



Appendix

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Appendix I A questionnaire used for gathering informant data

No.

GENERAL INFORMATION (GPS)

INFORMANT.....HOUSE NUMBER.....

AGECAREER.....EDUCATION.....INCOME.....PER.....

FAMILY MEMBERS

1. SEX: ♂/♀ ...NAME-SURNAMEAGE

CAREEREDUCATION.....INCOME.....PER MONTH /YEAR

2. SEX: ♂/♀ ...NAME-SURNAMEAGE

CAREEREDUCATION.....INCOME.....PER MONTH /YEAR

3. SEX: ♂/♀ ...NAME-SURNAMEAGE

CAREEREDUCATION.....INCOME.....PER MONTH /YEAR

4. SEX: ♂/♀ ...NAME-SURNAMEAGE

CAREEREDUCATION.....INCOME.....PER MONTH /YEAR

5. SEX: ♂/♀ ...NAME-SURNAMEAGE

CAREEREDUCATION.....INCOME.....PER MONTH /YEAR

TIME STAYED HEREYR. AGE OF HOUSEYR.

TIME OF MARRIAGE YR.

INCOME:DETAILS

RICE: YEILD...../YR INCOME/YR AREA.....

DETAIL OF OTHER CROPS

HOMEGARDEN: DETAIL

MAIN CARETAKER.....

SELLING PRODUCTS AND PERCENTAGE

INCOME FROM HG

TIME SPENT FOR HG

FERTILIZER N/Y.....PER..... INSECTICIDE N/Y.....PER.....

HERBICIDE N/Y.....PER..... OTIHER COST.....PER.....

SEED

1.ORIGINAL.....PRICE.....PER.....

2.ORIGINAL.....PRICE.....PER.....

3.ORIGINAL.....PRICE.....PER.....

4.ORIGINAL.....PRICE.....PER.....

5.ORIGINAL.....PRICE.....PER.....

PET:

HG COMPONENTS

GATE...FENCE...HEDGE...GARDEN TRACK...PUBLIC TRACK...SITE FOR CLOTTIES LINE... SITE FOR

DRYING FARM PRODUCTS...STORAGE...CAR LOT...WATER WELL...BATIING SITE/TOILET...FISH

POND...ANIMAL SHIELTER...LAMP POLE...GARBAGE DUMP.....OTHER.....

Appendix II Used categories descriptions

The descriptions were come from Economic Botany Data Collection Standard (Cook 1995). Only the level 1 classification was used in this thesis.

FOOD: plant Food, including beverages, for humans only.

FOOD ADDITIVES: Processing agents and other additive ingredients which are used in food preparation.

ANIMAL FOOD: Forage and fodder for vertebrate animals only.

BEE PLANTS: Pollen or nectar sources for honey production.

INVERTEBRATE FOOD: Only plants eaten by invertebrates useful to humans, such as silkworms, lac insects and edible grubs, are covered here.

MATERIALS: Woods, fibres, cork, cane, tannins, latex, resins, gums, waxes, oils, lipids etc. and their derived products.

FUELS: wood, charcoal, petroleum substitutes, fuel alcohols etc. - have been separated from MATERIALS because of their importance.

SOCIAL USES: Plants used for social purposes, which are not definable as food or medicines, for instance masticatories, smoking materials, narcotics, hallucinogens and psychoactive drugs, contraceptives and abortifacients and plants with ritual or religious significance.

VERTEBRATE POISONS: Plants which are poisonous to vertebrates, both accidentally and usefully, e.g. for hunting and fishing.

NON-VERTEBRATE POISONS: Both accidental and useful poisons (e.g. molluscicides, herbicides, insecticides) to non-vertebrate animals, plants, bacteria and fungi, are included.

MEDICINES. Both human and veterinary.

ENVIRONMENTAL USES. Examples include intercrops and nurse crops, ornamentals, barrier hedges, shade plants, windbreaks, soil improvers, plants for revegetation and

erosion control, waste water purifiers, indicators of the presence of metals, pollution, or underground water.

GENE SOURCES. Wild relatives of major crops which may possess traits or qualities, such as disease resistance, cold hardiness etc., of value in breeding programs.



