APPENDIX A

Table 15 Medicinal plant used in 14 Karen villages in Chiang Mai province

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Acanthaceae								
Andrographis paniculata (Burm.f.)	W	HH	-	fever	Lf	De	potion	0.23
Nees*		MC	-	fever	Lf	De	potion	0.19
		YT	-	fever	Lf	De	potion	0.52
Justicia adhatoda L.*	W	YP	Ti si po mue kwaw	amenorrhea	Lf	De	steam bath	0.45
Phlogacanthus curviflorus Nees*	W	MW	Jor to ko	amenorrhea, muscular pain	Al	De	potion, bath	0.36
		HL	Jor to ko	amenorrhea, postpartum recover	Al	De	potion, bath	0.48
		YT	Jaw ta ko	muscular pain, dysuria	Al	De	potion	0.78
Pseuderanthemum sp.	W	MT	-	fever	Lf	Po	poultice	0.03
		PA	-	fever	Lf	Po	poultice	0.14
Rhinacanthus nasutus (L.) Kurz*	W	TL	-	ringworm, muscular pain, tonic	Al	De	potion	0.27
Strobilanthes cusia (Nees) Kuntze*	W	HH	Ser ya	fever	Lf	Po	poultice	0.03
		MC	Ser ya	fever, typhoid	Lf	Po	poultice	0.05
		HM	Ser ya	fever, burn	Lf	Po	poultice	0.16
		KP	Ser ya	fever, burn	Lf	Po	poultice	0.11
Thunbergia coccinea Wall.*	W	HH	Jaw law lee der	diabetes	Arp	De	potion	0.03
Thunbergia laurifolia Lindl.*	W	HH	Jaw law lee der	intoxication, snake bite	St	De	potion	0.60
		MC	Jaw law lee der	intoxication	AP	De	potion	0.64
		HL	Jaw law lee der	intoxication, asthma	AL	De	potion	0.43
		HM	Jaw law lee der	intoxication, diarrhea	AP	De	potion	0.42
		TL	Jaw law lee der	intoxication, muscular pain	AP	De	potion	0.81
		YT	Jaw law lee der	intoxication, snake bite, fever	AP	De	potion	0.96

*Plants evaluated in SDM

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Actinidiaceae								
Saurauia napaulensis DC.*	W	HH	Hor tee sa	rash, itching	Lf	Bu	poultice	0.03
Agavaceae								
Agave americana L.	C	PA	-	joint pain, wound	Lf	Bu	poultice	0.11
Cordyline fruticosa (L.) A.Chev.	C	MT	Te nguey	hemorrhoid	St	De	potion	0.03
Dracaena fragrans (L.) Ker Gawl.	C	HL	Ter yae	sprain, muscular pain	Lf	Bu	poultice	0.19
Alismataceae								
Alisma plantago – aquatica L.*	W	MW	No do po	edema	Al	De	potion	0.05
Amaranthaceae								
Achyranthes aspera L.*	W	MT	Tid suy huy te	urethral stones	Al	De	potion	0.11
		KP	Tid suy huy te	urethral stones	Al	De	potion	0.07
		MW	Tid suy huy te	diabetes	Al	De	potion	0.09
Amaranthus lividus L.*	W	MW	Nor ro mae do	toothache, gastric ulcer, diabetes	Rt	De	potion	0.23
Amaranthus spinosus L.*	W	MT	Ker mae lor	urethral stones	Al	De	potion	0.03
		MW	Nor ro mae do	diabetes	Rt	De	potion	0.27
Celosia argentea L.*	W	MT	Por kwaw	itching, muscular pain	Lf	Po	poultice	0.28
Gomphrena globosa L.*	W	PA	-	dysuria, urethral stones	Rt	De	potion	0.50
Amaryllidaceae								
Crinum asiaticum L.*	W	HL	Por cli	sprain	Lf	Bu	poultice	0.81
Haemanthus multiflorus Martyn	C	KP	Por ca wa	fever, temperature regulation	Blb	Po	poultice	0.11
Zephyranthes rosea Lindl.	C	KP	Por cha wa	fever, urethral stones	Blb	De	potion	0.18

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Anacardiaceae								
Buchanania cochinchinensis (Lour.) M.R.Almeida*	W	MT	Sa ku rae	tonic	Bk	De	potion	0.03
Rhus javanica L.var. *chinensis* (Mill.) T.Yamaz.*	W	HM	Se chee sa	chapped skin	Fr	Po	liniment	0.03
		ML	Se chee sa	Vitamin C deficiency, muscular pain	Fr, Rt	De	potion	0.18
Spondias pinnata (L. f.) Kurz*	W	MC	Ma na sa	cough	Fr	No	hold in mouth	0.08
		MT		cough	Fr	No	hold in mouth	0.08
		MW		sore throat, fever	Fr	No	hold in mouth	0.27
Annonaceae								
Miliusa thorelii Finet & Gagnep.*	W	HH	Ti si pa do	muscular pain, fever, tonic	Bk, Lf	De	potion	0.60
		MC	Ti si pa do	muscular pain, tonic	Bk, Lf	De	potion	0.22
		HB	Ti si pa do	muscular pain, bruises	Bk	De	potion	0.67
		HM	Ti si pa do	muscular pain, bruises	Bk	De	potion	0.74
		KP	Ti si pa do	muscular pain, bruises	Bk	De	potion	0.68
		SM	Ti si pa do	muscular pain, bruises	Bk	De	potion	0.47
Miliusa velutina (Dunal) Hook. f. & Thomson*	W	YP	Ti si pa do	muscular pain	Bk, St	De	potion	1.00
		YT	Ti si pa do	muscular pain	Bk, St	De	potion	0.26
Apiaceae								
Centella asiatica (L.) Urb.	C	HB	Chuy po co la do	muscular pain, cold	Lf	De	potion	0.56
		SM	Chuy po co la do	muscular pain, bruises	Al	De	potion	0.73
		MT	Chee po ca la do	mouth ulcer	Al	No	EaF	0.61
		TL	Chee po ca la do	muscular pain, bruises	Al	De	potion	0.83

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Apocynaceae								
Alstonia glaucescens (K.Schum.) Monach.	W	YP	Nor	fever	La	No	potion	0.18
Alstonia scholaris (L.) R. Br.*	W	HM	Nor pa do	fever	Bk	De	potion	0.81
		KP	Nor pa do	typhoid	Bk	De	potion	0.43
		HT	Nor pa do	fever, sore throat	Bk	De	potion	0.61
Amalocalyx microlobus Pierre ex Spire*	W	MW	Se pae kree	amenorrhea, Vitamin C deficiency	St	De	potion	0.09
Ervatamia sp.	W	ML	Nor po ka	fever	Al	De	potion	0.14
Kopsia arborea Blume*	W	ML	-	diarrhea, muscular pain, tonic	Rt	De	potion	0.08
Rauvolfia serpentina (L.) Benth. ex Kurz*	W	MW	Nor po	fever	Rt	De	potion	0.14
		HL	Nor po	fever, malaria	Rt	De	potion	0.38
Rauvolfia verticillata (Lour.) Baill.*	W	KP	Nor po ka	toothache	Rt	No	chew	0.18
		SM	Nor po ka	typhoid, malaria	Rt	De	potion	0.63
Tabernaemontana pandacaqui Lam.*	W	KP	Por ka po	ringworm	La	No	liniment	0.07

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Araceae								
Acorus calamus L.*	W	HB	Ter si pa door	cold, fever	Al	De	liniment	0.67
		HH	Cha pa mae jae	cold, fever	Al	So	face wash	1.00
		HL	Por bue lah	cold, stomach ache	St	No	EaF	0.62
		HM	Ter si pa door	cold	Lf	So	face wash	0.90
		MT	Ter si pa door	cold	Rt	De	potion	0.81
		KP	Ter si pa door	cold	Rt	Mi	inhalers	0.61
		MC	Cha pa mae jae	cold	Rt	Mi, So	potion	0.69
		MW	Ter si pa door	cold, fever	Al	Mi	liniment	0.23
		SM	Ter si pa door	cold, sore throat	Lf	De	potion	0.80
Lasia spinosa (L.) Thwaites*	W	MW	Hor to po	cough, appetite stimulant	St	De	potion	0.18
Pothos scandens L.*	W	HH	Jaw sue	muscular pain, tonic, fever	Al	De	potion	0.37
		MC	Jaw sue	muscular pain, tonic	Al	De	potion	0.39
		HB	Jaw sue	muscular pain, dizziness	Al	De	potion	0.63
		HM	Jaw sue	muscular pain, urethral stones	Al	De	potion	0.43
		KP	Jaw sue	muscular pain, bruises	Al	De	potion	0.63
		SM	Jaw sue	muscular pain, food poisoning	Al	De	potion	0.61
Scindapsus sp.	W	YT	Ta ci mue	food poisoning, toothache	Arp	De	potion	0.30
Araliaceae								
Acanthopanax trifoliatum Merr.*		PA	Pak pam	urethral stone	Rt	De	potion	0.17
Polyscias filicifolia (C.Moore ex E.Fourn.) L.H.Bailey	C	PA	-	dizziness, headache	Lf	Po	poultice	0.25

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Schefflera leucantha R.Vig.*	W	HB	Pi jue ya	postpartum recovery, muscular pain	Al	De	potion	0.33
		HM	Pi jue ya	postpartum recovery, fever	Lf	De	bath	0.55
		KP	Pi jue ya	muscular pain, rash	Rt, St	De	potion, bath	0.50
		SM	Pi jue ya	postpartum recovery, amenorrhea	Lf, St	De	potion	0.70
Schefflera sp.	W	HB	Pi jue ya pa do	muscular pain	St	De	potion	0.15
		HM	Pi jue ya pa do	postpartum recovery	Lf	De	bath	0.48
		SM	Pi jue ya pa do	amenorrhea, fever	Lf, St	De	potion	0.70
Schefflera venulosa (Wight & Arn.) Harms*	W	MT	-	wound, muscular pain	Lf, La	De, No	potion, liniment	0.33
Trevesia palmata (Roxb. ex Lindl.) Vis.*	W	HB	Kee lor sa	rash	Lf	De	bath	0.07
		HL	Ki lor sa	urethral stones	Rt	De	potion	0.10
Heteropanax fragrans (Roxb.) Seem.*	W	YT	Ka chor ker tee beu	tonic, muscular pain	St, Lf	De	potion	0.87
Arecaceae								
Areca catechu L.	C	MC	Sae	cough	Fr	No	EaF	0.11
		MW	Sae	cough	Fr	No	EaF	0.14
Asclepiadaceae								
Dischidia imbricata (Blume) Steud.*	W	MT	-	toothache	Lf	De	hold in mouth	0.25
Dischidia major (Vahl) Merr.*	W	HL	Ka chor na por	anthelmintic, pneumonia	Lf	Bu	EaF	0.14

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Dischidia nummularia R.Br.*	W	HH	Bi na day	toothache, muscular pain	Lf	No, De No, De	EaF, potion	0.49
		MC	Bi na day	toothache, urethral stones	Lf	Po	EaF, potion	0.25
		HB	Ker si mae cha	toothache	Lf	Po	poultice	0.26
		HM	Ker si mae cha	toothache	Lf	Po	poultice	0.52
		KP	Ker si mae cha	toothache	Lf	Po	poultice	0.64
		SM	Ker si mae cha	toothache	Lf	No, De	poultice	0.53
		MW	Le sae	toothache, amenorrhea	Lf		EaF, potion	0.18
Asparagaceae								
Asparagus filicinus Buch.-Ham. ex D.Don*	W	HT	Ta sue	muscular pain, tonic	Rt	De	potion	0.19
		SM	Ya su mae	muscular pain, tonic	Rt	De	potion	0.13
		MW	Nor hue po	muscular pain, tonic	Al	De	potion	0.64
		HL	Nor hue po	amenorrhea	Rt	De	potion	0.43
Disporum calcaratum D.Don*	W	PA	-	postpartum recovery	Arp	De	potion	0.03
Asphodelaceae								
Aloe vera (L.) Burm.f.	C	HH	-	burn	Lf	No	liniment	0.03
Asteraceae								
Acmella oleracea (L.) R.K.Jansen	C	MW	Hor ter do	muscular pain	Rt	FeAl	potion	0.50
		HL	Hor ter do	toothache	Rt	No	chew	0.48
Ageratina adenophora (Spreng.) R.M.King & H.Rob.*	W	HT	-	wound, haemostatic, itching	Lf	Mi	poultice	0.70
Ageratum conyzoides L.*	W	MC	Nor ner chu	wound	Lf	Mi	poultice	0.75
		YP	Nor ner chee	wound	Lf	Mi	poultice	0.73

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Artemisia sp.	W	HM	Por jor pru	dizziness	Lf	Mi	inhalers	0.90
Bidens pilosa L. *	W	MT	Chor dee bo	abscess	Al	De	potion	0.28
		MW	Chuy mae buy	abscess	Sh	No	EaF	0.23
		HL	Chuy mae buy	abscess	Sh	No	EaF	0.33
Bidens sp.	W	HM	Chuy mae buy	muscular pain	Sh	No	EaF	0.06
Blumea balsamifera (L.) DC.*	W	HT	Por pa ka la	amenorrhea, postpartum recovery	Rt	De	potion	0.85
		PA	Por pa ka la	amenorrhea, postpartum recovery	Rt	De	potion	1.19
		MT	Por pa ka la	amenorrhea, postpartum recovery	Lf	Bu	Sit	0.92
		TL	Por pa ka la	amenorrhea, postpartum recovery	Rt, Lf	De	potion	1.10
		MW	Por pa ka la	amenorrhea, postpartum recovery	Lf	De	potion, bath	0.68
		HL	Por pa ka la	amenorrhea, postpartum recovery	Lf	De	potion, bath	0.86
Blumea sp.	W	HB	Ter bu	wound	Sh	Po	poultice	0.07
Chromolaena odorata (L.) R.M.	W	HB	Chee bo kaey	wound, haemostatic	Lf	Po	poultice	1.04
King & H.Rob.*		HH	Tee po kaey	wound, haemostatic	Lf	Po	poultice	1.00
		HM	Tee po kaey	wound, haemostatic	Lf	Po	poultice	1.13
		HT	Chee bo kaey	wound, haemostatic	Lf	Po	poultice	1.15
		PA	Tee po kaey	wound, haemostatic	Lf	Po	poultice	1.06
		MT	Tee po kaey	wound, haemostatic	Lf	Po	poultice	0.86
		MC	Tee po kaey	wound, haemostatic	Lf	Po	poultice	0.89
		TL	Tee po kaey	wound, haemostatic	Lf	Po	poultice	1.06
		MW	Tee po kaey	wound, haemostatic	Lf	Po	poultice	0.91
		HL	Tee po kaey	wound, haemostatic	Lf	Po	poultice	1.14
		YP	Tee po kaey	wound, haemostatic	Lf	Po	poultice	0.43
		YT	Tee po kaey	wound, haemostatic	Lf	Po	poultice	1.00

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Coix lacryma-jobi L.*	W	HH	Ber na tee	urethral stones	Rt, Lf	De	potion	0.46
		MC	Ber na tee	urethral stones	Rt	De	potion	0.42
		HB	Ber na tee	urethral stones	Rt	De	potion	0.26
		HM	Ber na tee	urethral stones	St, Lf	De	potion	0.32
		KP	Ber na tee	urethral stones	Lf	De	potion	0.71
		SM	Ber na tee	urethral stones	Rt	De	potion	0.33
		MW	Ber na tee	urethral stones	Rt, St	De	potion	0.73
		HL	Ber na tee	urethral stones	Lf	De	potion	0.81
		PA	Ber mue tee	urethral stones	Rt	De	potion	0.75
		MT	Ber mue tee	urethral stones	Al	De	potion	0.58
Eclipta prostata L.*	W	PA	Ta ci tee ci	urethral stones	Rt	De	potion	0.11
Elephantopus scaber L.*	W	MC	Nor mue klae	muscular pain, tonic	Al	De	potion	0.33
		MT	Nor ko la	fever	Al	De	potion	0.44
		PA	Nor ko la	fever, malaria	Al	De	potion	0.69
		TL	Nor ko la	fever, muscular pain	Al	De	potion	0.27
		SM	Nor kod lae	cough, muscular pain	Al	De	potion	0.37
		MW	Ti si po klae	fever, urethral stones	Al	De	potion	0.27
		HL	Ti si po klae	amenorrhea, muscular pain	Al	De	potion	0.62
Gynura pseudochina (L.) DC.*	W	HB	Di chee do	gastric ulcer	Al	De	potion	0.04

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Inula cappa (Ham.) DC.*	W	HH	Paw pa ka la	postpartum recovery	Lf	Bu	Sit	0.83
		MC	Paw pa ka la	postpartum recovery, muscular pain	Lf	De	bath, potion	0.64
		HB	Paw pa ka la	postpartum recovery	Lf	De	bath	0.74
		HM	Paw pa ka la	amenorrhea, cold, cough	Lf	De	potion, steam	1.00
		KP	Paw pa ka la	cold, dizziness	Lf	De, Bu	bath, poultice	0.57
		SM	Paw pa ka la	amenorrhea, dizziness	Lf	De, Bu	potion,	0.83
		MW	Paw pa ka la	amenorrhea	Lf	De	poultice	0.36
		HL	Paw pa ka la	postpartum recovery	Lf	Bu	bath Sit	0.14
Tithonia diversifolia (Hemsl.) A.Gray*	W	HB	Hor mue nue	itching	Lf	De	potion	0.78
		HT	-	itching	Lf	De	bath	0.46
		MW	Por kae ro	itching	Lf	De	potion	0.50
		YT	Por kae ro	ringworm, muscular pain, urethral stones	Lf, Rt	De	potion	0.70
Vernonia sp.	W	KP	Por wae zoo	jaundice, cold	Rt	De	potion	0.36
		MW	Por wae pa do	fever, muscular pain, amenorrhea	St	De	potion	0.32
Vernonia volkameriaefolia Bedd.*	W	HT	Kla por	muscular pain	Al	De	potion	0.26
		TL	Kla por	muscular pain, diarrhea, fever	Al	De	potion	0.27
Basellaceae								
Anredera cordifolia (Ten.) Steenis*	W	KP	Se ree por	skin diseases	Bub	De	bath	0.11

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Betulaceae								
Betula alnoides Buch.-Ham.	W	HH	Se kaw way	muscular pain, tonic	Bk	De	potion	0.49
ex D.Don*		HT	Se kaw way	muscular pain, tonic	Bk	FeAl	potion	0.65
		MC	Se kaw way	muscular pain, tonic	Bk	De	potion	0.33
		MW	Se kaw way	muscular pain, tonic	Bk	De	potion	0.68
Bignoniaceae								
Fernandoa adenophylla (Wall. ex G.Don) Steenis*	W	MW	Kwae po	ring worm	Lf	Po	liniment	0.09
Markhamia stipulata (Wall.) Seem.*	W	MW	Kwae por	ring worm	Fl	De	EaF	0.09
Oroxylum indicum (L.) Kurz	C	HH	Dok ka	hepatomegaly, hypertension	Bk	De	potion	0.31
		MC	Dok ka	splenomegaly	Bk	De	potion	0.19
		HB	Dok ka	tonic for cattle	Bk	Po	EaF	0.04
		KP	Dok ka	edema, fever	Rt	De	potion	0.18
		MT	Dok ka	postpartum recovery	Bk	De	steam bath	0.11
		HL	Dok ka	itching	Bk	De	liniment	0.14
Radermachera ignea (Kurz) Steenis	C	YT	Por lu to	fever, muscular pain	Bk	De	potion	0.61
Boraginaceae								
Heliotropium indicum L.*	W	MC	Nor so por mae	fever	Rt	De	potion	0.22
		MW	Nor ka chor gom	fever, typhoid	Rt	De	potion	0.14
Buddlejaceae								
Buddleja asiatica Lour.*	W	MT	Se sue buay	burn, wound	Al	De	liniment	0.14
		HT	Se sue buay	burn, muscular pain	Lf	Bu	poultice	0.20
		HL	Por ji bear	burn, itching	Lf	Po	poultice	0.29

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Burseraceae								
Garuga pinnata Roxb.*	W	MW	Sa pee per yor	fever	Bk	De	potion	0.05
Caesalpiniaceae								
Bauhinia sp.	W	MW	Ker her mue	muscular pain, tonic	St	De	potion	0.09
Caesalpinia sappan L.*	W	HB	Se kwaw	haemotonic, muscular pain	Bk, St	De	potion	0.44
		HM	Se kwaw	haemotonic	Bk	De	potion	0.74
		KP	Se kwaw	haemotonic	St	De	potion	0.61
		SM	Se kwaw	haemotonic, muscular pain	Bk	De	potion	0.77
		MW	Se kwaw	dysmenorrhea	Bk	De	potion	0.23
Cassia fistula L.	C	MW	Per yo	muscular pain, dizziness	Bk	De	potion	0.32
		PA	-	amenorrhea, laxative	Bk	De	potion	0.25
Cassia siamea Lam.*	W	TL	-	tonic, amenorrhea	Lf	De	potion	0.48
Cassia tora L.*	W	YP	Nor ki ker	headache, diarrhea	Sd	De	potion	0.45
Senna alata (L.) Roxb.*	W	HH	Ya la mer	laxative	Lf	De	potion	0.91
		MC	Ya la mer	laxative, ringworm	Lf, St	De, Po	potion, poultice	0.83
		HB	Ya la mer pa do	laxative	Lf	De	potion	0.67
		HM	Ya la mer pa do	laxative, burn	Lf	De, Po	potion, poultice	0.68
		KP	Ya la mer pa do	laxative	Lf	De	potion	0.50
		SM	Ya la mer pa do	laxative	Lf	De	potion	0.77
		PA	Ya la mer	laxative, ringworm	Lf	De, Po	potion, poultice	0.75
		MW	Ya la mer pa do	laxative, muscular pain	Lf, Bk	De	potion	0.68
		HL	Ya la mer pa do	laxative	Lf	De	potion	0.43

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Senna occidentalis (L.) Link*	W	HB	Ya la mer	laxative, fever	Lf	De	potion	0.63
		HM	Ya la mer	laxative	Lf	De	potion	0.55
		KP	Ya la mer	laxative, appetite stimulant	Lf	De	potion	0.50
		SM	Ya la mer	laxative, appetite stimulant	Lf	De	potion	0.73
		HL	Ta ci pa na mer	laxative, muscular pain	Lf	De	potion	0.24
Tamarindus indica L.	C	HL	Sa mor klae	laxative, urethral stones	Fr, Rt	No, De	EaF, potion	0.52
		PA	Sa mor klae	laxative, dizziness	Fr	No	EaF	0.31
		MT	Sa mor klae	laxative, fever	Fr, Sh	No, De	EaF, potion	0.28
		TL	Sa mor klae	fever, muscular pain, diarrhea	Bk	De	potion	0.60
Cannaceae								
Canna edulis Ker Gawl.	C	HB	Pla ya po	tonic	Blb	De	potion	0.07
Canna indica L.	C	KP	Pla ya	flatulence	Lf	De	potion	0.07
Capparidaceae								
Capparis sp.	W	TL	Ta su mae	tonic, muscular pain	Rt	De	potion	0.23
Caprifoliaceae								
Sambucus javanica Reinw. ex Blume*	W	HH	Ti si ka jue	joint pain, bruises, bone fracture	Lf	Bu	poultice	0.43
		MC	Ti si ka jue	bone fracture, muscular pain	Lf	Bu	poultice	0.44
		HB	Ti si ka jue	sprain	Lf	Bu	poultice	0.89
		HM	Ti si ka jue	sprain	Lf	Bu	poultice	0.93
		KP	Ti si ka jue	sprain, muscular pain	Lf	Bu	poultice	0.71
		SM	Ti si ka jue	sprain, muscular pain	Lf	Bu	poultice	0.90
		YP	Ti si ka jue	sprain, bruises	Lf	Bu	poultice	0.27

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Sambucus simpsonii Rehder*	W	HB	Por blue clee	sprain, joint pain	Lf	Bu	poultice	0.85
		HM	Por blue clee	sprain, joint pain	Lf	Bu	poultice	1.00
		KP	Por blue clee	sprain, joint pain	Lf	Bu	poultice	0.68
		SM	Por blue clee	sprain, joint pain	Lf	Bu	poultice	0.83
		MW	Ti si ka jue	sprain, muscular pain	Lf	Bu	poultice	0.73
		HL	Ti si ka jue	sprain, bruises	Lf	Bu	poultice	0.76
Viburnum sambucinum Blume	W	KP	Por bue klee	diarrhea, sprain	Rt, Lf	De, Bu	potion, poultice	0.68
var. *tomentosum* Hallier f.*		MC	Por bue kli	fever	Rt	De	potion	0.14
Caricaceae								
Carica papaya L.	C	MT	-	urethral stones	Rt	De	potion	0.03
Celastraceae								
Celastrus paniculatus Willd.*	W	MC	Ti si bler	diarrhea	Bk	De	potion	0.11
		MW	Ter si bler	muscular pain, tonic	Arp	De	potion	0.32
		HL	Ter si bler	diarrhea	Arp	De	potion	0.33
Lophopetalum wallichii Kurz*	W	MW	Se cher tu	tonic	Bk	De	potion	0.14
Chloranthaceae								
Chloranthus erectus (Buch.-Ham.) Sweet ex Wall.*	W	YT	Por ner see	diabetes, muscular pain	Rt	De	potion	0.30
Clusiaceae								
Cratoxylum formosum	W	HM	Se kwae jo	diarrhea	Lf	De	potion	0.77
subsp. *pruniflorum* (Kurz)		MW	Se kwae jo	itching	Bk	So	liniment	0.18
Gogel.*		HL	Se kwae jo	diarrhea	Lf	De	potion	0.24

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Garcinia xanthochymus Hook.f. ex T.Anderson*	W	YT	Se kha	diarrhea	Sh	No	EaF	0.35
Combretaceae								
Anogeissus acuminata (Roxb. ex DC.) Guill.*	W	YT	Se rer	diarrhea, cough	Sh	No	hold in mouth	0.43
Quisqualis indica L.*	W	MW	Por tae mo	anthelmintic, fever, muscular	Rt	De	potion	0.18
		KP	Por tae mo	pain anthelmintic (for cattle)	Fr	Po	EaF	0.11
Terminalia bellirica (Gaertn.) Roxb.*	W	MT	-	toothache	Fr	No	chew	0.08
		YP	Se kool	cough	Fr	No	chew	0.55
		YT	Se kool	gastric ulcer	Rt	De	potion	0.30
Terminalia chebula Retz.*	W	YP	Na na	cough, muscular pain	Fr, St	No, De	EaF, potion	0.82
Convolvulaceae								
Cuscuta chinensis Lam.*	W	HL	Se ha rue	amenorrhea	Al	De	potion	0.05
Costaceae								
Costus speciosus (J.König) Sm.*	W	HH	Su ley bo	otorrhea, wound	St	Bu	ear drop	0.57
		MC	Su ley bo	otorrhea, wound	St	Bu	ear drop	0.61
		MT	Su ley bo	otorrhea	St	Bu	ear drop	0.67
		MW	Su ley bo	otorrhea	St	Bu	ear drop	0.36
		HL	Su ley bo	wound	St	Bu	drop	0.14
Crassulaceae								
Kalanchoe pinnata (Lam.) Pers.	C	HL	Sa kae la	burn	Lf	Po	liniment	0.52

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Cucurbitaceae								
Gymnopetalum integrifolium Kurz.*	W	HB	Se do kwaw mee	jaundice, fever	Lf	De	potion	0.30
		HM	Se do kwaw mee	jaundice, edema	St	De	potion	0.48
		KP	Se do kwaw mee	jaundice, flatulence	Lf	De	potion	0.21
Luffa sp.	W	YP	Ta ko kha	dandruff, itching	Fr	So	Usp	0.55
Momordica charantia L.	C	MW	Saw ka do	tonic, ring worm	Fr, Lf	De, Po	EaF, poultice	0.41
Momordica cochinchinensis Spreng.	C	HB	Pa koo sa	laxative	Sh	De	EaF	0.07
Trichosanthes pubera Blume subsp. *rubriflos* (Cayla) Duyfjes & Pruesapan var. *Fissisepala* Duyfjes & Pruesapan*	W	HL	Sa do sa	rash, jaundice	Lf	De, Bu	potion, poultice	0.33
Cyperaceae								
Carex sp.	W	MW	Cha kae bue kho	fever	Rt	De	potion	0.27
		HL	Cha kae bue kho	muscular pain	Rt	De	potion	0.19
Dillenniaceae								
Dillenia parviflora Griff.*	W	HT	Kho	abscess	Bk	Bu	EaF	0.04
Dillenia pentagyna Roxb.*	W	MW	Kho tee	gastric ulcer	Bk	De	potion	0.59
Dioscoreaceae								
Dioscorea hispida Dennst.	W	HB	Klee	allergic contact dermatitis	Tb	Sl	liniment	0.04
var. *hispida**		KW	Klee	allergic contact dermatitis	Tb	Sl	liniment	0.14
Dipterocarpaceae								
Dipterocarpus obtusifolius Teijsm. ex Miq.*	W	MC	Cor la ter	fever, cold	Exd	No	potion	0.03

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Shorea obtusa Wall. ex Blume*	W	SM	La ni	toothache	Bk	No	hold in mouth	0.20
Shorea roxburghii G. Don*	W	MT		toothache	Bk	No	hold in mouth	0.03
Ebenaceae								
Diospyros glanulosa Lace	C	HT	Le co mor	postpartum recovery	St, Lf	De	potion	0.04
Equisetaceae								
Equisetum debile Roxb. ex	W	HH	Hrue sor por dua	urethral stones, dysuria	St	De	potion	0.46
Vuncher*		MC	Hrue sor por dua	urethral stones, muscular pain	St	De	potion	0.50
		HM	Hrue sor por dua	urethral stones, dysuria	Al	De	potion	0.58
		SM	Hrue sor por dua	urethral stones, dysuria	Al	De	potion	0.70
		MT	Hrue sor por dua	urethral stones, dysuria	St	De	potion	0.44
		MW	Hrue sor por dua	urethral stones, dysuria	St	De	potion	0.73
		HL	Hrue sor por dua	urethral stones, dysuria	Al	De	potion	0.86
Ericaceae								
Vaccinium sprengelii (G. Don)	W	KP	Ser blae	tonic, insect bite	Lf	De, Po	potion, poultice	0.14
Sleumer*		MW	Ser blae do	gastric ulcer	Lf	De	potion	0.14
		HL	Ser blae do	jaundice	Lf	De	potion	0.10
Euphorbiaceae								
Antidesma acidum Retz.*	W	HB	Hor sue ka sa	insect bite	Fr	No	liniment	0.15
		PA	Hor cha wa	fever, dizziness	Lf	De	potion	0.42
Antidesma bunius (L.) Spreng.*	W	MT	-	muscular pain	Rt	De	potion	0.08
Antidesma ghaesembilla Gaertn.*	W	MW	Hor ja ka lah	muscular pain, amenorrhea	Bk	De	potion	0.09
		HT	Hor ja ka lah	muscular pain, amenorrhea	Bk	De	potion	0.10

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Antidesma sootepense Craib*	W	MW	Se bu mae	amenorrhea, dizziness	Bk	De	potion	0.05
		HL	Se bu mae	amenorrhea, dizziness	Bk	De	potion	0.10
Aporosa villosa (Lindl.) Baill.*	W	HM	Per krue	intoxication	St	De	potion	0.03
Baccaurea ramiflora Lour.	C	MT	Sa por jue	muscular pain	Rt	De	potion	0.06
		KP	Sa prue jue	insect bite	Fr	No	liniment	0.14
Baliospermum calycinum Müll.Arg.*	W	PA	Por bor jue	muscular pain, diarrhea	Al	De	potion	0.53
		MT	Por bor jue	diarrhea	Rt	De	potion	0.47
		MW	Por su jor	cold	Lf	De	potion	0.77
		HL	Por su jor	cold	Lf	So	face wash	0.52
Baliospermum solanifolium (Burm.) Suresh*	W	YP	-	postpartum recovery	Lf	De	bath	0.45
Breynia vitis-idaea (Burm.f.) C.E.C.Fisch.*	W	HL	Jor ka pi	cold, amenorrhea	Rt	De	potion	0.19
Cleidion javanicum Blume*	W	HM	Na por jaw	tonic, malaria	St	De	potion	0.16
		MW	Na por jaw	malaria	Bk	De	potion	0.73
		HL	Na por jaw	typhoid	Bk	De	potion	0.76
		YT	Na por jaw	amenorrhea, itching	Bk	De	bath	0.78
Croton kongensis Gagnep.*	W	MC	Sa ko wa po	amenorrhea	Lf	De	stem bath	0.19
		MW	Sa ko wa	amenorrhea	Lf	De	bath	0.73
		HL	Sa ko wa	jaundice	Lf	De	bath	0.52
Croton robustus Kurz*	W	MW	Sa ko wa sui	jaundice	Lf, Bk	De	bath	0.45
		HL	Sa ko wa sui	jaundice	Lf	De	bath	0.33

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Jatropha curcas L.	C	KP	Se ro	burn, toothache	La	No	liniment	0.32
		TL	-	athlete's foot, muscular pain	La, Rt	No, De	liniment, potion	0.56
Jatropha podagrica Hook.	C	HL	Mae ho la pa do	wound, haemostatic	La	No	liniment	0.52
Phyllanthus acidus (L.) Skeels	C	MT		hypertension	Bk, Wo	De	potion	0.25
Phyllanthus amarus Schumach.	W	MW	Se ya sa hor co	diabetes, sore throat	Al	De	potion	0.14
& Thonn.*		YP	-	fever	Al	De	potion	0.52
		YT	-	fever, food poisoning	Rt	De	potion	1.00
Phyllanthus emblica L.*	W	MW	Se ya sa	cough, sore throat	Fr, Gl	No	EaF	0.82
		HL	Se ya sa	cough, sore throat	Fr, Gl	No	EaF	1.24
		SM	Se ya sa	cough, sore throat	Fr, Gl	No	EaF	1.13
Ricinus communis L.	C	HB	Ka ti clee	dizziness, tinnitus	Lf, Pt	Bu	poultice, BlE	0.52
		HM	Ka ti clee	dizziness, tinnitus	Lf, Pt	Bu	poultice, BlE	0.74
		KP	Ka ti clee	dizziness	Lf	Bu	poultice	0.82
		SM	Ka ti clee	dizziness, tinnitus	Lf, Pt	Bu	poultice, BlE	0.60
		MT	Ker ti	dizziness	Lf	Bu	poultice	0.42
		TL	Ker ti	dizziness, tinnitus	Lf, Pt	Bu	poultice, BlE	0.77
		MW	Ka tik cli	tinnitus	Pt	No	BlE	0.36
		HL	Ka tik cli	tinnitus	Pt	Bu	BlE	0.48
Sauropus sp.	W	HB	Nor po pree	tonic, muscular pain	Rt	FeAl	potion	0.33
Securinega leucopyrus Muell. Arg.*	W	MT	May co pla	ringworm	Sh	Po	poultice	0.06

