

Survey and importance of the flora of Rajiv Gandhi University Campus, Rono Hills, Arunachal Pradesh: Checklist – I

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Abstract

A preliminary floristic survey of the Rajiv Gandhi University Campus has recorded the occurrence of 282 species growing naturally, including herbs (80 spp, 28.37%), trees (79 spp, 28.01%), shrubs (52 spp, 18.44%), pteridophytes (32 spp, 11.35%), climbers (28 spp, 9.93%) and grasses & sedges (11 spp, 3.9%). Out of these, 156 species are of medicinal plants and, in addition, 34 species are used in various other ways. The developmental activities within the University Campus resulted in gradual dwindling of its once rich forest cover.

Key words: Plant Diversity, Ethnobotany, Rono Hills, Checklist

INTRODUCTION

Arunachal Pradesh is occupying the easternmost part of the Eastern Himalaya (93°46' to 13.59" E Longitude and 27°08' to 50.33" N Latitude). It is a land of lofty hills and luxuriant forests, gentle streams and raging torrents. The state harbors a significant diversity in the flora and fauna. The diverse topography, physiography, altitudinal gradients, climatic conditions prevailing in the state help to establish a diverse niche as the habitat for wide range of organisms. The major part of the area is falling within the 'Himalaya Hotspot' and a part in the 'Indo-Burma Hotspot' of IUCN (Myers *et al*, 2000; Conservation International 2005).

Campus of the Rajiv Gandhi University (formerly Arunachal University) is situated in the biodiversity rich Rono Hills and is, certainly, much affected with the developmental activities. A look into the adjoining forest of the Rono hills, Doimukh helps to understand the situation. The present attempt is to understand the status of the campus flora and to make an estimate to it's, at least, social importance.

MATERIALS AND METHODS

Rajiv Gandhi University, established in 1984, is located at the Rono hills 280 m above mean sea level in the outskirts of the state capital, Itanagar (about 25 km). The University campus spreads over an area of 302 acres overlooking the river Dikong, having ravine, gully, gorge, etc.

Plant diversity of the University campus was surveyed during May 2005 to October 2007, processed and identified in the Plant Systematic Research Laboratory of the Department of Botany following Jain & Rao (1977). Plants cultivated or planted in home gardens were not recorded. Ethnobotanical importance of the recorded plant species was determined consulting relevant ethnobotanical literatures like Kirtikar & Basu (1993), Das *et al.* (2003), Singh *et al.* (2003), Jain (1991) and through the discussion with local elderly people.

RESULTS AND DISCUSSION

A total of 282 species of plants were recorded representing 234 genera covering 134 families during the study period (Appendix I). Dominant families are Asteraceae (16 spp), followed by Euphorbiaceae (13 spp), Verbenaceae (12 spp), Polygonaceae, Poaceae and Solanaceae (7 species

each) and 5 species for Convolvulaceae. Forty-nine families contributed 1 species each, 20 families contributed 2 species each, 16 families contributed 3 species each, 6 families contributed 4 species each and 9 families having 6 species each (Figure 1).

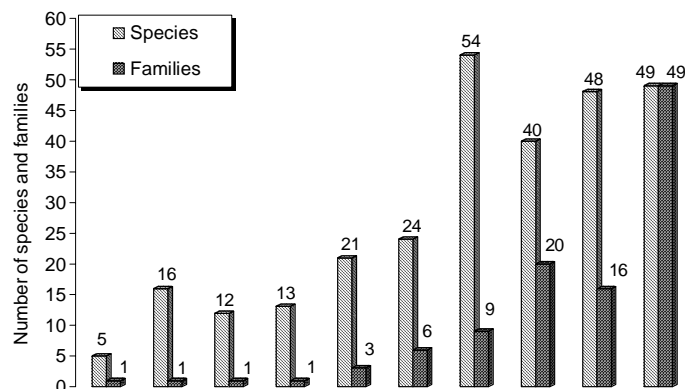


Figure 1. Species contribution in different families

Habit-group distribution of the recorded flora has been presented in Table 1. It shows that herbaceous plants [Herbs 80 + Grasses & Sedges 11] are dominating the flora. These are followed by 79 species of trees and 52 species of shrubs.

Table 1. Habit group distribution in the flora of Rajib Gandhi University campus.

Habit Groups	No. of species	No. of genera	No. of families	% occurrence
Herbs	80	66	33	28.37
Grasses & Sedges	11	11	2	3.9
Shrubs	52	44	23	18.44
Climbers	28	21	16	9.93
Pteridophytes	32	24	18	11.35
TOTAL:	282	234	134	

More than 67% of species (192 spp) recorded from the campus are with ethnobotanical importance used in varied purposes. Of these 156 species are used as medicine. In addition, a total of 34 species were used in different other purposes, viz., decorative, packaging, timber and furniture making, fiber, fodder, masticator, famine food, fire wood and fish poisoning. Four species used for fish poisoning are *Aesculus assamica*, *Albizia procera*, *Persicaria hydropiper* and *Maesa indica*.