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Appendix III Ethnic homegarden



Fig. A-1 General characteristic of a Hmong homegarden (i) Hmong traditional houses which occupy a flat area in the homestead (ii) part of a Hmong homegarden that includes a high slope area (iii, iv) Hmong homegarden back yards where most plants were grown



Fig. A-2 Pot in a Hmong homegarden (i) pot made from old tire and cover with an old bamboo basket to protect the crops from the chickens (ii) pots that were hung to protect them from the chicken and to save space (iii) pot made from an old tire



Fig. A-3 Hmong people (i) two old Hmong women talking in front of their houses (ii) a Hmong couple in their house preparing the lac for selling (iii) Hmong family members having a lunch together in their house.

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Fig. A-4 Karen homegarden (i) the side yard (ii) the back yard (iii) the firewood kept under the house (iv) a clear space used for rearing their cattle (v) plants along the homegarden boundaries (vi) the side yard where the slope was modified.



Fig. A-5 Karen people (i, ii, iii) Karen women in traditional cloth (iv, v)
Karen old man

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Fig. A-6 General characteristics of Lahu homegarden (i) traditional house of Lahu, normally the area around the houses especially those located at the center of the village was kept clear (ii) a pile of firewood at the homegarden (iii) a Lahu informant describing the plants in her back yard. The homegarden is on a sloping area as those of other ethnic groups who live in mountainous areas.



Fig. A-7 (i, ii) plants in pots which sometimes were kept in the house



(i)



(iii)



(iv)



(ii)



(v)

Fig. A-8 Lahu people (i) Lahu girl in traditional dress (ii) Lahu boy carrying his cock (iii) Lahu family members having dinner together (iv) an old Lahu woman gathering tobacco seed (*Nicotiana tabacum* L.) in her homegarden (v) old Lahu man and his grandchild chopping banana plants for his pigs.



Fig. A-9 Lawa homegarden and zones (i) the front yard and homegarden boundaries (ii) plants along the homegarden boundaries (iii) the granary which some time had room for pets under the floor (iv) the side yard of a Lawa homegarden which in part was on a slope (v-vii) homegarden zones (v) the pot kept in the house (vi) plants along the homegarden boundary which bordered the village road (vii) part of yard where the slope was





Fig. A-10 Lawa people (i) Lawa old man with a traditional cigarette (ii) Lawa old women in traditional dress with her grandchild (iii) Lawa couple in their house

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Fig. A-11 Lisu traditional house and homegarden (i) a traditional house of Lisu people (ii) the back yard of Lisu homegarden showing some slope area that was modified for planting (iii) a fenced plot in Lisu homegarden



Fig. A-12 The back yard of a Lisu homegarden which was connected to another homegarden



Fig. A-13 Slope area in a Lisu homegarden (i) side yard (ii) back yard



Fig. A-14 Lisu people (i) Lisu women in traditional dress (ii) Lisu man

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Fig. A-15 Thai Yuan homegarden (i) the side yard (ii) fenced plot



Fig. A-16 Thai Yuan homegarden zones (i) plants in cement barrel (ii, iii) plants along the homegarden boundaries



Fig. A-17 Thai Yuan people (i) a Thai Yuan old man showing his handicraft (ii) old woman giving information about her homegarden (iii) Thai Yuan girl in her homegarden (iv) two Thai Yuan woman harvesting the shoot of *Acacia pennata* (L.) Willd. subsp. *insuavis* (Lace) I.C.Nielsen planted along the homegarden boundaries (v) the Thai Yuan man in front of his house

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Fig. A-18 Yunnan Chinese traditional house (i) the front yard of Yunnan Chinese which is always kept as a cleared space (ii) the entrance of the house



Fig. A-19 Pot plant along the wall at the front yard



Fig. A-20 Drying agricultural products in homegardens (i) Chinese white cabbage (*Brassica rapa* L. Group *Chinensis*) (ii) peanut (*Arachis hypogaea* L.) (iii) Soy bean (*Glycine max* (L.) Merr.)



