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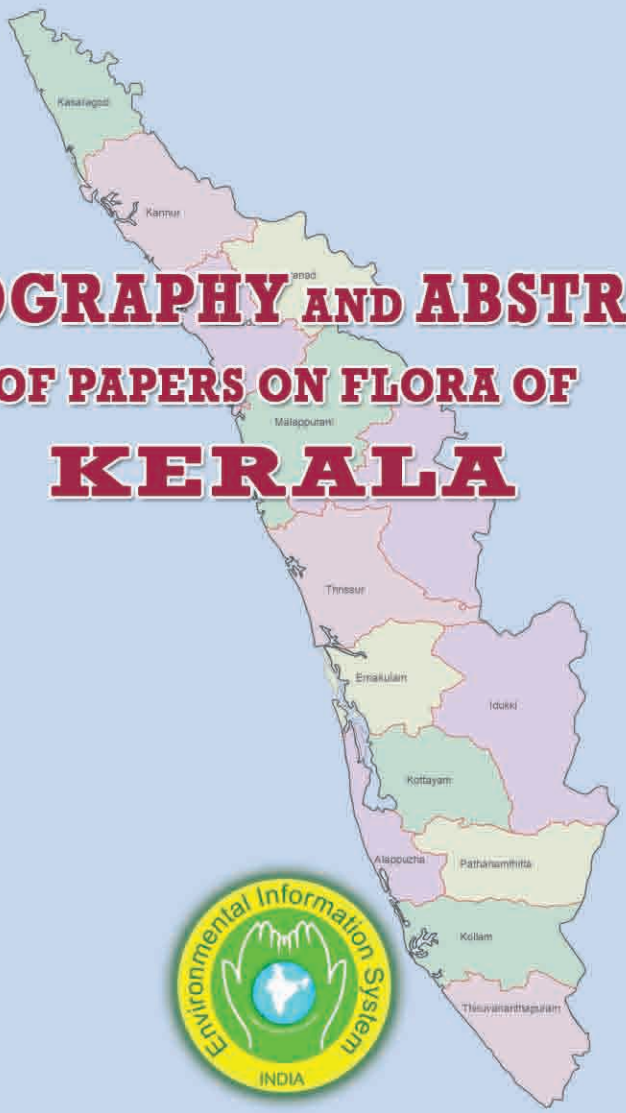
BIBLIOGRAPHY AND ABSTRACTS OF PAPERS ON FLORA OF KERALA



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2013

भारतीय वनस्पति सर्वेक्षण
BOTANICAL SURVEY OF INDIA

जहाँ है हरियाली।
वहाँ है खुशहाली॥

BOTANICAL SURVEY OF INDIA

MINISTRY OF ENVIRONMENT & FORESTS

BIBLIOGRAPHY AND ABSTRACTS OF PAPERS ON FLORA OF KERALA

Compiled by

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under ENVIS Programme

भारतीय वनस्पति सर्वेक्षण
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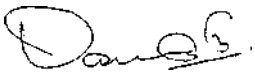
FOREWORD

The ENVIS Centre on Floral Diversity of the Botanical Survey of India has been publishing State-wise Bibliography and Abstracts of Papers pertaining to Floras. In this attempt, the Centre has already published consolidated bibliography and abstracts on flora of West Bengal (in two parts), North East India – I, Andaman and Nicobar Islands and Maharashtra. Kerala is the southernmost state along the Western Coast of Peninsular India. Due to the long tract of Western Ghats on the east and Arabian Sea on the west, the physiography of the state is highly diversified. The Western Ghats (together with Sri Lanka) is one of the hottest biodiversity hotspots in the world and has recently been declared as a Natural World Heritage Site by UNESCO. The state harbours 5094 taxa under 1537 genera and 221 families of flowering plants (Sasidharan, 2012). Nearly 1709 taxa that are endemic to Peninsular India are found in Kerala. Some of the important publications pertaining to the Flora of Kerala State are 'Biodiversity Documentation for Kerala: Flowering Plants' (Sasidharan, 2004), 'The Flora of Kerala Volume 1' (Daniel, 2005), 'Flowering Plants of Kerala – A Handbook' (Nayar & al., 2006) and a DVD of 'Flowering Plants of Kerala' (Sasidharan, 2012). Besides, there are bibliographies/references pertaining to Flora of Kerala such as in "Key Works of Floristics of India Vol. 1" (Nayar & Giri, 1988), and "Bibliography on the Angiosperm Flora of Kerala State" (Nair, 1997). The present work was therefore taken up with an objective to compile the scattered literature on the rich and diverse flora of Kerala state. Hope, this compilation comprising of 1373 references would help those who are interested in the flora, forestry, phytogeography, endemism, ecology, conservation, and economic and ethnobotany of this region. An electronic version of this publication will be made available on ENVIS-BSI website (www.bsienvis.nic.in).



Botanical Survey of India
Kolkata

(Paramjit Singh)
Director

INTRODUCTION

Kerala is the southernmost state along the Western Coast of Peninsular India. It lies between 8°18' – 12°48' N and 74°52' – 77°22' E. The state has a total area of 38,863 km^2, which constitute 1.8% of the total geographical area of India. Situated in the south-west region of Indian Peninsula, the state is bounded on the north and northeast by Karnataka, east (Western Ghats) and south by Tamil Nadu, and west by the Arabian Sea. The state has about 590 km of coastal belt.

Based on physiography, the state can be divided into three climatically distinct regions, viz., lowlands or coastal zone (below 20 – 300 m), midlands (300 – 600 m) and highlands (above 600 m). However, administratively, the state is divided into 14 districts, namely, Thiruvananthapuram, Kollam, Pathanamthitta, Alappuzha, Kottayam, Idukki, Ernakulam, Thrissur, Palakkad, Malappuram, Kozhikode, Wayanad, Kannur and Kasaragod. The state forms part of the Western Ghats, which together with Sri Lanka is one of the 34 globally recognized biodiversity hotspot regions (Mittermeier & al., 2004). Western Ghats covers 72.08% (28,008 km^2) of the total geographical area of the state (Sudha, 2011). Anaimudi, the tallest peak in southern India (2,695 m) is situated in the Anamalai high ranges of Western Ghats in Idukki district.

