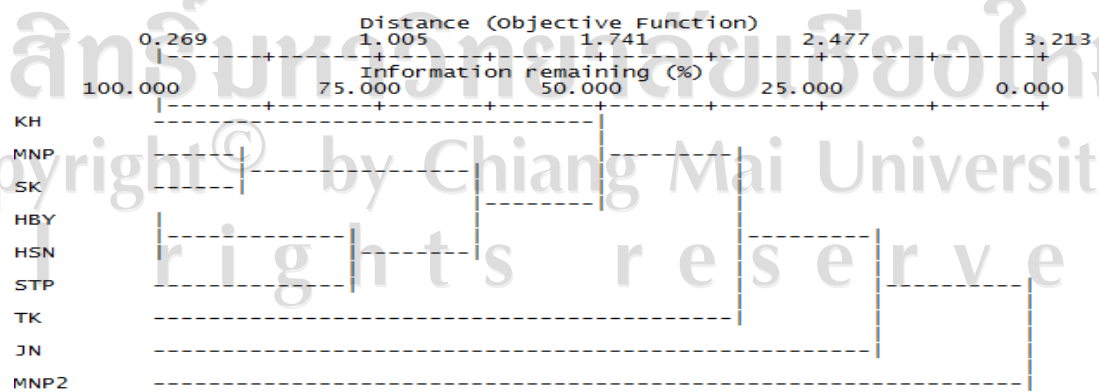


Figure 51 Dendrogram topology for comparison of medicinal plant composition for species used to treat blood system disorders among all villages studied

4.3.4.12 Medicines: Circulatory system disorders

From the dendrogram topology, high similarity was detected between Nam Pan and Joon village of the Khamu and Lua, respectively, whereas the remaining two Lua villages had more distinct species composition of plants used medicinally to treat circulatory system disorders that they were branched as out-groups. Among the remaining villages, cultural clusters were detected among two Mien villages, Huai Sanao and Huai Labaoya, as well as two Hmong villages, Manee Pruek and Song Khwae which in turn shared more similarity to Huai Satang village of the Khamu (Figure 52).

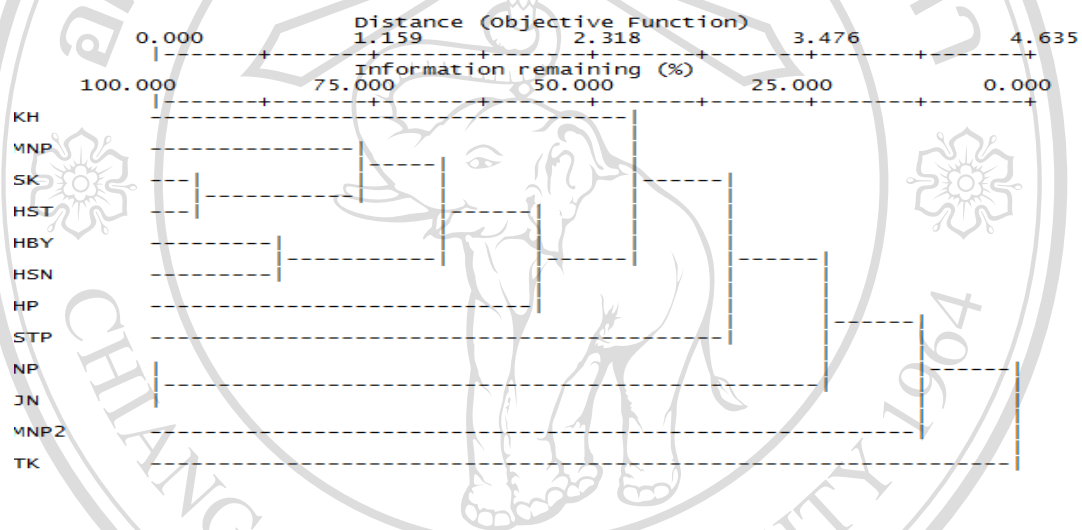


Figure 52 Dendrogram topology for comparison of medicinal plant composition for species used to treat circulatory system disorders among all villages studied

4.3.4.13 Medicines: Digestive system disorders

The significant result from the dendrogram topology showed cultural patterns of clustering, this is to say that all three villages of the Hmong were distinct and clustered together and so were the three Mien villages. Likewise, among villages of the Khamu and the Lua, highland Manee Pruek 2 and Toei Klang were more distinct and similar that they were clustered together whereas the Joon village of the same ethnic group was more similar and clustered with Khamu villages (Figure 53).

