

Angiosperms, Pachaiyappa's College, Chennai, Tamil Nadu, India

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ABSTRACT: We provide a checklist of Angiosperms along with the details of life form from a ~ 9.6 ha of non-concreted area of Pachaiyappa's College (PC) campus, Chennai, Tamil Nadu state, India. This area harbors 256 species belonging to 212 genera in 71 families. Families with maximum number of species include Fabaceae (31 species) followed by Malvaceae (15), Euphorbiaceae (13), Apocynaceae (12), Acanthaceae and Poaceae (11 each), Bignoniaceae and Rubiaceae (eight each) and Arecaceae, Moraceae, Rutaceae and Verbenaceae (seven each). The surveyed area represents a remnant of tropical dry evergreen forest (TDEF), as a substantial number of species collected in the present study belong exclusively to the Coromandel Coast (CC) TDEFs. PC is still preserving the biodiversity by means of strict rules and regulations enforced for the maintenance of the college premises.

INTRODUCTION

The forest types of Coromandel Coast (CC) of peninsular India include tropical dry evergreen forests (TDEFs), dry evergreen scrubs and mangroves (Champion and Seth 1968). The Coromandel coastal plains extend about 80-100 km inland from the coast (Mani 1974). Floristically, TDEF is distinguished by a fair representation of characteristic and preferential species, exclusively or mostly confined to this vegetation type (Champion and Seth 1968; Meher-Homji 1974). The tropical dry evergreen forests occurring in patches, short-statured, largely three-layered, tree dominated evergreen forests with a sparse and patchy ground flora (Venkateswaran and Parthasarathy 2003). Invariably the TDEF patches are protected by the local people as sacred groves (SGs) (Parthasarathy *et al.* 2008; Udayakumar and Parthasarathy 2010). TDEFs have been distinguished from other forest types by various authors (Sebastine and Ellis 1967; Champion and Seth 1968; Rao and Meher-Homji 1993) and they represent a peculiar type, confined to the southeastern coast of India, northwest Sri Lanka (Blasco and Legris 1973), northeastern Thailand (Bunyavejchewin 1999) and Jamaica (Kelly *et al.* 1988). As to the inventory of plant biodiversity of TDEFs of CC, Parthasarathy and Karthikeyan (1997) listed a total of 54 woody plant species in 47 genera and 31 families from two sacred groves of Cuddalore district; Reddy and Parthasarathy (2003) documented 39 (34 genera and 24 families) woody liana species from four sacred groves; Venkateswaran and Parthasarathy (2003) documented the presence of 46 woody flowering plant species (43 genera in 25 families) from two sacred groves; Mani and Parthasarathy (2005) recognized 60 tree species (49 genera in 24 families) from five sacred groves in Pudukottai district of Tamil Nadu; Venkateswaran and Parthasarathy (2005) identified 29 tree species (26 genera in 26 families) from a sacred grove of Villupuram district of Tamil Nadu.

Urban green space that includes streets with trees, parks, vegetated colleges and schools plays vital role in

conservation of local environment. It can decrease the urban island heat effect (Chow and Roth 2006), storm water run-off and flooding (Mc Pherson *et al.* 1997). Trees of the concretized urban environment render food to birds and other city dwelling animals (Fernandez-Zuricic 2000). They act as noise filters, air purifiers, sequester carbon and pollutant traps (Mc Pherson 1997; Beckett *et al.* 2000). Urban greening and urban forests are particularly important to healthy cities in developing countries (Thaiutsa *et al.* 2008). Due to escalating urbanization, green space and urban trees become increasingly important in developing countries (Cy 2006). Documentation of existing green spaces of the urban environment is important to determine existing resources and to set target for future improvements (Miller 1996). Results of tree inventory and assessment of urban environment can be a useful tool in urban planning and conservation of important tree species (Cy 2006). Urbanization is one of the major reasons for destruction of the natural vegetation. Urbanized areas can also harbor a high number of threatened species (Sodhi *et al.* 2010). Considering the importance of enumeration of plants, particularly in a typical metropolitan area such as Chennai, we made a qualitative floristic survey and prepared a checklist of angiosperm species of Pachaiyappa's College, Chennai which has a protected patch of the Coromandel Coast TDEFs.

MATERIALS AND METHODS

Study site

Qualitative angiosperm floristic survey was carried out in about ~9.6 ha of Pachaiyappa's College (13°07'30" N, 80°23'31" E), established in the year 1842, and one of the oldest and famous institutions of Higher learning in Tamil Nadu. It is located in middle of the Chennai, the most populated, metropolitan and capital city of Tamil Nadu state, south India. The total area of the College is about ~16 ha and it is a part of the Coromandel Coast. The city is experiencing tropical dissymmetric climate and receiving

bulk of rainfall during the north-east monsoon (October-December). Average annual rainfall received by the city is ~1,300 mm. The average temperature is 37 °C in summer and 24 °C in winter (Chennai District 2009). The east of the city is lined up by the sea shore of Bay of Bengal and the north, west and south are bound by land (Thiruvallur district) (Figure 1).

Data collection

During March-June 2009 enumeration of angiosperm flora was carried out by qualitative floristic survey in about 60 days in a total of ~9.6 ha. Species were identified using regional floras (Gamble 1921-1935; Matthew 1991; Nair et al. 1983; Henry et al. 1987; 1989). Angiosperm Phylogeny Group II was followed to classify the species. For all documented species the binomial and author citation were checked thoroughly with IPNI (International Plant Names Index). The well preserved specimens with voucher number were deposited in Herbarium of Post Graduate and Research Department of Botany, Pachaiyappa's College, Chennai, Tamil Nadu, India.