Kerala has a warm-humid tropical climate. The mean daily temperature ranges from 19.8° to 37°C. However, at higher altitudes the temperature often drops to 7°C during winter. The average annual rainfall of the state ranges from 101.6 to 362 cm. The state receives maximum rainfall (around 65%) during southwest monsoon from June to August, and the rest from September to December during northeast monsoon. The atmospheric relative humidity varies from 70 – 90%. Kerala has many lakes and rivers. There are 44 main rivers that originate from the Western Ghats, and empty themselves into the Arabian Sea, and 21 major lakes and many backwater canals in the state.

A warm-humid climate with perennial water resource and nutrient rich soil has attributed to diverse vegetation with enormous species diversity in the state. The high ranges and foot hills of Western Ghats, and upland region (100 – 300 m) harbour the major forest cover of Kerala. At present, the state has an area of 11,125.5 km^2, which constitute 28.63% of the total geographical area. The predominant forest types of Kerala are: Wet evergreen, Moist deciduous, Semi-evergreen, Moist deciduous, Dry deciduous and Shola-grassland complex (Champion & Seth, 1968). Besides, the state has scattered patches of mangroves along the coastal line (Anupama & Sivadasan, 2004), and Myristica swamps, a rare and unique type of evergreen vegetation, in Achenkoil and Kulathupuzha valleys of Kollam district, and adjacent Kottur range of Thiruvananthapuram district (Nayar, 1995; Mohanan & Daniel, 2005). There are 2 Biosphere Reserves, 3 National Parks, 13

Wildlife Sanctuaries, 2 Tiger Reserves and 4 Elephant Reserves in Kerala. The state has a total of 3,213.24 km^2 forest area under Protected Areas Network.

Flora provides authentic information about plants that occur in a particular geographical region. The magnificent 12-volume monumental treatise, "Hortus Indicus Malabaricus" by the Dutch explorer, Hendrik Adriaan van Rheede tot Draakestein (1678 – 1703), was the first authentic account on the plants of Kerala. Since then, numerous numbers of publications dealing with the flora of various plant groups have been published. Some of the recent important publications pertaining to the Flora of Kerala State are 'Biodiversity Documentation for Kerala: Flowering Plants' (Sasidharan, 2004), 'The Flora of Kerala' Volume 1 (Daniel, 2005), 'Flowering Plants of Kerala – A Handbook' (Nayar & al., 2006) and a DVD of 'Flowering Plants of Kerala' (Sasidharan, 2012).

Based on floristic composition the state of Kerala comes under the Malabar phytogeographical province (Takhtajan, 1986). The state harbours 5094 taxa under 1537 genera and 221 families of flowering plants (Sasidharan, 2012). A total of 1709 taxa that are endemic to Peninsular India are found in Kerala; of which 237 species distributed in 47 families are exclusively endemic to the present political boundary of the state (Nayar & al., 2008). There are about 1170 species with established medicinal properties. The flowering plants of Kerala include 858 exotics that have been introduced as agriculture, forestry as well as accidentally entered species (Sasidharan, 2012), of which around 200 species have become naturalised in the state. Gymnosperms are represented by just 5 species belonging to 3 genera. The state also harbours 337 species of pteridophytes (Easa, 2003), and 465 taxa of bryophytes (Manju & al., 2008).

The present work was taken up with an objective to compile the scattered literature to prepare a comprehensive bibliography and abstracts of research articles, floras/books pertaining to the rich and diverse flora of Kerala state. It also provides abstracts of articles published on phytogeography, endemism, ethnobotany, medicinal plants, ecology, and conservation.

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K E R A L A

1. **Abdul Kader, S. 2010.** "A note on the occurrence of *Bombax scopulorum* Dunn. – A lesser known 'Ilavu' species in Silent Valley National Park (A part of Nilgiri Biosphere Reserve), Palakkad district, Kerala state". *J. Econ. Taxon. Bot.* 34: 920–924.
   Abstract:- During the recent visit to Silent Valley National Park in Palakkad district of Kerala state on 5th February 2010, *Bombax scopulorum* Dunn (syn.: *B. insigne* Bourd.) – a lesser known indigenous 'Ilavu' species was noticed inside the forest which was not reported from this area. This is the first report on the distribution of this species in the northern Kerala and hence the present observation is very significant phytogeographically. Moreover, detailed account of *B. ceiba* L., *B. insigne* Wall. and *B. scopulorum* Dunn are given for comparison.
2. **Abhilash, E.S. & Menon, A.R.R. 2009.** "Status survey of *Nageia wallichiana* (Presl) O. Ktze in natural habitats of Goodrical Reserve Forests, Western Ghats, India". *Indian Forester* 135: 281–286.
   Abstract:- The study reveals the phyto-sociological aspects of *Nageia wallichiana* and plant diversity in the study area. In both the study sites the same typical evergreen species *Palaquium ellipticum* and *Cullenia exarillata* showed higher dominance among other species. It is evident that *Nageia wallichiana* is definitely established in the community but not as a dominant or co-dominant species in the study sites. In both the study sites, the *N. wallichiana* showed random distribution. However, most of the species in site I were contiguously distributed and in site II randomly distributed. The floristic study shows that the natural habitats of *N. wallichiana* harbour large number of endemic plants and other categories of the conservational importance, viz., endangered, rare and vulnerable plants.
3. **Abraham, A. & Vatsala, P. 1981.** "*Introduction to orchids with illustrations and descriptions of 150 south Indian orchids*". Tropical Botanic Garden and Research Institute, Trivandrum.
   Abstract:- In this book, 150 species of orchids native to Southern India, which have been collected during survey trips to various parts of the Western Ghats of Kerala and Tamil Nadu have been treated.
4. **Adawadkar, B. & Makhija, U. 2006.** "*Thalloloma* (Graphidaceae), a lichen genus new to India". *Phytotaxonomy* 6: 11–13.
   Abstract:- The lichen *Thalloloma patulum* (A.W. Archer) Adawadkar & Makhija has been recorded for the first time for India from Kerala.