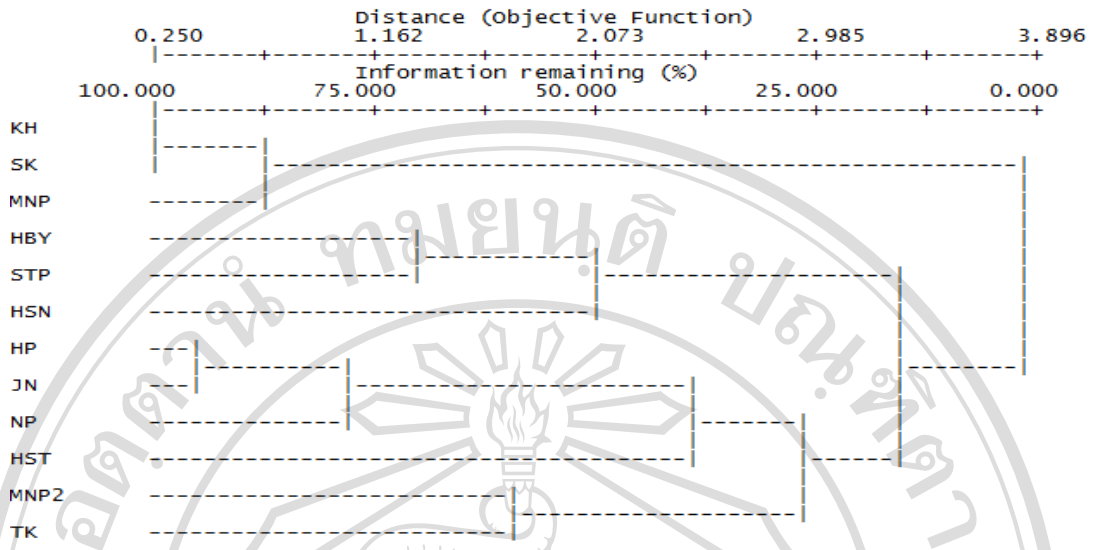


Figure 53 Dendrogram topology for comparison of medicinal plant composition for species used to treat digestive system disorders among all villages studied

4.3.4.14 Medicines: Endocrine system disorders

The dendrogram topology from the cluster analysis with the exclusion of three villages (Huai Pook, Nam Pan, Manee Pruek 2) showed neither cultural nor altitudinal patterns of clustering among the remaining villages. High similarity was detected among the neighboring villages Huai Sanao of the Mien and Khang Ho of the Hmong (Figure 54).

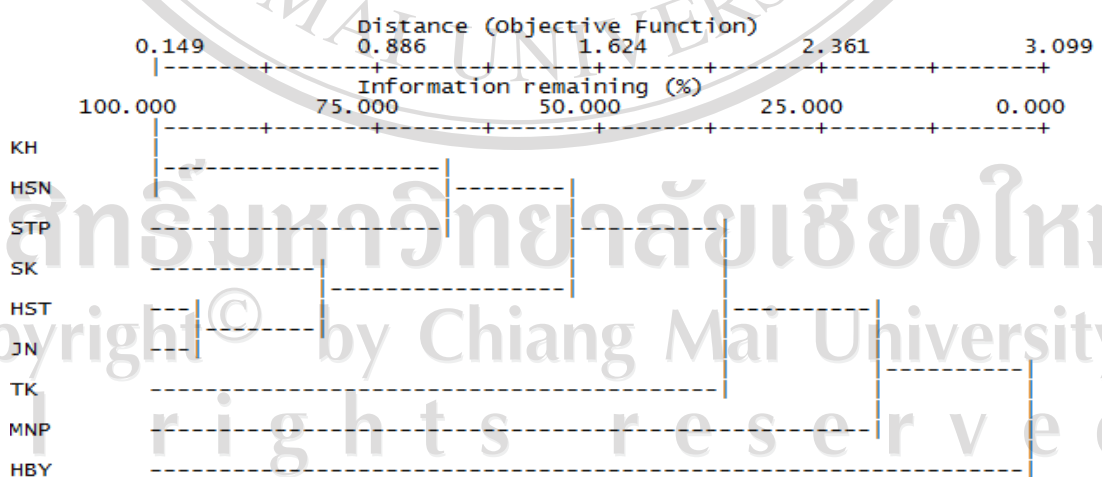


Figure 54 Dendrogram topology for comparison of medicinal plant composition for species used to treat endocrine system disorders among all villages studied

4.3.4.15 Medicines: Genitourinary system disorders

The dendrogram topology from cluster analysis of 12 villages based on presence/absence matrix of 151 plant species used to treat genitourinary system disorders showed cultural clusters of three Hmong and Khamu villages. Within the Hmong cluster, the lowland Khang Ho and Song Khwae villages were more similar. Among the Mien villages, similarity was detected between Huai Labaoya and Santiphap that in turn share more similarity to three villages of the Khamu and Joon village of the Lua than they were to the most distinct Huai Sanao village of the same ethnic group which was also branched as out-group. Among the Lua villages, low similarities were detected (Figure 55).

