

Supporting Information

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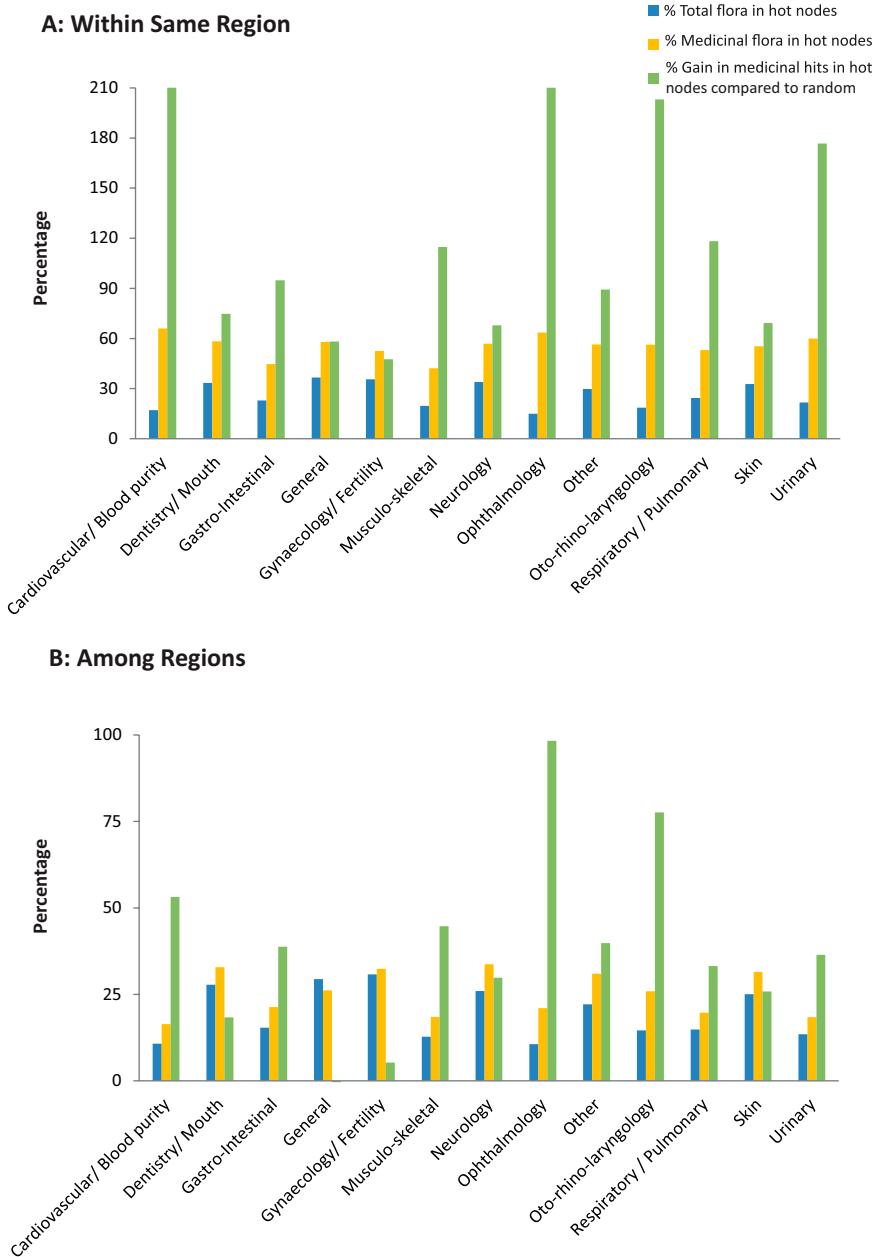


Fig. S1. Concentration of medicinal plants in phylogenetic “hot nodes” for the categories of medical conditions. Blue and orange bars show percentage of total and medicinal flora included in hot nodes, respectively. Green bars show percentage gain in medicinal plants included in hot nodes. Gain is the difference between the number of medicinal plants in hot nodes, and the number of medicinal plants expected in a random sample of the same size. (A) Patterns based on the average from analyses from within each of the three floras (Nepal, New Zealand, and Cape of South Africa). (B) Patterns based on the average from pairwise analyses among the three floras. Comparisons were carried out on a combined phylogenetic tree of the three floras to test whether hot nodes from one region can predict medicinal plant use from the other two.

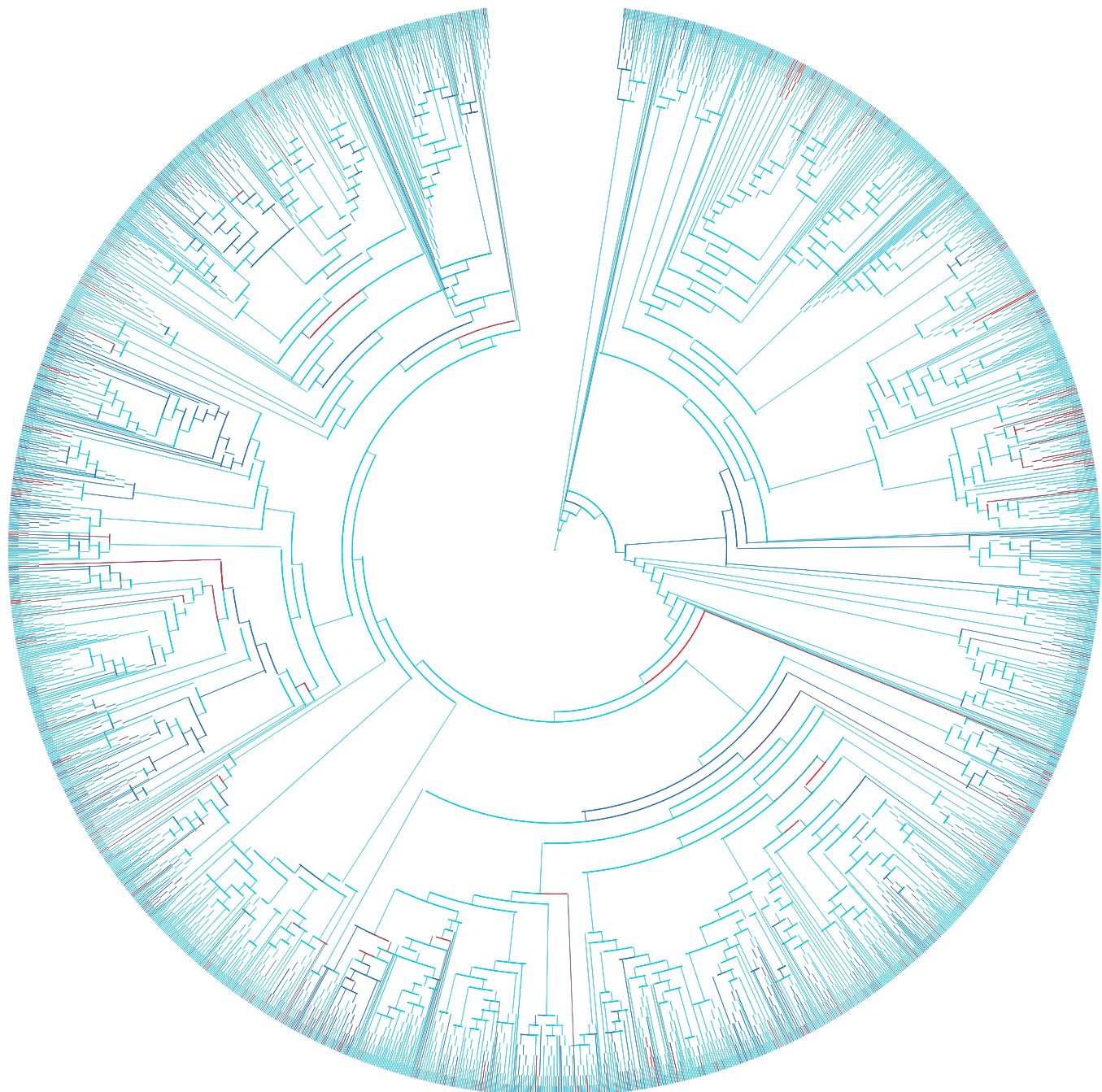


Fig. S2. Phylogenetic overlap between the medicinal floras of Nepal and Cape of South Africa. The phylogenetic tree shown is the combined tree of the floras from the three regions reconstructed under ML criterion with RAxML 7.2.8. Light blue branches are lineages that are not used in ethnomedicine in either of the two areas. Dark blue branches are lineages used in ethnomedicine in Nepal and red ones are used in the Cape of South Africa. As shown, the medicinal floras of the two regions are found in the same lineages on the tree.

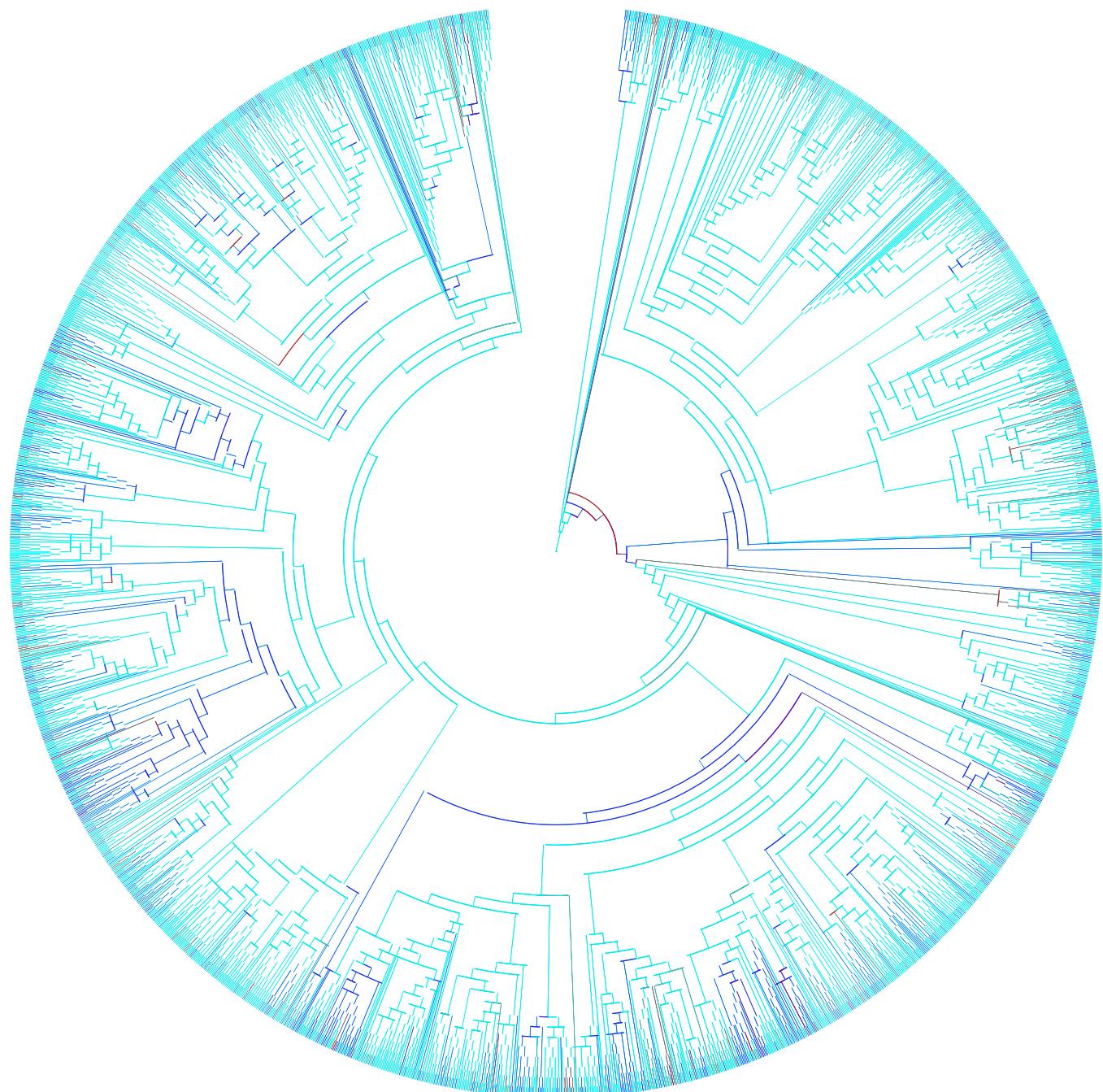


Fig. S3. Phylogenetic overlap between the medicinal floras of Nepal and New Zealand. The phylogenetic tree shown is the combined tree of the floras from the three regions reconstructed under ML criterion with RAxML 7.2.8. Light blue branches are lineages that are not used in ethnomedicine in either of the two areas. Dark blue branches are lineages used in ethnomedicine in Nepal and red ones are used in New Zealand. As shown, the medicinal floras of the two regions are found in the same lineages on the tree.

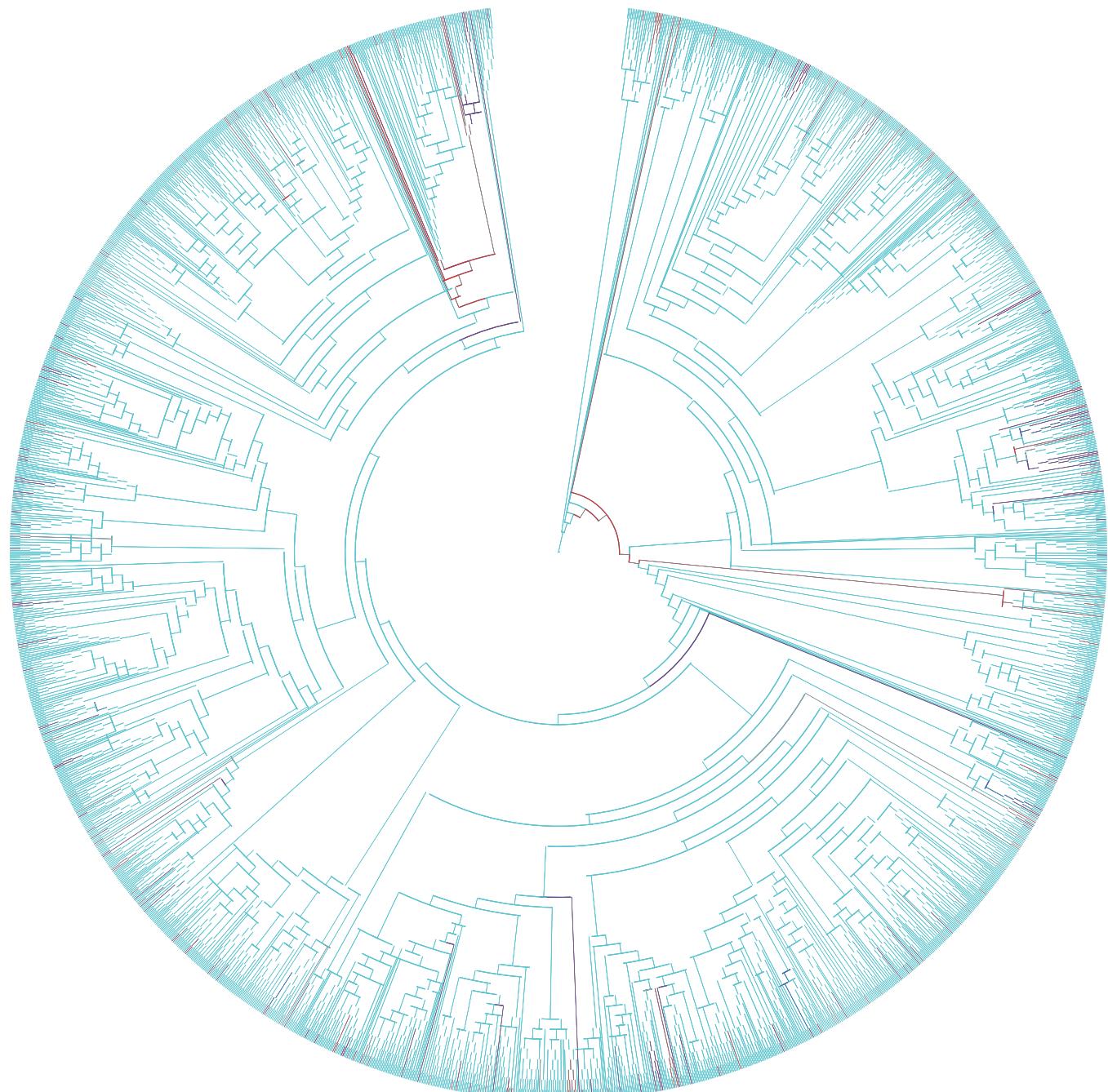


Fig. S4. Phylogenetic overlap between the medicinal floras of New Zealand and Cape of South Africa. The phylogenetic tree shown is the combined tree of the floras from the three regions reconstructed under ML criterion with RAxML 7.2.8. Light blue branches lineages that are not used in ethnomedicine in either of the two areas. Dark blue branches are lineages used in ethnomedicine in the Cape of South Africa and red ones are used in New Zealand. As shown, the medicinal floras of the two regions are found in the same lineages on the tree.

Table S1. Phylogenetic clumping of medicinal plant use in Nepal, the Cape of South Africa, and New Zealand

	MPD			NRI			P value		
	Nepal	South Africa Cape	New Zealand	Nepal	South Africa Cape	New Zealand	Nepal	South Africa Cape	New Zealand
Medicinal floras	0.4007	0.4645	0.4861	5.4604	1.2102	2.1919	< 0.001	0.117	0.014
Cardiovascular/ blood purity	0.3889	0.4447	0.4316	1.3932	1.2205	2.017	0.082	0.111	0.030
Dentistry/mouth	0.3816	0.4609	0.5642	2.3249	0.5654	-0.9443	0.006	0.278	0.831
Gastrointestinal	0.3936	0.4394	0.4554	4.5074	2.6699	2.7196	< 0.001	0.003	0.003
General	0.395	0.4511	0.4402	2.3658	0.9497	2.73	0.005	0.174	0.008
Gynecology/fertility	0.3804	0.4421	0.4693	2.902	1.9582	2.1128	< 0.001	0.031	0.019
Musculoskeletal	0.3814	0.4445	0.4906	3.9846	1.591	1.2184	< 0.001	0.066	0.119
Neurology	0.3958	0.4342	0.4867	3.3898	2.4327	1.2138	< 0.001	0.012	0.115
Ophthalmology	0.365	0.4783	0.4519	2.7387	0.0133	1.1417	0.003	0.485	0.135
Other	0.3927	0.4307	0.4466	2.9959	2.3692	2.2074	0.004	0.014	0.019
Otorhinolaryngology	0.4242	0.3973	0.4379	0.3767	2.9216	1.5397	0.351	0.002	0.067
Respiratory/pulmonary	0.4149	0.4348	0.4401	1.3661	2.4334	2.2763	0.084	0.009	0.014
Skin	0.3904	0.445	0.4898	4.6528	1.9255	1.5917	< 0.001	0.035	0.052
Urinary	0.4255	0.4821	0.493	0.3739	-0.1209	0.7126	0.346	0.547	0.226

Information shown for the three medicinal floras and 13 categories of conditions. Results were acquired with the "comstruct" command in PHYLOGCOM v4.1. MPD, mean phylogenetic distance within each sample; NRI, net relatedness index. P values in bold are the ones that remain significant after a Bonferroni correction of the α -significance level. Note that in uncorrected data, 1/20 significant comparisons may be spurious (type I errors), but the Bonferroni correction adjusts the α -threshold so the study-wide error rate remains at 0.05.

Table S2. "Hot nodes" of medicinal use within the three regions

	% total flora included	% medicinal hits	% gain in medicinal hits included compared with random	Significance in gain (P value)
Medicinal floras	32.66	52.10	59.50	< 0.001
Cardiovascular/blood purity	17.10	65.98	285.91	< 0.001
Dentistry/mouth	33.38	58.35	74.81	< 0.001
Gastrointestinal	22.92	44.66	94.83	< 0.001
General	36.59	57.85	58.13	< 0.001
Gynecology/fertility	35.62	52.54	47.50	< 0.001
Musculoskeletal	19.65	42.20	114.72	< 0.001
Neurology	33.89	56.87	67.83	< 0.001
Ophthalmology	14.97	63.56	324.53	< 0.001
Other	29.79	56.38	89.25	< 0.001
Otorhinolaryngology	18.56	56.28	203.15	< 0.001
Respiratory/pulmonary	24.33	53.09	118.21	< 0.001
Skin	32.71	55.38	69.29	< 0.001
Urinary	21.66	59.94	176.71	< 0.001
Average categories	26.24	55.62	132.68	< 0.001

Using the option "nodesig" in PHYLOGCOM v4.1, nodes on the phylogenetic tree with significantly more medicinal plants than in the rest of the phylogeny were recovered. The first column of data shows the percentage of the total flora included in those nodes. The second column shows the percentage of the medicinal flora included in the nodes. The third column shows the percentage of gain in medicinal plants included in hot nodes, compared with what would be expected by chance. Results are presented for the medicinal floras of Nepal, New Zealand, and the Cape of South Africa, and for the 13 categories of conditions. Each figure is the average of the results from the three regions. All P values remain significant after a Bonferroni correction of the α -significance level. Note that in uncorrected data, 1/20 significant comparisons may be spurious (type I errors), but the Bonferroni correction adjusts the α -threshold so the study-wide error rate remains at 0.05.

Table S3. Cross-cultural congruence in plant use in hot nodes

	% total flora included	% medicinal hits	% gain in medicinal hits included compared with random	Significance in gain (P value)
Medicinal floras	21.97	25.62	16.65	0.2657
Cardiovascular/blood purity	10.73	16.43	53.14	0.0673
Dentistry/mouth	27.78	32.87	18.33	0.2015
Gastrointestinal	15.39	21.35	38.77	0.0822
General	29.41	26.18	-10.99	N/A
Gynecology/fertility	30.81	32.43	5.25	0.4355
Musculoskeletal	12.78	18.50	44.70	0.0833
Neurology	25.95	33.68	29.80	0.0701
Ophthalmology	10.59	21.01	98.33	0.0017
Other	22.13	30.95	39.84	0.0415
Otorhinolaryngology	14.59	25.92	77.61	0.0043
Respiratory/pulmonary	14.81	19.72	33.17	0.1493
Skin	25.03	31.50	25.87	0.1049
Urinary	13.50	18.42	36.43	0.1230
Average categories	19.50	25.30	37.71	0.1057

Figures are the average from the six tests to investigate the extent to which hot nodes of each region (source region) can predict the medicinal plant use in the other two regions (target regions). The first column of data shows the percentage of the total flora of the target regions included in the hot nodes of the source region, using the option "nodesig" in PHYLOCOM v4.1. The second column shows the percentage of medicinal plants of the target regions found in those nodes. The third column shows the percentage of gain in medicinal hits achieved by sampling those nodes, compared with random sampling. Results are summarized for the medicinal floras of Nepal, New Zealand, and the Cape of South Africa, and for 13 categories of conditions. P value in bold is the one that remains significant after a Bonferroni correction of the α -significance level. Note that in uncorrected data, 1/20 significant comparisons may be spurious (type I errors), but the Bonferroni correction adjusts the α -threshold so the study-wide error rate remains at 0.05. N/A, not applicable

Table S4. Similarities between the floras of Nepal, New Zealand, and the Cape of South Africa based on the Sørensen Index (ref. 1) at the genus level

Region	Nepal	New Zealand	Cape of South Africa
Nepal	1		
New Zealand	0.28	1	
Cape of South Africa	0.37	0.34	1

1. Sørensen T (1948) A method of establishing groups of equal amplitude in plant sociology based on similarity of species and its application to analyses of the vegetation on Danish commons. *Biol Skr* 5:1–34.

Table S5. Significance of agreement in lineages used between pairs of medicinal floras when genera used in more than one region are removed

Region	Nepal	Cape of South Africa	New Zealand
Nepal	—		
Cape of South Africa	$P < 0.001$	—	
New Zealand	$P = 0.005$	$P = 0.021$	—

Significance was assessed by comparing observed values of pair-wise distances to those from 10,000 random comparisons per case and P values were the frequency of randomizations with smaller pair-wise distance.

Table S6. Drug-producing genera. Information extracted from Zhu et al. (ref. 1). Underlined signifies genera present in our dataset

The asterisk (*) here below represents genera used in at least one of the medicinal floras of Nepal, New Zealand, the Cape of South Africa. The terms "Applied" and "Trial" given after each genus name indicate whether the genus is used in drug production or is under trial, respectively.

