

Shaik Mahammad Khasim  
Chunlin Long  
Kanchit Thammasiri  
Henrik Lutken *Editors*

# Medicinal Plants: Biodiversity, Sustainable Utilization and Conservation

 Springer

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# Medicinal Plants: Biodiversity, Sustainable Utilization and Conservation

 Springer

*Editors*

Shaik Mahammad Khasim  
Department of Botany and Microbiology  
Acharya Nagarjuna University  
Guntur, Andhra Pradesh, India

Chunlin Long  
College of Life and Environmental Sciences  
Minzu University of China  
Beijing, China

Kanchit Thammasiri  
Department of Plant Science  
Mahidol University, Thailand  
Bangkok, Thailand

Henrik Lutken  
Department of Plant and Environmental  
Sciences  
University of Copenhagen  
Taastrup, Denmark

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## Tree Flora of Andhra Pradesh, India

# 3

K. Sri Rama Murthy, S. Sandhya Rani, S. Karuppusamy,  
A. Lalithamba, and T. Pullaiah

### Abstract

The state of Andhra Pradesh is endowed with rich biodiversity. Extensive field and literature survey of trees in Andhra Pradesh yielded 601 tree taxa under 295 genera belonging to 75 families out of the estimated 2900 species of flowering plants in Andhra Pradesh. Euphorbiaceae (49) followed by Rubiaceae (44), Mimosaceae (32), Moraceae (29), Rutaceae (26), Tiliaceae (20), Verbenaceae and Bignoniaceae (19), Meliaceae (18), Fabaceae, Annonaceae, Sterculiaceae (15), Cordiaceae, Ebenaceae, Combretaceae, Lauraceae (13) are the largest families based on the species number. The dominant genera include *Ficus* with 24 species, *Grewia* 19, *Acacia* 15, *Diospyros* 12, *Terminalia* 11, *Cassia* 9 and *Cordia* 8 species. Endemic tree species distributed in different regions of Andhra Pradesh are *Actinodaphne madraspatana*, *Alphonsea madraspatana*, *Albizia thompsonii*, *Boswellia ovalifoliolata*, *Bridelia cinerascens*, *Cordia domestica*, *Croton scabiosus*, *Dimorphocalyx kurnoolensis*, *Eriolaena lushingtonii*, *Hildegardia populifolia*, *Lasiococca comberi*, *Premna hamiltonii*, *Pterocarpus santalinus*, *Shorea tumbuggaia*, *Syzygium alternifolium*, *Terminalia pallida*, *Wendlandia gamblei*, *Toona ciliata* var. *brevipetiolata*, etc. A brief account on topography, geology, climate, vegetation pattern, tree flora analysis and distribution pattern of trees in various regions of Andhra Pradesh are provided.

K. S. R. Murthy

R&D Center for Conservation Biology and Plant Biotechnology, Shivashakti Biotechnologies Limited, Hyderabad, Telangana, India

S. S. Rani · T. Pullaiah (✉)

Department of Botany, Sri Krishnadevaraya University, Anantapuramu, Andhra Pradesh, India

S. Karuppusamy

Department of Botany, The Madura College, Madurai, Tamil Nadu, India

A. Lalithamba

Department of Botany, DKW College, Nellore, Andhra Pradesh, India

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**Keywords**Andhra Pradesh · Trees · Vegetation · Endemic trees

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### 3.1 Introduction

The close bonding of humans with trees may be traced back to their arboreal ancestry. Reposing under a tree is like being cuddled by a mother-comfortable and secured. Trees are major components of forests. By sequestering carbon, releasing oxygen and losing a large amount of water vapour, trees profoundly influence the environment. Trees bind the soil, recycle minerals and regulate the course of rainwater. Unparalleled in the variety of useful products they give and the wide range of organisms they feed and shelter, trees are essential for maintaining the health of several ecosystems. Above all, trees are friendly, beautiful and invoke awe and admiration. They are the largest and longest-lived immobile organisms and often an amazing diversity of forms. Trees symbolize benevolence, fertility and mobility.

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### 3.2 Location and Characteristics of the Study Area

Geometrically the state of Andhra Pradesh lies between the latitudes 12°37' N and 19°55' N and longitude 76°45' E and 84°46' E (Fig. 3.1). Located in southern India, Andhra Pradesh is bounded on the south by Tamil Nadu, west by Karnataka, north-west by Telangana, north by Orissa and east by the Bay of Bengal. The total area of the state is 1,60,205 km<sup>2</sup>. It has 974 km sea coastline along the Bay of Bengal.

The 13 districts of the state are generally grouped into two geographically distinct regions called (1) Circars or Coastal Andhra with nine districts, i.e. Srikakulam, Vizianagaram, Visakhapatnam, East Godavari, West Godavari, Krishna, Guntur, Prakasam and Nellore and (2) Rayalaseema with four districts, i.e. Kurnool, Kadapa (formerly called Cuddapah), Anantapuramu (formerly called Anantapur) and Chittoor. The new capital city of Andhra Pradesh is proposed at Amaravathi in Guntur District, north of Guntur City.

According to Andhra Pradesh Forest Department information brochure, the forest area in the state is 22,862 km<sup>2</sup>, forming 14.27% of the state's territory. This is far below the 33% stipulated in National Forest Policy. The depletion of forests all over the world at an estimated rate of 2,45,000 km<sup>2</sup> per year is one of the most alarming aspects of present day biosphere tendencies. Due to such an extensive and unabated destruction of forests, mankind is losing many valuable plants even before we come to know that they exist. Causes of threats to the flora have generally been grouped into two categories, viz., (1) natural and (2) man-made. The natural causes include floods, earthquakes, landslides, natural competition between species, biology of the species such as lack of pollination and natural regeneration, diseases, etc. In man-made threats could be included deliberate destruction of habitat (such as by mining, dam constructions and conversion of forests), excessive grazing, over-exploitation, etc.

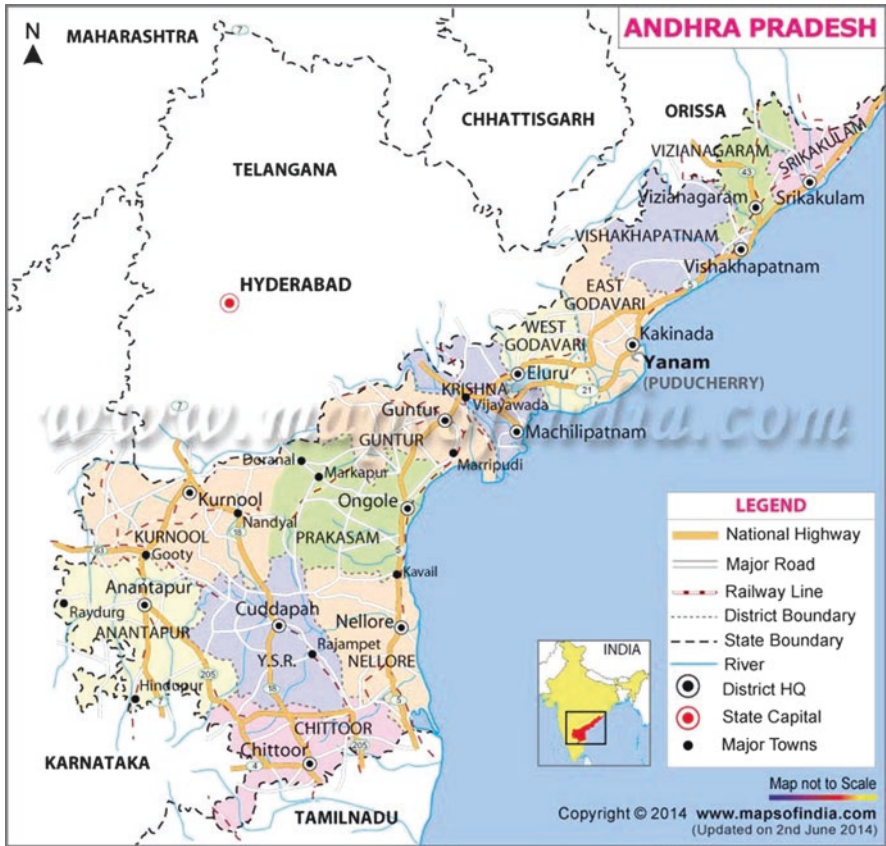


Fig. 3.1 Map of India and map of Andhra Pradesh

### 3.3 Geographical Division

Geographically, the whole state can be divided into the Coastal plains, the Eastern Ghats and the Western penneplains.

#### 3.3.1 The Coastal Plains

This region stretches along the coast from northern end to southern, i.e. from Srikakulam district to Nellore district. The northern portion of the coastal plain is narrow with an average width ranging between 30 and 40 km. The middle part is wider than northern portion, with an average between 70 and 75 km and in some places 100 km even. It includes the shallow fresh water lake of Kolleru which is a natural depression between Godavari and the Krishna deltas. The width of the coastal plain in the southern part is between 50 and 60 km. The Simhachalam cliff

(244 m), Dolphin's nose (375 m), Kondapalli (573 m), Kolleru lake (259 km<sup>2</sup>), Pulicat lake and Sriharikota island dot this coastal-plain region.

### 3.3.2 Eastern Ghats

These hills, unlike that of Western Ghats of India, do not form a continuous range running from north to south between the coastal plain and the plateau. The Eastern Ghats are the outcrops of the lower Vindhyan and the Cuddapah systems. In the northern portion, the Ghats are highly dissected and intervened by a number of valleys. The width of this place is between 60 and 70 km, and in many parts, the elevations reach above 1200 m above mean sea level. The Papikonda range in the north joins with Simhachalam hill range. Yarada hills extend towards the coast along Visakhapatnam. Veering further south-west they form the Kadapa range of hills called variously Palakondas, Velikondas, Erramalais, Nallamalais, Lankamalais and Seshachalam. They vary in elevation between 600 and 1350 m.

### 3.3.3 The Western Peneplains

The Western peneplain with scattered hillocks cover Kurnool except the Nallamalais portion, and Anantapuramu districts. The interior plateau formed with long belt of old peneplains (150–600 m altitude) is chiefly developed on the Archaean gneisses and granite rocks. The southern part of this region is generally poor with scanty rainfall. Much of this is below 150 m and most of the area is largely covered by deciduous forests.

#### 3.3.3.1 Vegetation

Biodiversity is fully expressed in the flora, fauna and vegetation. Tree flora is rich and varied and distributed under the following types of vegetation.

##### 1. Tropical evergreen forests

This type of vegetation is seen in very few valleys in small patch of forests in Lakshmipuram of Visakhapatnam in Northern Eastern Ghats. The common trees are *Cinnamomum zeylanicum*, *Elaeocarpus serratus*, *Ixora notoniana*, *Meliosma microcarpa*, *Symplocos laurina*, *Toona ciliata*, etc.

##### 2. **Tropical semievergreen forests** (moist deciduous forests and mixed with evergreen elements)

These are prevalent in moist valleys of Sapparla, Dharakonda, Galikonda, Tanjavanam, Minumuluru, some areas near Anantagiri, Nulakamaddi, Maredumilli of Northern Eastern Ghats, trees such as *Magnolia champaca*, *Mangifera indica*, *Artocarpus lakoocha*, *Dillenia pentagyna*, *Firmiana colorata*, *Bridelia tomentosa*, *Xylia xylocarpa*, *Mesua nagassarium*, *Polyalthia cerasoides*, *Macaranga peltata*, *Pittosporum napaulense*, *Phoebe lanceolata*, *Murraya koenigii*, etc. are the dominant elements of semievergreen forests.

3. **Tropical moist deciduous forests:** subdivided for convenience into

- (a) **Northern subtropical deciduous forests (Sal Forests):** This type of forest is found in parts of the districts of Srikakulam and north-eastern border area of Vizianagaram district. In the Sal forests *Shorea robusta* predominates and is associated with *Syzygium cumini*, *Xylia xylocarpa*, *Haldina cordifolia* (Fig. 3.3e), *Terminalia coriacea*, *Pterocarpus marsupium*, *Anogeissus latifolia*, *Albizia procera*, *Madhuca longifolia*, *Phyllanthus emblica*, *Lagerstroemia parviflora*, *Schleichera oleosa*, *Cleistanthus collinus*, *Buchanania lanzan* (Fig. 3.2c), *Dillenia pentagyna*, *Diospyros melanoxylon*, *Mallotus philippensis*, *Careya arborea*, *Litsea glutinosa*, *Syzygium operculatum*, etc.
- (b) **Southern Indian tropical moist deciduous forests (Non-Sal forests):** These are found in parts of the Rampa agency, Maredumilli areas of East Godavari district, parts of West Godavari district, small patches of Nallamalais, Talakona and some parts of Seshachalam hill ranges of Middle Eastern Ghats and parts of Southern Eastern Ghats. Dominant tree elements are *Terminalia alata*, *Xylia xylocarpa*, *Anogeissus latifolia*, *Dillenia pentagyna*, *Pterocarpus marsupium*, *Mangifera indica*, *Dalbergia latifolia*, *Terminalia chebula*, *Kavalama urens (Sterculia urens)* (Fig. 3.4c), *Mitragyna parviflora* (Fig. 3.4d), *Albizia odoratissima* (Fig. 3.2a), *Bridelia airyshawii*, *Schrebera swietenoides*, *Careya arborea*, *Grewia tiliifolia*, *Polyalthia cerasoides*, *Kydia calycina*, *Semecarpus anacardium*, etc.
- (c) **Southern tropical moist deciduous Riverian forests:** These are spread in very limited areas along banks and the dried river beds, represent a distinct eco-type comprising tree species of *Terminalia arjuna*, *Pongamia pinnata*, *Tamarindus indica*, *Anogeissus acuminata*, *Barringtonia acutangula* and also mixed with characteristic species on the sandy and rocky bouldered river beds such as *Homonoia riparia*, *Tamarix ericoides* and *Syzygium heyneanum*.

4. Tropical dry deciduous forests:

These forests are found in almost all regions of Andhra Pradesh. These are divided into teak-bearing forest and non-teak-bearing forests.

- (a) **Teak-bearing forests:** These are distributed in Northern and middle Eastern Ghats of Andhra Pradesh and dominated by valuable timber tree species, i.e. *Tectona grandis*. Associating elements are *Anogeissus latifolia*, *Pterocarpus marsupium*, *Terminalia chebula*, *Terminalia bellirica*, *Garuga pinnata*, *Bridelia airyshawii*, *Cassia fistula*, etc.
- (b) **Non-teak-bearing forests:** These are distributed along the Seshachalam hill ranges of middle Eastern Ghats. Interestingly these forests having important and very valuable endemic tree such as *Pterocarpus santalinus* and also *Shorea tumbuggaia*, *Syzygium alternifolium*, *Boswellia ovalifoliolata*, prominent in some areas and mixed up with other species like *Terminalia pallida*, *Shorea roxburghii*, *Phyllanthus emblica*, *Anogeissus latifolia*, *Terminalia paniculata*, *T. alata*, *Chloroxylon swietenia*, *Dolichandrone arcuata*, *Wrightia tinctoria*, *Vitex altissima*, etc.





**Fig. 3.2** (a) *Albizia odoratissima* (L.f.) Benth., (b) *Azadirachta indica* A. Juss., (c) *Buchanania lanzan* Spreng., (d) *Butea monosperma* (Lam.) Taub., (e) *Cochlospermum religiosum* (L.) Alston, (f) *Croton scabiosus* Beddome

## 5. Mixed dry deciduous forests

- (a) **Northern mixed dry deciduous forests:** These are distributed in restricted areas in Northern Eastern Ghats. *Shorea robusta* may or may not be present but *Boswellia serrata* is normally common and associated with *Terminalia alata*, *Bombax ceiba*, *Hymenodictyon excelsum*, *Pterocarpus marsupium*, *Kavalama urens* (*Sterculia urens*), *Alangium salvifolium*, *Mallotus philipensis*, *Cassia fistula*, etc.
- (b) **Southern mixed dry deciduous forests:** These are found in drier areas of Eastern Ghats. Dominant tree elements are *Anogeissus latifolia*, *Chloroxylon swietenia*, *Diospyros melanoxylon*, *Gardenia gum-mifera*, *Albizia odoratissima*, *Hardwickia binata*, *Pterospermum xylocarpum*, *Helicteres isora*, *Catunaregam spinosa*, *Flacourtia ramontchi*, etc.

