Supplementary Material

Table S1. Ethnic groups from 152 studies of traditional medicine in Thailand, produced between 1986– 2019.

Name of ethnic groups	Number of use reports	Number of references
Akha	84	6
Burmese Immigrant	6	1
Hmong	120	14
H'tin	17	4
Kachin	4	1
Karen	906	33
Kayah	6	1
Khamu	32	5
Kuoy	7	2
Lahu	67	8
Lawa	30	11
Lisu	20	4
Lua	50	4
Mien	55	7
Moken	3	1
Phu Tai	27	2
Pwo	246	7
Sakai	5	1
Tai Lao	35	1
Tai Lue	26	4
Tai Yai	166	9
Tai Yuan	274	13
Thai	3090	70
Thai-Khmer	45	2
Thai-Khorat	5	1
unspecified	34	2
Yakkul	26	1
Yunnan Chinese	1	1

Table S2 Genera of medicinal legume species in Thailand, derived from 152 primary sources produced between 1986–2019.

Genus	Number of species	Use reports	Total species in Thailand
Crotalaria	18	141	39
Dalbergia	16	133	33
Senna	11	752	17
Phanera	10	71	28
Derris	8	78	15
Flemingia	8	152	12
Indigofera	8	55	24
Millettia	8	62	21
Albizia	7	212	12
Bauhinia	7	48	23
Senegalia	7	278	16
Uraria	6	107	14
Erythrina	5	65	6
Cassia	4	239	9
Mimosa	4	292	5
Mucuna	4	43	17
Phyllodium	4	119	6
Spatholobus	4	65	4
Biancaea	3	363	6
Clitoria	3	79	6
Dendrolobium	3	19	8
Entada	3	56	4
Grona	3	75	12
Lysiphyllum	3	70	4
Sesbania	3	52	6
Tephrosia	3	13	5
Abrus	2	53	6
Adenanthera	2	77	2
Aeschynomene	2	24	3
Archidendron	2	67	9
Butea	2	47	3
Caesalpinia	2	29	3
Cajanus	2	38	6
Canavalia	2	6	7
Christia	2	5	4
Dunbaria	2	15	8
Erythrophleum	2	7	3
Guilandina	2	42	4
Huangtcia	2	27	3
Parkia	2	38	5
Peltophorum	2	21	3
Phylacium	2	11	1
Pterocarpus	2	83	3
Pterolobium	2	11	5
Pueraria	2	25	12
Saraca	2	5	9
Shuteria	2	6	3
Sophora	2	10	6
Vachellia	2	19	5
Vigna	2	7	20

Genus	Number of species	Use reports	Total species in Thailand
Xylia	2	105	2
Brachypterum	2	153	5
Lasiobema	1	11	8
Acrocarpus	1	4	1
Adinobotrys	1	6	1
Afzelia	1	86	7
Aganope	1	2	3
Akschindlium	1	7	1
Alysicarpus	1	9	3
Calliandra	1	2	4
Centrosema	1	2	1
Chamaecrista	1	2	4
Cheniella	1	4	4
Codariocalyx	1	10	2
Cynometra	1	2	7
Delonix	1	6	1
Dialium	1	5	4
Dumasia	1	4	11
Eriosema	1	19	1
Galactia	1	1	1
Glycine	1	1	1
Glycyrrhiza	1	5	2
Hegnera	1	7	1
Hultholia	1	19	1
Lablab	1	9	1
Leucaena	1	53	2
Mezoneuron	1	1	1
Moullava	1	33	1
Neptunia	1	29	4
Neustanthus	1	5	1
Ototropis	1	1	1
Pachyrhizus	1	1	2
Piliostigma	1	10	1
Pithecellobium	1	12	7
Pleurolobus	1	8	1
Polhillides	1	31	2
Pongamia	1	3	1
Psophocarpus	1	19	1
Rhynchosia	1	1	5
Samanea	1	10	1
Sigmoidala	1	4	1
Sindora	1	33	4
Sohmaea	1	2	3
Tadehagi	1	124	2
Tamarindus	1	205	1
Teramnus	1	5	1
Teyleria	1	3	3
Zornia	1	1	1
Total	262	5387	262

Table S3 The Pearson correlation coefficient between number of medicinal legume genera and Thailand's legume genera.

Correlations

		Medicinal_Genera	Thailand_Genera
Medicinal_Genera	Pearson Correlation	1	.873**
	Sig. (2-tailed)		.000
	N	98	98
Thailand_Genera	Pearson Correlation	.873**	1
	Sig. (2-tailed)	.000	
	N	98	98

**. Correlation is significant at the 0.01 level (2-tailed).

Table S4 Use reports and percentages of parts used of legume species with medicinal uses, from 152 primary data sources produced between 1986–2019.

Part used	Use reports	Percent
roots	1206	22.7
stems	1056	19.9
unspecified	1056	19.9
leaves	920	17.3
entire plant	720	13.5
bark	559	10.5
seeds	353	6.6
infructescenes	305	5.7
inflorescenes	178	3.3
exudates	16	0.3
galls	6	0.1

Table S5 Use reports of preparation of legume species with medicinal uses, from 152 primary data sources produced between 1986–2019.

Preparation	Number of use reports
decoction	2001
none	144
grated with water	96
pounded	84
cold infusion	62
herbal liquor	56
roasted and hot infusion	32
herbal compress	29
boiled	28
roasted	27
smashed	25
cooked	24
crushed	23
powdered	21
grinded	20
make a bolus	14
squeezed	12
roasted and grinded	11
hot infusion	10
maceration	10
make a balm	10
dried and decoction	9
grated with rice water	9
cut in half	8
pounded with oil	7
roasted and cold infusion	6
crushed with liquor	4
crushed with rice water	4
dried and grinded	4
make a cigarette	4
make an infused oil	4
roasted and grinded then hot infusion	4
cooked chicken soup	3
crushed with a bit of salt	3
crushed with water	3
soaked in rice water	3
soaked in water	3
burned and grinded	2
concoction	2
decoction and add the honey	2
decoction with brown sugar	2
dried and grinded then cold infusion	2
dried and grinded then hot infusion	2
grinded and mix with alum powder	2
grinded and mix with lime juice	2
grinded and mix with liquor or hot water	2
make a shampoo	2
mixed with honey	2
oil extraction	2
pounded and heated	2
pounded with coconut oil	2