Acanthaceae: Andrographis; Applied. Amaranthaceae: Spinacia; Applied&Trial. Amaryllidaceae: Allium*; Applied. Galanthus; Applied. Leucojum; Applied. Lycoris; Applied. Narcissus; Applied. Annonaceae: Artobotrys; Applied. Apiaceae: Ammi; Applied. Apium*; Trial. Carum*; Trial. Centella*; Applied. Daucus*; Applied. Petroselinum; Trial. Apocynaceae: Acokanthera; Applied, Trial. Asclepias*; Applied. Aspidosperma; Applied&Trial. Catharanthus*; Applied&Trial. Hoodia; Trial. Ochrosia; Applied&Trial. Rauvolfia*; Applied. Strophanthus; Applied&Trial. Tabernaemontana*; Applied&Trial. Vinca; Applied. Araliaceae: Panax*; Trial. Arecaceae: Areca*; Applied. Cocos; Applied&Trial. Serenoa; Applied. Asparagaceae: Convallaria; Applied. Urginea; Trial. Asteraceae: Artemisia*; Applied&Trial. Cynara; Applied&Trial. Inula*; Trial. Matricaria; Trial. Silybum; Applied&Trial. Stevia; Applied. Berberidaceae: Berberis*; Applied. Dysosma; Applied&Trial. Leontice; Applied. Podophyllum*; Applied&Trial. Sinopodophyllum; Applied&Trial. Betulaceae: Corylus*; Applied&Trial. Bignoniaciae: Tabebuia; Trial. Boraginaceae: Cordia*; Applied. Brassicaceae: Brassica*; Applied&Trial. Isatis; Trial. Rorippa*; Applied. Sinapis; Trial. Commiphora; Applied. Calophyllaceae: Calophyllum; Trial. Campanulaceae: Lobelia*; Trial. Cannabaceae: Cannabis*; Applied&Trial. Celastraceae: Maytenus*; Trial. Tripterygium; Applied&Trial. Colchicaceae: Colchicum; Applied&Trial. Combretaceae: Combretum*; Trial. Convolvulaceae: Ipomoea*; Applied. Turbina; Applied. Cornaceae: Camptotheca; Applied&Trial. Cucurbitaceae: Hemsleya; Applied. Cupressaceae: Juniperus*; Trial. Thuja; Applied. Ephedraceae: Ephedra*; Applied. Erythroxylaceae: Erythroxylum; Applied. Euphorbiaceae: Croton*; Applied&Trial. Euphorbia*; Trial. Hippomane; Trial. Homalanthus; Trial. Ricinus*; Trial. Fabaceae: Acacia*; Applied. Cassia*; Applied. Castanospermum*; Trial. Ceratonia; Applied. Cicer; Trial. Crotalaria*; Applied. Cullen; Trial. Genista; Trial. Glycine; Applied&Trial. Glycyrrhiza*; Applied. Indigofera*; Trial. Lens; Trial. Lonchocarpus; Applied. Medicago; Applied&Trial. Melilotus; Applied. Mucuna*; Applied. Phaseolus; Trial. Physostigma; Applied&Trial. Pisum*; Applied&Trial. Pueraria; Trial. Senegalia; Applied. Sophora*; Applied&Trial. Trifolium; Applied&Trial. Vachellia; Applied. Vicia; Trial. Vigna*; Trial. Hippocastanaceae: Aesculus*; Applied. Icacinaeae: Mapnedia; Applied&Trial. Lamiaceae: Lavandula; Trial. Mentha*; Applied&Trial. Monarda; Trial. Perilla*; Trial. Plectranthus; Applied. Salvia*; Trial. Thymus*; Applied. Lauraceae: Cinnamomum*; Applied. Laurus; Trial. Ocotea; Applied. Loganiaceae: Strychnos*; Applied&Trial. Lycopodiaceae: Huperzia; Applied&Trial. Lycopodium; Applied. Malvaceae: Theobroma; Applied. Melanthiaceae: Veratrum; Trial. Meliaceae: Dysoxylum*; Trial. Menispermaceae: Anamirta; Applied. Anomospermum; Trial. Chondrodendron; Applied&Trial. Cissampelos*; Applied. Curarea; Applied. Stephania*; Applied. Moraceae: Morus*; Applied&Trial. Myrtaceae: Callistemon; Applied. Leptospermum; Applied. Syzygium*; Trial. Nitrariaceae: Sympytum; Applied. Oleaceae: Fraxinus*; Trial. Papaveraceae: Corydalis*; Applied. Glaucium; Applied. Papaver*; Applied&Trial. Sanguinaria; Applied. Pinaceae: Cedrus*; Applied. Larix; Applied. Pinus*; Applied. Tsuga; Applied. Piperaceae: Piper*; Applied. Plantaginaceae: Digitalis; Applied&Trial. Poaceae: Cymbopogon*; Trial. Oryza*; Applied. Triticum; Applied. Zea; Applied&Trial. Quillajaceae: Quillaja; Trial. Ranunculaceae: Adonis; Applied. Coptis; Applied. Hydrastis; Applied. Thalictrum*; Applied. Rosaceae: Agrimonia*; Applied. Malus*; Trial. Potentilla*; Applied. Prunus*; Applied. Rubiaceae: Cinchona; Applied. Coffea; Applied. Galium*; Trial. Ophiorrhiza*; Applied&Trial. Pausinystalia; Applied. Rutaceae: Citrus*; Applied. Pilocarpus; Applied. Sarcomelicope; Trial. Salicaceae: Populus*; Applied. Salix*; Applied. Sapindaceae: Paullinia; Applied. Simaroubaceae: Brucea; Trial. Solanaceae: Anisodus; Applied. Atropa; Applied. Capsicum*; Applied&Trial. Datura*; Applied. Hyoscyamus; Applied. Mandragora; Applied. Nicotiana*; Applied. Solanum*; Applied. Taxaceae: Taxus*; Applied&Trial. Theaceae: Camellia; Applied&Trial. Thymelaeaceae: Pimelea; Trial. Zingiberaceae: Curcuma*; Trial. Zingiber*; Applied&Trial. Zygophyllaceae: Larrea; Applied&Trial.

1. Zhu F, et al. (2011) Clustered patterns of species origins of nature-derived drugs and clues for future bioprospecting. *Proc Natl Acad Sci USA* 108:12943–12948.

Table S7. Plant genera with high priority for future screening for overall medicinal bioactivity

These genera were included in the hot nodes of at least two of the study regions (Nepal, New Zealand, and the Cape of South Africa).

Achariaceae: *Acharia*, *Ceratiosicyos*, Amaranthaceae: *Psilotrichum*, Anacardiaceae: *Anacardium*, *Buchanania*, *Cotinus*, *Dobinea*, *Heeria*, *Laurophylus*, *Mangifera*, *Pistacia*, *Rhus*, Semecarpus, Spondias, Apocynaceae: *Asclepias*, *Aspidoglossum*, *Gomphocarpus*, *Telosma*, *Xysmalobium*, Asteraceae: *Marasmodes*, *Myriactis*, Begoniaceae: *Begonia*, Betulaceae: *Alnus*, *Betula*, *Carpinus*, *Corylus*, Brassicaceae: *Alliaria*, *Arabidopsis*, *Arabis*, *Barbarea*, *Brassica*, *Braya*, *Cadaba*, *Capparis*, *Capsella*, *Cardamine*, *Chamira*, *Christolea*, *Cleome*, *Crateva*, *Descurainia*, *Desideria*, *Dilophia*, *Diplotaxis*, *Dontostemon*, *Draba*, *Erysimum*, *Eutrema*, *Hedinia*, *Helophilila*, *Iberis*, *Lepidium*, *Lignariella*, *Maerua*, *Megacarpaea*, *Microsymbrium*, *Nasturtium*, *Notothlaspi*, *Pachycladon*, *Pegaeophyton*, *Phaeonychium*, *Raphanus*, *Rorippa*, *Sisymbrium*, *Thlaspi*, *Torularia*, Cannabaceae: *Cannabis*, *Humulus*, Caricaceae: *Carica*, Casuarinaceae: *Casuarina*, Celastraceae: *Bhesa*, *Cassine*, *Celastrus*, *Elaeodendron*, *Euonymus*, *Gloveria*, *Gymnosporia*, *Lauridia*, *Lophopetalum*, *Maurocenia*, *Maytenus*, *Mystroxylon*, *Putterlickia*, *Reissantia*, *Robsonodendron*, Stackhousia, Clusiaceae: *Garcinia*, *Hypericum*, *Mesua*, Combretaceae: *Anogeissus*, *Combretum*, *Quisqualis*, Terminalia, Coriariaceae: *Coriaria*, Corynocarpaceae: *Corynocarpus*, Crassulaceae: *Adromischus*, *Cotyledon*, *Crassula*, *Kalanchoe*, *Sedum*, Cucurbitaceae: *Benincasa*, *Biswarea*, *Bryonia*, *Citrullus*, *Coccinia*, *Cucumis*, *Cucurbita*, *Cyclanthera*, *Diplocyclos*, *Edgaria*, *Gomphogyne*, *Gymnopetalum*, *Gynostemma*, *Herpetospermum*, *Kedrostis*, *Lagenaria*, *Luffa*, *Momordica*, *Mukia*, *Neoalsomitra*, *Sechium*, *Sicyos*, *Solena*, *Thladiantha*, *Trichosanthes*, *Zehneria*, Cunoniaceae: *Ackama*, *Cunonia*, *Platylophus*, Weinmannia, Daphniphyllaceae: *Daphniphyllum*, Daticaceae: *Datisca*, Tetrameles, Dipterocarpaceae: *Shorea*, Elaeagnaceae: *Elaeagnus*, Hippophae, Elaeocarpaceae: *Aristotelia*, *Elaeocarpus*, *Sloanea*, Elatinaceae: *Bergia*, *Elatine*, Escalloniaceae: *Ixerba*, Euphorbiaceae: *Acalypha*, *Adenocline*, *Alchornea*, *Aleurites*, *Andrachne*, *Antidesma*, *Baccaurea*, *Baliospermum*, *Bischofia*, *Breynia*, *Bridelia*, *Chrozophora*, *Cleidion*, *Clutia*, *Croton*, *Dalechampia*, *Euphorbia*, *Excoecaria*, *Flueggea*, *Glochidion*, *Homalanthus*, *Hydnangea*, *Jatropha*, *Lachnostylis*, *Leidesia*, *Macaranga*, *Mallotus*, *Mercurialis*, *Ostodes*, *Phyllanthus*, *Poranthera*, *Putranjiva*, *Ricinus*, *Sapum*, *Sauvagesia*, *Securinega*, *Seidelia*, *Tragia*, *Trewia*, Fabaceae: *Abrus*, *Acacia*, *Acrocarpus*, *Aeschynomene*, *Albizia*, *Alysicarpus*, *Amphicarpa*, *Amphithalea*, *Apios*, *Arachis*, *Argyrolobium*, *Aspalathus*, *Astragalus*, *Atylosia*, *Bauhinia*, *Bolusafra*, *Butea*, *Caesalpinia*, *Cajanus*, *Calpurnia*, *Campylotropis*, *Canavalia*, *Caragana*, *Carmichaelia*, *Cassia*, *Chamaecrista*, *Chesneya*, *Cicer*, *Clianthes*, *Clitoria*, *Cochlianthus*, *Codariocalyx*, *Colutea*, *Crotalaria*, *Cyclopia*, *Cytisus*, *Dalbergia*, *Delonix*, *Derris*, *Desmodium*, *Dipogon*, *Dolichos*, *Dumasia*, *Dunbaria*, *Entada*, *Eriosema*, *Erythrina*, *Flemingia*, *Galactia*, *Geissaspis*, *Genista*, *Glycine*, *Glycyrrhiza*, *Gueldenstaedtia*, *Hedysarum*, *Hypocalyptus*, *Indigofera*, *Kennedia*, *Lablab*, *Lathyrus*, *Lebeckia*, *Lens*, *Lespedeza*, *Lessertia*, *Leucaena*, *Liparia*, *Lotomonis*, *Lotus*, *Lupinus*, *Macrotyloma*, *Medicago*, *Melilotus*, *Melolobium*, *Millettia*, *Mimosa*, *Montigena*, *Mucuna*, *Ormosia*, *Otholobium*, *Oxytropis*, *Paracalyx*, *Paraserianthes*, *Parochetus*, *Phaseolus*, *Piptanthus*, *Pisum*, *Pithecellobium*, *Podalyria*, *Polhillia*, *Pongamia*, *Pterocarpus*, *Pueraria*, *Rafnia*, *Rhynchosia*, *Robinia*, *Saraca*, *Schotia*, *Senna*, *Sesbania*, *Shuteria*, *Smithia*, *Sophora*, *Spatholobus*, *Stirtonianthus*, *Tadehagi*, *Tamarindus*, *Tephrosia*, *Thermopsis*, *Trifolium*, *Trigonella*, *Uraria*, *Vicia*, *Vigna*, *Virgilia*, *Wiborgia*, *Wisteria*, Xiphophoreae: *Zornia*, Fagaceae: *Castanopsis*, *Lithocarpus*, *Nothofagus*, Quercus, Geissolomataceae: *Geissoloma*, Geraniaceae: *Erodium*, *Geranium*, *Monsonia*, *Pelargonium*, Grossulariaceae: *Ribes*, Haloragaceae: *Gonocarpus*, *Haloragis*, Hamamelidaceae: *Exbucklandia*, *Trichocladus*, Juglandaceae: *Engelhardia*, *Juglans*, Lamiaceae: *Ballota*, *Galeobdolon*, *Lamium*, *Leonotis*, *Leonurus*, *Marrubium*, Lauraceae: *Cryptocarya*, Linaceae: *Anisadenia*, *Linum*, *Reinwardtia*, Loranthaceae: *Dendrophthoe*, *Loranthus*, *Macrosolen*, *Moquiniaella*, *Peraxilla*, *Scurrula*, *Septulina*, *Taxillus*, *Tupeia*, Lythraceae: *Ammannia*, *Cuphea*, *Duabanga*, *Lagerstroemia*, *Lawsonia*, *Lythrum*, *Punica*, *Rotala*, *Trapa*, *Woodfordia*, Malpighiaceae: *Aspidopterys*, *Hiptage*, Malvaceae: *Abroma*, *Abutilon*, *Adansonia*, *Alcea*, *Anisodontea*, *Bombax*, *Byttneria*, *Corchorus*, *Entelea*, *Eriolaena*, *Firmiana*, *Gossypium*, *Grewia*, *Helicteres*, *Hermannia*, *Hibiscus*, *Hoheria*, *Kydia*, *Lavatera*, *Malva*, *Malvaviscus*, *Melochia*, *Pavonia*, *Plagianthus*, *Pterospermum*, *Sida*, *Sparrmannia*, Sterculia, Thespesia, Triumfetta, Urena, Melastomataceae: *Medinilla*, *Melastoma*, Osbeckia, Meliaceae: *Aglaiia*, *Azadirachta*, *Chukrasia*, *Cipadessa*, *Dysoxylum*, Ekebergia, *Melia*, *Munronia*, *Nymania*, *Toona*, *Trichilia*, Melianthaceae: *Melianthus*, Moraceae: *Artocarpus*, *Ficus*, *Maclura*, *Morus*, *Streblus*, Moringaceae: *Moringa*, Myricaceae: *Morella*, *Callistemon*, *Eucalyptus*, *Eugenia*, *Kunzea*, *Leptospermum*, *Lophomyrtus*, *Metrosideros*, *Neomyrtus*, *Psidium*, *Syzygium*, *Neurodaceae*: *Grielum*, *Ochnaceae*: *Ochna*, Olacaceae: *Erythropalum*, *Olax*, *Schoepfia*, Oliniaceae: *Olinia*, Onagraceae: *Chamerion*, *Circaea*, *Epilobium*, *Ludwigia*, *Oenothera*, *Opiliaceae*: *Cansjera*, *Lepionurus*, Oxalidaceae: *Biophytum*, *Oxalis*, Paeoniaceae: *Paeonia*, *Parnassia*, Passifloraceae: *Passiflora*, Penaeaceae: *Brachysiphon*, *Endonema*, *Glischrocolla*, *Penaea*, *Saltera*, *Sonderothamnus*, *Stylopteris*, *Phyllanthaceae*: *Aporus*, Poaceae: *Australopyrum*, Podostemaceae: *Hydrobryum*, Polygalaceae: *Muraltia*, *Polygala*, *Securidaca*, Resedaceae: *Oligomeris*, Rhamnaceae: *Berchemia*, *Discaria*, *Gouania*, *Helinus*, *Hovenia*, *Noltea*, *Paliurus*, *Phyllica*, *Pomaderris*, *Rhammella*, *Rhamnus*, *Sageretia*, *Scutia*, *Ventilago*, *Ziziphus*, Rhizophoraceae: *Carallia*, Rosaceae: *Acaena*, *Agrimonia*, *Alchemilla*, *Aruncus*, *Cliffortia*, *Cotoneaster*, *Crataegus*, *Docynia*, *Eriobotrya*, *Filipendula*, *Fragaria*, *Geum*, *Malus*, *Neillia*, *Photinia*, *Potentilla*, *Prinsepia*, *Prunus*, *Pygeum*, *Pyracantha*, *Rosa*, *Rubus*, *Sanguisorba*, *Sibbaldia*, *Sorbaria*, *Sorbus*, *Spiraea*, *Rutaceae*: *Acmaea*, *Adenandra*, *Aegle*, *Agathosma*, *Calodendrum*, *Citrus*, *Clausena*, *Coleonema*, *Diosma*, *Empleurium*, *Euchaetis*, *Euodia*, *Glycosmis*, *Macrostylis*, *Meliceope*, *Micromelum*, *Murraya*, *Ptaeroxylon*, *Ruta*, *Skimmia*, *Toddalia*, *Zanthoxylum*, Salicaceae: *Casearia*, *Dovyalis*, *Flacourtie*, *Gynocardia*, *Homalium*, *Kiggelaria*, *Populus*, *Salix*, *Scopolia*, Trimeria, *Xylosma*, Salvadoraceae: *Azima*, Santalaceae: *Arceuthobium*, *Dufrenoya*, *Exocarpus*, *Korthalsella*, *Mida*, *Osyris*, *Pyrularia*, *Rhoiacarpos*, *Santalum*, *Thesodium*, *Theesia*, *Viscum*, Sapindaceae: *Acer*, *Aesculus*, *Alectryon*, *Allophylus*, *Atalaya*, *Cardiospermum*, *Dodonaea*, *Erioglossum*, *Lepisanthes*, *Litchi*, *Pappea*, *Sapindus*, *Schleicheria*, *Smelophyllum*, *Saxifragaceae*: *Astilbe*, *Bergenia*, *Chrysosplenium*, *Rodgersia*, *Saxifraga*, *Tiarella*, Simaroubaceae: *Brucea*, *Picrasma*, Stachyuraceae: *Stachyurus*, *Staphyleaceae*: *Staphylea*, *Turpinia*, Tamaricaceae: *Myricaria*, Thymelaeaceae: *Aquilaria*, *Daphne*, *Drapetes*, *Edgeworthia*, *Gnidia*, *Lachnaea*, *Passerina*, *Pimelea*, *Stellera*, *Struthiola*, *Wikstroemia*, Tropaeolaceae: *Tropaeolum*, Ulmaceae: *Celtis*, *Chaetachme*, *Holoptelea*, *Trema*, *Ulmus*, Urticaceae: *Boehmeria*, *Chamabainia*, *Dendrocnide*, *Didymodoxa*, *Droguetia*, *Elatostema*, *Forskaolea*, *Girardinia*, *Gonostegia*, *Laportea*, *Lecanthus*, *Parietaria*, *Pilea*, *Poikilospermum*, *Procris*, *Urtica*, Violaceae: *Hybanthus*, *Melicytus*, *Viola*, Vitaceae: *Ampelocissus*, *Ampelopsis*, *Cayratia*, *Cissus*, *Cyphostemma*, *Leea*, Parthenocissus, *Rhoicissus*, *Tetrastigma*, *Vitis*, Zygophyllaceae: *Augea*, *Seetzenia*, *Tribulus*, *Zygophyllum*.

Table S8. Plant genera with high priority for future screening for conditions related to cardiovascular/blood purity problems

These genera were included in the hot nodes of at least two of the study regions (Nepal, New Zealand, and the Cape of South Africa) for this category of conditions.

Agavaceae: *Cordyline*, Anacardiaceae: *Anacardium*, *Buchanania*, *Cotinus*, *Dobinea*, *Heeria*, *Laurophylus*, *Mangifera*, *Pistacia*, *Rhus*, Semecarpus, Spondias, Asteraceae: *Taraxacum*, Fabaceae: *Carmichaelia*, *Sophora*, Hemerocallidaceae: *Phormium*, Loranthaceae: *Loranthus*, Malvaceae: *Alcea*, Meliaceae: *Aglaiia*, Azadirachta, Chukrasia, Cipadessa, Dysoxylum, Ekebergia, *Melia*, *Munronia*, *Nymania*, *Toona*, *Trichilia*, Myrtaceae: *Leptospermum*, Rhamnaceae: *Pomaderris*, Rosaceae: *Acaena*, Rutaceae: *Acmaea*, *Adenandra*, *Aegle*, *Agathosma*, *Calodendrum*, *Citrus*, *Clausena*, *Coleonema*, *Diosma*, *Empleurium*, *Euchaetis*, *Euodia*, *Glycosmis*, *Macrostylis*, *Meliceope*, *Micromelum*, *Murraya*, *Ptaeroxylon*, *Ruta*, *Skimmia*, *Toddalia*, *Zanthoxylum*, Sapindaceae: *Acer*, *Aesculus*, *Alectryon*, *Allophylus*, *Atalaya*, *Cardiospermum*, *Dodonaea*, *Erioglossum*, *Lepisanthes*, *Litchi*, *Pappea*, *Sapindus*, Schleicheria, Smelophyllum, Simaroubaceae: *Brucea*, *Picrasma*, Violaceae: *Melicytus*.

Table S9. Plant genera with high priority for future screening for conditions related to dentistry/mouth problems

These genera were included in the hot nodes of at least two of the study regions (Nepal, New Zealand, and the Cape of South Africa) for this category of conditions.

Achariaceae: Acharia, Ceratiosicyos, Amaranthaceae: Psilotrichum, Anacardiaceae: Anacardium, Buchanania, Cotinus, Dobinea, Heeria, Laurophylus, Mangifera, Pistacia, Rhus, Semecarpus, Spondias, Apocynaceae: Telosma, Asteraceae: Marasmodes, Myriactis, Begoniaceae: Begonia, Berberis, Mahonia, Podophyllum, Betulaceae: Alnus, Betula, Carpinus, Corylus, Boraginaceae: Myosotis, Brassicaceae: Alliaria, Arabidopsis, Arabis, Barbarea, Brassica, Braya, Cadaba, Capparis, Capsella, Cardamine, Chamira, Christolea, Cleome, Crateva, Descurainia, Desideria, Dilophia, Diplotaxis, Dontostemon, Draba, Erysimum, Eutrema, Hedinia, Heliophilus, Iberis, Lepidium, Lignariella, Maerua, Megacarpaea, Microsymbrium, Nasturtium, Notothlaspi, Pachycladon, Pegaeophytion, Phaeonychium, Raphanus, Rorippa, Sisymbrium, Thlaspi, Torularia, Cannabaceae: Cannabis, Humulus, Caricaceae: Carica, Casuarinaceae: Casuarina, Celastraceae: Bhesa, Cassine, Celastrus, Elaeodendron, Euonymus, Gloveria, Gymnosporia, Lauridia, Lophopetalum, Maurocenia, Maytenus, Mystroxylon, Putterlickia, Reissantia, Robsonodendron, Stackhousia, Circaeasteraceae: Circaeaster, Clusiaceae: Garcinia, Hypericum, Mesua, Combretaceae: Anogeissus, Combretum, Quisqualis, Terminalia, Coriariaceae: Coriaria, Corynocarpaceae: Corynocarpus, Crassulaceae: Adromischus, Cotyledon, Crassula, Kalanchoe, Sedum, Cucurbitaceae: Benincasa, Biswarea, Bryonia, Citrullus, Coccinia, Cucumis, Cucurbita, Cyclanthera, Diplocyclos, Edgaria, Gomphogyne, Gymnopetalum, Gynostemma, Herpetospermum, Kedrostis, Lagenaria, Luffa, Momordica, Mukia, Neoalsomitra, Sechium, Sicyos, Solena, Thladiantha, Trichosanthes, Zehneria, Cunoniaceae: Ackama, Cunonia, Platylaphus, Weinmannia, Daphniphyllaceae: Daphniphyllum, Daticaceae: Datisca, Tetrameles, Dipterocarpaceae: Shorea, Elaeagnaceae: Elaeagnus, Hippophae, Elaeocarpaceae: Aristotelia, Elaeocarpus, Sloanea, Elatinaceae: Bergia, Elatine, Escalloniaceae: Ixerba, Euphorbiaceae: Acalypha, Adenocline, Alchornea, Aleurites, Andracrine, Antidesma, Aporusa, Baccaurea, Biospermum, Bischofia, Breynia, Bridelia, Chrozophora, Cleidion, Clutia, Croton, Dalechampia, Euphorbia, Excoecaria, Flueggea, Gluchidion, Homalanthus, Hydnocarpus, Jatropha, Lachnostylis, Leidesia, Macaranga, Mallotus, Mercurialis, Ostodes, Phyllanthus, Poranthera, Putranjiva, Ricinus, Sapium, Sauvagesia, Securinega, Seidelia, Tragia, Trewia, Fabaceae: Abrus, Acacia, Acrocarpus, Aeschynomene, Albizia, Alysicarpus, Amphicarpa, Amphithalea, Apios, Arachis, Argyrolobium, Aspalathus, Astragalus, Atylosia, Bauhinia, Bolusafra, Butea, Caesalpinia, Cajanus, Calpurnia, Campylotropis, Canavalia, Caragana, Carmichaelia, Cassia, Chamaecrista, Chesneya, Cicer, Cianthus, Clitoria, Cochlianthus, Codariocalyx, Colutea, Crotalaria, Cyclopia, Cytisus, Dalbergia, Delonix, Derris, Desmodium, Dipogon, Dolichos, Dumasia, Dunbaria, Entada, Eriosema, Erythrina, Flemingia, Galactia, Geissaspis, Gerista, Glycine, Glycyrrhiza, Gueldenstaedtia, Hedysarum, Hypocalyptus, Indigofera, Kennedia, Lablab, Lathyrus, Lebeckia, Lens, Lespedeza, Lessertia, Leucaena, Liparia, Lotononis, Lotus, Lupinus, Macrotyloma, Medicago, Melilotus, Melilotum, Millettia, Mimosa, Montigena, Mucuna, Ormosia, Otholobium, Oxytropis, Paracalyx, Paraserianthes, Parochetus, Phaseolus, Piptanthus, Pisum, Pithecellobium, Podalyria, Polhillia, Pongamia, Pterocarpus, Pueraria, Rafnia, Rhynchosia, Robinia, Saraca, Schotia, Senna, Sesbania, Shuteria, Smithia, Sophora, Spatholobus, Stirtonanthus, Tadehagi, Tamandindu, Tephrosia, Thermopsis, Trifolium, Trigonella, Uraria, Vicia, Vigna, Virgilia, Wiborgia, Wisteria, Xiphotheca, Zornia, Castanopsis, Lithocarpus, Nothofagus, Quercus, Geissolomataceae: Geissoloma, Geraniaceae: Erodium, Geranium, Monsonia, Pelargonium, Grossulariaceae: Ribes, Haloragaceae: Gonocarpus, Haloragis, Hamamelidaceae: Exbucklandia, Trichocephalus, Trichocladus, Juglandaceae: Engelhardia, Juglans, Lardizabalaceae: Akebia, Decaisnea, Holboellia, Lauraceae: Cryptocarya, Linaceae: Anisadenia, Linum, Reinwardtia, Loranthaceae: Dendrophthoe, Loranthus, Macrosolen, Moquinia, Peraxilla, Scurrula, Septulina, Taxillus, Tupeia, Ammannia, Lythraceae: Cuphea, Duabanga, Lagerstroemia, Lawsonia, Lythrum, Punica, Rotala, Trapa, Woodfordia, Malpighiaceae: Aspidopterys, Hiptage, Malvaceae: Abroma, Abutilon, Adansonia, Alcea, Anisodontea, Bombax, Bytneria, Corchorus, Entelea, Eriolaena, Firmiana, Gossypium, Grewia, Helicteres, Hermannia, Hibiscus, Hoheria, Kydia, Lavatera, Malva, Malvaviscus, Melochia, Pavonia, Plagianthus, Pterospermum, Sida, Sparrmannia, Sterculia, Thespesia, Triumfetta, Urena, Melastomataceae: Medinilla, Melastoma, Osbeckia, Meliaceae: Aglaia, Azadirachta, Chukrasia, Cipadessa, Dysoxylum, Ekebergia, Melia, Munronia, Nymania, Toona, Trichilia, Melianthaceae: Melianthus, Menispermaceae: Antizoma, Cissampelos, Coccus, Parabaena, Pericampylus, Stephania, Tiliacora, Tinospora, Moraceae: Artocarpus, Ficus, Maclura, Morus, Streblus, Moringaceae: Moringa, Myoporaceae: Myoporum, Myricaceae: Morella, Myrtaceae: Callistemon, Eucalyptus, Eugenia, Kunzea, Leptospermum, Lophomyrtus, Metrosideros, Neomyrtus, Psidium, Syzygium, Neuradaceae: Grielum, Ochnaceae: Ochna, Olacaceae: Erythrapalum, Olax, Schoepfia, Oliniaceae: Olinia, Onagraceae: Chamerion, Circae, Epilobium, Ludwigia, Oenothera, Opiliaceae: Cansjera, Lepionurus, Oxalidaceae: Biophytum, Oxalis, Paeoniaceae: Paeonia, Papaveraceae: Argemone, Corydalis, Cysticarpus, Dicentra, Dicranostigma, Hypocoum, Mecognosis, Papaver, Trigonocarpus, Parnassiaceae: Parnassia, Passifloraceae: Passiflora, Penaeaceae: Brachysiphon, Endonema, Glischrocolla, Penaea, Saltera, Sonderothamnus, Stylapterus, Poaceae: Australopyrum, Podostemaceae: Hydrobryum, Polygalaceae: Muraltia, Polygala, Securidaca, Ranunculaceae: Aconitum, Actaea, Adonis, Anemone, Aquilegia, Callianthemum, Caltha, Cimicifuga, Clematis, Delphinium, Halerpestes, Isopyrum, Naravelia, Nigella, Oxygraphis, Paraquilegia, Ranunculus, Thalictrum, Trollius, Resedaceae: Oligomeris, Rhamnaceae: Berchemia, Discaria, Gouania, Helinus, Hovenia, Noltea, Paliurus, Phyllica, Pomaderria, Rhamnella, Rhamnus, Sageretia, Scutia, Ventilago, Ziziphus, Rhizophoraceae: Carallia, Rosaceae: Acaena, Agrimonie, Alchemilla, Aruncus, Cliffortia, Cotoneaster, Crataegus, Docynia, Eriobotrya, Filipendula, Fragaria, Geum, Malus, Neillia, Photinia, Potentilla, Prunus, Pygeum, Pyracantha, Rosa, Rubus, Sanguisorba, Sibbaldia, Sorbaria, Sorbus, Spiraea, Rubiaceae: Psychotria, Rutaceae: Acmaenia, Adenandra, Aegle, Agathosma, Calodennum, Citrus, Clausena, Coleonema, Diosma, Empleuridium, Empleurum, Euchaetis, Euodia, Glycosmis, Macrostylis, Melicope, Micromelum, Murraya, Ptaeroxylon, Ruta, Skimmia, Toddalia, Zanthoxylum, Salicaceae: Casearia, Dovyalis, Flacourtie, Gynocardia, Homalium, Kiggelaria, Populus, Salix, Scolopia, Trimeria, Xylosma, Salvadoraceae: Azima, Santalaceae: Arceuthobium, Dufrenoya, Exocarpus, Korthalsella, Mida, Osyris, Pyrularia, Rhoiacarpos, Santalum, Thesodium, Thesium, Viscum, Sapindaceae: Acer, Aesculus, Alectryon, Allophylus, Atalaya, Cardiospermum, Dodonaea, Erioglossum, Lepisanthes, Litchi, Pappea, Sapindus, Schleichera, Smelophyllum, Saxifragaceae: Astilbe, Bergenia, Chrysosplenium, Rodgersia, Saxifraga, Tiarella, Scrophulariaceae: Lindernia, Torenia, Simaroubaceae: Brucea, Picrasma, Stachyuraceae: Stachyurus, Staphyleaceae: Staphylea, Turpinia, Tamaricaceae: Myricaria, Thymelaeaceae: Aquilaria, Daphne, Drapetes, Edgeworthia, Gnidia, Lachnaea, Passerina, Pimelea, Stellera, Struthiola, Wikstroemia, Tropaeolaceae: Tropaeolum, Ulmaceae: Celtis, Chaetachme, Holoptelea, Trema, Ulmus, Urticaceae: Boehmeria, Chamabainia, Dendrocnide, Didymodoxa, Droguetia, Elatostema, Forsskaolea, Girardinia, Gonostegia, Laporteia, Lecanthus, Parietaria, Pilea, Poikilospermum, Procris, Urtica, Violaceae: Hybanthus, Melicytus, Viola, Vitaceae: Ampelocissus, Ampelopsis, Cayratia, Cissus, Cyphostemma, Leea, Parthenocissus, Rhoicissus, Tetragastris, Vitis, Zygophyllaceae: Augea, Seetzenia, Tribulus, Zygophyllum.

