

## **Strengthening of floristic diversity in the KFRI Sub Centre campus through planting and weed management**

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## Abstract of Project Proposal

Code	KFRI 506/2006
Title	Strengthening of floristic diversity in the KFRI Sub Centre campus through planting and weed management
Objectives	<ol style="list-style-type: none"><li>1. To revise the flora of KFRI Sub Centre Campus</li><li>2. To adopt water and soil conservation methods for providing suitable habitats for the growth and establishment of seedlings/ propagules</li></ol>
Project period	April 2006- March 2012
Funded by	KFRI Plan Grant
Scientific personnel	U.M. Chandrashekara

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## **ABSTRACT**

A taxonomic survey was carried out to assess the diversity of angiosperm taxa in the campus of Kerala Forest Research Sub Centre at Nilambur. The data were collected during April 2006 to March 2012. A total of 1643 taxa belonging to 152 families were recorded in which 1452 taxa represented species (sub species and natural varieties included) and the rest represented cultivars and hybrids. Orchidaceae, Euphorbiaceae and Acanthaceae were families having highest number of taxa, 131, 92 and 71 respectively. Increasing anthropogenic influences on the environment, especially urbanization, have caused negative changes in natural ecosystems in and around Nilambur. In this context, the KFRI Sub Centre campus is an important green campus with its floral richness. The campus is visited by students of several schools and colleges, staff of forest department and members of non-governmental organizations and they get familiarize with the rich bioresource in the campus. The campus being an important floristic repository has its own importance in the environmental educational processes too. Strategies to enhance flowering and non-flowering plant populations and their diversity in the campus are also discussed in the report.

## INTRODUCTION

The Kerala Forest Research Institute Sub Centre (KFRI Sub Centre) is situated in the fringe area of the Nilgiri Biosphere Reserve and is about 5 km away from the Nilambur town. With a campus of around 43.36 ha, the KFRI Sub Centre is one of the important Green Institutions in Malappuram District with a rich floral and faunal diversity. It is situated in Kozhikkode-Gudalur road and on the bank of Karimpuzha, a tributary of Chaliyar River. The campus is quite clean, green and almost free from pollution. The campus does claim to have maintained and increased its green cover than what it had before the establishment of the Sub Centre in 1978. The campus is frequently visited by students, forest department staff and nature enthusiasts to observe plants, birds and butterfly in the campus. Several academicians have found the campus a very informative and practical laboratory to study several floral species. Thus, the KFRI Sub Centre campus has emerged not only as an important element of conservation but also has developed as a unique centre for education and research activities. Like many other parts of the tropics, increasing urbanisation and anthropogenic influences on the environment have caused negative changes in natural ecosystems in and around Nilambur. As a result, the campus is becoming a rare place where several plant species characteristic to the region can be observed. It may also be noted that the types of existing plant species are dependent upon the local geology, naturally-occurring or introduced soils, water availability, and the amount of human intervention. Thus a range of landscapes from carefully tended areas to areas that have reverted to nature under the influence of the forces that control ecological succession can be seen within the campus. The literature review carried out revealed that campus flora identification studies constitute an important part of urban habitat studies and such studies are gaining momentum in many parts of the globe (Parmaksiz et al., 2006; Verma et al., 2007; Singh, 2011; Ugulu et al., 2012). However, except a short-term study on plants (Nair et al., 1997) and on birds (Jayson et.al., 2000) there is a lack of regular and long-term documentation of several components of floral and faunal elements in the campus. Thus, the need to document and conserve plant wealth of the campus prompted the Institute (KFRI) to undertake a study to identify the floral richness of the campus of its Sub Centre at Nilambur. The present work was also aimed to strengthen the floristic diversity in the campus through planting and undertaking soil and water conservation measures and weed management.

## MATERIALS AND METHOD

The study was carried out in the Sub Centre Campus (76° 15' 28" E longitude and 11° 18' 14" N latitude; altitude about 65 m above msl) between 2006 -2012. The annual rainfall in the is around 2360 mm, and it is during the month of July that the area receives the maximum precipitation of about 422 mm, whereas in January, February and March the precipitation is 30.4 mm, 8.26 mm and 26.4 mm respectively. Mean maximum temperature is 37<sup>0</sup> C and Mean minimum temperature is around 17<sup>0</sup> C. Surface soil is red (oxisol) fine loamy and the sub-surface soil is gravel and red sandy. During the dry period, the humidity is very less and herbs and shrubs tend to dry in the absence of subsoil moisture. The area is dominated by *Terminalia paniculata*, *Terminalia crenulata*, *Xylia xylocarpa*, *Tectona grandis*, *Hopea parviflora*, *Swietenia macrophylla* etc.

An extensive survey of the flora of the campus was done throughout the project period. The collected specimens were critically examined and identified with the help of available literature (Gamble, 1928. Saldanha and Nicolson, 1976; Sivarajan and Mathew. 1997; Mathew, 1999, [www.flowersofindia.net](http://www.flowersofindia.net) 2005). The recorded families and species were alphabetically arranged following the nomenclature given in the website [www.theplantlist.org](http://www.theplantlist.org). (2010).

## RESULTS AND DISCUSSION

### Floristic study

A total of 1643 taxa of angiosperm plants belonging to 840 genera and 152 families were recorded in the campus (Table 1). Among these, 1452 taxa represented species (sub species and natural varieties included) while the remaining 191 taxa represented cultivars and hybrids. On the basis of number of taxa of the family, Orchidaceae (131), Euphorbiaceae (92) and Acanthaceae (71) were dominant followed by Poaceae (70), Asteraceae (65) and Araceae (62) (Table 2). Number of cultivars and hybrids were more from families such as Orchidaceae (46), Agavaceae (25), Araceae (19) and Euphorbiaceae (15). There were 42 families represented with single species.

Table 1. Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>ACANTHACEAE</b>
<i>Acanthus montanus</i> (Nees) T.Anderson
<i>Andrographis alata</i> (Vahl) Nees
<i>Andrographis paniculata</i> (Burm.f.) Nees
<i>Asystasia gangetica</i> var. <i>gangetica</i> (L.) T.Anderson
<i>Asystasia intrusa</i> (Forssk.) Blume
<i>Barleria cristata</i> L.
<i>Barleria cristata</i> L. var. <i>candida</i> Nees
<i>Barleria cristata</i> L. var. <i>rosea</i> Kuntze
<i>Barleria prionitis</i> L.
<i>Barleria repens</i> Nees
<i>Barleria strigosa</i> Willd.
<i>Blepharis maderaspatensis</i> (L.) B.Heyne ex Roth
<i>Crossandra infundibuliformis</i> (L.) Nees
<i>Dipteracanthus prostratus</i> (Poir.) Nees
<i>Eranthemum capense</i> L.
<i>Eranthemum capense</i> L. cv. <i>wightiana</i>
<i>Fittonia albivenis</i> (Lindl. ex Veitch) Brummitt
<i>Fittonia albivenis</i> (Lindl. ex Veitch) Brummitt var. <i>argyroneura</i> (Coem.) Regel
<i>Graptophyllum pictum</i> (L.) Griff.
<i>Graptophyllum pictum</i> (L.) Griff. cv. <i>tricolor</i>
<i>Hemigraphis colorata</i> (Blume) Hallier f.
<i>Hemigraphis colorata</i> (Blume) Hallier f. cv. <i>exotica</i>
<i>Hemigraphis crossandra</i> (Steud.) Bremek.
<i>Hemigraphis repanda</i> Hallier f.
<i>Hygrophila difformis</i> Blume
<i>Hygrophila ringens</i> (L.) Steud.
<i>Hygrophila schulli</i> (Buch.-Ham.) M.R.Almeida & S.M. Almeida
<i>Hygrophila</i> sp.
<i>Hypoestes sanguinolenta</i> (Van Houtte) Hook. f.
<i>Justicia adhatoda</i> L.
<i>Justicia beddomei</i> (C.B.Clarke) Bennet
<i>Justicia betonica</i> L.
<i>Justicia gendarussa</i> Burm. f.
<i>Justicia japonica</i> Thunb.
<i>Justicia nilgherrensis</i> (Nees) Wall. ex Anders.
<i>Justicia procumbens</i> L.(pink flower)
<i>Justicia procumbens</i> L.(white flower)
<i>Justicia protracta</i> (Nees) T. Anderson
<i>Lepidagathis cuspidata</i> Nees
<i>Lepidagathis incurva</i> Buch.-Ham. ex D.Don (variegated)
<i>Lepidagathis incurva</i> var. <i>lophostachyoides</i> Buch.-Ham. ex D. Don
<i>Nelsonia canescens</i> (Lam.) Spreng.
<i>Odontonema strictum</i> (Nees) Kuntze
<i>Pachystachys lutea</i> Nees
<i>Petalidium barlerioides</i> (Roth) Nees
<i>Phaulopsis imbricata</i> (Forssk.) Sweet

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>ACANTHACEAE (cont'd)</b>
<i>Pseuderanthemum alatum</i> (Nees) Radlk.
<i>Pseuderanthemum atropurpureum</i> (W.Bull) Radlk. cv. <i>tricolor</i>
<i>Pseuderanthemum carruthersii</i> (Seem.) Guillaumin
<i>Pseuderanthemum discolor</i> Radlk.
<i>Ruellia prostrata</i> Poir.
<i>Ruellia rosea</i> (Nees) Hemsl.
<i>Ruellia tweediana</i> Griseb.
<i>Rungia muralis</i> Nees.
<i>Rungia parviflora</i> Nees
<i>Rungia pectinata</i> (L.) Nees
<i>Sanchezia nobilis</i> Hook.
<i>Staurogyne glauca</i> (Nees.) D.ktze.
<i>Staurogyne</i> sp.
<i>Strobilanthes ciliatus</i> Nees
<i>Strobilanthes dyerianus</i> Mast.
<i>Strobilanthes lupulinus</i> Nees
<i>Strobilanthes</i> sp.
<i>Thunbergia alata</i> Bojer ex Sins
<i>Thunbergia coccinea</i> Wall.
<i>Thunbergia erecta</i> (Benth.) T.Anderson (blue flower)
<i>Thunbergia erecta</i> (Benth.) T.Anderson (white flower)
<i>Thunbergia fragrans</i> Roxb.
<i>Thunbergia grandiflora</i> var. <i>alba</i> Leonard
<i>Thunbergia grandiflora</i> (Roxb. ex Rottl.) Roxb.
<i>Thunbergia mysorensis</i> (Wight) T.Anderson
<b>AGAVACEAE</b>
<i>Agave americana</i> L.
<i>Agave americana</i> var. <i>marginata</i> Trel.
<i>Agave angustifolia</i> Haw.
<i>Agave angustifolia</i> var. <i>marginata</i> Trel.
<i>Agave filifera</i> Salm-Dyck
<i>Agave salmiana</i> var. <i>ferox</i> (K.Koch) Gentry
<i>Agave</i> sp.
<i>Agave victoriae-reginae</i> T.Moore
<i>Beaucarnea recurvata</i> Lem.
<i>Cordyline fruticosa</i> (L.) A.Chev.
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Alipore beauty</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Amanda's Blush</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Americana</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Baby Ti</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Ballerina</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Black Rooster's Tail</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Bosworth Black</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Brydan</i>

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>AGAVACEAE (cont'd)</b>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Calcutta</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Chocolate Queen</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Compacta</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Desmond</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Diamond Sunrise</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Garden Party</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Hawaian Sunrise</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Kuai Beauty</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Ms. Andrea</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Rainbow</i>
<i>Cordyline fruticosa</i> (L.) A.Chev. cv. <i>Tricolor</i>
<i>Dracaena reflexa</i> Lam. cv. <i>Angustifolia</i>
<i>Dracaena reflexa</i> Lam. cv. <i>Gracilis</i>
<i>Dracaena reflexa</i> Lam. cv. <i>Variegata</i>
<i>Furcraea foetida</i> (L.) Haw.
<i>Furcraea foetida</i> (L.) Haw. cv. <i>Mediopicta</i>
<i>Hesperoyucca whipplei</i> (Torr.) Trel.
<i>Yucca aloifolia</i> L.
<i>Yucca aloifolia</i> L. cv. <i>Mediopicta</i>
<i>Yucca aloifolia</i> L. cv. <i>Marginata</i>
<b>AIZOACEAE</b>
<i>Aptenia cordifolia</i> (L.f.) Schwantes
<i>Eberlanzia disarticulata</i> (L.Bolus) L.Bolus
<i>Gibbaeum petrense</i> (N.E.Br.) Tischler
<i>Lampranthus aureus</i> N.E.Br.
<i>Lithops salicola</i> L.Bolus
<i>Lampranthus deltoides</i> (L.) Glen ex Wijnands
<i>Trianthema portulacastrum</i> L.
<b>ALANGIACEAE</b>
<i>Alangium salviifolium</i> (L.f.) Wangerin ssp. <i>salviifolium</i>
<b>ALISMATACEAE</b>
<i>Alisma plantago-aquatica</i> L.
<i>Baldellia ranunculoides</i> (L.) Parl.
<i>Caldesia oligococca</i> (F.Muell.) Buchanan
<i>Echinodorus palifolius</i> (Nees & Mart.) J.F.Macbr.
<i>Limnophyton obtusifolium</i> (L.) Miq.
<i>Sagittaria guayanensis</i> Kunth
<b>ALOACEAE</b>
<i>Aloe abyssinica</i> Lam.
<i>Aloe bakeri</i> Scott-Elliot
<i>Aloe brevifolia</i> Mill.
<i>Aloe jucunda</i> Reynolds
<i>Aloe juvenna</i> Brandham & S.Carter
<i>Aloe vera</i> (L.) Burm.f.
<i>Aloe variegata</i> L.

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>ALOACEAE (cont'd)</b>
<i>Gasteria carinata</i> var. <i>verrucosa</i> (Mill.) van Jaarsv.
<i>Gasteria obliqua</i> (Aiton) Duval
<i>Haworthia attenuata</i> (Haw.) Haw.
<i>Haworthia cymbiformis</i> var. <i>cymbiformis</i> (Haw.) Duval
<i>Haworthia fasciata</i> (Willd.) Haw.
<i>Haworthia limifolia</i> Marloth
<i>Haworthia reinwardtii</i> (Salm-Dyck) Haw.
<b>AMARANTACEAE</b>
<i>Achyranthes aspera</i> L.
<i>Aerva lanata</i> (L.) Juss.
<i>Alternanthera ficoidea</i> (L.) Sm. cv. <i>White Carpet</i>
<i>Alternanthera ficoidea</i> (L.) Sm. cv. <i>Green nana</i>
<i>Alternanthera ficoidea</i> (L.) Sm. cv. <i>Roseonana</i>
<i>Alternanthera ficoidea</i> (L.) Sm. cv. <i>Green Machine</i>
<i>Alternanthera brasiliana</i> (L.) Kuntze
<i>Alternanthera brasiliana</i> (L.) Kuntze cv. <i>Purple Knight</i>
<i>Alternanthera brasiliana</i> (L.) Kuntze cv. <i>Rubiginosa</i>
<i>Alternanthera ficoidea</i> (L.) Sm.
<i>Alternanthera philoxeroides</i> (Mart.) Griseb.
<i>Alternanthera sessilis</i> (L.) R.Br. ex DC.
<i>Alternanthera bettzickiana</i> (Regel) Vass
<i>Amaranthus tricolor</i> L.
<i>Amaranthus</i> sp.
<i>Amaranthus spinosus</i> L.
<i>Amaranthus viridis</i> L.
<i>Celosia argentea</i> var. <i>cristata</i> (L.) Voss
<i>Celosia argentea</i> var. <i>plumosa</i> (L.) Voss
<i>Celosia argentea</i> var. <i>spicata</i> (L.) Voss
<i>Cyathula prostrata</i> (L.) Blume
<i>Gomphrena globosa</i> L.
<i>Iresine herbstii</i> Hook.
<i>Iresine herbstii</i> Hook. cv. <i>Aureo-reticulata</i>
<i>Iresine lindenii</i> Van Houtte
<b>AMARYLLIDACEAE</b>
<i>Caliphruria korsakoffii</i> (Traub) Meerow
<i>Crinum</i> × <i>amabile</i> Donn
<i>Crinum asiaticum</i> L.
<i>Crinum</i> × <i>powellii</i> Baker cv. <i>Alba</i>
<i>Hippeastrum puniceum</i> (Lam.) Voss
<i>Hippeastrum</i> sp.1
<i>Hippeastrum</i> sp.2
<i>Hymenocallis littoralis</i> (Jacq.) Salisb.
<i>Pancratium triflorum</i> Roxb.
<i>Proiphys amboinensis</i> (L.) Herb.
<i>Scadoxus multiflorus</i> (Martyn) Raf. ssp. <i>multiflorus</i>
<i>Zephyranthes carinata</i> Herb.
<i>Zephyranthes rosea</i> Lindl.

Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>ANACARDIACEAE</b>
<i>Anacardium occidentale</i> L.
<i>Holigarna arnottiana</i> Hook.f.
<i>Lanea coromandelica</i> (Houtt.) Merr.
<i>Mangifera indica</i> L.
<i>Nothopegia beddomei</i> Gamble
<i>Spondias pinnata</i> (L. f.) Kurz
<b>ANNONACEAE</b>
<i>Annona reticulata</i> L.
<i>Annona squamosa</i> L.
<i>Cananga odorata</i> (Lam.) Hook.f. & Thomson
<i>Goniothalamus thwaitesii</i> Hook.f. & Thomson
<i>Meiogyne pannosa</i> (Dalzell) J. Sinclair
<i>Miliusa tomentosa</i> (Roxb.) J.Sinclair
<i>Polyalthia coffeoides</i> (Thwaites) Hook.f. & Thomson
<i>Polyalthia fragrans</i> (Dalzell) Bedd.
<i>Polyalthia longifolia</i> (Sonn.) Thwaites
<b>APIACEAE</b>
<i>Centella asiatica</i> (L.) Urb.
<i>Eryngium foetidum</i> L.
<i>Hydrocotyle javanica</i> Thunb.
<i>Hydrocotyle sibthorpioides</i> Lam.
<i>Pimpinella heyneana</i> (DC.) Kurz.
<b>APOCYNACEAE</b>
<i>Adenium obesum</i> (Forssk.) Roem. & Schult.
<i>Allamanda blanchetii</i> A.DC.
<i>Allamanda cathartica</i> L.
<i>Allamanda cathartica</i> var. <i>hendersonii</i> (W.Bull ex Domb.) L.H.Bailey & Raffill
<i>Allamanda neriifolia</i> Hook.
<i>Allamanda schottii</i> Pohl
<i>Allamanda schottii</i> Pohl cv. <i>Australian Silver</i>
<i>Alstonia scholaris</i> (L.) R. Br.
<i>Alstonia venenata</i> R.Br.
<i>Carissa carandas</i> L.
<i>Cascabela thevetia</i> (L.) Lippold
<i>Catharanthus roseus</i> (L.) G.Don
<i>Cerbera manghas</i> L.
<i>Holarrhena pubescens</i> Wall.
<i>Hunteria zeylanica</i> (Retz.) Gardner ex Thwaites
<i>Ichnocarpus frutescens</i> (L.) W.T.Aiton
<i>Kopsia fruticosa</i> (Ker-Gawl.) A.DC.
<i>Nerium oleander</i> L. cv. <i>album</i>
<i>Nerium oleander</i> L. cv. <i>carnea</i>
<i>Pachypodium geayi</i> Costantin & Bois
<i>Pachypodium lamerei</i> Drake
<i>Pachypodium</i> sp.
<i>Plumeria obtusa</i> L.

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>APOCYNACEAE (cont'd)</b>
<i>Plumeria pudica</i> Jacq.
<i>Plumeria rubra</i> L.
<i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz
<i>Rauvolfia tetraphylla</i> L.
<i>Strophanthus gratus</i> Baill.
<i>Tabernaemontana alternifolia</i> L.
<i>Tabernaemontana divaricata</i> (L.) R.Br. ex Roem. & Schult.
<i>Tabernaemontana divaricata</i> (L.) R.Br. ex Roem. & Schult. cv. <i>flore pleno</i>
<i>Tabernaemontana divaricata</i> (L.) R.Br. ex Roem. & Schult. cv. <i>variegata</i>
<i>Tabernaemontana divaricata</i> (L.) R.Br. ex Roem. & Schult. cv. <i>dwarf</i>
<i>Vallaris solanacea</i> (Roth) Kuntze
<i>Wrightia antidysenterica</i> (L.) R.Br.
<i>Wrightia tinctoria</i> R.Br.
<b>APONOGETONACEAE</b>
<i>Aponogeton appendiculatus</i> Van Bruggen
<i>Aponogeton natans</i> (L.) Engl. & K.Krause
<i>Aponogeton</i> sp.
<b>ARACEAE</b>
<i>Acorus calamus</i> L.
<i>Aglaonema commutatum</i> Schott
<i>Aglaonema commutatum</i> Schott cv. <i>Malay Beauty</i>
<i>Aglaonema commutatum</i> Schott cv. <i>Pseudobracteatum</i>
<i>Aglaonema commutatum</i> Schott cv. <i>River side</i>
<i>Aglaonema costatum</i> N.E.Br.
<i>Aglaonema crispum</i> (Pitcher & Manda) Nicolson
<i>Aglaonema nitidum</i> (Jack) Kunth
<i>Alocasia</i> × <i>amazonica</i> Reark
<i>Alocasia clypeolata</i> A.Hay
<i>Alocasia cucullata</i> (Lour.) G.Don
<i>Alocasia macrorrhiza</i> (L.) G.Don
<i>Alocasia macrorrhiza</i> var. <i>variegata</i> (K.Koch & C.D.Bouché) Furtado
<i>Alocasia portei</i> Schott
<i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson
<i>Anthurium andraeanum</i> Linden ex André
<i>Anthurium andraeanum</i> Linden ex André cv. <i>album</i>
<i>Anthurium clarinervium</i> Matuda
<i>Anthurium schlechtendalii</i> Kunth
<i>Anthurium</i> sp.
<i>Caladium bicolor</i> (Aiton) Vent.
<i>Caladium bicolor</i> (Aiton) Vent. cv. <i>candidum</i>
<i>Caladium bicolor</i> (Aiton) Vent. cv. <i>Gen.W.B.Halderman</i>
<i>Caladium bicolor</i> (Aiton) Vent. cv. <i>Miss. Muffet</i>
<i>Caladium bicolor</i> (Aiton) Vent. cv. <i>Poecile Anglais</i>
<i>Caladium humboldtii</i> (Raf.) Schott
<i>Caladium lindenii</i> (André) Madison

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>ARACEAE (cont'd)</b>
<i>Colocasia affinis</i> Schott
<i>Colocasia esculenta</i> (L.) Schott
<i>Cryptocoryne spiralis</i> (Retz.) Fisch. ex Wydler
<i>Dieffenbachia amoena</i> Bull.cv. <i>Tropic snow</i>
<i>Dieffenbachia daguensis</i> Engl.cv. <i>variegata</i>
<i>Dieffenbachia exotica</i> hort.
<i>Dieffenbachia seguine</i> (Jacq.) Schott
<i>Dieffenbachia seguine</i> (Jacq.) Schott cv. <i>Rudolph Roehrs</i>
<i>Epipremnum pinnatum</i> (L.) Engl.
<i>Epipremnum pinnatum</i> (L.) Engl.cv. <i>Marble Queen</i>
<i>Homalomena lindenii</i> (Rodigas) Ridl.
<i>Lagenandra meeboldii</i> (Engl.) C.E.C.Fisch.
<i>Lagenandra toxicaria</i> Dalzell
<i>Monstera deliciosa</i> Liebm.
<i>Philodendron erubescens</i> K.Koch & Augustin
<i>Philodendron erubescens</i> K.Koch & Augustin cv <i>Emerald Duke</i>
<i>Philodendron erubescens</i> K.Koch & Augustin cv. <i>Burgundy</i>
<i>Philodendron erubescens</i> K.Koch & Augustin cv. <i>Ceylon Gold</i>
<i>Philodendron hederaceum</i> (Jacq.) Schott
<i>Philodendron lacerum</i> (Jacq.) Schott
<i>Philodendron mamei</i> André
<i>Philodendron schottianum</i> H.Wendl. ex Schott
<i>Philodendron warszewiczii</i> K.Koch & C.D.Bouché
<i>Philodendron williamsii</i> Hook.f.
<i>Pistia stratiotes</i> L.
<i>Pothos scandens</i> L.
<i>Spathiphyllum clevelandii</i> Regel
<i>Spathiphyllum wallisii</i> Regel
<i>Spathiphyllum wallisii</i> Regel cv. <i>Mauna Loa</i>
<i>Syngonium auritum</i> (L.) Schott
<i>Syngonium macrophyllum</i> Engl.
<i>Syngonium podophyllum</i> Schott
<i>Syngonium podophyllum</i> Schott cv. <i>Atrovirens</i>
<i>Syngonium podophyllum</i> Schott cv. <i>Emerald Gem</i>
<i>Syngonium wendlandii</i> Schott
<i>Typhonium bulbiferum</i> Dalzell
<b>ARALIACEAE</b>
<i>Hedera helix</i> L.
<i>Polyscias balfouriana</i> (André) L.H.Bailey cv. <i>albicans</i>
<i>Polyscias filicifolia</i> (C.Moore ex E.Fourn.) L.H.Bailey
<i>Polyscias fruticosa</i> (L.) Harms
<i>Polyscias fruticosa</i> (L.) Harms cv. <i>compacta</i>
<i>Polyscias guilfoylei</i> (W.Bull) L.H.Bailey
<i>Polyscias guilfoylei</i> var. <i>victoriae</i> (W.Bull) L.H.Bailey
<i>Polyscias</i> sp.
<i>Schefflera arboricola</i> var. <i>variegata</i> (Hayata) Merr.
<i>Schefflera venulosa</i> (Wight & Arn.) Harms

Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>ARECACEAE</b>
<i>Archontophoenix</i> sp.
<i>Areca catechu</i> L.
<i>Areca</i> sp.
<i>Areca triandra</i> Roxb. ex Buch.-Ham.
<i>Arenga hookeriana</i> (Becc.) Whitmore
<i>Arenga</i> sp.1
<i>Arenga</i> sp.2
<i>Bismarckia nobilis</i> Hildebr. & H.Wendl.
<i>Borassus flabellifer</i> L.
<i>Calamus hookerianus</i> Becc.
<i>Calamus nagbettai</i> R.R.Fernald & Dey
<i>Calamus rotang</i> L.
<i>Calamus trachycoleus</i> Becc.
<i>Caryota urens</i> L.
<i>Chamaedorea elegans</i> Mart.
<i>Chamaedorea seifrizii</i> Burret
<i>Chambeyronia lepidota</i> H.E.Moore
<i>Coccothrinax alta</i> (O.F.Cook) Becc.
<i>Cocos nucifera</i> L.
<i>Coccothrinax</i> sp.
<i>Corypha umbraculifera</i> L.
<i>Cyrtostachys renda</i> Blume
<i>Daemonorops</i> sp.
<i>Dypsis decaryi</i> (Jum.) Beentje & J.Dransf.
<i>Dypsis lutescens</i> (H.Wendl.) Beentje & J.Dransf.
<i>Elaeis guineensis</i> Jacq.
<i>Howea forsteriana</i> (F.Muell.) Becc.
<i>Howea</i> sp.
<i>Hyophorbe lagenicaulis</i> (L.H.Bailey) H.E.Moore
<i>Korthalsia laciniosa</i> (Griff.) Mart.
<i>Latania lontaroides</i> (Gaertn.) H.E.Moore
<i>Licuala grandis</i> H.Wendl.
<i>Licuala spinosa</i> Wurm
<i>Livistona rotundifolia</i> (Lam.) Mart.
<i>Mascarena revaughanii</i> L.H.Bailey
<i>Nypa fruticans</i> Wurm
<i>Phoenix pusilla</i> Gaertn.
<i>Phoenix roebelenii</i> O'Brien
<i>Phoenix</i> sp.
<i>Phoenix sylvestris</i> (L.) Roxb.
<i>Pinanga andamanensis</i> Becc.
<i>Pinanga dicksonii</i> (Roxb.) Blume
<i>Pritchardia pacifica</i> Seem. & H.Wendl.
<i>Ptychosperma lineare</i> (Burret) Burret
<i>Ptychosperma macarthurii</i> (H.Wendl. ex H.J.Veitch) H.Wendl. ex Hook.f.

Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>ARECACEAE (Cont'd)</b>
<i>Ravenea rivularis</i> Jum. & H.Perrier
<i>Rhapis excelsa</i> (Thunb.) Henry
<i>Rhopaloblaste singaporensis</i> (Becc.) Hook.f.
<i>Roystonea regia</i> (Kunth) O.F.Cook
<i>Syagrus romanzoffiana</i> (Cham.) Glassman
<i>Wallichia disticha</i> T.Anderson
<i>Washingtonia filifera</i> (Linden ex André) H.Wendl. ex de Bary
<i>Wodyetia bifurcata</i> A.K.Irvine
<b>ARISTOLOCHACEAE</b>
<i>Aristolochia indica</i> L.
<i>Aristolochia littoralis</i> Parodi
<i>Thottea siliquosa</i> (Lam.) Ding Hou
<b>ASCLEPIADACEAE</b>
<i>Asclepias curassavica</i> L.
<i>Calotropis gigantea</i> (L.) Dryand.
<i>Caralluma stalagmifera</i> C.E.C.Fisch.
<i>Caralluma umbellata</i> Haw.
<i>Dregea volubilis</i> (L.f.) Benth. ex Hook.f.
<i>Holostemma ada-kodien</i> Schult.
<i>Huernia kirkii</i> N.E. Br.
<i>Huernia</i> sp.
<i>Huernia zebrina</i> N.E.Br.
<i>Marsdenia sylvestris</i> (Retz.) P.I.Forst.
<i>Sarcostemma viminale</i> (L.) R.Br.
<i>Tylophora indica</i> var. <i>indica</i> (Burm. f.) Merr.
<b>ASPARAGACEAE</b>
<i>Asparagus densiflorus</i> (Kunth) Jessop cv. <i>myersii</i>
<i>Asparagus densiflorus</i> (Kunth) Jessop cv. <i>sprengeri</i>
<i>Asparagus fysonii</i> J.F.Macbr.
<i>Asparagus officinalis</i> L.
<i>Asparagus racemosus</i> Willd.
<i>Asparagus setaceus</i> (Kunth) Jessop
<b>ASTERACEAE</b>
<i>Acmella paniculata</i> (Wall. ex DC.) R.K.Jansen
<i>Acmella radicans</i> (Jacq.) R.K.Jansen
<i>Adenostemma lavenia</i> (L.) Kuntze
<i>Ageratum conyzoides</i> (L.) L.
<i>Artemisia nilagirica</i> (C.B.Clarke) Pamp.
<i>Bidens pilosa</i> L.
<i>Blumea axillaris</i> (Lam.) DC.
<i>Blumea lacera</i> (Burm.f.) DC.
<i>Blumea membranacea</i> DC.
<i>Blumea oxyodonta</i> DC.
<i>Blumea sessiliflora</i> Decne.
<i>Blumea</i> sp.
<i>Centratherum punctatum</i> Cass.

Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>ASTERACEAE (Cont'd)</b>
<i>Chromolaena odorata</i> (L.) R.M.King & H.Rob.
<i>Chrysanthemum indicum</i> L.
<i>Chrysanthemum morifolium</i> Ramat.
<i>Cissampelopsis walkeri</i> (Arn.) C.Jeffrey & Y.L.Chen
<i>Coreopsis lanceolata</i> L.
<i>Cosmos bipinnatus</i> Cav.
<i>Cosmos sulphureus</i> Cav.
<i>Cyanthillium cinereum</i> (L.) H.Rob.
<i>Dahlia</i> × <i>hortensis</i> Guillaumin
<i>Dahlia imperialis</i> Roetzl
<i>Echinops echinatus</i> Roxb.
<i>Eclipta prostrata</i> (L.) L.
<i>Elephantopus scaber</i> L.
<i>Emilia sonchifolia</i> (L.) DC. ex DC.
<i>Eupatorium triplinerve</i> Vahl
<i>Euryops chrysanthemoides</i> (DC.) B.Nord.
<i>Gazania rigens</i> (L.) Gaertn.
<i>Gynura lycopersicifolia</i> DC.
<i>Heliopsis helianthoides</i> (L.) Sweet cv. <i>bellerina</i>
<i>Kleinia grandiflora</i> (wall. ex DC.) N.Rani
<i>Lagascea mollis</i> Cav.
<i>Melampodium divaricatum</i> (Rich.) DC.
<i>Mikania micrantha</i> Kunth
<i>Montanoa bipinnatifida</i> (Kunth) K.Koch
<i>Parthenium hysterophorus</i> L.
<i>Pentanema indicum</i> (L.) Ling
<i>Senecio citrifolius</i> G.D.Rowley
<i>Senecio confusus</i> Burt
<i>Senecio elegans</i> L.
<i>Senecio petraeus</i> Boiss. & Reut.
<i>Senecio tristis</i> Phil.
<i>Sphaeranthus indicus</i> L.
<i>Sphagneticola trilobata</i> (L.) Pruski
<i>Spilanthes oleracea</i> L.
<i>Stevia rebaudiana</i> (Bertoni) Bertoni
<i>Symphyotrichum laeve</i> (L.) Á.Löve & D.Löve
<i>Symphyotrichum oolentangiense</i> (Riddell) G.L.Nesom
<i>Synedrella nodiflora</i> (L.) Gaertn.
<i>Tagetes erecta</i> L.
<i>Tagetes patula</i> L.
<i>Tagetes</i> sp.
<i>Tagetes tenuifolia</i> Cav.
<i>Tithonia diversifolia</i> (Hemsl.) A.Gray
<i>Tithonia rotundifolia</i> (Mill.) S.F.Blake
<i>Tridax procumbens</i> (L.) L.
<i>Vernonia arborea</i> Buch.-Ham. ex Buch.-Ham.
<i>Vernonia elliptica</i> DC.



Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>ASTERACEAE (Cont'd)</b>
<i>Vernonia</i> sp.
<i>Wedelia chinensis</i> (Osbeck) Merr.
<i>Xanthium indicum</i> Roxb.
<i>Zinnia elegans</i> Jacq.
<i>Zinnia elegans</i> Jacq. `hybrida'
<b>BALSAMINACEAE</b>
<i>Impatiens balsamina</i> L.
<i>Impatiens hawkeri</i> W.Bull
<i>Impatiens lucida</i> B.Heyne
<i>Impatiens minor</i> (DC.) S.M. Almeida
<i>Impatiens reptans</i> Hook. f.
<i>Impatiens walleriana</i> Hook.f.
<i>Impatiens walleriana</i> Hook.f. cv. <i>carpet</i>
<b>BASELLACEAE</b>
<i>Basella alba</i> L.
<i>Basella alba</i> var. <i>rubra</i> L.
<b>BEGONIACEAE</b>
<i>Begonia</i> `Cathedrel'
<i>Begonia</i> `Agnes Brin'
<i>Begonia</i> `Black Tuffeta'
<i>Begonia</i> `Cleopatra'
<i>Begonia</i> `Crestabruchii'
<i>Begonia</i> `Dew Drop'
<i>Begonia</i> `Madame Queen'
<i>Begonia</i> `Margaret P. Holmes'
<i>Begonia</i> `Martin's Mystery'
<i>Begonia</i> `Orococo'
<i>Begonia</i> `Sierra Gentle Rain'
<i>Begonia</i> `Silver Pink'
<i>Begonia concinna</i> Schott
<i>Begonia heracleifolia</i> Cham. & Schltldl.
<i>Begonia listada</i> L.B.Sm. & Wassh.
<i>Begonia rex</i> Putz.
<i>Begonia rex-cultorum</i> `Kathleyana'
<i>Begonia semperflorens</i> Link & Otto
<i>Begonia semperflorens</i> Link & Otto `White Comet'
<i>Begonia</i> sp.
<b>BIGNONIACEAE</b>
<i>Campsis radicans</i> (L.) Seem. cv. <i>flava</i>
<i>Crescentia cujete</i> L.
<i>Oroxylum indicum</i> (L.) Kurz
<i>Podranea ricasoliana</i> (Tanfani) Sprague
<i>Radermachera xylocarpa</i> (Roxb.) Roxb. ex K.Schum.
<i>Saritaea magnifica</i> (W.Bull) Dugand
<i>Stereospermum tetragonum</i> DC.
<i>Tabebuia argentea</i> (Bureau & K.Schum.) Britton

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>BIGNONIACEAE (Cont'd)</b>
<i>Tabebuia pallida</i> (Lindl.) Miers
<i>Tecoma capensis</i> (Thunb.) Lindl.
<i>Tecoma castanifolia</i> (D.Don) Melch.
<b>BIXACEAE</b>
<i>Bixa orellana</i> L.
<b>BOMBACACEAE</b>
<i>Ceiba pentandra</i> (L.) Gaertn.
<b>BORAGINACEAE</b>
<i>Coldenia procumbens</i> L.
<i>Ehretia laevis</i> Roxb.
<i>Heliotropium indicum</i> L.
<i>Heliotropium keralense</i> Sivarajan & Manilal
<i>Heliotropium marifolium</i> J.König ex Retz.
<b>BRASSICACEAE</b>
<i>Brassica juncea</i> (L.) Czern.
<i>Raphanus raphanistrum</i> L.
<b>BROMELIACEAE</b>
<i>Aechmea coelestis</i> var. <i>coelestis</i> (K.Koch) E.Morren
<i>Aechmea</i> cv. <i>Foster's Favourite'</i>
<i>Aechmea gamosepala</i> Wittm.
<i>Ananas comosus</i> (L.) Merr.
<i>Ananas nanus</i> (L.B.Sm.) L.B.Sm.
<i>Billbergia pyramidalis</i> (Sims) Lindl.
<i>Billbergia</i> sp.
<i>Cryptanthus bivittatus</i> (Hook.) Regel
<i>Cryptanthus praetextus</i> E.Morren ex Baker
<i>Neoregelia carolinae</i> (Beer) L.B.Sm.
<i>Neoregelia spectabilis</i> (T.Moore) L.B.Sm.
<b>BURSERACEAE</b>
<i>Canarium strictum</i> Roxb.
<i>Commiphora caudata</i> var. <i>caudata</i> (Wight & Arn.) Engl.
<i>Commiphora caudata</i> var. <i>pubescens</i> (Wight & Arn.) K.M.Matthew
<b>CABOMBACEAE</b>
<i>Cabomba caroliniana</i> A.Gray
<b>CACTACEAE</b>
<i>Acanthocereus tetragonus</i> (L.) Hummelinck
<i>Astrophytum asterias</i> (Zucc.) Lem.
<i>Astrophytum myriostigma</i> Lem.
<i>Cephalocereus senilis</i> (Haw.) Pfeiff.
<i>Cereus jamacaru</i> DC.
<i>Cereus pterogonus</i> Lem.
<i>Cereus uruguayanus</i> R. Kiesling
<i>Cleistocactus straussii</i> (Heese) Backeb.
<i>Copiapoa montana</i> F.Ritter
<i>Corynopuntia vilis</i> (Rose) F.M.Knuth

Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>CACTACEAE (cont'd)</b>
<i>Cryptocereus anthonyanus</i> Alexander
<i>Disocactus flagelliformis</i> (L.) Barthlott
<i>Disocactus speciosus</i> (Cav.) Barthlott
<i>Dolichothele uberiformis</i> (Zucc.) Britton & Rose
<i>Echinocactus grusonii</i> Hildm.
<i>Echinopsis chamaecereus</i> H.Friedrich & Glaetzel
<i>Epiphyllum oxypetalum</i> (DC.) Haw.
<i>Espositoa lanata</i> (Kunth) Britton & Rose
<i>Gymnocalycium</i> sp. 1
<i>Gymnocalycium</i> sp. 2
<i>Gymnocalycium</i> sp. 3
<i>Gymnocalycium bruchii</i> (Speg.) Hosseus
<i>Gymnocalycium mihanovichii</i> (Fric ex Gürke) Britton & Rose
<i>Gymnocalycium saglionis</i> (Cels) Britton & Rose
<i>Hatiora salicornioides</i> Britton & Rose
<i>Mammillaria</i> sp.
<i>Mammillaria bocasana</i> Poselger
<i>Mammillaria bombycina</i> Quehl
<i>Mammillaria boolii</i> G.E. Linds.
<i>Mammillaria compressa</i> DC.
<i>Mammillaria elongata</i> DC.
<i>Mammillaria geminispina</i> Haw.
<i>Mammillaria gracilis</i> Pfeiff.
<i>Mammillaria haageana</i> subsp. <i>elegans</i> D.R. Hunt
<i>Mammillaria magnimamma</i> Haw.
<i>Mammillaria prolifera</i> (Mill.) Haw.
<i>Myrtillocactus geometrizans</i> (Mart. ex Pfeiff.) Console
<i>Myrtillocactus schenckii</i> (J.A. Purpus) Britton & Rose
<i>Neomammillaria celsiana</i> (Lem.) Britton & Rose
<i>Notocactus magnificus</i> (F.Ritter) Krainz
<i>Opuntia falcata</i> Ekman & Werderm.
<i>Opuntia ficus-indica</i> (L.) Mill.
<i>Opuntia microdasys</i> (Lehm.) Pfeiff.
<i>Opuntia stricta</i> (Haw.) Haw.
<i>Parodia leninghausii</i> (Haage) F.H. Brandt
<i>Parodia mammulosa</i> (Lem.) N.P. Taylor
<i>Pereskia bleo</i> (Kunth) DC.
<i>Pereskiaopsis diguetii</i> (F.A.C.Weber) Britton & Rose
<i>Rebutia minuscula</i> K.Schum.
<i>Rhipsalis pilocarpa</i> Loefgr.
<i>Schlumbergera bridgesii</i> (Lem.) Loefgr.
<i>Schlumbergera russelianum</i> (Hook.) Britton & Rose
<i>Schlumbergera truncata</i> (Haw.) Moran
<i>Sulcorebutia arenacea</i> (Cárdenas) F. Ritter

Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>CAESALPINIACEAE</b>
<i>Acrocarpus fraxinifolius</i> Arn.
<i>Aeschynomene brasiliana</i> (Poir.) DC.
<i>Bauhinia acuminata</i> L.
<i>Bauhinia blakeana</i> Dunn
<i>Bauhinia purpurea</i> L.
<i>Bauhinia racemosa</i> Lam.
<i>Bauhinia scandens</i> L.
<i>Bauhinia tomentosa</i> L.
<i>Bauhinia variegata</i> L.
<i>Brownea</i> sp.
<i>Caesalpinia bonduc</i> (L.) Roxb.
<i>Caesalpinia coriaria</i> (Jacq.) Willd.
<i>Caesalpinia mimosoides</i> Lam.
<i>Caesalpinia pulcherrima</i> (L.) Sw.
<i>Caesalpinia sappan</i> L.
<i>Caesalpinia spicata</i> Dalzell
<i>Cassia fistula</i> L.
<i>Chamaecrista mimosoides</i> (L.) Greene
<i>Delonix regia</i> (Hook.) Raf.
<i>Humboldtia bourdillonii</i> Prain
<i>Peltophorum dubium</i> (Spreng.) Taub.
<i>Peltophorum pterocarpum</i> (DC.) K.Heyne
<i>Saraca asoca</i> (Roxb.) Willd.
<i>Senna alata</i> (L.) Roxb.
<i>Senna auriculata</i> (L.) Roxb.
<i>Senna hirsuta</i> (L.) H.S.Irwin & Barneby
<i>Senna occidentalis</i> (L.) Link
<i>Senna septemtrionalis</i> (Viv.) H.S.Irwin & Barneby
<i>Senna siamea</i> (Lam.) H.S.Irwin & Barneby
<i>Senna spectabilis</i> (DC.) H.S.Irwin & Barneby
<i>Senna tora</i> (L.) Roxb.
<i>Tamarindus indica</i> L.
<b>CANNACEAE</b>
<i>Canna × generalis</i> L.H. Bailey & E.Z. Bailey
<i>Canna × generalis</i> L.H. Bailey & E.Z. Bailey cv. <i>striped beauty</i>
<i>Canna indica</i> L.
<b>CAPPARIDACEAE</b>
<i>Cleome aspera</i> J.König ex DC.
<i>Cleome rutidosperma</i> var. <i>burmannii</i> (Wight & Arn.) Siddiqui & S.N.Dixit
<i>Cleome viscosa</i> L.
<i>Cleoserrata speciosa</i> (Raf.) Iltis
<b>CAPRIFOLIACEAE</b>
<i>Lonicera japonica</i> Thunb.
<b>CARICACEAE</b>
<i>Carica papaya</i> L.

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>CASUARINACEAE</b>
<i>Casuarina equisetifolia</i> L.
<b>CELASTRACEAE</b>
<i>Celastrus paniculatus</i> Willd.
<i>Cochlospermum religiosum</i> (L.) Alston
<i>Euonymus crenulatus</i> Wall. ex Wight & Arn.
<i>Euonymus indicus</i> B.Heyne ex Wall.
<i>Lophopetalum wightianum</i> Arn.
<b>CERATOPHYLLACEAE</b>
<i>Ceratophyllum demersum</i> L.
<b>CLUSIACEAE</b>
<i>Calophyllum calaba</i> L.
<i>Calophyllum inophyllum</i> L.
<i>Garcinia gummi-gutta</i> (L.) Roxb.
<i>Garcinia morella</i> (Gaertn.) Desr.
<i>Garcinia</i> sp.
<i>Garcinia xanthochymus</i> Hook.f. ex T.Anderson
<i>Mammea suriga</i> (Buch.-Ham. ex Roxb.) Kosterm.
<b>COMBRETACEAE</b>
<i>Anogeissus latifolia</i> (Roxb. ex DC.) Wall. ex Bedd.
<i>Calycopteris floribunda</i> (Roxb.) Lam. ex Poir.
<i>Combretum indicum</i> (L.) DeFilipps
<i>Terminalia bellirica</i> (Gaertn.) Roxb.
<i>Terminalia catappa</i> L.
<i>Terminalia chebula</i> Retz.
<i>Terminalia elliptica</i> Willd.
<i>Terminalia paniculata</i> Roth
<b>COMMELINACEAE</b>
<i>Callisia repens</i> (Jacq.) L.
<i>Commelina benghalensis</i> L.
<i>Cyanotis axillaris</i> (L.) D.Don ex Sweet
<i>Cyanotis cristata</i> (L.) D.Don
<i>Cyanotis somaliensis</i> C.B.Clarke
<i>Murdannia japonica</i> (Thunb.) Faden
<i>Murdannia nudiflora</i> (L.) Brenan
<i>Murdannia pauciflora</i> (G.Brückn.) G.Brückn.
<i>Murdannia spirata</i> (L.) G.Brückn.
<i>Rhopalephora scaberrima</i> (Blume) Faden
<i>Tradescantia spathacea</i> Sw.
<i>Tradescantia spathacea</i> . var. <i>compacta</i> Sw.
<i>Tradescantia spathacea</i> . var. <i>compacta variegata</i> Sw.
<i>Tradescantia zebrina</i> Bosse
<b>CONVOLVULACEAE</b>
<i>Argyreia cuneata</i> Ker Gawl.
<i>Argyreia hirsuta</i> Arn.
<i>Argyreia nervosa</i> (Burm. f.) Bojer

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>CONVOLVULACEAE (cont'd)</b>
<i>Evolvulus alsinoides</i> var. <i>hirsutus</i> (Lam.) Ooststr.
<i>Evolvulus glomeratus</i> Nees and Martius ssp. <i>grandiflorus</i> (Paroidi) Ooststr.
<i>Evolvulus nummularius</i> (L.) L.
<i>Hewittia malabarica</i> (L.) Suresh
<i>Ipomoea aquatica</i> Forssk.
<i>Ipomoea batatas</i> (L.) Poir.
<i>Ipomoea deccana</i> D.F. Austin
<i>Ipomoea eriocarpa</i> R. Br.
<i>Ipomoea fistulosa</i> Mart. ex Choisy
<i>Ipomoea hederifolia</i> L.
<i>Ipomoea indica</i> (Burm.) Merr.
<i>Ipomoea marginata</i> (Desr.) Verdc.
<i>Ipomoea mauritiana</i> Jacq.
<i>Ipomoea obscura</i> (L.) Ker Gawl.
<i>Ipomoea pes-caprae</i> Roth
<i>Ipomoea purpurea</i> (L.) Roth
<i>Ipomoea quamoclit</i> L.
<i>Jacquemontia pentantha</i> (Jacq.) G. Don
<i>Merremia hederacea</i> (Burm. f.) Hallier f.
<i>Merremia tridentata</i> (L.) Hall. F. ssp. <i>hastata</i> (Desr.) Ooststr.
<i>Merremia tridentata</i> (L.) Hallier f.
<i>Merremia umbellata</i> (L.) Hallier f.
<i>Merremia vitifolia</i> (Burm. f.) Hallier f.
<i>Stictocardia tiliifolia</i> (Desr.) Hallier f.
<b>COSTACEAE</b>
<i>Chamaecostus cuspidatus</i> (Nees & Mart.) C.Specht & D.W.Stev.
<i>Cheilocostus speciosus</i> (J.König) C.Specht
<i>Cheilocostus speciosus</i> (J.König) C.Specht cv. <i>variegata</i>
<i>Costus malortieanus</i> H.Wendl.
<i>Costus pictus</i> D.Don
<i>Costus stenophyllus</i> Standl. & L.O.Williams
<b>CRASSULACEAE</b>
<i>Adromischus cristatus</i> (Haw.) Lem.
<i>Aeonium haworthii</i> Webb & Berthel.
<i>Aeonium simsii</i> (Sweet) Stearn
<i>Aeonium</i> sp.
<i>Bryophyllum pinnatum</i> (Lam.) Oken
<i>Cotyledon orbiculata</i> L.
<i>Crassula arborescens</i> (Mill.) Willd.
<i>Crassula multicava</i> Lem.
<i>Crassula muscosa</i> L.
<i>Crassula ovata</i> (Mill.) Druce
<i>Crassula ovata</i> (Mill.) Druce var. <i>Montruosa</i> Lam.
<i>Crassula perfoliata</i> var. <i>falcata</i> (J.C.Wendl.) Toelken
<i>Crassula perforata</i> Thunb.