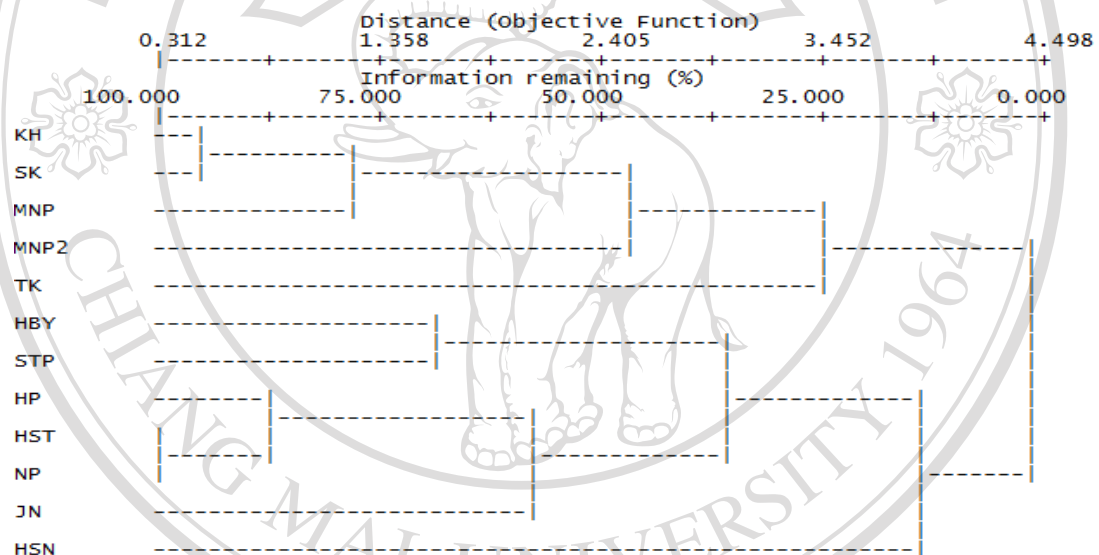


Figure 55 Dendrogram topology for comparison of medicinal plant composition for species used to treat genitourinary system disorders among all villages studied

4.3.4.16 Medicines: Ill-defined symptoms

The dendrogram topology from cluster analysis showed that plants used to treat ill-defined symptoms in 11 villages (not including Toei Klang) were more similar among villages of the Hmong and the Mien. High similarity among three Hmong villages as well as two Mien villages, Huai Labaoya and Santiphap, were detected whereas there were no patterns of clustering among the remaining villages (Figure 56).

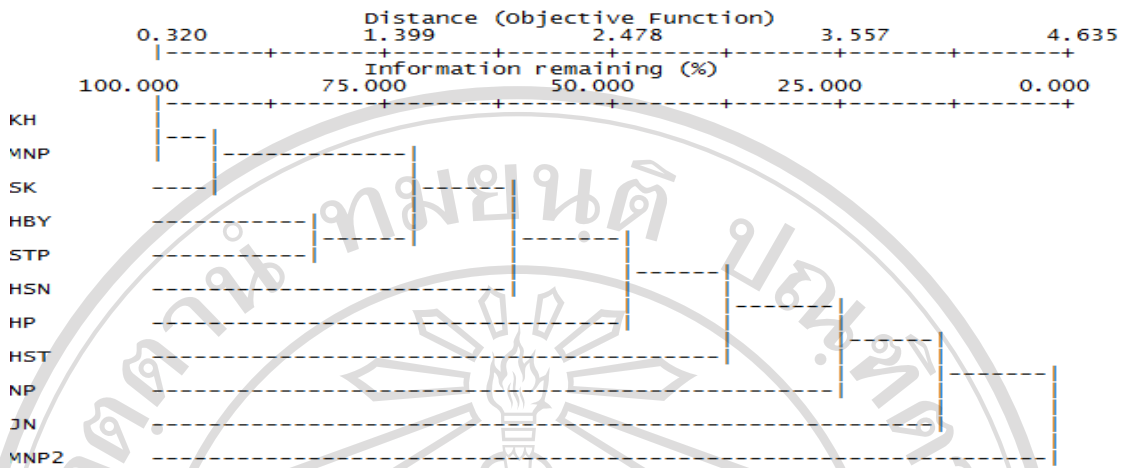


Figure 56 Dendrogram topology for comparison of medicinal plant composition for species used to treat ill-defined symptoms among all villages studied

4.3.4.17 Medicines: Infections/Infestations

The significant result from the dendrogram topology showed that all three villages of the Hmong and Mien were clustered together and these two groups shared more similarity. Joon village of the Lua was more similar to three Mien villages than it was to other Lua villages. Among the other Lua and Khamu villages, cultural clusters were not detected and Manee Pruek 2 was the most varied and branched as out-group from the remaining 11 villages (Figure 57).

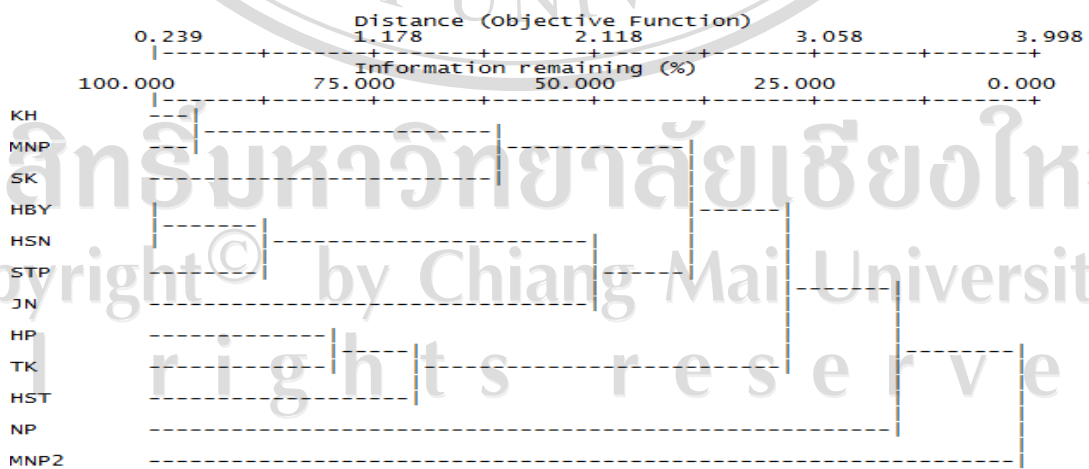


Figure 57 Dendrogram topology for comparison of medicinal plant composition for species used to treat infections/infestations among all villages studied

4.3.4.18 Medicines: Inflammation

There were only three villages, Huai Pook and Huai Satang of the Khamu and Manee Pruek of the Hmong, which had medicinal use-reports related to treatment of inflammations. The medicinal plants reported differ among the villages. Thus, there was no similarity detected among these villages.