5. **Ahmed, T.U.K., Mathew, P. & Biju, S.D. 1990.** "*Diodia teres* Walt. (Rubiaceae) – A new record for India". *Indian J. Forest.* 13: 351–352.
Abstract:- *Diodia teres* Walt. has been recorded for the first time for India from Ernakulam district of Kerala.

6. **Airy Shaw, H.K. 1963.** "Notes on Malaysian and other Asiatic Euphorbiaceae". *Kew Bull.* 16: 341–372.
Abstract:- Notes on new species, new combinations or new additions belonging to 28 different genera of the family Euphorbiaceae from Malaysia and other Asiatic countries have been discussed. A new species of *Ostodes*, viz., *O. integrifolius* has been described from Tamil Nadu (Nilgiri) and Kerala (Travancore).

7. **Ajitkumar, K.G. & Chitra, R.S. 2009.** "A survey of the medicinal use of religious plants in Parassala panchayat, Neyyattinkara taluk, Kerala". *J. Econ. Taxon. Bot.* 33(Suppl.): 143–148.
Abstract:- Plants have been associated with the health of mankind from time immemorial. India apart from being known for its ancient civilization and deep rootedness in its tradition is known for its rich diversity, both cultural as well as biological. The present study reveals the medicinal uses of 25 plant species which are considered sacred plants at temples or homes. They are rich source of medicine for various ailments of mankind. Documentation of such knowledge is important to evaluate culture and protection of people's exert on local biodiversity, since these aspects have implications in conservation and management of local resources. Unscientific exploitation has resulted a drastic reduction in the density of the sacred medicinal plants.

8. **Aleykutty, K.M. & Inamdar, J.A. 1978.** "*Cabomba aquatica* Aubl. – A new record for India from Kerala". *Curr. Sci.* 47: 136–137.
Abstract:- *Cabomba aquatica* Aubl. has been recorded for the first time for India from Cochin, Kerala. Earlier this species was known to occur in Central and South America.

9. **Ali, S.U. & Chelladurai, V. 1980.** "Botanical identity of '*Madanakama Poo*' obtained in Tamil Nadu and Kerala Raw Drug trade". *Bull. Med.-Ethno-Bot. Res.* 1: 196–202.
Abstract:- *Madanakama Poo* is reputed as an aphrodisiac in Siddha medical literature. The microsporophylls of *Cycas circinalis* L. constitute the drug according to earlier workers as evidenced in the literature on indigenous Materia Medica. A survey of crude drug commerce in Tamil Nadu and Kerala states revealed that another material is being used by the practitioners of indigenous medicine as *Madanakama Poo.* This paper deals with the elucidation of the botanical identity of the source taxon of the drug based on the morphology of the commercial samples. The material is identified as the flowers of *Careya*

arborea Roxb. of the family Lecythidaceae. This is a new record of the botanical source of *Madanakama Poo*.

10. **Almeida, M.R. & Almeida, S.M. 1993.** "Identification of some plants from 'Hortus Malabaricus'". *J. Bombay Nat. Hist. Soc.* 90: 423–429.
Abstract:- The paper deals with the nomenclature of six plants of which one is a fern and the rest are flowering plants. The correct scientific names of the plants have been brought out and thus six new combinations have been established.

11. **Amalraj, V.A. 1994.** "Genetic resources of banana collected from Southern India". *J. Econ. Taxon. Bot.* 18: 477–481.
Abstract:- A total of about 300 accessions of banana cultivars have been assembled through collections from the three southern states, viz., Kerala, Karnataka and Tamil Nadu and by exchange from Banana Research Station (Kannara) and NFPTCR (New Delhi). All these accessions are being maintained and characterised as per modified IBPGR descriptors. So far more than 250 accessions have been characterised and tentatively classified into genome groups. Highly variable characters and other observations as the result of characterisation study have been briefly discussed. A short note on need for conservation has been included. The same variety existing under different synonyms have been listed.

12. **Amalarj, V.A., Velayudhan, K.C. & Muralidharan, V.K. 1992.** "*Curcuma aurantiaca* van Zijp (Zingiberaceae) – A new record for India". *Indian J. Forest.* 15: 88–89.
Abstract:- *Curcuma aurantiaca* van Zijp has been recorded for the first time for India from Kerala. Earlier this species was known to occur in Java.

13. **Amalraj, V.A., Velayudhan, K.C. & Muralidharan, V.K. 1992.** "A note on *Curcuma cannanorensis* var. *lutea* Ansari *et al.* (Zingiberaceae)". *J. Econ. Taxon. Bot.* 16: 349–350.
Abstract:- A note to justify raising *Curcuma cannanorensis* var. *lutea* to species rank is given.

14. **Amalraj, V.A., Velayudhan, K.C., Muralidharan, V.K. & Soudamini, P. 1991.** "Studies of leaf morphology and its usefulness in taxonomy of South Indian *Dioscorea* species". *J. Swamy Bot. Club* 8: 51–60.
Abstract:- Leaf structure and epidermal peels of 18 collections representing 14 species of *Dioscorea* collected from Southern India have been studied. Without flower, these species are difficult to identify. The stem, leaf and petiole characters, and trichomes and types of cell wall thickening in dorsal epidermis were, to some extent, helpful in identification and hence used in formulating a taxonomic key. *Dioscorea alata* and *D. hispida* were the only two species without any cell wall thickening. Among the epidermal characters

statistically analysed for variance, all except dorsal epidermal cell length were significant. Grouping of 18 collections based on the above significant characters by computer oriented iterative algorithm resulted in four clusters.

15. **Ambily, D.V., Rajith, N.P., George, V. & Pushpangadan, P. 2010.** "Utilization of medicinal plants by the Paniyan tribe of Kozhikode district, Kerala". *Ethnobotany* 22: 14–24.

Abstract:- In olden days, good health was maintained in the villages because of the consumption of indigenous nutritious food and use of medicinal practices based on local plant wealth. The present study was undertaken to make a preliminary survey of plant wealth of Paniyans inhabiting Kozhikode district in Kerala. The study revealed 50 plant species belonging to 35 families used traditionally by Paniyans for the treatment of various ailments. The herbal recipes recorded in the present study may provide basis for studying them more critically for efficacy and also for developing new drugs.