RESULTS AND DISCUSSION

This qualitative floristic survey revealed the presence of 256 Angiosperm species belonging to 212 genera in 71 families. Plant binomial, family, life form and voucher number are provided in Table 1. The most speciose families include Fabaceae (31 species) followed by Malvaceae (15), Euphorbiaceae (13), Apocynaceae (12), Acanthaceae and Poaceae (11 each), Bignoniaceae and Rubiaceae (8 each) and Arecaceae, Moraceae, Rutaceae and Verbenaceae (7 each), whereas 29 families represented by a single species which include Aristolochiaceae, Bixaceae, Caricaceae, Celastraceae, Cornaceae and Clusiaceae etc., (Table 1). Among life-forms trees dominate the campus with 99 species followed by herbs (76), shrubs (51), lianas (22) and herbaceous climbers (8). Dicotyledons are more common with 222 (66.72%) species followed by monocotyledons with 34 (13.28%) species. Mayuranathan (1994) reported 1039 species (843 dicotyledons and 196 monocotyledons) of flowering plants from the entire Chennai district. Giles Lal and Livingstone (1978) have documented 458 (256 woody plants and 202 herbs) flowering plant species from ca. 151 ha campus of an age-old Madras Christian College (MCC), Chennai. Fabaceae is the dominant family in Chennai district, MCC as well as PC with 87, 59 and 31 species respectively. Presence of *Cordia obliqua*, *Ecbolium viride*, *Ixora pavetta*, *Pavetta indica*, *Pterospermum canescens*, *Sansevieria roxburghiana* and *Streblus asper* confirms that the flora of the area studied is a remnant of tropical dry evergreen forests of Coromandel Coast.

Among the plant species identified from PC, *Delonix regia* (IUCN 2009; Status: Vulnerable B1+2c ver. 2.3), *Guaiacum officinale* (IUCN 2009; Status: Endangered C2a ver. 2.3), *Pterospermum canescens* and *Sansevieria roxburghiana* (endemic to CC, Parthasarathy et al. 2008), are the most important species from the point of conservation. Important plant species are featured in Figures 2–6. Eight decades ago *Cordia obliqua*, *Evolvulus nummularius* and *Spathodea companulata* were only present at PC (Mayuranathan 1929), but now these species are distributed throughout the city. *Cordia obliqua*

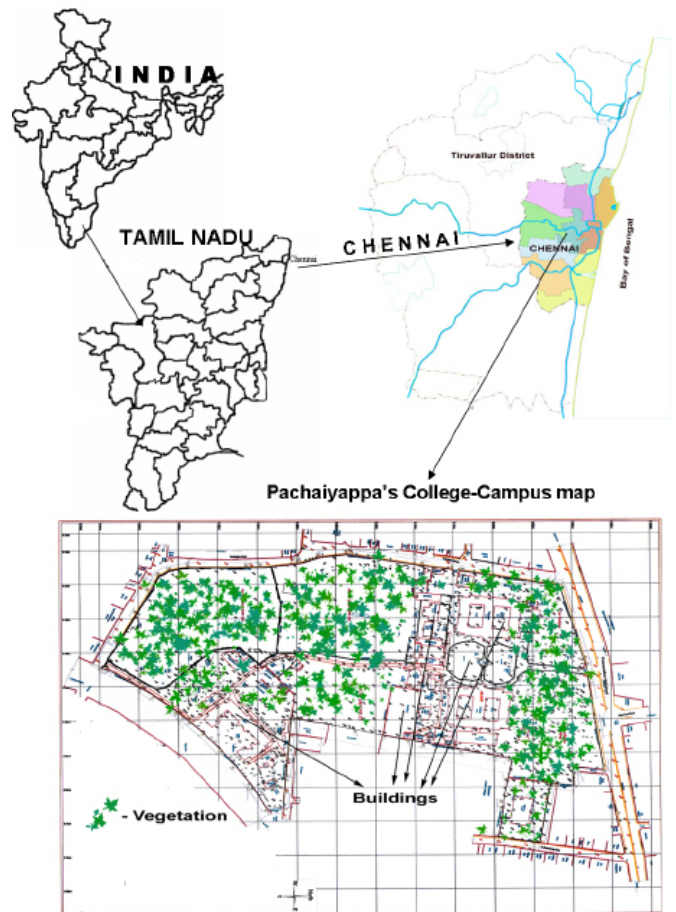


FIGURE 1. Map showing the vegetation cover of the Pachaiyappa's College campus, Chennai, Tamil Nadu, India.

and *Spathodea companulata* are extensively planted as avenue tree, and *Evolvulus nummularius* spreads as a weed. Previously, Fyson (1921) reported 100 flowering plant species from whole Chennai district of which 55 species are available in the PC. The earlier works on TDEFs of CC has revealed the presence of 149 (122 genera and 49 families) species of Angiosperms including 42 woody liana and 102 tree species (Parthasarathy et al. 2008); Recently, Udayakumar and Parthasarathy (2010) recorded 312 (252 genera and 80 families) species of flowering plants from 86 sacred groves of southern Coromandel Coast of India.