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Flacourtiaceae								
Flacourtia indica (Burm. f.) Merr.*	W	YP	Ser pae	fever, cough	Bk	De	potion	0.82
Flacourtia jangomas (Lour.)	W	MC	Ser pae	toothache	Bk	De	Hol	0.36
Raeusch.*		MT	Ser pae	malaria	Al	De	potion	0.06
		MW	Ser pae	muscular pain	Bk	De	potion	0.64
		HL	Ser pae	muscular pain, gastric ulcer	Bk	De	potion	0.81
Flacourtia rukam Zoll. & Moritzi*	W	HT	Ser pae	muscular pain, toothache	Bk	De	potion, Hol	0.30
		TL	Ser pae	muscular pain, diarrhea	Bk	De	potion	0.50
Heliconiaceae								
Heliconia sp.	W	KP	Ya mo	haemorrhoid	Rt	De	potion	0.04
		SM	Ya mo	haemorrhoid	Rt	De	potion	0.03
Hypoxidaceae								
Molineria latifolia (Dryand. ex W.T.Aiton) Herb. ex Kurz*	W	MW	Tor nor ei	urethral stones	Blb	De	potion	0.32
Molineria sp.	W	HB	To no ei	gastric ulcer	Blb	De	potion	0.07
Iridaceae								
Belamcanda chinensis (L.) DC.*	W	MT	-	splenomagaly	Lf	De	potion	0.08
Eleutherine americana (Aubl.)	W	HH	Por bee bae	wound	Blb	Po	poultice	0.69
Merr.*		MC	Por bee bae	wound	Blb, Lf	Po	poultice	0.33
		MT	Por bee bae	muscular pain	Blb	Po	poultice	0.06
		SM	Por bee bae	wound	Blb	Po	poultice	0.77
		MW	Por bee bae	wound, temperature regulation	Blb	Po	poultice	0.41
		HL	Por bee bae	wound, temperature regulation	Blb, Lf	Po	poultice	0.57

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Juglandaceae								
Engelhardtia spicata Blume	W	MC	Klue por	skin disease	Bk	De	bath	0.23
var. *colebrookeana* (Lindl. ex Wall.)		HL	Klue por	gastric ulcer, muscular pain	Bk	De	potion	0.76
Kuntze*								
Lamiaceae								
Clerodendrum japonicum (Thunb.)	W	MT	Paw kwaw	itching	Lf	Po	liniment	0.11
Sweet*		MW	Paw kwaw	allergy, edema	Rt	De	potion	0.14
Clerodendrum colebrookianum	W	HL	Paw kaw do	amenorrhea	Rt	De	potion	0.10
Walp.*								
Clerodendrum paniculatum L.*	W	KP	Paw kaw	postpartum recovery	Sh	De	bath	0.14
Clerodendrum serratum (L.) Moon*	W	HB	Kwee do jaw	itching, rash	Lf	De	bath	0.70
		KP	Kwee do jaw	headache	Rt	De	potion	0.75
		HH	Kwee do jaw	amenorrhea	Lf	De	steam bath	0.34
		MC	Kwee do jaw	amenorrhea, muscular pain	Lf	De	potion	0.42
		MT	Ta ho ae ka do	fever	all	De	potion	0.06
		MW	Kwuy do jaw	jaundice, itching	all	De	bath	0.77
Congea tomentosa Roxb.*	W	HL	Ti si tee pae	amenorrhea	Al	De	potion	0.10
		YT	Tee pae kwa	cough	Al	De	potion	0.30

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Gmelina arborea Roxb.*	W	HH	Ker ma	athlete's foot, muscular pain	Bk, Fl	De	soak, EaF	0.63
		MC	Ker ma	athlete's foot, muscular pain	Bk	De	soak, EaF	0.33
		HB	Ker ma	wound	Bk	De	wash	0.22
		HM	Ker ma	wound	Bk	Po	poultice	0.55
		KP	Ker ma	wound	Bk	Po	poultice	0.36
		SM	Ker ma	wound	Bk	Po	poultice	0.47
		YT	Ker ma	relaxant	St, Lf	De	potion	0.82
		YP	Ker ma	muscular pain	St, Bk	De	potion	0.22
		HL	Ker ma	gastric ulcer	Bk	De	potion	0.33
Gmelina sp.	W	SM	Ka mo o	wound, haemostasis	Rt	Po	poultice	0.10
Microtoena insuavis (Hance)	W	KP	Por nor	dizziness, postpartum recovery	Lf	De	steam bath	0.43
Prain ex Briq.*		MC		fever	Lf	So	face wash	0.19
		TL		dizziness, muscular pain	Lf, Rt	De	potion	0.42
Orthosiphon grandiflorus	W	MT	-	urethral stones	Al	De	potion	0.56
(Blume) Bold.*		MW	Chuy mae buy	muscular pain, diabetes	Rt	De	potion	0.18
Plectranthus amboinicus	C	HB	Por si mue pa do	cold, fever	Lf	De	potion	0.19
(Lour.) Spreng.								
Tectona grandis L.f.*	W	HL	Per hee	diabetes	Bk	De	potion	0.10
		MT	Per hee	malaria	Bk	De	potion	0.06
Vitex peduncularis Wall. ex	W	MW	Ka tor mae	amenorrhea, muscular pain	Lf, St	De	potion, steam bath	0.18
Schauer*		HL	Ka tor mae	jaundice	Lf, St	De	potion, bath	0.33
Vitex trifolia L.*	W	KP	Pee ser	dizziness	Lf	Po	inhalers	0.29

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Lauraceae								
Actinodaphne sp.	W	KP	Se blo bo	muscular pain	Bk	De	potion	0.57
Cassytha filiformis L.*	W	HB	Se kruy po	jaundice	Al	De	potion	0.67
		HM	Se kruy po	jaundice, fever	Al	De	potion	0.35
		KP	Se kruy po	jaundice, malaria	Al	De	potion	0.75
		SM	Se kruy po	jaundice, fever	Al	De	potion	0.63
		MW	Se hrue po	fever, muscular pain	Al	De	potion	0.41
		HL	Se hrue po	fever, tonic	Al	De	potion	0.48
Cinamomum iners Reinw. ex Blume*	W	HL	Ta si song	diabetes	Bk	De	potion	0.29
Cinnamomum camphora (L.) J.Presl*	W	KP	Se ner moo	dizziness	Lf	No	inhalers	0.04
Cinnamomum sp.	W	HB	Ti si saw	toothache	Bk	No	chew	0.04
		KP	Ti si saw	dizziness	Lf	No	inhalers	0.21
		SM	Ti si saw	toothache, sore throat	Bk	No	hold in mouth	0.17
		YT	Ti si saw	muscular pain	Rt	De	potion	0.87
Litsea cubeba (Lour.) Pers.*	W	MC	Ser ler sa	malaria	Fr	No	EaF	0.05
		KP	Ser lu sa	dengue fever	Rt	De	potion	0.14
		MW	Ser ler sa	fever	Bk	De	potion	0.13
Litsea sp.	W	KP	Ka mo o	wound	Rt	De	wash	0.07
Phoebe sp.	W	HM	Se glo bo	wound, haemorrhoid	Bk	Po, De	poultice, potion	0.45
Lecythidaceae								
Careya arborea Roxb.*	W	MT	Se jaw nae	wound, burn	Bk	No	liniment	0.03

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Leeaceae								
Leea indica (Burm. f.) Merr.*	W	HM	Na tor kor	dizziness, haemorrhoid	Al	De	potion	0.32
		SM	Na tor kor	diarrhea	St, Fr	De	potion	0.30
		HT	Na tor kor	muscular pain	Lf	Po	poultice	0.31
		MT	Na tor kor	diarrhea	Rt	De	potion	0.06
		MW	Na tor kor	haemorrhoid, muscular pain	Rt	De	potion	0.14
		HL	Na tor kor	gastric ulcer	Rt	De	potion	0.05
Liliaceae								
Lilium primulinum Baker *var. burmanicum* Stearn*	W	KP	Ker si go po	muscular pain, cough	Blb	De	potion	0.36
Loranthaceae								
Dendrophthoe pentandra (L.) Miq.*	W	MW	Lau mo cho	muscular pain, snake bite	St	De	potion	0.45
		HL	Lau mo cho	joint pain, snake bite	St	De	potion	0.33
*Henslowia sp.*1	W	TL	Lor mor chor	amenorrhea, fever	St, Lf	De	potion	0.33
Henslowia sp.2	W	MT	Lor mor chor	food poisoning, dizziness	St, Lf	De	potion	0.33
Macrosolen sp.	W	PA	Lor mor chor	food poisoning, muscular pain	St	De	potion	0.72
Scurrula sp.1	W	HM	Lo mor chor	amenorrhea, jaundice	Al	De	potion	0.39
Scurrula sp.2	W	PA	Lo mor chor	muscular pain, food poisoning	Al	De	potion	0.54
Scurrula sp.3	W	PA	Lo mor chor	flatulence, food poisoning	Al	De	potion	0.58
Lycopodiaceae								
Lycopodium cernuum L.*	W	TL	Ter si ler	muscular pain, cold	Al	De	potion	0.13

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Lythraceae								
Duabanga grandiflora (DC.) Walp.*	W	MT	Ko	muscular pain	Bk	De	potion	0.06
		MW	Ko	diarrhea	Bk	De	potion	0.09
		HL	Ko	itching	Bk	De	bath	0.10
Lagerstroemia speciosa (L.) Pers.	C	PA	-	tonic	Bk	De	potion	0.06
Malpighiaceae								
Hiptage benghalensis (L.) Kurz	W	MW	Se ta kor na	tonic, muscular pain	Bk	De	potion	0.59
subsp. *candicans**		HL	Se ta kor na	tonic, muscular pain	Bk	De	potion	0.57
		TL	Ti si chor kwaw	tonic, muscular pain	St	De	potion	0.60
		YP	Ti si nor po	tonic, muscular pain	Bk, St	De	potion	0.82
		PA	Hor sa puy kway	tonic, muscular pain	Bk	De	potion	0.08
		MT	Hor sa puy kway	tonic, muscular pain	Bk	De	potion	0.11
Malvaceae								
Gossypium sp.	W	KP	Blea	sprain	Lf, Sd	Po	poultice	0.29
Sida acuta Burm.f.*	W	HB	Por se kruy	dizziness	Lf	non	inhalers	0.07
		HL	Nor ke mae	joint pain, intoxication	Rt	De	potion	0.10
		MC	Nor ta mea	abscess	Lf	Po	poultice	0.11
		YP	Nor kwae se	muscular pain	Lf	De	potion	0.36
		YT	Nor kwae se	muscular pain, tonic, appetite stimulant	Lf	De	potion	0.83
Sida rhombifolia L.*	W	HL	Nor ke mae	intoxication	Rt	De	potion	0.05
		HT	Ser ba ka	fever, muscular pain, amenorrhea	Al	De	potion	0.37

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Marantaceae								
Maranta arundinacea L. *var. arundinacea*	C	KP	Ji clock clock	inducing labor, postpartum recovery	St	De	potion	0.18
Phrynium pubinerve Blume*	W	HL	La kreu la	dysuria	Fr	De	potion	0.14
Angiopteris evecta (G. Forst.)	W	MT	Do keng co	headache	Lf	De	potion	0.08
Hoffm.*		MW	Do re kho	amenorrhea	Lf	De	potion	0.36
		HL	Do re kho	amenorrhea	Lf	De	potion	0.29
Melastomataceae								
Melastoma malabathricum L.*	W	HH	Se la play	mouth ulcer, geographic tongue	Fr	No	chew	0.34
		MC	Se la play	mouth ulcer, geographic tongue	Fr	No	chew	0.14
Melastoma normale D.Don*	W	MT	Se la play	mouth ulcer, muscular pain	Fr, Rt	No, De	chew, potion	0.17
Meliaceae								
Azadirachta indica var. *siamensis* Valeton	C	MW	Ta kha lah	urethral stones, postpartum recovery	Lf	De	potion, bath	0.18
Melia azedarach L.*	W	MT		muscular pain, anthelmintic	Bk	De	potion	0.08
Menispermaceae								
Cyclea barbata Miers*	W	HB	Ya kae po	cough, sore throat	Al	De	potion	0.41
		HM	Ya kae po	sore throat	Al	De	potion	0.52
		KP	Ya kae po	bruises, cough	Rt	De	potion	0.71
		SM	Ya kae po	cough, sore throat	Rt	De	potion	0.57
		MC	Ti si po	fever	Rt	De	potion	0.17

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Tinospora crispa (L.)	W	HB	Ti si khee	cough, bruises	Arp	De	potion	0.26
Hook. f. & Thomson*		HM	Ti si khee	fever, typhoid	Arp	De	potion	0.35
		KP	Ti si khee	fever, sore throat	Arp	De	potion	0.11
		SM	Ti si khee	cough	Arp	De	potion	0.23
		MC	Lor lu mue	fever, tonic, muscular pain	Arp	De	potion	0.28
		MW	Lor lu mue	muscular pain, diabetes, fever	Arp	De	potion	0.41
		TL	Lor lu mue	fever, malaria	Arp	De	potion	0.71
Mimosaceae								
Acacia catechu (L.f.) Willd.*	W	MW	Se pi	toothache, wound	Wd	De	liniment	0.23
Acacia concinna (Willd.) DC.	C	TL	Per che sa	dandruff, itching	Fr	So	Usp	0.29
		PA	Per che sa	dandruff, itching	Fr	So	Usp	0.36
		MT	Per che sa	dandruff, itching	Fr	So	Usp	0.11
		HT	Per che sa	dandruff, itching	Fr	So	Usp	0.46
Archidendron clypearia (Jack)	W	HB	Chor tu mae	ophthalmitis	Al	De	eye wash	0.22
I.C.Nielsen*		KP	Chor tu mae	ophthalmitis	Al	De	eye wash	0.10
		SM	Chor tu mae	itching	St, Lf	De	bath	0.36
		MT	Sa tu mae	toothache	Bk	No	hold in mouth	0.03
Entada rheedii Spreng.*	W	HM	Mi ri kae	ophthalmitis, itching	Fr	Po	poultice	0.35
Leucaena leucocephala (Lam.)	C	KP	Lor kor ta kwaw la	anthelmintic	Sh	No	EaF	0.11
de Wit								
Mimosa pigra L.*	W	HT	Nor we mae	jaundice	St	De	bath	0.17

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Mimosa pudica L.*	W	HT	Nor we mae	urethral stones, edema	Al	De	potion	0.52
		MC	Nor we mae	muscular pain	Rt	De	potion	0.47
		KP	Nor we mae	urethral stones, haemorrhoid	Rt	De	potion	0.68
		MT	Nor we mae	urethral stones, edema	Al	De	potion	0.47
		MW	Nor we mae	urethral stones	Al	De	potion	0.41
		TL	Nor we mae	fever	Al	De	potion	0.63
		YP	Nor we mae	urethral stones	Rt	De	potion	0.91
Xylia xylocarpa (Roxb.) Taub. var.	W	MW	Play	muscular pain, tonic	St	De	potion	0.32
kerrii (Craib & Hutch.) I. C. Nielsen*		HL	Play	tonic	St	De	potion	0.03
Moraceae								
Artocarpus gomezianus Wall. ex Trécul*	W	KP	Pue ka be	burn	Wd	De	liniment	0.04
Artocarpus lakoocha Roxb.*	W	MW	Ber ka bea	gastric ulcer	Wd	De	potion	0.09
		HL	Ber ka bea	gastric ulcer	Wd	De	potion	0.19
Ficus auriculata Lour.*	W	HM	Ter kue	ringworm	La	No	liniment	0.81
		SM	Ter kue	ringworm	La	No	liniment	0.70
Ficus hispida L.f.*	W	MW	Ter ar na	asthma, cough	La	No	potion	0.09
		YP	Ter ar na	tinnitus	Pt	Bu	blow to ear	0.27
Maclura sp.	W	HM	Choo cha bo	haemorrhoid	Al	De	potion, bath	0.19
		MW	Choo cha bo	muscular pain	Rt	De	potion	0.59
		HL	Choo cha bo	heartburn, muscular pain	Rt	De	potion	0.38
Morus alba L.	C	HT	Sa to sa	diabetes	Sh	De	potion	0.05
		SM	Ko wa sa	stomach ache	Rt	De	potion	0.03

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Morus macroura Miq.*	W	MW	Krue sae tue	wound, haemostatic	La	No	liniment	0.27
		YT	Krue sae	abscess	La	No	liniment	0.61
Musaceae								
Ensete glaucum (Roxb.) Cheesman*	W	HM	Ya pa la	edema, jaundice, dizziness	LfSh	De	potion	0.81
		MT	Ya pa la	edema, jaundice	LfSh	De	potion	0.36
		MW	Ya pa la	diarrhea, food poisoning	LfSh	De	potion	0.55
		HL	Ya pa la	diarrhea, muscular pain, beri beri	LfSh	De	potion	0.81
Musa acuminata Colla	C	HT	Ya	lactation stimulant	Infl, Fr	De	potion	0.19
Musa sapientum L.	C	HT	Si kuy	lactation stimulant	Infl	De	potion	0.20
		MW	Si kuy	diarrhea	Fr	No	EaF	0.32
Myrsinaceae								
Embelia sessiliflora Kurz*	W	HB	Blea blor	anthelmintic	Fr	De	potion	0.52
		HM	Blea blor	anthelmintic	Fr	De	potion	0.45
		KP	Blea blor	anthelmintic	Fr	De	potion	0.75
		SM	Blea blor	anthelmintic	Fr	De	potion	0.57
Embelia tsjeriamcottam (Roem. & Schult.) A.DC.*	W	HM	To ku mae po la	muscular pain, diarrhea	St, Rt	De	potion	0.23

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Myrtaceae								
Psidium guajava L.	C	HB	Ma kwuy mo	diarrhea	Sh, Lf	De	potion	0.78
		MC	Ma kwuy	diarrhea	Sh, Lf	De	potion	0.86
		HT	Ma kwuy	diarrhea	Sh	De	potion	0.94
		PA	Ma kwuy	diarrhea	Lf	De	potion	0.86
		TL	Ma kwuy	diarrhea	Sh	De	potion	0.96
		MW	Kwaw sa mu	diarrhea	Sh, Lf	De	potion	0.55
		HL	Kwaw sa mu	diarrhea	Sh	De	potion	0.95
		YT	Ma kwuy	diarrhea	Sh, Lf	De	potion	0.52
Syzygium sp.	W	KP	Se tee du	jaundice, diarrhea	Bk	De	potion	0.14
Tristaniopsis burmanica (Griff.) Peter G.Wilson & J.T.Waterh. var. *rufescens* (Hance) J.Parn. & Nic Lughadha*	W	HM	Ter ner	wound	La	No	liniment	0.52
		KP	Ter ner	wound, chapped skin	La	No	liniment	0.36
Nymphaeaceae								
Nymphaea lotus L.	C	MT	-	haemorrhoid	Lf, Fl	De	potion	0.08

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Olacaceae								
Anacolosa ilicoides Mast.*	W	HB	Mor sa lor	amenorrhea, cough	Al	De	potion	0.22
Jasminum funale Decne subsp. *funale* Decne*	W	MW	Ta ci kuu	cough	Rt	De	potion	0.14
Jasminum sp.1	W	MT	Por ner see	anthelmintic	Rt	De	potion	0.03
Jasminum sp.2	W	HT	Por sea lee	dysmenorrhea	Rt	De	potion	0.13
Orchidaceae								
Bulbophyllum sp.	W	SM	Chor pa mae ko	urethral stones	Al	De	potion	0.17
Cymbidium bicolor Lindl.*	W	HL	Nor ter to	otorrhea	Lf	Bu	ear drop	0.62
Cymbidium sp.	W	HM	Ti si na ter	otorrhea	Lf	Bu	ear drop	0.65
Nervilia sp.	W	MW	Chui klo law do	muscular pain, amenorrhea	Al	De	potion	0.32
Sarcanthus sp.	W	MT	Por lua jae	tonic	Al	De	potion	0.03
Oxalidaceae								
Averrhoa carambola L.	C	MT	Ke mo clo sa	urethral stones	Rt	De	potion	0.50
		YT	Ma per sa	urethral stones	Fr	No	EaF	0.30
		YP	Ma per sa	urethral stones	Fr	No	EaF	0.82
		HL	Sa kree ku	urethral stones	Rt	De	potion	0.33
Biophytum umbraculum Welw.*	W	KP	Nor we mae	urethral stones, hemorrhoid	Al	De	potion	0.50
Oxalis acetosella L.*	W	MW	Ta chi crey	flatulence, typhoid	Al	De	potion, steam bath	0.27
Pandanaceae								
Pandanus amaryllifolius Roxb.	C	MW	Nae der	diabetes	Lf	De	potion	0.09

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Papaveraceae								
Papaver somniferum L.	C	TL	-	gastric ulcer, muscular pain	La	Dr	potion	0.44
Papilionaceae								
Crotalaria sp.	W	HL	Jae krey po	diarrhea	Rt	De	potion	0.10
Dalbergia glomeriflora Kurz*	W	HL	Se hre	gastric ulcer	Bk	No	EaF	0.05
		SM	Se hruay po	diarrhea	Bk	De	potion	0.03
Dalbergia sp.	W	HM	Tor glo bor	gastric ulcer	Bk	De	potion	0.39
Desmodium oblongum Benth.*	W	MC	Ti si bor	anthelmintic	St, Rt	De	potion	0.13
		MT	-	tonic, muscular pain	St, Rt	De	potion	0.22
Desmodium renifolium (L.) Schindl. var. *renifolium**	W	MW	-	tonic, muscular pain	Rt	De	potion	0.27
Desmodium rennifolium (L.) Schindl. var. *oblatum* *	W	HL	Ti si yor de cha	tonic, muscular pain	Al	De	potion	0.19
Desmodium sp.	W	SM	Jay dor ba	tendodynia, fever	Al	De	potion	0.30
Erythrina subumbrans (Hassk.) Merr.*	W	YP	Cher	dizziness, muscular pain	Lf	De, Bu	potion, poultice	0.64
Flemingia ferruginea Benth.	W	MW	Ma hea nok	diabetes	Rt	De	potion	0.05
Flemingia lineata (L.) Aiton*	W	HT	Chor ae go bor	diarrhea	Rt	De	potion	0.15
		MW	Chor ae go bor	jaundice	Rt	De	potion	0.09
		HL	Chor ae go bor	jaundice	Rt	De	potion	0.14
Flemingia macrophylla (Willd.) Merr.*	W	MW	Chor ae go bor	jaundice, amenorrhea	St	De	potion	0.64
		HL	Chor ae go bor	jaundice, fever	Bk	De	potion	0.62
Flemingia sp.	W	HB	Tor ner me	amenorrhea	St	De	potion	0.15

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Flemingia stricta Roxb.*	W	MW	Chor ae go bor pa do	muscular pain, jaundice	Arp	De	potion	0.45
Indigofera caloneura Kurz*	W	HM	Juy too	amenorrhea, toothache	Al	De	potion, Hol	0.19
Lablab purpureus (L.) Sweet	C	MW	Bor ba sa	rash, itching	Lf	Po	liniment	0.05
Millettia extensa (Benth.) Baker*	W	MW	Ta ue jue wa mue	wound	Al	De	wash	0.23
Millettia sp.	W	KP	Po por do	cough, amenorrhea	Lf	De	potion, bath	0.21
Mucuna macrocarpa Wall.*	W	HL	Ri mue jue	wound	Sd	Bu	poultice	0.14
Phyllodium pulchellum (L.)	W	HH	Nor so por mae	amenorrhea, urethral stones	Al	De	potion	0.51
Desv.*		MC	Nor jaw bi	amenorrhea, muscular pain	Al	De	potion	0.25
		HL	Ti si yo hor mae	amenorrhea, muscular pain	Rt	De	potion	0.11
Phyllodium sp.	W	HB	Nor so hor mae	postpartum recovery, amenorrhea	Al	De	potion	0.26
		HM	Nor so hor mae	fever, recovery	Arp	De	bath, potion	0.13
		KP	Nor so hor mae	postpartum recovery, diabetes	Arp	De	bath, potion	0.32
Phyllodium vestitum Benth.*	W	MW	Nor so hor mae	fever, muscular pain, edema	Rt	De	potion	0.23
Passifloraceae								
Passiflora foetida L.	C	MW	Sa do sa	jaundice, amenorrhea	Arp	De	potion, bath	0.32
Pedaliaceae								
Martynia annua L.	C	KP	Ker si ha ngue mae	snake bite, wound	Fr	Po	poultice	0.36
		SM	Ker si ha ngue mae	itching	Fr	Po	poultice	0.10

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Pinaceae								
Pinus kesiya Royle ex Gordon*	W	HT	Cho bor	dizziness, jaundice	St	No, De	inhalers, potion	0.22
Piperaceae								
Piper interruptum Opiz*	W	MW	Sae ka mue	muscular pain	Arp	De	potion	0.09
		HL	Sae ka mue	muscular pain	Arp	De	potion	0.10
Piper nigrum L.	C	MT	-	muscular pain	Fr	De	potion	0.08
Piper retrofractum Vahl*	W	MW	-	amenorrhea	Fr	De	potion	0.14
		MT	-	muscular pain	Fr	De	potion	0.06
		KP		dizziness	Lf	Po	inhalers	0.07
Piper ribesoides Wall.	C	MT	-	muscular pain	Arp	De	potion	0.11
Piper sarmentosum Roxb.	C	HL	Poo ling do la	cough, ringworm	Lf	No, Po	chew, poultice	0.48
		MT	Pool lin	ringworm	Lf	Po	poultice	0.06
		PA	Pool lin	ringworm, toothache	Lf	Po Po	poultice	0.19
Piper sp.	W	HM	Ta ka lae jae	toothache	Rt	No	hold in mouth	0.10
		YP	Ju kaw do	toothache, diarrhea	Lf	No	hold in mouth	0.36

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Plantaginaceae								
Plantago major L.*	W	MC	Por ko	joint pain	Lf	Po	poultice	0.56
		MT	Nor na ae	muscular pain, tendodynia	Lf	Po	poultice	0.69
		PA	Nor na ae	joint pain, sprain	Lf	Po	poultice	0.81
		TL	Nor na ae	muscular pain	Lf	Bu	poultice	0.44
		SM	Ta sue do	muscular pain, bruises	Al	De	potion	0.67
		MW	Ya ee yo	wound, muscular pain	Lf, Rt	Po, De	poultice, potion	0.32
		HL	Ya ee yo	muscular pain, urethral stones	Lf	De	potion	0.57
		YT	Doi por ka	muscular pain, joint pain	Lf	Bu	poultice	0.26
Plumbaginaceae								
Plumbago indica L.*	W	MW	Tor chu kwaw	amenorrhea	Rt	De	potion	0.09
		HL	Tor chu kwaw	amenorrhea	Rt, Lf	De	potion	0.05
		SM	Tor chu kwaw	muscular pain	Rt	De	potion	0.10
		TL	Pew dang	postpartum recovery	Al	De	potion	0.19
		YP	Tae chu	muscular pain	Rt	De	potion	0.18
Plumbago zeylanica L.*	W	MW	Tor chu kwaw	amenorrhea	Rt	De	potion	0.05
		HL	Tor chu kwaw	amenorrhea	Rt	De	potion	0.05
		HM	Ta chu kwaw	muscular pain	Rt	De	potion	0.03
		TL	Pew khaw	postpartum recovery, muscular pain	Al	De	potion	0.21
Poaceae								
Bambusa sp.	W	MT	Wa mee	malaria	St	De	potion	0.06

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Cymbopogon citratus (DC.) Stapf	C	MW	Hor war ta po	cough	Lf	So	face wash	0.59
		TL	-	bone fracture	Lf	Po	poultice	0.69
Cymbopogon nardus (L.) Rendle	C	PA	Hor war ter po	toothache, urethral stones	Lf	De	potion	0.30
Dendrocalamus brandisii (Munro)	W	MW	Wa sue	diabetes	Lf	De	potion	0.18
Kurz*		TL	-	urethral stones, muscular pain	Lf	De	potion	0.17
Dendrocalamus hamiltonii Nees & Arn. ex Munro*	W	MW	Wa kru	diabetes, beri beri	Lf	De	potion	0.05
Dendrocalamus strictus (Roxb.)	W	MW	Wa mee	diabetes, beri beri	Lf	De	potion	0.05
Nees*		HL	Wa mee	diabetes	Lf	De	potion	0.10
		KP	Wa mee la	jaundice	Lf	De	potion	0.54
Eleusine indica (L.) Gaertn.*	W	PA	-	fever, muscular pain	Al	De	potion	0.36
		TL	-	fever	Al	De	potion	0.21
Gigantochloa albociliata (Munro) Kurz*	W	MW	Wa klae	diabetes	St, Lf	De	potion	0.05
Imperata cylindrica (L.) Raeusch.*	W	HB	Ker hee	urethral stones	Rt	De	potion	0.52
		HM	Ker hee	urethral stones, muscular pain	Rt	De	potion	0.13
		HL	Ka ga ee la	urethral stones	Rt	De	potion	0.29
Oryza sativa L.	C	MT	Bue	urethral stones, tonic	Sd	De	potion	0.33
		MW	Bue	tonic, muscular pain	Sd	De	potion	0.05
		HL	Bue	tonic	Sd	De	potion	0.14

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Saccharum officinarum L.	C	HL	Ker tee sue	muscular pain, dizziness,	St	De	potion	0.48
		KP	Ker tee sue	diarrhea	St	No	EaF	0.43
		MT	Ker tee sue	fever, cough	St	De	potion	0.25
		PA	Ker tee sue	flatulence, urethral stones	St	De	potion	0.33
		YT	Ker tee sue	fever, muscular pain, tonic muscular pain	St	De	potion	0.52
Thyrsostachys siamensis Gamble*	W	MW	Wa bor	diabetes	Lf	De	potion	0.05
		HL	Wa bor	jaundice	Lf	De	potion	0.14
Thysanolaena maxima (Roxb.)	W	MT	Keiy la	heartburn	Sh	No	EaF	0.08
Kuntze*		MW	Keiy la	fever	Lf	De	potion	0.05
Polygalaceae								
Polygala crotalarioides Buch.-Ham. ex DC.*	W	PA	-	appetite stimulant, muscular pain	Rt	De	potion	0.81
Polygonaceae								
Muehlenbeckia platyclados (F.Muell.) Meisn.*	W	HH	Por la bor	urethral stones	Lf	De	potion	0.03
Polygonum paleaceum Wall.*	W	KP	Li qu	cough	St, Rt	De	potion	0.61
Polypodiaceae								
Drynaria quercifolia (L.) J. Sm.*	W	KP	Ka chor na por	jaundice	Lf	De	bath	0.14
		MW	Jor la ar	diabetes, amenorrhea	Al	De	potion	0.14
Platycerium wallichii Hook.*	W	MC	Krue chor na	fertility	Lf	No	EaF	0.39
		MT	por	edema, postpartum recovery	Al	De	bath	0.31
			-					

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Proteaceae								
Helicia nilagirica Bedd.*	W	HB	Se jaw ba	ophthalmitis	Rt, St	De	eye wash	0.56
		KP	Se jaw ba	ophthalmitis	Bk	De	eye wash	0.54
Heliciopsis terminalis (Kurz) Sleumer*	W	HH	Se jaw ba	ophthalmitis, muscular pain	Bk	So, De	eye wash, potion	0.29
		HM	Se jaw ba	ophthalmitis	Bk	De	eye wash	0.48
		MC	Se jaw ba	ophthalmitis, food poisoning	Bk	So, De	eye wash, potion	0.19
Punicaceae								
Punica granatum L. *var. granatum*	C	KP	Chor pa lea	diarrhea	Sh	De	potion	0.75
Rhamnaceae								
Berchemia floribunda (Wall.) Brongn.*	W	MW	Se hrue sue	muscular pain	St	De	potion	0.09
Ventilago denticulata Willd.*	W	YP	Ker kae	muscular pain, tonic	Arp	De	potion	0.45
Ziziphus cambodiana Pierre*	W	MW	Ri co mae	muscular pain, gastric ulcer	Bk	De	potion	0.36
		HL	Ri co mae	gastric ulcer, jaundice	Bk, St	De	potion, bath	0.19
		HT	Ri co mae	urethral stones, muscular pain	Bk, Lf	De	potion	0.28
		TL	Ri co mae	diarrhea, muscular pain	Bk	De	potion	0.33
Ziziphus oenoplia (L.) Mill.*	W	MW	Ta chu mae mue	haemorrhoid	St	De	potion	0.09
Rosaceae								
Prunus cerasoides Buch.-Ham. ex D. Don*	W	HB	Se kaw way	tonic, diarrhea	Bk	De	potion	0.56
Rubus alceifolius Poir.	W	HH	Chu pee sa	cough	Sh	No	EaF	0.03

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Rubus rosifolius Sm. ex Baker*	W	HT	Ko wa sa	fever	St	De	potion	0.06
		TL	Ko wa sa	fever, diarrhea, muscular pain	St	De	potion	0.31
Rubus sp.	W	HT	Bla ko dor mue	asthma	St	De	potion	0.06
Rubiaceae								
Adina sp.	W	TL	Wah ngo	muscular pain	Bk	De	potion	0.13
Galium sp.	W	KP	Ti si jeu si	muscular pain	Rt	Po	poultice	0.25
Mitragyna rotundifolia (Roxb.) Kuntze*	W	YP	Se to ber	jaundice	Lf	De	potion	0.09
Morinda angustifolia Roxb.*	W	MT	Kwao	hypertension	Rt	De	potion	0.03
		SM	Kwao	intoxication	Rt	De	potion	0.10
Mussaenda sanderiana Ridl.*	W	HH	Por jor kaw pe	itching	Rt	De	bath	0.14
		MC	Por jor kaw pe	muscular pain, toothache	Rt	De	potion, Hol	0.14
		HM	Por tae	postpartum recovery, fever	Lf	De	bath	0.23
		KP	Por tae	jaundice	Al	De	jaundice	0.07
		SM	Por tae	jaundice, appetite stimulant	Al	De	potion	0.17
		HT	Jaw ker pe por	jaundice, amenorrhea	Al	De	potion, bath	0.41
		TL	Jaw ker pe por	fever, stomach ache	Al	De	potion	0.52
		Hl	Por lor ko	jaundice, amenorrhea	Al	De	potion	0.45
		MW	Por lor ko	jaundice, amenorrhea, muscular pain	Al	De	potion	0.52
Paederia foetida L.*	W	MC	Chuy nor mue	gastric ulcer	Rt	De	potion	0.11
		MT		flatulence	Rt	De	potion	0.03
		PA		stomach ache	Al	De	potion	0.03

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Paederia sp.	W	YT	Chuy air nor	fever	Lf, Bk	De	potion	0.87
Uncaria sp.	W	KP	Ta chu mae	muscular pain, jaundice, haemorrhoid	Arp	De	potion	0.39
Rutaceae								
Citrus aurantifolia (Christm.)	C	MW	Nor glae sa	urethral stones	Rt	De	potion	0.27
Swingle		MT	-	sore throat, cough	Fr	Sl	hold in mouth	0.29
Citrus hystrix DC.	C	MT	-	dandruff, itching	Fr	De	Usp	0.25
Citrus maxima (Burm.) Osbeck	C	MT	-	amenorrhea, recovery	Sh	De	steam bath	0.11
Clausena excavata Burm.f.*	W	MW	Se chor kha	jaundice	Arp	De	steam bath	0.18
		HL	Se chor kha	fever	Arp	De	steam bath	0.10
Melicope pteleifolia (Champ. ex	W	HB	Ti si sae saw	fever, jaundice	Al	De	potion, bath	0.59
Benth.) T.G. Hartley*		HH	Ti si sae saw	cough, muscular pain	Rt	De	potion	0.66
		MC	Ti si sae saw	cough, postpartum recovery	Rt	De	potion	0.42
Micromelum sp.	W	HM	Sae jor klaer	haemorrhoid, fever	St	De	potion	0.16
Salicaceae								
Salix tetrasperma Roxb.*	W	MW	Se tee	toothache	Bk	No	chew	0.05
Sapindaceae								
Sapindus rarak DC.*	W	MT	Sa le dea	tonic	Bk	De	potion	0.14
		MW	Sa le dea	sore throat	Bk	De	potion	0.09
		HL	Sa le dea	urethral stones	St	De	potion	0.24
Schleichera oleosa (Lour.) Merr.*	W	MT	-	diarrhea, muscular pain, urethral stones	Bk	De	potion	0.11