16. **Ammal, L.S. & Bhavanandan, K.V. 1988.** "Cytology of *Blechnum occidentale* Linn. from South India". *Indian Fern J.* 5: 89–91.

Abstract:- A detailed cytological investigation of a tetraploid taxon of *Blechnum occidentale* from South India has been carried out. The spore mother cells consistently showed 40 bivalents and 44 univalents at metaphase – I. Micronuclei in varying numbers were observed at telophase I and II and in the tetrads and resulting in 46% spore sterility. The cytological evidence reveals that the present taxon is cytologically different from the materials of *B. occidentale* reported earlier from South India.

17. **Ammal, L.S. & Bhavanandan, K.V. 1990.** "A note on the cytology of a tetraploid cytotype of *Diplazium polypodioides* Bl. from Idukki (Kerala), South India". *Indian Fern J.* 7: 131–132.

Abstract:- Cytological investigation on *Diplazium polypodioides* Bl. from Idukki in the Western Ghats of Kerala has been conducted. The taxon is found to be a tetraploid cytotype (n = 82; 2n = 164).

18. **Ammal, L.S. & Bhavanandan, K.V. 1991.** "Cytological studies on some members of Pteridaceae (sensu Copeland) from South India". *Indian Fern J.* 8: 87–92.

Abstract:- Cytological studies on ten species covering six genera such as *Dennstaedtia scabra* (n = 123), *Microlepia trapeziformis* (n = 86), *Lindsaea heterophylla* (n = 90), *Pteris argyraea* (n = 58), *Pteris aspericaulis* (n = 29; 2n = 58), *Pteris vittata* (n = 29; n = 58), *Pteris octaria* (n = 58), *Cheilanthes varians* (n = 60; 2n = 120), *Pellaea boivini* (n = 60; 2n = 120) and *P. sagittata* (n = 2n = 87) from South India have been done. Of these, only two species are diploids and the others polyploids. The polyploids are at different

levels such as one triploid (apomictic), six tetraploids and one octoploid. Basic chromosome number for *Lindsaea* and *Pellaea* have been suggested. The systematic position of Pteridaceae has been discussed. Six species have been reported from Kerala.

19. **Ammal, L.S. & Bhavanandan, K.V. 1992.** "Studies on the cytology of some ferns from South India:. *Indian Fern J.* 9: 94–101.

Abstract:- Cytological studies on 10 taxa under 9 species namely, *Ophioglossum reticulatum* (n = ca 528; n = ca 230), *Schizaea digitata* (n = 240–250), *Anemia tomentosa* (n = 76), *Lygodium microphyllum* (n = 60), *Trichomanes elegans* (n = 36), *Oleandra neriiformis* (n = 82), *Antrophyum plantagineum* (n = 45), *Vittaria elongata* (n = 90) and *Azolla pinnata* (n = 44) from Kerala and Tamil Nadu states have been made. All the species are found to be polyploides, tetraploides, predominating. On the basis of cytological evidence, the ancestral basic chromosome number, x = 15, has been suggested for *Ophioglossum* and *Antrophyum*. Eight species have been reported from Kerala and two from Tamil Nadu.

20. **Ampili, P. & Panikkar, M.V.N. 1989.** "Observations on *Zygogonium kumaoense* Randhawa from Kerala". *J. Econ. Taxon. Bot.* 13: 71–73.

Abstract:- *Zygogonium kumaoense* Randhawa is recorded from different parts of Kerala state and studied its reproduction from two different habitats. The conjugation of this species is recorded for the first time. The asexual reproduction by akinetes is also reported and discussed in detail.

21. **Anil Kumar, N., Ratheesh Narayanan, M.K. & Satheesh, K. 2008.** "Traditional knowledge of three 'mycophilic' communities on wild edible mushrooms of Wayanad district, Kerala". *Ethnobotany* 20: 41–47.

Abstract:- The present paper deals with traditional knowledge about wild edible, mushrooms available among three tribal communities, namely *Paniya, Kattunaikka* and *Kuruma* in Wayanad district – a 'biodiversity hot-speck' in the global biodiversity hotspot Western Ghats in India. Using the data collected over a period of one year from 180 individuals, ethnobotanical knowledge among the 3 ethnic communities, who live close to the forest, with regard to mushroom availablity and utilization is evaluated. The knowledge and management approach of these communities for about 40 wild edible mushroom species are described with a detailed account of each taxon. Results show women, in particular, have profound knowledge about the ecology, usage and classification of a wide range of mushrooms that are available in the wild. A sizable number of species described are little known to the outside world though many of these have potential for research on their palatability and high nutritional as well as medicinal values.

22. **Anil Kumar, N., Ratheesh Narayanan, M.K., Sujanapal, P., Meera Raj, R., Sujana, K.A. & Mithunlal. 2011.** "*Impatiens veerapazhasii* (Balsaminaceae), a new scapigerous Balsam from Wayanad, Western Ghats, India". *J. Bot. Res. Inst. Texas* 5: 153–158.
Abstract:- A new species of *Impatiens* L. (Balsaminaceae), viz., *I. veerapazhasii* Ratheesh & al. allied to *I. pandata* Barnes, is described and illustrated from the Nilgiri phytogeographical region of Western Ghats of India (Kurichiarmala-Banasura hill ranges of Wayanad district in Kerala).

23. **Anil Kumar, N. & Ravi, N. 1992.** "A taxonomic note on *Passiflora foetida* Linn. in India". *J. Econ. Taxon. Bot.* 16: 69–72.
Abstract:- Two varieties of *Passiflora foetida* L., viz., *P. foetida* var. *foetida* and *P. foetida* var. *hispida* occur in India. The former is found in Andaman & Nicobar Islands, Tamil Nadu, Kerala and Andhra Pradesh and the latter in Kerala, Tamil Nadu and Andhra Pradesh.