#### 6. Dry Savannah forests

These, formed mostly as a result of biotic interference, are scattered throughout the area, covered with stunted tree species of *Phyllanthus emblica*, *Terminalia chebula*, *Pterocarpus marsupium*, etc.

#### 7. Scrub forests

These are considered to be a result of intensive biotic interference. These are seen in all along the Andhra Pradesh in smaller areas. These are dominated by thorny species of *Acacias*, *Capparis sepiaria*, *Ziziphus mauritiana*, *Z. oenoplia*, *Z. xylopyrus*, *Euphorbia antiquorum*, *E. tirucalli*, *Flacourtia sepiaria*, and *Catunaregam spinosa*, and also associated with non-thorny drought-resistant species like *Dolichandrone falcata*, *Wrightia tinctoria*, *Dodonaea viscosa*, *Cassia fistula*, etc.

#### 8. Tropical dry evergreen forests

This type of forest is found in South Kadapa, Sriharikota and Mamandur valley in Seshachalam hill ranges. The forest is characterized by tree species like *Manilkara hexandra*, *Memecylon umbellatum*, *Syzygium cumini*, *Albizia amara*, *A. lebeck*, *Strychnos nux-vomica* (Fig. 3.6c), *Sapindus emarginatus* (Fig. 3.5d), *Drypetes sepiaria*, *Pterospermum canescens*, *Drypetes ferrea*, *Garcinia spicata*, *Cordia dichotoma*, *Flacourtia indica*, etc.

### 3.4 Tree Flora Analysis

An extensive field study was conducted during 1993–2018 in different hills of Andhra Pradesh Ghats. Analysis of the tree diversity available within the Andhra Pradesh and literature (Hooker 1872-1897; Gamble and Fischer 1915-1935; Pullaiah and Sandhya Rani 1999; Pullaiah and Sri Rama Murthy 2001, 2018; Pullaiah and Muralidhara Rao 2002; Pullaiah et al. 2007, 2011, 2018a, 2018b; Pullaiah 2018; Pullaiah and Karuppusamy 2018) revealed altogether 601 taxa including 561 species and 5 varieties under 295 genera belonging to 80 families. The details of the number of species, genera and families under each plant group are shown in Table 3.1.

It is evident from the data that the ratio of species belonging to monocotyledons and dicotyledons is 1:530. Dominant families with 13 or more tree species are Euphorbiaceae (49), Rubiaceae (44), Mimosaceae (32), Moraceae (29), Rutaceae (26), Caesalpiniaceae (24), Tiliaceae (20), Bignoniaceae and Verbenaceae (19), Meliaceae (18), Fabaceae, Annonaceae, Sterculiaceae 15 each, and Lauraceae, Combretaceae, Myrtaceae, Ebenaceae, Cordiaceae 13 each. It is interesting that Euphorbiaceae occupies the first position; this indicates the wide range of growth adaptability and distribution of the various members of the family. 23 out of 75 families are represented by single genus with one species each.

Some of the arborescent genera having more than 3 arborescent species occurring in Andhra Pradesh are *Ficus* with 24 species, *Grewia* 19, *Acacia* 15, *Diospyros* 12, *Terminalia* 11, *Cassia* 9, *Cordia* 8, *Mallotus*, *Syzygium*, *Wendlandia*, *Vitex* 8 each, *Litsea*, *Citrus* 7 each, *Antidesma*, *Bridelia*, *Euphorbia*, *Glochidion*, *Bauhinia* 6 each, *Maytenus*, *Ehretia*, *Erythrina*, *Ziziphus*, *Zanthoxylum*, *Aglaia*, *Memecylon*,



**Table 3.1** Statistical analysis of trees of Andhra Pradesh

Group	Species		Genera		Families	
	Total	Percentage	Total	Percentage	Total	Percentage
<b>Dicots</b>	<b>590</b>	<b>98.18</b>	<b>287</b>	<b>97.24</b>	<b>72</b>	<b>96.00</b>
Polypetalae	329	55.82	164	57.45	46	63.89
Gamopetalae	141	25.13	73	25.18	14	19.44
Monochlamydae	112	19.06	50	17.38	12	16.67
<b>Monocots</b>	<b>11</b>	<b>1.85</b>	<b>8</b>	<b>02.76</b>	<b>3</b>	<b>04.00</b>
Total	601	100	295	100	75	100

*Antidesma* 5 each and *Cinnamomum*, *Litsea*, *Chionanthus*, *Premna*, *Annona*, *Polyalthia*, *Dolichandrone*, *Phyllanthus*, *Caesalpinia*, *Dalbergia*, *Morinda*, *Gardenia*, 4 species each.

### 3.5 Phytogeographical Distributional Pattern of Tree Taxa

Andhra Pradesh is the storehouse of 601 tree species (details given in Tables 3.2 and 3.3), of which 253 tree species are commonly seen throughout Andhra Pradesh like species of *Kavalama urens* (*Sterculia urens*), *Azadirachta indica*, *Boswellia serrata*, *Pterocarpus marsupium*, *Dalbergia* spp., *Diospyros melanoxylon*, *Haldina cordifolia*, *Gyrocarpus americanus*, *Tectona grandis*, etc.

### 3.6 Endemic Tree Taxa to Andhra Pradesh

Of the estimated 17,000 species of angiosperms in India, about 1932 taxa are endemic to Peninsular India (Ahmedullah and Nayar 1987). As many as 77 taxa are endemic to Andhra Pradesh, of which 16 are tree taxa. The taxonomically and phytogeographically interesting endemic tree species occurring in Andhra Pradesh are given below.

*Actinodaphne madraspatana* Bedd (Lauraceae). Small- to medium-sized tree, leaves simple, glaucous beneath, flowers yellow, dioecious, fruit ellipsoid; distributed in Seshachalam hill ranges (Kadapa-Chittoor districts) at 600–800 m altitudes.

*Alphonsea madraspatana* Bedd (Lauraceae). Middle-sized tree, flowers yellow; found throughout Andhra Pradesh but rare in distribution at 700–1000 m altitude.

*Boswellia ovalifoliolata* Balakr. & Henry (Burseraceae). Deciduous tree, leaves imparipinnate, flowers pinkish-white in lax panicles, drupe 3-gonous, seeds winged; distribution is confined to Seshachalam hills (in Kadapa, Chittoor districts) at 600–900 m.

*Cordia domestica* Roth (Cordiaceae). Small tree, leaves simple, flowers yellowish-white, drupe ellipsoid, yellowish or pinkish-yellow; found in Guvvalacheruvu of Kadapa district at about 1000 m altitude.

**Table 3.2** Trees in Andhra Pradesh

S. No.	Botanical name	Family	Tree height	Status	Remarks
1	<i>Acacia auriculiformis</i> A. Cunn. ex Benth.	Mimosaceae	Medium	Social forestry	Planted as avenue tree and also grown in forests as social forestry plantation.
2	<i>Acacia campbellii</i> Arnott	Mimosaceae	Small	Common	Open forests
3	<i>Acacia catechu</i> (L.f.) Willd.	Mimosaceae	Medium	Common	Foot hills of scrub and deciduous forests
4	<i>Acacia decurrens</i> (Wendl.) Willd.	Mimosaceae	Small	Introduced	Naturalized
5	<i>Acacia eburnea</i> (L.f.) Willd.	Mimosaceae	Small	Common	Scrub forest
6	<i>Acacia farnesiana</i> Willd.	Mimosaceae	Small	Occasional	Open dry deciduous forests
7	<i>Acacia ferruginea</i> DC.	Mimosaceae	Small	Occasional	Dry deciduous forests
8	<i>Acacia horrida</i> (L.f.) Willd.	Mimosaceae	Small	Common	Scrub and foot hills of dry deciduous forests
9	<i>Acacia leucophloea</i> (Roxb.) Willd.	Mimosaceae	Medium	Common	Out skirts of dry deciduous forests and scrubs
10	<i>Acacia mangium</i> Willd.	Mimosaceae	Medium	Introduced	Planted as avenue tree and also grown as social forestry plantation.
11	<i>Acacia nilotica</i> (L.) Willd. ssp. <i>indica</i> Benth. ( <i>A. arabica</i> Willd.)	Mimosaceae	Medium	Common	Scrub forest and waste lands. Planted as plantation crop in afforestation programmes.
12	<i>Acacia planifrons</i> Wight & Arn.	Mimosaceae	Small	Occasional	Scrub and dry deciduous forests
13	<i>Acacia polyacantha</i> Willd.	Mimosaceae	Medium	Occasional	Dry deciduous forests
14	<i>Acacia tomentosa</i> Willd.	Mimosaceae	Small	Rare	Dry deciduous forests
15	<i>Acacia torta</i> (Roxb.) Craib	Mimosaceae	Small	Occasional	Open dry deciduous forests
16	<i>Acer laurinum</i> Hassk.	Aceraceae	Large	Rare	Moist deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
17	<i>Acronychia pedunculata</i> (L.) Miq.	Rutaceae	Small	Rare	Dry deciduous forests
18	<i>Actinodaphne madraspatana</i> Bedd. ex Hook.f.	Lauraceae	Medium	Common	Deciduous forests
19	<i>Adansonia digitata</i> L.	Bombacaceae	Large	Introduced	Planted on road sides
20	<i>Adenanthera pavonina</i> L.	Mimosaceae	Medium	Cultivated	Planted in gardens and as avenue tree
21	<i>Aegiceras corniculatum</i> (L.) Blanco.	Myrsinaceae	Small	Occasional	Mangrove forest
22	<i>Aegle marmelos</i> (L.) Correa	Rutaceae	Medium	Planted	Deciduous forests
23	<i>Aglaia almeidai</i> Sandhyarani, Sriramamurthy & Pullaiah	Meliaceae	Large	Rare	Semievergreen forests
24	<i>Aglaia elaeagnoidea</i> (Juss.) Benth.	Meliaceae	Medium	Rare	Moist deciduous forests
25	<i>Aglaia lawii</i> (Wight) C. J. Saldanha	Meliaceae	Medium	Rare	Semievergreen
26	<i>Ailanthus excelsa</i> Roxb.	Simaroubaceae	Large	Occasional	Deciduous forests
27	<i>Ailanthus triphysa</i> (Dennst.) Alston	Simaroubaceae	Large	Rare	Deciduous forests
28	<i>Alangium chinense</i> (Lour.) Harms	Alangiaceae	Small	Rare	Moist deciduous forests
29	<i>Alangium salvifolium</i> (L.f.) Wangerin ssp. <i>salvifolium</i>	Alangiaceae	Small	common	Deciduous forests outskirts near streams and ponds
30	<i>Albizia amara</i> (Roxb.) Boivin	Mimosaceae	Small	Common	Dry deciduous forests
31	<i>Albizia chinensis</i> (Osbeck) Merr.	Mimosaceae	Medium	Occasional	Dry deciduous forests along river banks
32	<i>Albizia lebbek</i> (L.) Willd.	Mimosaceae	Medium	Common	Planted along road sides and rarely found in dry deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
33	<i>Albizia odoratissima</i> (L.f.) Benth. var. <i>odoratissima</i> Fig. 3.2a	Mimosaceae	Medium	Common	Dry deciduous forests
34	<i>Albizia procera</i> (Roxb.) Benth.	Mimosaceae	Large	Occasional	Deciduous forests
35	<i>Albizia saman</i> (Jacq.) F. Muell. ( <i>Samanea saman</i> (Jacq.) Merr.)	Mimosaceae	Medium	Avenue tree	Planted for shade along avenues
36	<i>Albizia thompsonii</i> Brandis	Mimosaceae	Medium	Occasional	Deciduous forests
37	<i>Alchornea mollis</i> Muell.-Arg.	Euphorbiaceae	Small	Occasional	Deciduous forests
38	<i>Aleurites moluccana</i> (L.) Willd.	Euphorbiaceae	Small	Cultivated	Planted in gardens
39	<i>Allophylus cobbe</i> (L.) Raeusch	Sapindaceae	Small	Common	Deciduous forests
40	<i>Alphonsea madraspatana</i> Bedd.	Annonaceae	Medium	Rare	Semievergreen
41	<i>Alphonsea sclerocarpa</i> Thw.	Annonaceae	Medium	Occasional	Deciduous forests, along streams in deep valleys
42	<i>Alstonia scholaris</i> (L.) R.Br	Apocynaceae	Large	Rare	Deciduous forests, preferably moist situations
43	<i>Alstonia venenata</i> R. Br	Apocynaceae	Small	Occasional	Deciduous forests
44	<i>Amoora canarana</i> (Turez.) Hiern	Meliaceae	Medium	Rare	Semievergreen forest
45	<i>Anacardium occidentale</i> L.	Anacardiaceae	Medium	Cultivated	Introduced but naturalized
46	<i>Annona cherimola</i> Miller	Annonaceae	Small	Cultivated	Planted
47	<i>Annona muricata</i> L.	Annonaceae	Small	Cultivated	Planted
48	<i>Annona reticulata</i> L.	Annonaceae	Small	Cultivated	Planted
49	<i>Annona squamosa</i> L.	Annonaceae	Small	Wild and Cultivated	Rocky hills in dry deciduous forests and plains

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
50	<i>Anogeissus acuminata</i> (Roxb. ex DC.)	Combretaceae	Large	Rare	Deciduous forests usually on river banks
51	<i>Anogeissus latifolia</i> (Roxb. ex DC.) Wall ex Guill. & Perr.	Combretaceae	Large	Common	Deciduous forests
52	<i>Antidesma acidum</i> Retz	Stilagiaceae	Small	Common	Deciduous forests
53	<i>Antidesma bunius</i> Spreng.	Stilagiaceae	Small	Rare	Deciduous forests
54	<i>Antidesma ghaesembilla</i> Gaertn.	Stilagiaceae	Small	Common	Deciduous forests
55	<i>Antidesma menasu</i> Miq.	Stilagiaceae	Medium	Occasional	Deciduous forests
56	<i>Antidesma zeylanicum</i> Lam.	Stilagiaceae	Small	Occasional	Deciduous forests
57	<i>Aphanamixis polystachya</i> (Wall.) Parker	Meliaceae	Very large	Rare	Semievergreen forest
58	<i>Areca catechu</i> L.	Arecaceae	Large	Cultivated	Planted
59	<i>Aridisia depressa</i> Clarke	Myrsinaceae	Small	Rare	Moist deciduous forests
60	<i>Aridisia solanacea</i> Roxb.	Myrsinaceae	Small	Common	Moist deciduous forests
61	<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Large	Cultivated	Hills of high elevations.
62	<i>Artocarpus lakucha</i> Buch-Ham.	Moraceae	Large	Rare	Semievergreen forests
63	<i>Atalantia monophylla</i> (L.) Correa	Rutaceae	Small	Common	Deciduous forests
64	<i>Atalantia racemosa</i> Wight & Arn.	Rutaceae	Small	Rare	Deciduous forests
65	<i>Averrhoa carambola</i> L.	Averrhoaceae	Small	Cultivated	Planted in hills as handsome ornamental tree
66	<i>Avicennia officinalis</i> L.	Verbenaceae	Small	Rare	Mangrove forests
67	<i>Azadirachta indica</i> A. Juss. Fig. 3.2b	Meliaceae	Medium	Common	Plains, Villages outskirts, rarely in forests
68	<i>Balanites aegyptiaca</i> (L.) Del.	Balanitaceae	Small	Common	Plains