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Sapotaceae								
Xantolis cambodiana (Pierre ex	W	HB	Se nu tee	lactation stimulant, fever	Bk	De	potion	0.22
Dubard) P.Royen*		HH	Se nu tee	lactation stimulant, cold	Bk	De	potion	0.71
		MC	Se nu tee	cough, cold	Bk	De	potion	0.56
Saururaceae								
Houttuynia cordata Thunb.	C	HH	Ta ner chuy do	cold	Sh	No, De	EaF	0.03
		MC	Ta nae chi do	cough, cancer	Sh	No, De	EaF	0.22
Schizaeaceae								
Lygodium flexuosum (L.) Sw.*	W	HH	Kik gu la	wound, haemostatic	Lf	Po	poultice	0.77
		MC		wound, haemostatic	Lf	Po	poultice	0.31
Scrophulariaceae								
Lindenbergia indica (L.) Kuntze.*	W	MW	-	edema	Al	De	stem bath	0.05
Scoparia dulcis L.*	W	HB	Nor hue po	wound	Lf	Po	poultice	0.11
		HM	Nor kwae mae	wound	Al	De	potion	0.71
		SM	Pa kae do	wound	Lf	Po	poultice	0.10
		HL	Por nor la po	muscular pain, fever	Al	De	potion	0.19
		PA	Nor hue bo	fever	Rt	De	potion	0.14
		YT	Nor hue po	cough	Al	De	potion	0.48
Simaroubaceae								
Eurycoma longifolia Jack*	W	HH	Hae pa ja	fever, muscular pain	Al	De	potion	0.46
		MC	Hae pa ja	fever, muscular pain	Al	De	potion	0.31

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Harrisonia perforata (Blanco) Merr.*	W	MW	Mae jee	toothache	Bk	De	hold in mouth	0.73
		HL	Mae jee	toothache, athlete's foot	Fr	Bu	poultice	0.33
		YP	Mae jee	toothache	Bk	Bu	poultice	0.64
		YT	Mae jee	toothache	Bk	Bu	poultice	0.04
Picrasma javanica Blume*	W	YT	Na por jaw	fever	Bk	De	potion	0.96
Smilacaceae								
Smilax griffithii A.DC.*	W	HH	Hor ka ar	muscular pain	Rt	De	potion	0.26
		MC	Hor ka ar	muscular pain	Rt	De	potion	0.22
Smilax ovalifolia Roxb. ex D.Don*	W	MW	Hor ka ar pa do	fever, muscular pain, stomach ache	Arp	De	potion	0.32
Smilax sp.	W	HT	Hor ka ar	muscular pain, tonic	Al	De	potion	0.22
		TL	Hor ka ar	muscular pain, gastric ulcer	Al	De	potion	0.15
Smilax verticalis Gagnep.*	W	MW	Hor ka ar po	muscular pain, amenorrhea	Rt	De	potion	0.27
		HL	Hor ka ar po	muscular pain, amenorrhea	Rt	De	potion	0.10
Solanaceae								
Nicotiana tabacum L.	C	MT	Ya su	wound, haemostatic	Lf	Po	poultice	0.06
		MW	Ya su	wound, haemostatic	Lf	Po	poultice	0.14
		HL	Ya su	wound, haemostatic	Lf	Po	poultice	0.52
Solanum erianthum D. Don*	W	PA	Sa kaw prue	fever	Rt	De	potion	0.22
		KP	Sa kaw prue	muscular pain	St	De	potion	0.04
		MW	Sa kaw prue	postpartum recovery, muscular pain	St	De	potion	0.18

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Solanum indicum L.	C	MT	Sa kaw kha po pri	appetite stimulant	Fr	No	EaF	0.06
		KP	Sa kaw kha	cough, wound	Fr, Lf	De, Po	EaF, poultice	0.29
		YT	Sa kaw sa	cough, cold	Fr	De	EaF	0.17
Solanum lasiocarpum Dunal	C	HB	Sa kaw khu	cough	Fr	De	potion	0.41
var. domesticum Heiser		KP	Sa kaw khu	cough, urethral stones	Fr	De	potion	0.57
Solanum nigrum L.	C	HB	Chor po pi do	abscess	Lf	Po	poultice	0.07
		HM	So ar do	fever	Fr	De	potion	0.45
		MW	Sa kaw kha po pi	cold, diabetes	Fr, Rt	De	potion	0.23
Stemonaceae								
Stemona sp.	W	HH	Nor to hu sa	cancer	Rt	De	potion	0.03
Sterculiaceae								
Helicteres hirsuta Lour.*	W	MW	Ta si ta ku bue	fever	Rt	De	potion	0.09
Strychnaceae								
Strychnos nux-blanda A.W. Hill*	W	PA	-	diarrhea, snake bite	Bk	De, Po	potion, poultice	0.22
Symplocaceae								
Symplocos racemosa Roxb.*	W	KP	Ko por	hemorrhoid, wound	Rt	De	potion, wash	0.39
Theaceae								
Camellia sinensis (L.) Kuntze	C	HB	Na mue kray	diarrhea, tonic	Lf	De	potion	0.30
		YT	Nor mue	fever, tonic	Lf	De	potion	0.48

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Schima wallichii (DC.) Korth.*	W	HH	Ter sue sa	cold, fever	Exd	No	potion	0.51
		MC	Se sue sa	cold, fever, asthma	Exd	No	potion	0.58
		HB	Ter sue sa	cold, fever	Exd	No	potion	0.30
		HM	Ter sue sa	cold, fever	Exd	No	potion	0.58
		KP	Ter sue sa	cold, fever	Exd	No	potion	0.68
		SM	Ter sue sa	cold, fever	Exd	No	potion	0.50
		HL	Se lue sa	cold, fever	Exd	No	potion	0.33
		HT	Ta lue sa	cold, fever	Exd	No	potion	0.31
		MT	Ta lue sa	cold, fever	Exd	No	potion	0.11
Trilliaceae								
Paris polyphylla Sm.*	W	HB	Kue kee bo	gout, muscular pain, fever	Blb	De	potion	0.19
		HM	Kue kee bo	muscular pain, tonic	Blb	De	wash, potion	0.87
		KP	Kue kee bo	wound	Blb	Po	poultice	0.50
		SM	Kue kee bo	panacea, muscular pain	Blb	De	potion	0.30
Ulmaceae								
Celtis timorensis Span*	W	SM	Se na ue	fever	Wd	So	face wash	0.40
Urticaceae								
Dendrocnide stimulans (L.f.) Chew*	W	MW	Ae go per	urethral stones	Rt	De	potion	0.09
		HL		jaundice	Al	De	potion	0.14
Girardinia diversifolia (Link) Friis*	W	MW	La cha	muscular pain	Rt	De	potion	0.18
		HL	La cha	urethral stones	Rt	De	potion	0.19

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Usneaceae								
Usnea siamensis Vain.*	W	HH	Kho lee nu wae	dizziness, amenorrhea	Al	Dr, De	cigarette, steam bath	0.43
		MC	Khu lee nu wae	dizziness	Al	Dr	cigarette	0.47
		HT	-	sinus	Al	Dr	cigarette	0.43
		MW	Mue ka wa	dizziness, amenorrhea	Al	Dr, De	cigarette, steam bath	0.59
Verbenaceae								
Stachytarpheta jamaicensis (L.)	W	HM	Tid sue huiy te	dysuria, urethral stones	Al	De	potion	0.06
Vahl*		KP	Tid sue huiy te	dysuria, urethral stones	Al	De	potion	0.07
		SM	Tid sue huiy te	cold, amenorrhea	Rt	De	potion	0.20
Verbena officinalis L.*	W	HB	Ti si chi see	urethral stones, muscular pain	Al	De	potion	0.22
		HM	Ti si chi see	urethral stones, fever	Al	De	potion	0.77
		KP	Ti si chi see	urethral stones	Al	De	potion	0.54
		SM	Ti si chi see	urethral stones	Al	De	potion	0.40
		MW	Ti si rue te	itching, fever	Al	De	potion	0.14
Viscaceae								
Viscum articulatum Burm. f.*	W	YT	Lor mor chor	fever, urethral stones	Al	De	potion	0.48
Vitaceae								
Cayratia sp.	W	KP	Ti si kli	bone fracture, sprain	Lf	Bu	poultice	0.07
		SM	Ti si kli	bone fracture, sprain	Lf	Bu	poultice	0.13

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Cissus bicolor Domin*	W	HH	Ya mang bong	allergic contact dermatitis, itching	Lf	Po	poultice	0.57
		MC	Som por cha	allergic contact dermatitis, itching	Lf	Po	poultice	0.44
Cissus hastata Miq.*	W	SM	Ker si si mo por	itching	Lf	Po	poultice	0.20
Cissus sp.	W	HL	Ti si si nor por	allergic contact dermatitis, itching	Lf	Bu	poultice	0.29
Zingiberaceae								
Alpinia galanga (L.) Willd.	C	MT	Se ae choie	flatulence	St	No	EaF	0.11
		TL	Se ae choie	flatulence, sprain	St	No, Mi	EaF, poultice	0.35
Alpinia malaccensis (Burm.f.) Roscoe*	W	KP	Po ker	cough	St	De	potion	0.71
Boesenbergia rotunda (L.) Mansf.	C	MT	-	flatulence	Rh	De	potion	0.11
		HL	Por sa raw	flatulence, amenorrhea	Rh	De	potion	0.29
Boesenbergia sp.	W	KP	Por lu ku	flatulence, sprain	Rh	No	EaF	0.46
Curcuma aeruginosa Roxb.*	W	KP	Por sue	wound	Rh	Po	poultice	0.71
		PA	Por sue	flatulence	Rh	De	potion	0.17

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Curcuma longa L.	C	HB	Si yaw bor	gastric ulcer, wound	Rh	De, Po	potion, poultice	0.89
		HM	Si yaw bor	gastric ulcer	Rh	De	potion	1.06
		SM	Si yaw bor	gastric ulcer, insect bite	Rh	No	EaF,liniment	0.87
		KP	Si yaw bor	gastric ulcer	Rh	De	potion	0.96
		HT	Si yaw	gastric ulcer, insect bite	Rh	No	EaF,liniment	1.02
		TL	Si yaw	gastric ulcer, insect bite	Rh	No	EaF,liniment	0.98
		ML	Si yaw	gastric ulcer, insect bite	Rh	No	EaF,liniment	0.72
		PA	Si yaw	gastric ulcer, cough	Rh	De	EaF	0.86
		YT	Si yaw	gastric ulcer, flatulence	Rh	No	EaF	0.87
		YP	Si yaw	gastric ulcer	Rh	No	EaF	0.91
		MW	Si yaw	gastric ulcer, insect bite	Rh	De, No	potion, liniment	0.82
		HL	Si yaw	gastric ulcer	Rh	No, De	EaF	1.00
Curcuma sessilis Gage*	W	MW	Aw doi	itching	Rh	No	liniment	0.03
*Curcuma sp.*1	W	KP	Paw sa kaw	flatulence	Rh	De	potion	0.50
Curcuma sp.2	C	HB	Paw pa do	stomach ache, wound	Rh	De, Po	potion, poultice	0.52
		HM	Paw pa do	wound	Rh	De	wash	0.39
		KP	Paw pa do	wound	Rh	De	wash	0.25
		SM	Paw pa do	wound	Rh	De	wash	0.47
		HL	Paw pa do	flatulence	Rh	No, De	EaF	0.38
Curcuma sp.3	C	SM	Paw na tee	wound, joint pain	Rh	Po	poultice	0.27
Curcuma sp.4	C	HM	Paw pa mue	postpartum recovery	Rh	De	potion	0.16
Curcuma sp.5	W	HM	Por sue	flatulence, wound	Rh	De, Po	potion, poultice	0.42
Curcuma sp.6	W	HL	Por hue bue cha	flatulence, gastric ulcer	Rh	No	EaF	0.24

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Curcuma sp.7	C	HL	Si yaw kwaw	flatulence	Rh	De	potion	0.48
Hedychium flavum Roxb.*	W	MT	-	postpartum recovery	Rh	De	steam bath	0.06
Kaempferia parviflora Wall.	W	KP	Por sue	wound, gastric ulcer	Rh	Po, De	poultice, potion	0.46
ex Baker*		SM	Por sue	flatulence	Rh	De	potion	0.33
Kaempferia rotunda L.*	W	MW	Por sa ker	wound, gastric ulcer	Rh	Po, De	poultice, potion	0.27
Kaempferia sp.	W	PA	Sue	fever	Rh	De	potion	0.06
		MT	-	tonic, stomach ache	Rh	De	potion	0.17
Zingiber latifolium Theilade & Mood	W	HB	Po por	bone fracture, tonic	Rh	De	potion	0.11
Zingiber montanum (J.König)	C	KP	Blae ko bor	flatulence, postpartum recovery	Rh	De	potion	0.75
Link ex A.Dietr.		MT	Blae ko bor	flatulence	Rh	De	potion	0.92
		MW	Blae ko bor	flatulence	Rh	No	EaF	0.64
		HL	Blae ko bor	flatulence	Rh	No	EaF	0.81
		YT	Blae ko bor	flatulence, gastric ulcer	Rh	De	potion	0.83
Zingiber officinale Roscoe	C	KP	Sa ae	haematonic, cough	Rh	De	potion	0.75
		SM	Sa ae	diarrhea, flatulence, cough	Rh	De	potion	0.93
		MW	Sa ae	flatulence, cough	Rh	De, No	potion, Eaf	0.68
		HL	Sa ae	sore throat, cough	Rh	De	potion	0.71
		MT	Sa ae	sore throat, flatulence, muscular pain	Rh	De, No	potion, Eaf	0.39

Table 15 (continued)

Family name Scientific name	PT	VL	Karen name	Application	PU	PP	Route of administration	CI
Zingiber ottensii Valeton	C	HH	Blae ko sue	flatulence, muscular pain	Rh	De	potion	0.89
		MC	Blae ko sue	flatulence, carminative	Rh	De, No	potion, Eaf	0.64
		HB	Blae ko sue	flatulence	Rh	De	potion	0.89
		HM	Blae ko sue	flatulence	Rh	De, No	potion, Eaf	0.77
		KP	Blae ko sue	flatulence	Rh	De	potion	0.79
		SM	Blae ko sue	flatulence	Rh	De	potion	0.70
		MW	Blae ko sue	flatulence	Rh	De	potion	0.68
		HL	Blae ko sue	flatulence	Rh	De	potion	0.76

APPENDIX B

Table 16 Medicinal plants and their distribution, number of occurrence recorded, model performance (AUC) and the three most important environmental variables to the model in this study

No.	Species	Distribution	No. occurrence recorded	Model performance (AUC values)		The most important environmental variables (%contributor)					
				training	testing	1		2		3	
1	*Acacia catechu*	Tha, Lao, Chi	7	0.921	0.961	bio17	(42.2)	bio12	(41.4)	bio4	(8.3)
2	*Acanthopanax trifoliatum*	Tha, Vie, Chi	37	0.983	0.974	bio4	(47.4)	bio14	(12.5)	bio18	(8.5)
3	*Achyranthes aspera*	Tha, Cam, Chi	33	0.960	0.868	bio4	(26.7)	bio3	(17.3)	bio18	(14.1)
4	*Acorus calamus*	Tha, Vie, Phi, Chi	32	0.970	0.965	slope	(34.6)	bio14	(15.7)	bio5	(14.9)
5	*Ageratina adenophora*	Tha, Chi, Tai	13	0.822	0.674	bio2	(52.4)	bio14	(41.7)	bio4	(3.8)
6	*Ageratum conyzoides*	Tha, Ind, Vie, Phi, Chi	51	0.910	0.780	slope	(32.8)	bio6	(13.1)	HII	(9.1)
7	*Alisma plantago– aquatica*	Tha, Vie, Chi	8	0.789	0.830	bio14	(90.4)	bio12	(9.6)	-	-
8	*Alpinia malaccensis*	Tha, Mal, Vie	13	0.948	0.652	soil	(44.3)	bio18	(30.7)	slope	(9.3)
9	*Alstonia scholaris*	Tha, Ind, Lao, Chi	17	0.798	0.882	bio4	(90.7)	bio6	(3.8)	bio12	(3.6)
10	*Amalocalyx microlobus*	Tha, Cam, Lao, Vie	16	0.963	0.994	bio2	(39.7)	soil	(27.0)	bio14	(12.5)
11	*Amaranthus lividus*	Tha, Vie	12	0.964	0.983	soil	(41.9)	bio6	(24.8)	bio12	(15.4)
12	*Amaranthus spinosus*	Tha, Cam, Lao, Vie, Chi, Tai	41	0.941	0.934	bio4	(22.9)	bio17	(12.2)	bio2	(11.8)
13	*Anacolosa ilicoides*	Tha	5	0.960	0.999	soil	(42.1)	bio14	(20.7)	bio12	(16.8)
14	*Andrographis paniculata*	Tha, Cam, Mal, Chi	12	0.789	0.569	HII	(59.6)	slope	(20.9)	bio1	(18.6)
15	*Angiopteris evecta*	Tha, Ind, Vie	22	0.948	0.982	soil	(32.7)	slope	(25.8)	bio18	(12.4)
16	*Anogeissus acuminata*	Tha, Lao, Myn, Cam	16	0.944	0.885	soil	(37.7)	bio14	(33.2)	bio12	(24.9)
17	*Anredera cordifolia*	Tha, Chi, Tai	7	0.834	0.866	bio14	(81.6)	bio2	(14.8)	bio4	(2.0)
18	*Antidesma acidum*	Tha, Ind, Chi	35	0.986	0.940	bio18	(26.5)	slope	(20.1)	bio2	(17.3)
19	*Antidesma bunius*	Tha, Ind, Phi, Chi	29	0.930	0.955	bio3	(32.0)	bio18	(22.3)	slope	(15.4)
20	*Antidesma ghaesembilla*	Tha, Ind, Phi, Vie	46	0.921	0.956	soil	(38.9)	bio18	(14.5)	HII	(14.0)
21	*Antidesma sootepense*	Tha	16	0.983	0.988	bio2	(43.2)	soil	(19.5)	bio14	(11.1)

Table 16 (continued)

No.	Species	Distribution	No. occurrence recorded	Model performance (AUC values)		The most important environmental variables (%contributor)					
				training	testing	1		2		3	
22	*Aporosa villosa*	Tha, Lao, Myn, Cam	18	0.988	0.913	bio18	(25.7)	slope	(20.6)	soil	(20.5)
23	*Archidendron clypearia*	Tha, Ind, Mal, Vie, Chi	87	0.903	0.844	bio3	(40.6)	bio14	(20.9)	bio2	(10.0)
24	*Artocarpus gomezianus*	Tha, Vie	7	0.932	0.993	soil	(41.3)	bio14	(37.0)	bio12	(17.3)
25	*Artocarpus lakoocha*	Tha, Ind	8	0.934	0.819	soil	(42.3)	HII	(37.4)	bio18	(12.7)
26	*Asparagus filicinus*	Tha, Vie, Chi	29	0.977	0.967	slope	(46.8)	bio2	(20.6)	bio4	(6.3)
27	*Baliospermum calycinum*	Tha	17	0.996	0.996	bio2	(31.2)	bio18	(19.3)	soil	(15.2)
28	*Baliospermum solanifolium*	Tha, Ind, Vie, Lao	29	0.962	0.981	bio18	(26.7)	soil	(26.3)	bio14	(23.0)
29	*Belamcanda chinensis*	Tha, Chi	7	0.749	0.547	bio12	(69.7)	bio14	(29.1)	slope	(1.2)
30	*Berchemia floribunda*	Tha, Myn, Lao, Chi	17	0.917	0.822	bio6	(63.3)	bio4	(11.1)	soil	(10.9)
31	*Betula alnoides*	Tha, Vie, Lao, Chi	43	0.979	0.954	slope	(41.8)	bio4	(15.7)	bio2	(13.9)
32	*Bidens pilosa*	Tha, Vie, Ind, Phi, Chi	52	0.923	0.822	bio2	(29.3)	bo4	(19.3)	slope	(17.2)
33	*Biophytum umbraculum*	Tha	6	0.943	0.956	soil	(26.8)	bio18	(24.3)	bio14	(19.5)
34	*Blumea balsamifera*	Tha, Vie, Lao, Ind, Chi	38	0.934	0.806	soil	(28.6)	slope	(28.1)	bio18	(18.4)
35	*Breynia vitis-idaea*	Tha, Phi, Indo, Cam, Chi	37	0.978	0.950	bio3	(52.9)	bio14	(23.1)	bio4	(12.1)
36	*Buchanania cochinchinensis*	Tha	6	0.987	0.997	bio2	(48.6)	soil	(24.4)	bio14	(8.1)
37	*Buddleja asiatica*	Tha, Lao, Ind, Chi	61	0.980	0.872	bio2	(26.3)	slope	(23.8)	bio14	(17.6)
38	*Caesalpinia sappen*	Tha, Chi	28	0.983	0.904	bio4	(44.0)	bio14	(13.4)	HII	(11.9)
39	*Careya arborea*	Tha, Cam, Vie, Lao	11	0.875	0.913	bio14	(46.3)	soil	(39.4)	bio4	(13.0)
40	*Cassia siamea*	Tha, Cam, Ind, Chi	29	0.935	0.930	bio3	(36.7)	soil	(18.5)	bio14	(14.5)
41	*Cassia tora*	Tha, Cam, Ind, Chi	31	0.926	0.868	bio3	(30.1)	bio14	(25.7)	HII	(20.2)
42	*Cassytha filiformis*	Tha, Ind, Vie, Phi, Lao	27	0.938	0.737	soil	(34.8)	bio4	(18.3)	slope	(10.4)
43	*Celastrus paniculatus*	Tha, Ind, Chi	19	0.878	0.803	bio12	(31.8)	bio4	(28.6)	bio2	(22.6)
44	*Celosia argentea*	Tha, Vie, Chi	53	0.937	0.922	bio4	(34.1)	bio3	(17.0)	slope	(15.7)

Table 16 (continued)

No.	Species	Distribution	No. occurrence recorded	Model performance (AUC values)		The most important environmental variables (%contributor)					
				training	testing	1		2		3	
45	*Celtis timorensis*	Tha, Vie	5	0.929	0.921	soil	(42.4)	bio12	(26.6)	bio14	(23.6)
46	*Chloranthus erectus*	Tha, Ind, Vie	20	0.936	0.965	soil	(30.1)	bio4	(23.0)	bio14	(15.6)
47	*Chromolaena odorata*	Tha, Vie, Ind, Mal, Chi	36	0.939	0.907	bio2	(25.3)	bio14	(18.4)	bio18	(9.6)
48	*Cinamomum iners*	Tha, Cam, Ind	13	0.902	0.625	bio18	(45.6)	soil	(37.1)	bio14	(12.6)
49	*Cinnamomum camphora*	Tha, Chi	12	0.916	0.755	bio3	(31.1)	HII	(30.2)	bio12	(22.1)
50	*Cissus bicolor*	Tha, Ind	20	0.981	0.983	bio18	(33.0)	slope	(27.7)	soil	(18.2)
51	*Cissus hastata*	Tha, Ind, Mal	11	0.854	0.861	bio4	(34.3)	soil	(33.0)	bio18	(32.4)
52	*Clausena excavata*	Tha, Ind, Cam, Vie, Lao	29	0.918	0.712	soil	(51.0)	bio3	(14.5)	slope	(11.2)
53	*Cleidion javanicum*	Tha, Mal, Ind, Vie	67	0.916	0.878	soil	(35.1)	bio18	(28.0)	bio4	(12.1)
54	*Clerodendrum japonicum*	Tha, Lao, Vie, Chi	11	0.792	0.950	bio14	(46.9)	bio15	(39.9)	bio2	(12.4)
55	*Clerodendrum colebrookianum*	Tha, Lao, Vie, Chi	25	0.986	0.969	slope	(42.5)	bio3	(17.2)	bio14	(15.8)
56	*Clerodendrum paniculatum*	Tha, Mal	6	0.918	0.609	bio18	(46.5)	soil	(439.4)	bio14	(9.5)
57	*Clerodendrum serratum*	Tha, Vie, Chi	28	0.977	0.844	soil	(25.3)	slope	(18.3)	bio14	(16.5)
58	*Coix lacryma-jobi*	Tha, Vie, Ind, Mal, Chi	57	0.921	0.882	slope	(29.5)	bio14	(20.5)	bio18	(13.1)
59	*Congea tomentosa*	Tha, Lao, Vie	6	0.868	0.855	soil	(53.3)	bio14	(31.9)	bio18	(8.4)
60	*Costus speciosus*	Tha, Ind, Mal, Phi, Vie, Chi	41	0.931	0.891	bio2	(24.9)	bio17	(15.2)	soil	(14.8)
61	*Cratoxylum formosum*	Tha, Myn, Lao, Cam	7	0.958	0.988	soil	(39.3)	bio12	(38.2)	bio17	(9.0)
62	*Crinum asiaticum*	Tha Chi	6	0.803	0.548	bio5	(89.5)	bio3	(10.5)	slope	(0.1)
63	*Croton kongensis*	Tha, Lao, Vie	11	0.932	0.827	bio14	(39.4)	soil	(35.2)	bio2	(14.5)
64	*Croton robustus*	Tha, Myn	9	0.984	0.968	bio2	(43.4)	soil	(21.4)	bio18	(14.6)
65	*Croton roxburghii*	Tha	42	0.988	0.993	bio18	(24.4)	bio2	(19.5)	soil	(17.3)
66	*Curcuma aeruginosa*	Tha, Lao	8	0.925	0.803	bio18	(42.0)	soil	(37.8)	bio14	(12.0)

Table 16 (continued)

No.	Species	Distribution	No. occurrence recorded	Model performance (AUC values)		The most important environmental variables (%contributor)					
				training	testing	1		2		3	
67	*Curcuma sessilis*	Tha	8	0.925	0.993	soil	(40.0)	bio18	(40.0)	bio14	(10.3)
68	*Cuscuta chinensis*	Tha, Chi, Tai	19	0.895	0.957	bio6	(457.7)	slope	(16.6)	bio4	(11.8)
69	*Cyclea barbata*	Tha, Ind	8	0.984	0.995	bio12	(39.0)	soil	(27.0)	bio14	(15.9)
70	*Cymbidium bicolor*	Tha, Ind, May, Lao	5	0.757	0.703	soil	(99.5)	bio2	(0.3)	bio18	(0.2)
71	*Dalbergia glomeriflora*	Tha, Myn, Lao	6	0.957	0.985	soil	(38.5)	bio14	(29.0)	HII	(16.4)
72	*Dendrocalamus brandisii*	Tha, Myn	11	0.978	0.791	bio2	(48.0)	bio5	(17.5)	soil	(15.5)
73	*Dendrocalamus hamiltonii*	Tha	11	0.990	0.995	bio2	(32.8)	soil	(18.7)	bio18	(12.1)
74	*Dendrocalamus strictus*	Tha, Myn	10	0.973	0.978	bio2	(31.0)	soil	(21.3)	bio14	(16.3)
75	*Dendrocnide stimulans*	Tha, Ind, Mal, Phi	14	0.914	0.948	soil	(46.4)	bio4	(31.0)	bio2	(9.1)
76	*Dendrophthoe pentandra*	Tha, Ind, Mal, Chi	19	0.785	0.775	bio4	(52.8)	bio2	(31.0)	soil	(9.4)
77	*Desmodium oblongum*	Tha, Myn, Lao, Vie, Cam	16	0.967	0.950	bio2	(47.9)	bio4	(17.4)	bio14	(10.7)
78	*Desmodium renifolium* var. *oblatum*	Tha, Myn, Chi	11	0.963	0.994	bio2	(70.9)	bio5	(17.2)	bio4	(5.9)
79	*Desmodium renifolium* var. *renifolium*	Tha, Myn, Chi	8	0.976	0.985	bio2	(34.3)	bio5	(16.7)	soil	(15.6)
80	*Dillenia parviflora*	Tha, Myn	11	0.992	0.938	bio2	(40.4)	soil	(18.2)	bio12	(14.0)
81	*Dillenia pentagyna*	Tha, Ind, Cam, Vie	11	0.891	0.652	bio18	(60.2)	soil	(19.9)	bio4	(19.9)
82	*Dioscorea hispida*	Tha, Ind, Cam	21	0.944	0.824	soil	(29.7)	bio18	(25.0)	bio12	(18.4)
83	*Dipterocarpus obtusifolius*	Tha, Lao, Vie	24	0.968	0.934	bio14	(31.0)	soil	(27.5)	bio4	(12.8)
84	*Dischidia imbricata*	Tha, Vie, Ind	10	0.885	0.669	soil	(41.1)	bio14	(28.5)	bio18	(27.7)
85	*Dischidia major*	Tha, Vie, Ind	7	0.983	0.995	bio12	(40.8)	soil	(27.3)	bio14	(13.5)
86	*Dischidia nummularia*	Tha, Vie, Lao, Ind, Mal	19	0.959	0.687	soil	(30.4)	bio14	(30.1)	bio4	(16.6)

Table 16 (continued)

No.	Species	Distribution	No. occurrence recorded	Model performance (AUC values)		The most important environmental variables (%contributor)					
				training	testing	1		2		3	
87	*Disporum calcaratum*	Tha, Vie	6	0.926	0.800	soil	(44.2)	bio14	(35.0)	bio17	(9.4)
88	*Drynaria quercifolia*	Tha, Ind, Mal, Phi	47	0.920	0.968	bio4	(37.0)	HII	(30.2)	soil	(10.2)
89	*Duabanga grandiflora*	Tha, Vie, Chi	18	0.967	0.996	bio2	(32.2)	slope	(18.6)	bio12	(14.2)
90	*Eclipta prostata*	Tha, Vie, Ind	17	0.873	0.931	HII	(49.7)	bio4	(28.9)	bio6	(6.1)
91	*Elephantopus scaber*	Tha, Vie, Cam, Lao, Chi	45	0.961	0.897	bio4	(28.3)	slope	(16.5)	bio14	(14.8)
92	*Eleusine indica*	Tha, Ind, Vie, Chi	29	0.909	0.718	slope	(26.8)	bio17	(21.3)	bio3	(17.8)
93	*Eleutherine americana*	Tha	13	0.990	0.995	bio2	(23.7)	soil	(22.9)	bio12	(20.8)
94	*Embelia sessiliflora*	Tha, Chi	24	0.984	0.837	bio2	(37.6)	slope	(23.4)	bio18	(11.9)
95	*Embelia tsjeriamcottam*	Tha	10	0.987	0.992	bio18	(25.8)	soil	(24.3)	bio2	(17.3)
96	*Engelhardtia spicata*	Tha, Lao, Chi	16	0.932	0.950	bio4	(31.9)	bio6	(28.3)	bio14	(18.3)
97	*Ensete glaucum*	Tha	6	0.992	0.999	bio2	(36.6)	soil	(18.3)	bio12	(14.1)
98	*Entada rheedii*	Tha, Mal, Ind, Lao, Chi	14	0.959	0.919	bio4	(52.0)	bio6	(33.9)	bio18	(7.4)
99	*Equisetum debile*	Tha, Ind, Mal, Phi, Vie	33	0.928	0.945	soil	(34.5)	slope	(23.8)	bio14	(16.0)
100	*Erythrina subumbrans*	Tha, Lao, Vie	8	0.968	0.823	bio2	(44.4)	soil	(31.3)	bio14	(11.7)
101	*Euphorbia heterophylla*	Tha, Ind, Phi, Chi	39	0.959	0.891	bio4	(20.4)	HII	(17.3)	bio12	(12.2)
102	*Euphorbia hirta*	Tha, Ind, Phi, Vie, Chi	47	0.866	0.762	bio3	(30.0)	HII	(21.7)	slope	(16.9)
103	*Eurycoma longifolia*	Tha, Ind, Mal, Cam, Vie	23	0.954	0.809	soil	(37.9)	bio18	(16.4)	bio4	(15.6)
104	*Falconeria insignis*	Tha	8	0.941	0.939	soil	(38.0)	bio14	(34.0)	bio12	(23.0)
105	*Fernandoa adenophylla*	Tha	6	0.968	0.965	bio2	(45.4)	soil	(27.5)	bio14	(12.4)
106	*Ficus auriculata*	Tha, Lao, Chi	40	0.980	0.974	slope	(30.4)	bio2	(25.9)	bio14	(14.3)
107	*Ficus hispida*	Tha, Lao, Vie, Chi	21	0.973	0.872	bio14	(27.7)	bio17	(15.4)	bio1	(11.0)
108	*Flacourtia indica*	Tha, Ind, Vie, Lao	15	0.881	0.933	soil	(49.5)	bio18	(19.4)	bio4	(9.4)

Table 16 (continued)

No.	Species	Distribution	No. occurrence recorded	Model performance (AUC values)		The most important environmental variables (%contributor)					
				training	testing	1		2		3	
109	*Flacourtia jangomas*	Tha, Cam	5	0.976	0.989	bio12	(27.2)	soil	(25.0)	bio18	(21.5)
110	*Flacourtia rukam*	Tha, Ind, Mal, Lao	10	0.826	0.678	bio4	(92.6)	bio18	(5.3)	bio1	(2.1)
111	*Flemingia lineata*	Tha, Ind, Chi	17	0.971	0.991	bio2	(45.3)	bio12	(13.2)	bio4	(12.1)
112	*Flemingia macrophylla*	Tha, Ind, Mal, Vie, Chi	55	0.880	0.838	bio4	(53.1)	bio14	(12.1)	bio2	(11.7)
113	*Flemingia stricta*	Tha	5	0.972	0.990	bio2	(34.0)	bio5	(23.6)	bio14	(19.0)
114	*Garcinia xanthochymus*	Tha, Ind	5	0.841	0.789	HII	(33.6)	bio3	(26.5)	bio5	(23.3)
115	*Garuga pinnata*	Vie, Tha	7	0.918	0.901	soil	(45.5)	bio14	(35.0)	bio2	(13.0)
116	*Gigantochloa albociliata*	Tha, Myn, Lao	11	0.969	0.938	bio2	(38.4)	soil	(21.8)	bio14	(18.7)
117	*Girardinia diversifolia*	Tha, Ind, Vie, Chi	13	0.859	0.661	bio6	(42.6)	soil	(37.2)	bio14	(15.7)
118	*Gmelina arborea*	Tha, Ind	22	0.987	0.986	bio18	(29.8)	soil	(17.9)	slope	(16.0)
119	*Gymnopetalum integrifolim*	Tha, Ind	11	0.916	0.805	bio2	(43.0)	soil	(39.5)	bio5	(12.6)
120	*Gynura pseudochina*	Tha, Vie, Chi	20	0.980	0.996	slope	(23.5)	soil	(17.4)	bio18	(15.5)
121	*Harrisonia perforata*	Tha, Ind, Mal, Lao, Vie	16	0.941	0.875	bio18	(38.9)	soil	(35.5)	bio14	(11.0)
122	*Hedychium flavum*	Tha, Chi	6	0.815	0.724	bio14	(45.6)	bio2	(37.2)	bio17	(17.1)
123	*Helicia nilagirica*	Tha, Myn, Chi	17	0.965	0.919	bio12	(27.5)	bio2	(20.8)	bio4	(18.9)
124	*Heliciopsis terminalis*	Tha, Lao, Chi	5	0.985	0.999	soil	(32.7)	bio14	(24.9)	bio2	(19.8)
125	*Helicteres hirsuta*	Tha	7	0.908	0.992	soil	(54.2)	bio14	(19.2)	bio18	(16.6)
126	*Heliotropium indicum*	Tha, Vie, Cam, Ind	14	0.893	0.841	bio4	(31.6)	HII	(27.3)	bio17	(14.6)
127	*Heteropanax fragrans*	Tha, Lao, Vie	7	0.919	0.797	bio14	(47.1)	soil	(46.3)	bio4	(3.3)
128	*Hiptage benghalensis*	Tha, Ind, Chi	11	0.865	0.942	bio18	(32.8)	bio14	(27.0)	bio4	(25.1)
129	*Imperata cylindrica*	Tha, Ind, Phi, Chi	49	0.974	0.788	slope	(23.3)	bio4	(16.1)	bio3	(12.5)
130	*Indigofera caloneura*	Tha, Vie	8	0.991	0.991	bio2	(53.3)	soil	(22.6)	bio4	(7.2)