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>CRASSULACEAE (cont'd)</b>
<i>Crassula pyramidalis</i> Thunb.
<i>Crassula</i> sp.
<i>Dudleya variegata</i> (S.Watson) Moran
<i>Echeveria affinis</i> E.Walther
<i>Echeveria carnicolor</i> (Baker) E.Morren
<i>Echeveria leucotricha</i> J.A.Purpus
<i>Echeveria macdougallii</i> E.Walther
<i>Echeveria secunda</i> Booth ex Lindl.
<i>Graptopetalum paraguayense</i> (N.E.Br.) E.Walther
<i>Kalanchoe coccinea</i> var. <i>blossfeldiana</i> (Poelln.) P.Boiteau
<i>Kalanchoe daigremontiana</i> Raym.-Hamet & H. Perrier
<i>Kalanchoe marnieriana</i> H. Jacobsen
<i>Pachyphytum oviferum</i> Purpus
<i>Pachyveria scheideckeri</i> (de Smet) E.Walther
<i>Sedum album</i> L.
<i>Sedum morganianum</i> E.Walther
<i>Sedum sexangulare</i> L.
<i>Sedum sieboldii</i> Regel
<i>Sedum treleasei</i> Rose
<b>CUCURBITACEAE</b>
<i>Coccinia grandis</i> (L.) Voigt
<i>Cucumis prophetarum</i> L.
<i>Cucumis sativus</i> L.
<i>Diplocyclos palmatus</i> (L.) C.Jeffrey
<i>Momordica charantia</i> ssp. <i>charantia</i> L.
<i>Mukia maderaspatana</i> (L.) M.Roem.
<b>CYCLANTHACEAE</b>
<i>Cyclanthus bipartitus</i> Poit. ex A.Rich.
<b>CYPERACEAE</b>
<i>Cyperus alternifolius</i> ssp. <i>alternifolius</i> L.
<i>Cyperus castaneus</i> Willd.
<i>Cyperus compressus</i> L.
<i>Cyperus cyperoides</i> (L.) Kuntze
<i>Cyperus diffusus</i> Vahl
<i>Cyperus distans</i> L.f.
<i>Cyperus malaccensis</i> Lam.
<i>Cyperus michelianus</i> ssp. <i>pygmaeus</i> (Rottb.) Asch. & Graebn.
<i>Cyperus nutans</i> Vahl
<i>Cyperus pangorei</i> Rottb.
<i>Cyperus pilosus</i> Vahl
<i>Cyperus rotundus</i> L.
<i>Fimbristylis argentea</i> (Rottb.) Vahl
<i>Fimbristylis dichotoma</i> (L.) Vahl
<i>Fimbristylis microcarya</i> F.Muell.
<i>Fimbristylis</i> sp.
<i>Fimbristylis tenera</i> Schult.

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur.

<b>CYPERACEAE (cont'd)</b>
<i>Fuirena ciliaris</i> (L.) Roxb.
<i>Hypolytrum nemorum</i> (Vahl) Spreng.
<i>Kyllinga nemoralis</i> (J.R.Forst. & G.Forst.) Dandy ex Hutch. & Dalziel
<i>Kyllinga odorata</i> ssp. <i>cylindrica</i> (Nees) T.Koyama
<i>Pycreus pumilus</i> (L.) Nees
<i>Schoenoplectiella articulata</i> (L.) Lye
<i>Scleria oblata</i> S.T.Blake ex J.Kern
<b>DATISCEAE</b>
<i>Tetrameles nudiflora</i> R. Br.
<b>DIDIEREACEAE</b>
<i>Alluaudia comosa</i> (Drake) Drake
<b>DILLENIAEAE</b>
<i>Dillenia indica</i> L.
<i>Dillenia pentagyna</i> Roxb.
<b>ELATINACEAE</b>
<i>Bergia capensis</i> L.
<b>ERICACEAE</b>
<i>Rhododendron arboreum</i> J. E. Smith ssp. <i>nilagiricum</i> (Zenk.) Tagg.
<b>ERIOCAULACEAE</b>
<i>Eriocaulon cinereum</i> R.Br.
<i>Eriocaulon cuspidatum</i> Dalzell
<i>Eriocaulon heterolepis</i> Steud.
<i>Eriocaulon robustobrownianum</i> Ruhland
<i>Eriocaulon xeranthemum</i> Mart.
<b>EUPHORBIACEAE</b>
<i>Acalypha amentacea</i> Roxb.
<i>Acalypha amentacea</i> Roxb. cv. <i>tahiti</i>
<i>Acalypha amentacea</i> Roxb. cv. <i>dwarf</i>
<i>Acalypha amentacea</i> Roxb. cv. <i>macrophylla</i>
<i>Acalypha amentacea</i> Roxb.c. <i>tricolor</i>
<i>Acalypha amentacea</i> var. <i>amentacea</i> Roxb.
<i>Acalypha chamaedrifolia</i> (Lam.) Müll.Arg.
<i>Acalypha hispida</i> Burm.f.
<i>Acalypha indica</i> L.
<i>Acalypha</i> sp.
<i>Acalypha wilkesiana</i> Müll.Arg.
<i>Antidesma acidum</i> Retz.
<i>Antidesma ghaesembilla</i> Gaertn.
<i>Antidesma</i> sp.
<i>Aporosa cardiosperma</i> (Gaertn.) Merr.
<i>Baccaurea courtallensis</i> (Wight) Müll.Arg.
<i>Baccaurea ramiflora</i> Lour.
<i>Baliospermum solanifolium</i> (Burm.) Suresh
<i>Bischofia javanica</i> Blume

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur.

<b>EUPHORBIACEAE (cont'd)</b>
<i>Breynia disticha</i> J.R.Forst. & G.Forst.
<i>Breynia retusa</i> (Dennst.) Alston
<i>Bridelia retusa</i> (L.) A.Juss.
<i>Bridelia stipularis</i> (L.) Blume
<i>Cleidion javanicum</i> Blume
<i>Cleistanthus collinus</i> (Roxb.) Benth. ex Hook.f.
<i>Codiaeum variegatum</i> (L.) Rumph. ex A.Juss. cv. <i>carnival</i>
<i>Codiaeum variegatum</i> (L.) Rumph. ex A.Juss. cv. <i>delaware</i>
<i>Codiaeum variegatum</i> (L.) Rumph. ex A.Juss. cv. <i>elite</i>
<i>Codiaeum variegatum</i> (L.) Rumph. ex A.Juss. cv. <i>fantasy</i>
<i>Codiaeum variegatum</i> (L.) Rumph. ex A.Juss. cv. <i>glory</i>
<i>Codiaeum variegatum</i> (L.) Rumph. ex A.Juss. cv. <i>H.D. Maity</i>
<i>Codiaeum variegatum</i> (L.) Rumph. ex A.Juss. cv. <i>princess</i>
<i>Codiaeum variegatum</i> (L.) Rumph. ex A.Juss. cv. <i>Punctatum aureum</i>
<i>Codiaeum variegatum</i> var. <i>variegatum</i> (L.) Rumph. ex A.Juss.
<i>Croton bonplandianus</i> Baill.
<i>Croton caudatus</i> Geiseler
<i>Croton malabaricus</i> Bedd.
<i>Euphorbia canariensis</i> L.
<i>Euphorbia caput-medusae</i> L.
<i>Euphorbia cotinifolia</i> L.
<i>Euphorbia cristata</i> B.Heyne ex Roth
<i>Euphorbia cylindrifolia</i> Marn.-Lap. & Rauh
<i>Euphorbia decaryi</i> Guillaumin
<i>Euphorbia decaryi</i> var. <i>cap-saintemariensis</i> (Rauh) Cremers
<i>Euphorbia hirta</i> L.
<i>Euphorbia indica</i> Lam.
<i>Euphorbia lactea</i> Haw.
<i>Euphorbia lactea</i> Haw. cv. <i>alba</i>
<i>Euphorbia milii</i> Des Moul.
<i>Euphorbia milii</i> Des Moul. (red, small)
<i>Euphorbia milii</i> var. <i>lutea</i> Leandri
<i>Euphorbia milii</i> var. <i>lutea</i> Leandri (small)
<i>Euphorbia milii</i> var. <i>splendens</i> (Bojer ex Hook.) Ursch & Leandri
<i>Euphorbia nivulia</i> Buch.-Ham.
<i>Euphorbia pulcherrima</i> Willd. ex Klotzsch
<i>Euphorbia superans</i> Nel ex A.G.J.Herre
<i>Euphorbia susanna</i> Marloth
<i>Euphorbia thymifolia</i> L.
<i>Euphorbia tirucalli</i> L.

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>EUPHORBIACEAE (cont'd)</b>
<i>Euphorbia trigona</i> Mill.
<i>Euphorbia trigona</i> var. <i>rubra</i> Mill.
<i>Euphorbia umbellata</i> (Pax) Bruyns
<i>Excoecaria cochinchinensis</i> Lour.
<i>Excoecaria cochinchinensis</i> var. <i>cochinchinensis</i> Lour.
<i>Glochidion malabaricum</i> (Müll.Arg.) Bedd.
<i>Jatropha curcas</i> L.
<i>Jatropha gossypifolia</i> L.
<i>Jatropha integerrima</i> Jacq.
<i>Jatropha multifida</i> L.
<i>Jatropha podagrica</i> Hook.
<i>Macaranga peltata</i> (Roxb.) Müll.Arg.
<i>Mallotus philippensis</i> (Lam.) Müll.Arg.
<i>Mallotus tetracoccus</i> (Roxb.) Kurz
<i>Manihot carthaginensis</i> (Jacq.) Müll.Arg.
<i>Meineckia parvifolia</i> (Wight) G.L.Webster
<i>Micrococca mercurialis</i> (L.) Benth.
<i>Microstachys chamaelea</i> (L.) Müll.Arg.
<i>Paracroton pendulus</i> ssp. <i>zeylanicus</i> (Thwaites) N.P.Balacr. & Chakrab.
<i>Pedilanthus tithymaloides</i> (L.) Poit. cv. <i>nana</i>
<i>Pedilanthus tithymaloides</i> (L.) Poit. cv. <i>variegatus</i>
<i>Phyllanthus acidus</i> (L.) Skeels
<i>Phyllanthus airy-shawii</i> Jean F.Brunel & J.P.Roux
<i>Phyllanthus amarus</i> Schumach. & Thonn.
<i>Phyllanthus emblica</i> L.
<i>Phyllanthus gardnerianus</i> (Wight) Baill.
<i>Phyllanthus myrtifolius</i> (Wight) Müll.Arg.
<i>Phyllanthus reticulatus</i> Poir.
<i>Phyllanthus rheedei</i> Wight
<i>Phyllanthus rheedei</i> Wight
<i>Phyllanthus urinaria</i> L.
<i>Putranjiva roxburghii</i> Wall.
<i>Ricinus communis</i> L.
<i>Sauropus androgynus</i> (L.) Merr.
<i>Tragia involucrata</i> L.
<b>FABACEAE</b>
<i>Abrus precatorius</i> L.
<i>Aeschynomene aspera</i> L.
<i>Alysicarpus vaginalis</i> (L.) DC.
<i>Arachis pintoii</i> Krapov. & W.C.Greg.

Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>FABACEAE (cont'd)</b>
<i>Butea monosperma</i> (Lam.) Taub.
<i>Cajanus cajan</i> (L.) Millsp.
<i>Calopogonium mucunoides</i> Desv.
<i>Canavalia gladiata</i> (Jacq.) DC.
<i>Centrosema molle</i> Benth.
<i>Clitoria ternatea</i> L.
<i>Codariocalyx motorius</i> (Houtt.) H. Ohashi
<i>Crotalaria grahamiana</i> Wight & Arn.
<i>Crotalaria heyneana</i> Wight & Arn.
<i>Crotalaria nana</i> Burm.f.
<i>Crotalaria pallida</i> Aiton
<i>Crotalaria retusa</i> L.
<i>Dalbergia horrida</i> (Dennst.) Mabb.
<i>Dalbergia lanceolaria</i> L.f.
<i>Dalbergia latifolia</i> Roxb.
<i>Dalbergia sissooides</i> Wight & Arn.
<i>Dalbergia sissoo</i> DC.
<i>Dalbergia volubilis</i> Roxb.
<i>Derris</i> sp.
<i>Desmodium gangeticum</i> (L.) DC.
<i>Desmodium heterophyllum</i> (Willd.) DC.
<i>Desmodium triflorum</i> (L.) DC.
<i>Desmodium velutinum</i> (Willd.) DC.
<i>Erythrina stricta</i> Roxb.
<i>Erythrina variegata</i> L.
<i>Flemingia macrophylla</i> (Willd.) Merr.
<i>Geissaspis cristata</i> Wight & Arn.
<i>Gliricidia sepium</i> (Jacq.) Walp.
<i>Indigofera articulata</i> Gouan
<i>Indigofera tinctoria</i> L.
<i>Phaseolus</i> sp. 1
<i>Phaseolus</i> sp. 2
<i>Pongamia pinnata</i> (L.) Pierre
<i>Pseudarthria viscida</i> (L.) Wight & Arn.
<i>Pterocarpus dalbergioides</i> DC.
<i>Pterocarpus marsupium</i> Roxb.
<i>Pterocarpus santalinus</i> L.f.
<i>Pueraria montana</i> var. <i>lobata</i> (Willd.) Sanjappa & Pradeep
<i>Pycnospora lutescens</i> (Poir.) Schindl.
<i>Sesbania grandiflora</i> (L.) Pers.
<i>Smithia sensitiva</i> Aiton
<i>Tadehagi triquetrum</i> (L.) H. Ohashi
<i>Tephrosia purpurea</i> (L.) Pers.
<i>Uraria rufescens</i> (DC.) Schindl.
<i>Zornia gibbosa</i> Span.

Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>FLACOURTIACEAE</b>
<i>Flacourtia jangomas</i> (Lour.) Raeusch.
<i>Flacourtia montana</i> J. Graham
<i>Hydnocarpus pentandra</i> (Buch.-Ham.) Oken
<b>GENTIANACEAE</b>
<i>Canscora pauciflora</i> Dalzell
<b>GERANIACEAE</b>
<i>Pelargonium × hortorum</i> L.H. Bailey
<b>GESNERIACEAE</b>
<i>Achimenes longiflora</i> DC.
<i>Chrysothemis pulchella</i> (Donn ex Sims) Decne.
<i>Episcia cupreata</i> (Hook.) Hanst. cv. <i>frosty</i>
<i>Episcia lilacina</i> Hanst.
<i>Episcia reptans</i> Mart.
<i>Henckelia incana</i> (Vahl) Spreng.
<i>Nautilocalyx forgetii</i> (Sprague) Sprague
<i>Rhynchoglossum notonianum</i> (Wall.) B.L.Burt
<i>Saintpaulia intermedia</i> B.L.Burt
<i>Saintpaulia rupicola</i> B.L. Burt
<b>HAEMODORACEAE</b>
<i>Ophiopogon jaburan</i> (Siebold) Lodd.
<i>Ophiopogon jaburan</i> (Siebold) Lodd. var. <i>variegata</i> Frw.
<i>Ophiopogon japonicus</i> (Thunb.) Ker Gawl.
<b>HALORAGACEAE</b>
<i>Myriophyllum alterniflorum</i> DC.
<i>Myriophyllum intermedium</i> DC.
<b>HAMAMELIDACEAE</b>
<i>Loropetalum chinense</i> (R. Br.) Oliv.
<b>HELICONIACEAE</b>
<i>Heliconia caribaea</i> × <i>H. bihai</i> cv. 'Hot Rio Night'
<i>Heliconia psittacorum</i> L.f.
<i>Heliconia rostrata</i> Ruiz & Pav.
<b>HIPPOCRATEACEAE</b>
<i>Salacia fruticosa</i> Wall.
<i>Salacia reticulata</i> Wight
<b>HYDRANGEACEAE</b>
<i>Hydrangea macrophylla</i> (Thunb.) Ser.
<b>HYDROCHARITACEAE</b>
<i>Blyxa aubertii</i> Rich.
<i>Hydrilla verticillata</i> (L.f.) Royle
<i>Hydrocharis dubia</i> (Blume) Backer
<i>Ottelia alismoides</i> (L.) Pers.
<i>Vallisneria natans</i> (Lour.) H.Hara
<b>HYDROPHYLLACEAE</b>
<i>Hydrolea zeylanica</i> (L.) Vahl

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>HYPOXIDACEAE</b>
<i>Curculigo orchioides</i> Gaertn.
<i>Curculigo recurvata</i> Dryand.
<b>IRIDACEAE</b>
<i>Iris domestica</i> (L.) Goldblatt & Mabb.
<i>Neomarica gracilis</i> (Herb.) Sprague
<b>LAMIACEAE</b>
<i>Anisomeles indica</i> (L.) Kuntze
<i>Hyptis capitata</i> Jacq.
<i>Hyptis suaveolens</i> (L.) Poit.
<i>Leucas aspera</i> (Willd.) Link
<i>Mentha × piperita</i> L.
<i>Mentha spicata</i> L.
<i>Ocimum basilicum</i> L.
<i>Ocimum gratissimum</i> L.
<i>Ocimum tenuiflorum</i> L.
<i>Orthosiphon aristatus</i> (Blume) Miq.
<i>Orthosiphon rubicundus</i> (D.Don) Benth.
<i>Orthosiphon thymiflorus</i> (Roth) Sleesen
<i>Plectranthus amboinicus</i> (Lour.) Spreng.
<i>Plectranthus hadiensis</i> var. <i>hadiensis</i> (Forssk.) Schweinf. ex Spreng.
<i>Plectranthus hadiensis</i> var. <i>tomentosus</i> (Benth. ex E.Mey.) Codd
<i>Plectranthus rotundifolius</i> (Poir.) Spreng.
<i>Plectranthus scutellarioides</i> (L.) R.Br.
<i>Plectranthus scutellarioides</i> (L.) R.Br.
<i>Plectranthus scutellarioides</i> (L.) R.Br. `trailing queen`
<i>Pogostemon auricularius</i> (L.) Hassk.
<i>Pogostemon paniculatus</i> (Willd.) Benth.
<i>Salvia coccinea</i> Buc'hoz ex Etl.
<i>Salvia coccinea</i> Buc'hoz ex Etl. `coral nymph`
<i>Salvia coccinea</i> Buc'hoz ex Etl. `snow nymph`
<i>Salvia splendens</i> Sellow ex Roem. & Schult.
<b>LAURACEAE</b>
<i>Alseodaphne semecarpifolia</i> Nees
<i>Cinnamomum camphora</i> (L.) J.Presl
<i>Cinnamomum malabattrum</i> (Burm.f.) J.Presl
<i>Cinnamomum verum</i> J.Presl
<i>Litsea coriacea</i> Hook.f.
<i>Persea americana</i> Mill.
<i>Persea macrantha</i> (Nees) Kosterm.
<b>LECYTHIDACEAE</b>
<i>Barringtonia acutangula</i> (L.) Gaertn.
<i>Careya arborea</i> Roxb.
<i>Couroupita guianensis</i> Aubl.
<b>LEEACEAE</b>
<i>Leea guineense</i> G.Don `rubra`
<i>Leea indica</i> (Burm. f.) Merr.
<i>Leea macrophylla</i> Roxb. ex Hornem.

Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>LEMNACEAE</b>
<i>Lemna perpusilla</i> Torr.
<i>Lemna</i> sp.
<i>Spirodela polyrrhiza</i> (L.) Schleid.
<i>Wolffia globosa</i> (Roxb.) Hartog & Plas
<b>LENTIBULARIACEAE</b>
<i>Utricularia aurea</i> Lour.
<i>Utricularia gibba</i> L.
<i>Utricularia stellaris</i> L.f.
<i>Utricularia uliginosa</i> Vahl
<b>LILIACEAE</b>
<i>Chlorophytum laxum</i> R.Br.
<i>Dianella tasmanica</i> Hook.f.
<i>Dianella tasmanica</i> var. <i>variegata</i> C.Pynaert
<i>Gloriosa superba</i> L.
<i>Urginea indica</i> (Roxb.) Kunth
<b>LIMNOCHARITACEAE</b>
<i>Limnocharis flava</i> (L.) Buchenau
<b>LINACEAE</b>
<i>Hugonia mystax</i> Cav.
<i>Reinwardtia indica</i> Dumort.
<b>LOGANIACEAE</b>
<i>Lobelia nicotianifolia</i> Roth ex Schult.
<i>Strychnos nux-vomica</i> L.
<i>Strychnos potatorum</i> L.f.
<b>LORANTHACEAE</b>
<i>Dendrophthoe falcata</i> (L.f.) Ettingsh.
<i>Elytranthe parasitica</i> (L.) Danser
<b>LYTHRACEAE</b>
<i>Ammannia baccifera</i> L. ssp. <i>baccifera</i> Koehne
<i>Cuphea hyssopifolia</i> Kunth
<i>Cuphea ignea</i> A.DC.
<i>Lagerstroemia hirsuta</i> Willd.
<i>Lagerstroemia speciosa</i> (L.) Pers.
<i>Lagerstroemia microcarpa</i> Wight
<i>Lawsonia inermis</i> L.
<i>Rotala indica</i> (Willd.) Koehne
<i>Rotala macrandra</i> Koehne
<i>Rotala rotundifolia</i> (Buch.-Ham. ex Roxb.) Koehne
<i>Woodfordia fruticosa</i> (L.) Kurz
<b>MAGNOLIACEAE</b>
<i>Magnolia champaca</i> (L.) Baill. ex Pierre
<b>MALPIGHIACEAE</b>
<i>Galphimia gracilis</i> Bartl.
<i>Malpighia coccigera</i> L.
<i>Tristellateia australis</i> A.Rich.

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>MALVACEAE</b>
<i>Abelmoschus moschatus</i> Medik.
<i>Abelmoschus moschatus</i> subsp. <i>tuberosus</i> (Span.) Borss.Waalk.
<i>Abutilon indicum</i> (L.) Sweet
<i>Gossypium arboreum</i> L.
<i>Hibiscus hispidissimus</i> Griff.
<i>Hibiscus mutabilis</i> L.
<i>Hibiscus rosa-sinensis</i> L.
<i>Hibiscus rosa-sinensis</i> L. var. <i>rosa-sinensis</i> Hook. f.
<i>Hibiscus rosa-sinensis</i> L. 'snow flake'
<i>Hibiscus sabdariffa</i> L.
<i>Hibiscus sabdariffa</i> L. var. <i>sabdariffa</i> L.
<i>Hibiscus schizopetalus</i> (Dyer) Hook.f.
<i>Hibiscus surattensis</i> L.
<i>Hibiscus syriacus</i> L.
<i>Hibiscus tiliaceus</i> L. 'tricolor'
<i>Malva viscosa penduliflorus</i> DC.
<i>Sida acuta</i> Burm.f.
<i>Sida alnifolia</i> L.
<i>Sida beddomei</i> K.C.Jacob
<i>Sida cordifolia</i> L.
<i>Sida rhombifolia</i> L.
<i>Thespesia lampas</i> (Cav.) Dalzell & A. Gibson
<i>Urena lobata</i> L. ssp. <i>lobata</i> Hook. f.
<i>Urena sinuata</i> L.
<b>MARANTACEAE</b>
<i>Calathea bella</i> (W.Bull) Regel
<i>Calathea crotalifera</i> S.Watson
<i>Calathea lindeniana</i> Wallis
<i>Calathea ornata</i> (Linden) Körn. var. <i>roseolineata</i> Körn.
<i>Calathea picturata</i> K.Koch & Linden
<i>Calathea picturata</i> K.Koch & Linden 'argentea'
<i>Calathea undulata</i> (Linden & André) Linden & André
<i>Calathea zebrina</i> (Sims) Lindl.
<i>Maranta arundinacea</i> L.
<i>Maranta leuconeura</i> E.Morren
<i>Stachyphrynium spicatum</i> (Roxb.) K.Schum.
<i>Thalia geniculata</i> L.
<b>MELASTOMATACEAE</b>
<i>Heterotis rotundifolia</i> (Sm.) Jacq.-Fél.
<i>Melastoma malabathricum</i> L.
<i>Osbeckia aspera</i> Bl.
<i>Osbeckia muralis</i> Naudin

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>MELIACEAE</b>
<i>Aglaia elaeagnoidea</i> (A.Juss.) Benth.
<i>Aglaia lawii</i> (Wight) C.J.Saldanha
<i>Aglaia</i> sp.
<i>Aphanamixis polystachya</i> (Wall.) R.Parker
<i>Azadirachta indica</i> A.Juss.
<i>Chukrasia tabularis</i> A.Juss.
<i>Melia azedarach</i> L.
<i>Melia dubia</i> Cav.
<i>Naregamia alata</i> Wight & Arn.
<i>Swietenia macrophylla</i> King
<i>Toona ciliata</i> M.Roem.
<b>MENISPERMACEAE</b>
<i>Anamirta cocculus</i> (L.) Wight & Arn.
<i>Cissampelos pareira</i> L.
<i>Coscinium fenestratum</i> (Goetgh.) Colebr.
<i>Cyclea peltata</i> (Lam.) Hook.f. & Thomson
<i>Diploclisia glaucescens</i> (Blume) Diels
<i>Tiliacora acuminata</i> Miers
<i>Tinospora cordifolia</i> (Willd.) Miers
<i>Tinospora sinensis</i> (Lour.) Merr.
<b>MENYANTHACEAE</b>
<i>Nymphoides hydrophylla</i> (Lour.) Kuntze
<i>Nymphoides indica</i> (L.) Kuntze
<b>MIMOSACEAE</b>
<i>Acacia auriculiformis</i> Benth.
<i>Acacia mangium</i> Willd.
<i>Acacia mellifera</i> (M.Vahl) Benth.
<i>Acacia sinuata</i> (Lour.) Merr.
<i>Acacia torta</i> (Roxb.) Craib
<i>Adenantha pavonina</i> L.
<i>Albizia chinensis</i> (Osbeck) Merr.
<i>Albizia odoratissima</i> (L.f.) Benth.
<i>Albizia saman</i> (Jacq.) Merr.
<i>Calliandra calothyrsus</i> Meisn.
<i>Calliandra haematocephala</i> Hassk.
<i>Entada rheedii</i> Spreng.
<i>Mimosa diplotricha</i> Sauvalle var. <i>inermis</i> (Adelb.) Veldk.
<i>Mimosa pudica</i> L.
<i>Xylocarpus xylocarpa</i> (Roxb.) Taub.
<b>MOLLUGINACEAE</b>
<i>Glinus oppositifolius</i> (L.) Aug.DC.
<i>Mollugo pentaphylla</i> L.
<b>MORACEAE</b>
<i>Antiaris toxicaria</i> Lesch.
<i>Artocarpus heterophyllus</i> Lam.
<i>Artocarpus hirsutus</i> Lam.



Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>MORACEAE (cont'd)</b>
<i>Dorstenia indica</i> Wall. ex Wight
<i>Ficus benghalensis</i> L. var. <i>benghalensis</i> Hook. f.
<i>Ficus benghalensis</i> L. var. <i>krishnae</i> (C.DC.) Corner
<i>Ficus benjamina</i> L.
<i>Ficus benjamina</i> L. cv. <i>variegata</i>
<i>Ficus deltoidea</i> Jack
<i>Ficus elastica</i> Roxb. ex Hornem.
<i>Ficus elastica</i> Roxb. ex Hornem. Cv. <i>Doescheri</i>
<i>Ficus exasperata</i> Vahl
<i>Ficus hispida</i> L.f.
<i>Ficus longifolia</i> Schott
<i>Ficus microcarpa</i> L.f.
<i>Ficus natalensis</i> ssp. <i>leprieurii</i> (Miq.) C.C.Berg
<i>Ficus pumila</i> L.
<i>Ficus racemosa</i> L.
<i>Ficus religiosa</i> L.
<i>Morus alba</i> L.
<i>Streblus asper</i> Lour.
<b>MORINGACEAE</b>
<i>Moringa oleifera</i> Lam.
<b>MUSACEAE</b>
<i>Ensete superbum</i> (Roxb.) Cheesman
<i>Musa × paradisiaca</i> L.
<i>Musa ornata</i> Roxb.
<b>MYRISTICACEAE</b>
<i>Knema attenuata</i> Warb.
<i>Myristica malabarica</i> Lam.
<b>MYRSINACEAE</b>
<i>Embelia tsjeriam-cottam</i> (Roem. & Schult.) A.DC.
<b>MYRTACEAE</b>
<i>Corymbia citriodora</i> (Hook.) K.D.Hill & L.A.S.Johnson
<i>Corymbia tessellaris</i> (F.Muell.) K.D.Hill & L.A.S.Johnson
<i>Eucalyptus brassiana</i> S.T.Blake
<i>Eucalyptus camaldulensis</i> Dehnh.
<i>Eucalyptus deglupta</i> Blume
<i>Eucalyptus globulus</i> Labill.
<i>Eucalyptus grandis</i> W.Hill
<i>Eucalyptus pellita</i> F.Muell.
<i>Eucalyptus</i> sp.
<i>Eucalyptus tereticornis</i> Sm.
<i>Eucalyptus urophylla</i> S.T.Blake
<i>Melaleuca leucadendra</i> (L.) L.