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
69	<i>Bambusa arundinacea</i> (Retz.) Roxb.	Poaceae	Large	Common	Deciduous forests
70	<i>Bambusa tulda</i> Roxb.	Poaceae	Large	Common	Deciduous forests
71	<i>Barringtonia acutangula</i> (L.) Gaertn. subsp. <i>acutangula</i>	Barringtoniaceae	Medium	Common	In plains along streams or swamps
72	<i>Bauhinia malabarica</i> Roxb.	Caesalpiniaceae	Medium to large	Occasional	Semievergreen and deciduous
73	<i>Bauhinia purpurea</i> L	Caesalpiniaceae	Medium	Common	Planted and also grows in deciduous forests
74	<i>Bauhinia racemosa</i> Lam	Caesalpiniaceae	Small	Common	Along the hill slopes and forest paths of deciduous forests
75	<i>Bauhinia semla</i> Wunderin ( <i>B. retusa</i> Ham. ex Roxb.)	Caesalpiniaceae	Small	Rare	Slopes and hills of dry deciduous forests
76	<i>Bauhinia tomentosa</i> L.	Caesalpiniaceae	Small	Occasional	Often planted for ornamental
77	<i>Bauhinia variegata</i> L. var. <i>variegata</i>	Caesalpiniaceae	Medium	Common	Often planted for ornamental
78	<i>Beilschmiedia roxburghiana</i> Nees	Lauraceae	Small	Rare	Deciduous forests
79	<i>Beilschmiedia sikkimensis</i> King ex Hook.f.	Lauraceae	Small	Occasional	Deciduous forests
80	<i>Benkeria malabarica</i> (Lam.) Tirveng. ( <i>Randia malabarica</i> Lam.)	Rubiaceae	Small	Common	Deciduous forests
81	<i>Berrya cordifolia</i> (Willd.) Burret	Tiliaceae	Medium	Introduced	Deciduous forests
82	<i>Bischofia javanica</i> Blume	Stilagiaceae	Medium	Occasional	Deciduous forests
83	<i>Bixa orellana</i> L.	Bixaceae	Small	Cultivated	Exotic, occasionally wild as an escape
84	<i>Boehmeria platyphylla</i> Don	Urticaceae	Small	Rare	Semievergreen and moist deciduous

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
85	<i>Bombax ceiba</i> L.	Bombacaceae	Large	Cultivated	Along the steams in mixed deciduous forests
86	<i>Borassus flabellifer</i> L.	Arecaceae	Large	Common	Wild and cultivated in plains from the coast
87	<i>Boswellia ovalifoliolata</i> Balakr. & Henry	Burseraceae	Medium	Rare	Deciduous forests
88	<i>Boswellia serrata</i> Roxb. ex Colebr.	Burseraceae	Medium	Common	Deciduous forests
89	<i>Breynia vitis-idaea</i> (Burm. f) C. Fischer	Euphorbiaceae	Small	Common	Deciduous forests
90	<i>Bridelia cinerascens</i> Gehrm.	Euphorbiaceae	Small	Common	Deciduous forests
91	<i>Bridelia crenulata</i> Roxb.	Euphorbiaceae	Medium	Rare	Moist evergreen forests
92	<i>Bridelia glauca</i> Blume	Euphorbiaceae	Medium	Occasional	Semievergreen along streams
93	<i>Bridelia montana</i> (Roxb.) Willd.	Euphorbiaceae	Small	Common	Open dry deciduous forests
94	<i>Bridelia retusa</i> (L.) Spreng.	Euphorbiaceae	Medium	Common	Deciduous forests
95	<i>Bridelia tomentosa</i> (Bail) Blume	Euphorbiaceae	Small	Occasional	Deciduous forests
96	<i>Brownea coccinea</i> Jacq.	Caesalpiniaceae	Small	Planted	Planted in gardens
97	<i>Bruguiera cylindrica</i> (L.) Blume	Rhizophoraceae	Medium	Common	Mangrove forests
98	<i>Bruguiera gymnorrhiza</i> (L.) Savigny	Rhizophoraceae	Medium	Common	Mangrove forest
99	<i>Buchanania axillaris</i> (Desr.) Ramam.	Anacardiaceae	Small	Occasional	Dry deciduous forests on hills
100	<i>Buchanania lanzan</i> Spreng. <a href="#">Fig. 3.2c</a>	Anacardiaceae	Medium	Common	Dry deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
101	<i>Butea monosperma</i> (Lam.) Taub ( <i>B. frondosa</i> Koen. ex Roxb.) Fig. 3.2d	Fabaceae	Small to medium	Common	Deciduous forests
102	<i>Caesalpinia coriaria</i> (Jacq.) Willd.	Caesalpiniaceae	Medium	Occasional	Deciduous forests
103	<i>Caesalpinia pulcherrima</i> (L.) Sw.	Caesalpiniaceae	Small	Cultivated	In gardens also as an escape
104	<i>Calliandra inermis</i> (L.) Druce.	Mimosaceae	Small	Planted	Planted in gardens
105	<i>Callicarpa arborea</i> Roxb.	Verbenaceae	Small	Common	Deciduous forests
106	<i>Callicarpa tomentosa</i> (L.) Murray	Verbenaceae	Small	Rare	Deciduous forests
107	<i>Callistemon citrinus</i> (Curtis) Skeels	Myrtaceae	Small	Cultivated	Planted as ornamental tree
108	<i>Calophyllum inophyllum</i> L.	Clusiaceae	Medium	Cultivated	Planted as an avenue tree
109	<i>Cananga odorata</i> (Lam.) Hook. F.	Annonaceae	Medium	Planted	Ornamental
110	<i>Canthium dicoccum</i> (Lam.) Teijsm & Binn var. <i>dicoccum</i>	Rubiaceae	Small	Common	Deciduous forests
111	<i>Canthium dicoccum</i> (Wight) Sant. & Merch. var. <i>umbellatum</i> (Wight) Sant. & Merch.	Rubiaceae	Small	Common	Deciduous forests
112	<i>Canthium parviflorum</i> Lam.	Rubiaceae	Small	Common	Deciduous forests
113	<i>Capparis grandis</i> L.f.	Capparaceae	Small	Occasional	Foot hills of deciduous forests
114	<i>Capparis olacifolia</i> Hook. f. & Thomson	Capparaceae	Small	Rare	Along grassy slopes
115	<i>Carallia brachiata</i> (Lour.) Merr.	Rhizophoraceae	Medium	Rare	Mangrove forest
116	<i>Careya arborea</i> Roxb.	Barringtoniaceae	Medium	Common	Deciduous forests

(continued)



**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
117	<i>Carica papaya</i> L.	Caricaceae	Small	Cultivated	Planted in backyards and also grown as fruit crop
118	<i>Caryota urens</i> L.	Arecaceae	Large	Wild, Cultivated	Shady valleys of deciduous forests
119	<i>Cascabela thevetia</i> (L.) Lippold	Apocynaceae	Small	Cultivated, common	Planted in gardens for its showy flowers
120	<i>Casearia graveolens</i> Dalz.	Flacourtiaceae	Small	Common	Deciduous forests, open hills, valleys and ravines
121	<i>Casearia ovata</i> (Lam.) Willd.	Flacourtiaceae	Small	Occasional	Deciduous forests
122	<i>Casearia tomentosa</i> Roxb.	Flacourtiaceae	Small	Occasional	Deciduous forests
123	<i>Casearia zeylinica</i> (Gaertn.) Thw.	Flacourtiaceae	Small	Common	Dry evergreen forests
124	<i>Cassia fistula</i> L.	Caesalpiniaceae	Small	Common	Plains and deciduous forests
125	<i>Cassia grandis</i> L.f.	Caesalpiniaceae	Small	Planted	Planted as avenue tree
126	<i>Cassia javanica</i> L.	Caesalpiniaceae	Medium	Planted	Planted as avenue tree
127	<i>Cassia nodosa</i> Buch.-Ham ex Roxb.	Caesalpiniaceae	Medium	Planted	Planted as avenue tree
128	<i>Cassia renigera</i> Wall. ex Benth.	Caesalpiniaceae	Medium	Planted	Planted as avenue tree
129	<i>Cassia roxburghii</i> DC.	Caesalpiniaceae	Small	Occasional	Planted on road sides, gardens
130	<i>Cassia spectabilis</i> DC.	Caesalpiniaceae	Medium	Planted	Planted as avenue tree
131	<i>Cassia suffruticosa</i> Koen. ex Roth	Caesalpiniaceae	Small	Planted	Planted as avenue tree
132	<i>Cassia surattensis</i> Burm. f.	Caesalpiniaceae	Small	Planted	As an avenue tree
133	<i>Cassine glauca</i> (Rottb.) Kuntze	Celastraceae	Small	Common	Deciduous forests
134	<i>Casuarina equisetifolia</i> Forst. & Forst. f.	Casurinaceae	Medium	Planted	Planted in gardens

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
135	<i>Catunaregam spinosa</i> (Thunb.) Tirveng. ( <i>Randia dumetorum</i> (Retz.) Poir. var. <i>floribunda</i> (DC.) Gamble)	Rubiaceae	Small	Common	Dry deciduous forests
136	<i>Catunaregam tomentosa</i> (Bl. ex DC.) Tirveng.	Rubiaceae	Small	Common	Deciduous forests
137	<i>Ceiba pentandra</i> (L.) Gaertn.	Bombacaceae	Medium	Introduced	Planted
138	<i>Celtis philippensis</i> Blanco ex Wight	Ulmaceae	Medium	Common	Deciduous forests
139	<i>Celtis tetrandra</i> Roxb.	Ulmaceae	Medium	Occasional	Semievergreen and moist deciduous forests
140	<i>Celtis timorensis</i> Spanoghe	Ulmaceae	Medium	Occasional	Semievergreen and deciduous
141	<i>Cerbera odollana</i> Gaertn.	Apocynaceae	Small	Occasional	Planted as an ornamental
142	<i>Ceriops decandra</i> (Griff.) Ding	Rhizophoraceae	Small	Common	Mangrove forest
143	<i>Ceriops tagal</i> (Perr.) Robins	Rhizophoraceae	Small	Common	Mangrove forest
144	<i>Ceriscoides turgida</i> (Roxb.) Tirveng. ( <i>Gardenia turgida</i> Roxb.)	Rubiaceae	Small	Occasional	Deciduous forests
145	<i>Chionanthus intermedius</i> (Wight) F. Muell. ( <i>Linociera intermedia</i> Wight)	Oleaceae	Small	Rare	Deciduous forests
146	<i>Chionanthus mala-elengi</i> (Dennst.) P. S. Green ( <i>Linociera malabarica</i> Wall ex. G. Don)	Oleaceae	Small	Rare	Deciduous forests
14	<i>Chionanthus ramiflorus</i> Roxb.	Oleaceae	Small	Rare	Deciduous forests
148	<i>Chionanthus zeylanicus</i> L. ( <i>Linociera zeylanica</i> (L.) Gamble)	Oleaceae	Small	Common	Deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
149	<i>Chloroxylon swietenia</i> DC.	Flindersiaceae	Medium	Common	Deciduous forests
150	<i>Chrysophyllum roxburghii</i> Don	Sapotaceae	Medium	Rare	Semievergreen forests
151	<i>Chukrasia tabularis</i> Adr. Juss.	Meliaceae	Large	Rare	Mixed moist deciduous forests
152	<i>Cinnamomum camphora</i> (L.) J. S. Presl	Lauraceae	Small	Cultivated	Planted in agency areas
153	<i>Cinnamomum caudatum</i> Nees	Lauraceae	Small	Rare	Moist deciduous forests
154	<i>Cipadessa baccifera</i> (Roth) Miq.	Meliaceae	Small	Common	Scrubs and open forests
155	<i>Citharexylum subserratum</i> Sw.	Verbenaceae	Small	Planted	Planted in gardens
156	<i>Citrus aurantium</i> L.	Rutaceae	Small	Cultivated	Horticulture crop
157	<i>Citrus aurantifolia</i> (Christon. & Panz.) Swingle	Rutaceae	Small	Planted	Horticulture crop
158	<i>Citrus grandis</i> (L.) Osbeck	Rutaceae	Small	Cultivated	Horticulture crop
159	<i>Citrus limon</i> (L.) Burm. f.	Rutaceae	Small	Cultivated	Horticulture crop
160	<i>Citrus medica</i> L.	Rutaceae	Small	Cultivated	Horticulture crop
161	<i>Citrus reticulata</i> Blanco	Rutaceae	Small	Cultivated	Horticulture crop
162	<i>Citrus sinensis</i> (L.) Osbeck	Rutaceae	Medium	Cultivated	Horticulture crop
163	<i>Clausena heptaphylla</i> (Roxb.) Wight & Arn.	Rutaceae	Small	Occasional	Deciduous forests
164	<i>Cleistanthus collinus</i> (Roxb.) Hook f.	Euphorbiaceae	Small	Common	Deciduous forests
165	<i>Cleistanthus patulus</i> (Roxb.) Muell-Arg.	Euphorbiaceae	Small	Occasional	Deciduous forests chiefly in ravines
166	<i>Cochlospermum religiosum</i> (L.) Alston Fig. 3.2e	Cochlospermaceae	Large	Common	Open hilly dry deciduous forests
167	<i>Cocos nucifera</i> L.	Arecaceae	Large	Cultivated	Planted near the houses and fields