Table 16 (continued)

No.	Species	Distribution	No. occurrence recorded	Model performance (AUC values)		The most important environmental variables (%contributor)					
				training	testing	1		2		3	
131	*Inula cappa*	Tha, Chi	37	0.962	0.948	slope	(26.6)	bio2	(23.0)	bio4	(20.3)
132	*Jasminum funale*	Tha	6	0.986	0.997	bio12	(49.8)	bio1	(17.5)	bio18	(16.9)
133	*Justicia adhatoda*	Tha, Chi, Tai	5	0.853	0.729	HII	(42.2)	-	-	-	-
134	*Kaempferia parviflora*	Myn, Tha, Vie	6	0.969	0.761	soil	(32.7)	bio17	(31.9)	bio2	(18.9)
135	*Kaempferia rotunda*	Tha, Lao, Cam	8	0.935	0.970	soil	(39.2)	bio14	(35.4)	bio2	(13.3)
136	*Kopsia arborea*	Tha, Vie, Ind	9	0.892	0.953	soil	(65.7)	bio5	(19.2)	bio2	(10.0)
137	*Lasia spinosa*	Tha, Ind, Mal, Vie	16	0.918	0.981	soil	(39.5)	bio2	(29.1)	bio12	(11.5)
138	*Leea indica*	Tha, Ind, Phi, Vie	59	0.930	0.920	soil	(36.5)	bio14	(15.7)	bio2	(13.3)
139	*Lilium primulinum*	Tha, Vie, Chi	5	0.974	0.988	soil	(42.3)	bio14	(27.1)	bio12	(26.4)
140	*Lindenbergia indica*	Tha, Chi	7	0.940	0.908	soil	(82.5)	HII	(8.2)	bio15	(7.5)
141	*Litsea cubeba*	Tha, Vie, Lao, Chi	58	0.931	0.914	bio6	(27.6)	bio14	(20.7)	soil	(10.6)
142	*Lophopetalum wallichii*	Tha, Myn, Lao, Cam	1	0.934	0.923	soil	(37.7)	bio14	(27.0)	bio2	(17.9)
143	*Lycopodium cernuum*	Tha, Ind, Mal, Phi, Chi	91	0.921	0.824	bio4	(24.9)	soil	(19.5)	bio14	(14.7)
144	*Lygodium flexuosum*	Tha, Ind, Mal, Phi, Vie	52	0.881	0.895	soil	(28.8)	HII	(26.7)	bio3	(17.1)
145	*Markhamia stipulata*	Tha, Lao, Cam	19	0.954	0.950	soil	(29.3)	bio14	(22.5)	bio18	(223)
146	*Melastoma malabathricum*	Tha, Ind, Mal, Vie, Chi	55	0.874	0.903	bio14	(30.8)	bio3	(27.3)	bio12	(10.3)
147	*Melastoma normale*	Tha, Ind, Mal, Vie, Chi	32	0.956	0.990	bio6	(27.7)	bio4	(20.0)	bio14	(12.7)
148	*Melia azedarach*	Tha, Ind, Phi, Chi	20	0.778	0.811	bio2	(39.3)	bio12	(26.5)	slope	(23.4)
149	*Melicope pteleifolia*	Chi, Tha, Myn, Cam	24	0.961	0.979	bio6	(24.6)	bio4	(15.2)	bio14	(12.2)
150	*Microtoena insuavis*	Tha, Vie, Chi	9	0.919	0.609	bio14	(38.3)	bio2	(22.5)	bio12	(14.6)
151	*Miliusa thorelii*	Tha	18	0.991	0.977	bio18	(27.8)	bio2	(19.4)	soil	(19.0)
152	*Miliusa velutina*	Tha	6	0.971	0.895	bio12	(40.0)	soil	(29.8)	bio14	(15.2)

Table 16 (continued)

No.	Species	Distribution	No. occurrence recorded	Model performance (AUC values)		The most important environmental variables (%contributor)					
				training	testing	1		2		3	
153	*Millettia extensa*	Tha	5	0.991	0.975	bio2	(46.7)	soil	(18.8)	bio12	(9.9)
154	*Mimosa pigra*	Tha, Ind, Lao	7	0.713	0.920	soil	(98.4)	bio12	(1.6)	-	-
155	*Mimosa pudica*	Tha, Ind, Phi, Vie, Chi	25	0.959	0.982	bio2	(29.2)	slope	(24.0)	bio4	(14.2)
156	*Mitragyna rotundifolia*	Tha, Myn, Cam	5	0.967	0.779	bio14	(35.8)	soil	(26.3)	bio18	(17.5)
157	*Molineria latifolia*	Tha, Mal	13	0.893	0.737	bio4	(37.7)	soil	(26.1)	bio18	(26.1)
158	*Morinda angustifolia*	Tha, Myn	11	0.989	0.986	bio2	(48.8)	soil	(19.9)	bio12	(7.6)
159	*Morus macroura*	Tha, Vie, Chi	14	0.762	0.828	bio14	(76.6)	bio12	(22.4)	bio18	(1.0)
160	*Muehlenbeckia platyclados*	Tha, Myn, Lao, Chi	18	0.994	0.988	bio12	(27.0)	soil	(21.5)	bio2	(15.3)
161	*Mucuna macrocarpa*	Tha	6	0.977	0.878	slope	(23.6)	bio18	(20.0)	bio14	(19.2)
162	*Mussaenda sanderiana*	Tha	21	0.995	0.988	bio2	(37.7)	bio18	(15.5)	soil	(14.8)
163	*Ochna integerrima*	Tha, Cam, Lao, Vie	15	0.934	0.999	soil	(38.4)	bio14	(30.3)	HII	(10.2)
164	*Orthosiphon grandiflorus*	Tha	5	0.989	0.988	bio2	(53.4)	bio5	(20.9)	soil	(12.5)
165	*Oxalis acetosella*	Tha, Chi	9	0.921	0.943	slope	(55.9)	bio14	(20.3)	bio17	(15.0)
166	*Paederia foetida*	Tha, Ind, Vie, Chi	59	0.939	0.806	slope	(20.7)	bio17	(14.3)	bio4	(13.8)
167	*Paris polyphylla*	Chi, Myn, Tha, Vie	42	0.971	0.973	slope	(42.9)	bio4	(14.1)	soil	(11.1)
168	*Phlogacanthus curviflorus*	Tha	18	0.978	0.992	soil	(32.7)	bio6	(27.9)	bio12	(21.7)
169	*Phrynium pubinerve*	Tha, Ind, Mal, Lao	22	0.937	0.973	soil	(34.3)	bio18	(21.8)	slope	(15.9)
170	*Phyllanthus amarus*	Tha, Ind, Cam	8	0.963	0.568	bio2	(27.6)	bio14	(23.2)	soil	(21.4)
171	*Phyllanthus emblica*	Tha, Ind, Cam, Lao, Vie, Chi	51	0.927	0.895	bio4	(18.1)	bio3	(17.0)	slope	(12.9)
172	*Phyllodium pulchellum*	Tha, Ind, Phi, Chi	29	0.966	0.911	bio14	(24.9)	bio4	(21.4)	bio5	(19.8)
173	*Phyllodium vestitum*	Tha	5	0.936	0.985	soil	(39.0)	bio18	(22.5)	bio14	(20.4)
174	*Picrasma javanica*	Tha, Indo	15	0.866	0.736	soil	(54.6)	bio18	(26.2)	slope	(9.2)

Table 16 (continued)

No.	Species	Distribution	No. occurrence recorded	Model performance (AUC values)		The most important environmental variables (%contributor)					
				training	testing	1		2		3	
175	*Pinus kesiya*	Tha, Vie, Phi, Chi	26	0.983	0.996	slope	(37.5)	bio18	(18.9)	soil	(17.6)
176	*Piper interruptum*	Tha	5	0.993	0.998	bio2	(52.5)	bio5	(24.9)	soil	(6.3)
177	*Piper retrofractum*	Tha, Phi	5	0.924	0.974	soil	(39.1)	bio18	(38.3)	bio14	(20.6)
178	*Plantago major*	Tha, Ind, Vie, Chi	51	0.971	0.748	slope	(30.2)	bio4	(23.7)	bio2	(11.4)
179	*Platycerium wallichii*	Tha, Myn	5	0.995	0.988	bio2	(41.8)	bio12	(17.6)	soil	(16.9)
180	*Plumbago indica*	Tha, Lao, Chi	9	0.971	0.955	soil	(26.6)	bio12	(22.6)	bio2	(17.6)
181	*Plumbago zeylanica*	Tha, Lao, Chi	12	0.900	0.942	bio12	(22.4)	bio14	(21.7)	soil	(15.9)
182	*Polygala crotalarioides*	Tha, Myn	5	0.998	0.991	bio2	(36.3)	soil	(20.6)	bio12	(16.1)
183	*Polygonum paleaceum*	Tha, Chi	14	0.965	0.971	bio6	(39.2)	slope	(31.3)	bio4	(14.0)
184	*Pothos scandens*	Tha, Vie, Lao, Cam	23	0.956	0.999	soil	(39.2)	bio14	(20.2)	bio5	(11.4)
185	*Prunus cerasoides*	Tha, Myn, Chi	36	0.983	0.984	slope	(38.6)	bio14	(18.9)	bio3	(11.8)
186	*Quisqualis indica*	Tha, Ind, Vie, Chi	14	0.817	0.956	bio12	(53.7)	HII	(32.1)	slope	(8.7)
187	*Rauvolfia serpentina*	Tha, Lao	6	0.967	0.951	bio2	(36.2)	bio12	(19.4)	bio5	(15.3)
188	*Rauvolfia verticillata*	Tha, Lao, Ind, Mal, Vie, Chi	30	0.948	0.913	bio4	(29.8)	HII	(13.5)	bio1	(12.3)
189	*Rhinacanthus nasutus*	Tha, Vie, Lao, Chi	40	0.950	0.838	bio4	(29.8)	slope	(17.9)	HII	(12.8)
190	*Rhus javanica*	Tha, Vie, Lao, Tai	17	0.976	0.858	bio4	(41.2)	bio6	(24.9)	bio14	(14.0)
191	*Rubus alceifolius*	Tha, Ind	9	0.888	0.635	soil	(52.1)	bio14	(43.5)	slope	(3.1)
192	*Rubus rosifolius*	Tha, Ind, Vie, Phi, Chi	22	0.921	0.842	bio4	(21.6)	bio14	(19.3)	bio6	(18.3)
193	*Salix tetrasperma*	Tha, Vie, Lao, Myn, Chi	16	0.927	0.862	bio14	(30.0)	bio2	(28.5)	bio4	(25.7)
194	*Sambucus javanica*	Tha, Lao, Vie, Ind	27	0.972	0.888	soil	(27.3)	slope	(20.1)	bio18	(13.9)
195	*Sambucus simpsonii*	Tha	9	0.992	0.997	bio2	(43.8)	soil	(20.1)	HII	(7.6)
196	*Sapindus rarak*	Tha	14	0.988	0.984	bio2	(34.4)	soil	(20.6)	bio18	(18.9)

Table 16 (continued)

No.	Species	Distribution	No. occurrence recorded	Model performance (AUC values)		The most important environmental variables (%contributor)					
				training	testing	1		2		3	
197	*Saurauia napaulensis*	Chi, Myn, Tha, Vie, Lao	32	0.961	0.937	slope	(47.7)	bio4	(29.0)	bio17	(8.2)
198	*Schefflera leucantha*	Tha, Chi	28	0.997	0.944	slope	(42.3)	bio3	(11.2)	soil	(9.2)
199	*Schefflera venulosa*	Tha, Chi	5	0.847	0.828	bio14	(48.2)	bio2	(47.5)	HII	(3.5)
200	*Schima wallichii*	Tha, Ind, Cam, Vie, Lao, Chi	72	0.939	0.946	bio3	(32.0)	bio14	(31.7)	bio18	(9.4)
201	*Schleichera oleosa*	Tha, Ind, Vie, Cam	25	0.976	0.956	bio18	(31.8)	soil	(19.9)	slope	(18.4)
202	*Scoparia dulcis*	Tha, Lao, Vie	15	0.944	0.920	soil	(33.8)	bio2	(27.3)	bio14	(22.8)
203	*Securinega leucopyrus*	Tha	6	0.981	0.968	bio2	(62.9)	soil	(19.2)	bio5	(11.5)
204	*Senna alata*	Tha, Cam, Vie, Lao, Ind	21	0.966	0.977	bio18	(35.9)	soil	(23.0)	HII	(10.5)
205	*Senna occidentalis*	Tha, Cam, Vie, Ind, Chi	20	0.926	0.757	bio14	(25.8)	bio3	(22.0)	bio12	(21.8)
206	*Shorea obtusa*	Tha, Myn, Vie	26	0.980	0.988	bio18	(26.9)	bio2	(18.5)	soil	(17.0)
207	*Shorea roxburghii*	Tha, Cam, Vie	17	0.955	0.920	soil	(30.2)	bio14	(28.3)	bio18	(25.4)
208	*Sida acuta*	Tha, Ind, Cam, Vie, Chi	22	0.976	0.783	bio4	(26.4)	bio18	(21.4)	slope	(18.2)
209	*Sida rhombifolia*	Tha, Ind, Cam, Vie, Chi	27	0.832	0.669	soil	(32.6)	bio14	(20.8)	bio12	(17.0)
210	*Smilax griffithii*	Tha, Myn	5	0.995	0.974	bio2	(44.3)	soil	(23.3)	bio4	(9.6)
211	*Smilax ovalifolia*	Chi, Myn, Tha, Lao	5	0.817	0.955	bio17	(61.0)	bio5	(37.6)	bio12	(1.4)
212	*Smilax verticalis*	Tha, Mynr, Vie	7	0.988	0.990	bio2	(31.7)	soil	(21.0)	bio18	(18.6)
213	*Solanum erianthum*	Tha, Cam, Vie, Lao, Phi, Chi	46	0.973	0.923	slope	(30.6)	bio14	(14.7)	bio3	(13.8)
214	*Spondias pinnata*	Tha, Ind, Chi	22	0.987	0.940	bio2	(39.5)	slope	(14.4)	bio18	(13.5)
215	*Stachytarpheta jamaicensis*	Tha, Ind, Cam, Chi, Vie	11	0.796	0.610	bio18	(51.4)	bio1	(48.6)	bio12	(0.1)
216	*Strobilanthes cusia*	Tha, Vie	21	0.990	0.966	bio4	(38.6)	bio2	(18.1)	bio14	(11.1)
217	*Strychnos nux-blanda*	Tha, Vie, Cam, Lao	6	0.934	0.886	bio14	(45.7)	soil	(36.7)	Bio18	(16.9)
218	*Symplocos racemosa*	Chi, Myn, Tha, Lao, Vie	15	0.913	0.950	bio4	(42.8)	bio14	(31.4)	bio6	(21.4)

Table 16 (continued)

No.	Species	Distribution	No. occurrence recorded	Model performance (AUC values)		The most important environmental variables (%contributor)					
				training	testing	1		2		3	
219	*Tabernaemontana pandacaqui*	Tha, Vie, Ind, Phi	23	0.914	0.905	bio4	(28.6)	HII	(27.8)	bio2	(14.4)
220	*Tectona grandis*	Tha, Ind, Chi	10	0.869	0.972	bio2	(59.0)	bio5	(29.4)	bio1	(4.5)
221	*Terminalia bellirica*	Tha	6	0.931	0.964	soil	(39.0)	bio18	(20.8)	bio14	(19.1)
222	*Terminalia chebula*	Tha, Chi	16	0.975	0.921	bio2	(47.2)	bio12	(12.3)	bio14	(9.4)
223	*Thunbergia coccinea*	Tha, Lao, Vie	8	0.928	0.935	soil	(45.2)	bio14	(19.6)	bio2	(18.9)
224	*Thunbergia laurifolia*	Tha, Lao	21	0.984	0.997	bio2	(23.4)	bio18	(19.2)	soil	(18.4)
225	*Thyrsostachys siamensis*	Tha	6	0.986	0.977	bio2	(51.6)	soil	(21.3)	bio14	(7.0)
226	*Thysanolaena maxima*	Tha, Ind, Vie, Chi	28	0.937	0.977	bio18	(29.9)	slope	(16.9)	bio2	(13.7)
227	*Tinospora crispa*	Tha, Vie, Cam	13	0.995	0.933	bio12	(37.1)	soil	(18.0)	HII	(13.4)
228	*Tithonia diversifolia*	Tha, Ind, Lao, Vie	10	0.946	0.987	soil	(31.9)	bio12	(35.1)	bio14	(25.2)
229	*Trevesia palmata*	Tha, Lao, Vie, Chi	29	0.980	0.991	slope	(28.3)	soil	(20.9)	bio14	(15.9)
230	*Trichosanthes pubera*	Tha, Ind	13	0.948	0.901	soil	(34.6)	bio18	(21.7)	bio12	(12.8)
231	*Tristaniopsis burmanica*	Tha, Lao	7	0.938	0.758	soil	(41.3)	bio14	(36.7)	bio18	(11.8)
232	*Usnea siamensis*	Tha	7	0.998	0.938	bio2	(31.5)	bio12	(23.4)	HII	(11.9)
233	*Vaccinium sprengelii*	Tha, Vie, Chi	64	0.976	0.976	slope	(45.4	bio14	(18.2)	HII	(12.9)
234	*Ventilago denticulata*	Tha, Myn	6	0.879	0.906	bio18	(45.0)	soil	(39.7)	bio14	(10.1)
235	*Verbena officinalis*	Tha, Vie, Chi	40	0.971	0.931	slope	(39.1)	bio14	(12.9)	bio4	(12.6)
236	*Vernonia volkameriaefolia*	Tha	10	0.991	0.977	bio2	(47.6)	soil	(20.9)	bio4	(8.9)
237	*Viburnum sambucinum*	Tha, Ind, Mal, Cam, Vie	19	0.940	0.992	bio4	(35.1)	bio1	(22.2)	soil	(14.7)
238	*Viscum articulatum*	Tha, Ind, Mal, Lao, Chi	20	0.766	0.696	HII	(55.3)	bio5	(25.2)	slope	(16.5)
239	*Vitex peduncularis*	Tha, Myn	5	0.967	0.991	bio2	(57.9)	soil	(21.9)	bio4	(6.6)

Table 16 (continued)

No.	Species	Distribution	No. occurrence recorded	Model performance (AUC values)		The most important environmental variables (%contributor)					
				training	testing	1		2		3	
240	*Vitex trifolia*	Tha, Ind, Mal, Chi	29	0.926	0.766	bio2	(38.7)	bio4	(16.1)	bio3	(11.9)
241	*Xantolis cambodiana*	Tha, Lao, Cam	6	0.998	0.997	bio2	(35.4)	bio12	(21.6)	bio4	(16.0)
242	*Xylia xylocarpa*	Tha, Cam	11	0.957	0.946	soil	(31.1)	bio18	(28.4)	bio14	(24.2)
243	*Ziziphus cambodiana*	Tha, Vie, Cam	5	0.969	0.994	soil	(31.4)	bio18	(26.5)	bio14	(11.2)
244	*Ziziphus oenoplia*	Tha, Cam, Lao	9	0.872	0.776	soil	(46.2)	bio14	(42.2)	bio1	(8.7)

APPENDIX C

Table 17 Percentage of suitable area, species loss, species gain, turnover and IUCN status of plant species in northern Thailand (NT) and Chiang Mai province (CM). The values were shown in A1B and A2 scenario by present, 2050 and 2080.

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
1	*Acacia catechu*	99.23	99.41												
	2050 A1B			96.62	99.41	-2.63	0.00	2.63	0.00	0.00	0.00	2.63	0.00	NE	LC
	2050 A2			94.61	98.98	-4.65	-0.43	4.66	0.43	0.01	0.00	4.67	0.43	NE	NE
	2080 A1B			93.55	99.41	-4.65	0.00	5.73	0.00	0.00	0.00	5.73	0.00	NE	LC
	2080 A2			87.96	95.54	-4.65	-3.90	11.36	3.90	0.00	0.00	11.36	3.90	NE	NE
2	*Acanthopanax trifoliatum*	51.89	94.71												
	2050 A1B			12.02	44.71	-76.84	-52.80	76.84	52.80	0.01	0.00	76.85	52.80	EN	EN
	2050 A2			14.18	43.70	-72.68	-53.86	72.68	53.86	0.00	0.00	72.68	53.86	EN	EN
	2080 A1B			0.93	2.55	-98.21	-97.31	98.21	97.31	0.00	0.00	98.21	97.31	CR	CR
	2080 A2			2.62	10.09	-94.95	-89.35	94.95	89.35	0.00	0.00	94.95	89.35	CR	CR
3	*Achyranthes aspera*	71.27	99.41												
	2050 A1B			45.86	93.03	-35.65	-6.42	35.84	93.58	0.19	0.00	35.96	93.58	VN	NT
	2050 A2			46.17	90.27	-35.22	-9.20	35.73	9.20	0.51	0.00	36.05	9.20	VN	NT
	2080 A1B			23.38	32.61	-67.19	-67.20	68.20	67.20	1.01	0.00	68.52	67.20	EN	EN
	2080 A2			62.91	94.39	-11.74	-5.05	17.73	5.05	6.00	0.00	22.39	5.05	NE	NE
4	*Acorus calamus*	60.80	97.05												
	2050 A1B			47.38	93.31	-22.06	-3.86	22.50	6.29	0.44	0.00	22.85	6.29	NE	NE
	2050 A2			46.32	91.69	-23.81	-5.53	24.26	7.96	0.45	0.00	24.60	7.96	NE	NE
	2080 A1B			29.22	47.46	-51.94	-51.10	51.98	53.53	0.04	0.00	52.00	53.53	EN	EN
	2080 A2			51.54	92.81	-15.22	-4.37	16.05	6.80	0.83	0.00	16.75	6.80	NE	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
5	*Ageratina adenophora*	98.42	99.37												
	2050 A1B			99.46	99.94	1.05	0.58	0.00	0.00	1.05	0.52	1.04	0.52	LC	LC
	2050 A2			99.59	99.89	1.18	0.52	0.01	0.00	0.63	0.52	0.63	0.52	LC	LC
	2080 A1B			99.78	100.00	1.38	0.63	0.00	0.00	1.38	0.63	1.36	0.63	LC	LC
	2080 A2			98.37	99.95	-0.05	0.58	0.00	0.00	1.18	0.58	1.17	0.58	NT	LC
6	*Ageratum conyzoides*	57.23	97.50												
	2050 A1B			26.33	64.46	-53.99	-33.88	53.99	33.88	0.00	0.00	53.99	33.88	EN	VN
	2050 A2			29.99	65.16	-47.60	-33.17	47.60	33.17	0.00	0.00	47.60	33.17	VN	VN
	2080 A1B			12.79	39.26	-77.64	-59.74	77.64	59.74	0.00	0.00	77.64	59.74	EN	EN
	2080 A2			20.08	58.84	-64.91	-39.65	64.91	39.65	0.00	0.00	64.91	39.65	EN	VN
7	*Alisma plantago–aquatica*	89.36	85.63												
	2050 A1B			86.29	83.52	-3.43	-2.46	4.18	2.46	0.75	0.00	4.90	2.46	NE	NE
	2050 A2			88.16	86.29	-1.34	0.77	3.88	4.78	2.54	5.55	6.26	9.79	NE	LC
	2080 A1B			78.01	90.04	-12.70	5.15	15.14	3.59	2.44	8.74	17.17	11.33	NE	LC
	2080 A2			71.58	63.56	-19.89	-25.77	19.89	25.77	0.00	0.00	19.89	25.77	NE	NE
8	*Alpinia malaccensis*	71.65	95.46												
	2050 A1B			54.81	80.73	-23.50	-15.43	29.52	15.44	6.02	0.01	33.52	15.44	NE	NE
	2050 A2			56.99	68.55	-20.46	-28.19	28.59	28.20	31.00	0.01	45.49	28.20	NE	NE
	2080 A1B			53.28	82.35	-25.64	-13.74	31.00	13.74	5.36	0.00	34.51	13.74	NE	NE
	2080 A2			49.37	81.45	-31.10	-14.68	35.76	14.75	4.66	0.07	38.62	14.80	VN	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
9	*Alstonia scholaris*	100.00	100.00												
	2050 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2050 A2			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A2			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
10	*Amalocalyx microlobus*	99.96	100.00												
	2050 A1B			98.94	100.00	-1.02	0.00	1.02	0.00	0.00	0.00	1.02	0.00	NE	LC
	2050 A2			99.45	100.00	-0.51	0.00	0.51	0.00	0.00	0.00	0.51	0.00	NE	LC
	2080 A1B			96.84	100.00	-3.12	0.00	3.12	0.00	0.00	0.00	3.12	0.00	NE	LC
	2080 A2			82.73	100.00	-17.24	0.00	17.24	0.00	0.00	0.00	17.24	0.00	NE	LC
11	*Amaranthus lividus*	77.25	100.00												
	2050 A1B			57.81	100.00	-25.16	0.00	25.16	0.00	0.00	0.00	25.16	0.00	NE	LC
	2050 A2			62.74	100.00	-18.78	0.00	18.78	0.00	0.00	0.00	18.78	0.00	NE	LC
	2080 A1B			46.16	87.93	-40.25	-12.07	40.25	12.07	0.00	0.00	40.25	12.07	VN	NE
	2080 A2			49.94	97.15	-35.35	-2.85	35.35	2.85	0.00	0.00	35.35	2.85	VN	NE
12	*Amaranthus spinosus*	82.78	99.85												
	2050 A1B			88.53	99.99	6.95	0.15	3.15	0.00	10.10	0.15	12.04	0.15	LC	LC
	2050 A2			82.47	99.93	-0.37	0.09	5.16	0.00	4.79	0.09	9.49	0.09	NE	LC
	2080 A1B			69.57	100.00	-15.96	0.15	17.93	0.00	1.97	0.15	19.52	0.15	NE	LC
	2080 A2			76.51	100.00	-7.58	0.15	12.70	0.00	5.12	0.15	16.96	0.15	NE	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
13	*Anacolosa ilicoides*	75.88	85.38												
	2050 A1B			71.95	77.17	-5.17	-9.61	10.80	9.61	5.63	0.00	15.55	9.61	NE	NE
	2050 A2			69.44	66.84	-8.49	-21.71	11.54	21.71	3.06	0.00	14.17	21.71	NE	NE
	2080 A1B			47.03	79.10	-38.03	-7.36	39.44	8.83	1.41	1.47	40.28	10.15	VN	NE
	2080 A2			29.55	62.21	-61.06	-27.14	61.07	27.14	0.00	0.00	61.07	27.14	EN	NE
14	*Andrographis paniculata*	47.56	24.45												
	2050 A1B			62.80	35.79	32.05	46.38	0.00	0.00	32.05	46.38	24.27	31.69	LC	LC
	2050 A2			61.54	34.59	29.38	41.45	0.00	0.00	29.38	41.45	22.71	29.30	LC	LC
	2080 A1B			69.36	44.61	45.83	82.44	0.00	0.00	45.83	82.44	31.43	45.19	LC	LC
	2080 A2			70.68	46.59	48.60	90.56	0.00	0.00	48.60	90.56	32.71	47.52	LC	LC
15	*Angiopteris evecta*	52.27	94.61												
	2050 A1B			34.04	80.51	-34.86	-14.90	34.86	14.90	0.00	0.00	34.86	14.90	VN	NE
	2050 A2			36.14	81.10	-30.86	-14.28	30.86	14.28	0.00	0.00	30.86	14.28	VN	NE
	2080 A1B			12.86	44.05	-75.40	-53.44	75.40	53.44	0.00	0.00	75.40	53.44	EN	EN
	2080 A2			27.07	68.14	-48.22	-27.98	48.23	27.98	0.01	0.00	48.24	27.98	VN	NE
16	*Anogeissus acuminata*	99.11	99.67												
	2050 A1B			95.57	98.94	-3.57	-0.73	3.57	0.73	0.00	0.00	3.57	0.73	NE	NE
	2050 A2			95.65	98.29	-3.49	-1.39	3.49	1.39	0.00	0.00	3.49	1.39	NE	NE
	2080 A1B			90.25	97.87	-8.94	-1.81	8.94	1.81	0.00	0.00	8.94	1.81	NE	NE
	2080 A2			78.88	92.86	-20.41	-6.83	20.41	6.83	0.00	0.00	20.41	6.83	NE	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
17	*Anredera cordifolia*	61.40	62.64												
	2050 A1B			94.85	87.63	54.50	39.91	0.03	0.00	54.52	39.91	35.30	28.52	LC	LC
	2050 A2			88.07	85.31	43.45	36.20	0.68	0.00	44.13	36.20	31.09	26.58	LC	LC
	2080 A1B			97.59	100.00	58.95	59.65	0.01	0.00	58.96	59.65	37.10	37.36	LC	LC
	2080 A2			97.44	100.00	58.71	59.65	0.40	0.00	59.10	59.65	37.40	37.36	LC	LC
18	*Antidesma acidum*	66.93	99.18												
	2050 A1B			24.96	68.08	-62.71	-31.36	62.71	31.36	0.00	0.00	62.71	31.36	EN	VN
	2050 A2			23.60	64.05	-64.74	-35.42	64.74	35.42	0.00	0.00	64.74	35.42	EN	VN
	2080 A1B			2.21	5.40	-96.70	-94.55	96.70	94.55	0.00	0.00	96.70	94.55	CR	CR
	2080 A2			5.78	16.55	-91.36	-83.31	91.39	83.31	0.03	0.00	91.40	83.31	CR	CR
19	*Antidesma bunius*	69.59	99.89												
	2050 A1B			52.78	93.38	-24.16	-6.52	24.64	6.52	0.48	0.00	25.00	6.52	NT	NT
	2050 A2			47.61	85.38	-31.59	-14.52	31.79	14.52	0.20	0.00	31.92	14.52	VN	NT
	2080 A1B			36.19	63.98	-47.99	-35.95	49.10	35.95	1.11	0.00	49.66	35.95	VN	VN
	2080 A2			65.38	94.97	-6.05	-4.93	13.61	4.93	7.56	0.00	19.68	4.93	NE	NE
20	*Antidesma ghaesembilla*	69.91	99.60												
	2050 A1B			30.13	70.34	-56.90	-29.37	58.03	29.37	1.13	0.00	58.50	29.37	EN	NT
	2050 A2			30.37	77.41	-56.56	-22.27	56.59	22.27	0.03	0.00	56.60	22.27	EN	NT
	2080 A1B			3.94	7.09	-94.37	-92.88	94.72	92.88	0.35	0.00	94.74	92.88	CR	CR
	2080 A2			8.92	24.76	-87.25	-75.14	87.37	75.27	0.13	0.13	87.39	75.30	CR	EN

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
21	*Antidesma sootepense*	99.20	100.00												
	2050 A1B			94.43	100.00	-4.80	0.00	4.81	0.00	0.00	0.00	4.81	0.00	NE	LC
	2050 A2			93.83	100.00	-5.41	0.00	5.41	0.00	0.00	0.00	5.42	0.00	NE	LC
	2080 A1B			92.95	100.00	-6.30	0.00	6.31	0.00	0.01	0.00	6.32	0.00	NE	LC
	2080 A2			80.53	100.00	-18.82	0.00	18.84	0.00	0.02	0.00	18.86	0.00	NE	LC
22	*Aporosa villosa*	63.26	96.97												
	2050 A1B			41.42	88.29	-34.52	-8.95	34.88	8.96	0.36	0.02	35.12	8.98	VN	NT
	2050 A2			40.94	88.89	-35.29	-8.32	35.75	8.66	0.46	0.33	36.04	8.96	VN	NT
	2080 A1B			17.80	10.53	-71.86	-89.14	72.74	89.15	0.88	0.01	72.98	89.15	EN	EN
	2080 A2			40.81	67.40	-35.48	-30.49	36.28	30.49	0.79	0.00	36.78	30.49	VN	VN
23	*Archidendron clypearia*	48.77	81.23												
	2050 A1B			17.26	46.85	-64.61	-42.33	64.90	42.33	0.29	0.00	65.00	42.33	EN	VN
	2050 A2			12.99	40.81	-73.36	-49.75	73.53	49.79	0.17	0.04	73.57	49.81	EN	VN
	2080 A1B			1.79	2.65	-96.33	-96.74	96.33	96.74	0.00	0.00	96.33	96.74	CR	EN
	2080 A2			20.75	40.81	-57.46	-49.75	59.68	30.96	2.22	0.64	60.56	31.40	VN	VN
24	*Artocarpus gomezianus*	96.45	96.16												
	2050 A1B			93.96	95.47	-2.59	-0.71	2.59	0.71	0.00	0.00	2.59	0.71	NE	NE
	2050 A2			93.75	95.17	-2.79	-1.03	2.80	1.03	0.00	0.00	2.80	1.03	NE	NE
	2080 A1B			91.88	95.21	-4.74	-0.98	4.74	0.98	0.00	0.00	4.74	0.98	NE	NE
	2080 A2			84.64	92.57	-12.24	-3.73	12.24	3.73	0.00	0.00	12.24	3.73	NE	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
25	*Artocarpus lakoocha*	58.65	71.91												
	2050 A1B			63.51	76.88	8.29	6.92	12.37	0.00	8.29	6.92	19.08	6.47	LC	LC
	2050 A2			62.55	72.33	6.65	0.59	0.14	0.00	6.79	0.59	6.49	0.59	LC	LC
	2080 A1B			65.91	81.96	12.37	13.98	0.00	0.00	12.37	13.98	11.01	12.26	LC	LC
	2080 A2			66.65	82.49	13.64	14.72	0.27	0.00	13.90	14.72	12.44	12.83	LC	LC
26	*Asparagus filicinus*	49.88	96.90												
	2050 A1B			47.60	86.21	-4.58	-11.03	8.89	11.21	4.31	0.18	12.66	11.37	NE	NE
	2050 A2			48.91	80.08	-1.96	-17.36	14.24	17.74	14.24	0.38	24.93	18.05	NE	NE
	2080 A1B			45.02	83.67	-9.75	-13.65	14.24	13.77	4.49	0.11	17.93	13.87	NE	NE
	2080 A2			49.02	90.70	-1.73	-6.40	10.41	7.70	8.68	1.30	17.56	8.88	NE	NE
27	*Baliospermum calycinum*	48.03	92.14												
	2050 A1B			18.70	63.68	-61.08	-30.89	61.08	30.89	0.00	0.00	61.08	30.89	EN	VN
	2050 A2			14.57	49.69	-69.66	-46.08	69.66	46.08	0.00	0.00	69.66	46.08	EN	VN
	2080 A1B			9.16	43.10	-80.94	-53.23	80.94	53.23	0.00	0.00	80.94	53.23	CR	EN
	2080 A2			12.63	49.98	-73.71	-45.76	74.13	45.76	0.41	0.00	74.23	45.76	EN	VN
28	*Baliospermum solanifolium*	68.50	99.76												
	2050 A1B			26.53	57.91	-61.27	-41.95	62.86	41.95	1.59	0.00	63.44	41.95	EN	VN
	2050 A2			21.68	53.17	-68.35	-46.71	68.55	46.71	0.20	0.00	68.61	46.71	EN	VN
	2080 A1B			18.80	49.35	-72.55	-50.53	73.45	50.53	0.90	0.00	73.69	50.53	EN	EN
	2080 A2			18.17	56.34	-73.47	-43.53	74.10	43.53	0.63	0.00	74.27	43.53	EN	VN