4.3.4.19 Medicines: Injuries

The dendrogram topology from cluster analysis of 12 villages based on presence/absence matrix of 106 plant species used for treating injuries showed neither cultural nor altitudinal pattern of clustering. However, the highland villages, Manee Pruek and Manee Pruek 2, had the most distinct species composition of plants used to treat injuries (Figure 58).

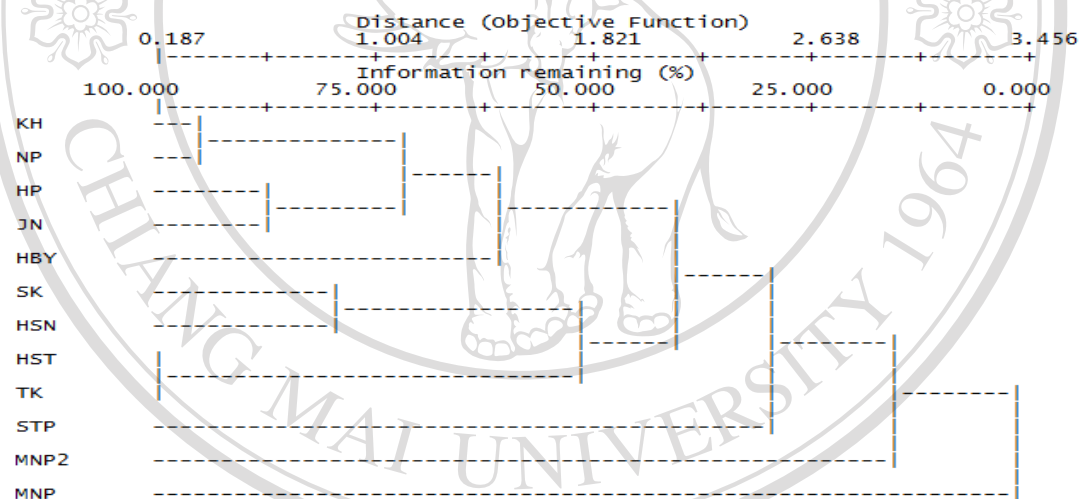


Figure 58 Dendrogram topology for comparison of medicinal plant composition for species used to treat injuries among all villages studied

4.3.4.20 Medicines: Mental disorders

The dendrogram topology from cluster analysis with the exclusion of seven villages that had no use-reports related to treatments of mental disorders showed high similarity among the two lowland Hmong villages, Khang Ho and Song Khwae, whereas the highland Hmong villages, Manee Pruek, shared more similarity with the Mien villages Huai Sanao and Huai Labaoya, respectively (Figure 59).

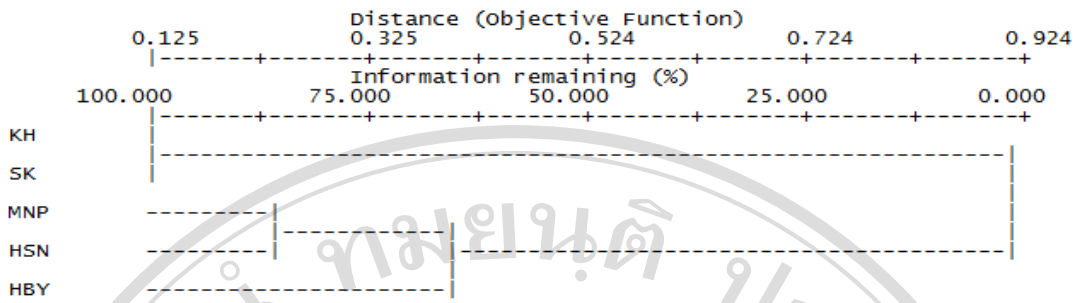


Figure 59 Dendrogram topology for comparison of medicinal plant composition for species used to treat mental disorders among all villages studied

4.3.4.21 Medicines: Muscular-skeletal system disorders

From the dendrogram, cultural clusters were detected. All three Hmong villages were clustered. Unlike the Hmong, only two Mien villages (Huai Labaoya, Santiphap) were highly similar whereas Huai Sanao village shared more similarity to the three Hmong villages. Among the Khamu and Lua villages, highland Toei Klang and Manee Pruek 2 villages of the Lua had distinct species compositions for species used to treat muscular-skeletal system disorders but shared high similarity with each other whereas the lowland Joon village of the same tribe shared more similarity to three of Khamu villages (Figure 60).