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
168	<i>Commiphora berryi</i> (Arn.) Engler	Burseraceae	Small	Rare	Dry hill slopes of deciduous and scrub forests
169	<i>Commiphora caudata</i> (Wight & Arn.) Engler	Burseraceae	Medium	Common	Deciduous forests
170	<i>Commiphora madagascariensis</i> Jacq.	Burseraceae	Small	Cultivated	Planted in house premises
171	<i>Cordia dichotoma</i> Forst.	Cordiaceae	Small	Common	Fallow lands and agriculture fields
172	<i>Cordia domestica</i> Roth	Cordiaceae	Small	Rare	Scrub jungles
173	<i>Cordia evolutior</i> (Clarke) Gamble	Cordiaceae	Medium	Rare	Dry forests
174	<i>Cordia gharaf</i> (Forssk.) Ehrenb.	Cordiaceae	Small	Rare	Dry forests
175	<i>Cordia macleodii</i> Hook. f. & Thoms.	Cordiaceae	Small	Rare	Deciduous forests
176	<i>Cordia monoica</i> Roxb.	Cordiaceae	Small	Occasional	Deciduous forests and foothills
177	<i>Cordia sebestena</i> L.	Cordiaceae	Small	Cultivated	Planted in gardens
178	<i>Cordia wallichii</i> G. Don	Cordiaceae	Medium	Occasional	Deciduous forests
179	<i>Couroupita guianensis</i> Aubl.	Barringtoniaceae	Medium	Cultivated	Hills, planted in gardens
180	<i>Crataeva adansonii</i> DC.	Capparaceae	Small	Occasional	Deciduous forests
181	<i>Crataeva magna</i> (Lour.) DC.	Capparaceae	Small	Occasional	Often planted, frequent along river banks
182	<i>Croton roxburghii</i> Balakr.	Euphorbiaceae	Small	Rare	Dry forests
183	<i>Croton scabiosus</i> Beddome Fig. 3.2f	Euphorbiaceae	Small	Common	Open dry deciduous forests
184	<i>Cudrania cochinchinensis</i> (Lour.) Kodo & Masam	Moraceae	Medium	Rare	Semievergreen forests
185	<i>Dalbergia lanceolaria</i> L.f.	Fabaceae	Medium	Common	Deciduous forests
186	<i>Dalbergia latifolia</i> Roxb.	Fabaceae	Medium to large	Common	Deciduous forests
187	<i>Dalbergia paniculata</i> Roxb	Fabaceae	Medium	Common	Deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
188	<i>Dalbergia sissoo</i> Roxb.	Fabaceae	Medium	Cultivated	Plains
189	<i>Debregeasia longifolia</i> (Burm. f.) Wedd.	Urticaceae	Small	Rare	Semievergreen and moist deciduous forests
190	<i>Deccania pubescens</i> (Roth) Tirveng. var. <i>candolleana</i> Wight & Arn. ( <i>Randia candolleana</i> Wight & Arn.) Fig. 3.3a	Rubiaceae	Small	Common	Deciduous forests
191	<i>Delonix elata</i> Gamble	Caesalpiniaceae	Medium	Planted	As an avenue tree
192	<i>Delonix regia</i> Raf.	Caesalpiniaceae	Medium	Cultivated	Planted in gardens and as avenue tree
193	<i>Dendrocalamus strictus</i> (Roxb.) Nees	Poaceae	Large	Common	Deciduous forests
194	<i>Dichrostachys cinerea</i> (L.) Wight & Arn.	Mimosaceae	Small	Common	Scrub jungles and open forests
195	<i>Dillenia aurea</i> Smith	Dilleniaceae	Small	Rare	Deciduous forests
196	<i>Dillenia bracteata</i> Wight Fig. 3.3b	Dilleniaceae	Medium	Rare	Mixed deciduous forests near streams
197	<i>Dillenia indica</i> L.	Dilleniaceae	Large	Occasional	Moist deciduous forests near streams
198	<i>Dillenia pentagyna</i> Roxb.	Dilleniaceae	Large	Occasional	Deciduous forests
199	<i>Dimorphocalyx glabellus</i> Thw.	Euphorbiaceae	Small	Occasional	Deciduous forests and scrubs
200	<i>Dimorphocalyx kurnoolensis</i> V. Raju & Pullaiah	Euphorbiaceae	Small	Rare	Foot hills along the streams
201	<i>Diospyros assamilis</i> Bedd.	Ebenaceae	Large	Rare	Semievergreen forests
202	<i>Diospyros candolleana</i>	Ebenaceae	Small	Rare	Semiever forests
203	<i>Diospyros chloroxylon</i> Roxb.	Ebenaceae	Small	Common	Deciduous forests and scrubs
204	<i>Diospyros cordifolia</i> Roxb.	Ebenaceae	Small	Rare	Deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
205	<i>Diospyros ebenum</i> J. Koenig ex Retz.	Ebenaceae	Small	Rare	Dry evergreen forests
206	<i>Diospyros exsculpta</i> Buch.-Ham.	Ebenaceae	Medium	Occasional	Deciduous forests
207	<i>Diospyros malabarica</i> (Desr.) Kostel	Ebenaceae	Medium	Rare	Moist deciduous forests
208	<i>Diospyros melanoxylon</i> Roxb. Fig. 3.3c	Ebenaceae	Small	Common	Deciduous forests
209	<i>Diospyros montana</i> Roxb.	Ebenaceae	Small	Common	Deciduous forests
210	<i>Diospyros ovalifolia</i> Wight	Ebenaceae	Medium	Occasional	Deciduous forests
211	<i>Diospyros sylvatica</i> Roxb.	Ebenaceae	Medium	Occasional	Deciduous forests
212	<i>Dodonaea viscosa</i> (L.) Jacq.	Sapindaceae	Small	Common	Deciduous forests
213	<i>Dolichandrone arcuata</i> (Wight) Clarke	Bignoniaceae	Medium	Common	Deciduous forests
214	<i>Dolichandrone atrovirens</i> (Roth) Sprague	Bignoniaceae	Small	Common	Deciduous forests
215	<i>Dolichandrone falcata</i> (Wall. ex DC.) Seem.	Bignoniaceae	Small	Common	Deciduous forests in dry localities
216	<i>Dolichandrone falcata</i> Seem var. <i>lawii</i> (Seem) Haines	Bignoniaceae	Small	Rare	Dry deciduous forests
217	<i>Dolichandrone spathacea</i> (L.f.) K.Schum	Bignoniaceae	Small	Rare	Deciduous forests along the margins of streams
219	<i>Drypetes assamica</i> (Hook. f.) Pax. & Hoffm.	Euphorbiaceae	Small	Rare	Deciduous forests along the river
219	<i>Drypetes roxburghii</i> (Wall.) Hurusawa	Euphorbiaceae	Medium	Occasional	Deciduous forests
220	<i>Drypetes sepiaria</i> (Wight & Arn.) Pax & Hoffm	Euphorbiaceae	Small	Occasional	Along streams of moist deciduous forests
221	<i>Ehretia acuminata</i> R. Br.	Cordiaceae	Small	Rare	Deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
222	<i>Ehretia aspera</i> Willd.	Cordiaceae	Small	Occasional	Deciduous forests
223	<i>Ehretia canarensis</i> (Clarke) Gamble	Cordiaceae	Small	Rare	Dry forests
224	<i>Ehretia laevis</i> Roxb.	Cordiaceae	Small	Common	Mixed dry deciduous forests
225	<i>Ehretia pubescens</i> Benth.	Cordiaceae	Small	Occasional	Deciduous forests
226	<i>Elaeagnus caudata</i> Schlecht ex Momiya	Elaeagnaceae	Small	Rare	Semievergreen forest
227	<i>Elaeocarpus lanceaefolius</i> Roxb.	Elaeocarpaceae	Large	Rare	Semievergreen forest
228	<i>Elaeocarpus lucidus</i> Roxb.	Elaeocarpaceae	Large	Rare	Moist deciduous forest
229	<i>Elaeocarpus tectorius</i> (Laur.) Poir	Elaeocarpaceae	Large	Occasional	Moist deciduous forests
230	<i>Embelia tsjeriam-cottam</i> DC.	Myrsinaceae	Small	Occasional	Moist deciduous forests
231	<i>Embelia villosa</i> Wall.	Myrsinaceae	Small	Occasional	Moist deciduous forests
232	<i>Epiprinus mallotiformis</i> (Muell.-Arg.) Croizat	Euphorbiaceae	Small	Rare	Valleys of moist deciduous forests
233	<i>Eravatamia divaricata</i> (L.) Burkill	Apocynaceae	Small	Common	Grown as an ornamental
234	<i>Erioglossum rubiginosum</i> Blume	Sapindaceae	Small	Rare	Deciduous forests
235	<i>Eriolaena hookeriana</i> Wight & Arn.	Sterculiaceae	Small	Rare	Deciduous forests
236	<i>Eriolaena lushingtonii</i> Dunn	Sterculiaceae	Small	Rare	Deciduous forests
237	<i>Eriolaena quinquelocularis</i> (Wight & Arn.) Cleghorn	Sterculiaceae	Small	Occasional	Deciduous forests
238	<i>Erythrina fusca</i> Lour	Fabaceae	Small	Rare	Deciduous forests
239	<i>Erythrina stricta</i> Roxb.	Fabaceae	Medium	Occasional	Deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
240	<i>Erythrina suberosa</i> Roxb.	Fabaceae	Medium	Occasional	Deciduous forests
241	<i>Erythrina subumbrans</i> (Hassk.) Merr	Fabaceae	Large	Introduced	Deciduous forests
242	<i>Erythrina variegata</i> L. var. <i>orientalis</i> Merr.	Fabaceae	Medium		Plains and hills
243	<i>Erythroxylum monogynum</i> Roxb.	Erythroxylaceae	Small	Common	Dry deciduous and scrub forests
244	<i>Eucalyptus camaldulensis</i> Dehn.	Myrtaceae	Large	Introduced	Planted as social forestry plant
245	<i>Eucalyptus globulus</i> Labill.	Myrtaceae	Large	Introduced	Planted as social forestry plant
246	<i>Eugenia roxburghii</i> DC.	Myrtaceae	Small	Occasional	On sandy ground
247	<i>Euodia lunuakenda</i> (Gaertn.) Merr.	Rutaceae	Medium	Rare	Deciduous forests
248	<i>Euonymus glaber</i> Roxb.	Celastraceae	Medium	Occasional	Deciduous forests near streams
249	<i>Euphorbia antiquorum</i> L.	Euphorbiaceae	Small	Common	Foot hills of dry deciduous and scrub forests
250	<i>Euphorbia barnhartii</i> Croizat	Euphorbiaceae	Small	Occasional	Dry deciduous and scrub forests
251	<i>Euphorbia ligularia</i> Roxb.	Euphorbiaceae	Small	Occasional	Village outskirts
252	<i>Euphorbia nivulia</i> Buch-Ham	Euphorbiaceae	Small	Common	Open forests
253	<i>Euphorbia tirucalli</i> L.	Euphorbiaceae	Small	Common	Village outskirts and roadsides
254	<i>Euphorbia tortillis</i> Rottl. ex Ainslie	Euphorbiaceae	Small	Occasional	Foot hills of scrub and deciduous forests
255	<i>Excoecaria agallocha</i> L.	Euphorbiaceae	Small	Common	Mangrove forests
256	<i>Ficus amplissima</i> Smith	Moraceae	Large	Common	Deciduous forests
257	<i>Ficus arnottiana</i> (Miq.) Miq	Moraceae	Small	Common	Deciduous forests
258	<i>Ficus asperrima</i> Roxb.	Moraceae	Medium	Rare	Deciduous forests
259	<i>Ficus auriculata</i> Lour.	Moraceae	Medium	Rare	Semievergreen forests along streams

(continued)