Table S10. Plant genera with high priority for future screening for conditions related to gastrointestinal problems

These genera were included in the hot nodes of at least two of the study regions (Nepal, New Zealand, and the Cape of South Africa) for this category of conditions.

Anacardiaceae: *Anacardium, Buchanania, Cotinus, Dobinea, Heeria, Laurophylus, Mangifera, Pistacia, Rhus, Semecarpus, Spondias, Apocynaceae:* *Telosma, Brassicaceae:* *Alliaria, Arabidopsis, Arabis, Barbarea, Brassica, Braya, Cadaba, Capparis, Capsella, Cardamine, Chamira, Christolea, Cleome, Crateva, Descurainia, Desideria, Dilophia, Diplotaxis, Dontostemon, Draba, Erysimum, Hedinia, Heliophiila, Iberis, Lepidium, Lignariella, Maerua, Megacarpaea, Microsisymbrium, Nasturtium, Notothlaspi, Pachycladon, Pegaeophyton, Phaeonychium, Raphanus, Rorippa, Sisymbrium, Thlaspi, Torularia, Caricaceae:* *Carica, Combretaceae:* *Anogeissus, Combretum, Quisqualis, Terminalia, Cucurbitaceae:* *Benincasa, Bryonia, Citrullus, Coccinia, Cucumis, Diplocyclos, Kedrostis, Lagenaria, Mukia, Solena, Zehneria, Cunoniaceae:* *Ackama, Cunonia, Platylaphus, Weinmannia, Dipterocarpaceae:* *Shorea, Elaeocarpaceae:* *Aristotelia, Elaeocarpus, Sloanea, Geraniaceae:* *Erodium, Geranium, Monsonia, Pelargonium, Lamiaceae:* *Ballota, Leonotis, Marrubium, Lythraceae:* *Ammannia, Cuphea, Duabanga, Lagerstroemia, Lawsonia, Lythrum, Punica, Rotala, Trapa, Woodfordia, Malvaceae:* *Abroma, Abutilon, Adansonia, Alcea, Anisodontea, Bombax, Bytteria, Corchorus, Entelea, Eriolaena, Gossypium, Grewia, Helicteres, Hermannia, Hibiscus, Hoheria, Kydia, Lavatera, Malva, Malvaviscus, Melochia, Pavonia, Plagianthus, Pterospermum, Sida, Sparrmannia, Sterculia, Thespesia, Triumfetta, Urena, Melastomataceae:* *Medinilla, Melastoma, Osbeckia, Meliaceae:* *Aglaiia, Azadirachta, Chukrasia, Cipadessa, Dysoxylum, Ekebergia, Melia, Munronia, Nymania, Toona, Trichilia, Melianthaceae:* *Melianthus, Moringaceae:* *Moringa, Myrtaceae:* *Callistemon, Eucalyptus, Eugenia, Kunzea, Leptospermum, Lophomyrtus, Metrosideros, Neomyrtus, Psidium, Syzygium, Neuradaceae:* *Grielum, Oliniaceae:* *Olinia, Onagraceae:* *Chamerion, Circaeа, Epilobium, Ludwigia, Oenothera, Oxalidaceae:* *Biophytum, Oxalis, Passifloraceae:* *Passiflora, Penaeaceae:* *Brachysiphon, Endonema, Glischrocolla, Penaea, Saltera, Sonderothamnus, Penaeaceae:* *Stylapterus, Polygonaceae:* *Emex, Oxyria, Rheum, Rumex, Resedaceae:* *Oligomeris, Rosaceae:* *Acaena, Agrimonia, Alchemilla, Cliffortia, Filipendula, Fragaria, Geum, Potentilla, Rosa, Rubus, Sanguisorba, Sibbaldia, Rutaceae:* *Acmadenia, Adenanthera, Aegle, Agathosma, Calodendrum, Citrus, Clausena, Coleonema, Diosma, Empleurum, Euchaetis, Euodia, Glycosmis, Macrostylis, Melicope, Micromelum, Murraya, Ptaeroxylon, Ruta, Skimmia, Toddalia, Zanthoxylum, Salicaceae:* *Populus, Salix, Trimeria, Salvadoraceae:* *Azima, Sapindaceae:* *Acer, Aesculus, Alectryon, Allophylus, Atalaya, Cardiospermum, Dodonaea, Erioglossum, Lepisanthes, Litchi, Pappea, Sapindus, Schleichera, Smelophyllum, Simaroubaceae:* *Brucea, Picrasma, Thymelaeaceae:* *Aquilaria, Daphne, Drapetes, Edgeworthia, Gnidia, Lachnaea, Passerina, Pimelea, Stellera, Struthiola, Wikstroemia, Tropaeolaceae:* *Tropaeolum, Violaceae:* *Hybanthus, Melicytus, Viola.*

Table S11. Plant genera with high priority for future screening for conditions related to general health problems

These genera were included in the hot nodes of at least two of the study regions (Nepal, New Zealand, and the Cape of South Africa) for this category of conditions.

Achariaceae: Acharia, Ceratiosicyos, **Agavaceae:** Agave, Arthropodium, Caesia, Chlorophytum, Cordyline, Herpolirion, **Aizoaceae:** Psilocaulon, **Alliaceae:** Agapanthus, Allium, Milula, Tulbaghia, **Amaranthaceae:** Achyranthes, Acroglochin, Aerva, Alternanthera, Amaranthus, Beta, Bosea, Celosia, Chenopodium, Deeringia, Gomphrena, Iresine, Manochlamys, Psilotrichum, Pupalia, **Amaryllidaceae:** Amaryllis, Ammocharis, Apodolirion, Boophone, Brunsvigia, Clivia, Crinum, Cyrtanthus, Haemanthus, Nerine, Pancratium, Scadoxus, Zephyranthes, **Anacardiaceae:** Anacardium, Buchanania, Cotinus, Dobinea, Heeria, Laurophylus, Mangifera, Pistacia, Rhus, Semecarpus, Spondias, **Apocynaceae:** Telosma, **Araucariaceae:** Agathis, Araucaria, **Asparagaceae:** Asparagus, Bowiea, Dipcadi, Drimia, Eucomis, Lachenalia, Ledebouria, Ornithogalum, Spetaea, Urginea, Veltheimia, **Asphodelaceae:** Aloe, Asphodelus, Astroloba, Bulbine, Bulbinella, Gasteria, Haworthia, Kniphofia, Trachyandra, **Asteraceae:** Marasmodes, Myriactis, **Begoniaceae:** Begonia, **Betulaceae:** Alnus, Betula, Carpinus, Corylus, **Brassicaceae:** Alliaria, Arabidopsis, Arabis, Barbarea, Brassica, Braya, Cabada, Capparis, Capsella, Cardamine, Chamira, Christolea, Cleome, Crateva, Descurainia, Desideria, Dilophia, Diplotaxis, Dontostemon, Draba, Erysimum, Eutrema, Hedinia, Heliophila, Iberis, Lepidium, Lignariella, Maerua, Megacarpaea, Microsismbrium, Nasturtium, Notothlaspi, Pachycladon, Pegaeophyton, Phaeonychium, Raphanus, Rorippa, Sisymbrium, Thlaspi, Torularia, **Cannabaceae:** Cannabis, Humulus, **Caricaceae:** Carica, **Caryophyllaceae:** Pseudostellaria, Casuarinaceae: Casuarina, Celastraceae: Bhesa, Cassine, Celastrus, Elaeodendron, Euonymus, Gloveria, Gymnosporia, Lauridia, Lophopetalum, Maurocenia, Maytenus, Mystroxylon, Putterlickia, Reissantia, Robsonodendron, Stackhousia, **Clusiaceae:** Garcinia, Hypericum, Mesua, **Combretaceae:** Anogeissus, Combretum, Quisqualis, Terminalia, **Coriariaceae:** Coriaria, **Corynocarpaceae:** Corynocarpus, **Crassulaceae:** Adromischus, Cotyledon, Crassula, Kalanchoe, Sedum, **Cucurbitaceae:** Benincasa, Biswarea, Bryonia, Citrullus, Coccinia, Cucumis, Cucurbita, Cyclanthera, Diplocyclos, Edgaria, Gomphogyne, Gymnopetalum, Gynostemma, Herpetospermum, Kedrostis, Lagenaria, Luffa, Momordica, Mukia, Neoalsomitra, Sechium, Sicyos, Solena, Thladiantha, Trichosanthes, Zehneria, **Cunoniaceae:** Ackama, Cunonia, Platylaphus, Weinmannia, **Cupressaceae:** Cupressus, Juniperus, Libocedrus, Cycadaceae: Cycas, **Daphniphyllaceae:** Daphniphyllum, **Datiscaceae:** Datisca, Tetrameles, **Dipterocarpaceae:** Shorea, Elaeagnaceae: Elaeagnus, Hippophae, **Elaeocarpaceae:** Aristotelia, Elaeocarpus, Sloanea, **Elatinaceae:** Bergia, Elatine, Ephedraceae: Ephedra, Ericaceae: Agapetes, Archgeria, Cyathodes, Dracophyllum, Epacris, Gaultheria, Leucopogon, Lyonia, Pentachondra, Pieris, Vaccinium, **Escalloniaceae:** Ixerba, Euphorbiaceae: Acalypha, Adenocline, Alchornea, Aleurites, Andracme, Antidesma, Baccaurea, Balsispernum, Bischofia, Breynia, Bridelia, Chrozophora, Cleidion, Clutia, Croton, Dalechampia, Euphorbia, Excoecaria, Flueggea, Glochidion, Homalanthus, Hyaanen, Jatropha, Lachnostylis, Leidesia, Macaranga, Mallotus, Mercurialis, Ostodes, Phyllanthus, Panneria, Putranjiva, Ricinus, Sapium, Sauvagea, Securinega, Seidelia, Tragia, Trewia, **Fabaceae:** Abrus, Acacia, Acrocarpus, Aeschynomene, Albizia, Alysicarpus, Amphicarpa, Amphithalea, Apios, Arachis, Argyrolobium, Aspalathus, Astragalus, Atylotis, Bauhinia, Boulasafra, Butea, Caesalpinia, Cajanus, Calpurnia, Campylotropis, Canavalia, Caragana, Carmichaelia, Cassia, Chamaecrista, Chesneya, Cicer, Cianthus, Clitoria, Cochlianthus, Codariocalyx, Colutea, Crotalaria, Cyclopia, Cytisus, Dalbergia, Delonix, Derris, Desmodium, Dipogon, Dolichos, Dumasia, Dunbaria, Entada, Eriosema, Erythrina, Flemingia, Galactia, Geissaspis, Genista, Glycine, Glycyrrhiza, Gueldenstaedtia, Hedyotis, Hypocalyptus, Indigofera, Kennedia, Lablab, Lathyrus, Lebeckia, Lens, Lespedeza, Lessertia, Leucaena, Liparia, Lotononis, Lotus, Lupinus, Macrotyloma, Medicago, Melilotus, Melolobium, Millettia, Mimosoidea, Montigena, Mucuna, Ormosia, Otholobium, Oxytropis, Paracalyx, Paraserianthes, Parochetus, Phaseolus, Piptanthus, Pisum, Pithecellobium, Podalyria, Polhillia, Pongamia, Pterocarpus, Pueraria, Rafnia, Rhynchosia, Robinia, Saraca, Schotia, Senna, Sesbania, Shuteria, Smithia, Sophora, Spatholobus, Stirtonanthus, Tadehagi, Tamarindus, Tephrosia, Thermopsis, Trifolium, Trigonella, Uraria, Vicia, Vigna, Virgilia, Wiborgia, Wisteria, Xenoscapa, Xiphotheca, Zornia, Castanopsis, Lithocarpus, Nothofagus, Quercus, **Geissolomataceae:** Geissoloma, **Geraniaceae:** Erodium, Geranium, Monsonia, Pelargonium, **Ginkgoaceae:** Ginkgo, **Gnetaceae:** Gnetum, **Grossulariaceae:** Ribes, Haloragaceae: Gonocarpus, Haloragis, **Hamamelidaceae:** Exbucklandia, Trichocladus, **Hemerocallidaceae:** Dianella, Hemerocallis, Phormium, Xeronema, **Hydatellaceae:** Trithuria, **Iridaceae:** Aristeia, Babiana, Belamcanda, Bobartia, Chasmanthe, Crocosmia, Crocus, Dierama, Dietes, Ferraria, Freesia, Geissorhiza, Gladiolus, Hesperantha, Iris, Ixia, Klattia, Lapeirousia, Libertia, Melaspaeula, Micranthus, Moraea, Nivenia, Pillansia, Romulea, Sparaxis, Syringodea, Therianthus, Tritonia, Tritoniopsis, Watsonia, Witsenia, **Juglandaceae:** Engelhardia, Juglans, **Lauraceae:** Cryptocarya, Linaceae: Anisadenia, Linum, Reinwardtia, **Loranthaceae:** Dendrophthoe, Loranthus, Macrosolen, Moquinia, Peraxilla, Scurrula, Septulina, Taxillus, Tupeia, **Lythraceae:** Ammannia, Cuphea, Duabanga, Lagerstroemia, Lawsonia, Lythrum, Punica, Rotala, Trapa, Woodfordia, **Malpighiaceae:** Aspidopterys, Hiptage, **Malvaceae:** Abroma, Abutilon, Adansonia, Alcea, Anisodontea, Bombax, Byttneria, Corchorus, Entelea, Eriolaena, Firmiana, Gossypium, Grewia, Helicteres, Hermannia, Hibiscus, Hoheria, Kydia, Lavatera, Malva, Malvaviscus, Melochia, Pavonia, Plagianthus, Pterospermum, Sida, Sparrmannia, Sterculia, Thespesia, Triumfetta, Urena, **Melastomataceae:** Medinilla, Melastoma, Osbeckia, **Meliaceae:** Aglaia, Azadirachta, Chukrasia, Cipadessa, Dysoxylum, Ekebergia, Melia, Munronia, Nymania, Toona, Trichilia, **Melianthaceae:** Melianthus, **Moraceae:** Artocarpus, Ficus, Macfura, Morus, Streblus, **Moringaceae:** Moringa, **Myricaceae:** Morella, **Myrtaceae:** Callistemon, Eucalyptus, Eugenia, Kunzea, Leptospermum, Lophomyrtus, Metrosideros, Neomyrtus, Psidium, Syzygium, **Neuradaceae:** Grielum, **Nymphaeaceae:** Euryale, Nymphaea, Ochnaceae: Ochna, **Olacaceae:** Erythropodium, Olax, Schoepfia, **Oliniaceae:** Olinia, **Onagraceae:** Chamerion, Circaeum, Epilobium, Ludwigia, Oenothera, **Opiliaceae:** Cansjera, Leptonurus, **Oxalidaceae:** Biophytum, Oxalis, **Paeoniaceae:** Paeonia, Parnassia, **Passifloraceae:** Passiflora, **Penaeaceae:** Brachysiphon, Endonema, Glischrocolla, Penaea, Saltera, Sonderothamnus, Stylapterus, **Philesiaceae:** Behnia, **Phyllanthaceae:** Aporusa, **Pinaceae:** Abies, Cedrus, Larix, Larix, Picea, Pinus, Pseudotsuga, Tsuga, **Piperaceae:** Macropiper, Piper, **Poaceae:** Australopyrum, **Podocarpaceae:** Dacrycarpus, Dacrydium, Halocarpus, Lepidothamnus, Phyllocladus, Podocarpus, Prumnopitys, Hydrobryum, **Polygalaceae:** Muraltia, Polygala, Securidaca, **Pontederiaceae:** Eichhornia, Monochoria, Ranunculaceae: Clematis, Naravelia, **Resedaceae:** Oligomeris, **Rhamnaceae:** Berchemia, Discaria, Gouania, Helinus, Hovenia, Noltea, Palmarus, Phylica, Pommaderris, Rhamnella, Rhamnus, Sageretia, Scutia, Trichocephalus, Ventilago, Ziziphus, **Rhizophoraceae:** Carallia, **Rosaceae:** Acaena, Agrimonias, Alchemilla, Aruncus, Cliffortia, Cotoneaster, Crataegus, Docynia, Eriobotrya, Filipendula, Fragaria, Geum, Malus, Neillia, Photinia, Potentilla, Prunus, Pygeum, Pyracantha, Rosa, Rubus, Sanguisorba, Sibbaldia, Sorbaria, Sorbus, Spiraea, **Ruscaceae:** Campylandra, Dracaena, Eriospermum, Maianthemum, Ophiopogon, Petiosanthes, Polygonatum, Sansevieria, Smilacina, Tupistra, **Rutaceae:** Acmadenia, Adenandra, Aegle, Agathosma, Calodendrum, Citrus, Clausena, Coleonema, Diosma, Empleuridium, Empleurum, Euchaetis, Euodia, Glycosmis, Macrostylis, Melicope, Micromelum, Murraya, Ptaeroxylon, Ruta, Skimmia, Toddalia, Zanthoxylum, **Salicaceae:** Casearia, Dovyalis, Flacourtie, Gynocardia, Homalium, Kiggelaria, Populus, Salix, Scopolia, Trimeria, Xylosma, **Salvadoraceae:** Azima, **Santalaceae:** Arceuthobium, Dufrenoya, Exocarpus, Korthalsella, Mida, Osyris, Pyrularia, Rhoiacarpos, Santalum, Thesidium, Thesium, Viscum, **Sapindaceae:** Acer, Aesculus, Alectryon, Allophylus, Atalaya, **Cardiospermum:** Dodonaea, Erioglossum, Lepisanthes, Litchi, Pappea, Sapindus, Schleichera, **Smelophyllum:** **Saxifragaceae:** Astilbe, Bergenia, Chrysosplenium, Rodgersia, Saxifraga, Tiarella, **Schisandraceae:** Schisandra, **Scrophulariaceae:** Aletris, Buchnera, Cynium, Graderia, Harveya, Hybananche, Lindenbergia, Melasma, Pedicularis, Sopubia, Striga, **Simaroubaceae:** Brucea, Picrasma, **Stachyuraceae:** Stachyurus, **Staphyleaceae:** Staphylea, Turpinia, **Tamaricaceae:** Myricaria, **Taxaceae:** Taxus, **Taxodiaceae:** Cryptomeria, **Tecophilaeaceae:** Cyanella, Walleria, **Thymelaeaceae:** Aquilaria, Daphne, Drapetes, Edgeworthia, Gnidia, Lachnaea, Passerina, Pimelea, Stellera, Struthiola, Wikstroemia, **Tropaeolaceae:** Tropaeolum, **Ulmaceae:** Celtis, Chaetachme, Holoptelea, Trema, Ulmus, **Urticaceae:** Boehmeria, Chamabainia, Dendrocnide, Didymodoxa, Droguetia, Elatostema, Forsskaolea, Girardinia, Gonostegia, Laporteia, Lecanthus, Parietaria, Pilea, Poikilospermum, Procris, Urtica, **Violaceae:** Hybanthus, Melicytus, Viola, **Vitaceae:** Ampelocissus, Ampelopsis, Cyrtatia, Cissus, Cyphostemma, Leea, Parthenocissus, Rhoicissus, Tetrastigma, Vitis, **Zygophyllaceae:** Augea, Seetzenia, Tribulus, Zygophyllum.

Table S12. Plant genera with high priority for future screening for conditions related to gynecological/fertility problems

These genera were included in the hot nodes of at least two of the study regions (Nepal, New Zealand, and the Cape of South Africa) for this category of conditions.