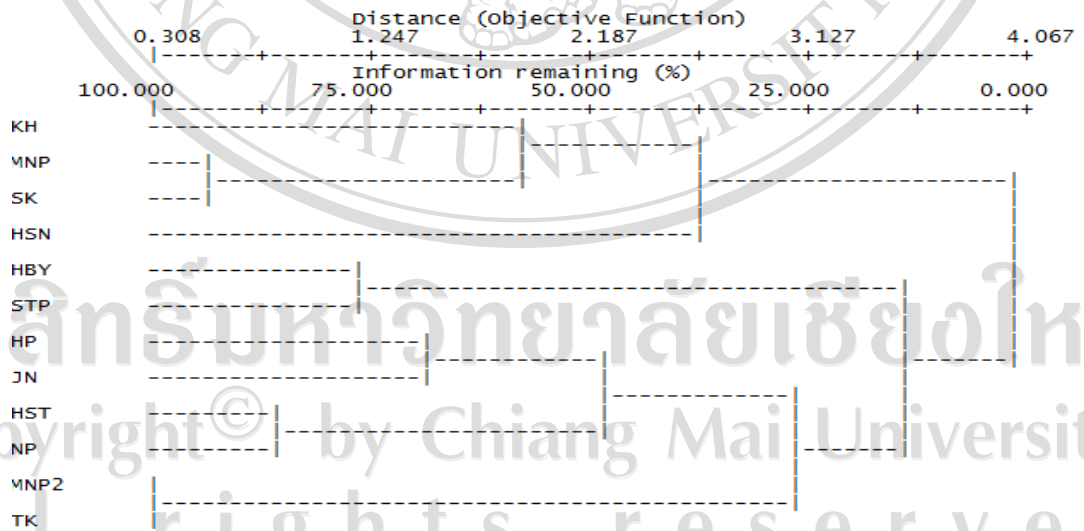


Figure 60 Dendrogram topology for comparison of medicinal plant composition for species used to treat muscular-skeletal system disorders among all villages studied

4.3.4.22 Medicines: Neoplasm

Five villages that did not have uses related to treatment of neoplasm were excluded from the cluster analysis. The dendrogram topology of the remaining villages showed high similarity among neighboring villages (Khang Ho of the Hmong, Huai Sanao of the Mien) while there were low similarities among the remaining villages (Figure 61).

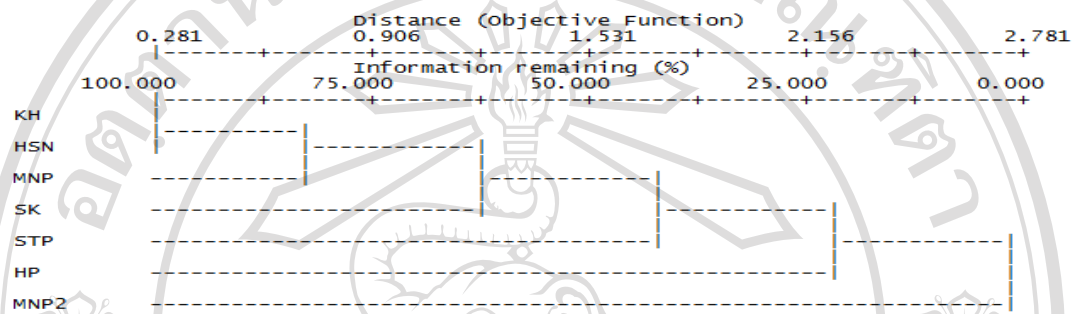


Figure 61 Dendrogram topology for comparison of medicinal plant composition for species used to treat neoplasms among all villages studied

4.3.4.23 Medicines: Nervous system disorders

Medicinal use-reports related to nervous system disorders were reported from only seven villages. Cultural clusters were detected only among the Hmong villages. The dendrogram topology showed that two Hmong villages, Manee Pruek and Song Khwae, were more similar and in turn shared more similarity to the Mien village Huai Labaoya. The Nam Pan village of the Khamu and Manee Pruek 2 village of the Lua shared high similarity and they were in turn more similar to Huai Pook village of the Khamu whereas the Joon village of the Lua was the most distinct and branched as out-group (Figure 62).

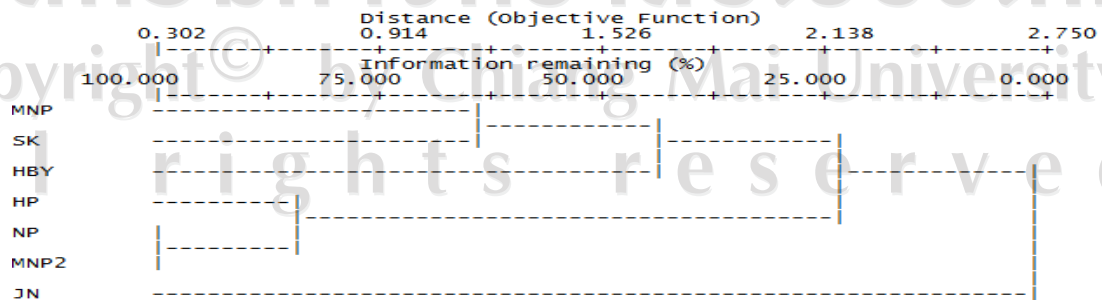


Figure 62 Dendrogram topology for comparison of medicinal plant composition for species used to treat nervous system disorders among all villages studied

4.3.4.24 Medicines: Nutritional disorders

The significant result from dendrogram topology showed that species composition for species used to treat nutritional disorders by the Hmong and Mien was more similar than they were to the Khamu and Lua. Among the Khamu and Lua villages, similarity was detected only between Nam Pan and Toei Klang (Figure 63).