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>MYRTACEAE (cont'd)</b>
<i>Myrcianthes fragrans</i> (Sw.) McVaugh
<i>Pimenta dioica</i> (L.) Merr.
<i>Psidium guajava</i> L.
<i>Syzygium aqueum</i> (Burm.f.) Alston
<i>Syzygium caryophyllatum</i> (L.) Alston
<i>Syzygium cumini</i> (L.) Skeels
<i>Syzygium gardneri</i> Thwaites
<i>Syzygium hemisphericum</i> (Wight) Alston
<i>Syzygium jambos</i> (L.) Alston
<i>Syzygium lanceolatum</i> (Lam.) Wight & Arn.
<i>Syzygium malaccense</i> (L.) Merr. & L.M.Perry
<i>Syzygium mundagam</i> (Bourd.) Chithra
<i>Syzygium</i> sp.
<i>Syzygium travancoricum</i> Gamble
<b>NELUMBONACEAE</b>
<i>Nelumbo nucifera</i> Gaertn.
<b>NEPENTHACEAE</b>
<i>Nepenthes khasiana</i> Hook.f.
<b>NYCTAGINACEAE</b>
<i>Boerhavia diffusa</i> L.
<i>Bougainvillea buttiana</i> Holttum & Standl.
<i>Bougainvillea glabra</i> Choisy
<i>Bougainvillea</i> sp.
<i>Bougainvillea spectabilis</i> Willd.
<i>Mirabilis jalapa</i> L.
<i>Pisonia grandis</i> R. Br.
<b>NYCTANTHACEAE</b>
<i>Nyctanthes arbor-tristis</i> L.
<b>NYMPHAEACEAE</b>
<i>Nuphar lutea</i> (L.) Sm.
<i>Nymphaea omarana</i> var. <i>omarana</i> Bisset
<i>Nymphaea omarana</i> var. <i>rosea</i> (Sims) R.Ansari & Jeeja
<i>Nymphaea</i> × <i>marliacea</i> Wildsmith
<i>Nymphaea mexicana</i> Zucc.
<i>Nymphaea micrantha</i> Guill. & Perr.
<i>Nymphaea nouchali</i> var. <i>nouchali</i> Burm.f.
<i>Nymphaea nouchali</i> Burm.f. (flowers pale blue)
<i>Nymphaea nouchali</i> Burm.f. (flowers pale pink)
<i>Nymphaea nouchali</i> Burm.f. (flowers white)
<i>Nymphaea nouchali</i> var. <i>caerulea</i> (Savigny) Verdc.
<i>Nymphaea pubescens</i> Willd.
<i>Nymphaea rubra</i> Roxb. ex Andrews

Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>OLEACEAE</b>
<i>Jasminum angustifolium</i> (L.) Willd.
<i>Jasminum auriculatum</i> Vahl
<i>Jasminum grandiflorum</i> L.
<i>Jasminum mesnyi</i> Hance
<i>Jasminum multiflorum</i> (Burm.f.) Andrews
<i>Jasminum nervosum</i> Lour.
<i>Jasminum sambac</i> (L.) Ait.
<i>Jasminum sambac</i> (L.) Ait. 'belle of india'
<i>Jasminum sambac</i> (L.) Ait. 'Japanese rai'
<i>Jasminum sambac</i> (L.) Ait. 'maid of orleans'
<i>Jasminum</i> sp.
<i>Myxopyrum smilacifolium</i> (Wall.) Blume
<i>Olea dioica</i> Roxb.
<b>ONAGRACEAE</b>
<i>Ludwigia adscendens</i> (L.) H. Hara
<i>Ludwigia hyssopifolia</i> (G.Don) Exell
<i>Ludwigia octovalvis</i> (Jacq.) P.H.Raven
<i>Ludwigia peruviana</i> (L.) H.Hara
<i>Ludwigia prostrata</i> Roxb.
<i>Ludwigia sedioides</i> (Humb. & Bonpl.) H.Hara
<b>ORCHIDACEAE</b>
<i>Acampe ochracea</i> (Lindl.) Hochr.
<i>Acampe praemorsa</i> (Roxb.) Blatt. & McCann
<i>Aerides crispa</i> Lindl.
<i>Aerides maculosa</i> Lindl.
<i>Aerides ringens</i> (Lindl.) C.E.C.Fisch.
<i>Anoectochilus elatus</i> Lindl.
<i>Anoectochilus</i> sp.
<i>Arachnis</i> 'Anne Black'
<i>Arachnis</i> 'Muskiflora'
<i>Arachnis flos-aeris</i> (L.) Rchb.f. (light yellow with light brown spot)
<i>Arachnis flos-aeris</i> (L.) Rchb.f. (yellow ribbon)
<i>Arachnis flos-aeris</i> (L.) Rchb.f. 'Muhammed Haneef'
<i>Arachnis flos-aeris</i> (L.) Rchb.f. (light yellow with red spot)
<i>Arachnis flos-aeris</i> (L.) Rchb.f. (pure white)
<i>Arachnis flos-aeris</i> (L.) Rchb.f. (white with light brown spot)
<i>Arachnis flos-aeris</i> (L.) Rchb.f. 'Maggie Oei'
<i>Arachnis hybrid</i> (small flower)

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>ORCHIDACEAE (cont'd)</b>
<i>Aranda [Arachnis x Vanda]</i>
<i>Aranda hybrid</i> (light rose)
<i>Ascocenda hybrid</i>
<i>Brachycorythis splendida</i> Summerh.
<i>Bulbophyllum aureum</i> (Hook.f.) J.J.Sm.
<i>Bulbophyllum fimbriatum</i> (Lindl.) Rchb.f.
<i>Bulbophyllum rosemarianum</i> Sath.Kumar, P.C.S.Kumar & Saleem
<i>Bulbophyllum sterile</i> (Lam.) Suresh
<i>Calanthe sylvatica</i> (Thouars) Lindl.
<i>Cattleya 'Coerula Capri'</i>
<i>Cleisostoma tenuifolium</i> (L.) Garay
<i>Coelogyne breviscapa</i> Lindl.
<i>Coelogyne longipes</i> Lindl.
<i>Coelogyne mossiae</i> Rolfe
<i>Coelogyne nervosa</i> A.Rich.
<i>Coelogyne ovalis</i> Lindl.
<i>Coelogyne punctulata</i> Lindl.
<i>Conchidium braccatum</i> (Lindl.) Brieger
<i>Conchidium filiforme</i> (Wight) Rauschert
<i>Conchidium nanum</i> (A.Rich.) Brieger
<i>Cotonia peduncularis</i> (Lindl.) Rchb.f.
<i>Crepidium resupinatum</i> (G.Forst.) Szlach.
<i>Cymbidium aloifolium</i> (L.) Sw.
<i>Cymbidium haematodes</i> Lindl.
<i>Dendrobium 'Emma White'</i>
<i>Dendrobium 'Sunlight'</i>
<i>Dendrobium 'Waibu Beauty'</i>
<i>Dendrobium 'Kasem Gold'</i>
<i>Dendrobium 'Me Vipa'</i>
<i>Dendrobium 'Singapore White'</i>
<i>Dendrobium 'Red bul'</i>
<i>Dendrobium 'Banyat Pink'</i>
<i>Dendrobium 'Caesar Stripe 4N'</i>
<i>Dendrobium 'Chrysanthemum'</i>
<i>Dendrobium 'Diana White'</i>
<i>Dendrobium 'Heang Beauty'</i>
<i>Dendrobium 'Jaquelyn Thomas'</i>
<i>Dendrobium 'JoyConcert' x Dendrobium 'Samut Song Kram'</i>
<i>Dendrobium 'Macro Big'</i>
<i>Dendrobium 'Madam Pompadour'</i>

Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>ORCHIDACEAE (cont'd)</b>
<i>Dendrobium 'Madam Viper'</i>
<i>Dendrobium 'Martico White'</i>
<i>Dendrobium 'Ooty'</i>
<i>Dendrobium 'Rinnapa'x</i>
<i>Dendrobium 'Sonia 17 Mutant'</i>
<i>Dendrobium 'Sonia 17'</i>
<i>Dendrobium 'Sonia 18'</i>
<i>Dendrobium 'Sonia 19'</i>
<i>Dendrobium 'Sonia 28'</i>
<i>Dendrobium 'White'</i>
<i>Dendrobium "Sonia 16'</i>
<i>Dendrobium 1</i>
<i>Dendrobium 2</i>
<i>Dendrobium anceps</i> Sw.
<i>Dendrobium aphyllum</i> (Roxb.) C.E.C.Fisch.
<i>Dendrobium aqueum</i> Lindl.
<i>Dendrobium chrysanthum</i> Wall. ex Lindl.
<i>Dendrobium fimbriatum</i> Hook.
<i>Dendrobium herbaceum</i> Lindl.
<i>Dendrobium heterocarpum</i> Wall. ex Lindl.
<i>Dendrobium heyneanum</i> Lindl.
<i>Dendrobium</i> hybrid (dark rose)
<i>Dendrobium</i> hybrid (dark rose)
<i>Dendrobium</i> hybrid (light rose)
<i>Dendrobium jerdonianum</i> Wight
<i>Dendrobium ovatum</i> (L.) Kraenzl.
<i>Dendrobium wightii</i> A.D.Hawkes & A.H.Heller
<i>Dendrobium 'Burana green star'</i>
<i>Disperis neilgherrensis</i> Wight
<i>Epidendrum radicans</i> Pav. ex Lindl.
<i>Epipogium roseum</i> (D.Don) Lindl.
<i>Eria microchila</i> Ames
<i>Eria mysorensis</i> Lindl.
<i>Eria pauciflora</i> Wight
<i>Eulophia ochreatea</i> Lindl.
<i>Eulophia spectabilis</i> (Dennst.) Suresh
<i>Flickingeria nodosa</i> (Dalzell) Seidenf.
<i>Gastrochilus flabelliformis</i> (Blatt. & McCann) C.J.Saldanha
<i>Geodorum densiflorum</i> (Lam.) Schltr.
<i>Habenaria brachyphylla</i> (Lindl.) Aitch.

Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>ORCHIDACEAE (cont'd)</b>
<i>Habenaria crinifera</i> Lindl.
<i>Habenaria furcifera</i> Lindl.
<i>Habenaria longicorniculata</i> J.Graham
<i>Habenaria longicornu</i> Lindl.
<i>Habenaria plantaginea</i> Lindl.
<i>Ipea malabarica</i> (Rchb.f.) Hook.f.
<i>Liparis beddomei</i> Ridl.
<i>Liparis biloba</i> Wight
<i>Liparis odorata</i> (Willd.) Lindl.
<i>Luisia tenuifolia</i> Blume
<i>Malaxis intermedia</i> (A.Rich.) Seidenf.
<i>Mokara</i> (light violet)
<i>Mokara</i> [ <i>Arachnis</i> x <i>Ascocentrum</i> x <i>Vanda</i> ]
<i>Mokara</i> 'Calypso'
<i>Mokara</i> 'Calypso' Dark Rose
<i>Mokara</i> 'Chao Praya Boy Blue'
<i>Mokara</i> 'Chark Kuan Pink'
<i>Mokara</i> 'Cintha Manis'
<i>Mokara</i> 'Getty'
<i>Mokara</i> 'Kelwin'
<i>Mokara</i> 'Madam Funny'[[ <i>M. Carnival</i> ]
<i>Mokara</i> 'Pani'
<i>Mokara</i> 'Philippines' x 'Kaisum'
<i>Mokara</i> 'Singapore Red'
<i>Mokara</i> 'Walter Omega White'
<i>Nervilia aragoana</i> Gaudich.
<i>Nervilia crociformis</i> (Zoll. & Moritzi) Seidenf.
<i>Nervilia infundibulifolia</i> Blatt. & McCann
<i>Nervilia plicata</i> (Andrews) Schltr.
<i>Nervilia</i> sp.
<i>Oberonia brachyphylla</i> Blatt. & McCann
<i>Oberonia brunoniana</i> Wight
<i>Oberonia ensiformis</i> (Sm.) Lindl.
<i>Oberonia ensiformis</i> (Sm.) Lindl.
<i>Oberonia santapau</i> Kapadia
<i>Oberonia wightiana</i> Lindl.
<i>Oncidium</i> '682'
<i>Oncidium</i> '954 UCO'
<i>Oncidium</i> 'Wildcat – Bobcat'
<i>Oncidium excavatum</i> Lindl. 'Dancing Girl'

Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>ORCHIDACEAE (cont'd)</b>
<i>Papilionanthe teres</i> (Roxb.) Schltr.
<i>Peristeria elata</i> Hook.
<i>Phaius luridus</i> Thwaites
<i>Phaius tankervilleae</i> (Banks ex L'Hér.) Blume
<i>Phalaenopsis</i> (light green with patches)
<i>Phalaenopsis</i> (pink)
<i>Phalaenopsis</i> (white)
<i>Phalaenopsis parishii</i> Rchb.f.
<i>Pholidota imbricata</i> Lindl.
<i>Pholidota</i> sp.
<i>Polystachya concreta</i> (Jacq.) Garay & H.R.Sweet
<i>Porpax reticulata</i> Lindl.
<i>Rhynchostylis retusa</i> (L.) Blume
<i>Saccolabium congestum</i> (Lindl.) Hook.f.
<i>Spathoglottis plicata</i> (light rose colour)
<i>Spathoglottis plicata</i> (meijenta violet colour)
<i>Spathoglottis plicata</i> (orange colour)
<i>Spathoglottis plicata</i> (yellow colour)
<i>Spathoglottis plicata</i> Blume
<i>Spathoglottis plicata</i> Blume var. <i>alba</i>
<i>Vanda</i> 'Ruby Prince'
<i>Vanda</i> Hybrid
<i>Vanda</i> 'Arun Sree Beauty'
<i>Vanda</i> 'Patoharee's Delight'
<i>Vanda</i> 'Robert Delight'x
<i>Vanda</i> 'Suksamran Sunlight'
<i>Vanda</i> 'Tokyo Blue' x
<i>Vanda</i> 'Vasco Pine River Pink'
<i>Vanda coerulea</i> Griff. ex Lindl.
<i>Vanda Masao Yamada</i> x <i>Vanda Tokyo Blue</i>
<i>Vanda Patoharee's Delight</i>
<i>Vanda Rasri Gold</i> x <i>Vanda Kultana Gold</i>
<i>Vanda Rasri Gold</i> x <i>Vanda SCDA Muangthong White</i>
<i>Vanda spathulata</i> (L.) Spreng.
<i>Vanda tessellata</i> (Roxb.) Hook. ex G.Don
<i>Vanda testacea</i> (Lindl.) Rchb.f.
<i>Vanilla planifolia</i> Jacks. ex Andrews
<i>Zeuxine longilabris</i> (Lindl.) Trimen

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>OXALIDACEAE</b>
<i>Averrhoa carambola</i> L.
<i>Biophytum sensitivum</i> (L.) DC. var. <i>sensitivum</i> Hook. f.
<i>Biophytum sensitivum</i> (L.) DC.
<i>Oxalis corniculata</i> L.
<i>Oxalis hedysaroides</i> Kunth cv. <i>rubra</i>
<i>Oxalis latifolia</i> Kunth
<b>PANDANACEAE</b>
<i>Pandanus amaryllifolius</i> Roxb.
<i>Pandanus dubius</i> Spreng.
<i>Pandanus odorifer</i> (Forssk.) Kuntze
<i>Pandanus pygmaeus</i> Thouars
<i>Pandanus tectorius</i> Parkinson ex Du Roi
<i>Pandanus thwaitesii</i> Martelli
<b>PAPAVERACEAE</b>
<i>Argemone mexicana</i> L.
<b>PASSIFLORACEAE</b>
<i>Adenia hondala</i> (Gaertn.) W.J.de Wilde
<i>Passiflora edulis</i> Sims
<i>Passiflora foetida</i> L.
<i>Passiflora vitifolia</i> Kunth
<b>PEDALIACEAE</b>
<i>Pedaliium murex</i> L.
<b>PERIPLOCACEAE</b>
<i>Cryptolepis dubia</i> (Burm.f.) M.R.Almeida
<i>Hemidesmus indicus</i> (L.) R. Br. ex Schult.
<b>PHYTOLACCACEAE</b>
<i>Phytolacca octandra</i> L.
<i>Rivinia humilis</i> L.
<b>PIPERACEAE</b>
<i>Peperomia argyreia</i> (Hook.f.) E.Morren
<i>Peperomia caperata</i> Yunck.
<i>Peperomia clusiifolia</i> (Jacq.) Hook.
<i>Peperomia obtusifolia</i> (L.) A.Dietr.
<i>Peperomia obtusifolia</i> (L.) A.Dietr. cv. <i>variegata</i>
<i>Peperomia pellucida</i> (L.) Kunth
<i>Peperomia serpens</i> (Sw.) Loudon
<i>Peperomia</i> sp.
<i>Piper betle</i> L.
<i>Piper longum</i> L.
<i>Piper nigrum</i> L.
<i>Piper retrofractum</i> Vahl
<i>Piper umbellatum</i> L.

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>PITTOSPORACEAE</b>
<i>Pittosporum tetraspermum</i> Wight & Arn.
<b>PLUMBAGINACEAE</b>
<i>Plumbago auriculata</i> Lam.
<i>Plumbago indica</i> L.
<i>Plumbago zeylanica</i> L.
<b>POACEAE</b>
<i>Alloteropsis cimicina</i> (L.) Stapf
<i>Aristida setacea</i> Retz.
<i>Arundinella leptochloa</i> (Steud.) Hook.f.
<i>Arundo donax</i> L.
<i>Axonopus compressus</i> (Sw.) P.Beauv.
<i>Bambusa balcooa</i> Roxb.
<i>Bambusa bambos</i> (L.) Voss
<i>Bambusa multiplex</i> (Lour.) Raeusch. ex Schult.
<i>Bambusa polymorpha</i> Munro
<i>Bambusa tulda</i> Roxb.
<i>Bambusa tuldoides</i> Munro
<i>Bambusa vulgaris</i> Schrad.
<i>Brachiaria burmanica</i> Bor
<i>Brachiaria eruciformis</i> (Sm.) Griseb.
<i>Centotheca lappacea</i> (L.) Desv.
<i>Chrysopogon zizanioides</i> (L.) Roberty
<i>Coix lacryma-jobi</i> L.
<i>Cymbopogon flexuosus</i> (Nees ex Steud.) W.Watson
<i>Cynodon dactylon</i> (L.) Pers.
<i>Cyrtococcum oxyphyllum</i> (Steud.) Stapf
<i>Dactyloctenium aegyptium</i> (L.) Willd.
<i>Dendrocalamus asper</i> (Schult.) Backer
<i>Dendrocalamus brandisii</i> (Munro) Kurz
<i>Dendrocalamus giganteus</i> Munro
<i>Dendrocalamus hamiltonii</i> Nees & Arn. ex Munro
<i>Dendrocalamus longispathus</i> (Kurz) Kurz
<i>Dendrocalamus membranaceus</i> Munro
<i>Dendrocalamus strictus</i> (Roxb.) Nees
<i>Desmostachya bipinnata</i> (L.) Stapf
<i>Digitaria ciliaris</i> (Retz.) Koeler
<i>Digitaria radicata</i> (Pers.) Miq.
<i>Echinochloa colona</i> (L.) Link
<i>Echinochloa frumentacea</i> Link
<i>Eleusine indica</i> (L.) Gaertn.
<i>Eragrostis amabilis</i> (L.) Wight & Arn.
<i>Eragrostis patula</i> (Kunth) Steud.
<i>Eragrostis uniolooides</i> (Retz.) Nees ex Steud.
<i>Heteropogon contortus</i> (L.) P.Beauv. ex Roem. & Schult.