Therefore, taking into account of the existing number of plant species, it may be stated that university campus harbors rich plant diversity even today. Establishment of such a campus helps the entry some exotic species and their subsequent release and naturalization. However, regular monitoring on the flora is very much essential. Creation of a database on the flora of this region is very much important for this fragile ecosystem and the Plant Diversity Group of the “Centre of the Biodiversity” of this University has undertaken such activities in a phase-wise manner. It is expected that all the plant species could be recorded and documented in course of time within the university campus.

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APPENDIX I

List of plants growing in the Campus of Rajiv Gandhi University along with their uses and useful parts. [NK = not known; Infls = Infls]

Scientific name	Family	Uses/ ailments	Part used
CLIMBERS			
<i>Argyreia nervosa</i> (Burm.f.) Bojer	Convolvulaceae	Wounds, anorexia, dyspepsia, flatulence, colic, constipation, nervous weakness, obesity, hoarseness, leucorrhoea, general debility	Rt, Sds
<i>Aristolochia cathcartii</i> Hook.f.	Aristolochiaceae	NK	NK
<i>Basella rubra</i> L.	Basellaceae	Burning sensation, constipation, flatulence, sleeplessness, dysentery, gonorrhoea	St, Rt
<i>Cardiospermum halicacabum</i> L.	Sapindaceae	Fever and arthritis	Rt, Lvs, Sds
<i>Cissus repens</i> H.J. Lam	Vitaceae	NK	NK
<i>Clitoria ternatea</i> L.	Fabaceae	Ophthalmopathy, burning sensation, tubercular glands, fevers	Rt, Lvs, Sds
<i>Cuscuta reflexa</i> Roxburgh	Cuscutaceae	Jaundice, myalgia, cough, bronchitis, fever, paralysis	WP
<i>Dioscorea alata</i> L.	Dioscoreaceae	Diabetes, leprosy, gonorrhoea, helminthiasis	Tubers
<i>Dioscorea bulbifera</i> L.	Dioscoreaceae	Scrofula, sprains, injuries, dysentery	Tubers
<i>Dioscorea pentaphylla</i> L.	Dioscoreaceae	Vegetable	Tubers
<i>Ipomoea batatas</i> (L.) Lamarck	Convolvulaceae	Burning sensation, constipation, diabetes, general weakness	Rt tubers
<i>Ipomoea nil</i> (L.) Roth	Convolvulaceae	Inflammations, constipation, skin diseases, fever	Sds
<i>Ipomoea quamoclit</i> L.	Convolvulaceae	Plies	Lvs
<i>Melothria perpusilla</i> Cogniaux	Cucurbitaceae	Fever, diarrhea	Rt
<i>Mikania micrantha</i> Kunth	Asteraceae	Stops bleeding; insect bites, skin irritations	WP

Scientific name	Family	Uses/ ailments	Part used
<i>Momordica dioica</i> Roxburgh	Cucurbitaceae	Stops piles bleeding; bowel complaints	Rt
<i>Momordica monadelpha</i> Roxburgh	Cucurbitaceae	NK	NK
<i>Paederia foetida</i> L.	Rubiaceae	Rheumatism, dyspepsia, bacillary dysentery	Fresh lvs
<i>Passiflora subpeltata</i> Ortenga	Passifloraceae	NK	NK
<i>Piper sylvaticum</i> Roxburgh	Piperaceae	Liver & urinary troubles	Mature infls
<i>Smilax ovalifolia</i> Roxburgh	Liliaceae	NK	NK
<i>Smilax zeylanica</i> L.	Liliaceae	Venereal diseases, skin troubles, sores, swellings and abscess	Rt, Lvs
<i>Stemona tuberosa</i> Loureiro	Stemonaceae	Convulsion, neuropathy, leprosy, skin diseases, fever, ulcers, cephalalgia	St
<i>Stephania japonica</i> (Thunburgh) Miers	Menispermaceae	Urinary problems, headache	Lvs
<i>Stephania rotunda</i> Hook.f. & Thomson	Menispermaceae	Dysentery and fever	Rt
<i>Tetrastigma bracteolatum</i> (Wallich) Planchon	Vitaceae	NK	NK
<i>Thunbergia grandiflora</i> Roxburgh	Acanthaceae	Snake bite	Lvs
<i>Tinospora cordifolia</i> (Willdenow) Miers ex Hook.f. & Thomson	Menispermaceae	Stomach problems, constipation, burning sensation, dyspepsia, chronic fevers, gout, vomiting	St
GRASSES & SEDGES			
<i>Cynodon dactylon</i> (L.) Persoon	Poaceae	Vulnerary, constipation, burning sensation, leprosy, skin diseases, vomiting, diarrhea, general debility	WP
<i>Cyperus rotundus</i> L.	Cyperaceae	Irregular menstruation, dyspepsia, diarrhea, vomiting	Rhz
<i>Dactyloctenium aegypticum</i> (L.) P. Beauvois	Poaceae	Ulcers	WP
<i>Imperata cylindrica</i> (L.) P. Beauvois	Poaceae	Stomach problems, indigestion, relieving wind and griping, colds, menstrual problems	Sobol
<i>Kyllinga</i> sp.	Cyperaceae	NK	NK
<i>Lipocarpha chinensis</i> (Osbeck) J. Kern	Cyperaceae	NK	NK
<i>Panicum compactum</i> Swartz	Poaceae	NK	NK
<i>Paspalum</i> sp.	Poaceae	NK	NK
<i>Phragmites karka</i> (Retzius) Trinius	Poaceae	NK	NK
<i>Setaria</i> sp.	Poaceae	NK	NK
HERBS			
<i>Acanthospermum hispidum</i> DC.	Asteraceae	NK	NK
<i>Achyranthes aspera</i> L.	Amaranthaceae	Rheumatism, dysuria, stomach troubles, wounds	Rt, Sds
<i>Acmella calva</i> (DC.) Jansen	Asteraceae	Toothache, throat & gum affections, dysentery, fever during summer	Lvs, Rt, capitula
<i>Aconogonum molle</i> (D. Don) Hara	Polygonaceae	NK	NK