As reported by Mani (1974) that the CC extended up to 50-100 km inland from the coast, the study area is located 5 km inland from the Coast of Chennai constituting a part of the CC TDEFs. In Chennai itself such CC TDEFs patches are well protected in the Guindy National park and the Raj Bhavan, Chennai (Tamil Nadu Government 2009). As of now, approximately 40% (6.4 ha) of the College land is occupied by buildings and play grounds and the remaining 60% (9.6 ha) supports the life of various herbs, herbaceous climbers, shrubs, woody lianas and trees. Though the PC is located in the Chennai Metropolis, the biodiversity of the campus is protected by strict rules and regulations. Many of the introduced and exotic-ornamental plants are also growing along with the native flora to enhance the aesthetic value and biodiversity wealth of the campus. Documentation of plant biodiversity of the colleges is also an essential factor that promotes to evaluate the total biodiversity wealth of any particular place such as town, city, district etc.



FIGURE 2. A) Undisturbed tree stand of Pachaiyappa's College campus; B) *Allophylus cobbe* (Sapindaceae); C) *Bougainvillea spectabilis* (Nyctaginaceae); D) *Coccoloba uvifera* (Polygonaceae); E) *Cordia obliqua* (Boraginaceae); F) *Cordia sebestena* (Boraginaceae).

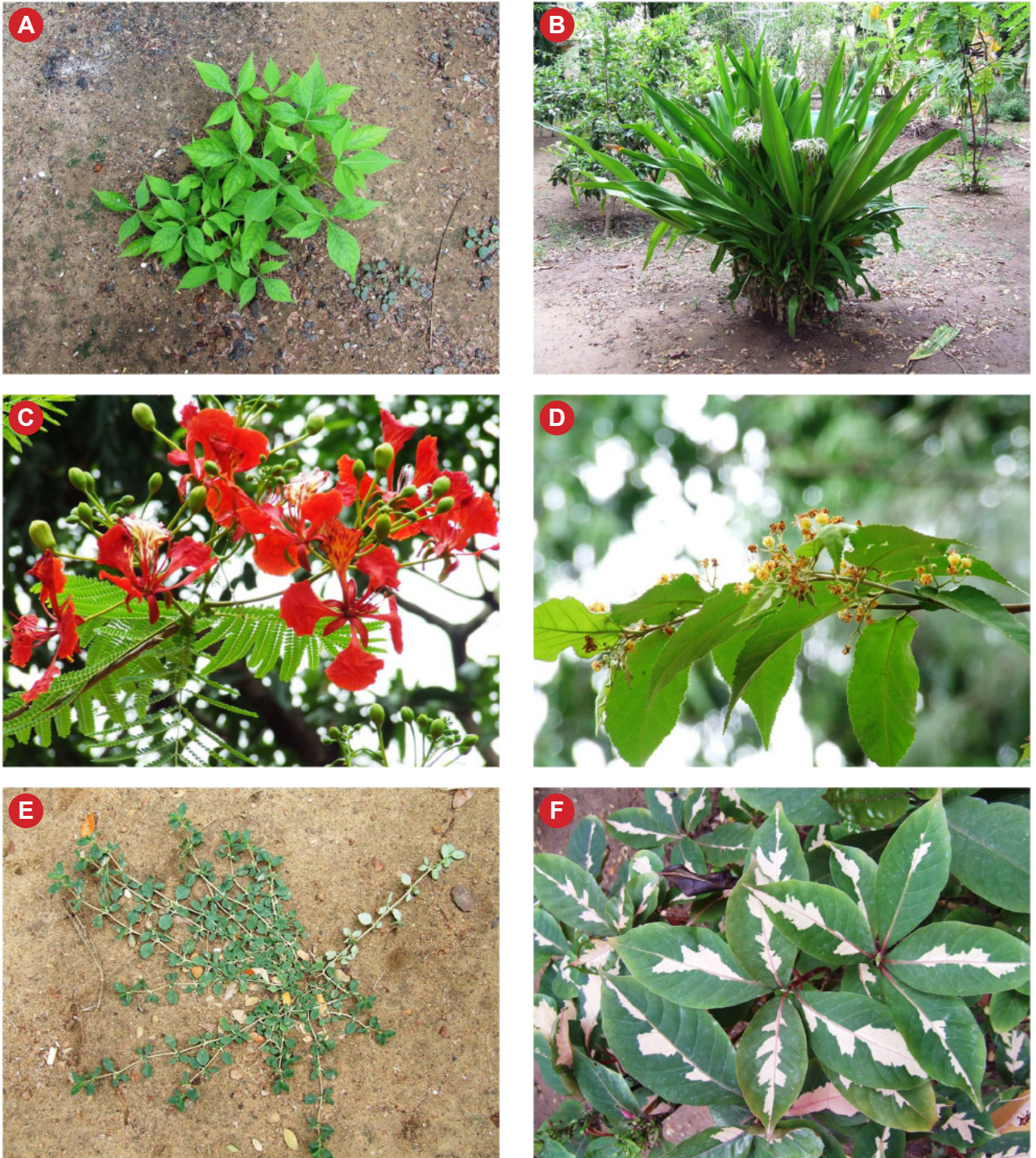


FIGURE 3. A) *Crateva magna* (Brassicaceae); B) *Crinum asiaticum* (Amaryllidaceae); C) *Delonix regia* (Fabaceae); D) *Guazuma ulmifolia* (Malvaceae); E) *Gisekia pharnaceoides* (Gisekiaceae); F) *Graptophyllum hortense* (Acanthaceae).