24. **Anil Kumar, N. & Ravi, N. 1994.** "An interesting new species of *Hibiscus* Linn. (Malvaceae) from Kerala, India". *Rheedea* 4: 129–132.
Abstract:- An interesting species of *Hibiscus* Linn., viz., *H. sreenarayanianus*, which could be accommodated in any of the sections recognized under the genus, is described and illustrated.

25. **Anil Kumar, N., Sivadasan, M. & Ratheesh Narayanan, M.K. 2001.** "A new species of *Dysoxylum* Blume (Meliaceae) from India". *Rheedea* 11: 115–118.
Abstract:- A new species of *Dysoxylum*, viz., *D. swaminathanianum* is described from Kerala, India.

26. **Anilkumar, C. 2003.** "Species of *Ceramium* (Ceramiales – Rhodophyta) from Kerala". *Bull. Bot. Surv. India* 45: 173–178.
Abstract:- Five species of the genus *Ceramium* Roth [*C. caudatum* Setch & Gard, *C. californicum* J. Ag, *A. equisetoides* Daws, *C. flaccidum* (Kutz.) Ardissone and *C. suhrianum*] are described from Kerala. Of these *C. equisetoides* and *C. californicum* are the first reports from Indian Ocean and one species (*C. caudatum*) is new to Indian shores.

27. **Anilkumar, C. & Panikkar, M.V.N. 1994.** "Siphonaceous green algae of the Kerala coast". *J. Econ. Taxon. Bot.* 18: 483–487.
Abstract:- The present paper gives an account of 14 taxa of Siphonaceous green algae belonging to 9 genera collected from the coast of Kerala. Of these, *Caulerpa racemosa* var. *peltata, Codium indicum, Derbesia boergeseii, Cladophoropsis zollingeri, Boodlea composita, Acetabularia mobii* are the first reports from Kerala coast.

28. **Anilkumar, K.K. & Muraleedharakurup, G. 2010.** "Occurrence of mycorrhizal fungi in certain medicinally/economically important plants growing in their natural habitat".

Indian Forester 136: 1536–1544.

Abstract:- Field studies were conducted to examine whether the plants growing naturally in their habitat have a mycobiont in roots. A sum total of 106 angiospermic plants, which are of great economic/medicinal value, were randomly collected from different regions of Kottayam district, Kerala. It was found that five plants do not have any kind of mycorrhiza and they are herbaceous plants with low growth rate. Thirty-eight plants have ectomycorrhiza, ninety-six plants have endomycorrhiza and thirty-three have both types of mycorrhiza in their root systems. The mycorrhizal fungus acts as a link species between two plants.

29. **Anilkumar, R. 2006.** "*Christisonia indica* R. Anilkumar, sp. nov. (Orobanchaceae) – An undescribed root parasite from Peninsular India". *J. Econ. Taxon. Bot.* 30: 285–287.

Abstract:- A new species of *Christisonia*, viz., *C. indica* R. Anilkumar is described and illustrated from Onnamkurukku, Idukki district, Kerala.

30. **Anoop, K.P., Swapna, M.M., Rajilesh, V.K. & Prakashkumar, R. 2012.** "Taxonomy and distribution of the aquatic family Pontederiaceae Kunth in South India". *J. Econ. Taxon. Bot.* 36: 64–68.

Abstract:- The distribution and taxonomic characters of the noxious weeds of the family Pontederiaceae of South India are described in detail along with comments on the impact and range of the family in South India. *Eichhornia crassipes* (Mart.) Solms has been reported from Tamil Nadu, Kerala and Andhra Pradesh, *Monochoria hastata* (L.) Solms from Tamil Nadu, Kerala, Karnataka and Andhra Pradesh, *M. vaginalis* (Burm.f.) Presl from Kerala, Karnataka and Andhra Pradesh and *Pontederia cordata* L. from Kerala.

31. **Ansari, R. & Jeeja, G. 1993.** "On the identity and history of *Phyllanthus myrtifolius* Moon (Euphorbiaceae) in Kerala". *J. Econ. Taxon. Bot.* 17: 141–142.

Abstract:- *Phyllanthus myrtifolius* Moon has been identified and reported from Malabar region of Kerala. This plant was originally introduced into Nilgiris from Sri Lanka during 19th century and from there it was brought to Malabar as garden plant.

32. **Ansari, R., Nair, N.C. & Nair, V.J. 1982.** "An analysis of the lip of Oberonias in Andhra Pradesh, Kerala and Tamil Nadu". *J. Econ. Taxon. Bot.* 3: 113–119.

Abstract:- The structure of the lip of all the one species and three varieties of the *Oberonia* Lindl. (Orchidaceae) available in the three southern states of India, viz., Andhra Pradesh, Kerala and Tamil Nadu has been analytically studied and a dichotomous key has been prepared for the easy identification of various species. *Oberonia wightiana* Lindl. var. *arnottiana* R. Ansari, N.C. Nair *et* V.J. Nair (*stat. nov.*) is proposed and a new variety *O. wightiana* var. *nilgirensis* R. Ansari, N.C. Nair *et* V.J. Nair is described.

33. **Ansari, R. & Nair, V.J. 1987.** "Nomenclatural notes on some South Indian plants". *J. Econ. Taxon. Bot.* 11: 205–206.
Abstract:- A new combination *Crinum viviparum* is suggested for *C. defixum* and the var. *ensifolium* is brought under the new combination. *Memecylon wightianum* Triana is the correct name for the plant so far known as *M. deccanense*. The name *Mormordica charantia* var. *muricata* of Chakravarty is superfluous, and the earlier var. *abbreviata* Ser. is proposed as its legitimate name.

34. **Ansari, R., Nair, V.J. & Nair, N.C. 1982.** "Two new taxa of *Curcuma* Linn. (Zingiberaceae) from Cannanore district, Kerala, India". *Curr. Sci.* 51: 293–294.
Abstract:- One new species of *Curcuma*, viz., *C. cannanorensis* allied to *C. albiflora* Thwaites. has been described from Karimbam, Cannanore district, Kerala and a new variety *C. cannanorensis* var. *lutea* from Kalliasseri, Cannanore district, Kerala.