Scientific name	Family	Uses/ ailments	Part used
<i>Adenostemma lavenia</i> (L.) O. Kuntze	Asteraceae	NK	NK
<i>Ageratum conyzoides</i> L.	Asteraceae	Fresh cuts and wounds	Young Lvs
<i>Alocasia macrorrhiza</i> (L.) Schott	Araceae	Colic & vomiting, impetigo, snake-bite	Lvs, Rhz
<i>Alpinia galanga</i> Willdenow	Zingiberaceae	Dyspepsia, flatulence, vomiting, diarrhea, malaria	Rhz
<i>Alpinia</i> sp.	Zingiberaceae	NK	NK
<i>Amaranthus spinosus</i> L.	Amaranthaceae	Burning sensation, eczema, bronchitis, boils, burns, nausea	WP
<i>Amaranthus viridis</i> L.	Amaranthaceae	Liver diseases	Lvs
<i>Andrographis paniculata</i> (Burman f.) Wallich ex Nees	Acanthaceae	Dysentery, diarrhea, cough, sore throat, tonsillitis	WP
<i>Anisomeles indica</i> (L.) O.Kuntze	Lamiaceae	Uterine affections	WP
<i>Arisaema tortuosum</i> Schott	Araceae	NK	NK
<i>Begonia roxburghii</i> (Miquel) A. DC.	Begoniaceae	NK	NK
<i>Bidens pilosa</i> L.	Asteraceae	NK	NK
<i>Blumea hieracifolia</i> (D. Don) DC.	Asteraceae	NK	NK
<i>Boerhavia diffusa</i> L.	Nyctaginaceae	Inflammations, jaundice, constipation, cough	WP
<i>Borreria hispida</i> (L.) K. Schumacher	Rubiaceae	Tooth-worms	WP
<i>Cardamine hirsuta</i> L.	Brassicaceae	NK	NK
<i>Centella asiatica</i> (L.) Urban	Apiaceae	Urinary discharges, blood diseases, inflammations, fever	WP
<i>Coccinia grandis</i> (L.) Voigt	Cucurbitaceae	NK	NK
<i>Colocasia esculenta</i> (L.) Schott	Araceae	Internal haemorrhages	WP
<i>Commelina benghalensis</i> L.	Commelinaceae	Fever, bilious affection, snake bite	Lvs
<i>Costus speciosus</i> (Koeing) Smith	Costaceae	Inflammations, fever; ear drop	St, Rhz
<i>Crassocephalum crepidioides</i> (Bentham) S. Moore	Asteraceae	NK	NK
<i>Curcuma</i> sp.	Zingiberaceae	NK	NK
<i>Cuphea balsamona</i> Cham. & Schlecht	Lythraceae	NK	NK
<i>Cyanotis cristata</i> D. Don	Commelinaceae	NK	NK
<i>Desmodium microphyllum</i> (Thunbergh) DC.	Fabaceae	NK	NK
<i>Desmodium</i> sp.	Fabaceae	NK	NK
<i>Drymaria cordata</i> Willdenow	Caryophyllaceae	Muscular sprain, cough, dysentery	WP
<i>Duchesnia indica</i> (Anderson) Focke	Rosaceae	Stone in urinary tract & kidney	WP
<i>Eclipta prostrata</i> (L.) L.	Asteraceae	Skin diseases, wounds, ulcers, jaundice. Good for blackening & strengthening of hair	WP
<i>Eryngium foetidum</i> L.	Apiaceae	Stimulant, appetizer	Lvs
<i>Eupatorium cannabinum</i> L.	Asteraceae	Jaundice, scurvy, ulcers	Lvs
<i>Euphorbia hirta</i> L.	Euphorbiaceae	Fever, colds, flu and other acute viral conditions	Rt