**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
260	<i>Ficus benghalensis</i> L.	Moraceae	Large	Common	Plains, road sides, village surroundings
261	<i>Ficus benjamina</i> L.	Moraceae	Large	Cultivated	Deciduous forests
262	<i>Ficus carica</i> L.	Moraceae	Small	Cultivated	Grown as commercial crop in plains
263	<i>Ficus dalhousiae</i> Miq.	Moraceae	Medium	Rare	Ravines of moist deciduous forests
264	<i>Ficus elastica</i> L.	Moraceae	Small	Cultivated	Grown as ornamental tree
265	<i>Ficus exasperata</i> Vahl	Moraceae	Small	Occasional	Mixed dry deciduous forests
266	<i>Ficus hispida</i> L.f.	Moraceae	Small	Common	Deciduous forests and village outskirts
267	<i>Ficus microcarpa</i> L.f.	Moraceae	Medium	Common	Deciduous forests, often planted as avenue tree
268	<i>Ficus mollis</i> Vahl	Moraceae	Large	Common	Deciduous forests
269	<i>Ficus nervosa</i> Heyne ex Roth	Moraceae	Large	Occasional	Moist deciduous forests
270	<i>Ficus oligodon</i> Miq.	Moraceae	Medium	Rare	Semievergreen forests
271	<i>Ficus palmata</i> Forssk.	Moraceae	Small	Rare	Deciduous forests
272	<i>Ficus racemosa</i> L. Fig. 3.3d	Moraceae	Medium	Common	Along river banks of deciduous forests
273	<i>Ficus religiosa</i> L.	Moraceae	Medium	Common	Plains, along road sides and near temples
274	<i>Ficus rumphii</i> Blume	Moraceae	Medium	Occasional	Moist deciduous forests
275	<i>Ficus semicordata</i> Buch-Ham ex Smith	Moraceae	Medium	Common	Moist deciduous forests
276	<i>Ficus talboti</i> King	Moraceae	Large	Occasional	Deciduous forests
277	<i>Ficus tinctoria</i> Forster f.	Moraceae	Medium	Common	Open dry deciduous forests
278	<i>Ficus tsjakela</i> Rheede ex Burm.f	Moraceae	Large	Common	Deciduous forests
279	<i>Ficus virens</i> Ait.	Moraceae	Large	Common	Deciduous forests
280	<i>Firmiana colorata</i> (Roxb.) R.Br.	Sterculiaceae	Medium	Occasional	Deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
281	<i>Flacourtia indica</i> (Burm. f.) Merr.	Flacourtiaceae	Small	Occasional	Deciduous forests
282	<i>Flacourtia jangomas</i> (Lour.) Raeusch.	Flacourtiaceae	Small	Rare	Deciduous forests
283	<i>Flacourtia ramontchi</i> L.	Flacourtiaceae	Medium	Occasional	Deciduous forests
284	<i>Garcinia spicata</i> (Wight & Arn.) Hook. f.	Clusiaceae	Medium	Occasional	Along the coast
285	<i>Garcinia xanthochymus</i> Hook. f. ex T. And.	Clusiaceae	Large	Rare	Moist deciduous forests
286	<i>Gardenia gummifera</i> L.f	Rubiaceae	Small	Common	Deciduous forests
287	<i>Gardenia jasminoides</i> Ellis	Rubiaceae	Small	Cultivated	Planted as garden plant
288	<i>Gardenia latifolia</i> Ait.	Rubiaceae	Medium	Common	Deciduous forests
289	<i>Gardenia resinifera</i> Roth ( <i>G. lucida</i> Roxb.)	Rubiaceae	Small	Occasional	Deciduous forests
290	<i>Garuga pinnata</i> Roxb.	Burseraceae	Medium	Common	Deciduous forests
291	<i>Givotia moluccana</i> (L.) Sreem.	Euphorbiaceae	Medium	Occasional	Deciduous forests
292	<i>Gliricidia sepium</i> (Jacq.) Kunth	Fabaceae	Small	Avenue tree	Plains and hills
293	<i>Glochidion candolleianum</i> (Wight & Arn.) Chakrab. & M. Gangop.	Euphorbiaceae	Medium	Rare	Mixed forests
294	<i>Glochidion ellipticum</i> Wight	Euphorbiaceae	Small	Occasional	Moist deciduous forests
295	<i>Glochidion tirupathiense</i> Rasingam et al.	Euphorbiaceae	Small	Rare	Along stream banks in moist deciduous forests
296	<i>Glochidion tomentosum</i> Dalz.	Euphorbiaceae	Small	Occasional	Deciduous forests
297	<i>Glochidion velutinum</i> Wight	Euphorbiaceae	Small	Occasional	Along the streams of moist deciduous forests
298	<i>Glochidion zeylanicum</i> (Gaertn.) Juss	Euphorbiaceae	Small	Common	Deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
299	<i>Glycosmis mauritiana</i> (Lam.) Tanaka	Rutaceae	Small	Common	Deciduous forests
300	<i>Glycosmis pentaphylla</i> (Retz.) DC.	Rutaceae	Small	Common	Deciduous forests
301	<i>Gmelina arborea</i> Roxb.	Verbenaceae	Medium	Common	Deciduous forests and scrub
302	<i>Gmelina asiatica</i> L.	Verbenaceae	Medium	Common	Deciduous forests and scrub
303	<i>Grevillea robusta</i> A. Cunn.	Proteaceae	Large	Cultivated	Hills
304	<i>Grewia abutilifolia</i> Vent. ex Juss.	Tiliaceae	Small	Common	Deciduous forests
305	<i>Grewia asiatica</i> L.	Tiliaceae	Small	Rare	Deciduous forests
306	<i>Grewia bracteata</i> Heyne	Tiliaceae	Small	Occasional	Deciduous forests
307	<i>Grewia damine</i> Gaertn.	Tiliaceae	Small	Common	Deciduous forests
308	<i>Grewia elastica</i> Royle	Tiliaceae	Small		Deciduous forests
309	<i>Grewia eriocarpa</i> Juss	Tiliaceae	Small	Rare	Deciduous forests
310	<i>Grewia flavescens</i> Juss.	Tiliaceae	Small	Common	Deciduous forests
311	<i>Grewia glabra</i> Blume	Tiliaceae	Small	Occasional	Deciduous forests
312	<i>Grewia heterotricha</i> Mast.	Tiliaceae	Small	Rare	Deciduous forests
313	<i>Grewia laevigata</i> Vahl	Tiliaceae	Small	Occasional	Deciduous forests
314	<i>Grewia obtusa</i> Wall. ex Dunn	Tiliaceae	Small	Occasional	Deciduous forests
315	<i>Grewia orbiculata</i> Rottler	Tiliaceae	Small	Common	Deciduous forests
316	<i>Grewia orientalis</i> L.	Tiliaceae	Small	Common	Deciduous forests
317	<i>Grewia polygama</i> Roxb.	Tiliaceae	Small		Deciduous forests
318	<i>Grewia rothii</i> DC.	Tiliaceae	Small	Common	Deciduous forests
319	<i>Grewia serrulata</i> DC.	Tiliaceae	Small	Common	Deciduous forests
320	<i>Grewia tenax</i> (Forssk.) Fiori	Tiliaceae	Small	Occasional	Deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
321	<i>Grewia tiliifolia</i> Vahl	Tiliaceae	Small	Common	Deciduous forests
322	<i>Grewia villosa</i> Willd.	Tiliaceae	Small	Occasional	Deciduous forests
323	<i>Guazuma ulmifolia</i> Lam.	Sterculiaceae	Medium	Introduced	Planted
324	<i>Guettarda speciosa</i> L.	Rubiaceae	Medium	Cultivated	Planted
325	<i>Gyrocarpus americanus</i> Jacq. ( <i>G. jacquinii</i> Roxb.)	Hernandiaceae	Medium	Common	Deciduous forests
326	<i>Haldina cordifolia</i> (Roxb.) Ridsd. Fig. 3.3e	Rubiaceae	Small	Common	Deciduous forests
327	<i>Hardwickia binata</i> Roxb.	Caesalpiniaceae	Large	occasional	Scrub and deciduous forests
328	<i>Helicteres isora</i> L.	Sterculiaceae	Small	Common	Deciduous forests
329	<i>Heritiera littoralis</i> Dryand ex Ait.	Sterculiaceae	Medium	Occasional	Mangrove forest
330	<i>Heterophragma quadriloculare</i> (Roxb.) Schum. ( <i>H. roxburghii</i> DC.)	Bignoniaceae	Medium	Occasional	Deciduous forests
331	<i>Hibiscus platanifolius</i> (Willd.) Sweet	Malvaceae	Small	Occasional	Deciduous forests
332	<i>Hibiscus tiliaceus</i> L.	Malvaceae	Small	Occasional	Mangrove forest
333	<i>Hildegardia populifolia</i> (Roxb.) Schott. & Endl. Fig. 3.3f	Sterculiaceae	Small	Rare	Deciduous forests
334	<i>Holarrhena pubescens</i> (Buch.-Ham.) Wall. ex G. Don	Apocynaceae	Small	Common	Deciduous forests
335	<i>Holoptelia integrifolia</i> (Roxb.) Planchon Fig. 3.4a	Ulmaceae	Large	Common	Deciduous
336	<i>Homalium ceylanicum</i> (Gard.) Benth.	Flacourtiaceae	Medium	Rare	Deciduous forests
337	<i>Homalium nepalense</i> Benth.	Flacourtiaceae	Small	Common	Moist deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
338	<i>Lasiococca comberi</i> Haines	Euphorbiaceae	Small	Occasional	Along rocky ravines
339	<i>Hymenodictyon obovatum</i> Wall.	Rubiaceae	Small	Rare	Deciduous forests
340	<i>Hymenodictyon orixense</i> (Roxb.) Mabb.	Rubiaceae	Large	Common	Deciduous forests
341	<i>Isonandra villosa</i> Wight Fig. 3.4b	Sapotaceae	Medium	Rare	Deciduous forests
342	<i>Ixora brachiata</i> Roxb. ex DC.	Rubiaceae	Small	Occasional	Deciduous forests
343	<i>Ixora finlaysonian</i> Wall. ex G. Don	Rubiaceae	Small	Cultivated	Planted in gardens as ornamental plant
344	<i>Ixora pavetta</i> Andrews	Rubiaceae	Small	Common	Deciduous forests
345	<i>Ixora undulata</i> Roxb.	Rubiaceae	Small		Deciduous forests
346	<i>Jacaranda mimosifolia</i> DC.	Bignoniaceae	Medium	Occasional	Hills, planted in gardens
347	<i>Jatropha curcas</i> L.	Euphorbiaceae	Small	Common	Semi wild; also grown as hedge plant.
348	<i>Kavalama urens</i> (Roxb.) Raf. ( <i>Sterculia urens</i> Roxb.) Fig. 3.4c	Sterculiaceae	Medium	Common	Deciduous forests
349	<i>Kigelia africana</i> (Lam.) Benth.	Bignoniaceae	Medium	Avenue	Grown as avenue plant
350	<i>Kleinhovia hospita</i> L.	Sterculiaceae	Small	Planted	Planted as an ornamental tree
351	<i>Knema attenuata</i> (Hook. & Thw.) Warb.	Myristicaceae	Medium	Rare	Moist deciduous forests
352	<i>Kydia calycina</i> Roxb.	Malvaceae	Small	Occasional	Deciduous forests
353	<i>Lagerstroemia lanceolata</i> Wall.	Lythraceae	Medium	Common	Deciduous and dry evergreen forests
354	<i>Lagerstroemia parviflora</i> Roxb.	Lythraceae	Medium	Common	Deciduous forests
355	<i>Lagerstroemia speciosa</i> Pers.	Lythraceae	Medium	Cultivated	Planted as an ornamental tree
356	<i>Lanea coromandelica</i> (Houtt.) Merr.	Anacardiaceae	Medium	Common	Dry deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
357	<i>Laportea crenulata</i> Gaud.	Urticaceae	Small	Occasional	Semievergreen and deciduous forests
358	<i>Laurocerasus jenkinsii</i> (Hook. f. & Thomson) Browicz	Rosaceae	Medium	Rare	Moist deciduous forests
359	<i>Lawsonia inermis</i> L.	Lythraceae	Small	Cultivated	Plains, grows as hedge plant
360	<i>Leea indica</i> (Burm. f) Merr.	Leeaceae	Small	Occasional	Deciduous forests
361	<i>Lepisanthes rubiginosa</i> (Roxb.) Leenh	Sapindaceae	Small	Common	Deciduous forests
362	<i>Lepisanthes tetraphylla</i> (Vahl) Radlk.	Sapindaceae	Small	Common	Deciduous forests
363	<i>Leucaena leucocephala</i> (Lam.) De Wit ( <i>L. latisiliqua</i> (L.) Gillis, <i>L. glauca</i> Willd.)	Mimosaceae	Small	Cultivated	Plains, recommended for plantation in variety of soils
364	<i>Ligustrum gamblei</i> Ramam.	Oleaceae	Small	Rare	Deciduous forests
365	<i>Ligustrum lucidum</i> Ait.	Oleaceae	Small	Cultivated	
366	<i>Limonia acidissima</i> L. ( <i>Feronia elephantum</i> Correa)	Rutaceae	Medium	Common	Deciduous forests
367	<i>Litsea deccanensis</i> Gamble	Lauraceae	Medium	Rare	Deciduous forests
368	<i>Litsea glutinosa</i> (Lour) Robinson	Lauraceae	Small	Occasional	Moist deciduous forests
369	<i>Litsea laeta</i> (Nees) Hook. f.	Lauraceae	Small	Rare	Moist deciduous forests
370	<i>Litsea monopetala</i> (Roxb.) Pers.	Lauraceae	Medium	Occasional	Deciduous forests
371	<i>Maba buxifolia</i> (Rotb.) A. L. Juss. ( <i>Diospyros ferrea</i> (Willd.) Bakh)	Ebenaceae	Small	Common	Deciduous forests
372	<i>Maba neilgherrensis</i> Wight	Ebenaceae	Medium	Rare	Deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
373	<i>Macaranga indica</i> Wt.	Euphorbiaceae	Medium	Rare	Ravines of semievergreen forests
374	<i>Macaranga peltata</i> (Roxb.) Muell.-Arg.	Euphorbiaceae	Medium	Occasional	Along moist valleys and hills of moist deciduous forests
375	<i>Madhuca indica</i> J. F. Gmel.	Sapotaceae	Medium	Common	Mixed deciduous forests
376	<i>Madhuca longifolia</i> (J. Koenig) Macbr.	Sapotaceae	Medium	Occasional	Open deciduous forests
377	<i>Maerua apetala</i> (Roth) Jacobs Fig. 3.4e	Capparaceae	Small	Occasional	Foot hills and dry deciduous forests
378	<i>Magnolia champaca</i> (L.) Baill. ex Pierre ( <i>Michelia champaca</i> L.)	Magnoliaceae	Medium	Occasional	On hills and in temples for the sake of fragran flowers
379	<i>Mallotus philippensis</i> (Lam) Muell.-Arg.	Euphorbiaceae	Medium	Common	Deciduous forests
380	<i>Mallotus philippensis</i> (Lam.) Muell.-Arg. var. <i>tomentosus</i> Gamble	Euphorbiaceae	Medium	Occasional	Deciduous forests
381	<i>Mallotus resinousus</i> (Blanco) Merr.	Euphorbiaceae	Small	Rare	Deciduous forests
382	<i>Mallotus rhamnifolius</i> Muell.-Arg.	Euphorbiaceae	Small	Occasional	Moist deciduous forests near the streams
383	<i>Mammea surgia</i> (Buch.-Ham. ex Roxb.) Kosterm	Clusiaceae	Medium	Cultivated	Planted as an avenue tree and in house hold garden
384	<i>Mangifera indica</i> L.	Anacardiaceae	Medium	Cultivated, also wild	In forest hills; cultivated for its fruit
385	<i>Manihot glaziovii</i> Muell.	Euphorbiaceae	Small	Cultivated	Introduced, planted in gardens
386	<i>Manilkara hexandra</i> (Roxb.) Dubard	Sapotaceae	Small	Common	Deciduous forests
387	<i>Manilkara roxburghiana</i> (Wight) Dubard	Sapotaceae	Large	Rare	Dry evergreen forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
388	<i>Manilkara zapota</i> (L.) P. Royen	Sapotaceae	Medium	Cultivated	In plains and lower slopes for its fruits
389	<i>Margaritaria indica</i> (Dalz.) Airy Shaw	Euphorbiaceae	Medium	Occasional	Semievergreen forests along the streams
390	<i>Maytenus bailadillana</i> (Narayan. & Mooney) Raju & Babu	Celastraceae	Small	Rare	Deciduous forests
391	<i>Maytenus emarginata</i> (Willd.) Ding Hou	Celastraceae	Small	Common	Scrub forests
392	<i>Maytenus heyneana</i> (Roth) Raju & Babu	Celastraceae	Small	Rare	Deciduous forests
393	<i>Maytenus hookeri</i> Loes	Celastraceae	Small	Common	Deciduous forests
394	<i>Maytenus rufa</i> (Wall.) Hara.	Celastraceae	Small	Common	Deciduous forests
395	<i>Melia azedarach</i> L.	Meliaceae	Medium	Planted	Planted as an avenue tree
396	<i>Melia dubia</i> Cav.	Meliaceae	Large	Rare	Moist deciduous forests
397	<i>Meliosma pinnata</i> (Roxb.) Walp.	Sabiaceae	Medium	Rare	Moist deciduous forests
398	<i>Meliosma simplicifolia</i> (Roxb.) Walp.	Sabiaceae	Medium	Rare	Moist deciduous forests
399	<i>Memecylon angustifolium</i> Wight	Melastomataceae	Small	Rare	Deciduous forests, along the banks of rivers
400	<i>Memecylon edule</i> Roxb.	Melastomataceae	Small	Common	Dry evergreen forests along rocky ravines
401	<i>Memecylon lushingtonii</i> Gamble	Melastomataceae	Small	Common	Deciduous forests
402	<i>Memecylon molestum</i> (Clarke) Cogn.	Melastomataceae	Small	Rare	Deciduous forests
403	<i>Memecylon umbellatum</i> Burm.f.	Melastomataceae	Small	Occasional	Deciduous forests

(continued)



**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
404	<i>Mesua ferrea</i> L.	Clusiaceae	Large	Rare	Semievergreen forests
405	<i>Meyna spinosa</i> Roxb. ex Link var. <i>pubescens</i> Robyns	Rubiaceae	Small	Rare	Deciduous forests
406	<i>Micromelum pubescense</i> Blume	Rutaceae	Small	Rare	Deciduous forests
407	<i>Milusa montana</i> Gardn. ex Hook. f. & Thoms.	Annonaceae	Small	Rare	Deciduous forests
408	<i>Milusa tomentosa</i> (Roxb.) Sinclair	Annonaceae	Large	Common	Deciduous forests
409	<i>Milusa velutina</i> Hook. f. & Thoms.	Annonaceae	Medium	Occasional	Deciduous forests
410	<i>Millingtonia hortensis</i> L.f.	Bignoniaceae	Medium	Cultivated	Plains, planted
411	<i>Mimusops elengi</i> L.	Sapotaceae	Small	Occasional	Plains and deciduous forests
412	<i>Mitragyna parvifolia</i> (Roxb.) Korth. Fig. 3.4d	Rubiaceae	Medium	Occasional	Deciduous forests
413	<i>Mitrephora heyneana</i> (Hook. f. & Thomson) Thwaites.	Annonaceae	Medium	Rare	Deciduous forests on hill tops
414	<i>Morinda angustifolia</i> Roxb.	Rubiaceae	Small	Rare	Deciduous forests
415	<i>Morinda citrifolia</i> L.	Rubiaceae	Small	Occasional	Deciduous forests
416	<i>Morinda pubescens</i> J. E. Smith var. <i>stenophylla</i> (Sperng.) Kumari	Rubiaceae	Small	Occasional	Deciduous forests
417	<i>Morinda pubescens</i> J. E. Smith. var. <i>pubescens</i> ( <i>M. tinctoria</i> Roxb.)	Rubiaceae	Small	Common	Deciduous forests
418	<i>Moringa concanensis</i> Nimmo ex Gibbs	Moringaceae	Small	Occasional	Deciduous forests
419	<i>Moringa oleifera</i> Lam. ( <i>M. pterygosperma</i> Gaertn.)	Moringaceae	Small	Cultivated	Planted in Plains and hills
420	<i>Morus alba</i> L.	Moraceae	Small	Cultivated	Plains