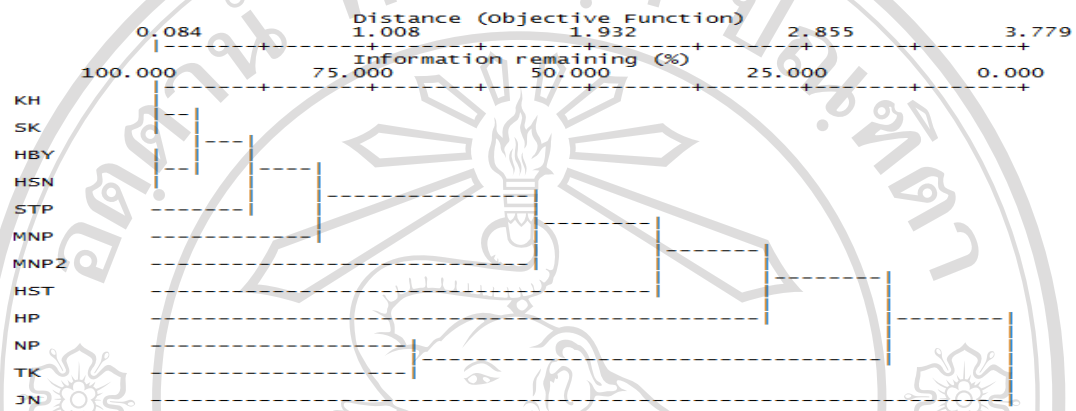


Figure 63 Dendrogram topology for comparison of medicinal plant composition for species used to treat nutritional disorders among all villages studied

4.3.4.25 Medicines: Pain

The dendrogram topology of cluster analysis with the exclusion of two Khamu villages (Huai Satang, Nam Pan) reflected high similarity among all three Mien villages. Toei Klang village of the Lua shared more similarity to three Hmong villages which were clustered on the same branch than it did to the remaining two villages of the same ethnic group whereas plant species reported from the only one Khamu village, Huai Pook, was the most distinct and distantly branched (Figure 64).

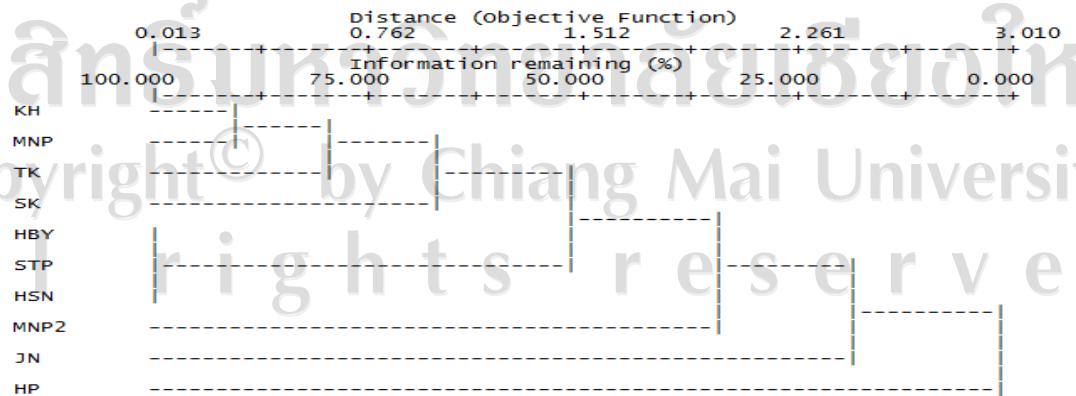


Figure 64 Dendrogram topology for comparison of medicinal plant composition for species used to treat pain among all villages studied

4.3.4.26 Medicines: Poisonings

From the dendrogram topology, highland neighboring Hmong and Lua village, Manee Pruek and Manee Pruek 2, as well as lowland Khang Ho village of the Hmong were most distinct. Among the remaining villages, cultural pattern of clustering was obvious among all three Mien villages. Likewise, two Lua villages (Joon, Toei Klang) were clustered. Despite the low similarity, three villages of the Khamu were still clustered on the same branch to which Song Khwae village of the Hmong also shared similarity (Figure 65).