Scientific name	Family	Uses/ ailments	Part used
<i>Fragaria nilgerrensis</i> Schlecht ex J. Gay		Rosaceae	Stone
formation in urinary tract and kidney		Whole plant	
<i>Galinsoga parviflora</i> Cavanilles	Asteraceae	Dysentery, boils	Lvs
<i>Gynura cusimbua</i> (D. Don) Moore	Asteraceae	Fresh cuts & wounds	Young lvs
<i>Hedychium coronarium</i> Koenig	Zingiberaceae	Carminative, stimulant, bruises, sprains	Fls, Rhz
<i>Hedychium spicatum</i> Smith	Zingiberaceae	Nausea, vomiting, asthma, bronchitis, local inflammation	Rhz
<i>Hedyotis auricularia</i> L.	Rubiaceae	NK	NK
<i>Heliotropium indicum</i> L.	Boraginaceae	Ulcers, sores, wound, skin infections, stings of insects, rheumatism and ring-worm	WP
<i>Hodgsonia macrocarpa</i> (Blume) Cogniaux	Cucurbitaceae	Fruit-vegetable	Frt
<i>Houttuynia cordata</i> Thunburgh	Saururaceae	Hemorrhoids, measles, acute conjunctivitis, enteritis, irregular menstruation	WP
<i>Hydrocotyle sibthorpioides</i> Lamarck	Apiaceae	Cough, fever, jaundice	WP
<i>Impatiens balsamina</i> L.	Balsaminaceae	Amenorrhea	Sds
<i>Kalanchoe pinnata</i> (Lamarck) Persoon	Crassulaceae	Burns, wounds and ulcer	WP
<i>Lucas aspera</i> (Willdenow) Link	Lamiaceae	Colic, dyspepsia, chronic skin eruption, cough, intermittent fevers, ulcers	Lvs, Fls
<i>Lindernia ciliata</i> (Colsmann) Pennell	Scrophulariaceae	Cold-bite, cuts and injuries	Lvs
<i>Lindernia ruellioides</i> (Colsmann) Pennell	Scrophulariaceae	Worms in the skin	WP
<i>Linaria ramosissima</i> Wallich	Scrophulariaceae	Diabetes	WP
<i>Lindenbergia indica</i> (L.) Vatke	Scrophulariaceae	Chronic bronchitis, skin eruptions	Lvs
<i>Ludwigia prostrata</i> Roxburgh	Onagraceae	NK	NK
<i>Mimosa pudica</i> L.	Mimosaceae	Hemorrhoids, urinary infections, dysentery, fever, stomach worms, insomnia, piles	WP
<i>Oldenlandia corymbosa</i> L.	Rubiaceae	Jaundice, liver diseases	WP
<i>Oxalis corniculata</i> L.	Oxalidaceae	Dizziness, diarrhea, dysentery, wounds, burns, body sores, wine intoxication, swelling beneath tongue	WP
<i>Oxalis debilis</i> H.B. & K.	Oxalidaceae	Liver complain	WP
<i>Peperomia pellucida</i> (L.) Kunth	Piperaceae	NK	NK
<i>Peristrophe bicalyculata</i> Nees	Acanthaceae	Antidote of snake poison	Shoot
<i>Phrynium pubinerve</i> Blume	Marantaceae	NK	NK
<i>Phyllanthus urinaria</i> L.	Euphorbiaceae	Sores throat, boils especially on chin, impetigo, infantile cheek, eczema and tongue thrush	WP
<i>Phyllanthus virgatus</i> Forster f.	Euphorbiaceae	Viral hepatitis, diuretic in edema, inflammations	WP
<i>Plantago major</i> L.	Plantaginaceae	Toothache, earache and enuresis, itching and burning urticaria and bleeding piles	WP, Sds

Scientific name	Family	Uses/ ailments	Part used
<i>Persicaria barbata</i> (L.) Hara	Polygonaceae	NK	NK
<i>Persicaria capitata</i> (D. Don) H. Gross	Polygonaceae	NK	NK
<i>Persicaria hydropiper</i> (L.) Spach	Polygonaceae	Uterine disorder; fish poison	WP
<i>Persicaria minor</i> (Huds.) Opiz	Polygonaceae	NK	NK
<i>Persicaria orientalis</i> (L.) Spach	Polygonaceae	NK	NK
<i>Portulaca oleracea</i> L.	Portulacaceae	NK	NK
<i>Pouzolzia sanguinea</i> (Blume) Merrill	Urticaceae	NK	NK
<i>Pouzolzia zeylenica</i> O. Kuntze	Urticaceae	NK	NK
<i>Rumex nepalensis</i> Sprengel	Polygonaceae	Constipation	WP
<i>Sauromatum venosum</i> (Aiton) Kunth	Araceae	NK	NK
<i>Scoparia dulcis</i> L.	Scrophulariaceae	Hyperthermia, sore throat, cough, measles, boils	WP
<i>Solanum nigrum</i> L.	Solanaceae	Cough, asthma, bronchitis, wounds, ulcers, dyspepsia, skin diseases, fever, giddiness	WP
<i>Sonchus asper</i> (L.) Hill	Asteraceae	Fresh cuts, skin itching	Lvs
<i>Thunbergia alata</i> Bojer	Acanthaceae	Cough	Lvs
<i>Tridax procumbens</i> L.	Asteraceae	NK	NK
<i>Zephyranthes x ajax</i> Sprengel	Amaryllidaceae	Wounds, muscular sprain	WP
PTERIDOPHYTES			
<i>Adiantum capillus-veneris</i> L.	Adiantaceae	Coughs, bronchitis, sore throat, chronic nasal catarrh	Aerial parts
<i>Adiantum philippense</i> L.	Adiantaceae	NK	NK
<i>Alsophila spinulosa</i> (Wallich ex Hooker) Tryon	Cyathaceae	Starch from pith Is famine food	Pith
<i>Amphineuron opulentum</i> (Kaulf.) Holtum	Thelypteridaceae	NK	NK
<i>Angiopteris evecta</i> (G. Frost) Hoffman	Marattiaceae	Starch from pith Is famine food	Pith
<i>Asplenium nidus</i> L.	Aspleniaceae	NK	NK
<i>Athyrium</i> sp.	Athyriaceae	NK	NK
<i>Blechnum orientale</i> L.	Blechnaceae	NK	NK
<i>Cheilanthes</i> sp.	Pteridaceae	NK	NK
<i>Cyathea gigantea</i> (Wallich ex Hooker) Holtum	Cyathaceae	Starch from pith is famine food	Pith
<i>Dicranopteris linearis</i> (N. Burm) Undrew	Gleicheniaceae	NK	NK
<i>Diplazium axillare</i> Ching	Athyriaceae	NK	NK
<i>Diplazium esculentum</i> (Koeing ex Retzius) Swartz	Athyriaceae	NK	NK
<i>Dryopteris marginata</i> (Wallich) H. Christ	Dryopteridaceae	Boils and burns	Fronde
<i>Equisetum debile</i> Roxburgh ex DC.	Equisetaceae	Skin diseases	WP