35. **Ansari, R., Nair, V.J. & Nair, N.C. 1984.** "On the identity and nomenclature of *Begonia fallax* DC. and *B. malabarica* Lam. (Begoniaceae)". *J. Econ. Taxon. Bot.* 5: 125–126.
Abstract:- Based on the critical study on the genus *Begonia*, the authors consider *B. fallax* DC. to be quite distinct from *B. malabarica* Lam. The correct nomenclatural citations and the distinguishing features of both the species have also been given.

36. **Ansari, R., Nair, V.J. & Nair, N.C. 1987.** "Two new species of *Eriocaulon* L. (Eriocaulaceae) from Kerala state". *J. Econ. Taxon. Bot.* 11: 235–238.
Abstract:- Two new species of *Eriocaulon* L., viz., *E. kasaragodense* R. Ansari, V.J. Nair & N.C. Nair (allied to *E. lanceolatum* Miq.) and *E. keralense* R. Ansari, V.J. Nair & N.C. Nair (allied to *E.* sexangulare L.) have been described from Kerala.

37. **Ansari, R., Ramachandran, V.S. & Sreekumar, P.V. 1984.** "*Ischaemum jayachandranii* – A new species of Poaceae from Kerala, India". *Curr. Sci.* 53: 151–153.
Abstract:- *Ischaemum jayachandranii*, a new species allied to *I. commutatum* Hack. has been described from Nileswar, Cannanore district, Kerala.

38. **Anto, P.V. & Renuka, C. 2003.** "An identification key for rattans of Western Ghats based on seed characters". *J. Non-Timber Forest Products* 10: 248–250.
Abstract:- A detailed study of the seeds of rattan species of Western Ghats revealed that most of the seed characteristics are species specific. The most useful characters are the shape, size, colour and surface features. A field identification key based on these characters was prepared for 16 species of *Calamus*, the only rattan genus in the Western Ghats.

39. **Anto, P.V., Renuka, C. & Pradeep, A.K. 2008.** "Demographic and conservation studies on two solitary species of *Calamus* in Western Ghats of Kerala, India". *J. Non-Timber Forest Products* 15: 225–234.

Abstract:- *Calamus vattayila* Renuka and *C. delessertianus* Becc. are two solitary rattan species sparsely distributed throughout the Western Ghats of India. Both species occur in the evergreen forest at 700 m altitude. These two species are extracted in large scale for the furniture industries and the populations are decreasing very rapidly. Hence conservation strategies and management practices should be developed to protect these species for their sustainable use. Demographic studies were carried out to find out which life stage of the population is adversely affected. In *C. vattayila* there is an annual decrease ($\lambda = 0.91$) of nine per cent in the population. Elasticity analysis of *C. vattayila* reveals that juvenile stage is more critical for conservation. Adult survival rate and germination percentage of seeds under natural condition are also very low (Anto, 2005). In the case of *C. delessertianus*, even though the population is increasing ($\lambda = 1.21$) in matrix analysis, population flux results show a decrease in population during the study period. Even though large amount of individuals are present in juvenile and seedlings its benefits are not seen in sub-adult and adult stage. Elasticity analysis shows that adult stage of this species is important in the conservation point of view. *Calamus vattayila* and *C. delessertianus* are more threatened due to the solitary nature. Hence *ex situ* and *in situ* conservation methods should be initiated for these species.

40. **Anto, P.V., Renuka, C. & Sreekumar, V.B. 2001.** "*Calamus shendurunii*, a new species of Arecaceae from Kerala, India". *Rheedea* 11: 37–39.
Abstract:- A new species *Calamus shendurunii* Anto, Renuka *et* V.B. Sreek. allied to *C. gamblei* Becc. is described from Shenduruny Valley, Kerala, India.

41. **Antony, R. 2009.** "*Pteris heteromorpha* Fee (Pteridaceae: Pteridophyta): A new record for Kerala". *J. Econ. Taxon. Bot.* 33: 428–429.
Abstract:- *Pteris heteromorpha* Fee, a rare fern is reported as a new record for Kerala state. A brief description along with photograph of herbarium specimen is given for easy identification.

42. **Antony, R., Khan, A.E.S., Kumar, E.S.S. & Thomas, J. 1996.** "A new variety of *Grammitis pilifera* Ravi & Joseph (Grammitidaceae: Pteridophyta) from Kerala, South India". *J. Econ. Taxon. Bot.* 20: 697–698.
Abstract:- A new variety of *Grammitis*, viz., *G. pilifera* var. *munnarensis* is described and illustrated from Munnar, Idduki district, Kerala, South India.

43. **Antony, R., Khan, A.E.S., Kumar, E.S.S. & Thomas, J. 1996.** "*Selaginella wightii* Hieron. (Selaginellaceae) – A new record for Kerala". *J. Econ. Taxon. Bot.* 20: 733–734.
Abstract:- *Selaginella wightii* Hieron. has been reported for the first time for Kerala from Chinnar, Idukki district, Kerala. Earlier this species was known from Tamil Nadu.

44. **Antony, R., Khan, A.E.S. & Thomas, J. 2000.** "Rare, endangered and threatened ferns from Chemunji Hills, Kerala". *J. Econ. Taxon. Bot.* 24: 413–415.
Abstract:- Eighteen rare, endangered and threatened ferns from Chemunji hills of Western Ghats in Kerala state are briefly described.

45. **Antony, R., Kumar, E.S.S. & Koshy, C.P. 2008.** "*Asplenium grevillei* Wall. ex Hook. & Grev. (Aspleniaceae) – An endangered spleen wort". *J. Econ. Taxon. Bot.* 32: 544–546.
Abstract:- *Asplenium grevillei* Wall. ex Hook. & Grev., an endangered 'Spleen Wort' is rediscovered after a lapse of three decades from a *Myristica* swamp of Kulathupuzha forest of Kollam district, Kerala state. A brief description and illustrations are given for easy identification.

46. **Antony, R., Kumar, E.S.S. & Kumar, A.E.S. 2002.** "*Selaginella camusii*, a new species of Selaginellaceae from India". *Nordic J. Bot.* 22: 337–339.
Abstract:- A new species of *Selaginella,* viz., *S. camusii* is described and illustrated from Kerala, India.