Fig. A-21 Yunnan Chinese people (i) Yunnan Chinese removing corn kernels from the cob (ii) Yunnan Chinese informant describing her plants homegarden (iii) old Yunnan Chinese women cleaning seeds in her yard

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Appendix IV Some of plants found in homegardens



Fig. A-22 *Acacia concinna* (Willd.) DC. (i) habit (ii) pods which were drying



Fig. A-23 *Acacia pennata* (L.) Willd. subsp. *insuavis* (Lace) I. C. Nielsen (i) habit (ii) gathered young shoot in bamboo basket



Fig. A-24 *Acalypha hispida* Burm.



Fig. A-25 *Acanthus* sp.



Fig. A-26 *Acmella oleracea* (L.) R. K. Jansen

Fig. A-27 *Acorus calamus* L. (i) habit (ii) inflorescence



Fig. A-28 *Acorus gramineus* Soland.

Fig. A-29 *Ageratina adenophora* (Spreng.) R. M. King & H. Rob.

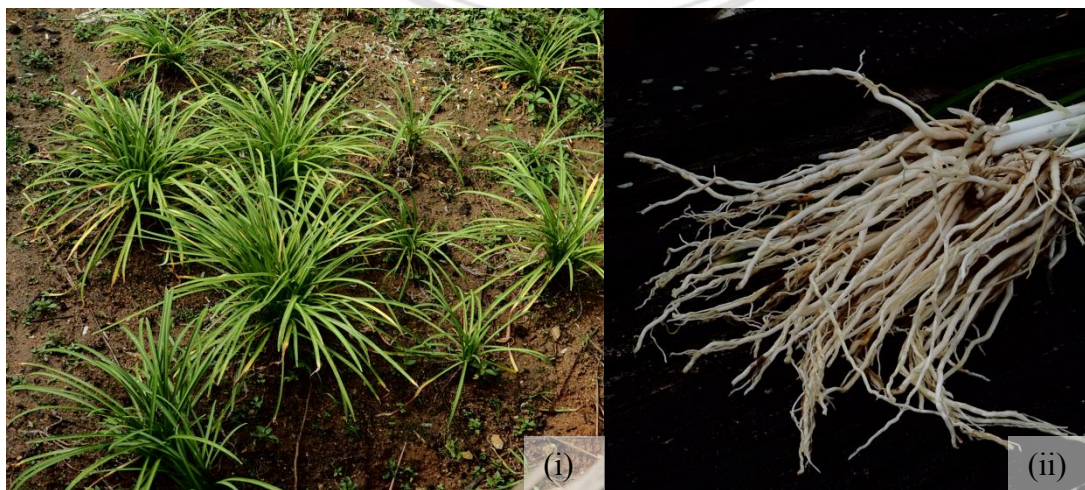


Fig. A-30 *Allium hookeri* Thwaites (i) habit (ii) roots



Fig. A-31 *Andrographis paniculata* (Burm. f.)
Wall. ex Nees



Fig. A-32 *Anethum graveolens* L.



Fig. A-33 *Annona muricata* L.



Fig. A-34 *Archidendron clypearia* (Jack) I.C. Nielsen
(dehiscent pot with black seeds)



Fig. A-35 *Artocarpus heterophyllus* Lam.



Fig. A-36 *Asparagus setaceus*
(Kunth.) Jessop



Fig. A-37 *Asystasia gangetica* (L.)
T. Anderson



Fig. A-38 *Azadirachta indica*
A. Juss.



Fig. A-39 *Baccaurea ramiflora* Lour.
(i) fruits (ii) inflorescence



Fig. A-40 *Barleria lupulina* Lindl.



Fig. A-41 *Basella alba* L.

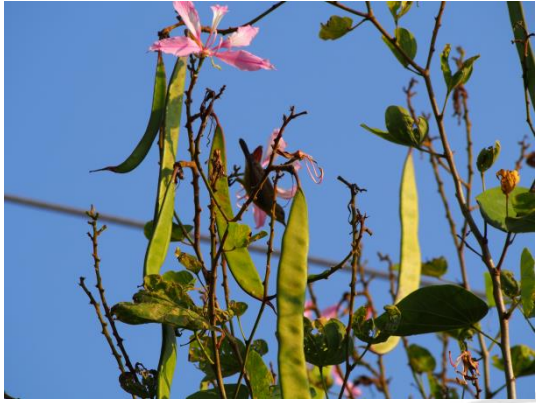


Fig. A-42 *Bauhinia purpurea* L.