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
29	*Belamcanda chinensis*	99.04	100.00												
	2050 A1B			90.93	99.63	-8.18	-0.37	8.18	0.37	0.00	0.00	8.18	0.37	NE	NE
	2050 A2			90.95	97.19	-8.16	-2.81	8.16	2.81	0.00	0.00	8.16	2.81	NE	NE
	2080 A1B			79.52	92.32	-19.70	-7.68	19.70	7.68	0.00	0.00	19.70	7.68	NE	NE
	2080 A2			70.51	80.39	-28.81	-19.61	28.81	19.61	0.00	0.00	28.81	19.61	NE	NE
30	*Berchemia floribunda*	1.11	3.11												
	2050 A1B			0.06	0.29	-94.86	-90.81	94.86	90.81	0.00	0.00	94.86	90.81	CR	CR
	2050 A2			0.08	0.37	-92.95	-87.99	92.95	87.99	0.00	0.00	92.95	87.99	CR	CR
	2080 A1B			0.03	0.17	-97.75	-94.46	97.75	94.46	0.00	0.00	97.75	94.46	CR	CR
	2080 A2			0.03	0.19	-97.49	-93.99	97.49	93.99	0.00	0.00	97.49	93.99	CR	CR
31	*Betula alnoides*	36.56	75.66												
	2050 A1B			27.24	65.48	-25.51	-13.44	25.51	13.44	0.00	0.00	25.51	13.44	NT	NE
	2050 A2			29.42	65.14	-19.54	-13.90	19.62	13.90	0.08	0.00	19.68	13.90	NT	NE
	2080 A1B			14.90	45.85	-59.24	-39.40	59.24	39.40	0.00	0.00	59.24	39.40	EN	VN
	2080 A2			21.35	59.84	-41.61	-20.90	41.64	20.90	0.03	0.00	41.66	20.90	VN	NT
32	*Bidens pilosa*	29.57	57.09												
	2050 A1B			13.54	37.45	-54.22	-34.41	54.98	34.89	0.76	0.49	55.32	35.21	EN	VN
	2050 A2			9.77	25.99	-66.96	-54.48	68.07	57.35	1.11	2.87	68.43	58.54	EN	EN
	2080 A1B			2.22	3.87	-92.51	-93.22	92.64	93.22	0.13	0.00	92.64	93.22	CR	CR
	2080 A2			8.16	32.40	-72.40	-43.25	74.70	44.89	2.30	1.64	75.27	45.77	EN	VN

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
33	*Biophytum umbraculum*	99.99	100.00												
	2050 A1B			100.00	100.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	LC	LC
	2050 A2			100.00	100.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	LC	LC
	2080 A1B			100.00	100.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	LC	LC
	2080 A2			99.92	100.00	-0.07	0.00	0.08	0.00	0.01	0.00	0.09	0.00	NE	LC
34	*Blumea balsamifera*	67.64	98.74												
	2050 A1B			38.54	81.64	-43.01	-17.32	43.02	17.32	0.00	0.00	43.02	17.32	VN	NT
	2050 A2			38.38	79.60	-43.26	-19.39	43.27	19.39	0.01	0.00	43.27	19.39	VN	NT
	2080 A1B			12.62	19.35	-81.34	-80.40	81.34	80.40	0.00	0.00	81.34	80.40	CR	CR
	2080 A2			30.82	64.74	-54.43	-34.43	54.43	34.43	0.00	0.00	54.43	34.43	EN	VN
35	*Breynia vitis-idaea*	20.52	46.22												
	2050 A1B			34.12	27.83	66.30	-39.80	46.45	43.78	112.74	3.98	74.83	45.93	LC	VN
	2050 A2			37.79	91.72	84.19	98.44	20.08	0.86	104.27	99.29	60.87	50.25	LC	LC
	2080 A1B			49.88	95.89	143.10	107.44	13.03	0.00	156.13	107.44	66.04	51.79	LC	LC
	2080 A2			74.32	100.00	262.20	116.35	7.50	0.00	269.71	116.35	74.98	53.78	LC	LC
36	*Buchanania cochinchinensis*	52.72	75.32												
	2050 A1B			63.24	89.16	19.96	18.38	1.24	0.00	21.20	18.38	18.51	15.53	LC	LC
	2050 A2			58.44	84.18	10.85	11.77	2.90	0.00	13.75	11.77	14.63	10.53	LC	LC
	2080 A1B			68.62	96.70	30.17	28.40	0.41	0.00	30.58	28.40	23.73	22.12	LC	LC
	2080 A2			72.57	99.93	37.65	32.68	2.21	0.00	39.86	32.68	30.08	24.63	LC	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
37	*Buddleja asiatica*	41.03	75.09												
	2050 A1B			12.25	36.01	-70.13	-52.04	70.14	52.04	0.00	0.00	70.14	52.04	EN	EN
	2050 A2			7.77	22.06	-81.07	-70.62	81.21	70.62	0.14	0.00	81.23	70.62	CR	EN
	2080 A1B			0.98	2.82	-97.60	-96.24	97.60	96.24	0.00	0.00	97.60	96.24	CR	CR
	2080 A2			6.31	24.00	-84.63	-68.04	84.65	68.04	0.02	0.00	84.65	68.04	CR	EN
38	*Caesalpinia sappan*	58.39	98.71												
	2050 A1B			19.92	65.41	-65.89	-33.73	66.14	33.73	0.25	0.00	66.22	33.73	EN	VN
	2050 A2			25.79	66.31	-55.83	-32.82	55.87	32.82	0.04	0.00	55.89	32.82	EN	VN
	2080 A1B			1.51	2.08	-97.42	-97.89	97.47	97.89	0.05	0.00	97.47	97.89	CR	CR
	2080 A2			5.98	22.81	-89.76	-76.89	89.87	76.89	0.11	0.00	89.88	76.89	CR	EN
39	*Careya arborea*	99.68	100.00												
	2050 A1B			99.92	100.00	0.24	0.00	0.00	0.00	0.24	0.00	0.24	0.00	LC	LC
	2050 A2			99.56	100.00	-0.12	0.00	0.33	0.00	0.21	0.00	0.55	0.00	NE	LC
	2080 A1B			99.87	100.00	0.20	0.00	0.05	0.00	0.24	0.00	0.29	0.00	LC	LC
	2080 A2			99.45	100.00	-0.22	0.00	0.25	0.00	0.03	0.00	0.28	0.00	NE	LC
40	*Cassia siamea*	39.59	62.94												
	2050 A1B			17.11	29.37	-56.79	-53.33	56.97	53.36	0.19	0.03	57.06	53.37	EN	EN
	2050 A2			15.29	27.61	-61.38	-56.13	61.73	57.79	0.35	1.65	61.86	58.47	EN	EN
	2080 A1B			5.54	4.64	-86.01	-92.64	89.61	92.64	3.60	0.00	89.98	92.64	CR	CR
	2080 A2			33.85	50.03	-14.50	-20.50	24.76	28.43	10.26	7.92	31.76	33.68	NE	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
41	*Cassia tora*	47.09	60.94												
	2050 A1B			36.94	61.83	-21.55	1.46	24.01	4.13	2.45	5.59	25.83	9.20	NE	LC
	2050 A2			39.59	57.52	-15.92	-5.61	21.22	15.63	5.30	10.02	25.19	23.32	NE	NE
	2080 A1B			25.50	17.16	-45.84	-71.84	51.50	71.84	5.66	0.00	54.10	71.84	VN	EN
	2080 A2			29.88	41.93	-36.55	-31.20	37.56	34.13	1.02	2.93	38.19	36.01	VN	VN
42	*Cassytha filiformis*	63.59	96.41												
	2050 A1B			24.06	61.31	-62.16	-36.40	62.16	36.40	0.00	0.00	62.16	36.40	EN	VN
	2050 A2			20.98	61.25	-67.01	-36.47	67.01	36.47	0.00	0.00	67.01	36.47	EN	VN
	2080 A1B			5.43	9.47	-91.45	-90.18	91.45	90.21	0.00	0.00	91.45	90.21	CR	CR
	2080 A2			9.72	27.30	-84.71	-71.69	84.71	71.69	0.00	0.00	84.71	71.69	CR	EN
43	*Celastrus paniculatus*	99.84	100.00												
	2050 A1B			99.13	100.00	-0.71	0.00	0.71	0.00	0.00	0.00	0.71	0.00	NE	LC
	2050 A2			99.48	100.00	-0.36	0.00	0.36	0.00	0.00	0.00	0.36	0.00	NE	LC
	2080 A1B			98.06	100.00	-1.78	0.00	1.78	0.00	0.00	0.00	1.78	0.00	NE	LC
	2080 A2			95.60	100.00	-4.25	0.00	4.25	0.00	0.01	0.00	4.26	0.00	NE	LC
44	*Celosia argentea*	72.55	98.99												
	2050 A1B			89.57	96.35	23.46	-2.67	10.73	2.69	34.19	0.03	33.47	2.72	LC	NT
	2050 A2			92.76	95.69	27.86	-3.34	9.07	3.34	36.93	0.00	33.60	3.34	LC	NT
	2080 A1B			82.61	68.59	13.87	-30.71	19.73	30.71	33.60	0.00	39.92	30.71	LC	VN
	2080 A2			90.68	98.93	25.00	-0.06	5.19	0.13	30.18	0.06	27.17	0.19	LC	NT

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
45	*Celtis timorensis*	98.84	100.00												
	2050 A1B			94.47	99.98	-4.42	-0.02	4.42	0.02	0.00	0.00	4.42	0.02	NE	NE
	2050 A2			93.63	99.78	-5.27	-0.22	5.27	0.22	0.00	0.00	5.27	0.22	NE	NE
	2080 A1B			91.72	99.95	-7.21	-0.05	7.21	0.05	0.00	0.00	7.21	0.05	NE	NE
	2080 A2			84.68	96.60	-14.32	-3.40	14.32	3.40	0.00	0.00	14.32	3.40	NE	NE
46	*Chloranthus erectus*	47.34	71.54												
	2050 A1B			40.93	80.24	-13.54	12.17	20.16	0.07	6.62	12.24	25.12	10.97	NE	LC
	2050 A2			33.40	78.13	-29.44	9.21	35.21	4.23	5.77	13.44	38.74	15.58	NE	LC
	2080 A1B			21.10	30.56	-55.42	-57.28	58.14	57.28	2.72	0.00	59.25	57.28	EN	VN
	2080 A2			32.87	65.14	-30.58	-8.94	32.47	9.86	1.90	0.93	33.73	10.69	VN	NT
47	*Chromolaena odorata*	58.93	97.28												
	2050 A1B			17.94	53.85	-69.56	-44.65	71.17	44.71	1.61	0.06	71.63	44.75	EN	VN
	2050 A2			17.91	55.58	-69.62	-42.87	70.00	42.99	0.38	0.12	70.11	43.06	EN	VN
	2080 A1B			1.85	2.92	-96.86	-96.99	97.20	96.99	0.33	0.00	97.21	96.99	CR	CR
	2080 A2			5.84	19.07	-90.08	-80.40	90.61	80.80	0.53	0.40	90.66	80.87	CR	CR
48	*Cinamomum iners*	99.89	100.00												
	2050 A1B			96.27	99.97	-3.62	-0.03	3.63	0.03	0.01	0.00	3.64	0.03	NE	NE
	2050 A2			92.51	94.56	-7.39	-5.44	7.39	5.44	0.00	0.00	7.40	5.44	NE	NE
	2080 A1B			92.79	95.49	-7.11	-4.51	7.11	4.51	0.00	0.00	7.11	4.51	NE	NE
	2080 A2			89.94	85.75	-9.97	-14.25	9.97	14.25	0.00	0.00	9.97	14.25	NE	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
49	*Cinnamomum camphora*	63.85	66.97												
	2050 A1B			30.58	43.62	-52.11	-34.86	52.11	34.86	0.00	0.00	52.11	34.86	EN	VN
	2050 A2			34.44	33.47	-46.06	-50.03	46.19	50.03	0.13	0.00	46.26	50.03	VN	EN
	2080 A1B			14.26	25.38	-77.66	-62.10	77.66	62.10	0.00	0.00	77.66	62.10	EN	EN
	2080 A2			5.98	12.12	-90.64	-81.90	90.64	81.90	0.00	0.00	90.64	81.90	CR	CR
50	*Cissus bicolor*	33.24	71.51												
	2050 A1B			12.87	33.90	-61.28	-52.60	61.28	52.60	0.00	0.00	61.28	52.60	EN	EN
	2050 A2			10.34	28.23	-68.88	-60.52	68.88	60.52	0.00	0.00	68.88	60.52	EN	EN
	2080 A1B			3.74	7.67	-88.75	-89.27	88.75	89.27	0.00	0.00	88.75	89.27	CR	CR
	2080 A2			2.19	6.36	-93.42	-91.10	93.42	91.10	0.00	0.00	93.42	91.10	CR	CR
51	*Cissus hastata*	79.17	89.37												
	2050 A1B			79.22	77.02	0.06	-13.82	7.08	13.82	7.13	0.00	13.26	13.82	LC	NE
	2050 A2			73.78	53.87	-6.81	-39.73	15.00	39.73	8.18	0.00	21.43	39.73	NE	VN
	2080 A1B			87.93	74.80	11.06	-16.30	3.88	16.47	14.94	0.17	16.37	16.62	LC	NE
	2080 A2			89.82	76.95	13.45	-13.90	4.30	14.74	17.75	0.84	18.72	15.45	LC	NE
52	*Clausena excavata*	72.13	98.45												
	2050 A1B			62.78	95.86	-12.96	-2.62	22.53	2.62	9.56	0.00	29.29	2.62	NE	NE
	2050 A2			60.02	92.83	-16.80	-5.71	24.93	5.71	8.13	0.00	30.57	5.71	NE	NE
	2080 A1B			33.84	58.63	-53.08	-40.45	59.10	40.68	6.02	0.23	61.42	40.81	EN	VN
	2080 A2			57.20	97.42	-20.70	-1.04	28.49	1.25	7.79	0.21	33.66	1.46	NE	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
53	*Cleidion javanicum*	86.94	94.61												
	2050 A1B			94.74	99.03	8.97	4.67	3.37	0.00	12.35	4.67	13.99	4.47	LC	LC
	2050 A2			91.30	96.93	5.02	2.45	4.80	0.10	9.82	2.56	13.31	2.59	LC	LC
	2080 A1B			92.90	85.61	6.86	-9.51	4.78	10.71	11.64	1.20	14.71	11.77	LC	NT
	2080 A2			97.01	99.87	11.58	5.56	1.08	0.00	1.08	5.56	2.13	5.27	LC	LC
54	*Clerodendrum japonicum*	99.96	99.84												
	2050 A1B			100.00	100.00	0.04	0.16	0.00	0.00	0.04	0.16	0.04	0.16	LC	LC
	2050 A2			100.00	100.00	0.03	0.16	0.00	0.00	0.03	0.16	0.03	0.16	LC	LC
	2080 A1B			100.00	100.00	0.04	0.16	0.00	0.00	0.04	0.16	0.04	0.16	LC	LC
	2080 A2			100.00	100.00	0.04	0.16	0.00	0.00	0.04	0.16	0.04	0.16	LC	LC
55	*Clerodendrum colebrookianum*	26.72	62.58												
	2050 A1B			20.46	51.89	-23.41	-17.08	27.34	19.32	3.93	2.24	30.08	21.09	NE	NE
	2050 A2			22.23	45.17	-16.80	-27.82	26.28	30.48	9.48	2.66	32.67	32.28	NE	NE
	2080 A1B			15.27	49.06	-42.86	-21.60	43.31	21.60	0.45	0.00	43.56	21.60	VN	NE
	2080 A2			19.26	56.60	-27.92	-9.56	31.31	13.06	3.39	3.51	33.57	16.01	NE	NE
56	*Clerodendrum paniculatum*	84.27	91.98												
	2050 A1B			80.13	77.22	-4.91	-16.04	10.53	16.32	5.62	0.27	15.29	16.55	NE	NE
	2050 A2			75.84	58.26	-10.00	-36.66	16.75	36.85	6.75	0.19	22.01	36.97	NE	VN
	2080 A1B			86.17	74.98	2.26	-18.48	7.01	21.11	9.26	2.63	14.89	23.14	LC	NE
	2080 A2			84.61	74.26	0.41	-19.26	8.64	21.09	9.06	1.83	16.23	22.50	LC	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
57	*Clerodendrum serratum*	62.49	99.07												
	2050 A1B			24.50	69.66	-60.80	-29.68	60.80	29.68	0.00	0.00	60.80	29.68	EN	NE
	2050 A2			26.57	73.17	-57.47	-26.14	57.47	26.14	0.00	0.00	57.47	26.14	EN	NE
	2080 A1B			6.88	24.25	-88.99	-75.52	88.99	75.52	0.00	0.00	88.99	75.52	CR	EN
	2080 A2			6.64	19.53	-89.37	-80.28	89.37	80.28	0.00	0.00	89.37	80.28	CR	CR
58	*Coix lacryma-jobi*	72.09	100.00												
	2050 A1B			52.04	98.16	-27.81	-1.84	28.06	1.84	0.25	0.00	28.24	1.84	NE	NE
	2050 A2			56.39	97.60	-21.78	-2.40	22.12	2.40	0.34	0.00	22.39	2.40	NE	NE
	2080 A1B			32.61	37.90	-54.76	-62.10	55.43	62.10	0.67	0.00	55.73	62.10	EN	EN
	2080 A2			42.15	83.09	-41.53	-16.91	41.57	16.91	0.04	0.00	41.59	16.91	VN	NT
59	*Congea tomentosa*	99.91	100.00												
	2050 A1B			99.92	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2050 A2			99.92	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A1B			99.92	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A2			99.88	100.00	-0.04	0.00	0.04	0.00	0.00	0.00	0.04	0.00	NT	LC
60	*Costus speciosus*	64.73	99.70												
	2050 A1B			22.07	59.12	-65.91	-40.71	65.92	40.72	0.01	0.01	65.93	40.73	EN	VN
	2050 A2			22.78	64.01	-64.81	-35.80	64.82	35.80	0.01	0.00	64.82	35.80	EN	VN
	2080 A1B			4.94	15.95	-92.37	-84.00	92.38	84.00	0.01	0.00	92.38	84.00	CR	CR
	2080 A2			8.37	26.36	-87.07	-73.56	87.12	73.69	0.05	0.13	87.13	73.73	CR	EN

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
61	*Cratoxylum formosum*	95.17	100.00												
	2050 A1B			89.88	99.79	-5.56	-0.21	5.56	0.21	0.00	0.00	5.56	0.21	NE	NE
	2050 A2			90.23	97.78	-5.18	-2.22	5.18	2.22	0.00	0.00	5.18	2.22	NE	NE
	2080 A1B			84.34	99.10	-11.37	-0.90	11.37	0.90	0.00	0.00	11.37	0.90	NE	NE
	2080 A2			63.80	87.71	-32.96	-12.29	32.96	12.29	0.00	0.00	32.96	12.29	VN	NE
62	*Crinum asiaticum*	90.66	83.15												
	2050 A1B			99.52	99.04	9.77	19.11	0.00	0.00	9.77	19.11	8.90	16.05	LC	LC
	2050 A2			99.24	98.12	9.46	18.01	0.00	0.00	9.46	18.01	8.64	15.26	LC	LC
	2080 A1B			99.95	99.79	10.25	20.02	0.00	0.00	10.25	20.02	9.29	16.68	LC	LC
	2080 A2			99.98	99.88	10.27	20.12	0.00	0.00	10.27	20.12	9.32	16.75	LC	LC
63	*Croton kongensis*	96.92	96.49												
	2050 A1B			98.74	98.39	1.88	1.97	0.00	0.00	1.88	1.97	1.85	1.93	LC	LC
	2050 A2			98.04	97.92	1.16	1.48	0.01	0.00	1.17	1.48	1.17	1.46	LC	LC
	2080 A1B			99.37	99.90	2.53	3.54	0.00	0.00	2.53	3.54	2.47	3.42	LC	LC
	2080 A2			98.71	99.95	1.85	3.59	0.22	3.59	2.07	0.00	2.24	3.59	LC	LC
64	*Croton robustus*	95.22	100.00												
	2050 A1B			99.21	100.00	4.19	0.00	0.00	0.00	4.19	0.00	4.02	0.00	LC	LC
	2050 A2			99.19	100.00	4.17	0.00	0.12	0.00	4.29	0.00	4.23	0.00	LC	LC
	2080 A1B			99.56	100.00	4.55	0.00	0.00	0.00	4.55	0.00	4.35	0.00	LC	LC
	2080 A2			91.73	100.00	-3.66	0.00	6.30	0.00	2.64	0.00	8.71	0.00	NE	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
65	*Croton roxburghii*	72.29	99.84												
	2050 A1B			36.35	86.60	-49.71	-13.25	49.83	13.26	0.12	0.01	49.89	13.27	VN	NE
	2050 A2			48.55	82.15	-32.84	-17.72	34.84	17.80	2.01	0.08	36.13	17.86	VN	NE
	2080 A1B			8.24	21.70	-88.60	-78.27	88.64	78.27	0.03	0.00	88.64	78.27	CR	EN
	2080 A2			33.90	85.19	-53.11	-14.67	53.15	14.67	0.05	0.00	53.17	14.67	EN	NE
66	*Curcuma aeruginosa*	85.48	90.94												
	2050 A1B			83.48	83.81	-2.34	-7.84	6.70	8.54	4.35	0.70	10.59	9.17	NE	NE
	2050 A2			82.26	68.53	-3.77	-24.64	9.11	25.05	5.34	0.42	13.72	25.36	NE	NE
	2080 A1B			83.75	77.37	-2.02	-14.91	8.22	17.09	6.20	2.18	13.58	18.86	NE	NE
	2080 A2			78.50	75.47	-8.16	-17.00	13.83	18.60	5.66	1.60	18.45	19.88	NE	NE
67	*Curcuma sessilis*	99.70	100.00												
	2050 A1B			98.61	99.63	-1.09	-0.37	1.13	0.37	0.04	0.00	1.17	0.37	NE	NE
	2050 A2			95.80	97.11	-3.91	-2.89	3.99	2.89	0.08	0.00	4.06	2.89	NE	NE
	2080 A1B			95.83	99.05	-3.88	-0.95	3.92	0.95	0.03	0.00	3.95	0.95	NE	NE
	2080 A2			96.11	99.58	-3.59	-0.42	3.62	0.42	0.03	0.00	3.65	0.42	NE	NE
68	*Cuscuta chinensis*	32.23	72.96												
	2050 A1B			10.80	32.75	-66.48	-55.11	66.48	55.11	0.00	0.00	66.48	55.11	EN	EN
	2050 A2			11.90	32.93	-63.09	-54.86	63.09	54.86	0.00	0.00	63.09	54.86	EN	VN
	2080 A1B			9.48	31.62	-70.57	-56.66	70.57	56.66	0.00	0.00	70.57	56.66	EN	EN
	2080 A2			0.01	0.05	-99.98	-99.93	99.98	99.93	0.00	0.00	99.98	99.93	CR	CR

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
69	*Cyclea barbata*	80.12	81.03												
	2050 A1B			90.34	96.18	12.75	18.70	0.72	0.00	13.47	18.70	12.50	15.75	LC	LC
	2050 A2			84.01	85.02	4.85	4.92	0.24	0.00	5.09	4.92	5.07	4.69	LC	LC
	2080 A1B			84.23	97.69	5.13	20.56	6.74	0.03	11.87	20.59	16.63	17.10	LC	LC
	2080 A2			57.27	85.21	-28.52	5.15	31.91	1.59	3.39	6.74	34.14	7.80	NT	LC
70	*Cymbidium bicolor*	99.92	100.00												
	2050 A1B			99.92	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2050 A2			99.92	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A1B			99.92	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A2			99.64	100.00	-0.28	0.00	0.28	0.00	0.00	0.00	0.28	0.00	NE	LC
71	*Dalbergia glomeriflora*	57.47	77.35												
	2050 A1B			64.01	83.53	11.38	7.99	0.88	0.00	12.26	7.99	11.71	7.40	LC	LC
	2050 A2			64.41	81.39	12.08	5.23	0.81	0.13	12.90	5.36	12.14	5.22	LC	LC
	2080 A1B			64.96	82.86	13.04	7.13	1.51	0.09	14.55	7.21	14.01	6.81	LC	LC
	2080 A2			61.04	77.66	6.22	0.40	3.00	2.57	9.22	2.97	11.19	5.38	LC	LC
72	*Dendrocalamus brandisii*	99.63	100.00												
	2050 A1B			99.86	100.00	0.23	0.00	0.00	0.00	0.23	0.00	0.23	0.00	LC	LC
	2050 A2			99.80	100.00	0.17	0.00	0.02	0.00	0.19	0.00	0.21	0.00	LC	LC
	2080 A1B			99.97	100.00	0.35	0.00	0.00	0.00	0.35	0.00	0.35	0.00	LC	LC
	2080 A2			97.78	100.00	-1.85	0.00	1.91	0.00	0.06	0.00	1.97	0.00	NE	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
73	*Dendrocalamus hamiltonii*	73.64	84.94												
	2050 A1B			75.19	94.82	2.10	11.62	8.20	0.00	10.30	11.62	16.77	10.41	LC	LC
	2050 A2			65.96	80.69	-10.44	-5.01	11.45	5.01	10.15	0.00	19.61	5.01	NE	NE
	2080 A1B			72.68	96.69	-1.30	13.82	11.24	0.00	0.80	13.82	11.94	12.15	NT	LC
	2080 A2			54.32	90.34	-26.24	6.35	27.99	0.03	1.75	6.38	29.23	6.02	NT	LC
74	*Dendrocalamus strictus*	77.32	90.71												
	2050 A1B			87.05	94.20	12.58	3.85	0.00	0.00	12.58	3.85	11.18	3.70	LC	LC
	2050 A2			83.24	90.85	7.65	0.15	0.37	0.47	8.02	0.63	7.77	1.09	LC	LC
	2080 A1B			93.86	97.74	21.38	7.74	0.00	0.00	21.38	7.74	17.62	7.19	LC	LC
	2080 A2			87.60	100.00	13.30	10.24	3.85	0.00	17.15	10.24	17.92	9.29	LC	LC
75	*Dendrocnide stimulans*	100.00	100.00												
	2050 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2050 A2			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A2			92.33	99.96	-7.67	-0.04	7.67	0.04	0.00	0.00	7.67	0.04	NE	NE
76	*Dendrophthoe pentandra*	100.00	100.00												
	2050 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2050 A2			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A2			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
77	*Desmodium oblongum*	100.00	100.00												
	2050 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2050 A2			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A2			73.25	100.00	-26.75	0.00	26.75	0.00	0.00	0.00	26.75	0.00	NT	LC
78	*Desmodium renifolium* var. *oblatum*	99.99	100.00												
	2050 A1B			100.00	100.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	LC	LC
	2050 A2			100.00	100.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	LC	LC
	2080 A1B			100.00	100.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	LC	LC
	2080 A2			79.21	100.00	-20.78	0.00	20.78	0.00	0.00	0.00	20.78	0.00	NE	LC
79	*Desmodium renifolium* var. *renifolium*	99.84	100.00												
	2050 A1B			99.54	100.00	-0.30	0.00	0.35	0.00	0.05	0.00	0.41	0.00	NE	LC
	2050 A2			99.64	100.00	-0.21	0.00	0.26	0.00	0.05	0.00	0.31	0.00	NE	LC
	2080 A1B			99.36	100.00	-0.48	0.00	0.54	0.00	0.05	0.00	0.59	0.00	NE	LC
	2080 A2			93.81	100.00	-6.04	0.00	6.09	0.00	0.05	0.00	6.14	0.00	NE	LC
80	*Dillenia parviflora*	59.59	84.52												
	2050 A1B			60.35	92.95	1.27	9.97	8.42	0.01	9.69	9.98	16.51	9.09	LC	LC
	2050 A2			49.59	77.54	-16.79	-8.26	17.34	8.26	0.55	0.00	17.80	8.26	NE	NE
	2080 A1B			59.35	96.23	-0.40	13.85	11.27	0.00	10.86	13.85	19.96	12.17	NE	LC
	2080 A2			39.66	69.57	-33.45	-17.69	33.46	17.69	0.01	0.00	33.46	17.69	VN	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
81	*Dillenia pentagyna*	82.88	92.83												
	2050 A1B			79.50	79.03	-4.08	-14.86	7.10	92.86	3.02	0.00	9.82	92.86	NE	NE
	2050 A2			73.89	53.98	-10.84	-41.85	14.72	41.85	3.88	0.00	17.90	41.85	NE	VN
	2080 A1B			87.97	74.73	6.13	-19.50	3.67	19.50	9.81	0.00	12.28	19.50	LC	NE
	2080 A2			91.81	80.07	10.77	-13.74	2.06	13.74	12.84	0.00	13.20	13.74	LC	NE
82	*Dioscorea hispida*	99.87	100.00												
	2050 A1B			98.63	100.00	-1.23	0.00	1.33	0.00	0.09	0.00	1.42	0.00	NE	LC
	2050 A2			98.23	100.00	-1.64	0.00	1.69	0.00	0.05	0.00	1.74	0.00	NE	LC
	2080 A1B			87.82	100.00	-12.07	0.00	12.07	0.00	0.01	0.00	12.08	0.00	NE	LC
	2080 A2			80.87	100.00	-19.02	0.00	19.10	0.00	0.08	0.00	19.16	0.00	NE	LC
83	*Dipterocarpus obtusifolius*	63.82	90.56												
	2050 A1B			7.25	21.43	-88.63	-76.34	88.64	76.34	0.00	0.00	88.64	76.34	CR	EN
	2050 A2			10.59	31.55	-83.41	-65.16	83.41	65.16	0.00	0.00	83.41	65.16	CR	EN
	2080 A1B			0.90	2.64	-98.59	-97.08	98.59	97.08	0.00	0.00	98.59	97.08	CR	CR
	2080 A2			3.91	6.40	-93.87	-92.93	93.87	92.93	0.00	0.00	93.87	92.93	CR	CR
84	*Dischidia imbricata*	99.99	100.00												
	2050 A1B			100.00	100.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	LC	LC
	2050 A2			99.94	100.00	-0.05	0.00	0.06	0.00	0.01	0.00	0.07	0.00	NE	LC
	2080 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	LC	LC
	2080 A2			100.00	100.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	LC	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
85	*Dischidia major*	38.12	53.46												
	2050 A1B			16.07	38.18	-57.84	-28.58	58.11	28.58	0.28	0.00	58.23	28.58	EN	NE
	2050 A2			12.92	34.45	-66.10	-35.56	66.10	35.56	0.00	0.00	66.10	35.56	EN	VN
	2080 A1B			7.04	21.37	-81.54	-60.02	81.54	60.02	0.00	0.00	81.54	60.02	CR	EN
	2080 A2			2.87	5.53	-92.48	-89.66	92.48	89.66	0.00	0.00	92.48	89.66	CR	CR
86	*Dischidia nummularia*	91.01	100.00												
	2050 A1B			73.17	99.80	-19.60	-0.20	19.60	0.20	0.00	0.00	19.60	0.20	NE	NE
	2050 A2			73.40	99.43	-19.35	-0.57	19.35	0.57	0.00	0.00	19.35	0.57	NE	NE
	2080 A1B			67.15	98.87	-26.22	-1.13	26.22	1.13	0.00	0.00	26.22	1.13	NE	NE
	2080 A2			63.67	98.97	-30.04	-1.03	30.05	1.03	0.01	0.00	30.06	1.03	VN	NT
87	*Disporum calcaratum*	68.14	89.27												
	2050 A1B			35.52	59.34	-47.87	-33.53	47.87	33.53	0.00	0.00	47.87	33.53	VN	VN
	2050 A2			38.68	57.46	-43.24	-35.63	43.24	35.63	0.00	0.00	43.24	35.63	VN	VN
	2080 A1B			29.02	48.98	-57.42	-45.13	57.42	45.13	0.00	0.00	57.42	45.13	EN	VN
	2080 A2			29.60	20.48	-56.57	-77.06	60.79	77.06	4.22	0.00	62.38	77.06	EN	EN
88	*Drynaria quercifolia*	21.99	56.87												
	2050 A1B			8.42	31.15	-61.70	-45.23	65.72	45.25	4.01	0.02	67.04	45.26	EN	VN
	2050 A2			4.06	19.69	-81.56	-65.38	81.62	65.56	0.06	0.18	81.63	65.62	CR	EN
	2080 A1B			0.29	0.37	-98.70	-99.34	98.76	99.34	0.06	0.00	98.77	99.34	CR	CR
	2080 A2			0.51	1.43	-97.67	-97.48	97.68	97.48	0.01	0.00	97.68	97.48	CR	CR