Preparation	Number of use reports
preserved in sugar syrup	2
roasted and decoction	2
roasted and grinded then cold infusion	2
smashed and cold infusion	2
crushed with red lime	1
cut into small pieces	1
decoction with calcium carbonate	1
dipped with salt	1
grated with liquor	1
grinded and cold infusion	1
make a necklace	1
make a tea	1
make a toothpaste	1
mixed with alum and air-dry overnight	1
mixed with cooked rice	1
mixed with oil	1
mixed with other herbs	1
pounded with oil and heated	1
pounded with water	1
roasted and boiled	1
roasted and crushed	1
roasted and crushed with pig fat	1
roasted and grinded then mixed with laxative medicine	1
roasted and pounded	1
roasted and put in the cooked rice	1
shaved	1
smashed and roasted then boiled with salt	1
soaked in honey for 3 months then grated with water	1
soaked in lime water	1
taken out an epicarp	1

Table S6 Use reports of routes of administration of legume species with medicinal uses, from 152 primary data sources produced between 1986–2019.

Routes of administration	Number of use reports
potion	1965
oral	227
poultice	197
bath	187
liniment	166
herbal steam	52
chew	37
lozenge	20
put a spell on	19
hair wash	18
clean the wound	14
potion/oral	10
eye drops	9
oral/potion	8
gargle	6
hair treatment	6
face wash	5
hand soak and foot soak	5
massage	4
smoking	4
foot bath	3
blow to the eye	2
eye wash	2
potion/chew	2
put on the vagina	2
remove dust from the eyes	2
soak	2
step over	2
apply on the eye	1
apply on the eyelid	1
apply on the face	1
blow locally	1
blow to the nose	1
brush teeth	1
chew with betel nut	1
drops	1
ear drops	1
eat with rice	1
eat with slice lime	1
foot soak	1
potion/put a spell on	1
potion/sit over	1
put on the neck	1
put on the stomach and poultice with hot pot	1
snuff	1
spray	1
wipe the eye	1

Table S7 Use values (UV) of Thai medicinal legumes mentioned in 152 primary sources produced between 1986–2019.

Ranks	Species name	UV
1	**Biancaea sappan* (L.) Tod.	1.30
2	*Mimosa pudica* L.	1.14
3	**Senna siamea* (Lam.) H.S.Irwin & Barneby	0.93
4	**Senegalia rugata* (Lam.) Britton & Rose	0.91
5	**Tamarindus indica* L.	0.78
6	**Senna alata* (L.) Roxb.	0.73
7	**Cassia fistula* L.	0.72
8	**Brachypterum scandens* (Roxb.) Miq.	0.48
9	*Senna tora* (L.) Roxb.	0.48
10	*Tadehagi triquetrum* (L.) H.Ohashi	0.46
11	**Albizia myriophylla* Benth.	0.44
12	**Senna garrettiana* (Craib) H.S.Irwin & Barneby	0.33
13	*Clitoria ternatea* L.	0.32
13	*Pterocarpus macrocarpus* Kurz	0.32
14	*Senna occidentalis* (L.) Link	0.29
15	*Lysiphyllum strychnifolium* (Craib) A.Schmitz	0.28
16	*Afzelia xylocarpa* (Kurz) Craib	0.27
16	*Spatholobus parviflorus* (Roxb. ex G.Don) Kuntze	0.27
16	*Leucaena leucocephala* (Lam.) de Wit	0.27
17	*Adenanthera pavonina* L.	0.25
17	*Phyllodium pulchellum* (L.) Desv.	0.25
17	*Xylia xylocarpa* (Roxb.) W.Theob.	0.25
17	*Archidendron clypearia* (Jack) I.C.Nielsen	0.25
17	*Uraria oblonga* (Wall. ex Benth.) H.Ohashi & K.Ohashi	0.25
18	*Derris elliptica* (Wall.) Benth.	0.24
19	*Phyllodium longipes* (Craib) Schindl.	0.23
20	*Abrus precatorius* L.	0.22
21	**Erythrina subumbrans* (Hassk.) Merr.	0.20
21	*Sindora siamensis* Teijsm. ex Miq.	0.20
22	*Butea superba* Roxb. ex Willd.	0.18
22	*Sesbania grandiflora* (L.) Poir.	0.18
22	*Xylia xylocarpa* (Roxb.) W.Theob. var. *kerrii* (Craib & Hutch.) I.C.Nielsen	0.18
23	*Grona heterocarpos* (L.) H.Ohashi & K.Ohashi	0.17
24	*Albizia procera* (Roxb.) Benth.	0.16
24	*Cajanus cajan* (L.) Huth	0.16
24	*Entada rheedei* Spreng.	0.16
24	*Mucuna pruriens* (L.) DC.	0.16
25	*Albizia lebbeck* (L.) Benth.	0.14
25	*Uraria crinita* (L.) Desv. ex DC.	0.14
26	*Crotalaria pallida* Aiton	0.13
27	*Caesalpinia pulcherrima* (L.) Sw.	0.12
27	*Flemingia macrophylla* (Willd.) Kuntze ex Merr.	0.12
28	*Dalbergia cultrata* T.S.Ralph	0.11
28	*Flemingia strobilifera* (L.) W.T.Aiton	0.11
28	*Polhillides velutina* (Willd.) H.Ohashi & K.Ohashi	0.11
28	**Senegalia catechu* (L.f.) P.J.H.Hurter & Mabb.	0.11
29	*Flemingia stricta* Roxb.	0.10
29	*Grona triflora* (L.) H.Ohashi & K.Ohashi	0.10
29	*Guilandina bonduc* L.	0.10
29	*Huangtcia renifolia* (L.) H.Ohashi & K.Ohashi	0.10
29	*Millettia caerulea* Baker	0.10
29	*Neptunia prostrata* (Lam.) Baill.	0.10