47. **Antony, R. & Mohanan, N. 2010.** "*Ex-situ* conservation and multiplication of *Podocarpus wallichianus* Presl – A threatened conifer of Western Ghats". *Indian J. Forest.* 33: 131–134.
Abstract:- The multiplication of *Podocarpus wallichianus* Presl, an IUCN listed threatened species and lone conifer of the Western Ghats was carried out through stem cuttings. The study reveals that this species can be multiplied through tender cuttings without hormone treatment. The *ex-situ* conservation programme was also initiated to save this species from the verge of extinction.

48. **Antony, R. & Mohanan, N. 2010.** "*Polystichum manickamianum* Benniamin, Fraser-Jenkins & Irudayaraj (Pteridophyta: Dryopteridaceae) – A new record for Kerela". *Indian J. Forest.* 33: 273–274.
Abstract:- *Polystichum manickamianum* Benniamin, Fraser-Jenkins & Irudayaraj hitherto known only from Tamil Nadu is reported here for the first time from Kerala. Detailed description, photographs and relevant notes are provided for easy identification.

49. **Antony, R. & Mohanan, N. 2011.** "*Metathelypteris flaccida* (Blume) Ching (Thelypteridaceae: Pteridophyta), a very rare and little known fern from Kerala". *J. Non-Timber Forest Products* 18: 161–162.
Abstract:- *Metathelypteris flaccida* (Blume) Ching, a very rare and little known 'thelypteroid' fern is collected after Beddome (1883) from Agasthyamala, Thiruvananthapuram district of Kerala. A detailed description and photographs are provided for its easy identification.

50. **Antony, R. & Mohanan, N. 2012.** "*Dryopteris austro-indica* Fraser-Jenkins (Pteridophyta: Dryopteridaceae), a new distributional record for Kerala". *J. Non-Timber Forest Products* 19: 79–80.

Abstract:- *Dryopteris austro-indica* Fraser-Jenkins hitherto known from Tamil Nadu is reported for the first time from Rajamala, Idukki district, Kerala. Detailed description, photograph and relevant notes are provided for easy identification.

51. **Antony, R., Shareef, S.M. & Mohanan, N. 2012.** "Natural apospory in *Pteris argyraea* T. Moore from South India". *Indian Fern J.* 29: 149–152.

Abstract:- Natural apospory is reported for the first time in *Pteris argyraea* T. Moore, collected from the forest at Kallar, Idukki district, Kerla, South India. The aposporous gametophytes are yellowish-green, dichotomously branched, thalloid outgrowths from abaxial surface of the pinnules. The present report of natural apospory shows that this species is also asexually reproducing besides the usual process of sexual/agamosporous reproduction.

51a. **Antony, R., Sreenivas, V.K. & Mohanan, N. 2012.** "*Diplazium austrosylvaticum* Fraser-Jenkins & Benniamin (Pteridophyta: Woodsiaceae), a new distributional record for Kerala". *Indian J. Forest.* 35: 259–260.

Abstract:- *Diplazium austrosylvaticum* Fraser-Jenkins & Benniamin, hitherto known only from Tamil Nadu, is reported here for the first time from Attayar, Thiruvananthapuram, Kerala. Detailed description, photographs and relevant notes are provided for its easy identification.

52. **Antony, V.A., Kadavil, A. & Henry, A.N. 1991.** "Rediscovery of *Dicaelospermum ritchiei* Clarke (Cucurbitaceae) from Kerala, Southern India". *J. Econ. Taxon. Bot.* 15: 739–740.

Abstract:- *Dicaelospermum ritchiei* C.B. Clarke (Cucurbitaceae) has been recorded for the first time for Kerala from Kurisumala, Kottayam district. Earlier this species was known from Maharashtra and Karnataka.

53. **Anupama, C. & Sivadasan, M. 2004.** "Mangroves of Kerala, India". *Rheedea* 14: 9–46.

Abstract:- The present study reports 15 true mangrove and 49 mangrove associate species from Kerala coast. True mangrove species belong to nine genera under seven families. Detailed description, illustrations, notes on distribution and updated nomenclature of the true mangrove species are provided. Mangrove associates are listed. Five true mangrove species earlier reported from Kerala, viz., *Bruguiera eriopetala, B. malabarica, B. parviflora* and *Ceriops tagal* could not be located during the present investigation. *Bruguiera gymnorrhiza, B. sexangula, Excoecaria indica, Lumnitzera racemosa* and *Sonneratia alba* are found very rarely along Kerala coast. Developmental and

anthropogenic activities, grazing and widespread prawn farming are the major threats to Kerala mangroves.

54. **Asha, V.V. & Pushpangadan, P. 2002.** "Hepatoprotective plants used by the tribals of Wynadu, Malappuram and Palghat districts of Kerala, India". *Ancient Sci. Life* 22: 1–8.
Abstract:- An intensive survey was carried out in Wynadu, Malappuram and Palghat districts of Kerala to identify plants used by the tribals to treat liver diseases. A total of 25 medicinal plants used by the tribals were identified in the survey. A brief account of 15 plant species used as single plant remedy for alleviating liver ailments by the tribals is given in this report. This ethnomedical information can lead the development of useful drugs against liver diseases.

55. **Ashraf, K. & Santhoshkumar, A.V. 2011.** "Ecological status of wild edibles consumed by Cholanaickens, a primitive tribe of Western Ghats, India". *J. Non-Timber Forest Products* 18: 71–76.
Abstract:- A study was undertaken to document the ecological status of wild edibles consumed among the Cholanaickens tribe of Western Ghats in India. It was found that they consume a number of wild edible plants. It was observed that the people are less dependent on their traditional foods owing to the availability of subsidized food from the cooperative stores. A total of fifty six species of wild edible plants were documented which are consumed by the Cholanaickens. Among those species, twenty four species were leafy vegetables, followed by twelve fruit yielding species, nine species, which produce edible seeds and eleven species producing tubers and rhizomes. The phytosociological study showed that only thirteen species of edible plants are available at present in the study area. It was also found that regeneration of most of the tuber yielding species is not taking place probably because of higher exploitation in the previous period.