Agavaceae: *Agave, Arthropodium, Caesia, Chlorophytum, Cordyline, Herpolirion, Aizoaceae: Psilocaulon, Alliaceae: Agapanthus, Allium, Milula, Tulbaghia, Amaranthaceae: Achyranthes, Manochlamys, Pupalia, Amaryllidaceae: Amaryllis, Ammocharis, Apodolirion, Boophone, Brunsvigia, Clivia, Crinum, Cyrtanthus, Haemanthus, Nerine, Pancratium, Scadoxus, Zephyranthes, Araucariaceae: Agathis, Araucaria, Asparagaceae: Asparagus, Bowiea, Dipcadi, Drimia, Eucomis, Lachenalia, Ledebouria, Ornithogalum, Spetaea, Urginea, Veltheimia, Asphodelaceae: Aloe, Asphodelus, Astroloba, Bulbine, Bulbinella, Gasteria, Haworthia, Kniphofia, Trachyandra, Caryophyllaceae: Pseudostellaria, Combretaceae: Anogeissus, Combretum, Quisqualis, Terminalia, Coriariaceae: Coriaria, Corynocarpaceae: Corynocarpus, Cucurbitaceae: Benincasa, Bryonia, Citrullus, Coccinia, Cucumis, Diplocyclos, Kedrostis, Lagenaria, Mukia, Solena, Zehneria, Cupressaceae: Cryptomeria, Cupressus, Juniperus, Libocedrus, Cycadaceae: Cycas, Ebenaceae: Diospyros, Euclea, Ephedraceae: Ephedra, Ericaceae: Agapetes, Archgeria, Cyathodes, Dracophyllum, Epacris, Gaultheria, Leucopogon, Lyonia, Pentachondra, Pieris, Vaccinium, Geraniaceae: Erodium, Geranium, Monsonia, Pelargonium, Ginkgoaceae: Ginkgo, Gnetaceae: Gnetum, Hemerocallidiaceae: Dianella, Hemerocallis, Phormium, Xeronema, Hydatellaceae: Trithuria, Iridaceae: Aristea, Babiana, Belamcanda, Bobartia, Chasmanthe, Crocosmia, Crocus, Dierama, Dietes, Ferraria, Freesia, Geissorhiza, Gladiolus, Hesperantha, Iris, Ixia, Klattia, Lapeirousia, Libertia, Melasphaerula, Micranthus, Moraea, Nivenia, Pillansia, Romulea, Sparaxis, Syringodea, Thereianthus, Tritonia, Tritoniopsis, Watsonia, Witsenia, Xenoscopa, Lauraceae: Cryptocarya, Lythraceae: Ammannia, Cuphea, Duabanga, Lagerstroemia, Lawsonia, Lythrum, Punica, Rotala, Trapa, Woodfordia, Melastomataceae: Medinilla, Melastoma, Osbeckia, Myrtaceae: Callistemon, Eucalyptus, Eugenia, Kunzea, Leptospermum, Lophomyrtus, Metrosideros, Neomyrtus, Psidium, Syzygium, Nymphaeaceae: Euryale, Nymphaea, Oliniaceae: Olinia, Onagraceae: Chamerion, Circaea, Epilobium, Ludwigia, Oenothera, Penaeaceae: Brachysiphon, Endonema, Gischrocolla, Penaea, Saltera, Sonderothamnus, Stylapterus, Philesiaceae: Behnia, Pinaceae: Abies, Cedrus, Larix, Larix, Picea, Pinus, Pseudotsuga, Tsuga, Plantaginaceae: Callitrichie, Digitalis, Hippuris, Plantago, Podocarpaceae: Dacrycarpus, Dacrydium, Halocarpus, Lepidothamnus, Phyllocladus, Podocarpus, Prumnopitys, Polygonaceae: Aconogonon, Bistorta, Emex, Fagopyrum, Fallopia, Koenigia, Oxyria, Persicaria, Polygonum, Rheum, Rumex, Pontederiaceae: Eichhornia, Monochoria, Rosaceae: Acaena, Agrimonia, Alchemilla, Cliffortia, Filipendula, Fragaria, Geum, Potentilla, Rosa, Rubus, Sanguisorba, Sibbaldia, Rusaceae: Campylandra, Dracaena, Eriospermum, Maianthemum, Ophiopogon, Peliosanthes, Polygonatum, Sansevieria, Smilacina, Tropaeolum, Schisandraceae: Schisandra, Scrophulariaceae: Antirrhinum, Calorhabdos, Hebe, Hemiphragma, Kickxia, Parahebe, Veronica, Taxaceae: Taxus, Tecophilaeaceae: Cyanella, Walleria, Verbenaceae: Chascanum.*

Table S13. Plant genera with high priority for future screening for conditions related to musculoskeletal problems

These genera were included in the hot nodes of at least two of the study regions (Nepal, New Zealand, and the Cape of South Africa) for this category of conditions.

Anacardiaceae: *Anacardium, Buchanania, Cotinus, Dobinea, Heeria, Laurophylloides, Mangifera, Pistacia, Rhus, Semecarpus, Spondias, Cucurbitaceae: Benincasa, Biswarea, Bryonia, Citrullus, Coccinia, Cucurbita, Cyclanthera, Diplocyclos, Edgaria, Gymnopetalum, Herpetospermum, Kedrostis, Lagenaria, Luffa, Mukia, Sechium, Sicyos, Solena, Trichosanthes, Zehneria, Geraniaceae: Erodium, Geranium, Monsonia, Pelargonium, Lamiaceae: Ajuga, Anisochilus, Anisomeles, Ballota, Clinopodium, Colebrookea, Coleus, Craniotome, Dracocephalum, Elsholtzia, Galeobdolon, Galeopsis, Glechoma, Gomphostemma, Lamium, Leonotis, Leonurus, Leucas, Marrubium, Melissa, Mentha, Micromeria, Mosla, Nepeta, Ocimum, Origanum, Perilla, Phlomis, Plectranthus, Pogostemon, Prunella, Salvia, Scutellaria, Stachys, Teucrium, Thymus, Melastomataceae: Medinilla, Melastoma, Osbeckia, Meliaceae: Aglaia, Azadirachta, Chukrasia, Cipadessa, Dysoxylum, Ekebergia, Melia, Munronia, Nymania, Toona, Trichilia, Myrtaceae: Callistemon, Eucalyptus, Eugenia, Kunzea, Leptospermum, Lophomyrtus, Metrosideros, Neomyrtus, Psidium, Syzygium, Oliniaceae: Olinia, Passifloraceae: Passiflora, Penaeaceae: Brachysiphon, Endonema, Gischrocolla, Penaea, Saltiera, Sonderothamnus, Stylapterus, Rosaceae: Acaena, Agrimonia, Alchemilla, Cliffortia, Filipendula, Fragaria, Geum, Potentilla, Rosa, Rubus, Sanguisorba, Sibbaldia, Rutaceae: Acmadenia, Adenandra, Aegle, Agathosma, Calodendrum, Citrus, Clausena, Coleonema, Diosma, Empleurum, Euchaetis, Euodia, Glycosmis, Macrostylis, Melicope, Micromelum, Murraya, Ptaeroxylon, Ruta, Skimmia, Toddalia, Zanthoxylum, Salicaceae: Dovyalis, Flacourtie, Populus, Salix, Scolopia, Trimeria, Xylosma, Simaroubaceae: Brucea, Picrasma, Verbenaceae: Callicarpa, Caryopteris, Clerodendrum, Gmelina, Holmskioldia, Premna, Tectona, Teucrium, Vitex, Violaceae: Hybanthus, Melicytus, Viola.*

Table S14. Plant genera with high priority for future screening for conditions related to neurological problems

These genera were included in the hot nodes of at least two of the study regions (Nepal, New Zealand, and the Cape of South Africa) for this category of conditions.

Achariaceae: Acharia, Ceratiosicyos, Amaranthaceae: Psilotrichum, Anacardiaceae: Anacardium, Buchanania, Cotinus, Dobinea, Heeria, Laurophylus, Mangifera, Pistacia, Rhus, Semecarpus, Spondias, Apocynaceae: Asclepias, Aspidoglossum, Gomphocarpus, Telosma, Xysmalobium, Asteraceae: Marasmodes, Myriactis, Begoniaceae: Begonia, Betulaceae: Alnus, Betula, Carpinus, Corylus, Brassicaceae: Alliaria, Arabidopsis, Arabis, Barbarea, Brassica, Braya, Cadaba, Capparis, Capsella, Cardamine, Chamira, Christolea, Cleome, Crateva, Descurainia, Desideria, Dilophia, Diplotaxis, Dontostemon, Draba, Erysimum, Eutrema, Hedinia, Heliophilus, Iberis, Lepidium, Lignariella, Maerua, Megacarpaea, Microsymbrium, Nasturtium, Notothlaspi, Pachycladon, Pegaeophyton, Phaeonychium, Raphanus, Rorippa, Sisymbrium, Thlaspi, Torularia, Cannabaceae: Cannabis, Humulus, Caricaceae: Carica, Casuarinaceae: Casuarina, Celastraceae: Bhesa, Cassine, Celastrus, Elaeodendron, Euonymus, Gloveria, Gymnosporia, Lauridia, Lophopetalum, Maurocenia, Maytenus, Mstyroxylon, Putterlickia, Reissantia, Robsonodendron, Stackhousia, Clusiaceae: Garcinia, Hypericum, Mesua, Combretaceae: Anogeissus, Combretum, Quisqualis, Terminalia, Coriariaceae: Coriaria, Corynocarpaceae: Corynocarpus, Crassulaceae: Adromischus, Cotyledon, Crassula, Kalanchoe, Sedum, Cucurbitaceae: Benincasa, Biswarea, Bryonia, Citrullus, Coccinia, Cucumis, Cucurbita, Cyclanthera, Diplocyclos, Edgaria, Gomphogyne, Gymnopetalum, Gynostemma, Herpetospermum, Kedrostis, Lagenaria, Luffa, Momordica, Mukia, Neoalsomitra, Sechium, Sicyos, Solena, Thladiantha, Trichosanthes, Zehneria, Cunoniaceae: Ackama, Cunonia, Platylophus, Weinmannia, Daphniphyllaceae: Daphniphyllum, Daticaceae: Datisca, Tetrameles, Dipterocarpaceae: Shorea, Elaeagnaceae: Elaeagnus, Hippophae, Elaeocarpaceae: Aristotelia, Elaeocarpus, Sloanea, Elatinaceae: Bergia, Elatine, Escalloniaceae: Ixerba, Euphorbiaceae: Acalypha, Adenocline, Alchornea, Aleurites, Andracne, Antidesma, Baccarea, Baliaspermum, Bischofia, Breynia, Bridelia, Chrozophora, Cleidion, Clutia, Croton, Dalechampia, Euphorbia, Excoecaria, Flueggea, Glochidion, Homalanthus, Hyaananche, Jatropha, Lachnostylis, Leidesia, Macaranga, Mallotus, Mercurialis, Ostodes, Phyllanthus, Poranthera, Putranjiva, Ricinus, Sapium, Sauvagesia, Secidea, Tragia, Trewia, Fabaceae: Abrus, Acacia, Acrocarpus, Aeschynomene, Albizia, Alysicarpus, Amphicarpa, Amphithalea, Apios, Arachis, Argyrolobium, Aspalathus, Astragalus, Atylotis, Bauhinia, Bolusafra, Butea, Caesalpinia, Cajanus, Calpurnia, Campylotropis, Canavalia, Caragana, Carmichaelia, Cassia, Chamaecrista, Chesneya, Cicer, Cianthus, Clitoria, Cochlianthus, Codariocalyx, Colutea, Crotalaria, Cyclopia, Cytisus, Dalbergia, Delonix, Derris, Desmodium, Dipogon, Dolichos, Dumasia, Dunbaria, Entada, Eriosema, Erythrina, Flemingia, Galactia, Geissaspis, Genista, Glycine, Glycyrrhiza, Gueldenstaedtia, Hedsarum, Hypocalyptus, Indigofera, Kennedia, Lablab, Lathyrus, Lebeckia, Lens, Lepidium, Lessertia, Leucaena, Liparia, Lotononis, Lotus, Lupinus, Macrotyloma, Medicago, Melilotus, Melolobium, Millettia, Mimosoidea, Montigena, Mucuna, Ormosia, Otholobium, Oxytropis, Paracalyx, Paraserianthes, Parochetus, Phaseolus, Piptanthus, Pisum, Pithecellobium, Podalyria, Polhillia, Pongamia, Pterocarpus, Pueraria, Rafnia, Rhynchosia, Robinia, Saraca, Schotia, Senna, Sesbania, Shuteria, Smithia, Sophora, Spatholobus, Stirtonanthus, Tadehagi, Tamarindus, Tephrosia, Thermopsis, Trifolium, Trigonella, Uraria, Vicia, Vigna, Virgilia, Wiborgia, Wisteria, Xiphotheca, Zornia, Fagaceae: Castanopsis, Lithocarpus, Nothofagus, Quercus, Geissolomataceae: Geissoloma, Geraniaceae: Erodium, Geranium, Monsonia, Pelargonium, Grossulariaceae: Ribes, Haloragaceae: Gonocarpus, Haloragis, Hamamelidaceae: Exbucklandia, Trichocephalus, Trichocladus, Juglandaceae: Engelhardia, Juglans, Lamiaceae: Ballota, Galeobdolon, Lamium, Leonotis, Leonurus, Marrubium, Lauraceae: Cryptocarya, Linaceae: Anisadenia, Linum, Reinwardtia, Loranthaceae: Dendrophthoe, Loranthus, Macrosolen, Moquinia, Peraxilla, Scurrula, Septulina, Taxillus, Tupeia, Lythraceae: Ammannia, Cuphea, Duabanga, Lagerstroemia, Lawsonia, Lythrum, Punica, Rotala, Trapa, Woodfordia, Malpighiaceae: Aspidopterys, Hiptage, Malvaceae: Abroma, Abutilon, Adansonia, Alcea, Anisodontea, Bombax, Bytneria, Corchorus, Entelea, Eriosa, Firmiana, Gossypium, Grewia, Helicteres, Hermannia, Hibiscus, Hoheria, Kydia, Lavatera, Malva, Malvaviscus, Melochia, Pavonia, Plagianthus, Pterospermum, Sida, Sparrmannia, Sterculia, Thespesia, Triumfetta, Urena, Melastomataceae: Medinilla, Melastoma, Osbeckia, Meliaceae: Aglaia, Azadirachta, Chukrasia, Cipadessa, Dysoxylum, Ekebergia, Melia, Munronia, Nymania, Toona, Trichilia, Melianthaceae: Melianthus, Moraceae: Artocarpus, Ficus, Maclura, Morus, Streblus, Moringaceae: Moringa, Myricaceae: Morella, Callistemon, Eucalyptus, Eugenia, Kunzea, Leptospermum, Lophomyrtus, Metrosideros, Neomyrtus, Psidium, Syzygium, Neuradaceae: Grielum, Ochnaceae: Ochna, Olacaceae: Erythrophleum, Olax, Schoepfia, Oliniaceae: Olinia, Onagraceae: Chamerion, Circsea, Epilobium, Ludwigia, Oenothera, Opiliaceae: Cansjera, Lepionurus, Oxalidaceae: Biophytum, Oxalis, Paeoniaceae: Paeonia, Parnassiaceae: Parnassia, Passifloraceae: Passiflora, Penaeaceae: Brachysiphon, Endonoma, Glischrocolla, Penaea, Saltera, Sonderothamnus, Stylapterus, Phyllanthaceae: Aporosa, Poaceae: Australopyrum, Podostemaceae: Hydrobryum, Polygalaceae: Muraltia, Polygalia, Securidaca, Resedaceae: Oligomeris, Rhamnaceae: Berchemia, Discaria, Gouania, Helinus, Hovenia, Noltea, Paliurus, Phylica, Pomaderris, Rhamnella, Rhamnus, Sageretia, Scutia, Ventilago, Ziziphus, Rhizophoraceae: Carallia, Rosaceae: Acaena, Agrimonia, Alchemilla, Aruncus, Cliffortia, Cotoneaster, Crataegus, Docynia, Eriobotrya, Filipendula, Fragaria, Geum, Malus, Neillia, Photinia, Potentilla, Prinsepia, Prunus, Pygeum, Pyracantha, Rosa, Rubus, Sanguisorba, Sibbaldia, Sorbaria, Sorbus, Spiraea, Rutaceae: Aceria, Adenanthera, Aegle, Agathosma, Calodendrum, Citrus, Clausena, Coleonema, Diosma, Empleuridium, Empleurum, Euchaetis, Euodia, Glycosmis, Macrostylis, Melicope, Micromelum, Murraya, Ptaeroxylon, Ruta, Skimmia, Toddalia, Zanthoxylum, Salicaceae: Casearia, Dovyalis, Flacourtie, Gynocardia, Homalialia, Kiggelaria, Populus, Salix, Scopolia, Trimeria, Xylosma, Salvadoraceae: Azima, Santalaceae: Arceuthobium, Dufrenoya, Exocarpus, Korthalsella, Mida, Osyris, Pyrularia, Rhoiacarpus, Santalum, Thesidiump, Thesis, Viscum, Sapindaceae: Acer, Aesculus, Alectryon, Allophylus, Atalaya, Cardiospermum, Dodonaea, Erioglossum, Lepisanthes, Litchi, Pappea, Sapindus, Schleichera, Smelophyllum, Saxifragaceae: Astilbe, Bergenia, Chrysosplenium, Rodgersia, Saxifraga, Tiarella, Simaroubaceae: Brucea, Picrasma, Stachyuraceae: Stachyurus, Staphyleaceae: Staphylea, Turpinia, Tamaricaceae: Myricaria, Thymelaeaceae: Aquilaria, Daphne, Drapetes, Edgeworthia, Gnida, Lachnaea, Passerina, Pimelea, Stellera, Struthiola, Wikstroemia, Tropaeolaceae: Tropaeolum, Ulmaceae: Celtis, Chaetachme, Holoptelea, Trema, Ulmus, Urticaceae: Boehmeria, Chamabainia, Dendrocnide, Didymodoxa, Droguetia, Elatostema, Forsskaolea, Girardinia, Gonostegia, Laporteia, Lecanthus, Parietaria, Pilea, Poikilospermum, Procris, Urtica, Violaceae: Hybanthus, Melicytus, Viola, Vitaceae: Ampelocissus, Ampelopsis, Cayratia, Cissus, Cyphostemma, Leea, Parthenocissus, Rhoicissus, Tetrastigma, Vitis, Zygophyllaceae: Augea, Seetzenia, Tribulus, Zygophyllum.

Table S15. Plant genera with high priority for future screening for conditions related to ophthalmological problems

These genera were included in the hot nodes of at least two of the study regions (Nepal, New Zealand, and the Cape of South Africa) for this category of conditions.

Berberidaceae: Berberis, Mahonia, Podophyllum, Boraginaceae: Myosotis, Circaeasteraceae: Circaeaster, Coriariaceae: Coriaria, Corynocarpaceae: Corynacarpus, Elaeocarpaceae: Aristotelia, Elaeocarpus, Lardizabalaceae: Akebia, Decaisnea, Holboellia, Lauraceae: Cryptocarya, Malvaceae: Hoheria, Plagianthus, Menispermaceae: Antizoma, Cissampelos, Coccus, Parabaena, Pericampylus, Stephanitis, Tiliacora, Tinospora, Myrtaceae: Kunzea, Leptospermum, Metrosideros, Papaveraceae: Argemone, Corydalis, Cysticapnos, Dicentra, Dicranostigma, Hypocotylis, Meconopsis, Papaver, Trigonocarpus, Ranunculaceae: Aconitum, Actaea, Adonis, Anemone, Aquilegia, Callianthemum, Caltha, Cimicifuga, Clematis, Delphinium, Halerpestes, Isopyrum, Naravelia, Nigella, Oxygraphis, Paracquilegia, Ranunculus, Thalictrum, Trollius, Rosaceae: Geum, Rubus, Rubiaceae: Psychotria, Sapindaceae: Alectryon, Litchi, Pappea.

Table S16. Plant genera with high priority for future screening for conditions related to otorhinolaryngological problems

These genera were included in the hot nodes of at least two of the study regions (Nepal, New Zealand, and the Cape of South Africa) for this category of conditions.

Anacardiaceae: *Anacardium, Buchanania, Cotinus, Dobinea, Heeria, Laurophylus, Mangifera, Pistacia, Rhus, Semecarpus, Spondias, Apocynaceae: Telosma, Boraginaceae: Myosotis, Brassicaceae: Alliaria, Arabidopsis, Arabis, Barbarea, Brassica, Braya, Cadaba, Capparis, Capsella, Cardamine, Chamira, Christolea, Cleome, Crateva, Descurainia, Desideria, Dilophia, Diplotaxis, Dontostemon, Draba, Erysimum, Hedinia, Heliophila, Iberis, Lepidium, Lignariella, Maerua, Megacarpaea, Microsymprium, Nasturtium, Notothlaspi, Pachycladon, Pegaeophyton, Phaeonychium, Raphanus, Rorippa, Sisymbrium, Thlaspi, Torularia, Caricaceae: Carica, Dipterocarpaceae: Shorea, Escalloniaceae: Ixerba, Geissolomataceae: Geissoloma, Lamiaceae: Clinopodium, Mentha, Micromeria, Thymus, Malvaceae: Abroma, Abutilon, Adansonia, Alcea, Anisodontea, Bombax, Byttneria, Corchorus, Entelea, Eriolaena, Gossypium, Grewia, Helicteres, Hermannia, Hibiscus, Hoheria, Kydia, Lavatera, Malva, Malvaviscus, Melochia, Pavonia, Plagianthus, Pterospermum, Sida, Sparrmannia, Sterculia, Thespesia, Triumfetta, Urena, Melastomataceae: Medinilla, Melastoma, Osbeckia, Melianthaceae: Aglaia, Azadirachta, Chukrasia, Cipadessa, Dysoxylum, Ekebergia, Melia, Munronia, Nymania, Toona, Trichilia, Melianthaceae: Melianthus, Moringaceae: Moringa, Myrtaceae: Callistemon, Eucalyptus, Eugenia, Kunzea, Leptospermum, Lophomyrtus, Metrosideros, Neomyrtus, Psidium, Syzygium, Neuradaceae: Grielum, Oliniaceae: Olinia, Penaeaceae: Brachysiphon, Endonema, Glischrocolla, Penaea, Saltera, Sonderothamnus, Stylapterus, Ranunculaceae: Anemone, Callianthemum, Caltha, Clematis, Halerpestes, Naravelia, Nigella, Oxygraphis, Ranunculus, Resedaceae: Oligomeris, Rosaceae: Geum, Rubus, Rubiaceae: Psychotria, Rutaceae: Acmadenia, Adenandra, Aegle, Agathosma, Calodendrum, Citrus, Clausena, Coleonema, Diosma, Empleurum, Euchaetis, Euodia, Glycosmis, Macrostylis, Melicope, Micromelum, Murraya, Ptaeroxylon, Ruta, Skimmia, Toddalia, Zanthoxylum, Salvadoraceae: Azima, Sapindaceae: Acer, Aesculus, Alectryon, Allophylus, Atalaya, Cardiospermum, Dodonaea, Erioglossum, Lepisanthes, Litchi, Pappea, Sapindus, Schleichera, Smelophyllum, Simarubaceae: Brucea, Picrasma, Stachyuraceae: Stachyurus, Staphyleaceae: Staphylea, Turpinia, Thymelaeaceae: Aquilaria, Daphne, Drapetes, Edgeworthia, Gnidia, Lachnaea, Passerina, Pimelea, Stellera, Struthiola, Wikstroemia, Tropaeolaceae: Tropaeolum.*

Table S17. Plant genera with high priority for future screening for conditions related to respiratory/pulmonary problems

These genera were included in the hot nodes of at least two of the study regions (Nepal, New Zealand, and the Cape of South Africa) for this category of conditions.

Euphorbiaceae: Acalypha, Aleurites, Asteraceae: Anaphalis, Arctotheca, Arctotis, Berkheya, Blumeopsis, Caesulia, Carpesium, Cullumia, Cyathocline, Didelta, Elephantopus, Euchiton, Gamochaeta, Gazania, Gnaphalium, Heterolepis, Hoplophyllum, Inula, Laggera, Pentanema, Platycarpha, Pulicaria, Sphaeranthus, Vernonia, Euphorbiaceae: Baliospermum, Croton, Jatropha, Ostodes, Geraniaceae: Erodium, Geranium, Monsonia, Pelargonium, Lamiaceae: Ballota, Clinopodium, Galeobdolon, Lamium, Leonotis, Marrubium, Mentha, Micromeria, Origanum, Salvia, Thymus, Malvaceae: Firmiana.

Table S18. Plant genera with high priority for future screening for conditions related to skin problems

These genera were included in the hot nodes of at least two of the study regions (Nepal, New Zealand, and the Cape of South Africa) for this category of conditions.