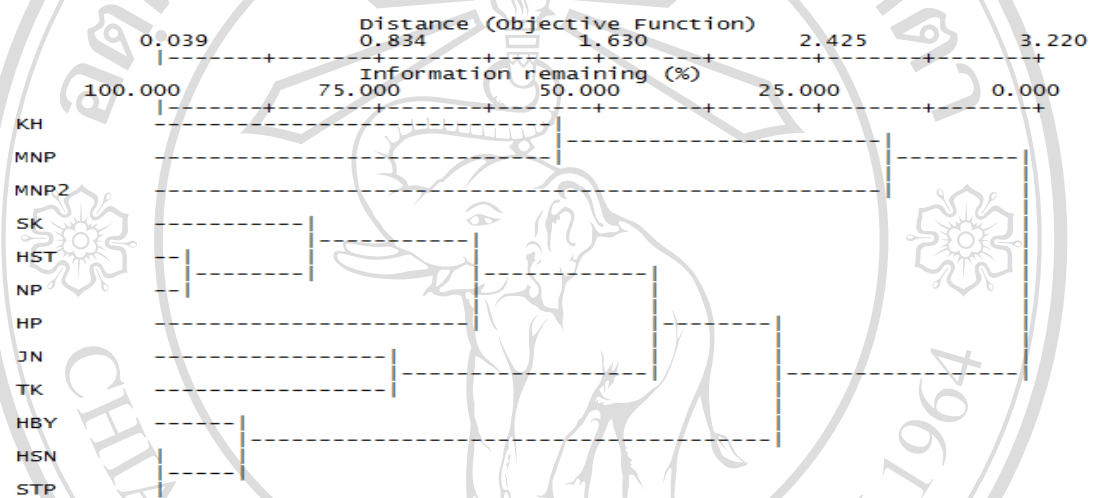


Figure 65 Dendrogram topology for comparison of medicinal plant composition for species used to treat poisonings among all villages studied

4.3.4.27 Medicines: Pregnancy/Birth/Puerperium disorders

The dendrogram topology from cluster analysis of 12 villages based on presence/absence matrix of 139 plant species used to treat pregnancy/birth/puerperium disorders showed distinct cultural cluster of three Hmong villages. Three Mien villages were also highly similar and in addition they clustered with Huai Pook village of the Khamu. Plants used by highland Manee Pruek 2 and Toei Klang villages of the Lua were more similar and in turn also similar to Nam Pan village of the Kham than they were to lowland Joon village from the same ethnic group that shared more similarity to Huai Satang village of the Khamu (Figure 66).

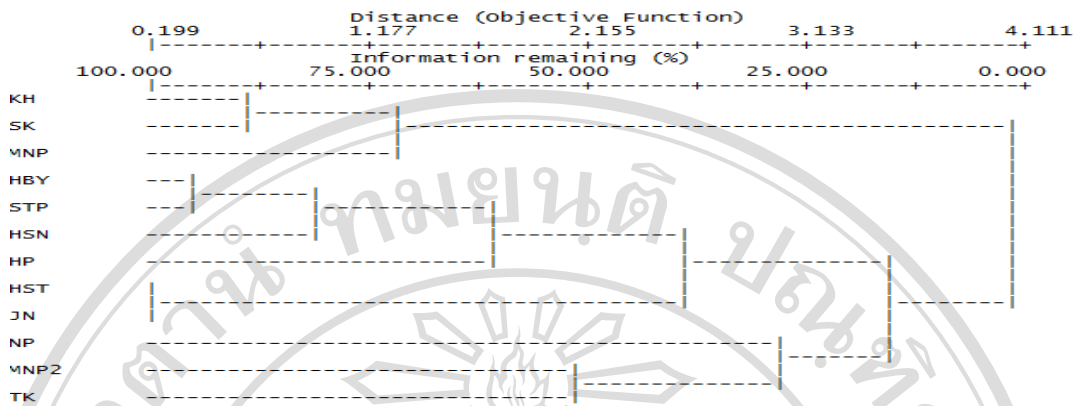


Figure 66 Dendrogram topology for comparison of medicinal plant composition for species used to treat pregnancy/birth/puerperium disorders among all villages studied

4.3.4.28 Medicines: Respiratory system disorders

The significant result of the dendrogram showed that there were two distinct clusters. A cultural pattern of clustering was found among villages of the Hmong and the Mien. The highland Lua village Manee Pruek 2 which is neighbor to the Manee Pruek village of the Hmong also shared more similarity to the Hmong cluster than it did to the other two villages from the same ethnic group. Among the five remaining villages, Huai Pook and Nam Pan villages of the Khamu were more similar and so were Toei Klang and Joon villages of the Lua. In this respect, Huai Satang village of the Khamu was the most distinct (Figure 67).

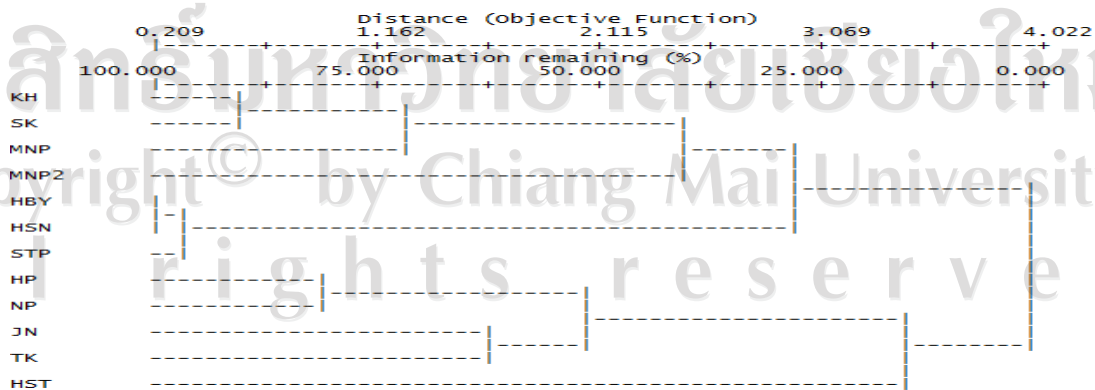


Figure 67 Dendrogram topology for comparison of medicinal plant composition for species used to treat respiratory system disorders among all villages studied

4.3.4.29 Medicines: Sensory system disorders

The Huai Satang village of the Khamu which has no plants used to treat sensory system disorders was excluded from the cluster analysis. The dendrogram topology of the 11 remaining villages did not show altitudinal patterns of clustering whereas cultural pattern, in spite of low similarity, was detected only among the Hmong villages to which highland Manee Pruek 2 village of the Lua also shared similarity (Figure 68).