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
89	*Duabanga grandiflora*	74.48	95.80												
	2050 A1B			46.10	86.12	-38.10	-10.11	38.10	10.11	0.00	0.00	38.10	10.11	VN	NT
	2050 A2			47.93	85.29	-35.64	-10.97	35.64	10.97	0.00	0.00	35.64	10.97	VN	NT
	2080 A1B			27.67	66.40	-62.85	-30.69	62.85	30.69	0.00	0.00	62.85	30.69	EN	VN
	2080 A2			18.33	54.75	-75.39	-42.85	75.39	42.85	0.00	0.00	75.39	42.85	EN	VN
90	*Eclipta prostata*	60.13	44.71												
	2050 A1B			40.26	34.98	-33.04	-21.77	33.04	21.77	0.00	0.00	33.04	21.77	VN	NT
	2050 A2			39.14	34.43	-34.90	-22.99	34.90	22.99	0.00	0.00	34.90	22.99	VN	NT
	2080 A1B			32.55	31.87	-45.86	-28.73	45.86	28.73	0.00	0.00	45.86	28.73	VN	NT
	2080 A2			19.61	28.02	-67.38	-37.34	67.38	37.34	0.00	0.00	67.38	37.34	EN	VN
91	*Elephantopus scaber*	75.12	100.00												
	2050 A1B			44.84	94.98	-40.31	-5.02	40.34	5.02	0.03	0.00	40.36	5.02	VN	NE
	2050 A2			50.52	94.51	-32.74	-5.49	33.50	5.49	0.76	0.00	34.00	5.49	VN	NE
	2080 A1B			17.69	42.32	-76.45	-57.68	76.49	57.68	0.05	0.00	76.50	57.68	EN	EN
	2080 A2			15.33	51.01	-79.60	-48.99	79.81	48.99	0.22	0.00	79.86	48.99	EN	VN
92	*Eleusine indica*	78.26	100.00												
	2050 A1B			85.05	100.00	8.67	0.00	3.00	0.00	11.67	0.00	13.14	0.00	LC	LC
	2050 A2			78.66	100.00	0.51	0.00	5.26	0.00	5.77	0.00	10.42	0.00	LC	LC
	2080 A1B			60.07	100.00	-23.25	0.00	26.06	0.00	2.81	0.00	28.08	0.00	NE	LC
	2080 A2			56.68	100.00	-27.58	0.00	5.77	0.00	2.41	0.00	7.98	0.00	NE	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
93	*Eleutherine americana*	56.32	84.20												
	2050 A1B			25.66	60.95	-54.45	-27.61	54.45	27.61	0.00	0.00	54.45	27.61	EN	NT
	2050 A2			19.64	51.25	-65.12	-39.13	65.12	39.13	0.00	0.00	65.12	39.13	EN	VN
	2080 A1B			12.56	39.73	-77.69	-52.81	54.45	52.81	0.00	0.00	54.45	52.81	EN	EN
	2080 A2			5.72	21.01	-89.85	-75.05	89.85	75.05	0.00	0.00	89.85	75.05	CR	EN
94	*Embelia sessiliflora*	59.91	91.90												
	2050 A1B			42.52	82.14	-29.02	-10.62	29.02	10.62	0.00	0.00	29.02	10.62	NE	NE
	2050 A2			38.66	76.33	-35.46	-16.94	35.46	16.94	0.00	0.00	35.46	16.94	VN	NE
	2080 A1B			27.58	68.03	-53.96	-25.97	53.96	25.97	0.00	0.00	53.96	25.97	EN	NE
	2080 A2			29.88	70.98	-50.12	-22.77	50.21	22.77	0.09	0.00	50.25	22.77	EN	NE
95	*Embelia tsjeriamcottam*	82.83	86.37												
	2050 A1B			94.31	96.50	13.87	11.73	0.00	0.00	13.87	11.73	12.18	10.50	LC	LC
	2050 A2			84.02	77.52	1.43	-10.25	5.03	10.25	6.47	0.00	10.80	10.25	LC	NE
	2080 A1B			94.34	97.20	13.90	12.54	0.00	0.00	13.90	12.54	12.20	11.14	LC	LC
	2080 A2			88.75	100.00	7.16	15.78	9.32	0.00	16.47	15.78	22.14	13.63	LC	LC
96	*Engelhardtia spicata*	72.92	100.00												
	2050 A1B			72.92	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2050 A2			49.53	89.32	-32.07	-10.68	32.07	10.68	0.00	0.00	32.07	10.68	VN	NE
	2080 A1B			49.97	92.95	-31.47	-7.05	31.47	7.05	0.00	0.00	31.47	7.05	VN	NE
	2080 A2			32.79	74.81	-55.03	-25.19	55.03	25.19	0.00	0.00	55.03	25.19	EN	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
97	*Ensete glaucum*	56.90	79.84												
	2050 A1B			55.14	83.78	-3.08	4.93	8.76	0.06	5.68	4.99	13.67	4.82	NE	LC
	2050 A2			44.15	70.95	-22.40	-11.13	22.41	11.13	0.01	0.00	22.42	11.13	NE	NT
	2080 A1B			52.02	86.69	-8.56	8.57	13.76	0.09	5.20	8.66	18.03	8.06	NE	LC
	2080 A2			40.91	80.49	-28.10	0.80	28.59	0.41	0.49	1.21	28.93	1.60	NE	LC
98	*Entada rheedii*	56.72	95.51												
	2050 A1B			25.65	63.92	-54.78	-33.08	54.78	33.08	0.00	0.00	54.78	33.08	EN	VN
	2050 A2			23.15	59.41	-59.18	-37.80	59.18	37.80	0.00	0.00	59.18	37.80	EN	VN
	2080 A1B			17.39	51.36	-69.35	-46.22	69.35	46.22	0.00	0.00	69.35	46.22	EN	VN
	2080 A2			18.18	55.66	-67.95	-41.72	67.95	41.72	0.00	0.00	67.95	41.72	EN	VN
99	*Equisetum debile*	64.67	99.82												
	2050 A1B			22.95	67.69	-64.51	-32.18	64.98	32.18	0.48	0.00	65.15	32.18	EN	VN
	2050 A2			22.54	65.92	-65.15	-33.96	65.15	33.96	0.00	0.00	65.15	33.96	EN	VN
	2080 A1B			1.35	3.17	-97.92	-96.82	97.92	96.82	0.00	0.00	97.92	96.82	CR	CR
	2080 A2			2.61	9.21	-95.97	-90.78	95.97	90.78	0.00	0.00	95.97	90.78	CR	CR
100	*Erythrina subumbrans*	99.92	100.00												
	2050 A1B			99.94	100.00	0.02	0.00	0.00	0.00	0.02	0.00	0.02	0.00	LC	LC
	2050 A2			99.92	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A1B			100.00	100.00	0.08	0.00	0.00	0.00	0.08	0.00	0.08	0.00	LC	LC
	2080 A2			99.61	100.00	-0.31	0.00	0.31	0.00	0.00	0.00	0.31	0.00	NE	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
101	*Euphorbia heterophylla*	61.88	97.81												
	2050 A1B			18.66	54.31	-69.84	-44.47	69.84	44.47	0.00	0.00	69.84	44.47	EN	VN
	2050 A2			17.47	55.72	-71.77	-43.04	71.77	43.04	0.00	0.00	71.77	43.04	EN	VN
	2080 A1B			2.43	4.96	-96.08	-94.92	96.08	94.92	0.00	0.00	96.08	94.92	CR	CR
	2080 A2			7.08	23.58	-88.56	-75.89	88.56	75.89	0.00	0.00	88.56	75.89	CR	EN
102	*Euphorbia hirta*	53.91	83.98												
	2050 A1B			28.04	57.06	-47.98	-32.06	47.98	32.06	0.00	0.00	47.98	32.06	VN	VN
	2050 A2			26.79	53.51	-50.31	-36.29	50.48	36.29	0.17	0.00	50.56	36.29	EN	VN
	2080 A1B			9.69	13.29	-82.02	-84.18	83.31	84.18	1.29	0.00	83.53	84.18	CR	CR
	2080 A2			24.53	58.90	-54.50	-29.86	59.55	40.78	5.06	10.92	61.50	46.61	EN	NE
103	*Eurycoma longifolia*	60.58	83.38												
	2050 A1B			15.18	34.76	-74.94	-58.31	75.00	58.51	0.06	0.21	75.02	58.60	EN	EN
	2050 A2			21.69	34.08	-64.19	-59.12	64.72	60.00	0.53	0.87	64.90	60.34	EN	EN
	2080 A1B			3.93	3.93	-93.51	-95.28	93.51	95.28	0.00	0.00	93.51	95.28	CR	CR
	2080 A2			4.48	7.21	-92.60	-91.35	92.60	91.35	0.00	0.00	92.60	91.35	CR	CR
104	*Falconeria insignis*	92.90	99.52												
	2050 A1B			86.38	94.79	-7.02	-4.75	7.02	4.75	0.00	0.00	7.02	4.75	NE	NE
	2050 A2			85.17	87.72	-8.32	-11.86	8.32	11.86	0.00	0.00	8.32	11.86	NE	NE
	2080 A1B			81.94	94.22	-11.80	-5.32	11.80	5.32	0.00	0.00	11.80	5.32	NE	NE
	2080 A2			62.40	73.57	-32.83	-26.07	32.83	26.07	0.00	0.00	32.83	26.07	VN	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
105	*Fernandoa adenophylla*	92.65	100.00												
	2050 A1B			98.60	100.00	6.42	0.00	0.00	0.00	6.42	0.00	6.03	0.00	LC	LC
	2050 A2			97.02	100.00	4.72	0.00	0.41	0.00	5.13	0.00	5.27	0.00	LC	LC
	2080 A1B			99.30	100.00	7.18	0.00	0.00	0.00	7.18	0.00	6.70	0.00	LC	LC
	2080 A2			91.18	100.00	-1.59	0.00	4.96	0.00	3.37	0.00	8.06	0.00	NT	LC
106	*Ficus auriculata*	39.59	77.93												
	2050 A1B			25.11	63.86	-36.59	-18.05	38.61	21.95	2.03	3.90	39.83	24.88	VN	NT
	2050 A2			20.89	42.46	-47.24	-45.52	54.94	49.54	7.70	4.02	58.17	51.49	VN	VN
	2080 A1B			8.53	16.11	-78.45	-79.33	79.22	79.67	0.77	0.34	79.37	79.73	EN	EN
	2080 A2			9.81	35.73	-75.22	-54.15	75.22	54.15	0.00	0.00	75.22	54.15	EN	EN
107	*Ficus hispida*	52.97	90.88												
	2050 A1B			13.40	38.93	-74.69	-57.16	74.87	57.46	0.18	0.31	74.92	57.59	EN	EN
	2050 A2			16.91	47.28	-68.08	-47.97	68.25	48.15	0.17	0.18	68.31	48.24	EN	VN
	2080 A1B			3.95	16.45	-92.54	-81.90	92.75	82.24	0.21	0.34	92.77	82.30	CR	CR
	2080 A2			13.01	35.29	-75.43	-61.17	75.67	61.53	0.23	0.37	75.72	61.67	EN	EN
108	*Flacourtia indica*	92.07	94.67												
	2050 A1B			90.30	92.74	-1.92	-2.03	1.92	2.03	0.00	0.00	1.92	2.03	NE	NE
	2050 A2			80.40	78.21	-12.68	-17.39	12.68	17.39	0.01	0.00	12.69	17.39	NE	NE
	2080 A1B			88.70	82.47	-3.66	-12.88	4.42	12.88	0.76	0.00	5.13	12.88	NE	NE
	2080 A2			69.67	74.73	-24.33	-21.06	26.06	21.36	1.73	0.30	27.32	21.60	NE	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
109	*Flacourtia jangomas*	38.61	44.20												
	2050 A1B			15.04	29.62	-61.04	-32.98	63.81	33.27	2.77	0.29	64.78	33.47	EN	VN
	2050 A2			31.49	23.77	-18.44	-46.23	27.72	55.48	0.00	9.25	27.72	59.25	NE	VN
	2080 A1B			3.87	13.34	-89.98	-69.81	89.98	69.81	0.00	0.00	89.98	69.81	CR	EN
	2080 A2			28.56	60.84	-26.03	37.64	62.21	10.69	36.18	48.33	72.25	39.79	NT	LC
110	*Flacourtia rukam*	7.39	65.86												
	2050 A1B			14.06	76.49	190.25	16.13	0.00	0.00	233.60	16.13	70.02	13.89	LC	LC
	2050 A2			11.87	78.21	195.81	18.74	0.00	0.00	195.81	18.74	66.19	15.86	LC	LC
	2080 A1B			14.04	86.69	104.79	31.62	0.00	0.00	104.79	31.62	51.17	24.02	LC	LC
	2080 A2			14.14	89.32	191.33	35.62	45.39	0.00	191.13	37.71	63.15	27.39	LC	LC
111	*Flemingia lineata*	99.71	100.00												
	2050 A1B			98.87	100.00	-0.85	0.00	0.85	0.00	0.00	0.00	0.85	0.00	NE	LC
	2050 A2			99.29	100.00	-0.43	0.00	0.43	0.00	0.00	0.00	0.43	0.00	NE	LC
	2080 A1B			97.96	100.00	-1.76	0.00	0.00	0.00	1.76	0.00	1.73	0.00	NE	LC
	2080 A2			92.46	100.00	-7.28	0.00	7.28	0.00	0.00	0.00	7.29	0.00	NE	LC
112	*Flemingia macrophylla*	96.88	99.98												
	2050 A1B			60.80	99.77	-37.24	-0.21	37.31	0.21	0.07	0.00	37.35	0.21	VN	NE
	2050 A2			68.78	99.84	-29.00	-0.14	29.07	0.14	0.07	0.00	29.12	0.14	NE	NE
	2080 A1B			59.86	52.95	-38.21	-47.04	38.48	47.04	0.27	0.00	38.65	47.04	VN	VN
	2080 A2			63.34	99.93	-34.62	-0.05	34.62	0.06	0.01	0.01	34.63	0.07	VN	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
113	*Flemingia stricta*	99.84	99.96												
	2050 A1B			99.95	100.00	0.12	0.04	0.00	0.00	0.12	0.04	0.12	0.04	LC	LC
	2050 A2			99.80	100.00	-0.04	0.04	0.06	0.00	0.02	0.04	0.08	0.04	NE	LC
	2080 A1B			99.97	100.00	0.13	0.04	0.00	0.00	0.13	0.04	0.13	0.04	LC	LC
	2080 A2			99.58	100.00	-0.26	0.04	0.42	0.00	0.16	0.04	0.57	0.04	NT	LC
114	*Garcinia xanthochymus*	42.87	18.66												
	2050 A1B			72.24	45.08	68.52	141.57	0.00	0.00	68.52	141.57	40.66	58.60	LC	LC
	2050 A2			72.69	42.35	69.57	126.94	0.00	0.00	69.57	126.94	41.03	55.94	LC	LC
	2080 A1B			83.56	63.47	94.91	240.11	0.00	0.00	94.91	240.11	48.69	70.60	LC	LC
	2080 A2			62.97	43.67	63.56	96.86	1.68	0.00	25.24	26.86	21.50	21.17	LC	LC
115	*Garuga pinnata*	99.85	100.00												
	2050 A1B			99.33	100.00	-0.52	0.00	0.52	0.00	0.00	0.00	0.52	0.00	NE	LC
	2050 A2			99.53	100.00	-0.32	0.00	0.32	0.00	0.00	0.00	0.32	0.00	NE	LC
	2080 A1B			98.52	100.00	-1.33	0.00	1.33	0.00	0.00	0.00	1.33	0.00	NE	LC
	2080 A2			89.64	94.14	-10.22	-5.86	10.22	5.86	0.00	0.00	10.22	5.86	NE	NE
116	*Gigantochloa albociliata*	99.77	100.00												
	2050 A1B			100.00	100.00	0.23	0.00	0.00	0.00	0.23	0.00	0.23	0.00	LC	LC
	2050 A2			99.86	100.00	0.09	0.00	0.02	0.00	0.11	0.00	0.12	0.00	LC	LC
	2080 A1B			100.00	100.00	0.23	0.00	0.00	0.00	0.23	0.00	0.23	0.00	LC	LC
	2080 A2			99.07	100.00	-0.71	0.00	0.71	0.00	0.00	0.00	0.71	0.00	NE	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
117	*Girardinia diversifolia*	97.71	100.00												
	2050 A1B			72.75	100.00	-25.54	0.00	25.54	0.00	0.00	0.00	25.54	0.00	NE	LC
	2050 A2			77.07	100.00	-21.13	0.00	21.13	0.00	0.00	0.00	21.13	0.00	NE	LC
	2080 A1B			67.93	100.00	-30.48	0.00	30.48	0.00	0.00	0.00	30.48	0.00	VN	LC
	2080 A2			64.52	96.34	-33.97	-3.66	33.97	3.66	0.00	0.00	33.97	3.66	VN	NE
118	*Gmelina arborea*	72.11	100.00												
	2050 A1B			25.59	69.16	-64.51	-30.84	64.51	30.84	0.00	0.00	64.51	30.84	EN	VN
	2050 A2			25.57	67.68	-64.54	-32.32	64.54	32.32	0.00	0.00	64.54	32.32	EN	VN
	2080 A1B			4.64	11.60	-93.57	-88.40	93.57	88.40	0.00	0.00	93.57	88.40	CR	CR
	2080 A2			10.88	35.83	-84.91	-64.17	84.91	64.17	0.00	0.00	84.91	64.17	CR	EN
119	*Gymnopetalum integrifolium*	98.28	98.55												
	2050 A1B			99.67	99.95	1.41	1.42	0.00	0.00	1.41	1.42	1.39	1.40	LC	LC
	2050 A2			99.47	99.92	1.21	1.39	0.00	0.00	1.21	1.39	1.19	1.37	LC	LC
	2080 A1B			99.85	100.00	1.60	1.47	0.00	0.00	1.60	1.47	1.57	1.45	LC	LC
	2080 A2			99.49	100.00	1.22	1.47	0.00	0.00	1.51	1.47	1.49	1.45	LC	LC
120	*Gynura pseudochina*	79.79	100.00												
	2050 A1B			75.99	99.94	-4.76	-0.06	8.78	0.06	4.02	0.00	12.31	0.06	NE	NE
	2050 A2			70.20	99.55	-12.02	-0.45	12.70	0.45	0.68	0.00	13.28	0.45	NE	NE
	2080 A1B			52.85	99.64	-33.77	-0.36	33.95	0.36	0.18	0.00	34.07	0.36	VN	NE
	2080 A2			44.36	91.39	-44.40	-8.61	44.41	8.61	0.00	0.00	44.41	8.61	VN	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
121	*Harrisonia perforata*	92.30	95.82												
	2050 A1B			89.24	92.44	-3.32	-3.53	4.37	3.59	1.05	0.07	5.36	3.66	NE	NE
	2050 A2			83.66	82.16	-9.36	-14.26	10.65	14.30	1.29	0.04	11.78	14.33	NE	NE
	2080 A1B			87.86	85.35	-4.81	-10.93	6.24	11.86	1.43	0.93	7.57	12.68	NE	NE
	2080 A2			79.38	75.63	-14.00	-21.08	15.36	22.20	1.37	1.13	16.51	23.07	NE	NE
122	*Hedychium flavum*	99.88	100.00												
	2050 A1B			100.00	100.00	0.12	0.00	0.00	0.00	0.12	0.00	0.12	0.00	LC	LC
	2050 A2			100.00	100.00	0.12	0.00	0.00	0.00	0.12	0.00	0.12	0.00	LC	LC
	2080 A1B			100.00	100.00	0.12	0.00	0.00	0.00	0.12	0.00	0.12	0.00	LC	LC
	2080 A2			69.10	99.82	-30.81	-0.18	30.81	0.18	0.00	0.00	30.81	0.18	VN	NE
123	*Helicia nilagirica*	80.92	94.32												
	2050 A1B			66.62	91.91	-17.66	-2.56	17.66	2.56	0.00	0.00	17.66	2.56	NE	NE
	2050 A2			68.29	88.32	-15.61	-6.36	15.61	6.36	0.00	0.00	15.61	6.36	NE	NE
	2080 A1B			56.78	87.24	-29.83	-7.51	29.83	7.51	0.00	0.00	29.83	7.51	NE	NE
	2080 A2			19.64	51.13	-75.72	-45.79	75.72	45.79	0.00	0.00	75.72	45.79	EN	VN
124	*Heliciopsis terminalis*	55.97	77.36												
	2050 A1B			53.02	76.38	-5.27	-1.27	8.45	1.51	3.18	0.24	11.27	1.74	NE	NE
	2050 A2			43.27	64.22	-22.69	-16.99	22.70	16.99	0.01	0.00	22.70	16.99	NE	NE
	2080 A1B			52.83	83.88	-5.61	8.42	10.79	0.01	5.18	8.43	15.19	7.78	NE	LC
	2080 A2			39.89	74.57	-28.73	-3.60	29.34	5.00	0.61	1.39	29.77	6.30	NE	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
125	*Helicteres hirsuta*	98.78	98.41												
	2050 A1B			98.58	97.63	-0.20	-0.80	0.38	0.80	0.18	0.00	0.57	0.80	NE	NE
	2050 A2			98.43	96.50	-0.35	-1.95	0.64	1.95	0.29	0.00	0.93	1.95	NE	NE
	2080 A1B			98.57	98.68	-0.21	0.27	0.54	0.47	0.32	0.74	0.86	1.20	NE	LC
	2080 A2			90.27	93.16	-8.61	-5.34	8.61	5.34	0.00	0.00	8.61	5.34	NE	NE
126	*Heliotropium indicum*	83.12	52.20												
	2050 A1B			88.10	63.21	5.99	21.10	0.00	0.00	5.99	21.10	5.66	17.42	LC	LC
	2050 A2			86.22	60.78	3.73	16.43	0.10	0.00	3.83	16.43	3.79	14.11	LC	LC
	2080 A1B			88.21	63.56	6.12	21.77	0.00	0.00	5.99	21.77	5.66	17.88	LC	LC
	2080 A2			92.27	73.49	11.01	40.80	0.00	0.00	11.01	40.80	9.92	28.98	LC	LC
127	*Heteropanax fragrans*	26.44	36.96												
	2050 A1B			10.58	11.11	-59.97	-69.95	59.97	69.95	0.00	0.00	59.97	69.95	EN	EN
	2050 A2			12.08	17.27	-54.32	-53.27	54.77	54.00	0.45	0.73	54.97	54.34	EN	EN
	2080 A1B			6.78	10.24	-74.35	-72.28	74.37	72.28	0.03	0.00	74.38	72.28	EN	EN
	2080 A2			5.07	13.26	-80.81	-64.12	80.81	64.12	0.00	0.00	80.81	64.12	CR	EN
128	*Hiptage benghalensis*	87.80	88.10												
	2050 A1B			92.57	94.53	5.43	7.30	0.00	0.00	5.43	7.30	5.15	6.80	LC	LC
	2050 A2			92.46	93.65	5.31	6.30	0.00	0.00	5.31	6.30	5.04	5.92	LC	LC
	2080 A1B			92.11	95.02	4.91	7.85	0.00	0.00	4.91	7.85	4.68	7.28	LC	LC
	2080 A2			94.59	97.61	7.73	10.80	0.00	0.00	7.73	10.80	7.18	9.74	LC	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
129	*Imperata cylindrica*	65.40	99.55												
	2050 A1B			61.83	95.06	-5.46	-4.50	18.96	4.96	13.50	0.46	28.60	5.39	NE	NE
	2050 A2			54.05	89.39	-17.35	-10.20	24.94	10.66	7.59	0.46	30.23	11.06	NE	NE
	2080 A1B			41.47	94.02	-36.60	-5.55	2.97	6.01	39.57	0.46	30.48	6.44	VE	NE
	2080 A2			40.10	82.56	-38.68	-17.06	41.41	17.50	2.73	0.44	42.97	17.86	VN	NE
130	*Indigofera caloneura*	52.12	76.97												
	2050 A1B			61.54	94.80	18.07	23.16	2.00	0.00	20.07	23.16	18.38	18.81	LC	LC
	2050 A2			47.60	74.47	-8.67	-3.25	13.40	6.11	4.72	2.86	17.30	8.72	NE	NE
	2080 A1B			66.89	100.00	28.34	29.92	0.68	0.00	29.02	29.92	23.02	23.03	LC	LC
	2080 A2			68.84	100.00	32.07	29.92	2.87	0.00	34.94	29.92	28.02	23.03	LC	LC
131	*Inula cappa*	32.54	83.10												
	2050 A1B			13.23	47.97	-59.33	-42.27	59.34	42.27	0.01	0.00	59.35	42.27	EN	VN
	2050 A2			14.23	39.17	-56.28	-52.87	56.59	53.42	0.32	0.55	56.73	53.67	EN	EN
	2080 A1B			0.40	1.58	-98.78	-98.10	98.78	98.10	0.00	0.00	98.78	98.10	CR	CR
	2080 A2			1.61	7.97	-95.05	-90.41	95.05	90.41	0.00	0.00	95.05	90.41	CR	CR
132	*Jasminum funale*	35.21	35.78												
	2050 A1B			20.77	32.49	-41.01	-9.19	49.37	10.21	8.36	1.02	53.28	11.12	VN	NE
	2050 A2			24.71	23.19	-29.82	-35.17	33.16	37.28	3.34	2.11	35.32	38.58	NE	VN
	2080 A1B			3.33	9.28	-90.54	-74.06	91.05	74.06	0.51	0.00	91.10	74.06	CR	EN
	2080 A2			1.21	1.03	-96.56	-97.11	96.56	97.11	0.00	0.00	96.56	97.11	CR	CR

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
133	*Justicia adhatoda*	48.67	100.00												
	2050 A1B			48.67	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2050 A2			48.67	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A1B			48.67	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A2			48.67	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
134	*Kaempferia parviflora*	77.50	90.67												
	2050 A1B			84.12	92.93	8.54	2.50	0.00	0.00	8.54	2.50	7.87	2.44	LC	LC
	2050 A2			81.32	90.26	4.93	-0.45	0.39	0.87	5.32	0.42	5.42	1.28	LC	NT
	2080 A1B			90.92	95.39	17.31	5.21	0.00	5.21	17.31	0.00	14.76	5.21	LC	LC
	2080 A2			86.66	96.47	11.83	6.40	1.32	6.40	13.15	0.00	12.78	6.40	LC	LC
135	*Kaempferia rotunda*	100.00	100.00												
	2050 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2050 A2			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A2			99.92	100.00	-0.08	0.00	0.08	0.00	0.00	0.00	0.08	0.00	NE	LC
136	*Kopsia arborea*	89.07	85.27												
	2050 A1B			99.01	98.81	11.16	15.88	0.00	0.00	11.16	15.88	10.04	13.71	LC	LC
	2050 A2			97.22	96.54	9.15	13.22	0.00	0.00	9.15	13.22	8.38	11.67	LC	LC
	2080 A1B			99.80	99.84	12.05	17.08	0.00	0.00	12.05	17.08	10.75	14.59	LC	LC
	2080 A2			99.99	100.00	12.26	17.27	0.00	0.00	12.26	17.27	10.92	14.73	LC	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
137	*Lasia spinosa*	98.54	98.79												
	2050 A1B			98.37	98.45	-0.17	-0.34	0.29	0.34	0.12	0.00	0.41	0.34	NE	NE
	2050 A2			98.26	98.23	-0.28	-0.56	0.39	0.56	0.11	0.00	0.49	0.56	NE	NE
	2080 A1B			98.45	99.18	-0.09	0.40	0.31	0.03	0.21	0.43	0.52	0.45	NE	LC
	2080 A2			86.11	95.21	-12.61	-3.62	12.61	3.62	0.00	0.00	12.61	3.62	NE	NE
138	*Leea indica*	79.37	100.00												
	2050 A1B			53.73	99.84	-32.30	-0.16	34.14	0.16	1.83	0.00	35.32	0.16	VN	NE
	2050 A2			58.02	100.00	-26.90	0.00	27.11	0.00	0.21	0.00	27.26	0.00	NE	LC
	2080 A1B			35.48	33.61	-55.30	-66.39	56.33	66.39	1.03	0.00	56.77	66.39	EN	EN
	2080 A2			51.01	84.19	-35.73	-15.81	35.93	15.81	0.20	0.00	36.06	15.81	VN	NE
139	*Lilium primulinum*	14.69	25.47												
	2050 A1B			7.12	9.80	-10.69	56.25	74.76	43.73	64.07	99.99	84.62	71.87	VN	EN
	2050 A2			7.91	9.52	-5.31	39.46	73.24	53.36	67.93	92.82	84.06	75.81	VN	EN
	2080 A1B			3.83	8.15	-73.92	-48.38	91.93	87.47	18.01	39.09	93.16	90.99	EN	EN
	2080 A2			0.00	0.00	-99.99	-100.00	100.00	100.00	0.01	0.00	100.00	100.00	EX	EX
140	*Lindenbergia indica*	91.99	99.63												
	2050 A1B			97.14	99.99	5.60	0.36	0.00	0.00	5.60	0.36	5.30	0.36	LC	LC
	2050 A2			99.91	100.00	8.61	0.37	0.00	0.00	8.61	0.37	7.93	0.37	LC	LC
	2080 A1B			100.00	100.00	8.71	0.37	0.00	0.00	8.71	0.37	8.01	0.37	LC	LC
	2080 A2			91.97	100.00	-0.02	0.37	6.04	0.00	6.02	0.37	11.37	0.37	NE	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
141	*Litsea cubeba*	36.64	68.68												
	2050 A1B			7.47	25.14	-79.62	-63.40	79.62	63.40	0.00	0.00	79.62	63.40	EN	EN
	2050 A2			4.59	19.29	-87.48	-71.91	87.50	71.91	0.00	0.00	87.50	71.91	CR	EN
	2080 A1B			0.18	0.53	-99.51	-99.22	99.51	99.22	0.00	0.00	99.51	99.22	CR	CR
	2080 A2			2.83	10.94	-92.29	-84.07	92.29	84.07	0.00	0.00	92.29	84.07	CR	CR
142	*Lophopetalum wallichii*	84.85	91.13												
	2050 A1B			94.24	95.17	11.07	4.43	0.00	0.00	11.07	4.43	9.96	4.24	LC	LC
	2050 A2			96.22	97.74	13.40	7.26	0.06	0.00	13.46	7.26	11.92	6.77	LC	LC
	2080 A1B			98.98	100.00	16.65	9.73	0.00	0.00	16.65	9.73	14.27	8.87	LC	LC
	2080 A2			96.22	100.00	13.40	9.73	0.61	0.00	14.00	9.73	12.82	8.87	LC	LC
143	*Lycopodium cernuum*	0.41	1.29												
	2050 A1B			0.00	0.00	-99.65	-100.00	99.65	100.00	0.00	0.00	99.65	100.00	CR	EX
	2050 A2			0.00	0.00	-100.00	-100.00	100.00	100.00	0.00	0.00	100.00	100.00	EX	EX
	2080 A1B			0.00	0.00	-100.00	-100.00	100.00	100.00	0.00	0.00	100.00	100.00	EX	EX
	2080 A2			0.00	0.00	-100.00	-100.00	100.00	100.00	0.00	0.00	100.00	100.00	EX	EX
144	*Lygodium flexuosum*	61.57	96.27												
	2050 A1B			37.49	83.94	-39.10	-12.80	39.81	13.18	0.71	0.38	40.24	13.51	VN	NE
	2050 A2			30.35	74.71	-50.71	-22.39	51.08	22.66	0.37	0.27	51.26	22.87	EN	NE
	2080 A1B			7.72	7.18	-87.47	-92.54	87.69	92.55	0.22	0.00	87.72	92.55	EN	CR
	2080 A2			0.00	0.00	-100.00	-100.00	100.00	100.00	0.00	0.00	100.00	100.00	EX	EX

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
145	*Markhamia stipulata*	100.00	100.00												
	2050 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2050 A2			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A2			99.97	100.00	-0.03	0.00	0.03	0.00	0.00	0.00	0.03	0.00	NT	LC
146	*Melastoma malabathricum*	42.75	82.23												
	2050 A1B			23.71	52.39	-44.54	-36.29	44.54	36.29	0.00	0.00	44.54	36.29	VN	VN
	2050 A2			20.24	41.34	-52.67	-49.73	52.67	49.73	0.00	0.00	52.67	49.73	EN	VN
	2080 A1B			5.84	16.64	-86.34	-79.76	86.34	79.76	0.00	0.00	86.34	79.76	CR	EN
	2080 A2			7.44	24.30	-82.59	-70.45	82.59	70.45	0.00	0.00	82.59	70.45	CR	EN
147	*Melastoma normale*	48.22	92.03												
	2050 A1B			16.39	48.42	-66.02	-47.39	66.02	47.39	0.00	0.00	66.02	47.39	EN	VN
	2050 A2			20.29	50.52	-57.92	-45.11	57.92	45.11	0.00	0.00	57.92	45.11	EN	VN
	2080 A1B			5.08	16.48	-89.47	-82.10	89.47	82.10	0.00	0.00	89.47	82.10	CR	CR
	2080 A2			1.87	10.15	-96.13	-88.98	96.13	88.98	0.00	0.00	96.13	88.98	CR	CR
148	*Melia azedarach*	100.00	100.00												
	2050 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2050 A2			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A2			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
149	*Melicope pteleifolia*	52.16	96.94												
	2050 A1B			13.26	44.38	-74.58	-54.22	74.58	54.22	0.00	0.00	74.58	54.22	EN	EN
	2050 A2			24.70	58.37	-52.64	-39.79	52.64	39.79	0.00	0.00	52.64	39.79	EN	VN
	2080 A1B			11.78	45.94	-77.40	-52.61	77.40	90.40	0.00	0.00	77.40	90.40	EN	EN
	2080 A2			7.09	25.81	-86.41	-73.37	86.41	73.37	0.00	0.00	86.41	73.37	CR	EN
150	*Microtoena insuavis*	71.48	81.29												
	2050 A1B			71.37	92.54	-0.15	13.85	11.65	0.00	11.50	13.85	20.77	12.16	NE	LC
	2050 A2			24.96	7.98	-65.08	-90.18	70.25	90.18	5.17	0.00	71.71	90.18	EN	CR
	2080 A1B			9.46	24.64	-86.76	-69.68	86.76	69.68	0.00	0.00	86.76	69.68	CR	EN
	2080 A2			11.98	3.11	-83.24	-96.17	84.16	96.17	0.92	0.00	84.30	96.17	CR	CR
151	*Miliusa thorelii*	57.61	86.53												
	2050 A1B			44.22	71.62	-23.25	-17.23	28.88	18.40	5.63	1.18	32.67	19.35	NE	NE
	2050 A2			43.99	54.64	-23.64	-36.85	34.95	38.42	11.31	1.57	41.56	39.38	NE	VN
	2080 A1B			44.71	76.75	-22.40	-11.30	32.11	17.09	9.71	5.79	38.12	21.62	NE	NE
	2080 A2			40.68	78.61	-29.40	-9.16	40.71	16.20	11.31	7.05	46.73	21.72	NE	NE
152	*Miliusa velutina*	52.72	57.65												
	2050 A1B			23.57	35.02	-55.30	-39.24	55.30	39.24	0.00	0.00	55.30	39.24	EN	VN
	2050 A2			55.16	31.28	4.62	-45.74	13.76	46.14	18.38	0.40	27.15	46.35	LC	VN
	2080 A1B			41.20	37.99	-21.85	-34.11	27.64	35.56	5.78	1.46	31.59	36.49	NE	VN
	2080 A2			20.77	14.82	-60.60	-74.28	60.92	74.31	0.32	0.03	61.05	74.32	EN	EN

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
153	*Millettia extensa*	42.87	64.69												
	2050 A1B			54.03	79.39	26.03	22.72	2.48	0.03	28.50	22.75	24.11	18.55	LC	LC
	2050 A2			34.72	56.78	-19.01	-12.23	0.96	12.35	39.04	0.12	28.77	12.46	NE	NE
	2080 A1B			59.20	95.80	38.08	48.09	0.96	0.00	39.04	48.09	28.77	32.47	LC	LC
	2080 A2			65.16	99.96	51.99	54.52	2.40	0.00	54.39	54.52	36.78	35.28	LC	LC
154	*Mimosa pigra*	99.92	100.00												
	2050 A1B			99.92	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2050 A2			99.79	99.49	-0.13	-0.51	0.13	0.51	0.00	0.00	0.13	0.51	NE	NE
	2080 A1B			99.68	99.42	-0.23	-0.58	0.23	0.58	0.00	0.00	0.23	0.58	NE	NE
	2080 A2			77.80	91.44	-22.14	-8.56	22.14	8.56	0.00	0.00	22.14	8.56	NE	NE
155	*Mimosa pudica*	66.15	100.00												
	2050 A1B			43.49	84.50	-34.25	-15.50	34.25	15.50	0.00	0.00	34.25	15.50	VN	NE
	2050 A2			42.56	86.91	-35.66	-13.09	35.66	13.09	0.00	0.00	35.66	13.09	VN	NE
	2080 A1B			20.20	60.07	-69.47	-39.93	69.47	39.93	0.00	0.00	69.47	39.93	EN	VN
	2080 A2			14.60	47.39	-77.93	-52.61	77.93	52.61	0.00	0.00	77.93	52.61	EN	EN
156	*Mitragyna rotundifolia*	43.60	36.04												
	2050 A1B			53.76	28.64	23.31	-20.53	13.51	29.82	36.82	9.29	36.78	35.79	LC	NE
	2050 A2			76.79	57.84	76.14	60.51	3.82	17.47	79.96	77.98	46.55	53.63	LC	LC
	2080 A1B			97.70	99.59	124.11	176.37	0.00	176.37	124.11	0.00	55.38	176.37	LC	LC
	2080 A2			5.48	11.02	-87.42	-69.42	87.42	69.42	0.00	0.00	87.42	69.42	CR	EN