Scientific name	Family	Uses/ ailments	Part used
<i>Helminthostachys zeylanica</i> (L.) Hooker	Ophioglossaceae	Dysentery, catarrh, malaria, blisters on tongue	Fronds
<i>Lycopodiella cernua</i> (L.) Pic.-serm.	Lycopodiaceae	NK	NK
<i>Lygodium japonicum</i> (Thunbergh) Swartz	Lygodiaceae	NK	NK
<i>Lygodium mearnsii</i> Copel.	Lygodiaceae	NK	NK
<i>Lygodium salicifolium</i> C. Presl	Lygodiaceae	NK	NK
<i>Nephrodium</i> sp.	Dryopteridaceae	NK	NK
<i>Nephrolepis</i> sp.	Nephrolepidaceae	NK	NK
<i>Onychium siliculosum</i> (Desvaux) C. Chr.	Coniogramme	NK	NK
<i>Ophioglossum reticulatum</i> L.	Ophioglossaceae	NK	NK
<i>Ophioglossum vulgatum</i> L.	Ophioglossaceae	NK	NK
<i>Pityrogramma calomelanos</i> (L.) Link	Hemionitidaceae	NK	NK
<i>Pteridium</i> sp.	Pteridaceae	NK	NK
<i>Pteris</i> sp.	Pteridaceae	NK	NK
<i>Selaginella pentagona</i> Spring	Selaginellaceae	NK	NK
<i>Selaginella tenuifolia</i> Spring	Selaginellaceae	NK	NK
<i>Sellaginella monospora</i> Spring	Selaginellaceae	NK	NK
<i>Woodwardia unigemmata</i> (Makino) Nakai	Blechnaceae	NK	NK
SHRUBS			
<i>Abelmoscus esculentus</i> (L.) Moench	Malvaceae	Dysentery, gonorrhoea; antispasmodic	Frts, Sds, Rt
<i>Acacia pennata</i> (L.) Willdenow	Mimosaceae	NK	NK
<i>Ambroma augusta</i> L. f.	Sterculiaceae	Uterine disorders, diabetes, headache with sinusitis, menstrual disorders	Rt, Lvs
<i>Artemisia nilagarica</i> (Clarke) Pampan	Asteraceae	Cough, asthma, bronchitis, nervous & spasmodic affections, inflammations, leprosy, skin diseases, fever, measles	Lvs, flwing tgs
<i>Boehmeria nivea</i> Hooker & Arnott	Urticaceae	Antibacterial; fiber from bark	Rt; bark
<i>Callicarpa macrophylla</i> Vahl	Verbenaceae	Burning sensation, dyspepsia, flatulence, diarrhea, dysentery, skin diseases, fever and general weakness	Fls, Frt
<i>Cannabis sativa</i> L.	Cannabaceae	Convulsions, otalgia, abdominal disorders, diarrhea, dyspepsia, inflammations	Dried Lvs, flwing sht
<i>Casearia vareca</i> Roxburgh	Flacourtiaceae	Worm troubles	Frt
<i>Cassia alata</i> L.	Caesalpiniaceae	Ring worm, eczema & other skin diseases	Lvs
<i>Cassia tora</i> L.	Caesalpiniaceae	Insomnia, headache, constipation, cough, hypertension, skin diseases	Sds, Lvs
<i>Catharanthus roseus</i> (L.) G. Don	Apocynaceae	Diabetics, menstrual disorders, hypertension	Lvs, Rt
<i>Cestrum nocturnum</i> L.	Solanaceae	Aromatic, ornamental	WP
<i>Clerodendrum colebrookianum</i> Walper	Verbenaceae	Skin diseases, cough, dysentery	Lvs
<i>Clerodendrum serratum</i> (L.) Moon	Verbenaceae	Inflammations, dyspepsia, anorexia, skin diseases, leprosy, fever	Rt, Lvs