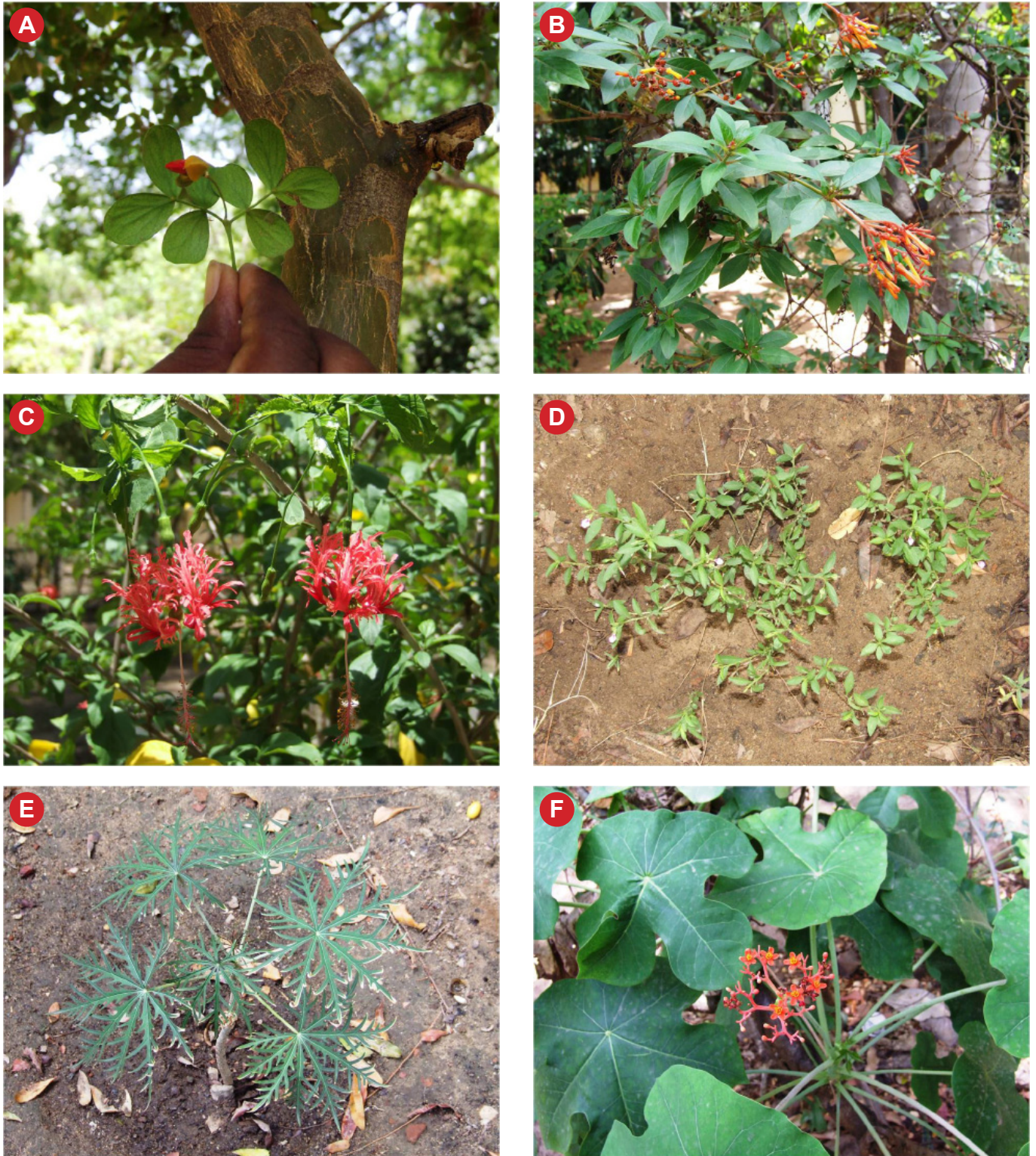


FIGURE 4. A) *Guaiacum officinale* (Zygophyllaceae); B) *Hamelia patens* (Rubiaceae); C) *Hibiscus schizopetalus* (Malvaceae); D) *Hybanthus enneaspermus* (Violaceae); E) *Jatropha multifida* (Euphorbiaceae); F) *Jatropha podagrica* (Euphorbiaceae).



FIGURE 5. A) *Pavetta indica* (Rubiaceae); B) *Pisonia alba* (Nyctaginaceae); C) *Punica granatum* (Lythraceae); D) *Senna alata* (Fabaceae); E) *Terminalia catappa* (Combretaceae); F) *Turnera ulmifolia* (Turneraceae).