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
421	<i>Muntingia calabura</i> L.	Elaeocarpaceae	Large	Cultivated	Grown as ornamental tree
422	<i>Murraya koenigii</i> (L.) Spreng.	Rutaceae	Small	Cultivated	Planted for its aromatic leaves
423	<i>Murraya paniculata</i> (L.) Jack ( <i>M. exotica</i> L.)	Rutaceae	Small	Cultivated	Deciduous forests
424	<i>Naringi alata</i> (Wall. ex Wight & Arn.) Ellis ( <i>Limonia alata</i> Wall. ex Wight & Arn.)	Rutaceae	Small	Occasional	Deciduous forests
425	<i>Naringi crenulata</i> (Roxb.) Nicolson	Rutaceae	Small	Common	Deciduous forests
426	<i>Neolamarckia cadamba</i> (Roxb.) Bosser ( <i>A. cadamba</i> (Roxb.) Miq.)	Rubiaceae	Large	Occasional	Deciduous forests
427	<i>Neolitsea foliosa</i> (Nees) Gamble	Lauraceae	Small	Occasional	Deciduous forests
428	<i>Neolitsea zeylanica</i> (Nees) Merr.	Lauraceae	Medium	Occasional	Deciduous forests
429	<i>Neonauclea purpurea</i> (Roxb.) Merr.	Rubiaceae	Medium	Rare	Deciduous forests
430	<i>Nothopegia beddomei</i> Gamble	Anacardiaceae	Small	Rare	Semievergreen forest
431	<i>Nothopegia heyneana</i> (Hook. f)	Anacardiaceae	Small	Rare	Semievergreen forests
432	<i>Nyctanthes arbor-tristis</i> L.	Nyctanthaceae	Small	Cultivated	Plains
433	<i>Ochna gamblei</i> DC.	Ochnaceae	Small	Occasional	Deciduous forests
434	<i>Ochna lanceolata</i> Spreng.	Ochnaceae	Small	Rare	Deciduous forests
435	<i>Ochna obtusata</i> DC. Fig. 3.4f	Ochnaceae	Small	Occasional	Deciduous forests
436	<i>Olea dioica</i> Roxb.	Oleaceae	Medium	Rare	Semievergreen forests
437	<i>Olea paniculata</i> R. Br. ( <i>Olea glandulifera</i> Wall. ex. G. Don)	Oleaceae	Medium	Rare	Deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
438	<i>Olea polygama</i> Wight	Oleaceae	Medium	Rare	Deciduous forests
439	<i>Oroxylum indicum</i> (L.) Vent.	Bignoniaceae	Small	Occasional	Deciduous forests, along streams and ravines and on cool sides of the hills
440	<i>Ougeinia oojeinensis</i> (Roxb.) Hochr. ( <i>Ougeinia dalbergioides</i> Benth.)	Fabaceae	Medium	Occasional	Deciduous forests
441	<i>Pamburus missionis</i> (Wight) Swingle	Rutaceae	Medium	Rare	Deciduous forests
442	<i>Pandanus fascicularis</i> Lam. ( <i>P. odoratissimus</i> L.f.).	Pandanaceae	Small	Occasional	Stream side and ravines in deciduous forests
443	<i>Parkia biglandulosa</i> Wight & Arn.,	Mimosaceae	Large	Cultivated	Planted in plains and hills
444	<i>Pavetta breviflora</i> DC.var. <i>ciliolata</i> Gamble ex Bremek.	Rubiaceae	Small	Occasional	Deciduous forests
445	<i>Pavetta hispidula</i> Wight & Arn.	Rubiaceae	Small	Rare	Deciduous forests
446	<i>Pavetta indica</i> L.	Rubiaceae	Small	Common	Deciduous forests
447	<i>Pavetta tomentosa</i> Roxb. ex Smith	Rubiaceae	Small	Common	Deciduous forests
448	<i>Peltophorum pterocarpum</i> (DC.) Backer	Caesalpiniaceae	Small	Planted	Grown as avenue tree
449	<i>Persea macrantha</i> (Nees.) Kosterm	Lauraceae	Large	Rare	Semievergreen and deciduous forests
450	<i>Phoebe wightii</i> Meissn	Lauraceae	Medium	Occasional	Semievergreen forests
451	<i>Phoenix lourierii</i> Kunth	Arecaceae	Small	occasional	Open forest, in sandy soils
452	<i>Phoenix robusta</i> (Becc) Becc & Hook. f.	Arecaceae	Large	rare	Open forests
453	<i>Phoenix sylvestris</i> Roxb.	Arecaceae	Large	Common	Along streams and waste lands

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
454	<i>Phyllanthus acidus</i> L.	Euphorbiaceae	Medium	Cultivated	Planted in gardens and house compounds
455	<i>Phyllanthus emblica</i> L.	Euphorbiaceae	Medium	Common	Deciduous forests
456	<i>Phyllanthus indofischeri</i> Bennet Fig. 3.5a	Euphorbiaceae	Small	Occasional	Deciduous forests
457	<i>Phyllanthus polyphyllus</i> Willd.	Euphorbiaceae	Small	Occasional	Deciduous forests
458	<i>Picrasma javanica</i> Blume	Simaroubaceae	Medium	Occasional	Deciduous forests
459	<i>Pisonia aculeata</i> L.	Nyctaginaceae	Small	Occasional	Dry deciduous forests
460	<i>Pithecellobium dulce</i> (Roxb.) Benth.	Mimosaceae	Medium	Occasional	Fallow lands and road sides. Grows in variety of soils
461	<i>Pittosporum nepalense</i> (DC.) Rehder & Wilson	Pittosporaceae	Small	Rare	Deciduous forests
462	<i>Pleurostylia opposita</i> (Wall.) Alston	Celastraceae	Small	Common	Deciduous forests
463	<i>Plumeria alba</i> L.	Apocynaceae	Small	Cultivated	As an ornamental in gardens and temples
464	<i>Plumeria obtusa</i> L.	Apocynaceae	Small	Cultivated	As an ornamental in gardens and temples
465	<i>Plumeria rubra</i> L.	Apocynaceae	Small	Cultivated	As an ornamental in gardens and temples
466	<i>Polyalthia cerasoides</i> (Roxb.) Bedd.	Annonaceae	Small	Common	Deciduous forests, in hill slopes
467	<i>Polyalthia korinti</i> (Dunal) Thwaites	Annonaceae	Small	Rare	Dry evergreen along ravines
468	<i>Polyalthia longifolia</i> (Sonner) Thwaites	Annonaceae	Large	Cultivated	Planted in gardens, avenues
469	<i>Polyalthia suberosa</i> (Roxb.) Thw.	Annonaceae	Small	Occasional	Deciduous forests near streams
470	<i>Pongamia pinnata</i> (L.) Pierre ( <i>P. glabra</i> Vent.,	Fabaceae	Medium	Common	Plains

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
471	<i>Premna hamiltonii</i> J. L. Ellis Fig. 3.5b	Verbenaceae	Small	Rare	Deciduous forests
472	<i>Premna latifolia</i> Roxb. var. <i>latifolia</i>	Verbenaceae	Small	Common	Deciduous forests
473	<i>Premna serratifolia</i> L.	Verbenaceae	Small	Rare	Deciduous forests
474	<i>Premna tomentosa</i> Willd.	Verbenaceae	Small	Common	Deciduous forests
475	<i>Prosopis cineraria</i> (L.) Druce	Mimosaceae	Small	Common	Dry stony lands and degraded forests.
476	<i>Prosopis glandulosa</i> Torrey	Mimosaceae	Small	Introduced	Naturalized in open forests
477	<i>Prosopis juliflora</i> (Sw.) DC.	Mimosaceae	Small	Common	Waste lands and road sides
478	<i>Protium serratum</i> (Colebr.) Engler	Burseraceae	Large	Common	Deciduous forests
479	<i>Prunus ceylanica</i> (Wight) Miq.	Rosaceae	Medium	Common	Moist deciduous forests
480	<i>Prunus jenkinsii</i> Hook. f	Rosaceae	Medium	Rare	Moist deciduous forests
481	<i>Psidium guajava</i> L.	Myrtaceae	Small	Cultivated	Grown as horticulture plant
482	<i>Psychotria monticola</i> Kurz ( <i>P. flava</i> Hook. f.)	Rubiaceae	Small	Rare	Deciduous forests
483	<i>Pterocarpus marsupium</i> Roxb.	Fabaceae	Medium	Common	Deciduous forests
484	<i>Pterocarpus santalinus</i> L.f. Fig. 3.5c	Fabaceae	Large	Endemic	Deciduous forests
485	<i>Pterospermum acerifolium</i> (L.) Willd.	Sterculiaceae	Medium	Rare	Deciduous forests
486	<i>Pterospermum canescens</i> Roxb.	Sterculiaceae	Small	Ocassional	Deciduous forests
487	<i>Pterospermum xylocarpum</i> (Gaertn.) Sant. & Wagh	Sterculiaceae	Medium	Common	Deciduous forests
488	<i>Punica granatum</i> L.	Punicaceae	Small	Cultivated	Plains and hills
489	<i>Radermachera xylocarpa</i> (Roxb.) Schum.	Bignoniaceae	Large	Occasional	Hill slopes of deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
490	<i>Rhamnus nepalensis</i> Lawson	Rhamnaceae	Small	Rare	Deciduous forests
491	<i>Rhamnus virgatus</i> Roxb.	Rhamnaceae	Small	Rare	Deciduous forests
492	<i>Rhizophora apiculata</i> Blume	Rhizophoraceae	Small	Common	Mangrove forests
493	<i>Rhizophora mucronata</i> Poir	Rhizophoraceae	Small	Common	Mangrove forest
494	<i>Rhus paniculata</i> Wall. ex Hook. f	Anacardiaceae	Small	Rare	Dry hilly regions
495	<i>Rubus gardnerianus</i> O. Kuntze	Rosaceae	Medium	Rare	Moist deciduous forests
496	<i>Sageretia parviflora</i> (Klein) G. Don	Rhamnaceae	Small	Common	Deciduous forests
497	<i>Salix tetrasperma</i> Roxb.	Salicaceae	Medium	Rare	Deciduous forests
498	<i>Salvadora persica</i> L.	Salvadoraceae	Small	Common	Deciduous forests
499	<i>Santalum album</i> L.	Santalaceae	Small	Occasional	Deciduous forests
500	<i>Sapindus emarginatus</i> Vahl Fig. 3.5d	Sapindaceae	Small	Common	plains
501	<i>Sapium eugeniifolium</i> Buch.-Ham.	Euphorbiaceae	Small	Rare	Semievergreen forests
502	<i>Sapium insigne</i> (Royle) Trimen	Euphorbiaceae	Small	Rare	Deciduous forests
503	<i>Saraca asoca</i> (Roxb.) De Wilde	Caesalpiniaceae	Small	Endangered	Deciduous forests
504	<i>Schleichera oleosa</i> (Lour) Oken	Sapindaceae	Medium	Common	Deciduous forests
505	<i>Schrebera swietenoides</i> Roxb.	Oleaceae	Medium	Occasional	Deciduous forests
506	<i>Scolopia crenata</i> (Wight & Arn.) Clos	Flacourtiaceae	Medium	Occasional	Deciduous forests
507	<i>Scyphiphora hydrophyllacea</i> Gaertn.	Rubiaceae	Small	Rare	Mangrove forest
508	<i>Searsia mysorensis</i> (G. Don) Moffett (= <i>Rhus mysorensis</i> G. Don)	Anacardiaceae	Small	Common	Dry stony and scrub forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
509	<i>Semecarpus anacardium</i> L.f.	Anacardiaceae	Medium	occasional	Dry deciduous forests
510	<i>Shorea robusta</i> Roxb. ex Gaertn.f. Fig. 3.5e	Dipterocarpaceae	Large	Rare	Deciduous forests
511	<i>Shorea roxburghii</i> G.Don	Dipterocarpaceae	Very large	Occasional	Deciduous forests
512	<i>Shorea tumbuggaia</i> Roxb. Fig. 3.5f	Dipterocarpaceae	Large	Occasional	Deciduous forests
513	<i>Siphondon celastrinus</i> Griff.	Celastraceae	Small	Occasional	Moist deciduous forests
514	<i>Sloanea sterculiacea</i> (Benth.) Rehder Fig. 3.6a	Elaeocarpaceae	Large	Rare	Moist deciduous forests
515	<i>Solanum erianthum</i> D. Don	Solanaceae	Small	Occasional	Deciduous forests
516	<i>Sonneratia apetala</i> Buch.-Ham	Sonneratiaceae	Medium	Common	Mangrove forests
517	<i>Sonneratia caseolaris</i> (L.) Engler	Sonneratiaceae	Medium	Rare	Mangrove forest
518	<i>Soymida febrifuga</i> (Roxb.) A.Juss. Fig. 3.6b	Meliaceae	Medium	Common	Deciduous forests
519	<i>Spathodea campanulata</i> P.Beauv.	Bignoniaceae	Medium	Cultivated	Plains and hills
520	<i>Spermadictyon suaveolens</i> Roxb.	Rubiaceae	Small	Rare	Deciduous forests
521	<i>Spondias pinnata</i> (L.f.) Kurz	Anacardiaceae	Medium	Rare	Dry deciduous forests
522	<i>Sterculia foetida</i> L.	Sterculiaceae	Large	Planted	As avenue plant
523	<i>Sterculia villosa</i> Roxb.	Sterculiaceae	Large	Occasional	Deciduous forests
524	<i>Stereospermum colais</i> (Dillw.) Mabb.	Bignoniaceae	Medium	Occasional	Slopes in deciduous forests
525	<i>Stereospermum personatum</i> (Hassk.) Chatterjee	Bignoniaceae	Small to medium	Common	Dry deciduous forests
526	<i>Stereospermum suaveolens</i> (Roxb.) DC.	Bignoniaceae	Medium	Occasional	Dry deciduous forests and semievergreen forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
527	<i>Streblus asper</i> Lour.	Moraceae	Small	Common	Deciduous forests
528	<i>Streblus taxoides</i> (Roth) Kurz	Moraceae	Small	Occasional	Semievergreen forests
529	<i>Strychnos nux-vomica</i> L. Fig. 3.6c	Loganiaceae	Medium	Common	Deciduous forests
530	<i>Strychnos potatorum</i> L.f. Fig. 3.6d	Loganiaceae	Medium	Common	Deciduous forests
531	<i>Suregada angustifolia</i> (Bail. ex Muell.-Arg.) Airy Shaw ( <i>Gelonium lanceolatum</i> auct.-non Willd.)	Euphorbiaceae	Small	Occasional	Deciduous forests
532	<i>Suregada multiflora</i> (Juss.) Bail. ( <i>Gelonium multiflorum</i> Juss.) Fig. 3.6e	Euphorbiaceae	Small	Occasional	Semievergreen forests
533	<i>Swietenia macrophylla</i> King	Meliaceae	Large	Introduced	Planted in hill stations, and also as an avenue tree
534	<i>Swietenia mahogani</i> (L.) Jacq	Meliaceae	Large	Introduced	Planted in hill stations, and also as an avenue tree
535	<i>Symplocos cochinchinensis</i> (Lour.) S. Moore	Symplocaceae	Medium	Rare	Deciduous forests
536	<i>Symplocos theaeifolia</i> D. Don	Symplocaceae	Small	Rare	Deciduous forests
537	<i>Syzygium alternifolium</i> (Wight) Walp.	Myrtaceae	Medium	Common	Hills of deciduous forests
538	<i>Syzygium calophyllifolium</i> Walp.	Myrtaceae	Large	Rare	Dry deciduous forests
539	<i>Syzygium cuminii</i> (L.) Skeels	Myrtaceae	Large	Common	Plains and hills
540	<i>Syzygium heyneanum</i> (Duthie) Wall. ex Gamble	Myrtaceae	Small	Rare	Dry deciduous forests along streams

(continued)



**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
541	<i>Syzygium malabaricum</i> (Bedd.) Gamble	Myrtaceae	Medium	Rare	High hills
542	<i>Syzygium nervosum</i> A. Cunn	Myrtaceae	Small	Rare	Moist deciduous forests
543	<i>Syzygium operculatum</i> (Roxb.) Nicolezu	Myrtaceae	Large	Occasional	High hills
544	<i>Syzygium samarangense</i> (Blume) Merrill & Perry	Myrtaceae	Large	Introduced	Planted in gardens
545	<i>Tabebuia argentea</i> (Bur & K. Schum) Britt.	Bignoniaceae	Small	Cultivated	Planted in gardens
546	<i>Tabebuia rosea</i> (Bertil.) DC.	Bignoniaceae	Small	Cultivated	Planted in gardens
547	<i>Tamarindus indica</i> L.	Caesalpiniaceae	Small	Wild and Cultivated	In fallow lands, road sides and forests
548	<i>Tamarix aphylla</i> (L.) Karsten.	Tamaricaceae	Small	Rare	Mangrove forests
549	<i>Tamilnadia uliginosa</i> (Retz.) Tirveng. & Sastre ( <i>Randia uliginosa</i> (Retz.) DC.)	Rubiaceae	Small	Occasional	Deciduous forests
550	<i>Tarenna asiatica</i> (L.) O. Kuntze ex K. Schum. ( <i>Chomelia asiatica</i> (L.) O.Kuntze)	Rubiaceae	Small	Common	Deciduous forests
551	<i>Tecomella undulata</i> (Sm.) Seem.	Bignoniaceae	Small	Cultivated	Planted in gardens
552	<i>Tecoma stans</i> (L.) Kunth	Bignoniaceae	Small	Cultivated	Planted in gardens
553	<i>Tectona grandis</i> L.f.	Verbenaceae	Large	Common	Deciduous forests
554	<i>Terminalia alata</i> Heyne ex Roth.	Combretaceae	Large	Occasional	Deciduous forests
555	<i>Terminalia arjuna</i> (Roxb ex DC.) Wight & Arn.	Combretaceae	Large	Common	Deciduous forests, frequent along streams, river banks