Ranks	Species name	UV
29	*Bauhinia acuminata* L.	0.10
29	*Bauhinia purpurea* L.	0.10
29	*Flemingia lineata* (L.) Roxb. ex W.T.Aiton	0.10
29	*Hultholia mimosoides* (Lam.) Gagnon & G.P.Lewis	0.10
29	*Moullava digyna* (Rottler) Gagnon & G.P.Lewis	0.10
29	*Senna hirsuta* (L.) H.S.Irwin & Barneby	0.10
30	*Crotalaria alata* Buch.-Ham. ex D.Don	0.09
30	*Dalbergia stipulacea* Roxb.	0.09
30	*Parkia speciosa* Hassk.	0.09
30	*Phanera bracteata* Benth.	0.09
30	*Pueraria mirifica* Airy Shaw & Suvat.	0.09
30	*Senegalia megaladena* (Desv.) Maslin, Seigler & Ebinger	0.09
31	*Indigofera hendecaphylla* Jacq.	0.08
31	*Millettia extensa* (Benth.) Benth. ex Baker	0.08
31	*Psophocarpus tetragonolobus* (L.) DC.	0.08
31	*Archidendron jiringa* (Jack) I.C.Nielsen	0.08
31	*Cassia bakeriana* Craib	0.08
31	*Dunbaria bella* Prain	0.08
31	*Pterocarpus indicus* Willd.	0.08
31	*Senegalia pennata* (L.) Maslin	0.08
31	*Senna timoriensis* (DC.) H.S.Irwin & Barneby	0.08
32	*Peltophorum dasyrhachis* (Miq.) Kurz	0.07
32	*Senna sophera* (L.) Roxb.	0.07
32	*Entada glandulosa* Pierre ex Gagnep.	0.07
32	*Erythrina stricta* Roxb.	0.07
32	*Flemingia paniculata* Wall. ex Benth.	0.07
32	*Indigofera tinctoria* L.	0.07
32	*Lasiobema penicillilobum* (Pierre ex Gagnep.) A.Schmitz	0.07
32	*Mucuna macrocarpa* Wall.	0.07
32	*Phanera scandens* (L.) Lour. ex Raf.	0.07
33	*Butea monosperma* (Lam.) Kuntze	0.06
33	*Crotalaria assamica* Benth.	0.06
33	*Dalbergia oliveri* Gamble ex Prain	0.06
33	*Dendrolobium lanceolatum* (Dunn) Schindl.	0.06
33	*Indigofera caloneura* Kurz	0.06
33	*Mimosa diplotricha* C.Wright	0.06
33	*Piliostigma malabaricum* (Roxb.)	0.06
33	*Pithecellobium dulce* (Roxb.) Benth.	0.06
34	*Aeschynomene americana* L.	0.05
34	*Albizia chinensis* (Osbeck) Merr.	0.05
34	*Cassia javanica* L.	0.05
34	*Dalbergia cochinchinensis* Pierre	0.05
34	*Dalbergia parviflora* Roxb.	0.05
34	*Eriosema chinense* Vogel	0.05
34	*Flemingia sootepensis* Craib	0.05
34	*Lablab purpureus* (L.) Sweet	0.05
34	*Pleurolobus gangeticus* (L.) J.St.-Hil. ex H.Ohashi & K.Ohashi	0.05
34	*Senna surattensis* (Burm.f.) H.S.Irwin & Barneby	0.05
34	*Vachellia farnesiana* (L.) Wight & Arn.	0.05
34	*Codariocalyx motorius* (Houtt.) H.Ohashi	0.05
34	*Crotalaria albida* B.Heyne ex Roth	0.05
34	*Crotalaria bracteata* Roxb. ex DC.	0.05
34	*Crotalaria spectabilis* Roth	0.05
34	*Grona styracifolia* (Osbeck) H.Ohashi & K.Ohashi	0.05
34	*Phylacium bracteosum* Benn.	0.05
34	*Phyllodium vestitum* Benth.	0.05

Ranks	Species name	UV
34	*Pterolobium macropterum* Kurz	0.05
34	*Samanea saman* (Jacq.) Merr.	0.05
34	*Spatholobus harmandii* Gagnep.	0.05
35	*Abrus melanospermus* Hassk.	0.04
35	*Akschindlium godefroyanum* (Kuntze) H.Ohashi	0.04
35	*Albizia lebbekoides* (DC.) Benth.	0.04
35	*Crotalaria lejoloba* Bartl.	0.04
35	*Dalbergia nigrescens* Kurz	0.04
35	*Delonix regia* (Bojer ex Hook.) Raf.	0.04
35	*Dendrolobium thorelii* (Gagnep.) Schindl.	0.04
35	*Derris trifoliata* Lour.	0.04
35	*Erythrina suberosa* Roxb.	0.04
35	*Flemingia semialata* Roxb. ex W.T.Aiton	0.04
35	*Millettia brandisiana* Kurz	0.04
35	*Phanera ornata* var. *kerrii* (Gagnep.) Bandyop., Ghoshal & M.K.Pathak	0.04
35	*Senegalia megaladena* var. *indochinensis* (I.C.Nielsen) Maslin, Seigler & Ebinger	0.04
35	*Tephrosia purpurea* (L.) Pers.	0.04
35	*Uraria lagopodioides* (L.) DC.	0.04
36	*Alysicarpus vaginalis* (L.) DC.	0.03
36	*Caesalpinia crista* L.	0.03
36	*Canavalia gladiata* (Jacq.) DC.	0.03
36	*Crotalaria verrucosa* L.	0.03
36	*Dalbergia ovata* Graham ex Benth.	0.03
36	*Dialium cochinchinense* Pierre	0.03
36	*Entada spiralis* Ridl.	0.03
36	*Erythrina fusca* Lour.	0.03
36	*Erythrophleum succirubrum* Gagnep.	0.03
36	*Mimosa pigra* L.	0.03
36	*Neustanthus phaseoloides* (Roxb.) Benth.	0.03
36	*Parkia timoriana* (DC.) Merr.	0.03
36	*Peltophorum pterocarpum* (DC.) Backer ex K.Heyne	0.03
36	**Senna alexandrina* Mill.	0.03
36	*Sophora exigua* Craib	0.03
36	*Teramnus labialis* (L.f.) Spreng.	0.03
36	*Acrocarpus fraxinifolius* Wight & Arn.	0.03
36	*Cajanus goensis* Dalzell	0.03
36	*Cheniella glauca* (Benth.) R.Clark & Mackinder	0.03
36	*Crotalaria pallida* Aiton var. *obovata* (G.Don) Polhill	0.03
36	*Dalbergia candenatensis* (Dennst.) Prain	0.03
36	*Dalbergia velutina* Benth.	0.03
36	*Derris elegans* Benth.	0.03
36	*Dumasia leiocarpa* Benth.	0.03
36	**Glycyrrhiza glabra* L.	0.03
36	*Hegnera obcordata* (Miq.) Schindl.	0.03
36	*Phanera sirindhorniae* (K.Larsen & S.S.Larsen) Mackinder & R.Clark	0.03
36	*Pueraria candollei* Wall. ex Benth.	0.03
36	*Senegalia caesia* (L.) Maslin, Seigler & Ebinger	0.03
36	*Senegalia comosa* (Gagnep.) Maslin, Seigler & Ebinger	0.03
36	*Vigna unguiculata* (L.) Walp.	0.03
37	*Albizia odoratissima* (L.f.) Benth.	0.02
37	*Bauhinia saccocalyx* Pierre	0.02
37	*Bauhinia viridescens* Desv.	0.02
37	*Clitoria macrophylla* Wall. ex Benth.	0.02