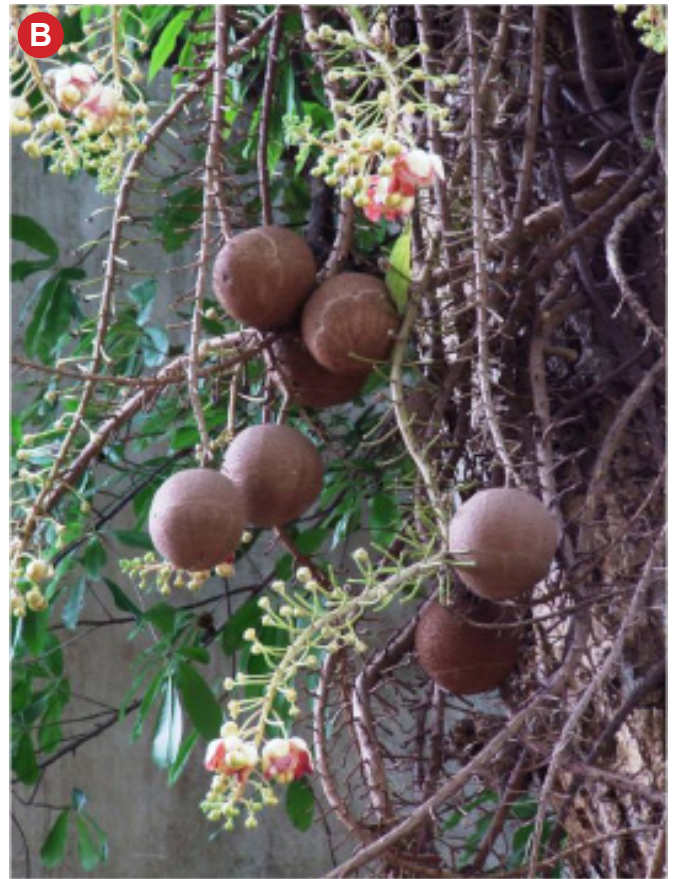


FIGURE 6. A) *Limonia acidissima* (Rutaceae); B) *Couroupita guianensis* (Lecythidaceae); C) *Pterospermum canescens* (Malvaceae); D) *Quisqualis indica* (Combretaceae).

TABLE 1. Angiosperm plant species from Pachaiyappa's College, Chennai, Tamil Nadu, India. The life-form was also presented (H = Herb; HC = Herbaceous climber; L = Liana; S = Shrub; T = Tree).

TAXON	LIFE-FORM	VOUCHER NO.
ACANTHACEAE		
<i>Andrographis echinoides</i> Nees	H	1755
<i>Barleria cristata</i> L.	S	1532
<i>Dipteracanthus prostratus</i> Nees	H	1588
<i>Ecbolium viride</i> (Forssk.) Alston	H	1591
<i>Graptophyllum hortense</i> Nees	S	1609
<i>Justicia adhatoda</i> L.	S	1631
<i>Justicia gendarussa</i> Burm.f	S	1632
<i>Justicia procumbens</i> L.	H	1633
<i>Justicia tranquebariensis</i> L.f.	H	1634
<i>Ruellia tuberosa</i> L.	H	1693
<i>Thunbergia grandiflora</i> Roxb.	L	1717
AIZOACEAE		
<i>Trianthema portulacastrum</i> L.	H	1723
AMARANTHACEAE		
<i>Achyranthes aspera</i> L.	H	1506
<i>Aerva lanata</i> (L.) Juss. Ex Schult.	H	1510
<i>Alternanthera paronychioides</i> A.St.-Hil.	H	1516
<i>Amaranthus spinosus</i> L.	H	1517
<i>Gomphrena procumbens</i> Zuccagni.	H	1608
<i>Amaranthus viridis</i> L.	H	1518
AMARYLLIDACEAE		
<i>Crinum asiaticum</i> L.	S	1579
<i>Curculigo orchoides</i> Gaertn.	H	1580
ANACARDIACEAE		
<i>Lannea coromandelica</i> (Houtt.) Merr.	T	1637
<i>Mangifera indica</i> L.	T	1645
ANNONACEAE		
<i>Annona squamosa</i> L.	T	1519
<i>Artabotrys hexapetalus</i> (L.f.) Bhandari	S	1522
<i>Polyalthia longifolia</i> (Sonn.) Thwaites	T	1680
APOCYNACEAE		
<i>Adenium obesum</i> Roem. & Schult.	S	1508
<i>Alstonia scholaris</i> (L.) R.Br.	T	1515
<i>Calotropis gigantea</i> (L.) W.T.Aiton	S	1546
<i>Catharanthus roseus</i> (L.) G.Don	H	1559
<i>Decalepis hamiltonii</i> Wight & Arn.	L	1585
<i>Hemidesmus indicus</i> (L.) R.Br.	L	1617
<i>Nerium oleander</i> L.	S	1662
<i>Pergularia daemia</i> (Forssk.) Chiov.	L	1670
<i>Rauwolfia tetraphylla</i> L.	H	1687
<i>Secamone emetica</i> (Retz.) Schult.	L	1696
<i>Tylophora indica</i> Merr.	L	1729
<i>Wrightia tinctoria</i> R.Br.	T	1733
ARACEAE		
<i>Colocasia antiquorum</i> Schott	S	1572
<i>Epipremnum pinnatum</i> (L.) Engl.	L	1592
ARECACEAE		

TABLE 1. CONTINUED.