Acanthaceae: Acanthus, Aechmanthera, Andrographis, Asystasia, Avicennia, Barleria, Chaetacanthus, Clarkeasia, Crossandra, Dicliptera, Ecbolium, Echinacanthus, Eranthemum, Hypoestes, Isoglossa, Justicia, Lepidagathis, Monechma, Nelsonia, Peristrophe, Petalidium, Phaulopsis, Pseudaechmanthera, Pseudanthemum, Ruellia, Rungia, Strobilanthes, Thunbergia, **Anacardiaceae:** Anacardium, Buchanania, Cotinus, Dobinea, Heeria, Laurophylus, Mangifera, Pistacia, Rhus, Semecarpus, Spondias, **Apocynaceae:** Acokanthera, Alstonia, Anisotoma, Araujia, Asclepias, Aspidoglossum, Ast Stephanus, Beaumontia, Calotropis, Carralluma, Carissa, Catharanthus, Ceropagia, Chonemorpha, Cryptolepis, Cynanchum, Dregea, Eustegia, Fockea, Gomphocarpus, Gonioma, Gymnema, Hemidesmus, Heterostemma, Holarrhena, Holostemma, Hoyia, Ichnocarpus, Leptadenia, Marsdenia, Microloba, Nerium, Oncinema, Orthanthera, Oxystelma, Pachypodium, Parsonsia, Pentasachme, Pergularia, Periploca, Plumeria, Quaque, Raphistemma, Rauvolfia, Riocreuxia, Sarcostemma, Secamone, Stapelia, Tabernaemontana, Trachelospermum, Treutlera, Tylophora, Vallaris, Vinca, Vincetoxicum, Wrightia, Xysmalobium, **Araliaceae:** Merrilliopanax, Asteraceae: Aster, Conyza, Felicia, Grangea, Vittadinia, **Bignoniaceae:** Campsis, Incarvillea, Jacaranda, Macfadyena, Oroxylum, Pandorea, Pyrostegia, Rhigozum, Stereospermum, Tecoma, Tecomanthe, Tecomaria, **Boraginaceae:** Anchusa, Arnebia, Asperugo, Codon, Cordia, Cynoglossum, Echiostachys, Echium, Ehretia, Heliotropium, Hydroleia, Lappula, Lasiocaryum, Lindelofia, Lithospermum, Lobostemon, Myosotis, Onosma, Trichodesma, Trigonotis, **Campanulaceae:** Sphenoclea, **Carlemanniaceae:** Carlemnia, **Convolvulaceae:** Aniseia, Argyreia, Calystegia, Convolvulus, Dichondra, Evolvulus, Falkia, Ipomoea, Operculina, Porana, **Coriariaceae:** Coriaria, **Corynocarpaceae:** Corynocarpus, **Cunoniaceae:** Ackama, Curonia, Platylaphus, Weinmannia, **Ebenaceae:** Diospyros, Euclea, Elaeocarpaceae: Aristotelia, Elaeocarpus, Sloanea, **Ericaceae:** Monotropa, Escalloniaceae: Ixerba, **Fabaceae:** Psoralea, Geissolomataceae: Geissoloma, **Gentianaceae:** Gentiana, scora, Centaurium, Chironia, Exacum, Gentiana, Gentianella, Halenia, Lomatogonium, Orphium, Sebaea, Swertia, Geraniaceae: Erodium, Geranium, Monsonia, Pelargonium, **Gesneriaceae:** Aeschynanthus, Chirita, Didymocarpus, Platystemma, Rhabdothamnus, Rhynchoglossum, Streptocarpus, **Icacinaceae:** Cassinopsis, Pyrenacantha, Lamiaceae: Ajuga, Anisochilus, Anisomeles, Ballota, Clinopodium, Colebrookea, Coleus, Craniotome, Dracocephalum, Elsholtzia, Galeobdolon, Galeopsis, Glechoma, Gomphostemma, Lamium, Leonotis, Leonurus, Leucas, Marrubium, Melissa, Mentha, Micromeria, Mosla, Nepeta, Ocimum, Origanum, Perilla, Phlomis, Plectranthus, Pogostemon, Prunella, Salvia, Scutellaria, Stachys, Teucrium, Thymus, Lauraceae: Cryptocarya, **Lentibulariaceae:** Pinguicula, Utricularia, Gardneria, Loganiaceae: Geniostoma, Logania, Mitrasacme, Mitreola, Strychnos, **Malvaceae:** Alcea, Anisodontea, Hoheria, Lavatera, Malva, Plagianthus, Sida, **Melastomataceae:** Medinilla, Melastoma, Osbeckia, Meliaceae: Aglaia, Azadirachta, Chukrasia, Cipadessa, Dysoxylum, Ekebergia, Melia, Munronia, Nymania, Toona, Trichilia, **Melianthaceae:** Melianthus, **Montiniaceae:** Montinia, **Myoporaceae:** Myoporum, **Myrtaceae:** Callistemon, Eucalyptus, Eugenia, Kunzea, Leptospermum, Lophomyrtus, Metrosideros, Neomyrtus, Psidium, Syzygium, Oleaceae: Chionanthus, Fraxinus, Jasminum, Ligustrum, Menodora, Nestegis, Olea, Osmanthus, Syringa, **Oliniaceae:** Olinia, **Oxalidaceae:** Biophytum, Oxalis, **Passifloraceae:** Passiflora, **Pedaliaceae:** Martynia, Sesamum, **Penaeaceae:** Brachysiphon, Endonema, Glischrocolla, Penaea, Saltera, Sonderothamnus, Stylapterus, **Phrymaceae:** Glossostigma, Phryma, **Plantaginaceae:** Callitricha, Hippuris, Plantago, **Poaceae:** Pseudosasa, **Ranunculaceae:** Myosurus, **Rubiaceae:** Adina, Anthocephalus, Anthospermum, Argostemma, Burchellia, Canthium, Carpacoce, Chassalia, Coffea, Coprosma, Galium, Galopina, Gardenia, Hedyotis, Hydrophyllax, Hymenodictyon, Ixora, Knoxia, Kohautia, Lasianthus, Leptodermis, Luculia, Meyna, Mitragyna, Morinda, Mussaenda, Mycteria, Neanotis, Nenax, Nertera, Oldenlandia, Ophiorrhiza, Paederia, Pavetta, Psydrax, Randia, Rothmannia, Rubia, Serissa, Spermadictyon, Uncaria, Wendlandia, **Rutaceae:** Acmadenia, Adenandra, Aegle, Agathosma, Calodendrum, Citrus, Clausena, Coleonema, Diosma, Empleurum, Euchaetis, Euodia, Glycosmis, Macrostylis, Melicope, Micromelum, Murraya, Ptaeroxylon, Ruta, Skimmia, Toddalia, Zanthoxylum, **Salicaceae:** Dovyalis, Populus, Salix, Trimeria, **Sapindaceae:** Acer, Aesculus, Alectryon, Allophylus, Atalaya, Cardiospermum, Dodonaea, Erioglossum, Lepisanthes, Litchi, Pappea, Sapindus, Schleichera, Smelophyllum, **Scrophulariaceae:** Adenosma, Alectra, Alonsoa, Angelonia, Antirrhinum, Aptosimum, Bacopa, Bartsia, Buchnera, Buddleja, Calceolaria, Calorhabdos, Cromidon, Cynium, Diascia, Diclis, Digitalis, Dischisma, Dopatrium, Ellisiophyllum, Euphrasia, Freylinia, Gomphostigma, Graderia, Halleria, Harveya, Hebe, Hebenstretia, Hemimeris, Hemiphagma, Hyobanche, Ixianthes, Jamesbrittenia, Jovellana, Kickxia, Lancea, Lindenbergia, Lindernia, Lyperia, Mazus, Melasma, Microdon, Mimulus, Nemesis, Nuxia, Oftia, Parahebe, Pedicularis, Peeliostomum, Phyllopodium, Polycarena, Scrophularia, Selago, Sopubia, Striga, Sutera, Teedia, Torenia, Verbasum, Veronica, Zaluziansky, **Simaroubaceae:** Brucea, Picrasma, Solanaceae: Atropa, Brugmansia, Brunfelsia, Capsicum, Cestrum, Datura, Lycianthes, Lycium, Lycopersicon, Mandragora, Nicandra, Nicotiana, Physalis, Solanum, Withania, **Stilbaceae:** Euthystachys, Kogelbergia, Retzia, Stilbe, **Tetrachondraceae:** Tetrachondria, **Urticaceae:** Maoutia, Vahlia, **Vahlia:** Vahlia, **Verbenaceae:** Callicarpa, Caryopteris, Chascanum, Clerodendrum, Gmelina, Holmskioldia, Lantana, Nyctanthes, Premna, Tectona, Teucrium, Verbena, Vitex, **Violaceae:** Hybanthus, Melicytus, Viola, **Zingiberaceae:** Amomum.

Table S19. Plant genera with high priority for future screening for conditions related to urinary problems

These genera were included in the hot nodes of at least two of the study regions (Nepal, New Zealand, and the Cape of South Africa) for this category of conditions.

Fabaceae: Carmichaelia, Cianthus, **Geraniaceae:** Erodium, Geranium, Monsonia, Pelargonium, **Meliaceae:** Aglaia, Azadirachta, Chukrasia, Cipadessa, Dysoxylum, Ekebergia, Melia, Munronia, Nymania, Toona, Trichilia, **Myrtaceae:** Kunzea, Leptospermum, **Poaceae:** Imperata, Miscanthus, Saccharum, Sorghum, **Ranunculaceae:** Clematis, Naravelia, **Rosaceae:** Acaena, Agrimonie, Alchemilla, Cliffortia, Filipendula, Fragaria, Geum, Potentilla, Rosa, Rubus, Sanguisorba, Sibbaldia, **Rutaceae:** Acmadenia, Adenandra, Aegle, Agathosma, Calodendrum, Citrus, Clausena, Coleonema, Diosma, Empleurum, Euchaetis, Euodia, Glycosmis, Macrostylis, Melicope, Micromelum, Murraya, Ptaeroxylon, Ruta, Skimmia, Toddalia, Zanthoxylum, **Simaroubaceae:** Brucea, Picrasma, **Violaceae:** Hybanthus, Melicytus.

Table S20. Plant genera with high priority for future screening for conditions related to other problems

These genera were included in the hot nodes of at least two of the study regions (Nepal, New Zealand, and the Cape of South Africa) for this category of conditions.

Achariaceae: Acharia, Ceratiosicyos, Amaranthaceae: Psilotrichum, Anacardiaceae: Anacardium, Buchanania, Cotinus, Dobinea, Heeria, Laurophylus, Mangifera, Pistacia, Rhus, Semecarpus, Spondias, Apocynaceae: Araujia, Asclepias, Aspidoglossum, Ast Stephanus, Calotropis, Cynanchum, Gomphocarpus, Holostemma, Microloma, Oncinema, Oxystelma, Pergularia, Raphistemma, Sarcostemma, Telosma, Tylophora, Vincetoxicum, Xysmalobium, Asteraceae: Marasmodes, Myriactis, Begoniaceae: Begonia, Betulaceae: Alnus, Betula, Carpinus, Corylus, Brassicaceae: Alliaria, Arabidopsis, Arabis, Barbarea, Brassica, Braya, Cadaba, Capparis, Capsella, Cardamine, Chamira, Christolea, Cleome, Crateva, Descurainia, Desideria, Dilophia, Diplotaxis, Dontostemon, Draba, Erysimum, Eutrema, Hedinia, Helophilila, Iberis, Lepidium, Lignariella, Maerua, Megacarpaea, Microsymbrium, Nasturtium, Notothlaspi, Pachycladon, Pegaeophyton, Phaeonychium, Raphanus, Rorippa, Sisymbrium, Thlaspi, Torularia, Cannabaceae: Cannabis, Humulus, Caricaceae: Carica, Casuarinaceae: Casuarina, Celastraceae: Bhesa, Cassine, Celastrus, Elaeodendron, Euonymus, Gloveria, Gymnosporia, Lauridia, Lophopetalum, Maurocenia, Maytenus, Mystaloxylon, Putterlickia, Reissantia, Robsonodendron, Stackhousia, Clusiaceae: Garcinia, Hypericum, Mesua, Combretaceae: Anogeissus, Combretum, Quisqualis, Terminalia, Coriariaceae: Coriaria, Corynocarpaceae: Corynocarpus, Cucurbitaceae: Benincasa, Biswarea, Bryonia, Citrullus, Coccinia, Cucumis, Cucurbita, Cyclanthera, Diplocyclos, Edgaria, Gomphogyne, Gymnopetalum, Gynostemma, Herpetospermum, Kedrostis, Lagenaria, Luffa, Momordica, Mukia, Neoalsomitra, Sechium, Sicyos, Solena, Thladiantha, Trichosanthes, Zehneria, Cunoniaceae: Ackama, Cunonia, Platylaphus, Cunoniaceae: Weinmannia, Daticaceae: Datisca, Tetrameles, Dipterocarpaceae: Shorea, Elaeagnaceae: Elaeagnus, Hippophae, Elaeocarpaceae: Aristotelia, Elaeocarpus, Sloanea, Elatinaceae: Bergia, Elatine, Escalloniaceae: Ixerba, Euphorbiaceae: Acalypha, Adenocline, Alchornea, Aleurites, Andracrine, Antidesma, Baccarea, Baliospermum, Bischofia, Breynia, Bridelia, Chrozophora, Cleidion, Clutia, Croton, Dalechampia, Euphorbia, Excoecaria, Flueggea, Glochidion, Homalanthus, Hyadenanche, Jatropha, Lachnostylis, Leidesia, Macaranga, Mallotus, Mercurialis, Ostodes, Phyllanthus, Poranthera, Putranjiva, Ricinus, Sapium, Sauvagesia, Securinega, Seidelia, Tragia, Trewia, Fabaceae: Abrus, Acacia, Acrocarpus, Aeschynomene, Albizia, Alysicarpus, Amphicarpa, Amphithalea, Apis, Arachis, Argyrolobium, Aspalathus, Astragalus, Atylosia, Bauhinia, Bolusafra, Butea, Caesalpinia, Cajanus, Calpurnia, Campylotropis, Canavalia, Caragana, Carmichaelia, Cassia, Chamaecrista, Chesneya, Cicer, Cianthus, Clitoria, Cochlianthus, Codariocalyx, Colutea, Crotalaria, Cyclopia, Cyrtisus, Dalbergia, Delonix, Derris, Desmodium, Dipogon, Dolichos, Dumasia, Dunbaria, Entada, Eriosema, Erythrina, Flemingia, Galactia, Geissaspis, Genista, Glycine, Glycyrrhiza, Gueldenstaedtia, Hedysarum, Hypocalyptus, Indigofera, Kennedia, Lablab, Lathyrus, Lebeckia, Lens, Lespedeza, Lessertia, Leucaena, Liparia, Lotononis, Lotus, Lupinus, Macrotyloma, Medicago, Melilotus, Meliolobium, Millettia, Mimoso, Montigena, Mucuna, Ormosia, Otholobium, Oxytropis, Paracalyx, Paraserianthes, Parochetus, Phaseolus, Piptanthus, Pisum, Pithecellobium, Podalyria, Polhillia, Pongamia, Pterocarpus, Pueraria, Rafnia, Rhynchosia, Robinia, Saraca, Schotia, Senna, Sesbania, Shuteria, Smithia, Sophora, Spatholobus, Stirtonanthus, Tadehagi, Tamarindus, Tephrosia, Thermopsis, Trifolium, Trigonella, Uraria, Vicia, Vigna, Virgilia, Wiborgia, Wisteria, Xiphotheca, Zornia, Fagaceae: Castanopsis, Lithocarpus, Nothofagus, Quercus, Geissolomataceae: Geissoloma, Geraniaceae: Erodium, Geranium, Monsonia, Pelargonium, Juglandaceae: Engelhardia, Juglans, Lauraceae: Cryptocarya, Linaceae: Anisadenia, Linum, Reinwardtia, Lythraceae: Ammannia, Cuphea, Duabanga, Lagerstroemia, Lawsonia, Lythrum, Punica, Rotala, Trapa, Woodfordia, Malpighiaceae: Aspidopterys, Hiptage, Malvaceae: Abroma, Abutilon, Adansonia, Alcea, Anisodontea, Bombax, Byttneria, Corchorus, Entelea, Eriolaena, Firmiana, Gossypium, Grewia, Helicteres, Hermannia, Hibiscus, Hoheria, Kydia, Lavatera, Malva, Malvaviscus, Melochia, Pavonia, Plagianthus, Pterospermum, Sida, Sparrmannia, Sterculia, Thespesia, Triumfetta, Urena, Melastomataceae: Medinilla, Melastoma, Osbeckia, Meliaceae: Aglaia, Azadirachta, Chukrasia, Cipadessa, Dysoxylum, Ekebergia, Melia, Munronia, Nymania, Toona, Trichilia, Melianthaceae: Melianthus, Moraceae: Artocarpus, Ficus, Maclura, Morus, Streblus, Moringaceae: Moringa, Myricaceae: Morella, Myrtaceae: Callistemon, Eucalyptus, Eugenia, Kunzea, Leptospermum, Lophomyrtus, Metrosideros, Neomyrtus, Psidium, Syzygium, Neuradaceae: Grielum, Ochnaceae: Ochna, Oliniaceae: Olinia, Onagraceae: Chamerion, Circae, Epilobium, Ludwigia, Oenothera, Oxalidaceae: Biophytum, Oxalis, Parnassiaceae: Parnassia, Passifloraceae: Passiflora, Penaeaceae: Brachysiphon, Endonema, Glischrocolla, Penaea, Salteria, Sonderothamnus, Styphlerus, Phyllanthaceae: Aporusa, Poaceae: Australopyrum, Podostemaceae: Hydrobryum, Polygalaceae: Muraltia, Polygal, Securidaca, Resedaceae: Oligomeris, Rhamnaceae: Berchemia, Discaria, Gouania, Helinus, Hovenia, Noltea, Palurus, Phyllya, Pomaderris, Rhamnella, Rhamnus, Sageretia, Scutia, Trichocephalus, Ventilago, Ziziphus, Rhizophoraceae: Carallia, Rosaceae: Acaena, Agrimonie, Alchemilla, Aruncus, Clifforia, Cotoneaster, Crataegus, Docynia, Eriobotrya, Filipendula, Fragaria, Geum, Malus, Neillia, Photinia, Potentilla, Prunus, Pygeum, Pyracantha, Rosa, Rubus, Sanguisorba, Sibbaldia, Sorbaria, Sorbus, Spiraea, Rutaceae: Acmadenia, Adenandra, Aegle, Agathosma, Calodendrum, Citrus, Clausena, Coleonema, Diosma, Empleuridium, Empleurum, Euchaetis, Euodia, Glycosmis, Macrostylis, Melicope, Micromelum, Murraya, Ptaeroxylon, Ruta, Skimmia, Toddalia, Zanthoxylum, Salicaceae: Casearia, Dovyalis, Flacourzia, Gynocardia, Homalium, Kiggelaria, Populus, Salix, Scopolia, Trimeria, Xylosma, Salvadoraceae: Azima, Sapindaceae: Acer, Aesculus, Alectryon, Allophylus, Atalaya, Cardiospermum, Dodonaea, Erioglossum, Lepisanthes, Litchi, Pappea, Sapindus, Schleichera, Smelophyllum, Simaroubaceae: Brucea, Picrasma, Stachyuraceae: Stachyurus, Staphyleaceae: Staphylea, Turpinia, Thymelaeaceae: Aquilaria, Daphne, Drapetes, Edgeworthia, Gnidia, Lachnaea, Passerina, Pimelea, Stellera, Struthiola, Wikstroemia, Tropaeolaceae: Tropaeolum, Ulmaceae: Celtis, Chaetachme, Holoptelea, Tremula, Ulmus, Urticaceae: Boehmeria, Chamabainia, Dendrocnide, Didymodoxa, Droguetia, Elatostema, Forsskaolea, Girardinia, Gonostegia, Laportea, Lecanthus, Parietaria, Pilea, Poikilospermum, Procris, Urtica, Violaceae: Hybanthus, Melicytus, Viola, Vitaceae: Ampelocissus, Ampelopsis, Cayratia, Cissus, Cyphostemma, Leea, Parthenocissus, Rhoicissus, Tetrastigma, Vitis, Zygophyllaceae: Augea, Seetzenia, Tribulus, Zygophyllum.

Table S21. Taxa included in the phylogenetic analysis for genera of the flora of Nepal based on *rbcL* plastid sequences

GenBank accession numbers are given for each taxon.

Abelia triflora AF206727; *Abies homolepis* AB015648; *Abroma angusta* AJ012208; *Abrus precatorius* Z70167; *Abutilon* sp. AM235023; *Acacia karroo* AM235003; *Acalypha insulana* AB233854; *Acampe papillosa* JQ933201; *Acanthocalyx albus* AF446943; *Acanthopanax trifoliatus* U50239; *Acanthospermum hispidum* JQ933202; *Acer sterculiaceum* DQ978435; *Achillea millefolium* L13641; *Achyranthes aspera* AY270048; *Aconitum artemisiifolium* DQ099435; *Acongonon molle* EF653764; *Acorus calamus* D28865; *Acrocarpus fraxinifolius* AY904371; *Acroglochin chenopodioides* AY270049; *Acronema tenerum* JQ933205; *Actaea laciniata* DQ099449; *Actinidia callosa* AJ549061; *Adansonia digitata* AY328180; *Adenocaulon himalaicum* JQ933206; *Adenosma indianum* JQ933207; *Adenostemma lavenia* JQ933208; *Adina rubella* AJ346965; *Adonis amurensis* AY954487; *Aechmanthera grossypina* JQ933209; *Aegle marmelos* AF066811; *Aerva javanica* AY270050; *Aeschynanthus micranthus* AF170222; *Aeschynomene indica* AF308701; *Aesculus pavia* U39277; *Agapanthus africanus* AY465699; *Agapetes buxifolia* AF419811; *Agave ghiesbreghtii* AF206729; *Ageratum conyzoides* JQ933210; *Aglaias elaeagnoidea* AY128209; *Agrimony parviflora* U06791; *Agrostis stolonifera* AJ746280; *Agrostophyllum glutinaceum* AY368351; *Ainsliaea acerifolia* AY874432; *Ajuga reptans* Z37385; *Alangium chinense* L11209; *Albizia julibrissin* Z70147; *Alcea rosea* JQ933211; *Alchemilla mollis* U06792; *Alchornea cordifolia* AY794959; *Aletris spicata* AB088834; *Aleurites moluccana* AY794883; *Alisma plantago-aquatica* L08759; *Alliaria petiolata* JQ933212; *Allium cepa* D38294; *Alnus sinuata* AY263926; *Alocasia odora* JQ933213; *Aloe vera* AY323649; *Alopecurus geniculatus* AJ746281; *Alpinia purpurata* AY298816; *Alstonia scholaris* X91760; *Alternanthera caracasana* AY270053; *Alysicarpus vaginalis* JQ933214; *Amaranthus tricolor* X53980; *Amischotolype monosperma* AF312239; *Ammannia baccifera* AY036145; *Amomum tsao-ko* FJ972788; *Amorphophallus paeoniifolius* AF497091; *Ampelocissus thrysiflora* AJ402919; *Ampelopsis megalophylla* AJ402920; *Amphicarpa bracteata* AF181930; *Anacardium occidentale* AY462008; *Anagallis arvensis* M88343; *Ananas comosus* L19977; *Anaphalis triplinervis* JQ933215; *Anchusa officinalis* JQ933216; *Andropogon paniculata* JQ933217; *Andropogon gerardii* AJ784818; *Androsace erecta* AF395004; *Anemone tenuifolia* AM235090; *Anethum graveolens* EU016783; *Angelica lucida* U50221; *Angelonia pubescens* AF123672; *Anisadenia pubescens* FJ169557; *Aniseia martinicensis* AY100998; *Anisochilus pallidus* JQ933218; *Anisomeles indica* FJ513149; *Annona muricata* L12629; *Anogeissus leiocarpa* AF425709; *Anthocephalus chinensis* JQ933220; *Anthogonium gracile* AF264153; *Anthoxanthum odoratum* AJ746282; *Anthriscus aemula* D44554; *Antidesma bunius* AY663566; *Antirrhinum majus* L11688; *Aphyllorchis caudata* FJ454873; *Apios taiwaniana* AB045787; *Apium graveolens* L01885; *Apluda mutica* JQ933221; *Aporusa frutescens* Z75674; *Apostasia stylidioides* Z73705; *Aquilaria beccariana* Y15149; *Aquilegia brevistyla* DQ099444; *Arabidopsis thaliana* NC_000932; *Arabis glabra* DQ310542; *Arachis hypogaea* U74247; *Arachnis longisepala* JQ933223; *Aralia spinosa* L11166; *Araucaria bidwillii* U96472; *Arceuthobium verticilliflorum* L26067; *Arctium lappa* JQ933225; *Ardisia crenata* L12598; *Areca triandra* AJ404819; *Arenaria drummondii* M83541; *Argemone mexicana* U86621; *Argostemma hookeri* Z68788; *Argyreia nervosa* AY100977; *Argyrolobium uniflorum* Z95548; *Ariopsis peltata* L10255; *Arisaema tortuosum* AF497109; *Aristida adscensionis* AM849349; *Aristolochia gigantea* AY572260; *Arnebia benthamii* JQ933226; *Artemisia afra* AM234849; *Arthraxon* sp. AJ746253; *Artocarpus altilis* AF500345; *Aruncus dioicus* U06794; *Arundina graminifolia* AF074111; *Arundinaria tecta* AJ746179; *Arundinella deppeana* AM849417; *Arundo donax* U13226; *Asarum yakusimense* AB205609; *Asclepias curassavica* X91774; *AscoCentrum ampullaceum* JQ933227; *Asparagus officinalis* L05028; *Asperugo procumbens* JQ933228; *Aspidopterys elliptica* AF344459; *Aster bakeranus* AM234851; *Astilbe taquetii* L11173; *Astragalus sparsus* Z95550; *Asyneuma virgatum* AY655146; *Asystasia travancorica* JQ933229; *Athamanta sicula* JQ933230; *Atropa belladonna* U08609; *Atylosia lineata* AF1781931; *Avena fatua* AJ746257; *Axonopus compressus* EF125127; *Axyris prostrata* AY270062; *Azadirachta indica* AY128215; *Baccaurea javanica* AY663570; *Bacopa repens* EF467905; *Balfoussermum montanum* AY794884; *Bambusa validia* AJ746171; *Barbarea verna* AP009370; *Barleria prionitis* L01886; *Barringtonia asiatica* Z80174; *Basella alba* M62564; *Bauhinia purpurea* Z70162; *Beaumontia grandiflora* AJ002882; *Begonia isoptera* AF534723; *Beilschmiedia pendula* GQ981679; *Belamcanda chinensis* AJ307078; *Benincasa hispida* AY862549; *Berberis thunbergii* AF139878; *Berchemia discolor* AJ225786; *Bergenia cordifolia* U06208; *Bergia ammannioides* AJ402927; *Beta vulgaris* DQ067450; *Betula platyphylla* AY263927; *Bhessa robusta* AY935723; *Bidens pilosa* var. minor JQ933234; *Biophytum reinwardtii* JQ933235; *Bischofia javanica* AB233917; *Bistorta amplexicaule* AF297130; *Biswarea tonglensis* JQ933236; *Blainvillea acmella* JQ933237; *Blumeopsis flava* JQ933238; *Blysmus compressus* AY404700; *Blyxa echinisperma* AB088810; *Boehmeria nivea* AJ235801; *Boerhavia elegans* JQ933239; *Bombax malabaricum* AY328181; *Borassus flabellifer* AY012469; *Boronia emeryi* EF125079; *Bosea yervamora* AY270069; *Bothriochloa ischemum* EF125115; *Bougainvillea glabra* M88340; *Boussingaultia cordifolia* JQ933240; *Brachiaria villosa* AM849375; *Brachyactis menthodora* JQ933241; *Brachycorythis* sp. AM235037; *Brachypodium sylvaticum* AJ746258; *Brachystemma calycinum* JQ933244; *Brassaiopsis hispida* JQ933245; *Brassica juncea* AY167979; *Braya purpurascens* JQ933246; *Breea arvensis* JQ933247; *Breynia cernua* AB233918; *Bridelia tomentosa* AY663574; *Briza media* AJ746285; *Bromus arenarius* AY691632; *Brucea mollis* U38924; *Bruinsmia styracoides* AF421086; *Brunfelsia americana* AY206720; *Buchanania latifolia* U39275; *Buchnera floridana* AF026822; *Buddleja asiatica* AJ001758; *Bulbophyllum lobbii* AF074115; *Bulbostylis hispida* Y12944; *Bupleurum falcatum* U50224; *Burmannia longifolia* AF307484; *Butea minor* AB045789; *Buxus sempervirens* AF093717; *Byttneria pilosa* AB269890; *Cacalia graciflora* JQ933248; *Caesalpinia pulcherrima* Z70153; *Caesulia axillaris* JQ933249; *Cajanus cajan* Z95535; *Calamagrostis epigejos* AJ784820; *Calamus usitatus* M81810; *Calanthe tricarinata* AF264160; *Calceolaria* sp. AF123669; *Caldesia oligococca* AY277799; *Calendula officinalis* JQ933250; *Callianthemum taipaicum* FJ626580; *Callicarpa dichotoma* L14393; *Callistemon citrinus* AM235652; *Callitriches stagnalis* AF248023; *Calorhabdos brunonianus* JQ933251; *Calotropis procera* AJ419736; *Caltha palustris* AY395532; *Calystegia sepium* AY100992; *Camellia sinensis* AF380037; *Campanula latifolia* EF141027; *Campsis grandiflora* AF190429; *Campylandra aurantiaca* AB089635; *Campylotropis griffithii* U74228; *Canna glauca* AF378774; *Cannabis sativa* AJ402933; *Canscora diffusa* JQ933252; *Cansjera leptostachya* DQ790128; *Canthium inerme* AM235109; *Capillipedium parviflorum* AM849398; *Capparis spinosa* AY167985; *Capsella bursa-pastoris* NC_009270; *Capsicum baccatum* U08610; *Caragana arborescens* Z70168; *Carallia brachiata* AB233928; *Caralluma indica* EU196258; *Cardamine flexuosa* D88905; *Cardiocrinum giganteum* AF275989; *Cardiospermum grandiflorum* AY724348; *Carduus edelbergii* JQ933253; *Carex nigra* AY395533; *Careya arborea* AF077655; *Carica papaya* M95671; *Carissa bispinosa* AJ419738; *Carlemannia griffithii* AJ402937; *Carpesium nepalense* JQ933254; *Carpinus laxiflora* AB060585; *Carthamus tinctorius* L13862; *Carum verticillatum* JQ933255; *Caryopteris incana* U28869; *Caryota mitis* M81811; *Casearia sylvestris* AF206746; *Cassia senna* Z70155; *Cassine peragua* AM234952; *Cassiopae mortensiana* L12603; *Castanopsis sieboldii* AB060564; *Casuarina equisetifolia* AY263930; *Cathatanthus roseus* X91757; *Cayratia trifolia* AJ419727; *Cedrus deodara* X63662; *Celastrus orbiculatus* AY788194; *Celosia argentea* AY270072; *Celtis philippensis* AY263941; *Centaurea iberica* JQ933258; *Centaurium erythraea* FJ395560; *Centella asiatica* D44559; *Centipeda minima* JQ933259; *Centotheca lappacea* AM887875; *Cephalanthera damasonium* AF074123; *Cerastium glomeratum* M83542; *Ceratostigma minus* Z97641; *Ceratostylis rubra* AY368353; *Cereus fernambucensis* AY875240; *Ceropegia woodii* X91775; *Cestrum nocturnum* AY206721; *Chaerophyllum khorosanicum* JQ933260; *Chamabainia cuspidata* JQ933261; *Chamaesciadium acaule* JQ933262; *Chassalia parviflora* Z68790; *Chenopodium botrys* AY270080; *Chesneya nubigena* JQ933263; *Chionanthus virginicus* DQ673309; *Chirita liboensis* JQ933264; *Chloranthus erectus* AY236834; *Chloris gayana* AM849409; *Chlorophytum ramosum* AB003273; *Chukrasia tabularis* AY128223; *Cicer arietinum* AF308707; *Cicerbita cyannea* JQ933267; *Cimicifuga simplex* AY954483; *Cinnadenia paniculata* JQ933268; *Cinnamomum camphora* L12641; *Cipadessa baccifera* U39083; *Circaeaa alpina* L10216; *Circaeaster agrestis* AF093720; *Cirsium arvense* AY395534; *Cissampelos pareira* AF197590; *Cissus quadrangularis* AJ419720; *Citrullus lanatus* DQ535745; *Citrus sinensis* NC_008334; *Cladium jamaicense* Y12988; *Clarkeasia parviflora* JQ933269; *Clausena excavata* AF066813; *Cleidion castaneifolium* AY794936; *Cleisostoma rolfeanum* AF074130; *Clematis ganpiniana* AY954491; *Cleome viridiflora* AY483268; *Clerodendrum fragrans* L11689; *Cleyera japonica* AF421090; *Clinopodium chinense* FJ513146; *Clintonia udensis* AB034750; *Clitoria ternatea* U74237; *Coccinia grandis* DQ535792; *Coccus trilobus* L12642; *Cochlianthus gracilis* JQ933271; *Cocos nucifera* AY012507; *Codariocalyx motorius* JQ933272; *Codonopsis viridis* AY655148; *Coelogyne cristata* AF074133; *Coffea arabica* X81095; *Coix lacryma-jobi* AM887882; *Colebrookea oppositifolia* U78712; *Coleus luteus* JQ933273; *Colocasia esculenta* JQ933275; *Colutea* sp. JQ933276; *Combretum wallichii* AY036151; *Commelinaceae* benghalensis L05033; *Convolvulus arvensis* AY100993; *Conyza scabrida* AM234861; *Corchorus neocaledonicus* AF523842; *Cordia* sp. JQ933277; *Coriandrum sativum* L11676; *Coriaria nepalensis* AY968522; *Cornus controversa* AF190433; *Cortiella cortioides* JQ933278; *Corydalis nobilis* AF093722; *Corylus avellana* AY263929; *Costus lateriflorus* AY298826; *Cotinus coggygria* AY510148; *Cotoneaster* sp. JQ933279; *Cousinia tenella* JQ933280; *Craniotome furcata* JQ933281; *Crassocephalum crepidioides* JQ933283; *Crateva odora* AY167986; *Cremanthodium oblongatum* JQ933284; *Cremastora appendiculata* EU391354; *Crepis tibetica* JQ933285; *Crinum asiaticum* JQ933286; *Crocus pulchellus* AJ309668; *Crossandra infundibuliformis* JQ933287; *Crotalaria pallida* Z70135; *Croton punctatus* EF405851; *Cryptocarya obovata* U06841; *Cryptolepis obtusa* JQ933288; *Cryptomeria japonica* AJ621937; *Cucubalus baccifera* JQ933289; *Cucumis sativus* DQ535747; *Cucurbita pepo* AF206756; *Cuminum cyminum* JQ933290; *Cuphea lanceolata* AY036137; *Cupressus sempervirens* L12571; *Curculigo capitulata* AY149362; *Curcuma cochininchinensis*