Scientific name	Family	Uses/ ailments	Part used
<i>Clerodendrum japonicum</i> (Thunbergh) Sweet	Verbenaceae	Anti-bacterial, anti-inflammatory	Rt, Lvs
<i>Clerodendrum viscosum</i> Ventenat	Verbenaceae	Anti-inflammatory, intermittent fevers, malaria, general debility	Lvs
<i>Croton caudatus</i> Geiseler	Euphorbiaceae	NK	NK
<i>Datura stramonium</i> L.	Solanaceae	Asthma, whooping cough, muscle spasm, Parkinsonism	Lvs, fls, Sds
<i>Datura suaveolens</i> Willdenow	Solanaceae	Dizziness, muscular sprain	Lvs
<i>Duranta repens</i> L.	Verbenaceae	NK	NK
<i>Eupatorium odoratum</i> L.	Asteraceae	Cut and wounds	Lvs, capitula
<i>Grewia</i> sp.	Tiliaceae	NK	NK
<i>Hibiscus mutabilis</i> L.	Malvaceae	Ornamental	WP
<i>Hibiscus rosa-sinensis</i> L.	Malvaceae	Headache, boils, sores, inflammation; ease menstrual cramps	Lvs, fls
<i>Hyptis suaveolens</i> Poiteau	Lamiaceae	Stomachache	Lvs
<i>Ipomoea carnea</i> Jacquin	Convolvulaceae	NK	NK
<i>Ixora acuminata</i> Roxburgh	Rubiaceae	Ornamental	NK
<i>Jasminum</i> sp.	Oleaceae	NK	NK
<i>Jatropha curcas</i> L.	Euphorbiaceae	Foul ulcers, tumors, scabies, rheumatism; paralytic affections	Lvs, Sds, oil
<i>Justicia adhatoda</i> L.	Acanthaceae	Bronchitis & bronchial asthma, cough, breathlessness	Lvs, St bark, Rt, Fls
<i>Lantana camara</i> L.	Verbenaceae	Tetanus, dysentery, cuts, wounds, ulcers, swellings	WP
<i>Leea indica</i> (Burman f.) Merrill	Leeaceae	Diarrhea and dysentery	Rt
<i>Maesa indica</i> (Roxburgh) A. DC.	Myrsinaceae	Fish poison	Lvs
<i>Melastoma malabathricum</i> L.	Melastomataceae	Diarrhea, dysentery, wounds, skin diseases	Lvs
<i>Mussaenda roxburghii</i> Hook.f.	Verbenaceae	NK	NK
<i>Nerium oleander</i> L.	Apocynaceae	NK	NK
<i>Oxyspora paniculata</i> DC.	Melastomataceae	NK	NK
<i>Phloganthus thyrsoiflorus</i> Nees	Acanthaceae	Cough, fever	Infls
<i>Phloganthus parviflorus</i> T. Anderson	Acanthaceae	NK	NK
<i>Phyllanthus simplex</i> Retzius	Euphorbiaceae	Urinary disorder	WP
<i>Piper boehmerifolia</i> (Miquel) DC.	Piperaceae	NK	NK
<i>Ricinus communis</i> L.	Euphorbiaceae	Boils, skin inflammations, rashes	Sds
<i>Sida acuta</i> Burman f.	Malvaceae	Urinary troubles, liver disorder. Fiber	Rt Bark
<i>Solanum khasianum</i> C.B. Clarke	Solanaceae	Biological activity	Frt
<i>Solanum torvum</i> Swartz	Solanaceae	Enlarged spleen. Vegetable	Young Frt
<i>Solanum virginianum</i> L.	Solanaceae	Stomach and liver problems	Frt
<i>Thevetia peruviana</i> (Persoon) Schumann	Apocynaceae	Intermittent fevers, acro-narcotic poison	Sds, Rt
<i>Triumfetta cana</i> Blume	Tiliaceae	NK	NK
<i>Urena lobata</i> L.	Malvaceae	Fiber for making gunny bags	Bark
<i>Verbena officinalis</i> L.	Verbenaceae	Nervine, stimulates bile secretion	Aerial parts
<i>Viburnum</i> sp.	Caprifoliaceae	NK	NK