TAXON	LIFE-FORM	VOUCHER NO.
<i>Borassus flabellifer</i> L.	T	1539
<i>Caryota urens</i> L.	T	1553
<i>Chrysalidocarpus lutescens</i> H.Wendl.	T	1760
<i>Cocos nucifera</i> L.	T	1570
<i>Livistona chinensis</i> R.Br.	T	1643
<i>Phoenix sylvestris</i> Roxb.	T	1671
<i>Roystonea regia</i> (Kunth) O.F.Cook	T	1692
ARISTOLOCHIACEAE		
<i>Aristolochia bracteolata</i> Lam.	H	1521
ASPARAGACEAE		
<i>Asparagus racemosus</i> Willd.	L	1524
<i>Sansevieria roxburghiana</i> Schult.f.	H	1694
ASTERACEAE		
<i>Acanthospermum hispidum</i> DC.	H	1751
<i>Ageratum conyzoides</i> L.	H	1749
<i>Blumea wightiana</i> DC.	H	1750
<i>Tridax procumbens</i> L.	H	1726
<i>Vernonia cinerea</i> (L.) Less.	H	1748
BIGNONIACEAE		
<i>Bignonia capreolata</i> L.	L	1534
<i>Crescentia cujeta</i> L.	T	1762
<i>Kigelia africana</i> (Lam.) Benth.	T	1636
<i>Markhamia stipulata</i> Seem.	T	1649
<i>Millingtonia hortensis</i> L.f.	T	1653
<i>Spathodea campanulata</i> P.Beauv.	T	1703
<i>Tabebuia rosea</i> DC.	T	1709
<i>Tecoma stans</i> (L.) Kunth	S	1711
BIXACEAE		
<i>Bixa orellana</i> L.	T	1535
BORAGINACEAE		
<i>Carmona retusa</i> (Vahl) Masam.	S	1552
<i>Cordia obliqua</i> Willd.	T	1574
<i>Cordia sebestena</i> L.	T	1575
<i>Heliotropium indicum</i> L.	H	1616
<i>Trichodesma indicum</i> R.Br.	H	1725
BRASSICACEAE		
<i>Capparis decidua</i> Edgew.	S	1548
<i>Capparis sepiaria</i> L.	S	1549
<i>Cleome viscosa</i> L.	H	1565
<i>Crateva magna</i> DC.	T	1578
<i>Gynandropsis gynandra</i> (L.) Briq.	H	1613
CARICACEAE		
<i>Carica papaya</i> L.	T	1551
CASUARINACEAE		
<i>Casuarina equisetifolia</i> L.	T	1557
<i>Casuarina torulosa</i> Aiton	T	1558
CELASTRACEAE		
<i>Celastrus paniculatus</i> Willd.	L	1560
CLUSIACEAE		

TABLE 1. CONTINUED.

TAXON	LIFE-FORM	VOUCHER NO.
<i>Calophyllum inophyllum</i> L.	T	1545
COLCHICACEAE		
<i>Gloriosa superba</i> L.	HC	1605
COMBRETACEAE		
<i>Quisqualis indica</i> L.	L	1686
<i>Terminalia bellirica</i> (Gaertn.) Roxb.	T	1714
<i>Terminalia catappa</i> L.	T	1715
COMMELINACEAE		
<i>Commelina benghalensis</i> L.	T	1573
<i>Cyanotis axillaris</i> (L.) D.Don	H	1756
<i>Tradescantia discolor</i> Raf.	H	1721
CONVOLVULACEAE		
<i>Evolvulus nummularius</i> (L.) L.	H	1763
<i>Ipomoea aquatica</i> Forssk.	HC	1623
<i>Ipomoea sepiaria</i> J.Koenig ex Roxb.	HC	1752
CORNACEAE		
<i>Alangium salviifolium</i> (L.f.) Wangerin	T	1511
COSTACEAE		
<i>Costus speciosus</i> Sm.	H	1576
CRASSULACEAE		
<i>Kalanchoe pinnata</i> (Lam.) Pers.	H	1635
CUCURBITACEAE		
<i>Coccinia grandis</i> (L.) Voigt	L	1568
<i>Mukia maderaspatana</i> (L.) M.Roem.	HC	1658
CYPERACEAE		
<i>Cyperus alternifolius</i> L.	H	1582
<i>Cyperus rotundus</i> L.	H	1583
<i>Kyllinga monocephala</i> L.f.	H	1757
EUPHORBIACEAE		
<i>Acalypha amentacea</i> Roxb.	S	1504
<i>Acalypha indica</i> L.	H	1505
<i>Codiaeum variegatum</i> (L.) A.Juss.	S	1571
<i>Euphorbia heterophylla</i> L.	H	1594
<i>Euphorbia hirta</i> L.	H	1595
<i>Jatropha curcas</i> L.	S	1627
<i>Jatropha gossypifolia</i> L.	S	1628
<i>Jatropha multifida</i> L.	S	1629
<i>Jatropha podagrica</i> Hook.	S	1630
<i>Micrococca mercurialis</i> Benth.	H	1652
<i>Pedilanthus tithymaloides</i> (L.) Poit.	S	1668
<i>Ricinus communis</i> L.	S	1690
<i>Tragia involucrata</i> L.	HC	1722
FABACEAE		
<i>Abrus precatorius</i> L.	L	1501
<i>Acacia auriculiformis</i> A.Cunn. ex Benth.	T	1503
<i>Adenanthera pavonina</i> L.	T	1507
<i>Albizia lebbek</i> (L.) Benth.	T	1512
<i>Albizia saman</i> (Jacq.) F.Muell.	T	1513
<i>Bauhinia racemosa</i> Lam.	T	1533

TABLE 1. CONTINUED.