EF590516; *Cyananthus lobatus* L18795; *Cyanotis* sp. AM234966; *Cyathocline purpurea* JQ933291; *Cycas circinalis* AF531198; *Cyclanthera brachystachya* DQ535749; *Cymbidium eburneum* AY368356; *Cymbopogon citratus* AM887872; *Cynanchum acutum* JQ933292; *Cynodon dactylon* AM849393; *Cynoglossum* sp. JQ933293; *Cyperus longus* Y13015; *Cypripedium passerinum* AF074142; *Cyrtococcum patens* AM849331; *Dactylis glomerata* AY395535; *Dactyloctenium aegyptium* AM887877; *Dactylorrhiza fuchsii* JQ933294; *Dahlia pinnata* JQ933295; *Dalbergia hupeana* U74236; *Danthonia spicata* U31102; *Daphne mezereum* AJ297233; *Daphniphyllum macropodum* AM183400; *Datisca cannabina* L21939; *Datura metel* EF590517; *Daucus carota* NC_008325; *Decaisnea fargesii* D85692; *Deeringia amaranthoides* AY270085; *Delonix regia* Z70156; *Delphinium bonvalottii* FJ626583; *Dendranthema mutellina* JQ933296; *Dendrobium crystallinum* D58407; *Dendrocalamus brandisii* AJ746174; *Dendrocnide sinuata* FJ432246; *Dendrophthoe nilgherrensis* JQ933297; *Derris laxiflora* U74234; *Deschampsia cespitosa* AY691635; *Descurainia sophia* JQ933298; *Desideria linearis* JQ933299; *Desmodium podocarpum* U74257; *Desmos dasymaschala* JQ933300; *Deutzia rubens* AF323196; *Dianella ensifolia* M96960; *Dianthus Caryophyllus* M77699; *Diapensia lapponica* L12612; *Dicentra eximia* L37917; *Dichanthium annulatum* JQ933301; *Dichroa febrifuga* AF323187; *Dichrocephala benthamii* JQ933302; *Dicliptera obanensis* JQ933303; *Dicranostigma franchetianum* U86624; *Didymocarpus albomarginata* AF170231; *Digitalis purpurea* X83720; *Digitaria ciliaris* AM849336; *Dillenia indica* L01903; *Dilophia salsa* JQ933304; *Dioscorea praeterita* AY904803; *Diospyros kaki* Z80185; *Dipcadi filifolium* AM902303; *Diphylax urceolata* JQ933305; *Diplarche multiflora* AF419821; *Diplocyclos palmatus* AY862552; *Diplotaxis tenuifolia* JQ933306; *Dipsacus sativus* L13864; *Disporum sessile* D17376; *Dobinea vulgaris* EU123470; *Docynia indica* JQ933307; *Dodecadenia grandiflora* JQ933308; *Dolichos decumbens* AM235006; *Dontostemon glandulosus* JQ933309; *Dopatrium juncinum* EF467903; *Doronicum roylei* JQ933310; *Draba nemorosa* NC_009272 *Dracocephalum grandiflorum* Z37388; *Dregea abyssinica* JQ933311; *Drepanostachyum falcatum* AJ746265; *Drosera burmannii* L01908; *Drymaria diandra* JQ933312; *Duabanga grandiflora* AY905407; *Dubyaea hispida* JQ933313; *Dufrenoya sphaerocarpa* EF584592; *Dunbaria villosa* AF181933; *Dunbaria fusca* JQ933314; *Dysoxylum gaudichaudianum* AY128227; *Ebolium amplexicaule* JQ933315; *Echinanthus attenuatus* JQ933316; *Echinochloa crus-galli* AM887871; *Echinops exaltatus* L13650; *Eclipta prostrata* JQ933318; *Edgaria darjeelingensis* JQ933319; *Edgeworthia chrysanthia* AJ297920; *Ehretia anacua* AJ247617; *Eichhornia crassipes* U41574; *Elaeagnus angustifolia* U17038; *Elaeocarpus sphaericus* AF206765; *Elatine triandra* AB233853; *Elatostema acuminatum* AY208702; *Eleocharis atropurpurea* Y13012; *Elephantopus scaber* JQ933320; *Eleusine indica* AM887880; *Ellisiophyllum pinnatum* JQ933321; *Elsholtzia stauntonii* U28872; *Elymus sibiricus* AY772669; *Elytrophorus globularis* AJ746289; *Emilia sonchifolia* JQ933323; *Engelhardia fenzlii* AY147095; *Enkianthus campanulatus* L12616; *Ensete ventricosum* AF243843; *Entada pursaetha* JQ933324; *Ephedra gerardiana* AY755792; *Epigeneium acuminatum* D58410; *Epilobium rigidum* AF495763; *Epipactis helleborine* Z73707; *Eragrostiella nardoidea* JQ933326; *Eragrostis minor* AM849338; *Eranthemum pulchellum* (=nervosum) JQ933327; *Erechtites valerianae* JQ933328; *Eria ferruginea* AF074164; *Erigeron multiradiatus* JQ933329; *Eriobotrya japonica* U06800; *Eriocaulon microcephalus* L10252; *Erioglossum rubiginosum* AY724351; *Eriolaena spectabilis* AJ233126; *Eriophorum vaginatum* Y12951; *Eriosema* sp. JQ933330; *Erodium stephanianum* DQ452871; *Eryngium giganteum* DQ133808; *Erysimum capitatum* AY167980; *Erythrina speciosa* AB045801; *Erythropalum scandens* DQ790164; *Eucalyptus globulus* NC_008115; *Eugenia uniflora* AF294255; *Eulalia aurea* AM849410; *Eulophia nuda* AF074170; *Euodia hupehensis* FN552679; *Euonymus hamiltonianus* AB233942; *Eupatorium atrorubens* L13649; *Euphorbia pulcherrima* AY794819; *Euphrasia disjuncta* AY849863; *Eurya chinensis* AF089714; *Euryale ferox* M77035; *Eutrema lancifolia* JQ933332; *Evolvulus glomeratus* AY101012; *Exacum affine* L11684; *Exbucklandia populnea* AF081071; *Excoecaria cochinchinensis* AJ418809; *Fagopyrum tataricum* D86287; *Festuca rubra* AJ746261; *Ficus pumila* AF500352; *Filago hirta* JQ933335; *Filipendula vulgaris* U06804; *Fimbristylis complanata* Y13009; *Firmiana simplex* AY082355; *Flacourtiella jangomas* AF206768; *Flemingia macrophylla* JQ933336; *Floscopia scandens* AF312255; *Flueggea virosa* AB233919; *Foeniculum vulgare* D44567; *Fragaria x ananassa* U06805; *Fraxinus chinensis* DQ673301; *Fritillaria meleagris* AY395537; *Gagea lutea* AB034752; *Galactia tashiroi* AB045803; *Galearia spectabilis* AY381121; *Galeopsis bifida* JQ933337; *Galinsoga quadriradiata* JQ933338; *Galium aparine* X81091; *Gamblea ciliata* JQ933339; *Gamochaeta pensylvanica* EU384977; *Garcinia xanthochymus* AF518391; *Gardenia thunbergia* X83637; *Gardneria angustifolia* AJ235819; *Gastrochilus formosanum* JQ933340; *Gaultheria miquelianum* AF124590; *Geissaspis tenella* JQ933342; *Gentiana procera* L14398; *Gentianella rapunculoides* Y11862; *Geodorum densiflorum* JQ933343; *Geranium multiflorum* U77907; *Gerbera jamesonii* L13643; *Geum macrophyllum* U06806; *Ginkgo biloba* D10733; *Girardinia diversifolia* JQ933344; *Glechoma hederacea* Z37391; *Globba curtissii* L05449; *Glochidion puberum* AY663586; *Gloriosa superba* D28867; *Glyceria fluitans* AJ746290; *Glycine tabacina* U74197; *Glycosmis pentaphyllea* AF066820; *Glycyrrhiza glabra* Z70171; *Gmelina hystrix* U28873; *Gnaphalium* sp. AM234874; *Gnetum montanum* AY056575; *Gochnatia paucifolia* AY874433; *Gomphogyne cissiformis* EU436382; *Gomphostemma javanicum* AF501986; *Gomphrena elegans* AY270088; *Gonostegia hirta* GQ436551; *Goodyera pubescens* AF074174; *Gossypium hirsutum* NC_007944; *Gouania mauritiana* AJ390040; *Grangea maderaspatana* JQ933347; *Grevillea robusta* AF193973; *Grewia occidentalis* AJ233152; *Gueldenstaedtia himalaica* JQ933348; *Guizotia abyssinica* NC_010601; *Gymnadenia conopsea* JQ933349; *Gymnema sylvestre* JQ933350; *Gymnopetalum integrifolium* DQ535754; *Gynocardia odorata* AJ402957; *Gynostemma pentaphyllum* AY968523; *Gypsophila repens* JQ933351; *Habenaria repens* AF074177; *Halenia elliptica* JQ933353; *Halerpestes cymbalaria* AY954490; *Hedera helix* L01924; *Hedinia tibetica* JQ933355; *Hedychium flavescens* AF243848; *Hedyotis fruticosa* Z68799; *Hedysarum vicioides* U74246; *Helianthus annuus* NC_007977; *Helicia* sp. 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JQ933374; *Lactuca sativa* NC_007578; *Lagenaria siceraria* DQ535825; *Lagerstroemia indica* AY905412; *Laggera alata* JQ933375; *Lalldhwojia staintonii* JQ933376; *Lamium amplexicaule* Z37399; *Lancea tibetica* JQ933377; *Lantana camara* AF156736; *Laporteia canadensis* AF500356; *Lappula squarrosa* JQ933378; *Larix occidentalis* X63663; *Lasia spinosa* L10250; *Lasianthus batangensis* AY538499; *Lasiocaryum diffusum* JQ933379; *Lathyrus pratensis* AY395544; *Launaea secunda* JQ933380; *Lavatera acerifolia* AJ233122; *Lawsonia inermis* AY905413; *Lecanthus peduncularis* JQ933381; *Leea guineensis* AJ235783; *Leersia oryzoides* U13228; *Legousia falcata* AY655152; *Leibnitzia nepalensis* JQ933382; *Lemma minor* NC_010109; *Lens culinare* JQ933383; *Leonotis leonurus* AM234998; *Leontopodium jacotianum* JQ933384; *Leonium japonicus* FJ513159; *Lepidagathis villosa* L12594; *Lepidium virginicum* NC_009273; *Lepionurus sylvestris* DQ790131; *Lepisanthes alata* AY724360; *Leptadenia reticulata* EU196282; *Leptocodon gracilis* EU713389; *Leptodermis potanini* DQ662180; *Leptodrepanis holosteoides* JQ933385; *Lespedeza cuneata* U74215; *Leucaena leucocephala* JQ933386; *Leucanthemum vulgare* AY395546; *Leucas capensis* AM234999; *Leycesteria formosa* AF446932; *Lignariella hobsonii* subsp. *serpens* JQ933388; *Ligularia mortonii* JQ933389; *Ligusticum sinense* D44572; *Ligustrum vulgare* DQ673302; *Lilium bakerianum* AB034923; *Lindelofia longiflora* JQ933390; *Lindenbergia philippinensis* AF123664; *Lindera benzoin* AY337732; *Lindernia antipoda* AB259810; *Linum arboreum* AY380351; *Liparis liliifolia* AF518046; *Lipocarpha microcephala* Y12991; *Listera smallii* AF074184; *Litchi chinensis* AY724361; *Lithocarpus wallichianus* AB125015; *Lithospermum* sp. 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panax dispermus JQ933394; Macrosolen cochinchinensis JQ933395; Macrotyloma uniflorum JQ933396; Madhuca microphylla AF421096; Maesa myrsinoides Z80203; Magnolia pterocarpa AY008931; Mahonia bealei L75871; Maianthemum hondoense D17380; Malaxis spicata AF074188; Mallotus japonicus AB267923; Malus baccata GU363810; Malva verticillata JQ933397; Malvaviscus arboreus var. penduliflorus JQ933398; Mandragora officinalis U08614; Mangifera indica U39269; Manglietia aromatica AY008920; Manilkara zapota L01932; Maoutia puya JQ933399; Marrubium vulgare U28875; Marsdenia carvalhoi JQ933400; Martynia annua JQ933401; Maytenus hookeri AF499234; Mazus stachydifolius EU348860; Meconopsis horridula JQ933402; Medicago lupulina AY395551; Medinilla humbertiana AF215517; Meeboldia digitata JQ933403; Megacarpaea polyandra JQ933404; Melasma scabrum AF190904; Melastoma malabathricum AF270748; Melia azedarach EU042973; Melica uniflora AJ746263; Melilotus officinalis JQ933405; Meliosma simplicifolia AF197587; Melissa officinalis Z37414; Melocanna baccifera EF125082; Melochia corchorifolia JQ933406; Melodorum fruticosum AY319071; Mentha longifolia AY570390; Menyanthes trifoliata L14006; Mercurialis leioCARPA AB233867; Merremia umbellata AY100898; Merrilliopanax cordifolius AY753243; Mesua ferrea AY625024; Meyna tetraphylla X83649; Michelia champaca DQ182336; Microgynoecium tibeticum AY270107; Micromelum ceylanicum AF320853; Micromeria juliana JQ933407; Microsymbrium minutiflorum JQ933408; Microstegium sp. AM849387; Mikania micrantha JQ933409; Miliusa velutina AY318993; Millettia japonica U74233; Milula spicata JQ933410; Mimosa speggazzinii Z70151; Mimulus aurantiacus AF026835; Minuartia verna var. gerardii JQ933411; Mirabilis jalapa M62565; Misanthus capensis AM235066; Mitragyna diversifolia AJ346985; Mitrasacme pilosa AJ235821; Mitreola petiolata AJ235822; Mollugo verticillata M62566; Momordica charantia DQ535760; Monochoria vaginalis U41591; Monoptropastrum humile JQ933412; Morina longifolia AF446945; Morinda citrifolia X83651; Moringa oleifera L11359; Morus indica NC_008359; Mosla chinensis FJ513158; Mucuna nigricans AB045812; Muhlenbergia racemosa AJ784836; Mukia maderaspatana DQ535761; Munronia pinnata AY128237; Murdannia clarkeana AF312256; Murraya paniculata U38860; Musa acuminata EU017045; Mussaenda erythrophylla X83652; Mycteria malayana Z68806; Myosotis discolor AY395552; Myriactis nepalensis JQ933415; Myrica cerifera AF119179; Myricaria squamosa AY099906; Myriophyllum exaltibescens L11195; Myristica fragrans AY298839; Myrsine africana U96652; Najas minor AB004899; Nannoglottis hookeri JQ933416; Naravelia zeylanica FJ626585; Nasturtium officinale AF020325; Neanotis ingratia JQ933417; Nechamandra alternifolia U80706; Neillia sinensis U06813; Nelsonia campestris L01935; Nelumbo nucifera M77033; Neosalomitra clavigera DQ535830; Neocinnamomum caudatum JQ933418; Neolitsea cassia AY298841; Neottia nidus-avis AY368364; Neottianthe cucullata JQ933420; Nepeta cataria Z37421; Nerium oleander AJ002886; Nervilia bicarinata AF074199; Neyraudia reynaudiana EF125109; Nicandra physalodes U08615; Nicotiana tabacum NC_001879; Nigella damascena EU053918; Notholirion bulbuliferum AF275991; Nyctanthes arbor-tristis DQ673295; Nymphaea alba AJ627251; Nymphoides peltata X87392; Oberonia acaulis JQ933422; Ochna serrulata AB233908; Ocimum basilicum Z37425; Oenothera fruticosa D445771; Olax aphylla DQ792943; Olea europaea DQ673042; Ophalogramma elwesiana AF395001; Onosma graecum EU599860; Operculla turpethum AY100988; Ophiopogon japonicus AB029842; Ophiorrhiza mungos X83656; Oplismenus compositus AM849368; Opuntia dillenii AY875233; Oreorchis foliosa JQ933425; Origanum vulgare Z37427; Ormosia emarginata U74231; Oroxylum indicum AF102651; Orthanthera jasminum JQ933426; Oryza sativa NC_008155; Oryzopsis cf munroi JQ933427; Osbeckia chinensis AF215525; Osmanthus americanus DQ673311; Osmorrhiza aristata D44578; Ostodes paniculata AY794900; Osyris lanceolata L11196; Ottelia alismoides U80707; Oxalis corniculata AB233943; Oxygraphis glacialis FJ626587; Oxyria sinensis AF297148; Oystelma esculentum EU196284; Oxytropis anertii EF685981; Paederia scandens AY654280; Paeonia suffruticosa AJ402982; Palurus spina-christi AJ390051; Panax ginseng NC_006290; Pancratium canariense AF116975; Pandanus tectorius AY952439; Pandorea jasminoides AF102652; Panicum miliaceum AM849333; Panisea uniflora JQ933430; Papaver sp. AM235045; Parabaena sagittata FJ026497; Paracalyx schwefelfurthii JQ933431; Paraquilegia microphylla EF437146; Parietaria pensylvanica AF500357; Paris polyphylla D28155; Parnassia tenella AY935733; Parochetus africanus JQ933432; Parthenium hysterophorus JQ933433; Parthenocissus himalayana AJ419726; Paspalum conjugatum AM849399; Passiflora quadrangularis L01940; Patrinia triloba AF446951; Pavetta lanceolata Z68865; Pecteilis susanna JQ933434; Pedicularis foliosa AF026836; Pegaeophytum nepalense JQ933435; Peliosanthus campanulata AB029845; Pennisetum longissimum AM849356; Pentanema vestitum JQ933436; Pentasachme wallichii JQ933437; Peperomia tamayoi AY572271; Peracarpa carnosa JQ933438; Pergularia tomentosa AY545885; Pericampylus glaucus DQ099442; Perilla frutescens FJ513160; Periploca graeca AJ002889; Peristrophe cernua AM234782; Perotis rara EF125098; Persea americana AY337727; Persicaria punctata EF653783; Petalidium oblongifolia JQ933440; Petasites tricholobus JQ933441; Peucedanum galbanum AM234823; Phaeonychium jaffri JQ933442; Phagnalon niveum JQ933443; Phaius minor AF074210; Phalaenopsis aphrodite NC_007499; Phalaris arundinacea AJ784827; Phaseolus vulgaris EU196765; Phaulopsis pulchella JQ933444; Philadelphus hirsutus AF323193; Phleum pratense AJ746298; Phlomis melanantha JQ933445; Phoenix dactylifera AY012468; Photinia fraseri L11200; Phragmites australis AJ746299; Phryma leptostachya U28881; Phrynum imbricatum AY656123; Phyllanthus emblica AY765269; Physalis alkekengi U08617; Physospermopsis obtusiuscula JQ933446; Phytolacca americana M62567; Picea smithiana AF145458; Picrasma javanica EU043011; Picris hieracioides subsp. kairmensis JQ933447; Pieris formosa AB206594; Pilea pumila U00438; Pilosiloïdes hirsuta EU384975; Pimpinella saxifraga U50229; Pinanga simpliciflora AJ829898; Pinguiscula caerulea L01942; Pinus wallichiana X58131; Piper nigrum EF450315; Piptanthus nepalensis Z70123; Pistacia vera AJ235786; Pistia stratiotes M96963; Pisum sativum X03853; Pithecellobium mexicanum Z70150; Pittosporum japonicum L11202; Plantago lanceolata L36454; Platanthera ciliaris AF074215; Platystemma violoides JQ933449; Plectranthus barbatus U28882; Pleione formosana AF264173; Pleurospermum camtschaticum D44583; Plumbago zeylanica Y16905; Plumeria inodora X91767; Poa trivialis AY395555; Podocarpus nerifolius AF249618; Podocilus cultratus AF074218; Podophyllum peltatum AF093716; Pogonatherum paniceum AM849381; Pogostemon patchouly L14406; Poikilospermum sp. AF500362; Polemonium reptans L11687; Pollia hasskarlii AF312262; Polycarpon tetraphyllum AY270144; Polygalia arillata AM234210; Polygonatum oppositifolium AB029830; Polygonum aviculare EF653761; Polypogon lutosus EF125145; Ponerorchis chusua JQ933451; Pongamia pinnata AY289676; Populus deltoides AF133677; Porana velutina AY101027; Portulaca oleracea AY875249; Potamogeton crispus U80722; Potentilla fruticosa U06818; Pothos scandens JQ933452; Pratia nummularia DQ356164; Premna microphylla U28883; Prenanthes asplenifolia JQ933454; Primula involucrata AF394974; Prinsepia uniflora U06819; Procris insularis AY208706; Prunella vulgaris AY395556; Prunus x yedoensis AF329005; Pseudechimantha glutinosa JQ933455; Pseudechinolaena polystachya AM849344; Pseuderanthemum tunicatum JQ933456; Pseudostellaria heterantha JQ933457; Psidium cattleyanum GU135194; Pilotrichum gnaphalobryum JQ933458; Psoralea aculeata AM235013; Psychotria nervosa AJ002186; Pternopetalum tanakae D44584; Pterocarpus marsupium JN083731; Pterocephalus hookeri AF446946; Pterospermum celebicum AJ233136; Pueraria montana AB045822; Pulicaria scabra AM234906; Punica granatum L10223; Putranjiva roxburghii AY663641; Pycreus nuerensis Y13004; Pygeum zeylanicum JQ933459; Pyracantha coccinea DQ860501; Pyrola rotundifolia L12622; Pyrostegia venusta JQ933460; Pyrularia pubera DQ329179; Quercus glauca AB060571; Quisqualis indica L01948; Randia truncata AJ286701; Ranunculus cantoniensis AY954489; Raphanus sativus EF590571; Raphistemma pulchellum JQ933462; Rauvolfia mannii X91769; Reinwardtia indica L13188; Reissantia sp. AJ402996; Remusatia vivipara JQ933463; Rhamnella franguloides AJ390027; Rhamnus prinoides AM235104; Rhaphidophora crassifolia AM905741; Rheum nobile AF297147; Rhododendron tomentosum AF421101; Rhus copallina U00440; Rhynchosoglossum notonianum AF206817; Rhynchosia minima AB045823; Rhynchospermum verticillatum JQ933465; Rhynchospora nervosa Y12977; Ribes aureum L11204; Ricinus communis AY794915; Riocreuxia torulosa AM234841; Rodgersia pinnata U06214; Rorippa indica D88907; Rosa woodsii U06824; Rotala indica AY036148; Rubia tinctorum X83666; Rubus idaeus U06825; Ruellia grecianica L12595; Rumex acetosa AY395559; Rungia pectinata JQ933466; Ruta graveolens AY128251; Sabicea campanulata AM183414; Saccharum officinarum AP006714; Sacciolepis indica AM887870; Sageretia thea AJ225785; Sagina saginoides JQ933467; Sagittaria latifolia L08767; Salix babylonica AB012782; Salsola genistoides AY270128; Salvia plebeia AB295077; Sambucus caerulea AJ420867; Sanguisorba officinalis AY395560; Sanicula elata AM234825; Santalum album L26077; Sapindus saponaria AY724366; Sapium laurocerasus AY794842; Saraca palembanica AM234238; Sarcococca confusa AF197588; SarcoSTEMMA viminale JQ933468; Satyrium nepalense AF074226; Saurauja nepaulensis Z83147; Sauromatum guttatum EU193200; Sauvagesia racemosus AY663617; Saussurea roylei JQ933469; Saxifraga cernua U06215; Schefflera elegantissima DQ133821; Schima wallichii AF380056; Schisandra sphenanthera L12665; Schleichera oleosa AY724367; Schoenoplectiella articularis Y12987; Schoenorchis paniculata JQ933470; Schoepfia schreberi L11205; Schulzia dissecta JQ933471; Scindapsus aureus AJ005625; Scirpus polystachyus Y12974; Scleria terrestris Y12947; Sclerocarpus africanus JQ933472; Scolopia mundii AM235122; Scorzonera divaricata JQ933473; Scrophularia sp. L36449; Scurrula sp. JQ933474; Scutellaria orientalis Z37460; Sebaea sp. AM234984; Sechium edule AY862553; Securidaca diversifolia L01955; Securinega capuronii AY663621; Sedum rubrotinctum L01956; Selinum cortiooides JQ933475; Semecarpus sp. JQ933476; Senecio burchellii AM234911; Serissa foetida Z68822; Serratula strangulata JQ933477; Sesamum indicum L14408; Sesbania sesban Z95541; Seseli yunnanense JQ933478; Setaria palmifolia AM849389; Shorea talura AJ247623; Shuteria vestita AB045824; Sibbaldia cuneata JQ933479; Sida sp. AM235027; Siegesbeckia orientalis JQ933480; Silene vulgaris EF646883; Sinocarum wolianum JQ933481; Sison amomum JQ933482; Sisymbrium irio AY167982; Skimmia aquifolium AF066818; Sloanea latifolia AF022131; Smilacina racemosa AY149376; Smilax glauca AF206822; Smithia sensitiva JQ933483; Smitinandia micrantha JQ933484; Solanum bulbocastanum NC_007943; Solena heterophylla DQ535851; Solidago juncea DQ006068; Soliva anthemifolia JQ933485; Sonchus