Scientific name	Family	Uses/ ailments	Part used
<i>Xanthium strumarium</i> L.	Asteraceae	Scrofula, ulcers, small pox, urinary diseases, boils, abscesses	Rt, Lvs, Frt
TREES			
<i>Acacia auriculaeformis</i> A. Cunn. ex Benth	Mimosaceae	NK	NK
<i>Actinodaphne obovata</i> (Nees) Blume	Lauraceae	House making, furniture, fire wood	Timber
<i>Aesculus assamica</i> Griffith	Hippocastanaceae	Fish poison	Lvs
<i>Ailanthus integrifolia</i> Prain	Simaroubaceae	NK	NK
<i>Alangium chinense</i> (Loureiro) Harms	Alangiaceae	Firewood	Lvs
<i>Albizia lebbek</i> (L.) Benth	Mimosaceae	Cough, catarrh, asthma, strengthening gums, scrofula, skin eruptions, leprosy, inflammations	Bark, Fls, Sds
<i>Albizia procera</i> (Roxburgh) Benth	Mimosaceae	Fish poison	Bark
<i>Albizia stipulata</i> (Roxburgh) Bovin	Mimosaceae	Scabies, skin diseases	Bark
<i>Aleurites cordata</i> Steudel	Euphorbiaceae	NK	NK
<i>Alstonia scholaris</i> (L.) R. Brown	Apocynaceae	Fevers, malaria, diarrhea, dysentery, abdominal disorders, skin diseases, foul ulcers	Bark, Lvs, latex
<i>Altingia excelsa</i> Noronha	Hamamelidaceae	Scabies, leucoderma. House building	Resin, timber
<i>Annona squamosa</i> L.	Annonaceae	Mental depression, spinal disorders, killing lice, anemia, burning sensation, weak muscles; insecticidal	Rt, Lvs, Frt, Sds
<i>Aralia armata</i> (G. Don) Seem	Araliaceae	NK	NK
<i>Artocarpus heterophyllus</i> Lamarck	Moraceae	Fever, boils, wounds, skin diseases	Rts, Lvs, Frt, Sds, Ltx
<i>Artocarpus lakoocha</i> Roxburgh	Moraceae	Boils, pimples	Seeds, bark
<i>Averrhoa carambola</i> L.	Averrhoaceae	Scabis, intermittent fevers, diarrhea, vomiting, intestinal worms	Lvs, Frt
<i>Baccaurea sapida</i> (Roxburgh) Muell.-Arg.	Euphorbiaceae	Edible	Frt
<i>Bauhinia variegata</i> L.	Caesalpiniaceae	Diarrhea, dysentery, skin diseases, intestinal worms, diabetes	Rt, bark
<i>Bombax ceiba</i> L.	Bombacaceae	Dysentery, influenza, burning sensation, skin eruptions	Root, Lvs, bark, young Frt, Sds
<i>Caesalpinia</i> sp.	Caesalpiniaceae	NK	NK
<i>Callicarpa arborea</i> Roxburgh	Verbenaceae	Masticatory	Bark
<i>Callistemon linearis</i> (Schrad. & Wendl.) Colv. ex Sweet	Myrtaceae	NK	NK
<i>Cassia fistula</i> L.	Caesalpiniaceae	Skin diseases, burning sensation, constipation, fever, diabetes, inflammations	All parts
<i>Castanopsis indica</i> (Roxburgh) A. DC.	Fagaceae	Making charcoal; wrapping biris	Wood; Lvs
<i>Celtis timorensis</i> Spanoghe	Ulmaceae	Dysentery, jaundice	Lvs
<i>Dalbergia sissoo</i> Roxburgh ex DC.	Fabaceae	Diarrhea, dysentery, burning sensation, ulcers	Rt, Lvs, heartwood
<i>Delonix regia</i> (Bojer) Rafinesque	Caesalpiniaceae	Avenue tree	Trees
<i>Dillenia indica</i> L.	Dilleniaceae	Fruit edible; hair lotion	Fruits

Scientific name	Family	Uses/ ailments	Part used
<i>Duabanga grandiflora</i> (Roxburgh ex DC.) Walpers	Sonneratiaceae	Making houses, furniture; fire wood	Timber
<i>Dysoxylum binectariferum</i> Hook.f. & Beddome	Meliaceae	Furniture, building house and packaging	Wood
<i>Elaeocarpus floribundus</i> Blume	Elaeocarpaceae	Edible; jam, pickles, chutney	Frt
<i>Elaeocarpus sphaericus</i> (Gaertner) Schumann	Elaeocarpaceae	Cough, bronchitis, fever, mental disorders, convulsions, insomnia	Frt, Sds kernel
<i>Erythrina stricta</i> Roxburgh	Fabaceae	Earache	Young Rt
<i>Eurya acuminata</i> DC.	Theaceae	Firewood	WP
<i>Ficus hispida</i> L.	Moraceae	Dysentery	Fresh bark
<i>Ficus religiosa</i> L.	Moraceae	Inflammatory swelling, wound, skin diseases, hemorrhages, asthma	Bark, Lvs, Frt, tender sht, Sds
<i>Ficus rumphii</i> Blume	Moraceae	Asthma. Fodder	Frt. Lvs, twigs
<i>Flacourtia indica</i> (Burm.f.) Merrill	Flacourtiaceae	Poisonous bite, skin diseases, purities, scabies, jaundice	Rts, Lvs, Frt
<i>Gmelina arborea</i> L.	Verbenaceae	Cough, rheumatism, fever, indigestion, cough, gonorrhea. Making furniture	Rt, Lvs. Timber
<i>Grevillea robusta</i> A. Cunningham	Proteaceae	NK	NK
<i>Hibiscus tiliaceus</i> L.	Malvaceae	Fractured bones, sprained muscles, gonorrhea, skin diseases	Lvs, Frt, bark
<i>Lagerstroemia reginae</i> Roxburgh	Lythraceae	Purgative, stimulant	Bark,Lvs, Rt
<i>Litsea cubeba</i> (Loureiro) Persoon	Lauraceae	Edible	Frt
<i>Litsea monopetala</i> (Roxburgh) Persoon	Lauraceae	Diarrhea, pain, bruises, fracture of animal bones. Rearing silk worms	Bark & Lvs
<i>Macaranga denticulata</i> Muell-Arg.	Euphorbiaceae	NK	NK
<i>Mallotus tetraococcus</i> (Roxburgh) Kurz	Euphorbiaceae	NK	NK
<i>Mangifera indica</i> L.	Anacardiaceae	Diarrhea, dysentery, diphtheria, rheumatism. Edible. Furniture, planking, ceiling boards, etc.	Rt, bark, Lvs, Fls, Frt. Timber
<i>Mangifera sylvatica</i> Roxburgh	Anacardiaceae	Furniture, planking, ceiling boards, etc. Edible	Timber. Frt
<i>Melia azedarach</i> L.	Meliaceae	Ascariasis, oxyuriasis	Bark
<i>Mesua ferrea</i> L.	Clusiaceae	Asthma, cough, leprosy, scabies, dysentery, burning sensation of feet, fever, cardiac debility	Fls, oil
<i>Michelia</i> sp.	Magnoliaceae	NK	NK
<i>Moringa oleifera</i> Lamarck	Moringaceae	Diarrhea, colic flatulence, amenorrhea, inflammation, intermittent fever	Rt, bark, Lvs, Sds
<i>Morus macroura</i> Miquel	Moraceae	Furniture, house building, tools handle, railway sleepers, etc.	Timber
<i>Neolamarckia cadamba</i> (Roxburgh) Bosser	Rubiaceae	Packing & match boxes, tea chests	Timber
<i>Nyctanthes arbortristis</i> L.	Oleaceae	Inflammations, dyspepsia, chronic fever, asthma, hemorrhoids, graying hair and baldness, scalp	Lvs, Fls, Sds