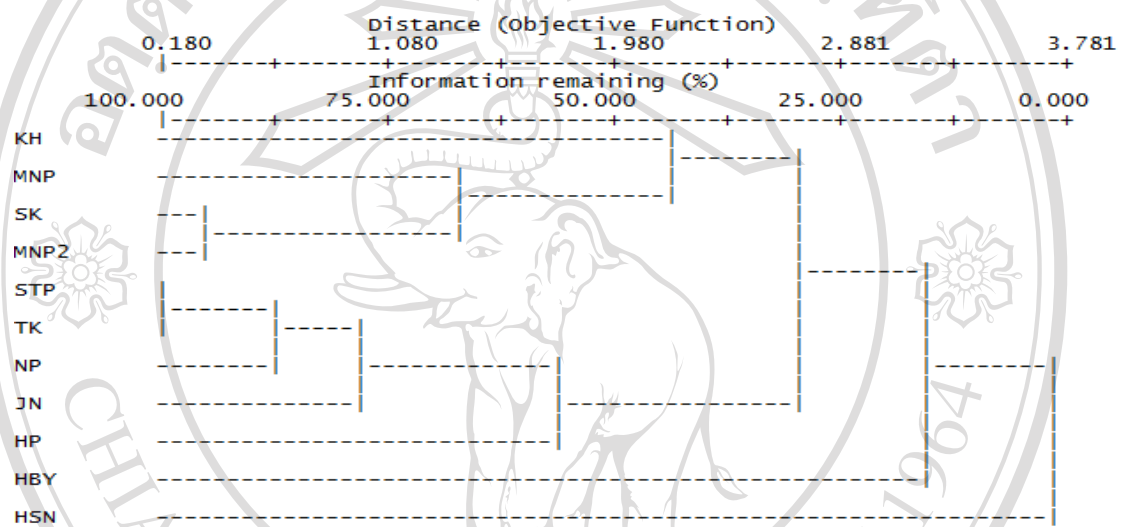


Figure 68 Dendrogram topology for comparison of medicinal plant composition for species used to treat sensory system disorders among all villages studied

4.3.4.30 Medicines: Skin/Subcutaneous cellular tissue disorders

From the dendrogram, cultural pattern of clustering, with high similarity, was detected among Khamu villages to which highland Manee Pruek 2 village of the Lua also shared had similarity. Besides, cultural cluster with low similarity was found between Manee Pruek and Song Khwae village of the Hmong. Among the rest village, neither pattern was found (Figure 69).

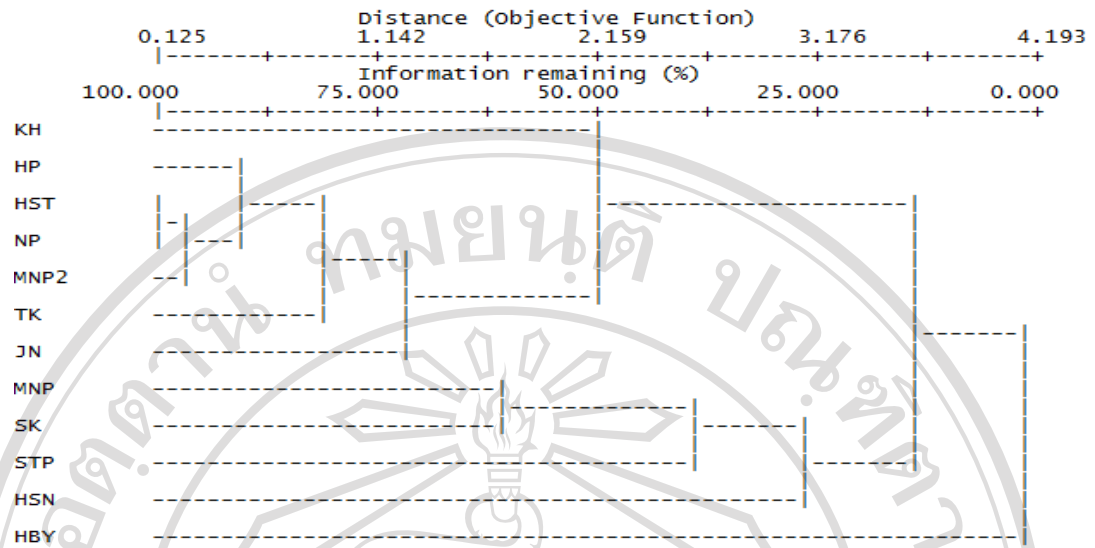


Figure 69 Dendrogram topology for comparison of medicinal plant composition for species used to treat skin/subcutaneous cellular tissue disorders among all villages studied