TAXON	LIFE-FORM	VOUCHER NO.
<i>Butea monosperma</i> (Lam.) Taub. In Engl. & Prantl	T	1541
<i>Caesalpinia coriaria</i> (Jacq.) Willd.	T	1542
<i>Caesalpinia pulcherrima</i> (L.) Sw.	S	1543
<i>Cassia fistula</i> L.	T	1554
<i>Cassia hirsuta</i> L.	H	1745
<i>Cassia occidentalis</i> L.	H	1746
<i>Cassia roxburghii</i> DC.	T	1555
<i>Cassia siamea</i> Lam.	T	1556
<i>Clitoria ternatea</i> L.	HC	1567
<i>Crotalaria trifoliatrum</i> Willd.	H	1744
<i>Delonix regia</i> (Bojer) Raf.	T	1586
<i>Desmodium triflorum</i> (L.) DC.	H	1587
<i>Erythrina variegata</i> L.	T	1593
<i>Gliricidia sepium</i> (Jacq.) Kunth	T	1604
<i>Leucaena leucocephala</i> (Lam.) de Wit.	T	1640
<i>Mimosa pudica</i> L.	H	1654
<i>Peltophorum pterocarpum</i> (DC.) Baker ex K.Heyne	T	1669
<i>Pithecellobium dulce</i> (Roxb.) Benth.	T	1677
<i>Pongamia pinnata</i> Merr.	T	1761
<i>Prosopis juliflora</i> (Sw.) Dc.	T	1682
<i>Rhynchosia cana</i> DC.	HC	1689
<i>Senna alata</i> (L.) Roxb.	S	1697
<i>Senna sophora</i> (L.) Roxb.	S	1698
<i>Tamarindus indica</i> L.	T	1710
<i>Tephrosia purpurea</i> (L.) Pers.	H	1713
GISEKIACEAE		
<i>Gisekia pharnaceoides</i> L.	H	1603
ICACINACEAE		
<i>Mappia foetida</i> Miers	S	1648
LAMIACEAE		
<i>Leucas aspera</i> Link	H	1641
<i>Ocimum americanum</i> L.	H	1664
<i>Ocimum tenuiflorum</i> L.	H	1665
LECYTHIDACEAE		
<i>Couroupita guianensis</i> Aubl.	T	1577
LYTHRACEAE		
<i>Lawsonia inermis</i> L.	T	1639
<i>Punica granatum</i> L.	S	1685
MALVACEAE		
<i>Abutilon indicum</i> (L.) Sweet	S	1502
<i>Bombax ceiba</i> L.	T	1538
<i>Guazuma ulmifolia</i> Lam.	T	1612
<i>Hibiscus rosa-sinensis</i> L.	S	1618
<i>Hibiscus schizopetalus</i> Hook.f.	S	1619
<i>Hibiscus tiliaceus</i> L.	T	1620
<i>Hibiscus vitifolius</i> L.	S	1621
<i>Melochia corchorifolia</i> L.	S	1651
<i>Pterospermum canescens</i> Roxb.	T	1684
<i>Sida acuta</i> Burm.f.	H	1700

TABLE 1. CONTINUED.

TAXON	LIFE-FORM	VOUCHER NO.
<i>Sida rhombifolia</i> L.	H	1742
<i>Sterculia foetida</i> L.	T	1706
<i>Thespesia populnea</i> (L.) Correa	T	1716
<i>Triumfetta rhomboidea</i> Jacq.	H	1727
<i>Triumfetta rotundifolia</i> Lam.	H	1743
MARTYNIACEAE		
<i>Martynia annua</i> L.	H	1650
MELIACEAE		
<i>Azadirachta indica</i> A.Juss.	T	1525
MENISPERMACEAE		
<i>Tiliacora acuminata</i> Miers	L	1718
<i>Tinospora cordifolia</i> (Willd.) Hook.f. & Thomson	L	1719
MOLLUGINACEAE		
<i>Mollugo pentaphylla</i> L.	H	1747
MORACEAE		
<i>Artocarpus heterophyllus</i> Lam.	T	1523
<i>Ficus benghalensis</i> L.	T	1596
<i>Ficus elastica</i> Roxb.	T	1597
<i>Ficus racemosa</i> L.	T	1598
<i>Ficus religiosa</i> L.	T	1599
<i>Ficus tomentosa</i> Roxb. ex Willd.	T	1600
<i>Streblus asper</i> Lour.	T	1707
MORINGACEAE		
<i>Moringa pterygosperma</i> Gaertn.	T	1657
MUSACEAE		
<i>Musa paradisiaca</i> L.	S	1661
<i>Ravenala madagascariensis</i> J.F.Gmel.	T	1688
MYRTACEAE		
<i>Callistemon citrinus</i> (Curtis) Stapf	T	1544
<i>Psidium guajava</i> L.	T	1683
<i>Syzygium cumini</i> (L.) Skeels	T	1708
NYCTAGINACEAE		
<i>Boerhavia diffusa</i> L.	H	1536
<i>Boerhavia erecta</i> L.	H	1537
<i>Bougainvillea spectabilis</i> Willd.	L	1540
<i>Pisonia alba</i> Span.	T	1676
OCHNACEAE		
<i>Gomphia serrata</i> (Gaertn.) Kanis	S	1607
OLEACEAE		
<i>Jasminum sambac</i> (Soland.)	L	1626
<i>Nyctanthes arbor-tristis</i> L.	T	1663
PASSIFLORACEAE		
<i>Passiflora foetida</i> L.	HC	1666
PHYLLANTHACEAE		
<i>Phyllanthus acidus</i> (L.) Skeels	T	1672
<i>Phyllanthus emblica</i> L.	T	1673
<i>Phyllanthus maderaspatensis</i> L.	H	1674
<i>Phyllanthus reticulatus</i> Poir.	S	1675
PHYTOLACCACEAE		

TABLE 1. CONTINUED.