Ranks	Species name	UV
37	*Crotalaria medicaginea* Lam.	0.02
37	*Crotalaria sessiliflora* L.	0.02
37	*Dalbergia cana* Graham ex Kurz	0.02
37	*Dalbergia lanceolaria* L.f.	0.02
37	*Dendrolobium triangulare* (Retz.) Schindl.	0.02
37	*Derris reticulata* Craib	0.02
37	*Guilandina major* (Medik.) Small	0.02
37	*Millettia pachycarpa* Benth.	0.02
37	*Mucuna revoluta* Wilmot-Dear	0.02
37	*Phanera pulla* (Craib) Sinou & Bruneau	0.02
37	*Pongamia pinnata* (L.) Pierre	0.02
37	*Pterolobium integrum* Craib	0.02
37	*Saraca declinata* (Jack) Miq.	0.02
37	*Shuteria involucrata* (Wall.) Wight & Arn. ex Walp.	0.02
37	*Sigmoidala kityana* (Craib) J.Compton & Schrire	0.02
37	*Teyleria stricta* (Kurz) A.N.Egan & B.Pan	0.02
38	*Adenanthera microsperma* Teijsm. & Binn.	0.01
38	*Adinobotrys atropurpureus* (Wall.) Dunn	0.01
38	*Aganope thyrsiflora* (Benth.) Polhill	0.01
38	*Albizia lucidior* (Steud.) I.C.Nielson ex H.Hara	0.01
38	*Bauhinia monandra* Kurz	0.01
38	*Bauhinia variegata* L.	0.01
38	*Biancaea decapetala* (Roth) O.Deg.	0.01
38	*Cassia grandis* L.f.	0.01
38	*Centrosema pubescens* Benth.	0.01
38	*Chamaecrista pumila* (Lam.) K.Larsen	0.01
38	*Christia obcordata* (Poir.) Bakh.f.	0.01
38	*Christia vespertilionis* (L.f.) Bakh.f.	0.01
38	*Crotalaria kurzii* Baker ex Kurz	0.01
38	*Crotalaria quinquefolia* L.	0.01
38	*Cynometra cauliflora* L.	0.01
38	*Dalbergia foliacea* Wall. ex Benth.	0.01
38	*Dalbergia glomeriflora* Kurz	0.01
38	*Dalbergia lanceolaria* subsp. *paniculata* (Roxb.) Thoth.	0.01
38	*Dalbergia tsoi* Merr. & Chun	0.01
38	*Dunbaria punctata* (Wight & Arn.) Benth.	0.01
38	*Erythrophleum teysmannii* (Kurz) Craib	0.01
38	*Indigofera galegoides* DC.	0.01
38	*Indigofera suffruticosa* Mill.	0.01
38	*Lysiphyllum binatum* (Blanco) de Wit	0.01
38	*Lysiphyllum winitii* (Craib) de Wit	0.01
38	*Millettia leucantha* Kurz	0.01
38	*Mucuna bracteata* DC. ex Kurz	0.01
38	*Phanera harmsiana* (Hosseus) Bandyop. & Ghoshal	0.01
38	*Phanera involucellata* (Kurz) de Wit	0.01
38	*Phanera nervosa* Benth.	0.01
38	*Phanera ornata* var. *burmanica* (K.Larsen & S.S.Larsen) Bandyop., Ghoshal & M.K.Pathak	0.01
38	*Phylacium majus* Collett & Hemsl.	0.01
38	*Saraca indica* L.	0.01
38	*Sesbania sesban* (L.) Merr.	0.01
38	*Sophora flavescens* Aiton	0.01
38	*Spatholobus pottingeri* Prain	0.01
38	*Spatholobus suberectus* Dunn	0.01
38	*Tephrosia coccinea* Wall.	0.01
38	*Vachellia harmandiana* (Pierre) Maslin, Seigler & Ebinger	0.01

Ranks	Species name	UV
38	*Aeschynomene indica* L.	0.01
38	*Bauhinia pottsii* G.Don	0.01
38	*Biancaea godefroyana* (Kuntze) Molinari & Mayta	0.01
38	*Brachypterum eriocarpum* (F.C.How) Adema & Sirich.	0.01
38	*Calliandra haematocephala* Hassk.	0.01
38	*Canavalia cathartica* Thouars	0.01
38	*Clitoria chanondii* Chuakul	0.01
38	*Crotalaria calycina* Schrank	0.01
38	*Crotalaria cytisoides* Roxb. ex DC.	0.01
38	*Crotalaria dubia* Benth.	0.01
38	*Crotalaria montana* B.Heyne ex Roth	0.01
38	*Crotalaria retusa* L.	0.01
38	*Dalbergia retusa* Hemsl.	0.01
38	*Derris ferruginea* (Wall. ex Voigt) Benth.	0.01
38	*Derris montana* Benth.	0.01
38	*Derris thorelii* (Gagnep.) Craib	0.01
38	*Derris tonkinensis* Gagnep.	0.01
38	*Erythrina variegata* L.	0.01
38	*Flemingia ferruginea* Wall. ex Benth.	0.01
38	*Galactia striata* (Jacq.) Urb. var. *villosa* (Wight & Arn.) Verdc.	0.01
38	*Glycine max* (L.) Merr.	0.01
38	*Huangtcia oblata* (Baker ex Kurz) H.Ohashi & K.Ohashi	0.01
38	*Indigofera hirsuta* L.	0.01
38	*Indigofera sootepensis* Craib	0.01
38	*Indigofera squalida* Prain	0.01
38	*Mezoneuron hymenocarpum* Wight & Arn. ex Prain	0.01
38	*Millettia glaucescens* Kurz	0.01
38	*Millettia kangensis* Craib	0.01
38	*Millettia rigens* (Craib) Niyomdham	0.01
38	*Mimosa pudica* var. *unijuga* (Duchass. & Walp.) Griseb.	0.01
38	*Ototropis multiflora* (DC.) H.Ohashi & K.Ohashi	0.01
38	*Pachyrhizus erosus* (L.) Urb.	0.01
38	*Phanera ornata (*Kurz) Thoth.	0.01
38	*Phyllodium elegans* (Lour.) Desv.	0.01
38	*Rhynchosia avensis* Benth. ex Baker	0.01
38	*Senna spectabilis* (DC.) H.S.Irwin & Barneby	0.01
38	*Sesbania aculeata* (Schreb.) Pers.	0.01
38	*Shuteria vestita* Wight & Arn.	0.01
38	*Sohmaea teres* (Wall. ex Benth.) H.Ohashi & K.Ohashi	0.01
38	*Tephrosia vestita* Vogel	0.01
38	*Uraria cordifolia* Wall.	0.01
38	*Uraria rotundata* Craib	0.01
38	*Uraria rufescens* (DC.) Schindl.	0.01
38	*Vigna dalzelliana* (Kuntze) Verdc.	0.01
38	*Zornia diphylla* (L.) Pers.	0.01