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
556	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	Large	Common	Deciduous forests
557	<i>Terminalia catappa</i> L.	Combretaceae	Medium	Cultivated	Planted in households, gardens
558	<i>Terminalia chebula</i> Retz.	Combretaceae	Large	Common	Deciduous forests
559	<i>Terminalia coriacea</i> (Roxb.) Wight & Arn.	Combretaceae	Medium	Common	Dry hills of dry deciduous forests
560	<i>Terminalia crenulata</i> Roth	Combretaceae	Large	Occasional	Deciduous forests
561	<i>Terminalia gella</i> Dalz.	Combretaceae	Medium	Rare	Moist deciduous forests
562	<i>Terminalia pallida</i> Brandis Fig. 3.6f	Combretaceae	Small	Occasional	Deciduous forests
563	<i>Terminalia paniculata</i> Roth	Combretaceae	Medium	Common	Deciduous forests
564	<i>Terminalia tomentosa</i> (Roxb. ex DC.) Wight & Arn.	Combretaceae	Medium	Common	Deciduous forests
565	<i>Thespesia populnea</i> (L.) Sol. ex Corr.	Malvaceae	Small	Cultivated	Plains, planted in garden and also as avenue plant
566	<i>Toddalia asiatica</i> (L.) Lam. var. <i>floribunda</i> Gamble	Rutaceae	Small	Common	Deciduous forests
567	<i>Toona ciliata</i> Roem.	Meliaceae	Large	Occasional	Moist deciduous forests
568	<i>Trema orientalis</i> (L.) Blume	Ulmaceae	Medium	Common	Dry evergreen forests
569	<i>Trewia nudiflora</i> L.	Euphorbiaceae	Small	Rare	Deciduous forests along streams
570	<i>Trichilia connaroides</i> (Wight & Arn.) Bentvelizen	Meliaceae	Medium	Common	Moist deciduous forests
571	<i>Vitex altissima</i> L.f.	Verbenaceae	Medium	Common	Semievergreen and deciduous forests
572	<i>Vitex leucoxydon</i> L.f.	Verbenaceae	Medium	Occasional	Deciduous forests
573	<i>Vitex negundo</i> L. var. <i>negundo</i>	Verbenaceae	Small	Common	Plains and deciduous forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
574	<i>Vitex negundo</i> var. <i>pupurpurascens</i> Sivar. & Moldenke	Verbenaceae	Small	Rare	Deciduous forests
575	<i>Vitex peduncularis</i> Wall. ex Schauer	Verbenaceae	Medium	Occasional	Deciduous forests
576	<i>Vitex pinnata</i> L.	Verbenaceae	Small	Occasional	Deciduous forests
577	<i>Vitex quinata</i> (Lour.) F. N. Williams	Verbenaceae	Small	Rare	Deciduous forests
578	<i>Vitex trifolia</i> L.	Verbenaceae	Small	Occasional	Deciduous forests
579	<i>Walsura trifolia</i> (A. Juss.) Harms	Meliaceae	Small	Common	Deciduous forests
580	<i>Wendlandia angustifolia</i> (Wight & Hook. f.)	Rubiaceae	Small	Rare	Deciduous forests
581	<i>Wendlandia bicuspidata</i> Wight & Arn.	Rubiaceae	Small	Occasional	Deciduous forests
582	<i>Wendlandia gamblei</i> Cowan	Rubiaceae	Small	Occasional	Deciduous forests
583	<i>Wendlandia glabrata</i> DC.	Rubiaceae	Small	Occasional	Deciduous forests
584	<i>Wendlandia heynei</i> (Roem. & Schult.) Santapau & Merchant	Rubiaceae	Small	Rare	Deciduous forests
585	<i>Wendlandia thyrsoides</i> (Roem & Schult.) Steud. ( <i>W. notoniana</i> Wall. ex Wight & Arn.)	Rubiaceae	Small	Rare	Deciduous forests
586	<i>Wendlandia tinctoria</i> DC. ssp. <i>tinctoria</i>	Rubiaceae	Small	Common	Deciduous forests
587	<i>Wrightia arborea</i> (Dennst.) Mabb. ( <i>W. tomentosa</i> Roem. & Schult)	Apocynaceae	Small	Occasional	Exposed hilly slopes of deciduous forests
588	<i>Wrightia tinctoria</i> R.Br.	Apocynaceae	medium	Common	Foot hills and open dry deciduous forests and scrubs
589	<i>Xantolis tomentosa</i> (Roxb.) Rap ( <i>Sideroxylon tomentosum</i> Roxb.)	Sapotaceae	Medium	Occasional	Moist evergreen forests

(continued)

**Table 3.2** (continued)

S. No.	Botanical name	Family	Tree height	Status	Remarks
590	<i>Ximenia americana</i> L.	Olacaceae	Small	Common	Deciduous forests
591	<i>Xylia xylocarpa</i> (Roxb.) Taub.	Mimosaceae	Medium	Common	Deciduous forests
592	<i>Xylocarpus moluccensis</i> (Lam) M. Roem	Meliaceae	Small	Common	Mangrove forests
593	<i>Xylosma longifolium</i> Clos	Flacourtiaceae	Small	Occasional	Moist deciduous forests
594	<i>Zanthoxylum armatum</i> DC.	Rutaceae	Small	Occasional	Deciduous forests
595	<i>Zanthoxylum ovalifolium</i> Wight	Rutaceae	Small	Occasional	Deciduous forests
596	<i>Zanthoxylum rhetsa</i> (Roxb.) DC.	Rutaceae	Large	Occasional	Deciduous forests
597	<i>Ziziphus glabrata</i> Heyne ex Roth	Rhamnaceae	Small	Rare	Deciduous forests
598	<i>Ziziphus horrida</i> Roth	Rhamnaceae	Small	Rare	Dry deciduous forests
599	<i>Ziziphus mauritiana</i> Lam. var <i>mauritiana</i>	Rhamnaceae	Small	Occasional	Dry deciduous forests
600	<i>Ziziphus rugosa</i> Lam	Rhamnaceae	Small	Common	Dry deciduous forests
601	<i>Ziziphus xylopyrus</i> (Retz.) Willd.	Rhamnaceae	Small	Common	Dry deciduous forests

*Croton scabiosus* Bedd (Euphorbiaceae) (Fig. 3.2f). Small- to medium-sized deciduous tree, leaves simple, lepidote on both surfaces, flowers yellow, capsules globose, golden yellow; common in hills of Kadapa district, rare in Veligonda hill ranges at above 400 m. altitude.

*Dimorphocalyx kurnoolensis* Venkataraju & Pullaiah (Euphorbiaceae). Dioecious small tree, leaves simple, shiny, flowers white, capsular fruit subglobose; found rare along the sides of the streams at the foot hills of Erramalai hills of middle Eastern Ghats at 500–700 m altitude.

*Eriolaena lushingtonii* Dunn (Sterculiaceae). Small tree, flowers yellow, fruits capsular, woody; and rare in open slopes of moist deciduous forests of Nallamalais, Northern Circars, between 350 and 900 m.

*Glochidion tirupathiense* Rasingam et al. (Euphorbiaceae). Small tree, flowers creamy, axillary fascicle; small tree in deciduous forests of Tirupathi hills above 700 m.

*Hildegardia populifolia* (Roxb.) Schott & Endl (Sterculiaceae) (Fig. 3.3f). Tree, leaves simple, flowers scarlet, fruit follicular, winged, wings flat, inflated; found in middle (few patches of Anantapuramu and Chittoor districts of Andhra Pradesh).

**Table 3.3** Medicinally useful tree taxa of Andhra Pradesh and modes of administration

Botanical name/family	Condition treated and mode of administration
<i>Acacia catechu</i> Mimosaceae	Heartwood extract given internally with local liquor made from <i>Madhuca longifolia</i> to control bleeding after childbirth in women.
<i>Acacia farnesiana</i> Mimosaceae	Heartwood made into a fine paste applied on the skin to cure leprosy. Fruits of this plant are used to control coughs, 15 ml of decoction of stem bark taken orally, twice a day for three days to cure diarrhoea and dysentery. Paste of bark is used to treat cuts and wounds.
<i>Acacia nilotica</i> Mimosaceae	Stem bark made into powder taken internally twice daily to cure gonorrhoea. Leaves chewed to cure scurvy.
<i>Albizia amara</i> Mimosaceae	Leaf with asphalt (silajittu in Telugu), crude copper sulphate (mayilututtam in Telugu) made into pills, one pill taken daily early in the morning to treat mental illness.
<i>Albizia lebbek</i> Mimosaceae	Stem bark powder used for diarrhoea. Leaf juice dropped into the eyes to cure night blindness.
<i>Albizia odoratissima</i> Mimosaceae	The paste of leaves is applied in the eye to treat diseases. The decoction of the stem bark is used to relieve body pains. The leaf juice dropped into the eye to cure night blindness.
<i>Alangium salvifolium</i>	Root paste taken internally and externally (bite spot) to cure snakebite. Root juice is used to relieve fever.
<i>Annona squamosa</i> Annonaceae	The root is a drastic purgative and is used in acute dysentery.
<i>Anogeissus latifolia</i> Rutaceae	Stem bark made into paste taken internally and externally (bite spots) As an antidote to treat snakebite. Stem bark paste taken internally after delivery to expel the placenta.
<i>Aegle marmelos</i> Rutaceae	Fruit pulp and stem bark decoction is taken internally with cumin seeds to treat stomach disorders. Fruit pulp mixed with honey or sugar is given for immediate relief of hiccups. The fruit is eaten for curing dysentery and diarrhoea.
<i>Ailanthus excelsa</i> Simaroubaceae	A total of 15 to 20 leaflets are boiled in 750 ml of water till it becomes 150 ml and taken 10 ml per time three times a day for three days to cure malaria. Fresh stem bark crushed, made into juice, taken internally for relief from stomachache and chronic fever.
<i>Azadirachta indica</i> Meliaceae	Leaf juice taken externally and internally to cure skin disease. Leaf decoction taken with honey to cure diarrhoea and dysentery. Stem bark decoction is drunk twice daily for seven days to cure malarial fever.
<i>Anacardium occidentale</i> Anacardoaceae	Kernel is used as an aphrodisiac.
<i>Bauhinia purpurea</i> Caesalpiniaceae	The root extract is used for haemorrhoids and as a homeostatic agent. The stem bark is boiled in water. This water is used for bathing by mothers to restore health after childbirth.
<i>Bridelia airy-shawii</i> Euphorbiaceae	Stem bark powder is given with water to relieve abdominal pains. Stem bark made into fine powder taken as vapour bath to restore health after childbirth.
<i>Bombax ceiba</i> Bombacaceae	Bark juice, about six teaspoons taken three times a day to cure stomach ache.

(continued)

**Table 3.3** (continued)

Botanical name/family	Condition treated and mode of administration
<i>Boswellia serrata</i> Bursaceae	The juice of this plant controls coughs. The paste of stem bark is given orally twice a day for one week to treat skin diseases. The bark of stem is used to treat diabetes. The gum is used to treat fever.
<i>Buchanania axillaris</i> Anacardiaceae	The fruits are edible. Seeds warmed slightly and made into powder taken daily after taking food for easy digestion (dyspepsia).
<i>Butea monosperma</i> Fabaceae	Yellow dye is prepared from flowers and seeds, used as purgative and vermifuge. Resin obtained from the bark taken internally to cure jaundice. Resin is given internally together with milk twice a day for ten days to treat bleeding.
<i>Capparis grandis</i> Capparaceae	The paste of leaf is used to cure skin diseases. Leaves crushed and juice applied to treat insect bite.
<i>Careya arborea</i> Barringtoniaceae	Stem bark mixed with salt made into a fine paste applied externally to cure skin diseases. Juice of leaves, about 15 ml thrice a day is given for about a week to treat fever.
<i>Cochlospermum religiosum</i> Cochlospermaceae	Leaves and flowers are macerated with water and given orally twice a day morning and evening in promoting menstruation. The stem bark decoction is added to the water and taken as a head bath every day for four days to cure jaundice.
<i>Chloroxylon swietenia</i> Flindersiaceae	The powdered bark is put in a thin cloth and soaked in breast milk, and applied in drops to eye injuries. The bark is used as an astringent.
<i>Dichrostachys cinerea</i> Mimosaceae	Decoction of stem bark taken twice a day to relieve fever.
<i>Diospyros chloroxylon</i> Sapotaceae	The paste of stem bark is taken orally thrice a day for two days to treat dyspepsia. Fruits used as diuretic and for constipation.
<i>Diospyros melanoxylon</i> Sapotaceae	Dried flowers crushed, made into juice and taken internally for urinary problems.
<i>Dolichandrone falcata</i> Bignoniaceae	Root powder is mixed with castor oil and applied externally as an antidote for snake and other poisonous bites. Root with goat's urine made into paste taken to treat haemorrhoids.
<i>Erythrina stricta</i> Fabaceae	Stem bark decoction taken internally to cure dysentery.
<i>Ficus hispida</i> Moraceae	The juice of leaves is applied to treat boils. The fruit boiled in goat's milk is used in hepatic hindering. The fruit and root are used to cure diabetes.
<i>Ficus religiosa</i> Moraceae	Stem bark decoction taken internally to cure dysentery. Stem ash with butter applied as an ointment to cure sores on feet.
<i>Erythroxylum monogynum</i> Erythroxylaceae	The leaf paste is applied externally for curing wounds and 10 ml of juice is given twice a day for about a week to treat malarial fever.
<i>Gardenia gummifera</i> Rubiaceae	Gum from the stem dissolved in water and given for constipation and also to kill intestinal worms (anthelmintic).

(continued)

**Table 3.3** (continued)

Botanical name/family	Condition treated and mode of administration
<i>Gardenia resinifera</i> Rubiaceae	Juice of leaves is taken internally to cure liver disorders. Gum from the stem dissolved in water and given to kill intestinal worms (anthelmintic).
<i>Gyrocarpus americana</i> Hernandiaceae	Stem bark made into paste taken externally to cure arthritis.
<i>Givotia moluccana</i> Euphorbiaceae	Seed made into fine powder, mixed with <i>Pongamia pinnata</i> seed oil and made into paste applied externally as an ointment for curing psoriasis.
<i>Gmelina arborea</i> Verbenaceae	Root paste used internally and externally as an antidote to snakebite.
<i>Gmelina asiatica</i> Verbenaceae	Stem bark is made into paste and applied on the head to treat dandruff. Root juice is given internally in the treatment of gonorrhoea.
<i>Helicteres isora</i> Sterculiaceae	Root decoction mixed with turmeric powder and applied externally to cure cuts and wounds, fruit paste applied externally to treat skin diseases.
<i>Haldina cordifolia</i> Rubiaceae	Stem bark of the plant is ground into a paste with black pepper and sesame seeds given to women twice a day for three days to treat dysmenorrhoea. Stem bark paste is used to treat sores and galls.
<i>Holarrhena pubescens</i> Apocynaceae	Stem bark powder taken orally with water to cure diarrhoea, dysentery and fever. The powder of stem bark is given orally along with pure honey to the child suffering from cold and coughs. Stem bark paste applied externally to skin diseases.
<i>Hardwickia binata</i> Caesalpiniaceae	Decoction of fresh leaves used as purgative. Gum obtained from the bark mixed with coconut oil applied externally to cure gonorrhoea.
<i>Ixora pavetta</i> Rubiaceae	Resin applied in the eyes for easy delivery in women.
<i>Lannea coromandelica</i> Anacardiaceae	Leaves gently boiled and applied on wounds.
<i>Lagerstroemia parviflora</i> Lythraceae	Root bark made into decoction taken twice daily to reduce fever.
<i>Melia azedarach</i> Meliaceae	Leaves ground with turmeric and made into pills and taken orally for four days after menstruation before baths to treat menstrual disorders. Leaves of <i>Melia azedarach</i> and <i>Aristolochia bracteolata</i> taken equally and heated. The mixtures taken with hot water to cure haemorrhoids. Leaves with camphor or turmeric made into paste used to cure sores.
<i>Mitragyna parvifolia</i> Rubiaceae	Stem bark mixed with leaf squeezed and inhaled to relieve coughs and cold. Squeezed fruits are applied on forehead to treat headache. Root bark made into paste taken internally and externally (bite spot) as antidote to snakebite.
<i>Madhuca indica</i> Sapotaceae	Juice of stem bark, about three teaspoons twice a day is given for about a week to treat fever. Liquor made from flowers and fruits is given as tonic to relieve dengue fever.