wightianus subsp. *wallichianus* JQ933486; *Sophora bhutanica* U74226; *Sopubia trifida* JQ933487; *Sorbaria arborea* U06826; *Sorbus scopulina* U06827; *Sorghum bicolor* NC_008602; *Soroseris pumila* JQ933488; *Spathoglottis plicata* AF264175; *Spatholobus parviflorus* AB045825; *Spergula rubra* AY270146; *Spermadictyon suaveolens* Z68824; *Sphaeranthus indicus* JQ933489; *Sphenoclea zeylanica* L1879; *Spilanthes iabadiensis* JQ933490; *Spiraea x L11206*; *Spiranthes cernua* AF074229; *Spirodela polyrhiza* AY034222; *Spondias cytherea* U39274; *Sporobolus festivus* AM849383; *Stachys sylvatica* Z37464; *Stachyurus praecox* DQ307101; *Staphylea colchica* EU002285; *Stellaria media* M62570; *Stellera chamaejasme* AJ295262; *Stephania venosa* EU526996; *Sterculia lanceolata* AY082362; *Stereospermum nematoxarpum* JQ933491; *Stipa dregeana* U31442; *Streblus pendulinus* AF500353; *Streptopus lanceolatus* D17381; *Striga gesnerioides* AF026839; *Strobilanthes isophyllus* JQ933492; *Strychnos nux-vomica* L14410; *Styrax chinensis* AF396157; *Swertia teres* JQ933493; *Swida controversa* AF190433; *Symplocos costata* Z80192; *Synedrella nodiflora* JQ933494; *Syringa vulgaris* DQ673303; *Syzygium venosum* JQ933495; *Tabernaemontana divaricata* X91772; *Tadehagi triquetrum* JQ933496; *Tagetes erecta* L13637; *Talauma ovata* L12666; *Talinum paniculatum* AY875214; *Tamarindus indica* Z70160; *Tamarix pentandra* Z97650; *Tanacetum atkinsonii* JQ933497; *Taraxacum officinale* AY395562; *Taxillus sclerophyllus* JQ933498; *Taxus wallichiana* DQ478796; *Tectona grandis* U28884; *Telosma pallida* JQ933500; *Tephrosia grandiflora* Z95542; *Terminalia catappa* U26338; *Ternstroemia gymnantha* AF421106; *Tetracentron sinense* L12668; *Tetrameles nudiflora* AF206828; *Tetragastris hookeri* AJ419715; *Teucrium flavum* Z37466; *Thalictrum javanicum* AY954496; *Thamnochalamus spathiflorus* EF125087; *Thelasis carinata* AF518047; *Thermopsis fabacea* Z70121; *Thesium strictum* AM235126; *Thespisia populnea* L01961; *Thladiantha dubia* DQ535733; *Thlaspi arvense* JQ933501; *Thunbergia mysorensis* AY008828; *Thunnia alba* AF074233; *Thylacospermum caespitosum* JQ933502; *Thymus vulgaris* Z37472; *Thysanolena maxima* U31380; *Tiarella polyphylla* AB003276; *Tiliacora acuminata* EU526997; *Tinospora caffra* L37923; *Tipularia discolor* AF074234; *Tithonia diversifolia* JQ933503; *Toddalia asiatica* JQ933504; *Tofieldia glutinosa* AF543717; *Tongoloa gracilis* JQ933505; *Toona* sp. AY128243; *Tordyliopsis brunonii* JQ933506; *Torenia fournieri* AB259804; *Toricella tiliifolia* AF299089; *Torilis japonica* D44590; *Torularia humilis* JQ933507; *Trachelospermum jasminoides* AJ002890; *Trachycarpus fortunei* AY012460; *Trachyspermum anethifolium* JQ933508; *Tragia urticifolia* AY794925; *Tragopogon pratensis* AY395563; *Trapa natans* L10226; *Trema orientalis* D86313; *Treutlera* sp. JQ933509; *Trevesia palmata* U50258; *Trewia nudiflora* AY663648; *Trianthema portulacastrum* M62572; *Tribulus terrestris* AM235167; *Trichilia emetica* AY128244; *Trichodesma africanum* AM234930; *Tricholepis furcata* JQ933510; *Trichosanthes ovigera* DQ535856; *Tricyrtis macrantha* AB034749; *Tridax procumbens* JQ933511; *Trifolium pratense* AY395564; *Triglochin palustris* DQ859176; *Trigonella ornithopodioides* JQ933512; *Trigonotis ovalifolia* JQ933513; *Trillidium govanianum* AB018839; *Triosteum perfoliatum* AJ420871; *Triplostegia glandulifera* AF446949; *Triponax minimus* AM849342; *Trisetum flavescens* AY395565; *Triticum aestivum* AB042240; *Triumfetta annua* JQ933514; *Trollius laxus* AY954486; *Tsuga dumosa* AF145460; *Tupistra grandis* AB029838; *Turpinia occidentalis* AY646110; *Tussilago farfara* JQ933515; *Tylophora sylvatica* X91780; *Typha angustifolia* AY952434; *Typhonium venosum* AF497113; *Ulmus americana* AF500337; *Uncaria africana* AJ347006; *Uraria lagopus* JQ933516; *Urena lobata* GU135283; *Urginea maritima* JQ933517; *Urochloa maxima* AM849390; *Urtica dioica* AF500361; *Utricularia biflora* L13190; *Uvaria lucida* AY238957; *Vaccinium meridionale* AF124576; *Valeriana jatamansi* AF446950; *Vallaris solanacea* JQ933518; *Vallisneria asiatica* AB004898; *Vandopsis gigantea* JQ933519; *Ventilago viminalis* AJ390035; *Verbascum thapsus* L36452; *Verbena officinalis* Z37473; *Vernonia mephitifolia* L13646; *Veronica persica* AY034022; *Vetiveria zizanioides* AM849394; *Viburnum acerifolium* L13928; *Vicatia coniifolia* JQ933520; *Vicia cracca* AY395566; *Vigna unguiculata* Z95543; *Vincetoxicum hirundinaria* AJ419769; *Viola* sp. AJ247621; *Viscum articulatum* EF464517; *Vitex agnus-castus* U78716; *Vitis vinifera* NC_007957; *Wahlenbergia gloriosa* AY655161; *Waldheimia glabra* JQ933522; *Wallichia disticha* AJ404792; *Wedelia montana* JQ933523; *Wendlandia notoniana* AM117283; *Wikstroemia gemmata* AJ297223; *Withania somnifera* DQ353868; *Wolffia globosa* AY034257; *Woodfordia fruticosa* AY036136; *Wrightia arborea* AJ002891; *Xanthium strumarium* DQ006070; *Xylosma buxifolium* AJ418834; *Xyris capensis* AJ286563; *Youngia racemifera* JQ933524; *Yushania maling* AJ746277; *Zannichellia palustris* U03725; *Zanthoxylum monophyllum* U39282; *Zea mays* X86563; *Zehneria scabra* AM234970; *Zephyranthes filifolia* AF116990; *Zeuxine strateumatica* JQ933525; *Zingiber gramineum* AF243850; *Zinnia elegans* JQ933526; *Ziziphus ornata* AJ390052; *Zornia cantoniensis* U74235.

Table S22. Taxa included in the phylogenetic analysis for genera of the flora of New Zealand based on *rbcL* plastid sequences

GenBank accession numbers are given for each taxon.

Abrotanella linearifolia JQ933200; Abutilon sp. AM235023; Acacia cavenia Z70145; Acaena sp. AM235106; Acanthus montanus L12592; Acer pseudoplatanus DQ978425; Achnatherum calamagrostis JQ933203; Acanthus exsertus AF074101; Aciphylla glacialis JQ933204; Ackama paniculosa AF291921; Actinidia chinensis L01882; Adenochilus nortonii AY381108; Agapanthus africanus AY465699; Agathis moorei AMU87755; Agave ghijsbrechtii AF206729; Ageratina luciae-brauniae HQ416169; Ageratum conyzoides GQ436453; Agrostis capillaris AY395527; Ajuga reptans U32163; Akebia quinata L12627; Alectryon connatus AY724341; Allium dregeanum AM234798; Alnus glutinosa EU644678; Alocasia odora AM905802; Alopecurus pratensis AY395528; Alseuosmia macrophylla X87377; Alternanthera pungens AY270054; Ammophila breviligulata AJ784835; Andropogon gerardii AJ784818; Anemanthele lessoniana EF125158; Anemone tenuifolia AM235090; Angelica sylvestris DQ133798; Anisotome haastii JQ933219; Anredera cordifolia AY270147; Apium graveolens L01885 Apodasmia sp. JQ933222; Aporostylis bifolia AY381109; Araujia hortorum AJ419734; Archgeria hirtella JQ933224; Arctium lappa AB530978; Arctotheca calendula AM234848; Aristea glauca Z77282; Aristotelia serrata AF307904; Arthropodium cirrhatum Z69233; Arum italicum GU067578; Arundo donax ADU31360; Ascarina lucida AF238050; Asparagus officinalis AY149374; Asphodelus aestivus AJ512314; Astelia linearis AF307905; Atriplex halimus AY270059; Australopyrum calycinum AY691636; Austrostipa littoralis JQ933231; Austrostipa sp. JQ933232; Avicennia alba AY008831; Azorella selago DQ133803; Banksia ericifolia DQ875843; Baumea rubiginosa AY725940; Beilschmiedia tawa JQ933233; Berberis fortunei FJ449857; Betula papyrifera X56617; Bidens polylepis DQ006061; Bolboschoenus fluviatilis GQ130358; Brachycome claris JQ933242; Brachyglottis repanda JQ933243; Bromus hordeaceus AY395531; Brugmansia suaveolens HM849829; Bryonia dioica DQ535786; Buddleja davidii AJ001757; Bulbinella nana AJ512325; Bulbophyllum lobbii AF074115; Caesalpinia pulcherrima Z70153; Caladenia cf caerulea AF074116; Callistemon citrinus AM235652; Callitriches stagnalis AF248023; Calluna vulgaris L12601; Calochilus robertsonii AF074118; Calystegia sepium AY100992; Canavalia rosea AB045793; Canna indica L05445; Cardamine flexuosa D88905; Carduus edelbergii JQ933253; Carex monostachya Y12998; Carmichaelia sp. AF308705; Carpha alpina AF307909; Carpobrotus edulis AM234787; Carpodetus serratus Y08461; Cassythia filiformis JQ933256; Celastrus orbiculatus AY788194; Celmisia bellidoides JQ933257; Cenchrus echinatus AM849359; Centella asiatica CT1CPRC08; Centipeda sp. 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AF123666; Juglans nigra U00437; Juncus triglumis AY216605; Kennedia nigricans EU717283; Knightia excelsa DQ875840; Koeleria aff. AY691645; Korthalsella lindsayi L26073; Kunzea vestita AM235655; Lagarosiphon major U80703; Lantana camara AF156736; Laurelia novae-zelandiae AF206788; Laurus nobilis AF197593; Lemna minor AY034234; Lepidium virginicum D88906; Lepidosperma tortuosum AY725950; Lepidothamnus fonkii AF249642; Lepilaena australis U80729; Leptospermum scoparium AM235656; Lepturus repens AM887876; Leucogenes grandiceps JQ933387; Leucopogon fraseri L12620; Leycesteria formosa AJ420872; Leymus chinensis Z49843; Libertia ixioidea AJ309687; Libocedrus plumosa L12574; Ligustrum vulgare DQ673302; Lilaeopsis novae-zelandiae AF466269; Lilium formosanum AB034933; Liparophyllum gunnii EF173092; Litsea monopetala EU128738; Lobelia cardinalis AY655144; Logania vaginalis Z68826; Lolium perenne AJ746293; Lonicera japonica GQ997430; Lophomyrtus bullata JQ933392; Loranthus delavayi HQ317767; Lotus corniculatus U74213; Ludwigia palustris AM235670; Lupinus perennis Z70058; Luzula multiflora AJ419945; Luzuriaga parviflora AF307925; Lycium ferocissimum AM235152; Lyperanthus nigricans AF074187; Lythrum salicaria AF495760; Machaerina sp. DQ058340; Macropiper excelsum AY298836; Malva verticillata JQ933397; Manaoao colensoi AF249644; Marsippospermum grandiflorum AJ419946; Mazus pumilus FJ172728; Melicope ternata AF116271; Melicytus novae-zelandiae AB354427; Mentha longifolia AY570390; Meryta sinclairii U50248; Metrosideros excelsa AM235659; Microlaena stipoides AM849377; Microtis parviflora AF074194; Mida salicifolia EF584598; Mimulus aurantiacus AF026835; Misanthus capensis AM235066; Mitrasacme pilosa AJ235821; Montia fontana JQ933413; Montigena novae-zelandiae JQ933414; Morelotia gahniiformis EF178576; Muehlenbeckia australis FM883618; Myoporum mauritianum L36445; Myosotis discolor AY395552; Myosurus minimus DQ099441; Myricaria squamosa AY099906; Myriophyllum exalbescens L11195; Myrmecilia trapeziformis AF074124; Myrsine africana U96652; Nardus stricta AY622895; Nassella viridula AY622896; Nasturtium officinale AF020325; Neomyrtus pedunculata JQ933419; Nerium oleander GQ997679; Nertera granadensis X83654 Nestegis sandwicensis DQ673305; Nothofagus truncata L13363; Notothlaspi australe JQ933421; Nymphaea alba AJ627251; Ochna serrulata Z75273; Olea europaea GU228899; Olearia chatamica JQ933423; Oplismenus compositus AM849368; Opuntia dillenii AY875233; Oreobolus pectinatus AF307927; Oreomyrrhis hookeri JQ933424; Oreostylidium subulatum AF451619; Orthoceras strictum AF074204; Osteospermum asperulum EU385004; Ottelia ovalifolia DQ859171; Oxalis corniculata AB233943; Ozothamnus sp. JQ933428; Pachycladon novae-zelandiae DQ310545; Pachystegia insignis JQ933429; Pandorea jasminoides AF102652; Parahebe catarractae AY034020; Paraserianthes lophantha Z70148; Parietaria pensylvanica AF500357; Parsonsia heterophylla AJ002888; Paspalum conjugatum AM849399; Passiflora biflora EU017122; Pelargonium candicans DQ317055; Pennantia corymbosa AJ494842; Pennisetum longissimum AM849356; Pentachondra pumila L12621; Peperomia serpens AY572270; Peraxilla tetrapetala JQ933439; Persicaria decipiens FM883624; Persoonia lanceolata U79178; Phoenix canariensis AM110194; Phormium tenax Z69232; Phragmites australis EF423005; Phyllachne clavigera AF307928; Phyllocladus trichomanoides AY442155; Phyllostachys nigra AJ746272; Physalis peruviana FJ914181; Phytolacca americana FJ860398; Picris hieracioides subsp. kaimensis JQ933447; Pimelea gilgiana AM167534; Pinus muricata DQ353725; Pittosporum tobira U50261; Plagianthus divaricatus JQ933448; Plantago crassifolia AM235049; Plectranthus barbatus U28882; Pleurophyllum criniferum JQ933450;

Poa trivialis AJ746301; Podalyria sericea Z70128; Podocarpus totara AF307931; Polygala peduncularis AM234214; Pomaderis rugosa AJ390063; Populus tremuloides M58392; Poranthera huegelii AY663613; Potamogeton perfoliatus AY952437; Potentilla fruticosa U06818; Pouteria obovata AF421100; Boehmeria nivea AF062005; Prasophyllum fimbriatum JQ933453; Prumnopitys ferruginoidea AF249659; Prunus campanulata AF411501; Pseudopanax laetevirens AF307932; Pseudosasa amabilis AJ746273; Pseudotsuga menziesii AY664856; Pseudowintera axillaris AY572266; Psidium cattleyanum GU135194; Psoralea aculeata AM235013; Psychrophila novae-zealandiae AF307907; Pterostylis nutans AF074224; Puccinellia distans L14621; Pyracantha coccinea HM850304; Pyrrhanthera exigua AY691638; Quintinia verdonii AF299092; Ranunculus macranthus DQ069502; Raoulia subsericea JQ933461; Raukaua simplex FJ470122; Rhabdothamnus solandri JQ933464; Rhagodia drummondii AY270124; Rhamnus lycioides AJ390070; Rhododendron simsii GQ997829; Rhopalostylis baueri AJ404808; Ribes aureum L11204; Ricinus communis AY794915; Ripogonum elseyanum Z77309; Robinia pseudoacacia U74220; Roldana petasisis HM850309; Rorippa sylvestris AF020328; Rosa woodii U06824; Rostkovia magellanica AJ419947; Rubus idaeus U06825; Rumex obtusifolius AF297126; Ruppia maritima U03729; Rytidosperma maculatum EU400673; Salix fragilis AJ418841; Sambucus caerulea AJ420867; Samolus repens AF421102; Sarcocornia utahensis AY270126 Scaevola aemula EU017199; Schefflera elegantissima DQ133821; Schizolelema nitens DQ133822; Schoenoplectus mucronatus EF178572; Schoenus nigricans Y12983; Scleranthus annuus AY270145; Scutellaria bolanderi L01954; Sebaea sp. AM234984; Sedum rubrotinctum L01956; Selliera radicans X87395; Senecio burchellii AM234911; Senna alata U74250; Setaria palmifolia AM849389; Sicyos angulatus DQ535847; Simplicia laxa AY691641; Solanum tuberosum M76402; Sonchus wightianus subsp. wallichianus JQ933486; Sophora microphylla AY725480; Sorbaria arborea U06826; Sorbus scopulina U06827; Sparganium eurycarpum AY465696; Spartina anglica AM849382; Spinifex littoreus AM849340; Spiraea x vanhouttei L11206; Spiranthes cernua AJ542435; Sporadanthus tasmanicus AF148793; Stackhousia minima AJ235795; Stellaria media AF206823; Stenostachys laevis AY691640; Stenotaphrum secundatum AM235074; Stilbocarpa polaris DQ133823; Streblus pendulinus AF500353; Stuckenia pectinata AB196953; Suaeda altissima AY270135; Syzygium sp. FJ976174; Taraxacum officinale AY395562; Tecomanthe venusta JQ933499; Tecoma capensis FJ870009; Tetrachondra hamiltonii U28885; Tetragonia tetragonoides AF132094; Tetrastra crinifolia DQ058348; Teucrium parvifolium U78715; Thelymitra sp. AF074232; Thismia rodwayi AY939892; Thymus vulgaris Z37472; Trachycarpus fortunei AY012460; Tradescantia pallida AM110254; Triglochin bulbosa AM234996; Triisetum youngii AY691646; Trithuria submersa DQ915188; Tropaeolum majus L14706; Tupeia antarctica DQ790133; Tussilago farfara JQ933515; Typha latifolia DQ069503; Ulmus alata U00441; Uncinia nemoralis AY725956; Urochloa maxima AM849390; Urtica dioica AF500361; Utricularia biflora L13190; Vaccinium macrocarpon L12625; Vinca minor AJ419768; Viola sororia L11674; Vitex agnus-castus U78716; Vitis vinifera AJ635355; Vittadinia triloba JQ933521; Wahlenbergia gloriosa AY655161; Watsonia angusta AJ309666; Weinmannia racemosa AF307933; Wisteria sinensis Z95544; Wolffia arrhiza AY034254; Xeronema callistemon Z69235; Zannichellia palustris U03725; Zantedeschia aethiopica AF065474; Zizania texana L05043; Zostera capricorni AY077963; Zostovia thomsonii AY691644; Zoysia japonica AM849385.

Table S23. Taxa included in the phylogenetic analysis for genera of the flora of the Cape of South Africa based on *rbcL* plastid sequences

GenBank accession numbers are given for each taxon.