Fig. A-43 *Blumea balsamifera* (L.) DC.



Fig. A-44 *Mangifera indica* L.

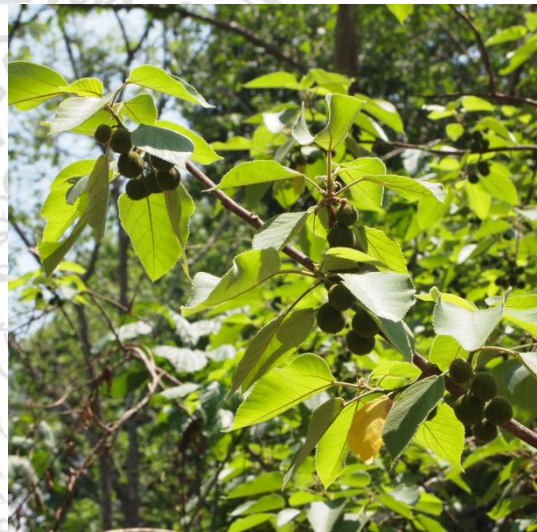


Fig. A-45 *Broussonetia papyrifera* (L.) Vent.



(i)



(ii)



(iii)

Fig. A-46 *Bryophyllum pinnatum* (Lam.) Oken (i) habit (ii) inflorescences and (iii) flowers



Fig. A-47 *Buddleja asiatica* Lour. (i) habit (ii) inflorescences



Fig. A-48 *Cajanus cajan* (L.) Millsp. (i) habit (ii) inflorescences (iii) young pods



Fig. A-49 *Calathea majestica* H. Kenn.



Fig. A-50 *Cananga odorata* (Lam.) Hook. f. & Thomson var. *fruticosa* (Craib) J. Sinclair



Fig. A-51 *Canna indica* L.



Fig. A-52 *Capsicum annuum* L.



Fig. A-53 *Carica papaya* L.



Fig. A-54 *Carmona retusa* (Vahl) Masam.



Fig. A-55 *Caryota mitis* Lour.



Fig. A-56 *Cassia fistula* L.



Fig. A-57 *Catharanthus roseus* (L.) G. Don



Fig. A-58 *Celosia argentea* L.



Fig. A-59 *Centella asiatica* (L.) Urb. 364



Fig. A-60 *Chlorophytum chinense* Bureau & Franchet



Fig. A-61 *Chromolaena odorata* (L.)
R. M. King & H. Rob.



Fig. A-62 *Cissus hastata* Miq.



(i)



(ii)



(iii)

Fig. A-63 *Citrullus lanatus* (Thunb.) Matsum. & Nakai (i) leaves (ii) flower (iii) fruit



Fig. A-64 *Citrus maxima* (Burm.f.) Merr.



Fig. A-65 *Clerodendrum thomsoniae*
Balf.f.



Fig. A-66 *Coccinia grandis* (L.) Voigt



Fig. A-67 *Cocos nucifera* L.



Fig. A-68 *Codiaeum variegatum* (L.)
Rumph. ex A.Juss.



Fig. A-69 *Colubrina asiatica* (L.)
Brongn.



Fig. A-70 *Cordyline fruticosa* (L.) A.Chev.

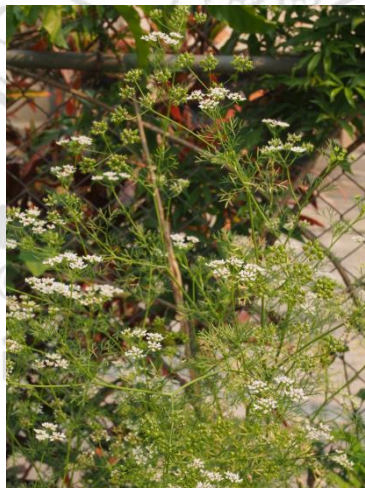


Fig. A-71 *Coriandrum sativum* L.