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
157	*Molineria latifolia*	92.26	96.98												
	2050 A1B			92.72	96.80	0.50	-0.19	0.38	0.19	0.88	0.01	1.24	0.20	LC	NE
	2050 A2			86.21	89.64	-6.56	-7.57	7.31	7.57	0.75	0.00	8.01	7.57	NT	NE
	2080 A1B			92.83	93.46	0.62	-3.62	1.78	3.62	2.40	0.00	4.09	3.62	LC	NE
	2080 A2			89.00	80.83	-3.54	-16.65	6.71	16.65	3.17	0.00	9.58	16.65	NT	NE
158	*Morinda angustifolia*	95.44	99.01												
	2050 A1B			64.72	96.91	-32.19	-2.12	32.45	2.13	0.26	0.00	32.63	2.13	VN	NE
	2050 A2			72.10	100.00	-24.46	1.00	29.15	0.00	4.69	1.00	32.33	0.99	NE	LC
	2080 A1B			64.82	99.96	-32.08	0.96	32.75	0.00	0.66	0.96	33.19	0.95	VN	LC
	2080 A2			51.32	79.85	-46.23	-19.35	46.23	19.35	0.00	0.00	46.23	19.35	VN	NT
159	*Morus macroura*	96.29	99.94												
	2050 A1B			99.99	100.00	3.84	0.06	0.00	0.00	3.84	0.06	3.70	0.06	LC	LC
	2050 A2			94.54	100.00	-1.82	0.06	4.26	0.00	2.45	0.06	6.55	0.06	NE	LC
	2080 A1B			99.98	100.00	3.83	0.06	0.00	0.00	3.83	0.06	3.69	0.06	LC	LC
	2080 A2			99.39	100.00	3.21	0.06	0.00	0.00	3.21	0.06	3.11	0.06	LC	LC
160	*Muehlenbeckia platyclados*	27.27	50.44												
	2050 A1B			23.21	43.97	-14.91	-12.83	19.83	12.83	4.92	0.00	23.59	12.83	NE	NE
	2050 A2			13.39	33.36	-50.92	-33.86	50.92	33.86	0.00	0.00	50.92	33.86	EN	VN
	2080 A1B			15.91	39.63	-41.66	-21.44	42.52	22.13	0.85	0.70	43.00	22.67	VN	NE
	2080 A2			13.29	38.77	-51.26	-23.14	51.89	23.14	0.63	0.00	52.19	23.14	EN	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
161	*Mucuna macrocarpa*	64.99	99.88												
	2050 A1B			52.03	97.11	-19.94	-2.78	20.90	2.78	0.96	0.00	21.65	2.78	NE	NE
	2050 A2			100.00	100.00	53.88	0.12	0.00	0.00	53.88	0.12	35.01	0.12	LC	LC
	2080 A1B			67.23	100.00	3.45	0.12	10.30	0.00	13.76	0.12	21.15	0.12	LC	LC
	2080 A2			67.23	99.96	3.46	0.08	7.42	0.01	10.88	0.09	16.51	0.10	LC	LC
162	*Mussaenda sanderiana*	47.20	81.46												
	2050 A1B			14.08	42.97	-70.18	-47.25	70.32	47.25	0.14	0.00	70.36	47.26	EN	VN
	2050 A2			15.57	50.08	-67.01	-38.51	68.06	39.91	1.06	1.40	68.40	40.74	EN	VN
	2080 A1B			4.55	12.31	-90.36	-84.88	90.48	84.88	0.12	0.00	90.49	84.88	CR	CR
	2080 A2			16.15	53.46	-65.80	-34.37	68.29	35.02	2.49	0.65	69.06	35.44	EN	VN
163	*Ochna integerrima*	87.33	91.79												
	2050 A1B			81.27	91.87	-6.94	0.09	7.04	0.01	0.10	0.10	7.14	0.11	NE	NE
	2050 A2			88.16	93.47	0.95	1.83	1.30	0.00	2.25	1.83	3.47	1.80	LC	LC
	2080 A1B			65.07	88.06	-25.49	-4.06	25.49	4.07	0.00	0.00	25.49	4.07	NE	NE
	2080 A2			77.33	89.70	-11.45	-2.28	11.45	2.28	0.00	0.00	11.45	2.28	NE	NE
164	*Orthosiphon grandiflorus*	50.12	65.24												
	2050 A1B			65.85	91.58	31.39	40.38	0.01	0.00	31.40	40.38	23.91	28.76	LC	NE
	2050 A2			56.38	80.68	12.50	23.67	4.32	0.00	16.82	23.67	18.09	19.14	LC	LC
	2080 A1B			72.74	97.86	45.14	50.01	45.14	0.00	0.00	50.01	45.14	33.34	LC	LC
	2080 A2			76.98	100.00	53.59	53.29	0.96	0.00	54.55	53.29	35.92	34.76	LC	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
165	*Oxalis acetosella*	8.13	24.12												
	2050 A1B			5.02	13.05	-38.25	-45.90	38.27	45.90	0.01	0.00	38.27	45.90	VN	VN
	2050 A2			37.49	50.60	361.04	109.83	2.65	4.45	363.69	114.28	79.01	55.41	LC	LC
	2080 A1B			8.75	17.73	7.62	-26.50	30.55	31.51	38.17	5.01	49.74	34.78	NE	NE
	2080 A2			12.87	23.21	58.31	-3.77	23.48	21.15	81.78	17.38	57.90	32.82	LC	NE
166	*Paederia foetida*	51.11	82.20												
	2050 A1B			43.20	86.29	-15.48	4.97	20.66	2.88	5.18	7.85	24.56	9.94	NE	LC
	2050 A2			50.09	83.64	-2.00	1.76	16.13	3.35	14.12	5.10	26.51	8.04	NE	LC
	2080 A1B			23.20	44.25	-54.61	-46.17	55.18	47.01	0.58	0.84	55.44	47.45	EN	VN
	2080 A2			46.97	90.43	-8.11	10.02	17.79	0.88	9.68	10.90	25.04	10.62	NT	LC
167	*Paris polyphylla*	31.95	72.63												
	2050 A1B			7.55	28.67	-76.37	-60.53	76.37	60.53	0.00	0.00	76.37	60.53	EN	EN
	2050 A2			6.96	24.05	-78.23	-66.88	78.23	66.88	0.00	0.00	78.23	66.88	EN	EN
	2080 A1B			1.03	3.52	-96.77	-95.15	96.77	95.15	0.00	0.00	96.77	95.15	CR	CR
	2080 A2			2.71	11.29	-91.51	-84.46	91.51	84.46	0.00	0.00	91.51	84.46	CR	CR
168	*Phlogacanthus curviflorus*	56.66	98.80												
	2050 A1B			22.37	64.64	-60.51	-34.58	60.51	34.60	0.00	0.00	60.51	34.60	EN	VN
	2050 A2			26.62	65.50	-53.02	-33.71	53.02	33.71	0.00	0.00	53.02	33.71	EN	VN
	2080 A1B			17.62	54.40	-68.90	-44.94	68.90	44.94	0.00	0.00	68.90	44.94	EN	VN
	2080 A2			6.66	23.52	-88.24	-76.19	88.24	76.19	0.00	0.00	88.24	76.19	CR	EN

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
165	*Oxalis acetosella*	8.13	24.12												
	2050 A1B			5.02	13.05	-38.25	-45.90	38.27	45.90	0.01	0.00	38.27	45.90	VN	VN
	2050 A2			37.49	50.60	361.04	109.83	2.65	4.45	363.69	114.28	79.01	55.41	LC	LC
	2080 A1B			8.75	17.73	7.62	-26.50	30.55	31.51	38.17	5.01	49.74	34.78	NE	NE
	2080 A2			12.87	23.21	58.31	-3.77	23.48	21.15	81.78	17.38	57.90	32.82	LC	NE
166	*Paederia foetida*	51.11	82.20												
	2050 A1B			43.20	86.29	-15.48	4.97	20.66	2.88	5.18	7.85	24.56	9.94	NE	LC
	2050 A2			50.09	83.64	-2.00	1.76	16.13	3.35	14.12	5.10	26.51	8.04	NE	LC
	2080 A1B			23.20	44.25	-54.61	-46.17	55.18	47.01	0.58	0.84	55.44	47.45	EN	VN
	2080 A2			46.97	90.43	-8.11	10.02	17.79	0.88	9.68	10.90	25.04	10.62	NE	LC
167	*Paris polyphylla*	31.95	72.63												
	2050 A1B			7.55	28.67	-76.37	-60.53	76.37	60.53	0.00	0.00	76.37	60.53	EN	EN
	2050 A2			6.96	24.05	-78.23	-66.88	78.23	66.88	0.00	0.00	78.23	66.88	EN	EN
	2080 A1B			1.03	3.52	-96.77	-95.15	96.77	95.15	0.00	0.00	96.77	95.15	CR	CR
	2080 A2			2.71	11.29	-91.51	-84.46	91.51	84.46	0.00	0.00	91.51	84.46	CR	CR
168	*Phlogacanthus curviflorus*	56.66	98.80												
	2050 A1B			22.37	64.64	-60.51	-34.58	60.51	34.60	0.00	0.00	60.51	34.60	EN	VN
	2050 A2			26.62	65.50	-53.02	-33.71	53.02	33.71	0.00	0.00	53.02	33.71	EN	VN
	2080 A1B			17.62	54.40	-68.90	-44.94	68.90	44.94	0.00	0.00	68.90	44.94	EN	VN
	2080 A2			6.66	23.52	-88.24	-76.19	88.24	76.19	0.00	0.00	88.24	76.19	CR	EN

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
169	*Phrynium pubinerve*	72.65	100.00												
	2050 A1B			62.94	99.50	-13.37	-0.50	13.59	0.50	0.22	0.00	13.78	0.50	NE	NE
	2050 A2			57.34	95.64	-21.08	-4.36	21.28	4.36	0.20	0.00	21.43	4.36	NE	NE
	2080 A1B			47.39	72.46	-34.77	-27.54	34.98	27.54	0.20	0.00	35.11	27.54	VN	NE
	2080 A2			44.70	76.41	-38.47	-23.58	38.50	23.58	0.03	0.00	38.52	23.58	VN	NE
170	*Phyllanthus amarus*	99.91	100.00												
	2050 A1B			99.92	100.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	LC	LC
	2050 A2			99.92	100.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A1B			99.92	100.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	LC	LC
	2080 A2			90.54	84.72	-9.37	-15.28	9.37	15.28	0.00	0.00	9.37	15.28	NE	NE
171	*Phyllanthus emblica*	66.78	99.23												
	2050 A1B			29.02	68.32	-56.54	-31.15	56.54	31.17	0.00	0.01	56.55	31.18	EN	VN
	2050 A2			42.97	89.04	-35.66	-10.27	36.52	10.99	0.86	0.72	37.06	11.63	VN	NE
	2080 A1B			15.63	37.72	-76.60	-61.99	76.89	62.04	0.29	0.05	76.95	62.06	EN	VN
	2080 A2			35.42	80.36	-46.96	-19.02	49.55	19.77	2.59	0.75	50.82	20.37	VN	NE
172	*Phyllodium pulchellum*	84.25	99.19												
	2050 A1B			37.16	80.26	-55.89	-19.08	56.78	19.22	0.89	0.14	57.17	19.34	EN	NE
	2050 A2			38.52	92.12	-54.28	-7.13	54.50	7.27	0.22	0.14	54.60	7.40	EN	NE
	2080 A1B			10.56	13.05	-87.47	-86.85	88.10	86.86	0.63	0.02	88.17	86.87	CR	CR
	2080 A2			28.13	68.77	-66.61	-30.67	67.19	31.07	0.58	0.40	67.38	31.35	EN	VN

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
173	*Phyllodium vestitum*	100.00	100.00												
	2050 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	LC	LC
	2050 A2			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	LC	LC
	2080 A2			99.92	100.00	-0.08	0.00	0.08	0.00	0.00	0.00	0.08	0.00	NT	LC
174	*Picrasma javanica*	99.92	100.00												
	2050 A1B			99.92	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2050 A2			99.47	100.00	-0.45	0.00	0.53	0.00	0.08	0.00	0.62	0.00	NE	LC
	2080 A1B			98.46	100.00	-1.46	0.00	1.54	0.00	0.08	0.00	1.62	0.00	NE	LC
	2080 A2			90.60	77.41	-9.33	-22.59	9.41	22.59	0.08	0.00	9.48	22.59	NE	NE
175	*Pinus kesiya*	39.22	76.53												
	2050 A1B			28.99	71.15	-26.09	-7.03	26.31	7.03	0.22	0.00	26.47	7.03	NE	NE
	2050 A2			23.39	65.65	-40.35	-14.21	40.42	14.21	0.07	0.00	40.46	14.21	VN	NE
	2080 A1B			8.44	15.83	-78.49	-79.32	78.49	79.32	0.00	0.00	78.49	79.32	EN	EN
	2080 A2			4.44	16.11	-88.67	-78.95	88.67	78.95	0.00	0.00	88.67	78.95	CR	EN
176	*Piper interruptum*	49.51	60.44												
	2050 A1B			71.03	92.34	43.47	52.79	0.00	0.00	43.47	52.79	30.30	34.55	LC	LC
	2050 A2			62.85	85.11	26.93	40.82	1.38	0.00	28.31	41.18	23.14	29.17	LC	LC
	2080 A1B			78.25	97.65	58.05	61.58	0.00	0.00	58.05	61.58	36.73	38.11	LC	LC
	2080 A2			76.93	100.00	55.38	65.46	1.04	65.46	56.41	0.00	36.73	65.46	LC	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
177	*Piper retrofractum*	99.18	99.81												
	2050 A1B			96.35	97.77	-2.86	-2.04	2.98	2.04	0.12	0.00	3.10	2.04	NE	NE
	2050 A2			92.43	94.04	-6.81	-5.78	6.96	5.78	0.16	0.00	7.11	5.78	NE	NE
	2080 A1B			94.14	97.41	-5.09	-2.40	5.41	2.54	0.33	0.14	5.72	2.68	NE	NE
	2080 A2			91.88	85.94	-7.37	-13.89	7.51	13.89	0.15	0.00	7.64	13.89	NE	NE
178	*Plantago major*	57.01	97.98												
	2050 A1B			28.64	68.07	-49.77	-30.53	49.77	30.53	0.00	0.00	49.77	30.53	VN	VN
	2050 A2			25.53	58.64	-55.22	-40.15	55.22	40.15	0.00	0.00	55.22	40.15	EN	VN
	2080 A1B			14.77	45.64	-74.08	-53.42	74.08	53.42	0.00	0.00	74.08	53.42	EN	EN
	2080 A2			14.10	49.18	-75.26	-49.81	75.26	49.81	0.00	0.00	75.26	49.81	EN	VN
179	*Platycerium wallichii*	30.42	60.30												
	2050 A1B			32.12	60.57	5.59	0.46	12.22	4.11	17.81	4.56	25.49	8.29	LC	LC
	2050 A2			34.29	78.48	12.73	30.15	15.76	0.00	28.49	30.15	34.43	23.17	LC	LC
	2080 A1B			15.43	47.31	-49.27	-21.55	58.63	34.96	9.36	13.42	62.17	42.66	VN	NE
	2080 A2			6.52	25.82	-78.57	-57.18	78.57	57.18	0.00	0.00	78.57	57.18	EN	EN
180	*Plumbago indica*	90.09	95.51												
	2050 A1B			82.89	95.18	-7.99	-0.35	8.03	0.39	0.03	0.04	8.06	0.43	NE	NE
	2050 A2			83.18	93.64	-7.68	-1.96	7.71	1.96	0.04	0.00	7.74	1.96	NE	NE
	2080 A1B			73.74	97.17	-18.15	1.74	18.58	0.00	0.43	1.74	18.92	1.71	NE	LC
	2080 A2			64.76	92.57	-28.12	-3.08	28.18	3.08	0.07	0.00	28.23	3.08	NE	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
181	*Plumbago zeylanica*	99.10	100.00												
	2050 A1B			77.63	100.00	-21.66	0.00	21.66	0.00	0.00	0.00	21.66	0.00	NE	LC
	2050 A2			89.19	100.00	-9.99	0.00	9.99	0.00	0.00	0.00	9.99	0.00	NE	LC
	2080 A1B			76.56	100.00	-22.74	0.00	22.74	0.00	0.00	0.00	22.74	0.00	NE	LC
	2080 A2			31.29	82.27	-68.42	-17.73	68.42	17.73	0.00	0.00	68.42	17.73	EN	NE
182	*Polygala crotalarioides*	24.68	58.73												
	2050 A1B			17.70	51.04	-28.30	-13.09	29.74	13.23	1.44	0.14	30.74	13.36	NE	NE
	2050 A2			12.16	40.93	-50.72	-30.30	50.72	30.30	0.00	0.00	50.72	30.30	EN	VN
	2080 A1B			17.75	54.46	-28.08	-7.27	32.85	11.67	4.77	4.40	35.91	15.40	NE	NE
	2080 A2			10.68	67.54	-56.74	15.00	57.01	1.14	0.27	16.14	57.12	14.88	EN	LC
183	*Polygonum paleaceum*	26.95	67.64												
	2050 A1B			7.05	27.01	-73.84	-60.07	73.84	60.07	0.00	0.00	73.84	60.07	EN	EN
	2050 A2			8.57	31.28	-68.19	-53.76	68.19	53.76	0.00	0.00	68.19	53.76	EN	EN
	2080 A1B			2.19	8.54	-91.86	-87.38	91.86	87.38	0.00	0.00	91.86	87.38	CR	CR
	2080 A2			1.50	6.45	-94.44	-90.47	94.44	90.47	0.00	0.00	94.44	90.47	CR	CR
184	*Pothos scandens*	57.60	91.72												
	2050 A1B			12.14	28.06	-78.92	-69.41	78.92	69.41	0.00	0.00	78.92	69.41	EN	EN
	2050 A2			11.11	28.69	-80.71	-68.72	80.71	68.72	0.00	0.00	80.71	68.72	CR	EN
	2080 A1B			1.34	1.90	-97.67	-97.93	97.67	97.93	0.00	0.00	97.67	97.93	CR	CR
	2080 A2			0.71	1.42	-98.77	-98.45	98.77	98.45	0.00	0.00	98.77	98.45	CR	CR

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
185	*Prunus cerasoides*	18.52	54.39												
	2050 A1B			13.40	42.73	-27.66	-21.43	31.29	25.47	3.63	4.04	33.69	28.37	NE	NE
	2050 A2			12.03	32.01	-35.03	-41.15	40.34	45.55	5.31	4.41	43.35	47.85	VN	VN
	2080 A1B			3.99	10.09	-78.46	-81.45	78.48	81.45	0.02	0.00	78.48	81.45	EN	CR
	2080 A2			8.36	39.25	-54.88	-27.84	55.75	27.92	0.87	0.09	56.13	27.99	EN	NE
186	*Quisqualis indica*	43.84	60.44												
	2050 A1B			36.59	52.99	-16.54	-12.32	16.54	12.32	0.00	0.00	16.54	12.32	NE	NE
	2050 A2			37.25	51.38	-15.05	-14.99	15.05	14.99	0.00	0.00	15.05	14.99	NE	NE
	2080 A1B			26.13	44.24	-40.41	-26.81	40.41	26.81	0.00	0.00	40.41	26.81	VN	NE
	2080 A2			33.68	55.75	-23.17	-7.77	25.70	13.19	2.53	5.43	27.54	17.66	NE	NE
187	*Rauvolfia serpentina*	62.28	32.19												
	2050 A1B			75.65	93.25	21.47	189.71	18.16	0.00	39.63	189.71	41.39	65.48	LC	LC
	2050 A2			73.66	86.91	18.28	169.99	24.27	6.65	42.55	176.64	46.87	66.26	LC	LC
	2080 A1B			84.06	98.00	34.97	204.46	10.14	0.00	45.11	204.46	38.07	67.16	LC	LC
	2080 A2			95.12	100.00	52.73	210.67	4.04	0.00	56.77	210.67	38.79	67.81	LC	LC
188	*Rauvolfia verticillata*	53.17	89.71												
	2050 A1B			18.96	54.16	-64.35	-39.63	64.35	39.63	0.00	0.00	64.35	39.63	EN	VN
	2050 A2			12.68	42.82	-76.16	-52.27	76.18	52.27	0.03	0.00	76.19	52.27	EN	EN
	2080 A1B			1.94	5.08	-96.35	-94.34	96.38	94.34	0.03	0.00	96.38	94.34	CR	CR
	2080 A2			8.76	29.77	-83.53	-66.81	83.55	66.81	0.02	0.00	83.56	66.81	CR	EN

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
189	*Rhinacanthus nasutus*	63.81	90.79												
	2050 A1B			63.16	87.26	-1.03	-3.89	16.27	4.38	15.24	0.48	27.35	4.84	NE	NE
	2050 A2			78.19	70.95	22.53	-21.85	18.67	21.85	41.20	0.00	42.40	21.85	LC	NE
	2080 A1B			45.89	59.31	-28.09	-34.67	44.39	36.20	16.30	1.53	52.19	37.17	NE	VN
	2080 A2			67.10	87.08	5.14	-4.09	27.59	11.66	32.73	7.57	45.45	17.88	LC	NE
190	*Rhus javanica*	45.10	72.22												
	2050 A1B			22.59	52.78	-49.92	-26.92	49.92	26.92	0.00	0.00	49.92	26.92	VN	NE
	2050 A2			29.64	77.12	-34.29	6.78	20.99	0.99	4.96	7.77	24.72	8.13	VN	LC
	2080 A1B			55.22	85.61	22.43	18.54	23.95	0.00	1.52	18.54	25.09	15.64	LC	LC
	2080 A2			37.87	63.17	-16.03	-12.53	34.29	12.53	0.00	0.00	34.29	12.53	NE	NE
191	*Rubus alceifolius*	94.46	99.08												
	2050 A1B			95.51	99.45	1.11	0.37	0.00	0.00	0.97	0.37	0.96	0.36	LC	LC
	2050 A2			99.92	100.00	5.77	0.92	0.00	0.00	5.77	0.92	5.46	0.92	LC	LC
	2080 A1B			99.92	100.00	5.77	0.92	0.00	0.00	2.08	0.92	2.04	0.92	LC	LC
	2080 A2			99.92	100.00	5.77	0.92	0.00	0.00	5.77	0.92	5.46	0.92	LC	LC
192	*Rubus rosifolius*	43.32	77.32												
	2050 A1B			23.33	58.85	-46.15	-23.89	46.28	23.92	0.12	0.03	46.34	23.94	VN	NE
	2050 A2			13.49	40.09	-68.87	-48.16	69.40	48.95	0.53	0.80	69.56	49.36	EN	VN
	2080 A1B			3.66	8.19	-91.55	-89.41	91.55	89.41	0.00	0.00	91.55	89.41	CR	CR
	2080 A2			6.01	23.35	-86.13	-69.80	86.15	69.80	0.02	0.00	86.15	69.80	CR	EN

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
193	*Salix tetrasperma*	99.92	100.00												
	2050 A1B			90.67	100.00	-9.26	0.00	9.26	0.00	0.00	0.00	9.26	0.00	NE	LC
	2050 A2			92.32	100.00	-7.61	0.00	7.61	0.00	0.00	0.00	7.61	0.00	NE	LC
	2080 A1B			82.58	100.00	-17.35	0.00	17.35	0.00	0.00	0.00	17.35	0.00	NE	LC
	2080 A2			81.94	100.00	-18.00	0.00	18.00	0.00	0.00	0.00	18.00	0.00	NE	LC
194	*Sambucus javanica*	48.38	92.82												
	2050 A1B			7.54	26.79	-84.40	-71.14	84.40	71.14	0.00	0.00	84.40	71.14	CR	EN
	2050 A2			19.03	56.49	-60.67	-39.14	60.67	39.14	0.00	0.00	60.67	39.14	EN	VN
	2080 A1B			2.69	5.18	-94.44	-94.42	94.44	94.42	0.00	0.00	94.44	94.42	CR	CR
	2080 A2			0.99	2.09	-97.95	-97.75	97.95	97.75	0.00	0.00	97.95	97.75	CR	CR
195	*Sambucus simpsonii*	51.50	69.61												
	2050 A1B			57.96	81.61	12.54	17.23	2.14	0.00	14.67	17.23	14.66	14.70	LC	LC
	2050 A2			55.13	74.19	7.05	6.57	2.72	0.82	9.77	7.38	11.37	7.64	LC	LC
	2080 A1B			62.53	89.84	21.43	29.06	1.31	0.00	22.73	29.06	19.59	22.52	LC	LC
	2080 A2			62.04	91.84	20.46	31.93	3.96	0.00	24.42	31.93	22.81	24.20	LC	LC
196	*Sapindus rarak*	81.16	100.00												
	2050 A1B			60.88	96.43	-24.99	-3.57	25.00	3.57	0.01	0.00	25.00	3.57	NE	NE
	2050 A2			60.91	98.81	-24.95	-1.19	24.99	1.19	0.03	0.00	25.01	1.19	NE	NE
	2080 A1B			49.83	87.51	-38.60	-12.49	38.60	12.49	0.00	0.00	38.60	12.49	VN	NE
	2080 A2			49.38	77.15	-39.16	-22.85	39.16	22.85	0.00	0.00	39.16	22.85	VN	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
197	*Saurauia napaulensis*	33.96	74.84												
	2050 A1B			24.97	55.02	-26.48	-26.48	30.47	26.68	3.99	0.20	33.13	26.83	NE	NE
	2050 A2			20.89	64.02	-38.48	-14.46	42.01	18.83	3.53	4.37	43.99	22.23	VN	NE
	2080 A1B			21.94	55.02	-35.38	-26.48	36.84	15.33	1.46	1.58	37.75	16.65	VN	NE
	2080 A2			6.19	24.96	-81.78	-66.65	81.78	41.52	0.00	1.36	81.78	42.31	CR	EN
198	*Schefflera leucantha*	16.77	48.91												
	2050 A1B			15.81	46.49	-5.73	-4.94	15.13	12.68	9.40	7.74	22.43	18.95	NE	NE
	2050 A2			10.60	25.60	-36.77	-47.66	47.16	51.08	10.39	3.42	52.13	52.69	VN	VN
	2080 A1B			15.07	40.63	-10.17	-16.93	21.74	19.54	11.57	2.61	29.86	21.58	NE	NE
	2080 A2			6.54	21.41	-60.99	-56.23	63.56	56.39	2.57	0.16	64.47	56.46	EN	EN
199	*Schefflera venulosa*	74.92	27.58												
	2050 A1B			81.85	93.37	9.24	238.55	0.01	0.01	9.26	3.52	8.49	3.41	LC	LC
	2050 A2			81.74	93.80	9.10	240.10	0.21	1.06	9.31	6.11	8.70	6.76	LC	LC
	2080 A1B			87.67	97.01	17.01	251.73	0.09	0.00	17.10	16.69	14.69	14.30	LC	LC
	2080 A2			53.59	65.54	-28.47	137.65	29.53	97.40	1.06	0.00	30.27	97.40	NE	LC
200	*Schima wallichii*	63.40	100.00												
	2050 A1B			22.91	67.60	-63.87	-32.40	64.40	32.40	0.53	0.00	64.59	32.40	EN	VN
	2050 A2			22.59	68.24	-64.38	-31.76	64.86	31.76	0.49	0.00	65.03	31.76	EN	VN
	2080 A1B			0.02	0.00	-99.96	-100.00	99.96	100.00	0.00	0.00	99.96	100.00	CR	EX
	2080 A2			0.02	0.11	-99.97	-99.89	99.97	99.89	0.00	0.00	99.97	99.89	CR	CR

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
201	*Schleichera oleosa*	79.85	99.68												
	2050 A1B			53.63	96.13	-32.84	-3.57	32.86	3.58	0.03	0.01	32.88	3.60	VN	NE
	2050 A2			40.96	86.75	-48.71	-12.98	48.73	12.99	0.02	0.01	48.74	13.00	VN	NE
	2080 A1B			24.22	57.19	-69.67	-42.63	69.76	42.63	0.10	0.00	69.79	42.63	EN	VN
	2080 A2			28.61	61.75	-64.17	-38.05	64.35	38.13	0.17	0.08	64.41	38.18	EN	VN
202	*Scoparia dulcis*	100.00	100.00												
	2050 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2050 A2			99.94	100.00	-0.06	0.00	0.06	0.00	0.00	0.00	0.06	0.00	NE	LC
	2080 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A2			98.93	100.00	-1.07	0.00	1.07	0.00	0.00	0.00	1.07	0.00	NE	LC
203	*Securinega leucopyrus*	63.44	85.72												
	2050 A1B			72.73	100.00	14.65	16.66	0.00	0.00	14.65	16.66	12.78	14.28	LC	LC
	2050 A2			65.79	98.79	3.70	15.25	3.13	0.00	6.83	15.25	9.33	13.23	LC	LC
	2080 A1B			83.86	100.00	32.19	16.66	0.00	0.00	32.19	16.66	24.35	14.28	LC	LC
	2080 A2			80.47	100.00	26.84	16.66	0.06	0.00	26.91	16.66	21.25	14.28	LC	LC
204	*Senna alata*	54.41	83.28												
	2050 A1B			16.63	41.71	-69.44	-49.92	69.44	49.92	0.00	0.00	69.44	49.92	EN	VN
	2050 A2			18.56	38.86	-65.88	-53.33	65.88	53.33	0.00	0.00	65.88	53.33	EN	EN
	2080 A1B			1.51	3.64	-97.22	-95.63	97.22	95.63	0.00	0.00	97.22	95.63	CR	CR
	2080 A2			1.35	3.09	-97.53	-96.30	97.72	96.30	0.20	0.00	97.73	96.30	CR	CR

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
205	*Senna occidentalis*	56.84	92.14												
	2050 A1B			48.81	96.17	-14.13	4.38	18.05	2.14	3.92	6.53	21.13	8.14	NT	LC
	2050 A2			56.23	94.94	-1.07	3.04	14.93	5.46	13.86	8.50	25.28	12.87	LC	LC
	2080 A1B			26.34	29.81	-53.66	-67.64	59.94	67.64	6.29	0.00	62.31	67.64	EN	EN
	2080 A2			48.99	86.13	-13.82	-6.52	18.55	6.78	4.73	0.26	22.22	7.02	NE	NE
206	*Shorea obtusa*	98.90	100.00												
	2050 A1B			77.85	100.00	-21.28	0.00	22.04	0.00	0.76	0.00	22.64	0.00	NE	LC
	2050 A2			74.17	100.00	-25.01	0.00	25.01	0.00	0.00	0.00	25.01	0.00	NE	LC
	2080 A1B			49.18	50.62	-50.27	-49.38	50.27	49.38	0.00	0.00	50.27	49.38	EN	VN
	2080 A2			67.38	95.02	-31.87	-4.98	31.87	4.98	0.01	0.00	31.88	4.98	VN	NE
207	*Shorea roxburghii*	99.99	100.00												
	2050 A1B			99.99	100.00	0.00	0.00	0.01	0.00	0.01	0.00	0.02	0.00	LC	LC
	2050 A2			99.88	100.00	-0.11	0.00	0.12	0.00	0.01	0.00	0.13	0.00	NE	LC
	2080 A1B			99.82	99.78	-0.17	-0.22	0.18	0.22	0.01	0.00	0.18	0.22	NE	NE
	2080 A2			71.93	88.67	-28.06	-11.33	28.06	11.33	0.00	0.00	28.06	11.33	NE	NE
208	*Sida acuta*	55.17	96.09												
	2050 A1B			14.87	43.93	-73.06	-54.28	73.16	54.28	0.10	0.00	73.18	54.28	EN	EN
	2050 A2			32.06	69.95	-41.89	-27.20	44.95	27.20	3.06	0.00	46.59	27.20	VN	NE
	2080 A1B			8.82	31.00	-84.01	-67.74	84.02	67.74	0.01	0.00	84.02	67.74	CR	EN
	2080 A2			1.59	3.99	-97.12	-95.84	97.12	95.84	0.00	0.00	97.12	95.84	CR	CR

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
209	*Sida rhombifolia*	58.64	91.74												
	2050 A1B			40.71	86.27	-30.58	-5.97	31.70	6.75	1.12	0.78	32.45	7.47	VN	NE
	2050 A2			50.88	96.64	-13.22	5.34	17.34	3.66	4.12	9.00	20.62	11.62	NE	LC
	2080 A1B			19.56	23.67	-66.65	-74.20	69.16	74.20	2.51	0.00	69.91	74.20	EN	EN
	2080 A2			35.37	74.40	-39.69	-18.91	39.85	18.91	0.16	0.00	39.94	18.91	VN	NT
210	*Smilax griffithii*	37.60	67.48												
	2050 A1B			47.52	77.33	26.38	14.59	5.49	0.36	31.88	14.96	28.34	13.33	LC	LC
	2050 A2			52.92	81.77	40.75	21.16	2.93	0.05	43.69	21.21	32.45	17.54	LC	LC
	2080 A1B			68.80	94.93	82.98	40.67	0.67	0.24	83.65	40.91	45.91	29.21	LC	VN
	2080 A2			70.92	100.00	88.64	48.18	2.07	0.00	90.72	48.18	48.65	32.52	LC	LC
211	*Smilax ovalifolia*	99.92	100.00												
	2050 A1B			72.74	96.16	-27.20	-3.84	27.20	3.84	0.00	0.00	27.20	3.84	NE	NE
	2050 A2			74.38	89.30	-25.56	-10.70	25.56	10.70	0.00	0.00	25.56	10.70	NE	NE
	2080 A1B			60.70	98.90	-39.25	-1.10	39.25	1.10	0.00	0.00	39.25	1.10	VN	NE
	2080 A2			40.45	98.90	-59.51	-1.10	59.51	1.10	0.00	0.00	59.51	1.10	EN	NE
212	*Smilax verticalis*	55.69	65.47												
	2050 A1B			74.47	87.35	33.72	33.42	0.02	0.00	33.74	33.42	25.25	25.05	LC	LC
	2050 A2			63.96	64.61	14.85	-1.33	2.79	4.51	17.63	3.18	17.36	7.45	LC	NE
	2080 A1B			97.49	100.00	75.07	52.73	0.00	0.00	75.07	52.73	42.88	34.53	LC	LC
	2080 A2			62.57	97.05	12.35	48.23	15.42	0.00	27.77	48.23	33.80	32.54	LC	VN