Species that are used in National List of Essential Medicines (Development of national list of essential drugs subcommittee, 2020) mark with *

Table S8 The species with high level use values (UV) and their popularity for treating disorders evaluated by fidelity level (FL).

UV	Species	Disorders	FL(%)
1.30	*Biancaea sappan* (L.) Tod.	blood nourishment	13.6
		health maintenance	8.6
		muscle pain	5.0
1.14	*Mimosa pudica* L.	kidney stone	7.2
		fever	6.1
		health maintenance	5.8
0.93	*Senna siamea* (Lam.) H.S.Irwin & Barneby	insomnia	7.2
		laxative	5.1
		health maintenance	4.7
0.91	*Senegalia rugata* (Lam.) Britton & Rose	muscle pain	6.1
		fever	5.6
		phlegm	5.6
		post-partum care	5.6
		laxative	4.6
0.78	*Tamarindus indica* L.	laxative	11.2
		cough	5.4
		wound	4.9
0.73	*Senna alata* (L.) Roxb.	dermatophytosis	15.4
		laxative	14.9
		constipation	6.5
0.72	*Cassia fistula* L.	laxative	15.2
		constipation	6.4
		fever	6.4
		post-partum care	4.4
0.48	*Brachypterum scandens* (Roxb.) Miq.	health maintenance	12.5
		muscle pain	11.2
		joint pain	5.9
0.48	*Senna tora* (L.) Roxb.	fever	15.7
		dermatophytosis	6.5
		insomnia	6.5
		laxative	6.5
		health maintenance	5.6
0.46	*Tadehagi triquetrum* (L.) H.Ohashi	anthelmintic	7.3
		diarrhea	7.3
		muscle pain	7.3
		health maintenance	6.5
		diuretic	5.6
		kidney stone	5.6
0.44	*Albizia myriophylla* Benth.	health maintenance	12.6
		cough	6.8
		sore throat	6.8
		thirst quenching	6.8
		phlegm	5.8
0.33	*Senna garrettiana* (Craib) H.S.Irwin & Barneby	laxative	7.9
		blood nourishment	6.6
		health maintenance	6.6
		blood purification	5.3
		insomnia	5.3
0.32	*Clitoria ternatea* L.	hair nourishment	15.5
		eye tonic	11.3

UV	Species	Disorders	FL(%)
		diuretic	8.5
		laxative	8.5
0.32	*Pterocarpus macrocarpus* Kurz	diarrhea	6.3
		toothache	6.3
		wound	6.3
0.29	*Senna occidentalis* (L.) Link	fever	10.0
		health maintenance	10.0
		antidote	8.3
		diuretic	8.3
		abdominal pain	6.7

Table S9 Species with high potential to be used in public herbal medicine with their medicinal uses.

Ranks	Scientific name	Vernacular name	Part used	Medicinal uses (use categories and disorders)	UV
1	*Biancaea sappan* (L.) Tod.	Fang (Thai) Ngai (Pwo)	bark entire plant inflorescences infructescences leaves roots seeds stems	**blood, blood forming organs and immune mechanism:** anemia, blood nourishment, blood purification, polycythemia **cardiovascular:** hemorrhoids, heart disease, heart nourishment, hypertension, stimulate blood circulation **digestive:** abdominal pain, bile nourishment, constipation, diarrhea, flatulence, food poisoning, gastritis, IBD (inflammatory bowel disease), indigestion, jaundice, laxative, liver cancer, mouth polyp, mouth ulcer, vomiting **endocrine/metabolic and nutritional:** appetite stimulant, beriberi, diabetes, gout, hyperlipidemia, malnutrition **eye:** bleary-eyed **female genital:** haemagogue, hernia (women), hypermenorrhoea, menstrual cycle adjustment, menstrual pain, menstrual purification, menstruation absent/scanty, menstruation fever, menstruation irregular, prolapsed uterus, women blood nourishment, women sexual tonic **general and unspecified:** allergy, antidote, blister, body heat balance, bruise, cancer, chest pain, chlamydia, colic, common cold, epistaxis, fainting, fatigue, fever, internal bruise, menopause, tonic, tuberculosis, venereal disease, wound **man genital:** hernia (man) **musculoskeletal:** back pain, bone disease, bone pain, joint pain, lumbago, muscle pain, muscle relaxant, rheumatoid arthritis, tendinitis, tendon pain **neurological:** brain nourishment, car sick, convulsion, dizziness, headache, meningitis, paralysis, paresis, tongue paralysis **pregnancy, childbearing, family planning:** acceleration of lochia discharge, amniotic fluid elimination, lactation stimulant, post-partum anxiety, post-partum care, post-partum haemagogue, post-partum muscle relaxant **psychological:** chronic alcohol abuse, insanity, insomnia **respiratory:** asthma, bronchitis, congestion, cough, lung abscess, lung disease, phlegm, pneumonia, sore throat, thirst quenching, thirsty **skin:** itching, pruritus, psoriasis, rash **urological:** anuria, kidney disease, kidney stones, urinary stones	1.30
2	*Mimosa pudica* L.	Ji yob (Tai Yuan) Toi Hoob (Tai Yuan) Nor wi mae (Karen) Mai ya rab (Thai) Yaa pan yod (Tai yai)	entire plant inflorescences infructescences leaves roots stems	**blood, blood forming organs and immune mechanism:** blood nourishment, blood purification, HIV-infection/aids **cardiovascular:** hemorrhoids, hypertension, oedema **digestive:** abdominal pain, constipation, diarrhea, flatulence, gastritis, IBD (inflammatory bowel disease), indigestion, jaundice, laxative, mouth ulcer,	1.14