Abutilon sp. AM235023; Acacia karo AM235003; Acaena sp. AM235106; Acalypha sp. AM234975; Acharia tragodes AJ418795; Achyranthes aspera AJ270048; Acmadenia rupicola AM235114; Acokanthera oppositifolia AM234828; Acrosanthes teritifolia AM234785; Adenandra uniflora AF066803; Adenocline violifolia AY794870; Adenogramma lichtensteinia AM235030; Adromischus sp. AM234968; Agapanthus africanus Z69221; Agathosma ovata AM235115; Agrostis capillaris AY395527; Alchemilla mollis U06792; Alectra sessiliflora AF026820; Allium dregeanum AM234798; Allophylus sp. AM235128; Aloe humilis AY323642; Alonsoa unilabiata AF026821; Amaryllis belladonna Z69219; Amellus sp. AM234845; Ammocharis longifolia AM234803; Ammophila breviligulata AJ784835; Amphiglossa tormentosa AM234846; Amphithaea micrantha AM235004; Anacampseros papyracea AM235079; Anagallis arvensis M88343; Anaxeton arborescens AM234847; Anchusa capensis AM234924; Andracrine arida AY663563; Androcymbium orienticapense AM234961; Andropogon gerardii AJ784818; Anemone tenuifolia AM235090; Anginon rugosum U50222; Angraecum sesquipedale AF074106; Anisodonta triloba AM235024; Anisotoma cordifolia AM234829; Annesorhiza altiscapa AM234812; Anthochortus graminifolius AM235091; Anthospermum herbaceum X83623; Anthoxanthum sp. AM235051; Antizoma angustifolia DQ099437; Apodolirion lanceolatum AM234804; Apodytes dimidiata AJ428895; Aponogeton distachyos U80684; Aptosimum sp. AF123671; Arctopus echinatus AY188414; Arctotheca calendula AM234848; Arctotis hirsuta EU384947; Argyrolobium harveyanum Z95546; Aristea glauca Z77282; Aristida congesta subsp. barbicallis U31359; Artemisia afra AM234849; Arundinella deppeana AM849417; Asaemia inermis AM234850; Asclepias currassavica X91774; Askidiosperma andreaeanum AM235092; Aspalathus cephalotes Z70132; Asparagus capensis AM234843; Aspidoglossum heterophyllum AM234830; Ast Stephanus marginatus AM234831; Aster bakeranus AM234851; Astroloba foliosa Z73683; Atalaya alata AY724345; Athanasiella trifurcata AM234852; Athrixia sp. AM234853; Atriplex patula X15925; Audouinia capitata AY490992; Augea capensis Y15015; Aulax cancellata AM235081; Azima tetracantha Z69782; Babiana ecklonii AJ309673; Ballota africana AM234997; Barleria prionitis L01886; Bartholina burmanniana AM235035; Bartsia alpina AF190903; Bassia diffusa AM234799; Behnia reticulata Z69226; Bergia glomerata AM234974; Berkheya rigida AM234854; Berula erecta AM234813; Berzelia lanuginosa L14391; Bobartia gladiata AJ309699; Bolboschoenus maritimus Y12996; Bonasafra bituminosa EU717272; Bonatea speciosa AM235036; Boophone disticha AF116945; Bowiea volubilis Z69237; Brabejum stellatifolium U79166; Brachiaria sp. AM235052; Brachycorythis sp. AM235037; Brachylaena neriifolia AM234855; Brachypodium sylvaticum AJ746258; Brachysiphon microphyllus AJ605086; Brachystelma luteum AM234832; Bromus hordeaceus AY395531; Brownleea caerulea AM235038; Brunia albiflora Y10674; Brunsvigia orientalis AM234805; Bryomorphe arietoides AM234856; Buchnera floridana AF026822; Buddleja davidi AJ001757; Bulbive succulenta Z73684; Bulbinella caudafelis Z73685; Bulbostylis atrosanguine Y12992; Bupleurum falcatum U50224; Burchellia bubalina Z68833; Cadaba aphylla AM234931; Caesia concorta Z77297; Calanthe vestita AF074117; Calodennum capense AF066805; Calopsis paniculata AM235093; Calpurnia intrusa AM235005; Calystegia sepium AY100992; Canthium inerme AM235109; Capelio tubularis AM234857; Capnophyllum africanum AM234814; Capparis hastata M95754; Cardamine pensylvanica AF020324; Carex conferta Y12999; Carissa bispinosa AJ419738; Carpacoce sp. AJ288597; Carpanthea pomeridiana AM234786; Carpha sp. AM234971; Carpobrotus edulis AM234787; Cassine piragua AM234952; Cassinopsis ilicifolia AJ428896; Celtis philippensis AY263941; Cenchrus setigerus L14622; Centella asiatica D44559; Cerastium capense AM234949; Ceratiosicyos laevis AM234784; Ceratophyllum demersum D89473; Ceropeltis woodii X91775; Chaetacanthus sp. AM234779; Chaetachme aristata D86310; Chaetobromus drageanus AM235053; Chamaecrista fasciculata U74187; Chamerion angustifolium L10217; Chamira circaeoides AM234932; Chascanum cernuum AM235164; Chasmanthe aethiopica AJ309660; Chionanthus virginicus DQ006108; Chironia baccifera AM234982; Chloris virgata EF125096; Chlorophytum comosum L05031; Chondropetalum sp. AM235094; Chrysanthemoides monilifera AM234858; Chrysitrix capensis AJ419938; Chrysocoma sp. AM234859; Cineraria sp. AM234860; Cissampelos capensis AM235029; Citrullus lanatus DQ53745; Cladium jamaicense Y12988; Cladoraphis spinosa AM235054; Clausena anisata AM235116; Clematis sp. AF193972; Cleretum papulosum subsp. papulosum AM234788; Cliffortia sp. AM235107; Clivia mirabilis AM234806; Clutia pulchella AM234976; Coccinia adoensis AF534745; Codon royenii AM234925; Coleonema pulchellum L12567; Commelina sp. AM234965; Conium sp. AM234815; Convolvulus sagittatus AY100994; Conyzia scabrida AM234861; Cortaderia selliana DQ005609; Corycius carnosum AY381115; Corymbium glabrum AM234862; Costularia natalensis DQ058345; Cotyledon orbiculata AM234969; Crassula perforata AF274594; Crinum yemense AF116951; Crocosmia mathewsi AY577250; Cromidon sp. AM235133; Crotalaria capensis Z70133; Cryptocarya obovata L28950; Culimnia bisulca AM234863; Cunonia atrorubens AF291918; Curtisia dentata L11222; Cussonia spicata U50242; Cyaneella hyacinthoides Z77312; Cyanotis sp. AM234966; Cyathocoma hexandra DQ058344; Cyclopia genistoides Z70124; Cycnum racemosum AF026826; Cymbopogon citratus EF125117; Cynanchum laeve DQ006054; Cynodon sp. AM235055; Cynoglossum sp. AM234926; Cynosurus cristatus EF125151; Cyperus laevigatus Y13017; Cyphia bulbosa AM234938; Cyphostemma juttae AJ419719; Cyrtanthus elatus AF116953; Cysticapnos sp. AM234980; Dalechampia spathulata AY788172; Dasispernum suffruticosum AM234816; Delosperma echinatum AJ235778; Desmazeria rigida EF125150; Deverra denudata AM234817; Dianthus namaensis AM234950; Diascia longicornis AM235134; Diastella parilis AM235082; Dichondra occidentalis AY101023; Diclis reptans AM235135; Dicoma picta AM234864; Didelta spinosa AM234865; Didymodoxa caffra AM235160; Dierama sp. AM234992; Dietes robinsoniana AJ309695; Digitaria sp. AM235056; Dilatris pillansii AM234986; Dimorphotheca pluvialis L13636; Dioscorea elephantipes AF307461; Diosma sabulosa AM235117; Diospyros whyteana Z83134; Dipogon lignosus AB045800; Disa tripetaloidea AF074151; Dischisma ciliata AM235136; Disparago anomala AM234866; Disperis capensis AY381120; Disphyma crassifolium AM234789; Dodonaea angustifolia AM235129; Dolichos decumbens AM235006; Dolichothrix ericoides AM234867; Dovea macrocarpa AM235095; Dovyalis rhamnoides Z75677; Dracaena sp. AM235113; Drimia elata AM234987; Droguetia ambigua AM235161; Drosanthemum hispidum AM234790; Drosera capensis L01909; Dumasia villosa AF181933; Echinochloa crus-galli AM887871; Echiostachys incanus AM234927; Edmondia sp. AM234868; Ehretia acanthalis AJ247617; Ehrhartia calycina AM235057; Ekebergia capensis AJ402947; Elaeodendron transvaalense AM234953; Elegia cuspidata AF148774; Eleocharis atropurpurea Y13012; Eleusine indica EF125108; Elytropappus rhinocerotis AM234869; Emex spinosa AF297142; Empleuridium juniperinum AY935725; Empleurum unicapsulare AM235118; Empodium veratrifolium Y14987; Endonema retzioides AJ605088; Enneapogon scaber U31103; Epilobium rigidum AF495763; Epischoenus quadrangularis DQ058349; Eragrostis capensis U31104; Erica australis L12617; Eriosema squarrosum AM235007; Eriospermum bayeri Z77277; Erythrina crista-galli Z70170; Euchaetis albertiniana AM235119; Euclae natalensis Z80186; Eucomis regia AM234988; Eulalia aurea AM849410; Eulophia streptopetala AM235039; Euphorbia silenifolia AM234977; Euryops speciosissimus AM234870; Eustachys paspaloides AM235058; Eustegia minuta AM234833; Euthystachys abbreviata Z29671; Excoecaria cochininchinensis AJ418809; Exomis microphylla AM234800; Ezosciadium capense AM234818; Falkia repens AY101024; Faurea saligna EU676072; Felicia bergerana L13639; Ferraria crispa AJ309690; Festuca rubra AJ746261; Ficinia pinguior AJ404703; Ficus cordata AM235033; Fimbristylis dichotoma Y13008; Fingerhuthia africana AM235059; Flueggea virosa subsp. virosa AY663585; Fockea capensis AM234834; Forsskaolea sp. AM235162; Foveolina tenella AM234871; Frankenia pulverulenta Z97638; Freesia alba Z77284; Freylinia undulata AM235137; Fuirena ciliaris Y12971; Galenia pubescens AF132099; Galium corsicum X81096; Galopina circaeoides AJ288602; Gardenia thunbergia X83637; Garuleum bipinnatum AM234872; Gasteria glomerata AJ512281; Gazania splendens L13638; Geissoloma marginatum AJ403022; Geissorhiza heterostyla AJ309676; Geranium ocellatum L14698; Gerbera jamesonii L13643; Gibbaria ilicifolia AM234873; Gladiolus guineensis Z77286; Glischrocolla formosa AM235046; Gloveria integrifolia AM234954; Gnaphalium sp. AM234874; Gnidia racemosa AJ295268; Gomphocarpus cancellatus AM234835; Gomphostigma sp. AM235138; Gonioma kamassi AM234836; Gorteria diffusa AM234875; Graderia scabra AM235043; Grammatotheca bergiana DQ356116; Grewia occidentalis AJ233152; Grielium humifusum AJ403023; Grubbia tormentosa Z83141; Gunniera perpensa AY008154; Gymnodiscus capillaris AM234876; Gymnosporia buxifolia AM234955; Habenaria falcicornis AM235040; Haemanthus humilis AF116960; Hakea archaeoides EU676114; Halleria lucida AF026828; Halopeplis amplexicaulis AY270095; Halophila ovalis AB004890; Harpochloa flax AM235060; Harveya capensis AF026829; Haworthia arachnoidea AM234844; Hebenstretia dentata AJ001767; Heeria argentea AM234809; Helichrysum cymosum AM234877; Helictotrichon requienii EF125144; Heliophila pubescens AM234933; Heliotropium arborescens L14399; Hellminthia membranacea Y13000; Hemarthria altissima GU135209; Hemimeris sabulosa AF123668; Hermannia sp. AM235025; Hermas villosa AM234819; Herniaria glabra AF132091; Hertia sp. AM234878; Hesperantha pseudopilosus AJ309656; Heterolepis aliena AM234879; Heteromorpha sp. AM234820; Heteropogon contortus AM235061; Hibiscus punaluuensis AJ233121; Hippia frutescens AM234880; Holcus lanatus AM235062; Holothrix aspera AM235041; Hoplophyllum spinosa AM234881; Hordeum marinum subsp. marinum AY137436; Hydnangia globosa AJ402961; Hybanthus enneaspermum AF530902; Hydrocotyle verticillata U50236; Hydrophylax maritima AJ616212; Hymenolepis gnidioides AM234882; Hyobanche atropurpurea AF026831; Hyparrhenia hirta U31436; Hypericum perforatum AF206779; Hypertelis salsolooides AF132097; Hypocalyptus sopheroides AF308710; Hypodiscus sp. AM235096; Hypoestes forskoalii L12593;

Hypoxis leptocarpa Z73702; *Ifloga verticillata* AM234883; *Ilex mitis* X98730; *Impatiens repens* Z80197; *Imperata cylindrica* GU135272; *Indigofera glomerata* AM235008; *Ipomoea purpurea* X60663; *Ischyrolepis subverticillata* AM235097; *Isoglossa cooperi* AM234780; *Isolepis cernua* Y13014; *Itasina filifolia* AM234821; *Ixia latifolia* Z77288; *Ixianthes retziooides* AM235154; *Jamesbrittenia foliosa* AM235139; *Jasminum suavissimum* L01929; *Jatropha capensis* AM234978; *Jordaanella dubia* AM234791; *Juncus effusus* L12681; *Justicia odorata* L01930; *Kalanchoe daigremontiana* L11189; *Karrooehloa purpurea* U31437; *Kedrostis africana* AJ235782; *Kiggelaria africana* AF206786; *Klattia flava* AJ309667; *Kniphofia uvaria* Z73689; *Koeleria* sp. AM235063; *Kogelbergia verticillata* AM235155; *Kyllinga appendiculata* Y13007; *Lachenalia orchoides* AM234989; *Lachnaea filicaulis* AJ297221; *Lachnospermum fascicularis* AM234884; *Lachnostylis bilocularis* AJ418813; *Lagarosiphon muscoides* U80702; *Lagenaria siceraria* DQ535825; *lampranthus filicaulis* AM234792; *Lanaria lanata* Z77313; *Lapeirousia neglecta* AJ309665; *Laporteana canadensis* AF500356; *Lappula deflexa* EU599846; *Lasiostpermum bipinnatum* AM234885; *Lauridia tetragonia* AM234956; *Laurophylloides* capensis AM234810; *Lavatera acerifolia* AJ233122; *Lebeckia simsiana* AM235009; *Lebedouria socialis* L05038; *Leersia oryzoides* U13228; *Leidesia procumbens* AM234979; *Lemna minuta* M91630; *Leonotis leonurus* AM234998; *Lepidium africanum* AM234934; *Lessertia frutescens* AM235010; *Leucadendron laureolum* U79180; *Leucas capense* AM234999; *Leucospermum bolusii* AM235083; *Leysera gnaphalooides* AM234886; *Lichtensteinia lacera* AM234822; *Lidbeckia pectinata* AM234887; *Limeum aethiopicum* AF132095; *Limonium scabrum* AM235050; *Linconia alopecuroides* AY490993; *Linum arboreum* AY380352; *Liparia splendens* Z70125; *Liparis liliifolia* AF074183; *Lithops* sp. M97889; *Lithospermum* sp. AM234928; *Lobelia erinus* L13930; *Lobostemon fruticosus* AM234929; *Lolium perenne* subsp. *perenne* AJ746293; *Lonchostoma monogynum* AY490982; *Lotononis alpina* AM235011; *Ludwigia peploides* L10222; *Lycium ferocissimum* AM235152; *Lyperis tristis* AM235140; *Lysimachia congestiflora* AF213820; *Lythrum salicaria* AF495760; *Maclemidium spinosum* AM234888; *Macrostylis ramulosa* AM235120; *Maerua kirkii* AY483266; *Mairia hirsuta* AM234889; *Manochlamys albicans* AM234801; *Manulea* sp. AM235141; *Marasmodes* sp. AM234890; *Mastersiella digitata* AM234972; *Maurocenia frangula* AM234957; *Maytenus senegalensis* AY380353; *Melasma scabrum* AF190904; *Melaspheerula ramosa* AM234993; *Melianthus major* AM235028; *Melica uniflora* AJ746294; *Melinis repens* AM235064; *Melolobium obcordatum* Z95540; *Menodora spinescens* DQ673299; *Mentha longifolia* Z37415; *Merciera brevifolia* AM234939; *Merxmullera* sp. AM235065; *Mesembryanthemum cristallinum* M98515; *Metalasia densa* AM234891; *Metrosideros angustifolia* AM235034; *Micranthus junceus* AJ309662; *Microcodon glomeratum* AM234940; *Microdon orbicularis* AM235142; *Microloma tenuifolium* AM234837; *Microstegium japonicum* AB125343; *Mimetes pauciflorus* AM235084; *Misanthus capensis* AM235066; *Mniothamnea bullata* AY490983; *Mollugo verticillata* M62566; *Monechma spartoides* AM234781; *Monerma cylindrica* EF125153; *Monopsis debilis* AM234941; *Monsonia emarginata* L14701; *Montinia caryophyllacea* L11194; *Moquinia rubra* AM235021; *Moraea villosa* AJ307156; *Morella californica* AJ626763; *Muraltia heisteria* AJ829698; *Myosotis discolor* AY395552; *Myriophyllum exalbescens* L11195; *Myrsine africana* U96652; *Mystroxylon aethiopicum* AM234958; *Najas marina* U80705; *Nassella trichotoma* EF125159; *Nebelia fragarioides* AY490985; *Neesenbeckia punctoria* AY725952; *Nemesia strumosa* AF123663; *Nenax microphylla* AM235110; *Nerine* sp. AM234807; *Nicotiana acuminata* M16896; *Nivenia corymbosa* Z77289; *Noltea africana* AJ390054; *Nuxia floribunda* AM235156; *Nymania capensis* U39084; *Nymphaea odorata* M77034; *Nymphoides peltata* X87392; *Ochna serrulata* Z75273; *Ocotea bullata* AM235002; *Oedera capensis* AM234892; *Oftia africana* AM235143; *Oldenburgia grandis* AM234893; *Oldenlandia goreensis* Z68808; *Olea europaea* AJ001766; *Oligomeris linifolia* AY483272; *Olinia ventosa* AF215546; *Oncinema lineare* AM234838; *Oncosiphon suffruticosus* AM234894; *Onixotis* sp. AM234962; *Oplismenus* sp. AM235067; *Oreoleysera montana* AM234895; *Ornithogalum longibracteatum* AM902312; *Ornithoglossum viride* AM234963; *Orothamnus zeyheri* U37132; *Orphium frutescens* AM234983; *Osmiotopsis asteriscoides* AM234896; *Osteospermum jucundum* AM234897; *Osyris compressa* AM235123; *Otholobium sericeum* U74219; *Othonna coronopifolia* AM234898; *Oxalis pes-caprae* AM235044; *Pachypodium rosulatum* AM234839; *Panicum* sp. AM235068; *Papaver* sp. AM235045; *Pappea capensis* AM235130; *Paranomus dispersus* AM235085; *Parapholis incurva* EF125154; *Paraserianthes lophantha* Z70148; *Paronychia canadensis* DQ006082; *Paspalum dilatatum* AM849371; *Passerina falcifolia* AJ297224; *Pauridia longituba* Y14991; *Pavonia* sp. AM235026; *Pelargonium extipulatum* L14704; *Peliostomum virgatum* AM235144; *Penaea mucronata* U26331; *Pennisetum glaucum* L14623; *Pentameris thuarii* DQ887119; *Pentaschistis airoides* AM235069; *Pentzia incana* AM234899; *Peperomia* sp. L12661; *Peristrophe cernua* AM234782; *Petalacte coronata* AM234900; *Peucedanum galbanum* AM234823; *Phalaris arundinacea* AJ784827; *Phaneroglossa boulisia* AY215161; *Pharnaceum* sp. AM235031; *Phragmites australis* U29900; *Phyllica pubescens* Y16769; *Phyllanthus liebmannianus* Z75676; *Phyllolobus splendens* AM234793; *Phyllopodium* sp. AM235145; *Phymaspernum appressum* AM234901; *Pillansia templemanni* AJ309671; *Pimpinella saxifraga* U50229; *Piper capense* AM235048; *Pittosporum japonicum* L11202; *Plantago crassifolia* AM235049; *Platycarpha carlinoides* EU385009; *Platycaulos major* AY881465; *Platyphorus trifoliatus* AF291933; *Plecostachys serpyllifolia* AM234902; *Plectranthus barbatus* U28882; *Plumbago auriculata* Y16906; *Poa trivialis* AY395555; *Podalyria biflora* Z70126; *Polemanniopsis marlothii* AM234824; *Polhillia pallens* AM235012; *Polyarrhena reflexa* AM234903; *Polycarena* sp. AM235146; *Polycarpon tetraphyllum* AY270144; *Polygala bracteolata* AJ829702; *Polygonum undulatum* AM235078; *Polygogon* sp. AM235070; *Polystachya pubescens* AF074222; *Portulacaria afra* AM235080; *Potamogeton distinctus* AB004901; *Printzia* sp. AM234904; *Prionanthium dentatum* DQ887121; *Prionium serratum* U49223; *Prismatocarpus schlechteri* AM234942; *Protea repens* U79182; *Prunus africana* AM235108; *Pseudobaeckia cordata* AM234935; *Pseudopentameris macrantha* DQ887122; *Pseudoselago* sp. AM235147; *Psilocaulon parviflorum* AM234794; *Psoralea aculeata* AM235013; *Psychotria nervosa* AJ002186; *Psydrax obovatum* AM235111; *Ptaeroxylon obliquum* AF123276; *Pteronia divaricata* AM234905; *Pterygodium catholicum* AY368346; *Puccinellia distans* L14621; *Pulicaria scabra* AM234906; *Pupalia lappacea* AY270122; *Putterlickia pyracantha* AM234959; *Pycreus mundtii* AF449517; *Pyrenacantha malvífolia* AJ402995; *Quaqua mammillaris* AM234840; *Rafnia perfoliata* AM235014; *Ranunculus trichophyllus* L08766; *Rapanea ferruginea* Z80204; *Raspalia virgata* AM234936; *Relhania rotundifolia* AM234907; *Restio dispar* AM235099; *Retzia capensis* Z29669; *Rhamnus prinoides* AM235104; *Rhigiophyllum squarrosum* AM234943; *Rhigozum obovatum* AM234922; *Rhodocoma capensis* AM235100; *Rhoiacarpos capensis* AM235124; *Rhoicissus tomentosa* AJ419725; *Rhus lucida* AM234811; *Rhynchosidium* sp. AM234908; *Rhynchosia capensis* AM235015; *Rhynchospora fascicularis* U49233; *Riocreuxia torulosa* AM234841; *Robsonodendron maritimum* AM234960; *Roella amplexicaulis* AM234944; *Romulea monodelpha* AJ133871; *Roridula gorgonias* L01950; *Rosenia humilis* AM234909; *Rothmannia capensis* AM235112; *Rubia tinctorum* X83666; *Rubus idaeus* U06825; *Ruellia graecizans* L12595; *Rumex acetosella* D86290; *Ruppia maritima* U03729; *Ruschia brakdamensis* AM234795; *Salicornia mayeriana* AM234802; *Salix mucronata* AM235121; *Salsola kali* AY270129; *Salteria sarcocolla* AM235047; *Salvia dentata* AM235000; *Samolus valerandi* U96659; *Sanicula elata* AM234825; *Sansevieria cylindrica* Z73698; *Saphesia flaccida* AM234796; *Sarcocornia utahensis* AY270126; *Sarcostemma viminale* EU196289; *Satyrium rhynchanthum* AJ542397; *Scabiosa columbaria* AF446948; *Scadoxus puniceus* AM234808; *Scaevola frutescens* L13932; *Schefflera arboricola* U50255; *Schismus barbatus* AM235071; *Schistostephium umbellata* AM234910; *Schoenoplectus articulatus* Y12987; *Schoenoxiphium lehmannii* EF178542; *Schoenus nigricans* Y12983; *Schotia afra* AM235016; *Scirpoidea thunbergii* AJ404727; *Scleranthus annuus* AY270145; *Scleria distans* Y12968; *Scloppia mundii* AM235122; *Scutia buxifolia* AJ390033; *Sebaea* sp. AM234984; *Secamone afzelii* X91779; *Seetzenia lanata* Y15025; *Seidelia triandra* AY794933; *Selago* sp. AM235148; *Senecio burchellii* AM234911; *Septulina glauca* AM235022; *Serruria fasciflora* AM235086; *Sesbania punicea* GU135148; *Setaria* sp. AM235072; *Sida* sp. AM235027; *Sideroxylon inerme* AM235132; *Silene* sp. AM234951; *Siphocodon debilis* AM234945; *Sisymbrium irio* AY167982; *Smelophyllum capense* AM235131; *Solanum* sp. AM235153; *Sonderothamnus petraeus* AY078154; *Sorocephalus alopecurus* AM235087; *Sparaxis* var *iegate* AJ309669; *Sparrmannia ricinocarpa* AJ233128; *Spartina pectinata* AJ784821; *Spatalla curvifolia* AM235088; *Spergula rubra* AY270146; *Spetaea lachenalifolia* AM234990; *Spiloxene capensis* Z77281; *Spirodela intermedia* U68092; *Sporobolus* sp. AM235073; *Staavia radiate* AM234937; *Staberoha* sp. AM235101; *Stachys aethiopica* AM235001; *Stapelia leendertziae* X91778; *Steirodiscus* sp. AM234912; *Stellaria media* M62570; *Stenoglottis woodii* AM235042; *Stenotaphrum secundatum* AM235074; *Sterculia tragacantha* AF022126; *Stilbe vestita* Z68827; *Stilpnogyne* sp. AM234913; *Stipa dregeana* U31442; *Stipagrostis zeyheri* U31378; *Stirtonanthus taylorianus* X83667; *Stoebe* sp. AM234914; *Stoibrax capense* AM234826; *Strelitzia reginae* AM235157; *Streptocarpus rexii* AM234985; *Striga gesnerioides* AF026839; *Struthiola ciliata* AJ297241; *Strychnos decussata* AM235020; *Stylapterus micranthus* AJ605093; *Suaeda altissima* AY270135; *Suessenguthiella scleranthoides* AM235032; *Sutera pinnatifida* AM235149; *Syncarpha ferruginea* AM234915; *Syringodea derustensis* AM234994; *Tamarix pentandra* Z97650; *Tarchonanthus camphoratus* AM234916; *Tecoma capensis* AM234923; *Tecomaria capensis* AM235150; *Teedia lucida* AM234923; *Tephrosia grandiflora* Z95542; *Tetragonia* sp. AM234797; *Tetrania involucrata* AM234973; *Teucrium fruticans* Z37467; *Thamneea massoniana* AY490990; *Thamnochortus anenarius* AM235102; *Thereianthus racemosus* AJ309663; *Thesodium fragile* AM235125; *Thesium strictum* AM235126; *Thinopyrum distichum* AM235075; *Thunbergia capensis* AM234783; *Tittmannia estherhuseniae* AY490991; *Torilis arvensis* AM234827; *Trachyandra tortilis* AJ512327; *Trachypogon spicatus* EF125123; *Tragus racemosus* EF125103; *Treichelia longibracteata* AM234946; *Tribolium uniolae* AM235076; *Tribulus terrestris* AM235167; *Trichocephalus stipularis* AM235105; *Trichochladus crinitus* AF060711; *Trichodesma africanum* AM234930; *Trichodiadema barbatum* AY046587; *Trichogyne repens* AM234917; *Trifolium burchelliae*

num AM235018; *Triglochin bulbosa* AM234996; *Trigonocapnos lichtensteinii* AM234981; *Trimeria grandifolia* AJ418835; *Tripteris clandestina* AM234918; *Tristachya leucothrix* AM235077; *Tritonia disticha* AJ309675; *Tritoniopsis unguicularis* AJ309658; *Troglophyton* sp. AM234919; *Tulbaghia violacea* Z69203; *Tylophora sylvatica* X91780; *Typha capensis* AM235159; *Ursinia* sp. AM234920; *Utricularia biflora* L13190; *Vahlia capensis* L11208; *Valeriana capensis* AM235163; *Vellereophytum dealbatum* AM234921; *Veltheimia bracteata* AM234991; *Vernonia mespilifolia* L13646; *Veronica anagallis-aquatica* AY034021; *Vexatorella obtusata* subsp. *obtusata* AM235089; *Vigna unguiculata* Z95543; *Villarsia calthifolia* L11685; *Viola decumbens* AM235165; *Virgilia divaricata* Z70131; *Viscum capense* AM235127; *Wachendorfia thyrsiflora* AF312266; *Wahlenbergia capensis* AM234947; *Walleria gracilis* AM235158; *Watsonia angusta* AJ309666; *Wiborgia tetraptera* EU347973; *Willdenowia incurvata* AM235103; *Wimmerella pygmaea* AM234948; *Witsenia maura* AJ277880; *Wolffia arrhiza* AY034254; *Wurmbea spicata* AM234964; *Xenoscapa fistulosa* AM234995; *Xiphotheca tecta* AM235019; *Xyris capensis* AJ286563; *Xysmalobium undulatum* AM234842; *Zaluzianskya ovata* AM235151; *Zannichellia palustris* U03725; *Zantedeschia aethiopica* AF065474; *Zanthoxylum monophyllum* U39282; *Zehneria scabra* AM234970; *Zornia cantoniensis* U74235; *Zostera capensis* AM235166; *Zygophyllum spinosum* AJ133871.