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
213	*Solanum erianthum*	56.06	95.86												
	2050 A1B			31.96	78.15	-42.99	-18.48	43.70	18.59	0.71	0.11	44.09	18.69	VN	NE
	2050 A2			38.50	90.99	-31.33	-5.08	32.27	5.55	0.94	0.47	32.90	5.98	VN	NE
	2080 A1B			15.96	26.73	-71.54	-72.11	71.95	72.13	0.41	0.02	72.06	72.13	EN	EN
	2080 A2			24.50	60.78	-56.30	-36.59	56.82	37.25	0.52	0.65	57.04	37.65	EN	VN
214	*Spondias pinnata*	41.62	85.90												
	2050 A1B			8.97	35.13	-78.44	-59.10	78.44	59.10	0.00	0.00	78.44	59.10	EN	EN
	2050 A2			28.54	68.37	-31.42	-20.41	48.23	26.38	16.81	5.97	55.68	30.53	VN	NE
	2080 A1B			1.21	0.68	-97.09	-99.21	98.67	99.21	1.58	0.00	98.69	99.21	CR	CR
	2080 A2			0.44	0.70	-98.95	-99.18	99.47	99.18	0.52	0.00	99.47	99.18	CR	CR
215	*Stachytarpheta jamaicensis*	98.96	98.67												
	2050 A1B			97.95	99.15	-1.02	0.49	1.45	0.00	0.42	0.49	1.86	0.49	NE	LC
	2050 A2			98.13	96.26	-0.84	-2.44	0.87	2.44	0.03	0.00	0.90	2.44	NE	NE
	2080 A1B			89.14	82.52	-9.93	-16.37	9.99	16.37	0.06	0.00	10.04	16.37	NE	NE
	2080 A2			98.18	96.22	-0.79	-2.48	0.88	2.48	0.09	0.00	0.97	2.48	NE	NE
216	*Strobilanthes cusia*	45.70	84.37												
	2050 A1B			24.26	68.79	-46.91	-18.47	47.21	18.47	0.30	0.00	47.37	18.47	VN	NE
	2050 A2			28.23	67.84	-38.23	-19.60	39.23	19.60	1.00	0.00	39.83	19.60	VN	NE
	2080 A1B			8.28	21.72	-81.88	-74.25	82.07	74.25	0.19	0.00	82.10	74.25	CR	EN
	2080 A2			22.55	62.07	-50.65	-26.44	51.29	26.44	0.65	0.00	51.61	26.44	EN	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
217	*Strychnos nux-blanda*	47.24	39.50												
	2050 A1B			60.86	26.30	28.82	-33.42	10.57	43.38	39.39	9.95	35.84	48.50	LC	VN
	2050 A2			61.64	25.89	30.46	-34.45	14.44	67.12	44.90	32.66	40.95	75.21	LC	VN
	2080 A1B			41.08	19.98	-13.69	-49.42	18.43	69.76	5.56	18.89	43.29	60.11	NE	VN
	2080 A2			35.90	19.71	-24.00	-50.09	27.27	56.86	3.27	6.77	3.27	59.60	NE	EN
218	*Symplocos racemosa*	97.32	100.00												
	2050 A1B			64.88	98.33	-33.33	-1.67	33.33	1.67	0.00	0.00	33.33	1.67	VN	NT
	2050 A2			78.26	100.00	-19.59	0.00	19.59	0.00	0.00	0.00	19.59	0.00	NT	LC
	2080 A1B			28.76	64.92	-70.44	-35.08	70.44	35.08	0.00	0.00	70.44	35.08	EN	VN
	2080 A2			8.95	22.66	-90.80	-77.34	90.80	77.34	0.00	0.00	90.80	77.34	CR	EN
219	*Tabernaemontana pandacaqui*	8.40	14.27												
	2050 A1B			1.44	7.05	-82.91	-50.59	90.69	74.78	7.79	24.19	91.37	79.69	CR	EN
	2050 A2			2.02	5.24	-75.99	-63.25	77.54	67.77	1.55	4.52	77.88	69.16	EN	EN
	2080 A1B			0.79	3.97	-90.64	-72.19	96.24	88.52	5.60	16.33	96.44	90.13	CR	EN
	2080 A2			0.04	0.26	-99.54	-98.20	99.54	98.20	0.00	0.00	99.54	98.20	CR	CR
220	*Tectona grandis*	98.00	99.40												
	2050 A1B			99.72	99.85	1.76	0.45	0.00	0.00	1.76	0.45	1.73	0.45	LC	LC
	2050 A2			99.64	99.95	1.68	0.55	0.00	0.00	1.68	0.55	1.65	0.55	LC	LC
	2080 A1B			99.97	100.00	2.01	0.60	0.00	0.00	2.01	0.60	1.98	0.60	LC	LC
	2080 A2			99.02	100.00	1.04	0.60	0.74	0.00	1.79	0.60	2.48	0.60	LC	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
221	*Terminalia bellirica*	100.00	100.00												
	2050 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2050 A2			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A1B			100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	LC	LC
	2080 A2			91.49	100.00	-8.51	0.00	8.51	0.00	0.00	0.00	8.51	0.00	NE	LC
222	*Terminalia chebula*	99.14	100.00												
	2050 A1B			77.88	100.00	-21.44	0.00	21.44	0.00	0.00	0.00	21.44	0.00	NE	LC
	2050 A2			64.13	100.00	-35.31	0.00	35.31	0.00	0.00	0.00	35.31	0.00	VN	LC
	2080 A1B			84.07	100.00	-15.21	0.00	15.21	0.00	0.00	0.00	15.21	0.00	NE	LC
	2080 A2			67.79	100.00	-31.62	0.00	31.63	0.00	0.01	0.00	31.63	0.00	VN	LC
223	*Thunbergia coccinea*	82.65	94.68												
	2050 A1B			95.19	100.00	15.17	5.62	1.71	0.00	16.89	5.62	15.91	5.32	LC	LC
	2050 A2			99.81	100.00	20.76	5.62	0.00	0.00	20.76	5.62	17.19	5.32	LC	LC
	2080 A1B			98.32	100.00	18.96	5.62	0.46	0.00	19.41	5.62	16.64	5.32	LC	LC
	2080 A2			99.92	100.00	20.89	5.62	0.00	0.00	20.89	5.62	17.28	5.32	LC	LC
224	*Thunbergia laurifolia*	66.70	99.15												
	2050 A1B			37.68	83.31	-43.51	-15.98	43.82	16.01	0.30	0.03	43.99	16.03	VN	NE
	2050 A2			31.83	80.88	-52.29	-18.43	52.36	18.51	0.07	0.07	52.39	18.57	EN	NE
	2080 A1B			3.82	4.77	-94.28	-95.19	94.38	95.19	0.10	0.00	94.38	95.19	CR	CR
	2080 A2			3.93	8.87	-94.11	-91.06	94.21	91.06	0.10	0.00	94.22	91.06	CR	CR

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
225	*Thyrsostachys siamensis*	62.02	87.00												
	2050 A1B			73.68	100.00	18.80	14.94	0.00	0.00	18.80	14.94	15.82	13.00	LC	LC
	2050 A2			71.27	100.00	14.91	14.94	1.53	0.00	16.44	14.94	15.43	13.00	LC	LC
	2080 A1B			71.40	95.84	15.12	10.16	1.85	0.00	16.97	10.16	16.09	9.22	LC	LC
	2080 A2			78.03	100.00	25.80	14.94	0.51	0.00	26.31	14.94	21.24	13.00	LC	LC
226	*Thysanolaena maxima*	64.93	100.00												
	2050 A1B			40.90	91.07	-37.02	-8.93	37.10	0.00	0.08	8.93	37.15	8.19	VN	NE
	2050 A2			35.33	86.74	-45.58	-13.26	45.60	13.26	0.01	0.00	45.60	13.26	VN	NE
	2080 A1B			22.62	55.45	-65.16	-44.55	65.29	44.55	0.13	0.00	65.34	44.55	EN	VN
	2080 A2			25.00	65.70	-61.50	-34.30	61.53	34.30	0.04	0.00	61.55	34.30	EN	VN
227	*Tinospora crispa*	55.92	76.78												
	2050 A1B			50.81	76.68	-9.13	-0.13	16.34	5.40	7.21	5.26	21.97	10.13	NE	NE
	2050 A2			54.32	70.71	-2.85	-7.91	17.17	11.77	14.31	3.87	27.54	15.06	NE	NE
	2080 A1B			26.41	53.79	-52.77	-29.94	52.94	30.13	0.17	0.19	53.02	30.27	EN	NE
	2080 A2			11.52	30.44	-79.39	-60.36	79.40	60.36	0.00	0.00	79.40	60.36	EN	EN
228	*Tithonia diversifolia*	90.24	99.14												
	2050 A1B			72.66	88.00	-19.48	-11.24	19.48	11.24	0.00	0.00	19.48	11.24	NE	NE
	2050 A2			77.40	82.90	-14.23	-16.38	14.23	16.38	0.00	0.00	14.23	16.38	NE	NE
	2080 A1B			45.55	68.89	-49.52	-30.51	49.52	30.51	0.00	0.00	49.52	30.51	VN	VN
	2080 A2			18.96	52.42	-78.98	-47.12	78.98	47.12	0.00	0.00	78.98	47.12	EN	VN

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
229	*Trevesia palmata*	65.37	100.00												
	2050 A1B			45.38	93.74	-30.58	-6.26	30.61	6.26	0.03	0.00	30.63	6.26	VN	NE
	2050 A2			45.38	91.56	-30.58	-8.44	30.64	8.44	0.06	0.00	30.68	8.44	VN	NE
	2080 A1B			5.35	10.60	-91.81	-89.40	91.81	89.40	0.00	0.00	91.81	89.40	CR	CR
	2080 A2			14.11	45.69	-78.41	-54.31	78.41	54.31	0.00	0.00	78.41	54.31	EN	EN
230	*Trichosanthes pubera*	93.92	95.13												
	2050 A1B			87.11	91.87	-7.26	-3.43	7.26	3.43	0.00	0.00	7.26	3.43	NE	NE
	2050 A2			93.31	93.89	-0.65	-1.31	1.11	1.31	0.46	0.00	1.57	1.31	NE	NE
	2080 A1B			93.96	95.60	0.04	0.49	0.87	0.00	0.91	0.50	1.77	0.50	LC	LC
	2080 A2			72.98	88.22	-22.30	-7.27	22.30	7.27	0.00	0.00	22.30	7.27	NE	NE
231	*Tristaniopsis burmanica*	99.92	100.00												
	2050 A1B			95.21	100.00	-4.71	0.00	4.71	0.00	0.00	0.00	4.71	0.00	NE	LC
	2050 A2			91.92	91.65	-8.00	-8.35	8.00	8.35	0.00	0.00	8.00	8.35	NE	NE
	2080 A1B			94.86	95.61	-5.06	-4.39	5.06	4.39	0.00	0.00	5.06	4.39	NE	NE
	2080 A2			84.91	100.00	-15.02	0.00	15.02	0.00	0.00	0.00	15.02	0.00	NE	LC
232	*Usnea siamensis*	28.53	54.12												
	2050 A1B			26.15	56.72	-8.35	4.80	29.90	10.80	21.55	15.60	42.33	22.84	NE	LC
	2050 A2			12.47	39.61	-56.29	-26.82	58.99	30.54	2.70	3.72	60.07	33.03	EN	NE
	2080 A1B			15.54	48.10	-45.52	-11.13	51.04	21.38	5.52	10.25	53.60	28.69	VN	NE
	2080 A2			12.06	39.74	-57.71	-26.58	57.83	26.58	0.12	0.00	57.88	26.58	EN	NE

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
233	*Vaccinium sprengelii*	37.42	80.76												
	2050 A1B			30.16	81.43	-19.40	0.83	24.96	5.14	5.56	5.97	28.92	10.48	NE	LC
	2050 A2			34.74	76.45	-7.19	-5.34	21.63	11.80	14.45	6.45	31.52	17.14	NE	NE
	2080 A1B			9.41	25.56	-74.84	-68.36	75.90	68.61	1.06	0.25	76.16	68.68	EN	EN
	2080 A2			14.69	53.78	-60.74	-33.41	61.35	34.01	0.61	0.60	61.58	34.41	EN	VN
234	*Ventilago denticulata*	95.52	99.95												
	2050 A1B			81.27	83.98	-14.91	-15.98	14.93	15.98	0.01	0.00	14.94	15.98	NE	NE
	2050 A2			75.74	58.94	-20.71	-41.04	20.81	41.04	0.10	0.00	20.88	41.04	NE	VN
	2080 A1B			87.89	74.73	-7.99	-25.24	8.00	25.24	0.02	0.00	8.02	25.24	NE	NE
	2080 A2			89.58	76.95	-6.21	-23.02	6.90	23.02	0.69	0.00	7.54	23.02	NE	NE
235	*Verbena officinalis*	21.93	60.52												
	2050 A1B			18.31	55.09	-16.50	-8.97	14.37	15.98	31.11	7.02	34.69	21.49	NE	NE
	2050 A2			19.56	45.30	-10.83	-25.15	14.61	32.16	20.53	7.01	29.16	36.61	NE	NE
	2080 A1B			2.96	9.05	-86.50	-85.05	10.02	85.05	45.40	0.00	38.11	85.05	CR	CR
	2080 A2			11.47	42.11	-47.68	-30.41	15.98	30.73	54.25	0.31	45.53	30.94	VN	VN
236	*Vernonia volkameriaefolia*	55.85	82.87												
	2050 A1B			59.52	93.69	6.57	13.06	5.64	0.00	12.22	13.06	15.91	11.55	LC	LC
	2050 A2			57.15	88.28	2.33	6.53	5.74	0.00	8.06	6.53	12.77	6.13	LC	LC
	2080 A1B			63.61	99.72	13.89	20.33	3.93	0.00	17.83	20.33	18.47	16.90	LC	LC
	2080 A2			64.24	100.00	15.02	20.67	6.28	0.00	21.30	20.67	22.73	17.13	LC	LC

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
237	*Viburnum sambucinum*	38.91	73.48												
	2050 A1B			10.65	23.15	-72.63	-68.50	73.24	68.50	0.61	0.00	73.40	68.50	EN	EN
	2050 A2			15.07	33.47	-61.28	-54.45	61.96	54.45	0.69	0.00	62.22	54.45	EN	EN
	2080 A1B			2.75	7.11	-92.92	-90.33	92.92	90.33	0.00	0.00	92.92	90.33	CR	CR
	2080 A2			2.09	6.79	-94.63	-90.76	94.63	90.76	0.00	0.00	94.63	90.76	CR	CR
238	*Viscum articulatum*	2.30	2.93												
	2050 A1B			0.43	0.95	-81.30	-67.75	81.30	67.75	0.00	0.00	81.30	67.75	CR	EN
	2050 A2			4.87	7.70	112.02	162.75	17.74	7.25	129.75	170.00	64.19	65.65	LC	LC
	2080 A1B			0.17	0.17	-92.80	-94.13	92.80	94.13	0.00	0.00	92.80	94.13	CR	CR
	2080 A2			1.16	2.21	-49.59	-24.63	51.01	29.50	1.42	4.88	51.69	32.78	VN	NT
239	*Vitex peduncularis*	69.71	99.56												
	2050 A1B			70.79	80.32	1.54	-19.33	27.68	19.33	29.23	0.00	44.04	19.33	LC	NE
	2050 A2			75.19	71.37	7.86	-28.31	29.26	28.31	37.12	0.00	48.41	28.31	LC	NE
	2080 A1B			57.50	76.87	-17.51	-22.79	28.34	22.79	10.83	0.00	35.35	22.79	NE	NE
	2080 A2			13.43	36.19	-80.73	-63.65	80.95	63.65	0.22	0.00	80.99	63.65	CR	EN
240	*Vitex trifolia*	3.38	10.40												
	2050 A1B			2.28	12.50	-32.73	20.23	63.14	44.29	30.41	64.52	71.74	66.14	VN	LC
	2050 A2			0.36	1.79	-89.35	-82.77	89.35	82.77	0.00	0.00	89.35	82.77	CR	CR
	2080 A1B			0.56	0.73	-83.53	-93.02	90.04	93.02	6.52	0.00	90.65	93.02	CR	CR
	2080 A2			0.00	0.00	-99.90	-100.00	99.90	100.00	0.00	0.00	99.90	100.00	CR	EX

Table 17 (continued)

No.	Species	Percentages (%)												IUCN status	
		Present suitable area		Future suitable area		Area change (+,-)		Species loss		Species gain		Turnover			
		NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM	NT	CM
241	*Xantolis cambodiana*	13.98	42.83												
	2050 A1B			10.49	34.34	-25.01	-19.82	29.67	20.05	4.67	0.23	32.81	20.23	NE	NE
	2050 A2			13.81	48.03	-1.25	12.14	23.48	1.91	22.22	14.05	37.39	13.99	NE	LC
	2080 A1B			8.15	28.99	-41.74	-32.32	46.46	32.89	4.72	0.57	48.88	33.27	VN	VN
	2080 A2			4.11	17.33	-70.63	-59.54	70.63	59.54	0.00	0.00	70.63	59.54	EN	EN
242	*Xylia xylocarpa*	90.35	96.73												
	2050 A1B			91.12	92.71	0.85	-4.15	2.71	4.16	3.56	0.01	6.05	4.17	LC	NE
	2050 A2			92.47	95.92	2.35	-0.83	1.76	1.43	4.11	0.59	5.63	2.01	LC	NE
	2080 A1B			92.07	93.82	1.90	-3.01	1.98	3.09	3.89	0.08	5.65	3.16	LC	NE
	2080 A2			94.00	95.12	4.05	-1.66	1.66	2.26	5.70	0.59	6.96	2.84	LC	NE
243	*Ziziphus cambodiana*	94.65	99.43												
	2050 A1B			95.16	99.67	0.53	0.24	0.04	0.00	0.58	0.24	0.62	0.24	LC	LC
	2050 A2			92.71	95.70	-2.05	-3.75	2.06	3.75	0.02	0.00	2.08	3.75	NE	NE
	2080 A1B			95.10	99.96	0.48	0.53	0.25	0.00	0.73	0.53	0.97	0.53	LC	LC
	2080 A2			94.26	96.96	-0.41	-2.48	1.67	2.48	1.26	0.00	2.89	2.48	NE	NE
244	*Ziziphus oenoplia*	100.00	100.00												
	2050 A1B			99.92	100.00	-0.08	0.00	0.08	0.00	0.00	0.00	0.08	0.00	NE	LC
	2050 A2			99.92	100.00	-0.08	0.00	0.08	0.00	0.00	0.00	0.08	0.00	LC	LC
	2080 A1B			99.92	100.00	-0.08	0.00	0.08	0.00	0.00	0.00	0.08	0.00	NE	LC
	2080 A2			99.92	100.00	-0.08	0.00	0.08	0.00	0.00	0.00	0.08	0.00	NE	LC

APPENDIX D

Some used medicinal plants by the Karen

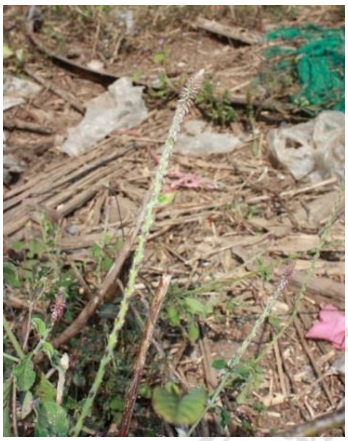

Figure 27 *Achyranthes aspera*

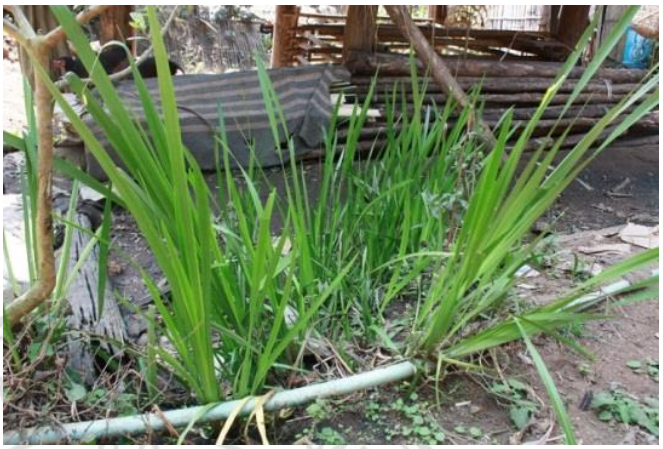

Figure 28 *Acorus calamus*

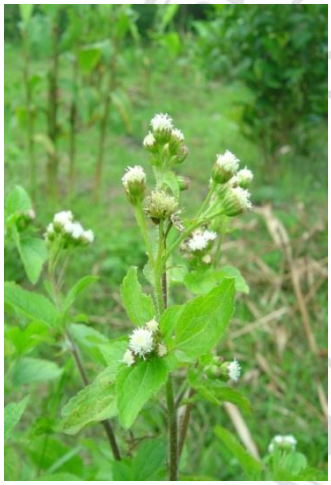

Figure 29 *Ageratum conyzoides*

Figure 30 *Angiopteris evecta*

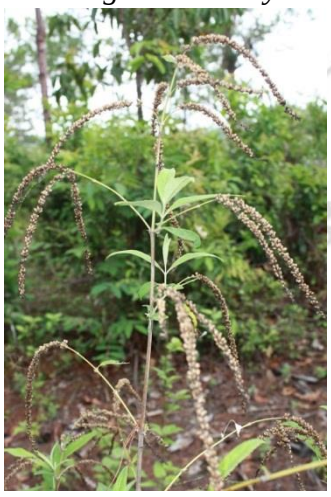

Figure 31 *Buddleja asiatica*

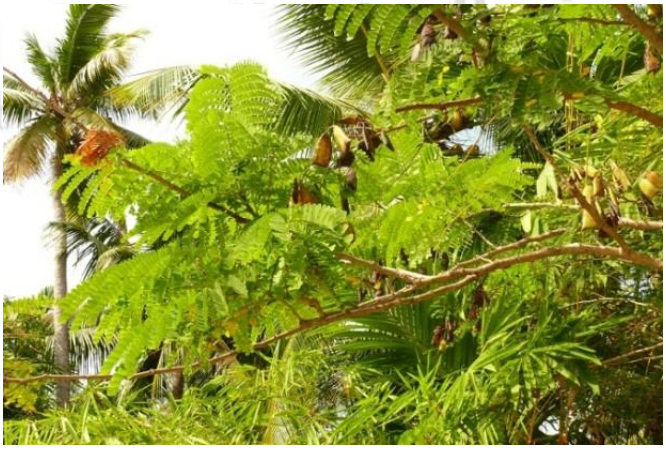

Figure 32 *Caesalpinia sappan*

Figure 33 *Chloranthus erectus*

Figure 34 *Chromolaena odoratum*

Figure 35 *Cissus bicolor*

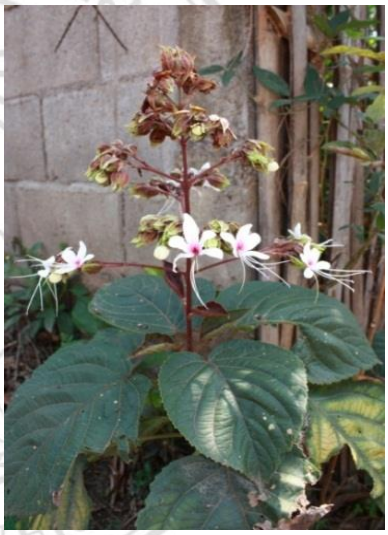

Figure 36 *Clerodendrum colebrookianum*

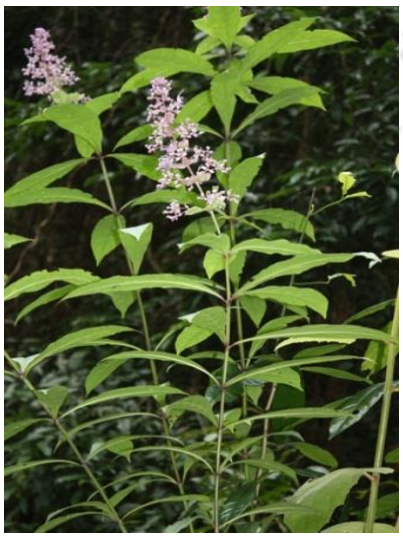

Figure 37 *Clerodendrum serratum*

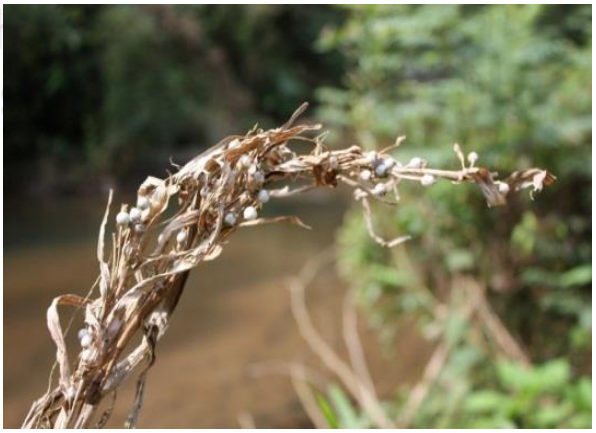

Figure 38 *Coix lachryma - jobi*

Figure 39 *Costus speciosus*

Figure 40 *Croton roxburghii*

Figure 41 *Dischidia nummularia*

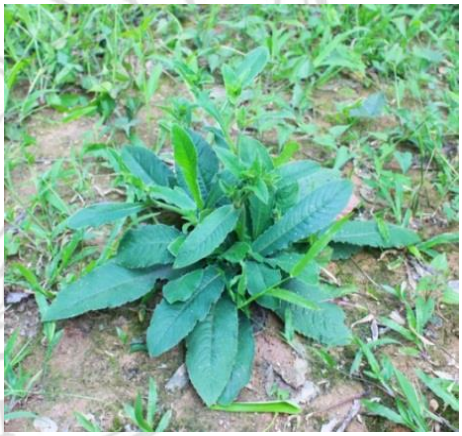

Figure 42 *Elephantopus scaber*

Figure 43 *Equisetum debile*

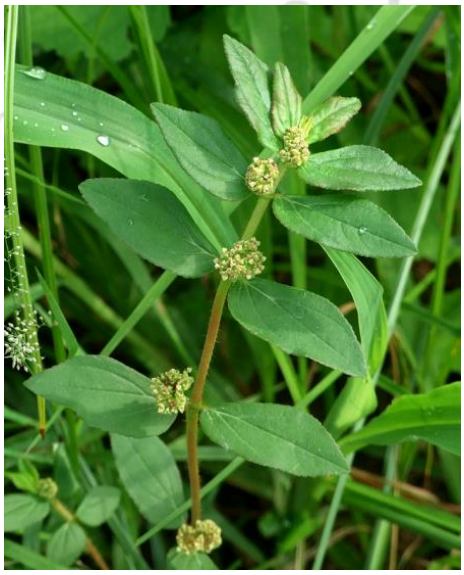

Figure 44 *Euphorbia hirta*

Figure 45 *Eurycoma longifolia*

Figure 46 *Harrisonia perforata*

Figure 47 *Heliciopsis terminalis*

Figure 48 *Houttuynia cordata*

Figure 49 *Inula cappa*

Figure 50 *Lilium primulinum*
(Sukkho, 2008)

Figure 51 *Lycopodium cernuum*

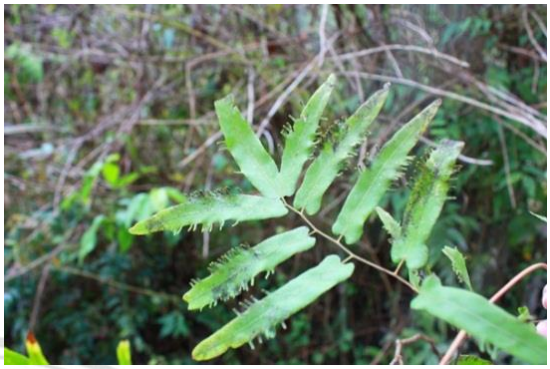

Figure 52 *Lygodium flexuosum*

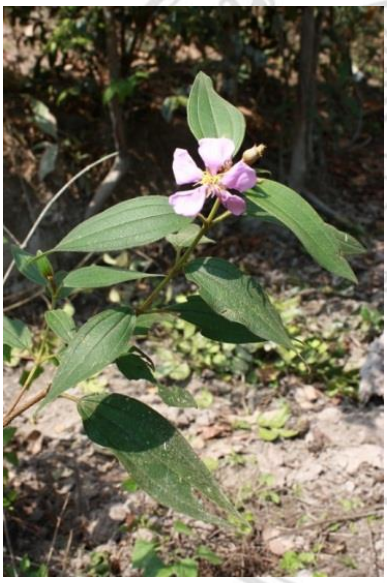

Figure 53 *Melastoma malabathricum*

Figure 54 *Melicope pteleifolia*

Figure 55 *Miliusa thorelii*

Figure 56 *Miliusa velutina*

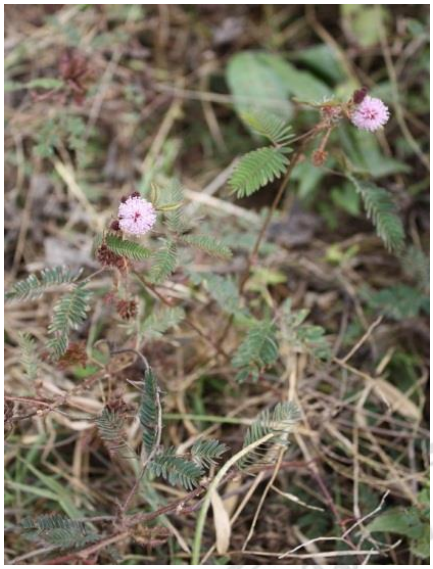

Figure 57 *Mimosa pudica*

Figure 58 *Muehlenbeckia platyclados*

Figure 61 *Paris polyphylla* (Sukkho, 2008)

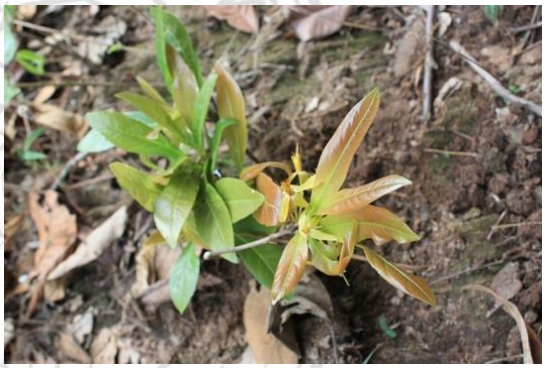

Figure 60 *Ochna integerrima*

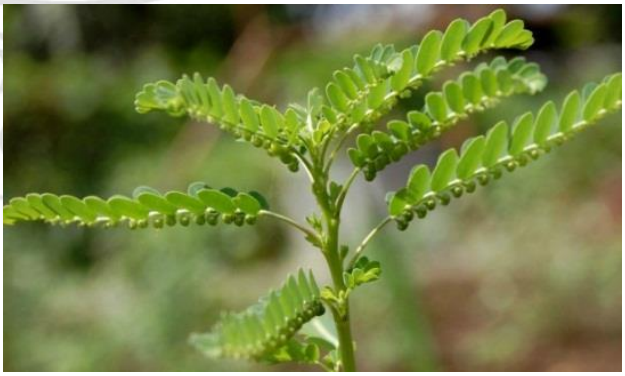

Figure 62 *Phyllanthus amarus*

Figure 63 *Phyllanthus emblica*

Figure 64 *Phyllodium pulchellum*

Figure 65 *Picrasma javanica*

Figure 66 *Plantago major*

Figure 67 *Plumbago zeylanica*

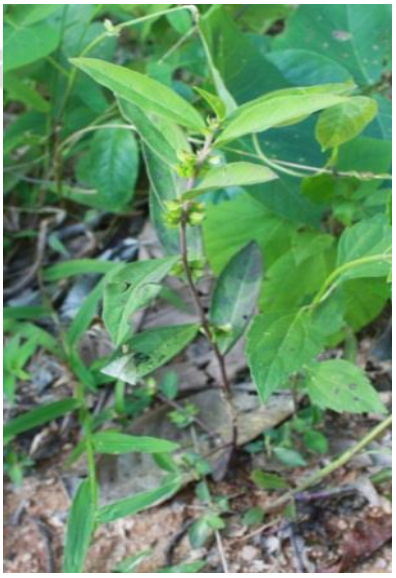

Figure 68 *Polygala crotalarioides*

Figure 69 *Pothos scandens*

Figure 70 *Sambucus javanica*

Figure 71 *Schima wallichii*

Figure 72 *Sida acuta*

Figure 73 *Smilax griffini*

Figure 74 *Spondias pinnata*

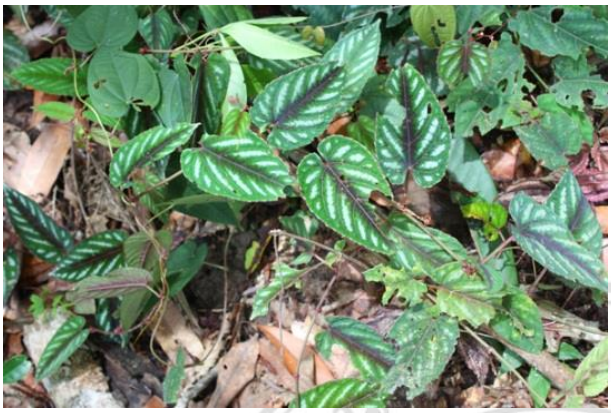

Figure 75 *Stemona* sp.

Figure 76 *Thunbergia laurifolia*

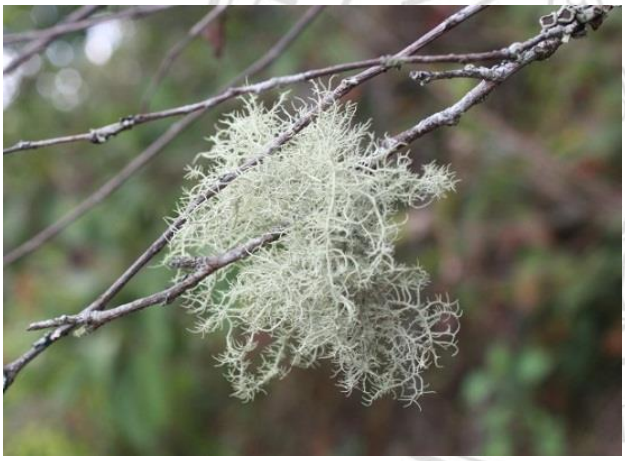

Figure 77 *Usnea siamensis*

Figure 78 *Vitex trifolia*

Figure 79 *Xantolis cambodiana*

Figure 80 *Zingiber ottensii*

APPENDIX E

Village: ……..... No…….

Medicinal Plant Questionnaire Interview

Name: …….. **Surname:** ……..…….. **Sex:** ……**Occupation:** ……

Age: ☐ 13-19 ☐ 20-29 ☐ 30-39 ☐ 40-49 ☐ 50-59 ☐ more than 60

Highest Education: ☐ uneducated ☐ grade 6 ☐ grade 9 ☐ grade 12 ☐ diploma ☐ more than bachelor's degree

Plant Name: …… **Karen Name:** ……

☐ used ☐ never used (know the plant) ☐ don't know the plant

Symptom: ……..

Part Used: ☐ whole plant ☐ roots ☐ stems ☐ aerial part ☐ bark ☐ shoot ☐ leaves ☐ flower ☐ exudates ☐ fruit ☐ others……

Preparation: ☐ fresh ☐ boil ☐ pound ☐ burn ☐ crush ☐ soak in hot water ☐ soak in the liquor ☐ cooked ☐ others……..

How to Use: ☐ eat fresh ☐ drink ☐ smear ☐ take a bath ☐ stream ☐ pack or press ☐ drops ☐ soak in water ☐ smell ☐ eat with food ☐ others……

Source of Plant: ☐ in village ☐ forest area near the village ☐ buy ☐ plant in homegarden ☐ forest area that far away from the village ☐ others……

Frequency of use: ☐ daily ☐ 1-3 times / week ☐ 1-3 times / month ☐ 1-6 times / year ☐ less than 1 time a year or use in special events

Last Used: ……

Source of Knowledge: ☐ self study ☐ study from an ancestor or traditional doctor ☐ use follow other people

CURRICULUM VITAE

Name Miss Kornkanok Tangjitman

Date/ Year of Birth 19 December 1985

Place of Birth Phrae Province, Thailand

Educations

2010: Biogeography and Macroecology course from Aarhus University.

2004-2007: Bachelor Degree of Science (Biology) (Second Class Honors) from Chiang Mai University.

2006-2003: High School from Princess Chulabron's College Chiang Rai.

Scholarships

2012 (May-Oct.): University of Aarhus Research Foundation (AUFF) (from University of Aarhus (Denmark))

2009: Undergraduate Student Exchange Scholarship (from University of Aarhus (Denmark))

2008-present: Strategic Scholarships Fellowships Frontier Research Networks (from Thai Ministry of Education)

2004-2007: Research Professional Development Project Under the Science Achievement Scholarship of Thailand (SAST) (from Thai Ministry of Education)

Publication Tangjitman, K., Wongsawad, C., Winijchaiyanan, P., Sukkho, T., Kamwong, K., Pongamornkul, W., Trisonthi, C., 2013. Traditional knowledge on medicinal plant of the Karen in northern Thailand: A comparative study. Journal of Ethnopharmacology, 150 : 232-243.

Research interests

1. Plant species distribution modeling under future climatic change with emphasis on medicinal plants
2. Ethnobotany

Experiences

2006-2007: Effects of Sucrose on Red Color Development of Mahajanaka Mango Exocarp (Special project for under graduated students, Assistant Professor Dr. Jumnong Uthaibutra as advisor)

2006: Botanist trainee in Queen Sirikit Botanic Garden, Chiang Mai, Thailand (March).

2006: Botanist trainee in Chiang Mai Rice Seed Center, Chiang Mai, Thailand (May).

2005: Anti-nematode and anti-cancer activity of crude extracts from the four Thai indigenous plants (Special project for under graduated students, Assistant Professor Dr. Weerah Wongkham and Dr. Puttinan Meepaopan as advisors)

Presentations

2012: Traditional knowledge of medicinal plants used by Karen people in Chiang Mai province (Thailand): A comparative study (in the 14th Tropical botany in Gothenburg University, Sweden: 6-7 August)

2010: A comparison of medicinal plants used by Karen people in Chiang Mai Province, Thailand (in the 2nd Symposium of the "Flore du Cambodge, du Laos et du Viêtnam", Vietnam: 6-8 December)

2008: Effects of Sucrose on Red Color Development of Mahajanaka Mango Exocarp (in the 3rd Science and Technology for Youth, Bangkok, Thailand: 22-23 March)

Membership

The Botanical Society under the Royal Patronage of Her Majesty the Queen