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>POACEAE (cont'd)</b>
<i>Hygroryza aristata</i> (Retz.) Nees ex Wight & Arn.
<i>Imperata cylindrica</i> (L.) Raeusch.
<i>Isachne miliacea</i> Roth
<i>Ischaemum commutatum</i> Hack.
<i>Ischaemum rangacharianum</i> C.E.C.Fisch.
<i>Ischaemum rugosum</i> Salisb.
<i>Ischaemum</i> sp.
<i>Iseilema laxum</i> Hack.
<i>Leersia hexandra</i> Sw.
<i>Melocanna baccifera</i> (Roxb.) Kurz
<i>Ochlandra scriptoria</i> (Dennst.) C.E.C.Fisch.
<i>Oplismenus compositus</i> (L.) P.Beauv.
<i>Oryza sativa</i> L.
<i>Panicum curviflorum</i> Hornem.
<i>Paspalidium flavidum</i> (Retz.) A.Camus
<i>Paspalum conjugatum</i> P.J.Bergius
<i>Paspalum scrobiculatum</i> L.
<i>Pennisetum polystachion</i> (L.) Schult.
<i>Perotis indica</i> (L.) Kuntze
<i>Phragmites karka</i> (Retz.) Trin. ex Steud.
<i>Phyllostachys</i> sp.
<i>Pleioblastus fortunei</i> (Van Houtte) Nakai
<i>Pogonatherum crinitum</i> (Thunb.) Kunth
<i>Pseudosasa disticha</i> (Mitford) Nakai
<i>Saccharum officinarum</i> L.
<i>Saccharum spontaneum</i> L.
<i>Sacciolepis indica</i> (L.) Chase
<i>Setaria italica</i> (L.) P.Beauv.
<i>Sporobolus diandrus</i> (Retz.) P.Beauv.
<i>Stenotaphrum secundatum</i> (Walter) Kuntze
<i>Thyrsostachys oliveri</i> Gamble
<i>Thyrsostachys siamensis</i> Gamble
<b>POLEMONIACEAE</b>
<i>Phlox drummondii</i> Hook.
<b>POLYGALACEAE</b>
<i>Polygala arvensis</i> Willd.
<i>Polygala elongata</i> Klein ex Willd.
<i>Xanthophyllum arnotianum</i> Wight
<b>POLYGONACEAE</b>
<i>Homalocladium platycladum</i> (F.Muell.) L.H.Bailey
<i>Persicaria chinensis</i> (L.) H. Gross
<i>Polygonum pubescens</i> Blume
<b>PONTEDERIACEAE</b>
<i>Eichhornia crassipes</i> (Mart.) Solms
<i>Monochoria hastata</i> (L.) Solms
<i>Monochoria vaginalis</i> (Burm.f.) C.Presl

Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>PORTULACACEAE</b>
<i>Portulaca grandiflora</i> Hook.
<i>Portulaca oleracea</i> L.
<i>Portulaca oleracea</i> L. 'All Aglow'
<i>Portulaca umbraticola</i> Kunth
<i>Portulacaria afra</i> Jacq.
<i>Talinum paniculatum</i> (Jacq.) Gaertn.
<i>Talinum portulacifolium</i> (Forssk.) Asch. ex Schweinf.
<b>POTAMOGETANACEAE</b>
<i>Potamogeton nodosus</i> Poir.
<b>PROTEACEAE</b>
<i>Grevillea robusta</i> A.Cunn. ex R.Br.
<b>PUNICACEAE</b>
<i>Punica granatum</i> L.
<b>RANUNCULACEAE</b>
<i>Clematis gouriana</i> Roxb. ex DC.
<i>Clematis recta</i> L.
<i>Naravelia zeylanica</i> (L.) DC.
<b>RHIZOPHORACEAE</b>
<i>Carallia brachiata</i> (Lour.) Merr.
<b>ROSACEAE</b>
<i>Fragaria vesca</i> L.
<i>Prunus ceylanica</i> Miq.
<i>Rosa damascena</i> Mills.
<i>Rosa multiflora</i> Thunb.
<i>Rosa</i> sp.
<i>Rubus niveus</i> Thunb.
<b>RUBIACEAE</b>
<i>Catunaregam spinosa</i> (Thunb.) Tirveng.
<i>Chassalia curviflora</i> var. <i>ophioxylodes</i> (Wall.) Deb & B.Krishna
<i>Coffea arabica</i> L.
<i>Coffea canephora</i> Pierre ex A.Froehner
<i>Gardenia jasminoides</i> J.Ellis
<i>Gardenia resinifera</i> Roth
<i>Geophila repens</i> (L.) I.M.Johnst.
<i>Haldina cordifolia</i> (Roxb.) Ridsdale
<i>Hamelia patens</i> Jacq.
<i>Hymenodictyon orixense</i> (Roxb.) Mabb.
<i>Ixora casei</i> Hance cv. <i>Super king</i>
<i>Ixora chinensis</i> Lam. cv. <i>Nana pink</i>
<i>Ixora chinensis</i> Lam. cv. <i>Nana red</i>
<i>Ixora chinensis</i> Lam. cv. <i>Nana white</i>
<i>Ixora chinensis</i> Lam. cv. <i>rosea</i>
<i>Ixora coccinea</i> L.
<i>Ixora finlaysonianana</i> Wall. ex G.Don

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>RUBIACEAE (cont'd)</b>
<i>Ixora javanica</i> (Blume) DC.
<i>Ixora nigricans</i> R.Br. ex Wight & Arn.
<i>Ixora parviflora</i> Lam.
<i>Ixora singaporensis</i> hort.
<i>Ixora</i> sp.
<i>Mitracarpus hirtus</i> (L.) DC.
<i>Mitragyna parvifolia</i> (Roxb.) Korth.
<i>Mussaenda erythrophylla</i> Schumach. & Thonn. (Rose)
<i>Mussaenda erythrophylla</i> Schumach. & Thonn. (yellow)
<i>Mussaenda frondosa</i> L.
<i>Mussaenda philippica</i> A.Rich.
<i>Mussaenda</i> sp. (bract yellow)
<i>Oldenlandia auricularia</i> (L.) K.Schum.
<i>Oldenlandia corymbosa</i> L.
<i>Oldenlandia herbacea</i> (L.) Roxb.
<i>Ophiorrhiza rugosa</i> var. <i>prostrata</i> (D.Don) Deb & Mondal
<i>Pavetta indica</i> L. var. <i>indica</i> Hook.f.
<i>Pavetta indica</i> var. <i>tomentosa</i> (Roxb. ex Sm.) Hook.f.
<i>Pentas lanceolata</i> (Forssk.) Deflers
<i>Pentas lanceolata</i> (Forssk.) Deflers cv. <i>coccinea</i>
<i>Pentas lanceolata</i> (Forssk.) Deflers cv. <i>karmesiana</i>
<i>Pentas lanceolata</i> (Forssk.) Deflers cv. <i>lilacina</i>
<i>Pentas lanceolata</i> var. <i>oncostipula</i> (K.Schum.) Verdc.
<i>Psilanthus travancorensis</i> (Wight & Arn.) J.-F.Leroy
<i>Psychotria nigra</i> (Gaertn.) Alston
<i>Psydrax umbellata</i> (Wight) Bridson
<i>Serissa japonica</i> (Thunb.) Thunb.
<i>Serissa japonica</i> (Thunb.) Thunb. cv. <i>variegata</i>
<i>Spermacoce articularis</i> L.f.
<i>Spermacoce exilis</i> (L.O.Williams) C.D.Adams ex W.C.Burger & C.M.Taylor
<i>Spermacoce hispida</i> L.
<i>Spermacoce latifolia</i> Aubl.
<i>Spermacoce ocymoides</i> Burm.f.
<i>Spermacoce pusilla</i> Wall.
<b>RUTACEAE</b>
<i>Acronychia pedunculata</i> (L.) Miq.
<i>Aegle marmelos</i> (L.) Corrêa
<i>Citrus aurantiifolia</i> (Christm.) Swingle
<i>Citrus limon</i> (L.) Burm. f.
<i>Citrus medica</i> L.
<i>Clausena anisata</i> (Willd.) Hook.f. ex Benth.
<i>Evodia elegans</i> Sander
<i>Glycosmis pentaphylla</i> (Retz.) DC.
<i>Melicope lunu-ankenda</i> (Gaertn.) T.G. Hartley
<i>Murraya koenigii</i> (L.) Spreng.

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>RUTACEAE (cont'd)</b>
<i>Murraya paniculata</i> (L.) Jack
<i>Naringi crenulata</i> (Roxb.) Nicolson
<i>Ruta chalepensis</i> L.
<i>Vepris bilocularis</i> Engl.
<i>Zanthoxylum rhetsa</i> DC.
<b>SALVINIACEAE</b>
<i>Salvinia adnata</i> Desv.
<i>Salvinia auriculata</i> Aubl.
<b>SANTALACEAE</b>
<i>Santalum album</i> L.
<b>SAPINDACEAE</b>
<i>Allophylus cobbe</i> (L.) Raeusch.
<i>Cardiospermum halicacabum</i> L.
<i>Filicium decipiens</i> (Wight & Arn.) Thwaites
<i>Nephelium lappaceum</i> L.
<i>Sapindus trifoliatus</i> L.
<i>Schleichera oleosa</i> (Lour.) Merr.
<b>SAPOTACEAE</b>
<i>Chrysophyllum cainito</i> L.
<i>Madhuca longifolia</i> var. <i>latifolia</i> (Roxb.) A.Chev.
<i>Madhuca longifolia</i> var. <i>longifolia</i> Vajr.
<i>Mimusops elengi</i> L.
<i>Palaquium ellipticum</i> (Dalzell) Baill.
<i>Pouteria campechiana</i> (Kunth) Baehni
<b>SCROPHULARIACEAE</b>
<i>Angelonia grandiflora</i> C.Morren
<i>Angelonia salicariaefolia</i> Humb. & Bonpl.
<i>Artanema longifolium</i> (L.) Vatke
<i>Bacopa caroliniana</i> (Walter) B.L.Rob.
<i>Bacopa monnieri</i> (L.) Wettst.
<i>Calceolaria mexicana</i> Benth.
<i>Centranthera indica</i> (L.) Gamble
<i>Ilysanthes rotundifolia</i> (L.) Benth.
<i>Limnophila conferta</i> Benth.
<i>Limnophila heterophylla</i> (Roxb.) Benth.
<i>Limnophila repens</i> (Benth.) Benth.
<i>Lindernia antipoda</i> (L.) Alston
<i>Lindernia caespitosa</i> (Blume) Panigrahi
<i>Lindernia ciliata</i> (Colsm.) Pennell
<i>Lindernia crustacea</i> (L.) F.Muell.
<i>Lindernia</i> sp.
<i>Lindernia viscosa</i> (Hornem.) Merr.
<i>Mecardonia procumbens</i> (Mill.) Small
<i>Otacanthus azureus</i> (Linden) Ronse
<i>Russelia equisetiformis</i> Schltldl. & Cham.

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>SCROPHULARIACEAE (cont'd)</b>
<i>Scoparia dulcis</i> L.
<i>Stemodia viscosa</i> Roxb.
<i>Torenia bicolor</i> Dalzell
<i>Torenia fournieri</i> Linden ex E. Fourn.
<b>SIMAROUBACEAE</b>
<i>Ailanthus triphysa</i> (Dennst.) Alston
<b>SMILACACEAE</b>
<i>Smilax zeylanica</i> L.
<b>SOLANACEAE</b>
<i>Capsicum annuum</i> var. <i>annuum</i> L.
<i>Capsicum annuum</i> L.
<i>Capsicum annuum</i> L.
<i>Datura metel</i> L.
<i>Datura stramonium</i> L.
<i>Lycopersicon esculentum</i> Mill.
<i>Petunia</i> × <i>hybrida</i> hort. ex Vilm.
<i>Physalis angulata</i> L.
<i>Solanum americanum</i> Mill.
<i>Solanum capsicoides</i> All.
<i>Solanum melongena</i> L.
<i>Solanum pimpinellifolium</i> L.
<i>Solanum rudepannum</i> Dunal
<i>Solanum</i> sp.
<i>Solanum violaceum</i> Ortega
<i>Solanum virginianum</i> L.
<i>Withania somnifera</i> (L.) Dunal
<b>STERCULIACEAE</b>
<i>Dombeya burgessiae</i> Gerrard ex Harv. & Sond.
<i>Helicteres isora</i> L.
<i>Kavalama urens</i> (Roxb.) Raf.
<i>Melochia corchorifolia</i> L.
<i>Pterospermum reticulatum</i> Wight & Arn.
<i>Pterygota alata</i> (Roxb.) R.Br.
<i>Sterculia guttata</i> Roxb.
<i>Theobroma cacao</i> L.
<i>Waltheria indica</i> L.
<b>TACCACEAE</b>
<i>Tacca chantrieri</i> André
<b>THEACEAE</b>
<i>Camellia sinensis</i> (L.) Kuntze
<i>Eurya japonica</i> Thunb.
<b>TILIACEAE</b>
<i>Corchorus aestuans</i> L.
<i>Grewia abutilifolia</i> Juss.
<i>Grewia tiliifolia</i> Vahl
<i>Triumfetta rhomboidea</i> Jacq.

Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>TRAPACEAE</b>
<i>Trapa natans</i> var. <i>bispinosa</i> (Roxb.) Makino
<b>TRICHOPODACEAE</b>
<i>Trichopus zeylanicus</i> Gaertn. ssp. <i>travancoricus</i> (Bedd.) Burkill ex Narayanan
<b>TURNERACEAE</b>
<i>Turnera subulata</i> Sm.
<i>Turnera ulmifolia</i> L.
<b>TYPHACEAE</b>
<i>Typha angustifolia</i> L.
<b>URTICACEAE</b>
<i>Debregeasia longifolia</i> (Burm.f.) Wedd.
<i>Dendrocnide sinuata</i> (Blume) Chew
<i>Laportea interrupta</i> (L.) Chew
<i>Pellionia heyneana</i> Wedd.
<i>Pellionia repens</i> (Lour.) Merr.
<i>Pilea cadierei</i> Gagnep. & Guillaumin
<i>Pilea depressa</i> (Sw.) Blume
<i>Pilea involucrata</i> (Sims) C.H.Wright & Dewar
<i>Pilea microphylla</i> (L.) Liebm.
<i>Pilea nummulariifolia</i> (Sw.) Wedd.
<i>Pilea spruceana</i> Wedd.
<i>Pilea spruceana</i> Wedd. cv. <i>Silver tree</i>
<i>Pouzolzia zeylanica</i> (L.) Benn. & R. Br.
<b>VERBENACEAE</b>
<i>Callicarpa tomentosa</i> (L.) L.
<i>Clerodendrum incisum</i> Klotzsch
<i>Clerodendrum infortunatum</i> L.
<i>Clerodendrum paniculatum</i> L.
<i>Clerodendrum phlomidis</i> L.f.
<i>Clerodendrum thomsoniae</i> Balf.f.
<i>Duranta erecta</i> L.
<i>Duranta erecta</i> L. cv. <i>Golden dewdrops</i>
<i>Glandularia pulchella</i> (Sweet) Tronc.
<i>Gmelina arborea</i> Roxb.
<i>Holmskioldia sanguinea</i> Retz.
<i>Lantana</i> × <i>aculeata</i> L.
<i>Lantana camara</i> L.
<i>Lantana depressa</i> Small
<i>Lantana montevidensis</i> (Spreng.) Briq. cv. <i>Dwarf white</i>
<i>Lantana montevidensis</i> (Spreng.) Briq. cv. <i>Pink frolic</i>
<i>Lantana nivea</i> Vent.
<i>Premna coriacea</i> C.B.Clarke
<i>Premna corymbosa</i> Rottler & Willd.
<i>Premna serratifolia</i> L.
<i>Rotheca serrata</i> (L.) Steane & Mabb.
<i>Stachytarpheta cayennensis</i> (Rich.) Vahl

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Table 1 (cont'd). Plant taxa in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

<b>VERBENACEAE (cont'd)</b>
<i>Stachytarpheta indica</i> (L.) Vahl
<i>Stachytarpheta jamaicensis</i> (L.) Vahl
<i>Stachytarpheta mutabilis</i> (Jacq.) Vahl
<i>Tectona grandis</i> L.f.
<i>Tectona hamiltoniana</i> Wall.
<i>Vitex altissima</i> L.f.
<i>Vitex negundo</i> L.
<b>VIOLACEAE</b>
<i>Hybanthus enneaspermus</i> (L.) F.Muell.
<b>VITACEAE</b>
<i>Cissus javana</i> DC.
<i>Cissus quadrangularis</i> L.
<i>Vitis vinifera</i> L.
<b>ZINGEBERACEAE</b>
<i>Alpinia calcarata</i> (Haw.) Roscoe
<i>Alpinia galanga</i> (L.) Willd.
<i>Alpinia purpurata</i> (Vieill.) K.Schum.
<i>Alpinia zerumbet</i> (Pers.) B.L.Burtt & R.M.Sm.
<i>Curcuma amada</i> Roxb.
<i>Curcuma aromatica</i> Salisb.
<i>Curcuma longa</i> L.
<i>Curcuma neilgherrensis</i> Wight
<i>Curcuma zedoaria</i> (Christm.) Roscoe
<i>Elettaria cardamomum</i> (L.) Maton
<i>Hedychium coronarium</i> J.König
<i>Kaempferia elegans</i> (Wall.) Baker
<i>Kaempferia galanga</i> L.
<i>Kaempferia rotunda</i> L.
<i>Zingiber officinale</i> Roscoe
<i>Zingiber zerumbet</i> (L.) J.E.Smith
<b>ZYGOPHYLLACEAE</b>
<i>Tribulus terrestris</i> L.