Fig. A-72 *Cosmos sulphureus* Cav.



Fig. A-73 *Crateva religiosa*
G.Forst.



Fig. A-74 *Cratoxylum*
cochinchinense (Lour.) Blume



Fig. A-75 *Crinum asiaticum*
L.



Fig. A-76 *Ctenanthe oppenheimiana*
(E.Morr.) Schum



Fig. A-77 *Cucurbita moschata* Duchesne (i) male
flower (ii) female flower



Fig. A-78 *Cuphea*
hyssopifolia Kunth



Fig. A-79 *Dioscorea alata* L. (i) habit (ii) cooked tuber



Fig. A-80 *Dregia volubilis* (L.f.)
Benth. ex Hook.f.

Fig. A-81 *Drimiopsis
maculata* Lindl.



Fig. A-82 *Durlanta erecta* L.

Fig. A-83
*Elaeagnus
latifolia* L.

Fig. A-84
*Elaeocarpus
hygrophilus* Kurz



Fig. A-85 *Epipremnum aureum* (Linden & Andre)
G. S. Bunting



Fig. A-86
Euphorbia cotinifolia L.



Fig. A-87 *Fagopyrum acutatum* (Lehm.) Mansf.
ex K. Hammer



Fig. A-88 *Ficus auriculata* Lour.



Fig. A-89 *Ficus hispida* L.f.



Fig. A-90 *Ficus semicordata* J.E.
Smith



Fig. A-91 *Ficus virens* Aiton



Fig. A-92 *Gmelina arborea* Roxb.



Fig. A-93
Gossypium sp.



Fig. A-94
Heliconia bihai
(L.) L.



Fig. A-95
Heliconia rostrata
Ruiz. & Pav.



Fig. A-96 *Helicteres isora* L. (i)
habit (ii) flower



Fig. A-97
Heteropanax
fragrans (Roxb.
ex DC.) Seem.



Fig. A-98
Impatiens
balsamina L.



Fig. A-99 *Ipomoea batatas* (L.)
Lam.



Fig. A-100 *Ipomoea*
hederifolia L.



Fig. A-101 *Iresine herbstii* Hook.



Fig. A-102 *Ixora coccinea* L.



Fig. A-103 *Jasminum adenophyllum* Wall. ex C.
B. Clarke (i) habit (ii) flower



Fig. A-104 *Jasminum multiflorum* (Burm. f.)
Andrews



Fig. A-105 *Jatropha integerrima*
Jacq.



Fig. A-106 *Kalimeris indica* (L.) Sch.
Bip.



Fig. A-107 *Lablab purpureus* (L.) Sweet (i) habit (ii) inflorescence



Fig. A-108 *Lantana camara* L.



Fig. A-109 *Luffa cylindrica* (L.) M.Roem. (i) young fruit (ii) dry fruit



Fig. A-109 *Magnolia coco* (Lour.) DC.



Fig. A-110 *Mangifera indica* L.



Fig. A-111 *Mansoa alliacea* (Lam.) A.Gentry



Fig. A-112 *Markhamia stipulata* Seem.

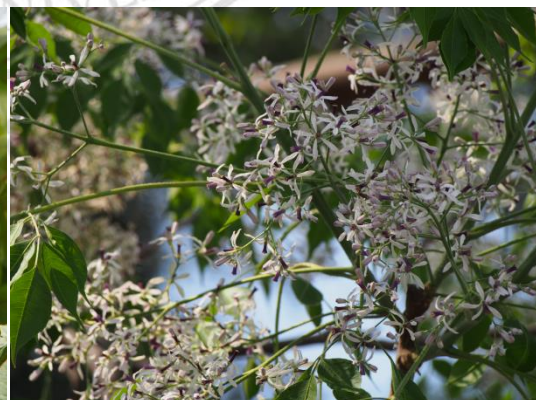


Fig. A-113 *Melia azedarach* L.



Fig. A-114 *Mirabilis jalapa* L.