Ranks	Scientific name	Vernacular name	Part used	Medicinal uses (use categories and disorders)	UV
				vomiting, peptic ulcer, dysentery, liver dysfunction, hernia, ulcerative colitis, gastric nourishment **endocrine/metabolic and nutritional:** diabetes, gout, malnutrition, goiter, cholesterol-lowering **eye:** bleary-eyed, eye tonic, eye pain, swollen eye **female genital:** haemagogue, menstrual pain, oophoritis, emmenagogue **general and unspecified:** antidote, blister, bruise, cancer, common cold, epistaxis, fainting, fever, tonic, wound, malaria, herbicide poisoning, gonorrhea, relaxant, measles, chronic wounds, pus wound, chickenpox, elixir **musculoskeletal:** back pain, bone disease, joint pain, lumbago, muscle pain, muscle relaxant, bone fracture, knee pain **neurological:** convulsion, dizziness, headache, sedative pregnancy, childbearing, family planning: lactation stimulant, post-partum anxiety, post-partum care, labor induction psychological: insomnia, insomnia (children), neurosis respiratory: asthma, bronchitis, cough, phlegm, pneumonitis skin: pruritus, psoriasis, rash, urticaria, boil, herpes simplex, herpes zoster, erysipelas urological: anuria, kidney disease, kidney stones, diuretic, dark color urine, dysuria, UTI (urinary tract infection), kidney dysfunction	
3	*Senna siamea* (Lam.) H.S.Irwin & Barneby	Khi lek (Thai) Pak gee dee (Tai Yai)	bark entire plant inflorescences infructescences leaves roots stems	**blood, blood forming organs and immune mechanism:** blood nourishment, blood purification, lymphatic system nourishment, blood dysfunction, poor lymph disorder **cardiovascular:** hemorrhoids, hypertension, stimulate blood circulation, oedema **digestive:** abdominal pain, bile nourishment, constipation, diarrhea, jaundice, laxative, mouth ulcer, dysentery, anthelmintic, colon cancer, purgative, strengthen teeth **endocrine/metabolic and nutritional:** appetite stimulant, beriberi, diabetes, gout, marasmus **eye:** bleary-eyed **female genital:** menstrual cycle adjustment, menstrual purification, emmenagogue, uterus dysfunction, cervicitis, uterus nourishment **general and unspecified:** antidote, bruise, cancer, colic, fever, tonic, tuberculosis, venereal disease, malaria, measles, elixir, hangover, balance body system, meningococcal disease, stimulate sweating **male genital:** BPH (benign prostatic hyperplasia) **musculoskeletal:** back pain, joint pain, lumbago, muscle pain	0.93

Ranks	Scientific name	Vernacular name	Part used	Medicinal uses (use categories and disorders)	UV
				muscle relaxant, tendinitis, tendon pain, knee pain, leg pain, shoulder pain, neck pain, bone nourishment, tendon dysfunction, tendon purification, ameloblastoma, tendon nourishment, plantar fasciitis **neurological:** brain nourishment, dizziness, paralysis, paresis, numbness, herniated nucleus pulposus, migraine pregnancy, childbearing, family planning: post-partum care, post-partum haemagogue **psychological:** insomnia, aphrodisiac **respiratory:** asthma, cough, lung abscess, lung disease, phlegm, hemoptysis **skin:** itching, psoriasis, boil, herpes simplex, athlete's foot, dermatophytosis **urological:** anuria, kidney disease, kidney stone, urinary stones, diuretic, kidney dysfunction, kidney nourishment, dialysis	
4	*Senegalia rugata* (Lam.) Britton & Rose	Som poi (Thai) Som khon (Tai Yai)	bark entire plant inflorescences infructescences leaves roots seeds stems	**blood, blood forming organs and immune mechanism:** blood nourishment, blood purification, cardiovascular, hypertension, stimulate blood circulation **digestive:** abdominal pain, constipation, diarrhea, food poisoning, laxative, vomiting, dysentery, bilharzia, mumps, sialaporia, intestinal cleanse, colon cleanse **endocrine/metabolic and nutritional:** appetite stimulant, diabetes, gout, SLE (systemic lupus erythematosus) **eye:** bleary-eyed, eye tonic, eye pain, eye disease, conjunctivitis **female genital:** haemagogue, menstrual pain, menstrual purification, menstruation absent/scanty, emmenagogue **general and unspecified:** antidote, body heat balance, cancer, common cold, fever, tonic, wound, malaria, chickenpox, hangover, pain, sweat induction, hyperhidrosis, typhoid, stop bleeding **musculoskeletal:** joint pain, lumbago, muscle pain, muscle relaxant, tendon dysfunction, sprain, tendon relaxant **neurological:** headache, paralysis pregnancy, childbearing, family planning: post-partum care **psychological:** insomnia **respiratory:** asthma, cough, phlegm, running nose, tight chest, nasal polyp **skin:** itching, rash, boil, athlete's foot, dermatophytosis, anti-dandruff, skin disease, hair dysfunction, catfish poison, scorpion sting, tinea capitis, hair nourishment, dermatosis, skin inflammation **urological:** kidney stones, diuretic	0.91
5	*Tamarindus indica* L.	Ma kham (Thai) Ba kham (Tai Yuan) Sae mor klae (Karen) Jue kua chue (Hmong) La loi (Lua)	bark inflorescences infructescences leaves roots	**blood, blood forming organs and immune mechanism:** blood nourishment, blood purification **cardiovascular:** hemorrhoids, hypertension, stimulate blood circulation	0.78