Table 2. Angiosperm families in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

	Family name	Number of genera	Number of taxa	Number of species	Number of cultivars and hybrids
1.	Acanthaceae	27	71	62	9
2.	Agavaceae	7	38	13	25
3.	Aizoaceae	7	7	7	0
4.	Alangiaceae	1	1	1	0
5.	Alismataceae	6	6	6	0
6.	Aloeaceae	3	14	14	0
7.	Amaranthaceae	8	25	17	8
8.	Amaryllidaceae	8	13	12	1
9.	Anacardiaceae	6	6	6	0
10.	Annonaceae	6	9	9	0
11.	Apiaceae	4	5	5	0
12.	Apocynaceae	19	36	30	6
13.	Aponogetanaceae	1	3	3	0
14.	Araceae	19	62	43	19
15.	Araliaceae	3	10	8	2
16.	Arecaceae	36	53	53	0
17.	Aristolochiaceae	2	3	3	0
18.	Asclepiadaceae	9	12	12	0
19.	Asperagaceae	1	6	4	2
20.	Asteraceae	44	65	63	2
21.	Balsaminaceae	1	7	6	1
22.	Basellaceae	1	2	2	0
23.	Begoniaceae	1	20	6	14
24.	Bignoniaceae	9	11	10	1
25.	Bixaceae	1	1	1	0
26.	Bombacaceae	1	1	1	0
27.	Boragianaceae	3	5	5	0
28.	Brassicaceae	2	2	2	0
29.	Bromeliaceae	5	11	10	1
30.	Bureraceae	2	3	3	0
31.	Cabombaceae	1	1	1	0
32.	Cactaceae	28	54	54	0
33.	Caesalpiniaceae	13	32	32	0
34.	Cannaceae	1	3	2	1
35.	Capparidaceae	2	4	4	0
36.	Caprifoliaceae	1	1	1	0
37.	Caricaceae	1	1	1	0
38.	Casuarinaceae	1	1	1	0
39.	Celastraceae	4	5	5	0
40.	Ceratophyllaceae	1	1	1	0

Table 2 (cont'd). Angiosperm families in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

	Family name	Number of genera	Number of taxa	Number of species	Number of cultivars and hybrids
41.	Clusiaceae	3	7	7	0
42.	Combretaceae	4	8	8	0
43.	Commelinaceae	6	14	14	0
44.	Convolvulaceae	7	27	27	0
45.	Costaceae	3	6	5	1
46.	Crassulaceae	12	32	32	0
47.	Cucurbitaceae	5	6	6	0
48.	Cyclanthaceae	1	1	1	0
49.	Cyperaceae	7	24	24	0
50.	Datisceae	1	1	1	0
51.	Didiereaceae	1	1	1	0
52.	Dilleniaceae	1	2	2	0
53.	Elatinaceae	1	1	1	0
54.	Ericaceae	1	1	1	0
55.	Eriocaulaceae	1	5	5	0
56.	Euphorbiaceae	29	92	77	15
57.	Fabaceae	32	49	49	0
58.	Flacourtiaceae	2	3	3	0
59.	Gentianaceae	1	1	1	0
60.	Geraniaceae	1	1	1	0
61.	Gesneriaceae	7	10	9	1
62.	Haemodoraceae	1	3	3	0
63.	Haloragaceae	1	2	2	0
64.	Hamamelidaceae	1	1	1	0
65.	Heliconiaceae	1	3	2	1
66.	Hippocrateaceae	1	2	2	0
67.	Hydrangeaceae	1	1	1	0
68.	Hydrocharitaceae	5	5	5	0
69.	Hydrophyllaceae	1	1	1	0
70.	Hypoxidaceae	1	2	2	0
71.	Iridaceae	2	2	2	0
72.	Lamiaceae	9	24	21	3
73.	Lauraceae	4	7	7	0
74.	Lecythidaceae	3	3	3	0
75.	Leeaceae	1	3	3	0
76.	Lemnaceae	3	4	4	0
77.	Lentibulariaceae	1	4	4	0
78.	Liliaceae	4	5	5	0
79.	Limnocharitaceae	1	1	1	0
80.	Linaceae	2	2	2	0

Table 2 (cont'd). Angiosperm families in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

	Family name	Number of genera	Number of taxa	Number of species	Number of cultivars and hybrids
81.	Loganiaceae	2	3	3	0
82.	Loranthaceae	2	2	2	0
83.	Lythraceae	6	11	11	0
84.	Magnoliaceae	1	1	1	0
85.	Malpighiaceae	3	3	3	0
86.	Malvaceae	8	24	22	2
87.	Marantaceae	4	12	10	2
88.	Melastomataceae	3	4	4	0
89.	Meliaceae	8	11	11	0
90.	Menispermaceae	7	8	8	0
91.	Menyanthaceae	1	2	2	0
92.	Mimosaceae	7	15	15	0
93.	Molluginaceae	2	2	2	0
94.	Moraceae	6	21	19	2
95.	Moringaceae	1	1	1	0
96.	Musaceae	2	3	3	0
97.	Myristicaceae	2	2	2	0
98.	Myrsinaceae	1	1	1	0
99.	Myrtaceae	7	26	26	0
100.	Nelumonaceae	1	1	1	0
101.	Nepanthaceae	1	1	1	0
102.	Nyctaginaceae	4	7	7	0
103.	Nyctanthaceae	1	1	1	0
104.	Nymphaeaceae	2	13	9	4
105.	Oleaceae	3	13	10	3
106.	Onagraceae	1	6	6	0
107.	Orchidaceae	89	131	85	46
108.	Oxalidaceae	3	6	5	1
109.	Papavaraceae	1	1	1	0
110.	Passifloraceae	2	4	4	0
111.	Pedaliaceae	1	1	1	0
112.	Periplocaceae	2	2	2	0
113.	Phytalaccaceae	2	2	2	0
114.	Piperaceae	2	13	13	0
115.	Pittosporaceae	1	1	1	0
116.	Plumbaginaceae	1	3	3	0
117.	Poaceae	47	70	70	0
118.	Polemoniaceae	1	1	1	0
119.	Polygalaceae	2	3	3	0
120.	Polygonaceae	3	3	3	0

Table 2 (cont'd). Angiosperm families in the Kerala Forest Research Institute Sub Centre Campus at Nilambur

	Family name	Number of genera	Number of taxa	Number of species	Number of cultivars and hybrids
121.	Pontederiaceae	2	3	3	0
122.	Portulacaceae	2	7	6	1
123.	Potamogetanaceae	1	1	1	0
124.	Proteaceae	1	1	1	0
125.	Punicaceae	1	1	1	0
126.	Ranunculaceae	2	3	3	0
127.	Rhizophoraceae	1	1	1	0
128.	Rosaceae	4	6	6	0
129.	Rubiaceae	21	51	40	11
130.	Rutaceae	12	15	15	0
131.	Salviniaceae	1	2	2	0
132.	Santalaceae	1	1	1	0
133.	Sapindaceae	6	6	6	0
134.	Sapotaceae	5	6	6	0
135.	Scrophulariaceae	14	24	24	0
136.	Simaroubaceae	1	1	1	0
137.	Smilacaceae	1	1	1	0
138.	Solanaceae	7	16	15	1
139.	Sterculiaceae	9	9	9	0
140.	Taccaceae	1	1	1	0
141.	Theaceae	2	2	2	0
142.	Tiliaceae	3	4	4	0
143.	Trapaceae	1	1	1	0
144.	Trichopodaceae	1	1	1	0
145.	Turneraceae	1	2	2	0
146.	Typhaceae	1	1	1	0
147.	Urticaceae	6	13	12	1
148.	Verbenaceae	13	29	25	4
149.	Violaceae	1	1	1	0
150.	Vitaceae	3	3	3	0
151.	Zingiberaceae	6	16	16	0
152.	Zygophyllaceae	1	1	1	0
		840	1643	1452	191

In the campus, the taxa were represented by naturally grown, cultivated and both naturally grown and cultivated plants. Many plants were introduced since the establishment of the campus and there is no record for several species whether the individuals were planted or

naturally grown. Thus, attempt has not been made to count number of taxa belonging to each category separately.

In the light of increasing urbanisation and anthropogenic influences on the environment that are adversely affecting natural ecosystems, campuses like that of KFRI Sub Centre have become rare area where characteristics species of the area can be observed. In addition to this, certain species characteristic to mid land (eg. *Palaquium ellipticum*) and high altitude forests (eg. *Rhododendron arboreum ssp. nilagiricum*) of the State and that were planted in the campus are growing well. Therefore, the campus has the potential to become a biodiversity rich area with different plants belonging to diverse habitats, conservation status and economic uses.

It is recognised that the use of local environment in educational activities has a positive impact on the students' environmental sensitivity, environmental literacy, and skills (Ernst, 2007). Students of several schools and colleges, trainees of the forest department of different states and members of non-governmental organisations who visited the campus during the project period stated that they are benefitted by the visit as they could familiarise with representative plants of different use categories such as timber trees, poisonous plants, ornamental plants, medicinal and ornamental plants, hedge plants, edible plants etc. The interviews with teaching staff revealed that even the post graduate students who study in fields of forestry, botany, ecology and ethnobotany will be benefitted by visiting the Sub centre campus by having an opportunity to understand the relationship between the botanical, ecological, social, economic and cultural dimensions of managing plant resources and conserving botanical diversity.

### **Soil and water management**

A wide range of soil and water conservation measures have been used. The most common are discussed below.

In sloppy areas of the campus, bunds made of earth or stones or concrete were constructed along the contour line in order to reduce erosion and conserve water and litter within campus. In order to reduce the velocity of surface runoff the upper reaches, of the campus (particularly along the southern boundary) was treated by constructing contour bunds. This

has helped water infiltration and reducing soil erosion and water loss from the system (Figure 1). Along the plain and gentle slopes of the lower reaches staggered pits and trenches were dug to harvest water and silt and reduce the loss of water and soil from the system. Half-moon or staggered trenches each of 1 m x 0.5m and 0.5 m were dug at 2-3 m spacing staggered on contour, with interspacing being 5-6 m depending on slope (Figure 2). In the western part of the campus, where reeds were planted, ponds were excavated. Water in ponds was used to irrigate reeds during dry months. Sediments collected in these ponds were emptied annually and used for surface mulching in the planting basins. Soil and water conservation (SWC) structures constructed in the campus have mainly used to conserve rain water. These structures also retained organic matter, soil structure and soil depth and improved soil physical properties in the campus. Along the western boundary of the campus, agave (*Agave americana*) was planted as hedge plant (Figure 3) both to keep out cattle and other grazers and to control soil erosion.

Afforestation is an important component of sound forest management. Many eroded parts of the campus regenerated well only due to more protection from fire and grazing than improved biomass considerably and collection of biomass. However, in some areas profuse growth of alien weeds such as *Chromolaena odorata*, *Mimosa pudica* was observed. Such areas were managed by regular weeding and planting bamboos and tree species.

During summer months, young seedlings were irrigated at least once in a week till their establishment. Leaf litter lying along paths and road of the campus were swept regularly and stored in heap. Partially decomposed leaf litter was used as surface mulch material (Figure 4). In case of tree species trial plots, leaf litter accumulated on the floor have not been disturbed in order to enrich soil with nutrients and promote water conservation.

### **Protection**

The unique feature of the Sub Centre campus is that there is very heavy rain (2300 mm) especially during June to September. The soil is gravelly and sandy and highly susceptible to erosion by water thus making the area exposed with laterite blocks. In addition to this, it is noticed that the campus was showing several symptoms of un-sustainability such as soil degradation, water scarcity, loss of biodiversity, incidence of fire, grazing, biomass removal etc. However, right from the beginning of the establishment of the campus, sustainable





Figure 1. A contour bund constructed in the KFRI Sub Centre Campus



Figure 2. Staggered trenches in the bambusetum of the KFRI Sub Centre Campus





Figure 3. Live fence using *Agave americana* in the KFRI Sub Centre Campus



Figure 4. Surface mulching undertaken in the KFRI Sub Centre Campus



management of the area was the prime concern of the Institute. Attempts have been made to develop and maintain green cover throughout the campus. Among them establishment of tree species trial plots is prominent. Subsequent to this, establishment of multi-species trail plots (Nair et al., 1990) and thematic gardens in a bioresources nature trail under different schemes (Chandrashekara et al., 2008; Chandrashekara and Sasidharan, 2010) also led to enhance the number of taxa in the campus. It may be pointed out here that at present in the campus there are a lot of cultivated plants with several of their hybrids and cultivars. In order to protect the vegetation, about 40-50% of the total circumference of the campus was fenced using chain-link tied to concrete posts fixed at every 2 m interval. The remaining length of the campus is also being protected by chain link fencing in a phased manner. Works have also been initiated to grow hedge plants all along the inner margin of the chain-link fence in order to reinforce the chain-link fencing.

## **CONCLUSION**

Knowledge of the organisms present in a region is an important step for future conservation measures. Although this preliminary work has greatly increased knowledge of the angiosperm diversity in the KFRI Sub Centre campus, it is clear that knowledge of the flora is far from complete and future collection and documentation will certainly add to the records presented here. With increasing habitat alteration in the State there is an urgent need to improve knowledge on the biodiversity of all well managed campuses and concomitantly with these efforts, design initiatives for the strengthening protection and sustainable management of the unique and diverse habitats of Kerala. Checklist of floristic diversity is a basic step in this effort. Therefore, attempts are to be made to prepare the checklist of diversity of all groups of plants.

It was observed that due to various reasons the numbers of some species decreased and some are totally absent now. Therefore, in terms of preserving floral diversity, it is important to replant and restock the area with such species. Recently the Institute has also initiated several programmes such as establishment of a field gene-bank for rare endangered and threatened (RET) tree species and establishment of taxonomic botanic garden at the KFRI Sub Centre, Nilambur, Kerala. These projects will also enable increase in the plant species diversity in the campus.

In Kerala, the school-based environmental education where the teachers use the local environment as a context for integrating subjects and a source of real world learning experiences is getting prominence. Despite the growing body of evidence supporting such education pattern, it appears that it is being practiced in relatively few schools and by few teachers. When the reasons are examined, it becomes apparent that financial constraints and time limitations are important factors. In this context, the campus of KFRI Sub Centre being an important floristic locus in the Malabar region has prominence in the educational processes also.

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