Fig. A-115 *Momordica charantia* L.

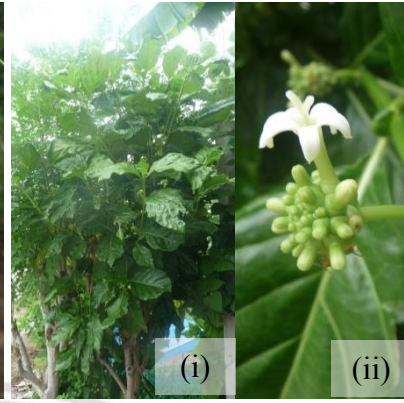


Fig. A-116 *Morinda citrifolia* L. (i) habit (ii) inflorescence



Fig. A-117 *Mucuna macrocarpa* Wall. (i) pods (ii) inflorescence

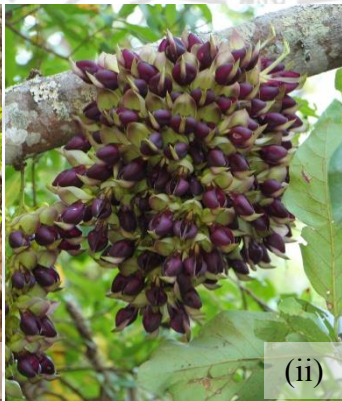


Fig. A-118 *Nelumbo nucifera* Gaertn.



Fig. A-119 *Nicotiana tabacum* L. (i) habit (ii) inflorescence



Fig. A-120 *Pandanus amaryllifolius* Roxb.



Fig. A-121 *Passiflora foetida* L.



Fig. A-121
Phyllanthus pulcher
Wall. ex Müll.Arg.



Fig. A-122 *Piper betle* L.



Fig. A-123 *Piper wallichii* Buch.



Fig. A-124 *Podocarpus neriifolius*
D.Don.



Fig. A-125 *Podranea ricasoliana* (Tanfani)
Sprague



Fig. A-126 *Polygonum odoratum* Lour.



Fig. A-127
Portulaca grandiflora Hook.f.



Fig. A-128 *Proiphys amboinensis*
(L.) Herb.





Fig. A-129
*Pseuderanthemum
platiferum* (Nees)
Radlk. ex Lindau



Fig. A-130 *Pyrostegia
venusta* (Ker Gawl.) Miers



Fig. A-131
Remusatia pumila
(D.Don) H.L. &
A.Hay



Fig. A-132
*Rhinacanthus
nastus* (L.) Kurz



Fig. A-133 *Ruellia
squarrosa* (Fenzi)
Cufod.



Fig. A-134 *Rumex
crispus* L.



Fig. A-135 *Sanchezia
speciosa* Leonard



Fig. A-136 *Sarcandra glaba*
(Thunb.) Nakai



Fig. A-137 *Scoparia
dulcis* L.



Fig. A-138 *Senna alata* (L.) Roxb.



Fig. A-139 *Senna occidentalis* (L.) Link



Fig. A-140 *Solanum incanum* L.



(i)



(ii)

Fig. A-141 *Solanum torvum* Sw. (i) flowers (ii) fruits



Fig. A-142 *Spathiphyllum cannifolium* (Dryand. ex Sims) Schott



Fig. A-143 *Spathodea campanulata* P.Beauv.



Fig. A-144 *Strobilanthes cusia* (Nees) Kuntze



Fig. A-145 *Syzygium malaccense* (L.) Merr. & L.M.Perry



Fig. A-146 *Thunbergia erecta*
(Benth.) T. Anderson



Fig. A-147
Tinospora crispa
(L.) Hook.f. &
Thomson



Fig. A-148
Toddalia asiatica
(L.) Lam.



Fig. A-149
Trachyspermum
roxburghianum
(DC.) H. Wolff



Fig. A-150 *Wendlandia*
tinctoria (Roxb.) DC.



Fig. A-151 *Wrightia religiosa*
(Teijsm. & Binn.) Benth. ex
Kurz



Fig. A-152
Zingiber ottensii
Voleton



Fig. A-153 *Zinnia*
elegans Jacq.

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Publications

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