Ranks	Scientific name	Vernacular name	Part used	Medicinal uses (use categories and disorders)	UV
			seeds stems	**digestive:** abdominal pain, constipation, diarrhea, flatulence, indigestion, laxative, mouth ulcer, dysentery, anthelmintic, purgative, bilharzia, colon cleanse, GERD (gastroesophageal reflux disease), liver disease **endocrine/metabolic and nutritional:** appetite stimulant, diabetes, malnutrition, weight loss **eye:** bleary-eyed, eye disease **female genital:** tubo-ovarian abscess general and unspecified: antidote, blister, colic, common cold, fever, tonic, venereal disease, wound, malaria, chronic wounds, pus wound, hangover, meningococcal disease, stimulate sweating, typhoid, burn, infection, mushroom poisoning **musculoskeletal:** back pain, lumbago, muscle pain, muscle relaxant, neurological, dizziness, paralysis, epilepsy pregnancy, childbearing, family planning: amniotic fluid elimination, lactation stimulant, post-partum anxiety, post-partum care, morning sickness **psychological:** insanity **respiratory:** congestion, cough, phlegm, sore throat, thirst quenching **skin:** itching, pruritus, rash, urticaria, boil, herpes simplex, herpes zoster, athlete's foot, rash (children), dry skin, freckles, hyperpigmentation **urological:** anuria, kidney stone, urinary stones, diuretic	
6	*Senna alata* (L.) Roxb.	Chum hed ted (Thai) Ya la mer (Karen) Lab muean luang (Tai Yuan) Jum hed (Lua)	bark entire plant inflorescences infructescences leaves roots seeds stems	**blood, blood forming organs and immune mechanism:** blood nourishment, lymph purification **cardiovascular:** hemorrhoids, heart nourishment, hypertension **digestive:** constipation, diarrhea, flatulence, food poisoning, laxative, mouth ulcer, peptic ulcer, anthelmintic, colon cancer, purgative, GERD (gastroesophageal reflux disease), toothache **endocrine/metabolic and nutritional:** hyperlipidemia, malnutrition, weight loss, malnutrition (children), dyslipidemia, hyperglycemia **general and unspecified:** antidote, blister, colic, fever, tonic, wound, elixir, flu-like syndrome **musculoskeletal:** back pain, joint pain, lumbago, muscle relaxant, tendinitis, neurological, paralysis, numbness **pregnancy, childbearing, family planning:** post-partum care, post-partum haemagogue **psychological:** insomnia **respiratory:** asthma, cough, lung disease, phlegm, nasal polyp **skin:** itching, pruritus, psoriasis, rash, boil, dermatophytosis, skin disease, hair nourishment, dermatosis, leprosy, insect bite/sting, scabies, acne **urological:** diuretic, cystitis	0.73

Ranks	Scientific name	Vernacular name	Part used	Medicinal uses (use categories and disorders)	UV
7	*Cassia fistula* L.	Rat cha phruek (Thai) Koon (Tai Lue, Tai Yuan, Karen) Lom lang (Tai Lue, Tai Yuan, Karen)	bark inflorescences infructescences leaves roots seeds stems	**cardiovascular:** hemorrhoids, heart disease, hypertension, stimulate blood, circulation, heart dysfunction **digestive:** abdominal pain, bile nourishment, constipation, diarrhea, flatulence, gastritis, jaundice, laxative, vomiting, anthelmintic, purgative, strengthen teeth, bilharzia, toothache, carminative, hepatoprotective, rectal bleeding, gingivitis, bile purification **endocrine/metabolic and nutritional:** appetite stimulant, gout, malnutrition **eye:** eye tonic **female genital:** menstruation absent/scanty **general and unspecified:** allergy, antidote, bruise, chest pain, colic, fever, menopause, tonic, venereal disease, wound, malaria, chronic wounds, pus wound, balance body system, meningococcal disease, flu-like syndrome, drowsiness musculoskeletal: bone pain, joint pain, muscle pain, muscle relaxant, tendinitis, tendon pain, knee pain, leg pain, tendon dysfunction, tendon purification, tendon nourishment **neurological:** convulsion, dizziness, paralysis, paresis pregnancy, childbearing, family planning: post-partum anxiety, post-partum care, labor induction, abortion induced, retention of placenta **psychological:** narcolepsy (children) **respiratory:** cough, phlegm, thirst quenching **skin:** psoriasis, herpes simplex, dermatophytosis, yaws **urological:** kidney stone, urinary stones	0.72
8	*Brachypterum scandens* (Roxb.) Miq.	Tao wan praeng (Thai)	entire plant leaves roots stems	**blood, blood forming organs and immune mechanism:** blood nourishment **cardiovascular:** hemorrhoids, hypertension, stimulate blood circulation **digestive:** abdominal pain, constipation, flatulence, IBD (inflammatory bowel disease), laxative, mouth ulcer, bilharzia **endocrine/metabolic and nutritional:** appetite stimulant, beriberi, malnutrition **female genital:** haemagogue, emmenagogue **general and unspecified:** antidote, common cold, fever, tonic, elixir, pain, inflammation **musculoskeletal:** back pain, bone pain, joint pain, lumbago, muscle pain, muscle relaxant, tendinitis, tendon pain, bone fracture, knee pain, tendon dysfunction, tendon nourishment, tendon relaxant **neurological:** headache, paralysis, numbness, herniated nucleus pulposus pregnancy, childbearing, family planning: post-partum care **respiratory:** asthma, cough, phlegm **urological:** kidney disease, kidney stones, urinary stones, diuretic, UTI (urinary tract infection), kidney dysfunction, kidney nourishment, dialysis	0.48