Scientific name	Family	Uses/ ailments	Part used
<i>Oroxylum indicum</i> Ventenat	Bignoniaceae	Stomachalgia, flatulence, cough, bronchitis, dyspepsia and cardiac disorders	Rts, Lvs, Frt, Sds
<i>Phyllanthus emblica</i> L.	Euphorbiaceae	Jaundice, diarrhea, dysentery, diabetes, cough, skin diseases, anemia	Rt, bark, Lvs, Frt
<i>Pinus roxburghii</i> Sargent	Pinaceae	Foul ulcers, haemorrhages, skin diseases, giddiness, scabies and inflammations	Timber, oil, oleoresin
<i>Polyalthia longifolia</i> (Sonn.) Thwaites	Annonaceae	Fever, skin diseases, diabetes and hypertension	Bark
<i>Pongamia glabra</i> W. Vent	Fabaceae	Gonorrhoea, ulcers, leprosy; Strengthening gums	Rt, bark, Fls, Lvs, Sds
<i>Premna bengalensis</i> Clarke	Verbenaceae	NK	NK
<i>Psidium guajava</i> L.	Myrtaceae	Diarrhea, cough, stomachache, dysentery	Lvs, Frt, Rt
<i>Sapindus mukorossi</i> Gaertner	Sapindaceae	Hysteria, epilepsy	Rt, bark, Frt
<i>Sapium bacatum</i> Roxburgh	Euphorbiaceae	Packing boxes, matches and scantling	Timber
<i>Schima wallichii</i> (DC.) Korthals	Theaceae	Veneers, ply, lead pencils, planks and scantling; good for firewood & charcoal	Timber
<i>Spondias pinnata</i> (L.f.) Kurz	Anacardiaceae	Regulating menstrual cycle, dysentery, diarrhea, muscular rheumatism	Rt, bark, Lvs, Frt
<i>Sterculia villosa</i> Roxburgh ex Smith	Sterculiaceae	Packing & tea boxes, scantling	Timber
<i>Sterospermum chelonoides</i> (L.) DC.	Bignoniaceae	Febrifuge; making railway sleepers, tea boxes, furniture and house building	Lvs, Rt, bark; timber
<i>Syzygium jambos</i> (L.) Alston	Myrtaceae	Gout, leprosy, diarrhea, wounds, ulcers	Bark, Frt
<i>Talauma hodgsoni</i> Hook.f. & Thomson	Magnoliaceae	Furniture, house building, packing & tea boxes, scantling	Timber
<i>Terminalia arjuna</i> (Roxburgh ex DC.) Wight & Arnott	Combretaceae	Bone fracture, ulcers, diabetes, fatigue, asthma, dysentery, inflammations and hypertension	Bark
<i>Terminalia bellirica</i> (Gaertner) Roxburgh	Combretaceae	Piles, dropsy, diarrhea, biliousness, dyspepsia and headache	Frt
<i>Terminalia chebula</i> Retzius	Combretaceae	Anti-inflammatory, stomachic, inflammations, jaundice, skin diseases, leprosy and intermittent fevers	Mature & immature Frt
<i>Terminalia myriocarpa</i> Heurck & Muelle Arg.	Combretaceae	Furniture and house building	Timber
<i>Thuja orientalis</i> L.	Cupressaceae	Anti-inflammatory, expectorant, lever tonic and body weakness	Sd, Rt
<i>Toona ciliata</i> Roemer	Meliaceae	Dysentery, cough, bronchitis, intermittent fevers, ulcers	Bark, Fls
<i>Trema orientalis</i> Blume	Ulmaceae	Fodder	Lvs
<i>Turpinia pomifera</i> (Roxburgh) DC.	Staphyleaceae	Packing boxes, scantling and tea boxes	Timber
<i>Zizyphus mauritiana</i> Lamarck	Rhamnaceae	General fatigue, loss bowels, night sweats and hysteria	Frt