TAXON	LIFE-FORM	VOUCHER NO.
<i>Rivina humilis</i> L.	H	1691
PLUMBAGINACEAE		
<i>Plumbago capensis</i> Thunb.	H	1678
<i>Plumbago zeylanica</i> L.	H	1679
POACEAE		
<i>Bambusa balcooa</i> Roxb.	S	1527
<i>Bambusa bambos</i> (L.) Voss	S	1528
<i>Bambusa nutans</i> Wall. ex Munro	S	1529
<i>Bambusa vulgaris</i> Schrad. ex J.C. Wendl. var. <i>striata</i>	S	1530
<i>Bambusa vulgaris</i> Schrad. ex J.C. Wendl. var. <i>wamin</i>	S	1531
<i>Chloris barbata</i> Sw.	H	1561
<i>Cynodon dactylon</i> (L.) Pers.	H	1581
<i>Echinochloa colona</i> (L.) Link.	H	1758
<i>Oplismenus compositus</i> (L.) P.Beauv.	H	1759
<i>Setaria verticillata</i> (L.) P.Beauv.	H	1699
<i>Sporobolus coromandelianus</i> (Retz.) Kunth	H	1705
POLYGONACEAE		
<i>Antigonon leptopus</i> Hook. & Arn.	L	1520
<i>Coccoloba uvifera</i> L.	T	1569
PROTEACEAE		
<i>Grevillea robusta</i> A.Cunn. ex R.Br.	T	1610
PUTRANJIVACEAE		
<i>Drypetes roxburghii</i> (Wall.) Hurus.	T	1590
RHAMNACEAE		
<i>Ventilago maderaspatana</i> Gaertn.	L	1730
<i>Ziziphus mauritiana</i> Lam.	T	1734
RUBIACEAE		
<i>Canthium coromandelicum</i> (Burm.f.) Alston	S	1547
<i>Hamelia patens</i> Jacq.	S	1614
<i>Hedyotis umbellata</i> Lam.	H	1615
<i>Ixora coccinea</i> L.	S	1624
<i>Ixora pavetta</i> Andrews	T	1625
<i>Morinda coreia</i> Buch.-Ham.	T	1656
<i>Pavetta indica</i> L.	S	1667
<i>Spermacoce ocymoides</i> Burm.f.	H	1704
RUTACEAE		
<i>Aegle marmelos</i> Correa	T	1509
<i>Citrus aurantiifolia</i> (Christm.) Swingle	T	1563
<i>Citrus medica</i> L.	T	1564
<i>Limonia acidissima</i> L.	T	1642
<i>Murraya koenigii</i> Spreng.	T	1659
<i>Murraya paniculata</i> (L.) Jack	T	1660
<i>Toddalia asiatica</i> Lam.	S	1720
SALICACEAE		
<i>Flacourtia indica</i> (Burm.f.) Merr.	S	1602
SALVADORACEAE		
<i>Azima tetracantha</i> Lam.	S	1526
SAPINDACEAE		
<i>Allophylus cobbe</i> (L.) Raeusch.	S	1514

TABLE 1. CONTINUED.

TAXON	LIFE-FORM	VOUCHER NO.
<i>Cardiospermum halicacabum</i> L.	L	1550
<i>Dodonaea viscosa</i> Jacq.	S	1589
<i>Filicium decipiens</i> Thwaites	T	1601
<i>Sapindus emarginatus</i> Vahl.	T	1695
SAPOTACEAE		
<i>Madhuca indica</i> J.F.Gmel.	T	1644
<i>Manilkara hexandra</i> Dubard	T	1646
<i>Manilkara zapota</i> (L.) P.Royen	T	1647
<i>Mimusops elengi</i> L.	T	1655
SCROPHULARIACEAE		
<i>Scoparia dulcis</i> L.	H	1754
SIMAROUBACEAE		
<i>Simarouba glauca</i> DC.	T	1701
SOLANACEAE		
<i>Datura innoxia</i> Mill.	H	1584
<i>Solanum americanum</i> Mill.	H	1702
<i>Solanum trilobatum</i> L.	L	1753
TURNERACEAE		
<i>Turnera ulmifolia</i> L.	H	1728
VERBENACEAE		
<i>Clerodendrum inerme</i> (L.) Gaertn.	S	1566
<i>Gmelina arborea</i> Roxb.	T	1606
<i>Lantana camara</i> L.	S	1638
<i>Premna latifolia</i> Roxb.	T	1681
<i>Tectona grandis</i> L.f.	T	1712
<i>Vitex negundo</i> L.	T	1731
<i>Waltheria indica</i> L.	H	1732
VIOLACEAE		
<i>Hybanthus enneaspermus</i> (L.) F.Muell.	H	1622
VITACEAE		
<i>Cissus quadrangularis</i> L.	L	1562
ZYGOPHYLLACEAE		
<i>Guaiacum officinale</i> L.	T	1611
<i>Tribulus lanuginosus</i> L.	H	1724

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