Ranks	Scientific name	Vernacular name	Part used	Medicinal uses (use categories and disorders)	UV
9	*Senna tora* (L.) Roxb.	Chum hed thai (Thai) Lab muean noi (Tai Yuan) Ta si khla (Karen)	entire plant inflorescences infructescences leaves roots seeds stems unspecified aerial parts	**cardiovascular:** hemorrhoids, heart nourishment, hypertension **digestive:** abdominal pain, constipation, flatulence, food poisoning, IBD (inflammatory bowel disease), laxative, mouth ulcer, vomiting, anthelmintic, purgative, liver disease, encopresis, hepatitis, cirrhosis **endocrine/metabolic and nutritional:** appetite stimulant, diabetes **eye:** bleary-eyed, conjunctivitis **general and unspecified:** bruise, colic, common cold, fever, tonic, venereal disease, wound **musculoskeletal:** joint pain, muscle pain **neurological:** convulsion, headache, paralysis, nerve nourishment **pregnancy, childbearing, family planning:** post-partum care **psychological:** insanity, insomnia **respiratory:** cough, thirst quenching **skin:** psoriasis, dermatophytosis, skin disease, dermatosis, scabies **urological:** kidney stones, diuretic	0.48
10	*Tadehagi triquetrum* (L.) H.Ohashi	Khao moa nok (Thai) Yaa koe khew (Tai Yuan) Nor jor bi (Karen)	entire plant inflorescences leaves roots stems	**cardiovascular:** hemorrhoids **digestive:** abdominal pain, diarrhea, jaundice, peptic ulcer, anthelmintic, purgative, liver disease **endocrine/metabolic and nutritional:** appetite stimulant, diabetes **general and unspecified:** antidote, bruise, cancer, common cold, fever, tonic, tuberculosis, wound, malaria, rotten wound **musculoskeletal:** back pain, lumbago, muscle pain, muscle relaxant, leg pain **neurological:** dizziness, headache pregnancy, childbearing, family planning: post-partum care **respiratory:** asthma, cough, pneumonia **skin:** boil, skin disease **urological:** anuria, kidney stones, urinary stones, diuretic, dark color urine, kidney nourishment	0.46
11	*Albizia myriophylla* Benth.	Cha em paa (Thai) Pho su po (karen) Som poi waan (Tai Yuan)	bark inflorescences infructescences leaves roots stems	**blood, blood forming organs and immune mechanism:** blood nourishment **cardiovascular:** hemorrhoids, heart nourishment, hypertension, stimulate blood circulation **digestive:** diarrhea, flatulence, gastritis, indigestion, jaundice, mouth ulcer, emetic, liver nourishment **endocrine/metabolic and nutritional:** appetite stimulant, diabetes, gout, hyperlipidemia **female genital:** emmenagogue **general and unspecified:** antidote, body heat balance, cancer, epistaxis, fatigue, fever, tonic, wound, malaria **male genital:** prostate nourishment **musculoskeletal:** back pain, lumbago, muscle pain, muscle relaxant	0.44

Ranks	Scientific name	Vernacular name	Part used	Medicinal uses (use categories and disorders)	UV
				neurological: dizziness, headache, paralysis **respiratory:** cough, phlegm, sore throat, thirst quenching, influenza, lung nourishment, respiratory disease, bronchodilators **skin:** rash, boil, herpes simplex, skin disease, skin nourishment, smallpox **urological:** kidney nourishment	
12	*Senna garrettiana* (Craib) H.S.Irwin & Barneby	Sa mae san (Thai) Mak muean (Lua) Khi lek phae (Tai Yuan)	bark entire plant inflorescences leaves roots stems	**blood, blood forming organs and immune mechanism:** blood nourishment, blood purification, poor lymph disorder, leukemia **cardiovascular:** hemorrhoids, hypertension, stimulate blood circulation, oedema, digestive, abdominal pain, laxative, liver dysfunction, anthelmintic, liver disease, IBS (irritable bowel syndrome), intestinal pain **endocrine/metabolic and nutritional:** diabetes **female genital:** haemagogue, menstruation absent/scanty **general and unspecified:** body heat balance, fainting, fever, tonic, wound, malaria, elixir, balance body system **musculoskeletal:** joint pain, muscle pain, tendon pain, knee pain, tendon, dysfunction, tendon nourishment **neurological:** paralysis, paresis pregnancy, childbearing, family planning: post-partum care **psychological:** insomnia **respiratory:** phlegm **skin:** pruritus, psoriasis, herpes zoster, dermatophytosis **urological:** anuria, diuretic, kidney dysfunction, kidney nourishment	0.33
13	*Clitoria ternatea* L.	An chan (Thai) Din yor (Tai Yai)	entire plant inflorescences leaves roots seeds unspecified parts	**cardiovascular:** hypertension, stimulate blood circulation **digestive:** laxative, strengthen teeth, toothache **endocrine/metabolic and nutritional:** diabetes, gout **eye:** bleary-eyed, eye tonic, eye pain, eye discharge, eye inflammation **general and unspecified:** bruise, tonic, pus wound, neurological, dizziness, headache **respiratory:** asthma, thirst quenching **skin:** pruritus, anti-dandruff, hair nourishment, insect bite/sting, hair loss **urological:** anuria, diuretic	0.32
13	*Pterocarpus macrocarpus* Kurz	Pra duu (Thai) Koe loe (Karen) Mai duu (Tai Yuan)	bark exudates galls inflorescences infructescences leaves roots stems unspecified parts	**blood, blood forming organs and immune mechanism:** anemia, blood nourishment **cardiovascular:** hemorrhoids, stimulate blood circulation, heart dysfunction **digestive:** diarrhea, vomiting, dysentery, strengthen teeth, toothache **female genital:** menstruation fever **general and unspecified:** antidote, colic, epistaxis, fever, menopause, tonic, wound, pus wound, stop bleeding, foot and mouth disease **musculoskeletal:** muscle pain, muscle relaxant **neurological:** headache, paralysis, epilepsy	0.32

Ranks	Scientific name	Vernacular name	Part used	Medicinal uses (use categories and disorders)	UV
				pregnancy, childbearing, family planning: post-partum care **respiratory:** asthma, cough, phlegm **skin:** pruritus, rash, boil, athlete's foot **urological:** diuretic, dysuria	
14	*Senna occidentalis* (L.) Link	Chum hed lek (Thai) Mak chad (Lua) Phak hed, Lab muean noi (Tai Yuan) Phak jid (Tai Yai)	bark entire plant leaves roots seeds stems unspecified parts	**digestive:** abdominal pain, constipation, diarrhea, flatulence, vomiting, peptic ulcer, anthelmintic, food poisoning (children) **endocrine/metabolic and nutritional:** appetite stimulant **general and unspecified:** antidote, blister, body heat balance, cancer, fever, tonic, malaria, feel feverish **musculoskeletal:** back pain, joint pain, lumbago, muscle pain, muscle relaxant, sprain **neurological:** brain nourishment, epilepsy, nerve nourishment **psychological:** insomnia, neurosis **respiratory:** cough, phlegm **skin:** rash, boil **urological:** diuretic	0.29