(continued)

**Table 3.3** (continued)

Botanical name/family	Condition treated and mode of administration
<i>Mallotus philippensis</i> Verbenaceae	The red powder obtained from the mature fruits is mixed with cow butter and taken internally during menstruation and an abortifacient. Stem bark made into a fine paste and applied externally to cure skin diseases.
<i>Ochna obtusata</i> Ochnaceae	Stem bark made into paste taken externally (bite spot) and internally to treat snakebite.
<i>Oroxylum indicum</i> Bignoniaceae	Seeds are soaked in water for 12 h and mixed with turmeric, made into a fine paste, given internally to relieve abdominal pains and burning sensation while passing urine.
<i>Pongamia pinnata</i> Fabaceae	Seed oil is warmed and applied externally for boils and wounds. Fruits made into necklace and worn around the neck to cure chronic coughs.
<i>Pterocarpus marsupium</i> Fabaceae	Red coloured sap obtained from cut stem ends is stored in bottles and taken two spoons a day with water to treat nervous diseases and weakness.
<i>Pterocarpus santalinus</i> Fabaceae	A paste of the wood is applied externally to give a cooling effect during inflammation and headache.
<i>Premna tomentosa</i> Verbenaceae	The leaf extract is taken orally twice a day to treat diuretic problems. The leaf juice is used internally as well as externally to relieve abdominal pains.
<i>Kavalam urens</i> ( <i>Sterculia urens</i> ) Sterculiaceae	Stem bark is powdered and made into small pills, two pills twice a day are given for a week in the treatment of rheumatic pains. Small quantity of gum taken internally for dyspepsia.
<i>Soymida febrifuga</i> Meliaceae	Decoction of stem bark is given in chronic cases of diarrhoea and dysentery.
<i>Sapindus emarginatus</i> Sapindaceae	Seeds are taken for blood purification.
<i>Schleichera oleosa</i> Sapindaceae	Stem bark paste applied externally to treat skin diseases.
<i>Schrebera swietenoides</i> Oleaceae	Stem bark and leaf paste applied on cracked lips. Leaf juice used to relieve toothache.
<i>Semecarpus anacardium</i> Anacardiaceae	Seed oil is used externally to relieve rheumatic pains. Seed oil is applied externally to cure cuts.
<i>Strychnos nux-vomica</i> Loganiaceae	Root is made into a fine paste and applied externally (bite spot) and internally taken to treat snakebite (cobra bite).
<i>Strychnos potatorum</i> Loganiaceae	One seed rubbed into a fine paste with buttermilk and given internally for one week to cure chronic diarrhoea. Seed paste used to cure gonorrhoea, to treat scorpion and snakebites and seed powder used for cleaning of muddy water.
<i>Tamarindus indica</i> Caesalpiniaceae	Fresh stem bark decoction is used to cure diarrhoea. Decoction of the leaves used as a vermifuge.
<i>Terminalia alata</i> Combretaceae	Stem bark is chewed as an antidote to snakebite for temporary treatment.

(continued)



**Table 3.3** (continued)

Botanical name/family	Condition treated and mode of administration
<i>Terminalia arjuna</i> Combretaceae	Stem bark made into powder and taken with water as an emetic when poison is taken.
<i>Terminalia bellirica</i> Combretaceae	Fruits of <i>Phyllanthus emblica</i> and <i>Terminalia chebula</i> are mixed and made into decoction, taken internally to cure leucorrhoea. Above fruits (locally known as triphala) mixed in equal parts made into fine powder taken internally twice a day for 15 days to treat haemorrhoids.
<i>Terminalia chebula</i> Combretaceae	Leaf galls (Karakantu in Telugu) and asafoetida resin made into paste, and used for setting bone fracture.
<i>Trema orientalis</i> Ulmaceae	Tips of aerial roots made into paste applied on penis to cure syphilis.
<i>Wrightia arborea</i> Apocynaceae	Roots are made into powder and taken with water, one teaspoon to relieve fever. Stem bark made into powder and taken with water to cure rheumatism.
<i>Wrightia tinctoria</i> Apocynaceae	Leaf juice with milk applied externally to relieve itching (scabies). Stem bark is made into powder and taken with water for epilepsy. Crushed roots given to induce vomiting (emetic).

*Lasiococca comberi* Haines (Euphorbiaceae). Small tree, often buttressed, leaves simple, panduri-form or obovate, flowers in racemes, capsule 3-lobed, tuberculate; found in northern circars of Andhra Pradesh at an altitudes of 700 m.

*Premna hamiltonii* (Buch.-Ham.) Ellis (Verbenaceae). Tree, leaves simple, ovate, yellow gland dotted, flowers pale green, drupe globose, black; occurring in Nallamalais of Middle Eastern Ghats at 600–1000 m.

*Pterocarpus santalinus* L. (Papilionaceae). Moderate-sized tree, leaves 3 rarely 5-foliolate, flowers yellow, fruit samara; common on the hill slopes at 300–700 m altitude, endemic to the southern-Middle Eastern Ghats.

*Shorea tumbuggaia* Roxb (Dipterocarpaceae). Large resinous tree, flowers creamy white, fruits winged; occurring in Seshachalam hill ranges of Chittoor district at 700–1000 m.

*Syzygium alternifolium* (Wight) Walp (Myrtaceae). Deciduous middle-sized tree, leaves thick coriaceous, simple, flowers cream or yellowish-white, sweet scented, berry globose, crowned with cup-like persistent calyx tube, dark purple; occurring in Middle Eastern Ghats at 600–850 m altitude.

*Terminalia pallida* Brandis (Combretaceae) (Fig. 3.6f). Small- to medium-sized tree, leaves simple, thick coriaceous, flowers pale yellow, drupe ovoid, faintly ridged; distribution is restricted to Kadapa and Chittoor districts of Andhra Pradesh at an altitudes of 600–800 m.

*Wendlandia gambleii* Cowan (Rubiaceae). Small tree, leaves simple, flowers yellowish, in panicles, capsule globose; found in Rampa hills of East Godavari district at 1000–1500 m altitude.



**Fig. 3.3** (a) *Deccania pubescens* (Roth) Tirveng., (b) *Dillenia bracteata* Wight, (c) *Diospyros melanoxylon* Roxb., (d) *Ficus racemosa* L., (e) *Haldina cordifolia* (Roxb.) Ridsd., (f) *Hildegardia populifolia* (Roxb.) Schott. & Endl

### 3.7 Endemic Trees of Peninsular India Occurring in Andhra Pradesh (Source, Nayar et al. 1984)

Anacardiaceae: *Nothopegia heyneana* (Hook. f.) Gamble

Annonaceae: *Alnosea madraspatana* Bedd., *Miliusa eriocarpa* Dunn ex Gamble, *Miliusa montana* Gard. ex Hook.f. et Thoms.

Aquifoliaceae: *Ilex malabarica* Bedd.

Bignoniaceae: *Dolichandrone arcuata* Clarke, *Dolichandrone atrovirens* (Heyne ex Roth) Sprague

Capparaceae: *Maerua apetala* (Roth) Jacob (Fig. 3.4e)

Celastraceae: *Eunymus indicus* Heyne ex Roxb., *Maytenus bailadillana* (Swamy & Mooney) Raju & Biswas



**Fig. 3.4** (a) *Holoptelia integrifolia* (Roxb.) Planchon, (b) *Isonandra villosa* Wight, (c) *Kavalama urens* (Roxb.) Raf., (d) *Mitragyna parvifolia* (Roxb.) Korth, (e) *Maerua apetala* (Roth) Jacobs, (f) *Ochna obtusata* DC

Cordiaceae: *Cordia evolutior* Gamble

Dilleniaceae: *Dillenia bracteata* Wt (Fig. 3.3b).

Dipterocarpaceae: *Shorea roxburghii* G. Don (Fig. 3.5e)

Ebenaceae: *Diospyros assimilis* Bedd.

Euphorbiaceae: *Bridelia crenulata* Roxb; *Glochidion ellipticum* Wt. *Glochidion neilgherrense* Wight, *Glochidion tomentosum* Dalz, *Mallotus aureopunctatus* Muell.-Arg, *Mallotus muricatus* Bedd, *Mallotus stenanthus* Muell.-Arg., *Trewia polycarpa* Benth. ex Hook.f.





**Fig. 3.5** (a) *Phyllanthus indofischeri* Bennet, (b) *Premna hamiltonii* J.L.Ellis, (c) *Pterocarpus santalinus* L.f. (d) *Sapindus emarginatus* Vahl, (e) *Shorea roxburghii* G.Don, (f) *Shorea tumbugaia* Roxb

Icacinaceae: *Apodytes dimidiata* E. Meyer ex Arn

Lauraceae: *Cinnamomum macrocarpum* Hook.f., *Cinnamomum malabaratum* (Burm. f.) Bl., *Cryptocarya neilgherrensis* Meissn., *Litsea oleoides* Hook.f., *Litsea wightiana* (Nees.) Hok.f., *Neolitsea foliosa* Gamble, *Neolitsea scrobiculata* Gamble

Melastomataceae: *Memecylon lushingtonii* Gamble

Meliaceae: *Aglaiia elaeagnoidea* (Juss.) Benth var. *courtallensis* (Gamble) K.K.N. Nair

Mimosaceae: *Acacia campbelli* Arn.

Moraceae: *Ficus beddomei* King, *Ficus dalhousiae* Miq

Myristicaceae: *Knema attenuata* (Hook.f. et Thoms.) Warb.

Myrsinaceae: *Myrsine capitellata* Wall. ex Roxb

Ochnaceae: *Ochna obtusata* DC. var. *gamblei* (King ex Brandi) Kanis (Fig. 3.4f)

Pittosporaceae: *Pittosporum dasycaulon* Miq.



**Fig. 3.6** (a) *Sloanea sterculiacea* (Benth.) Rehder, (b) *Soymida febrifuga* (Roxb.) A.Juss., (c) *Strychnos nux-vomica* L., (d) *Strychnos potatorum* L.f., (e) *Suregada angustifolia* (Baill. ex Muell.-Arg.) Airy Shaw, (f) *Terminalia pallida* Brandis

Rubiaceae: *Hymenodictyon obovatum* Wall., *Wendlandia angustifolia* Wt., *Deccania pubescens* (Roth) Tirveng (Fig. 3.3a).

Rutaceae: *Pamburus missionis* (Wt.) Swingle

Sapotaceae: *Isonandra villosa* Wt, *Manilkara roxburghinana* ( Wt.) Dubard

Vacciniaceae: *Vaccinium neilgherrense* Wt.

### 3.8 Overexploited Tree Taxa

The following tree taxa are overexploited by local peoples for their needs, i.e. for timber, cordage, gums, and fuel wood.

*Anogessus latofolia* (Roxb.) ex DC. Wall ex Guill. & Perr., *Cochlospermum religiosum* (L.) Alston,

*Chloroxylon swietenia*Adr. Juss, *Chukrasia tabularis*Adr. Juss., *Dalbergia latifolia* Roxb., *Diospyros melanoxylon* Roxb. (Fig. 3.3c), *Dolichandrone atrovirens* (Roth). Sprague., *Givotia moluccana* (L.) Sreem., *Gmelina arborea* Roxb., *Haldina cordifolia* (Roxb.) Ridsd., *Kavalama urens* (Roxb.) Raf. (Syn.: *Stercularia urens* Roxb.), *Pterocarpus marsupium* Roxb., *Pterocarpus santalinus* L., *Santalum album* L., *Shorea robusta* Roxb. ex Gaertn., *Soymida febrifuga* (Roxb.) Adr. Juss. (Fig. 3.6b), *Tecoma grandis* L.f., *Terminalia paniculata* Roxb. and *Terminalia coriacea* (Roxb.) Wt. & Arn.

### 3.9 Causes for Depletion of Tree Species and Its Conservation

The natural forests all over the Andhra Pradesh are under great pressure. Overgrazing, over-exploitation of trees for timber, fuel wood, fodder, etc., forest fires, encroachment of forest for agriculture, urbanization, and construction of reservoirs, plantation of exotic trees for shade or afforestation has decreased the tree and other biodiversity. Rich biodiversity has been thereby lost in Andhra Pradesh. Plantations favoured only few valuable species; thus, natural species are dwindling and shrinking. The biotic interference has had a marked effect on the vegetation leading to the extinction of valuable and rare species. Due to various anthropogenic factors and natural catastrophes, there is perceptible decline in the population of many valuable trees, making them rare and threatened.

Illegal felling of trees is a problem to reckon with in most reserve forests and the best way to solve it is protecting with the full involvement of the local communities living in the area. Forest fires should be prevented at any cost. Frequent fire has reduced the moist forest into drier forest. Grazing should be restricted to carrying capacity of forests and degraded grasslands should be planted up with improved fodder grass and legumes to increase the productivity of the area and to meet the present fodder demand. Enrichment plantations could be taken in degraded forestlands to introduce valuable species and a mixture of species having multipurpose characters. Appropriate conservation measures will not only stop further depletion of trees but will also help in improving tree diversity in Andhra Pradesh.

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### References

- Ahmedullah M, Nayar MP (1987) Endemic Plants of the Indian region, vol 1. Peninsular India. Bot. Surv. India, Calcutta  
 Gamble JS, Fischer CEC (1915–1935) Flora of Presidency of Madras, London Rep ed 1957. Calcutta  
 Hooker JD (1872–1897) Flora of British India, vol. 7. London

- Nayar MP, Ahmed M, Raju DCS (1984) Endemic and rare plants of Eastern Ghats. *Indian J For* 7:35–42
- Pullaiah T (2018) *Flora of Andhra Pradesh*, vol 5. Scientific Publishers, Jodhpur
- Pullaiah T, Karuppusamy S (2018) *Flora of Andhra Pradesh*, vol 3. Scientific Publishers, Jodhpur
- Pullaiah T, Muralidhara Rao D (2002) *Flora of Eastern Ghats*. In: *Ranunculaceae-Moringaceae*, vol 1. Regency Publications, New Delhi
- Pullaiah T, Sandhya Rani S (1999) *Trees of Andhra Pradesh, India*. Regency Publications, New Delhi
- Pullaiah T, Sri Rama Murthy K (2001) *Flora of Eastern Ghats*. In: *Leguminosae*, vol 2. Regency Publications, New Delhi
- Pullaiah T, Sri Rama Murthy K (2018) *Flora of Andhra Pradesh*, vol 2. Scientific Publishers, Jodhpur
- Pullaiah T, Sri Rama Murthy K, Karuppusamy S (2007) *Flora of Eastern Ghats, India*. In: *Rosaceae - Asclepiadaceae*, vol 3. Regency Publications, New Delhi
- Pullaiah T, Sandhya Rani S, Karuppusamy S (2011) *Flora of Eastern Ghats*. In: *Stylidaceae – Plantaginaceae*, vol 4. Regency Publications, New Delhi
- Pullaiah T, Chennaiah E, Sandhya Rani S (2018a) *Flora of Andhra Pradesh*, vol 1. Scientific Publishers, Jodhpur
- Pullaiah T, Ali Moulali D, Sandhya Rani S (2018b) *Flora of Andhra Pradesh*, vol 4. Scientific Publishers, Jodhpur