56. **Augustine, J. 2001.** "Exotic plants of Sabarimala and surrounding evergreen forests, Kerala". *J. Econ. Taxon. Bot.* 25: 591–593.
Abstract:- A total of 30 species of exotic plants collected from Sabarimala and surrounding evergreen forests of Kerala are enumerated in this paper.

57. **Augustine, J. 2002.** "Some threatened plants collected from Sabarimala and surrounding evergreen forests, Kerala". *Indian J. Forest.* 25: 338–340.
Abstract:- A total of 37 threatened species have been collected from Sabarimala and surrounding evergreen forests, Kerala. Their correct status and distribution is given.

58. **Augustine, J. 2005.** "Wild edible plants used by the tribes of Periyar Tiger Reserve, Kerala, South India". *J. Econ. Taxon. Bot.* 29: 227–231.
Abstract:- Periyar Tiger Reserve (area: 777 sq km) is situated in the Idukki district of

Kerala state. The wild edible plants used by the tribals of the tiger reserve were studied. There are five tribal groups namely *Mannan, Paliyan, Urali, Malayarayan* and *Malampandaram*. One hundred and seventy five species of flowering plants were recognized as having ethnobotanical interests of which 60 species were identified as edible plants, that are eaten by the tribes in the study area. There are 44 species of plants yielding edible fruits, 8 species with edible leaves, 5 species with edible stem and 4 species with edible tubers.

59. **Augustine, J. & Sasidharan, N. 1999.** "Rediscovery of *Symplocos monantha* Wight (Symplocaceae) from Periyar Tiger Reserve". *Indian J. Forest.* 22: 271–272.
Abstract:- *Symplocos monantha* Wight (Symplocaceae), described in 1848 had not been recollected and hence considered extinct. It has now been collected after a gap of 150 years from Periyar Tiger Reserve, Kerala.

60. **Augustine, J., Sasidharan, N. & Bharadwaj, A. 1994.** "*Ophioglossum pendulum* L. (Ophioglossaceae) from the mainland of India". *J. Econ. Taxon. Bot.* 18: 445–447.
Abstract:- *Ophioglossum pendulum* L. (Ophioglossaceae) has been recorded for the first time from the mainland India (Periyar Tiger Reserve, Idukki district, Kerala). Earlier this species was known from Andaman & Nicobar Islands.

61. **Augustine, J., Sasidharan, N. & Sivadasan, M. 1999.** Balsams of Periyar Tiger Reserve, southern Western Ghats, Kerala. In: Sivadasan, M. & Mathew, P. (Eds.), *Biodiversity, Taxonomy and Conservation of Flowering Plants*. Mentor Books, Calicut. pp. 275–292.

62. **Augustine, J. & Sivadasan, M. 2004.** "Ethnomedicinal plants of Periyar Tiger Reserve, Kerala, India". *Ethnobotany* 16: 44–49.
Abstract:- Periyar Tiger Reserve, with an area of 777 sq km, is situated in Idukki district of Kerala state. There are five tribal groups, namely, Mannan, Paliyan, Urali, Malayarayan and Malampandaram. Ethnobotanical investigation on the plants seen in the Tiger Reserve and used by the tribes were carried out. More than 180 species of plant were recognized as of ethnobotanical importance; 66 among them are of medicinal use.

63. **Augustine, J., Sreejesh, K.R. & Bijeshmon, P.P. 2010.** "Ethnogynecological uses of plants prevalent among the tribes of Periyar Tiger Reserve, Western Ghats". *Indian J. Traditional Knowledge* 9: 73-76.
Abstract:- Periyar Tiger Reserve, with an area of 777 sq km is the largest protected area in the high ranges of Kerala state. There are five tribal groups, namely *Mannan, Paliyan, Urali, Malayarayan* and *Malampandaram* with a total population of 2,166. An ethnobotanical study carried out among the tribal groups of Periyar Tiger Reserve revealed use of 15 plant species for ethnogynecological purposes.

64. **Augustine, J., Uthaman, K.V. & Rajesh, K.P. 2010.** "Preliminary study on the flora and vegetation of Aralam Wildlife Sanctuary, Western Ghats, India". *J. Econ. Taxon. Bot.* 34: 530–540.

Abstract:- The southernmost Protected Area in Kerala state, Aralam Wildlife Sanctuary, has shown to be one that should not be underestimated in any policy decisions in Wildlife Protection measures. A recent plant diversity study conducted in this small (53 sq km) protected area has brought some very interesting facts about the richness of its biodiversity. There are five types of vegetation in Aralam WLS, namely Moist Deciduous forest, Semi-evergreen forest, Evergreen forest, Hill top evergreen forest and Grasslands. There are 961 species of flowering plants indentified in this Sanctuary. A total of 318 species of flowering plants identified from the sanctuary are Peninsular Indian endemics. There are 239 species of trees, of which 90 species are with restricted distribution in the Western Ghats. The Hill top evergreen forest found at Ambalappara is in fact a shola-like forests but with a different kind of species combination.

65. **Augustine, K.T. 2000.** "The seedling morphology of *Tephrosia purpurea* (L.) Pers., *T. maxima* (L.) Pers., *T. pumila* (Lam.) Pers. and *T. villosa* (L.) Pers. from Thumba, Kerala". *J. Econ. Taxon. Bot.* 24: 243–250.

Abstract:- The seedling morphology of *Tephrosia purpurea* (L.) Pers., *T. maxima* (L.) Pers., *T. pumila* (Lam.) Pers. and *T. villosa* (L.) Pers. are observed for 45 days. The growth in height patterns are: *T. villosa* to 34.5 cm, *T. pumila* to 5.5 cm, *T. purpurea* to 4.5 cm and *T. maxima* to 2 cm. The intercalary meristems are very active in *T. villosa* (internode to 5 cm) and very minimal in *T. maxima* (0.2 cm).

66. **Augustine, K.T. 2001.** "New record of *Sesamum radiatum* Schumach. & Thonn. (Pedaliaceae) from Thiruvananthapuram district, Kerala". *J. Econ. Taxon. Bot.* 25: 617–620.

Abstract:- *Sesamum radiatum* Schumach. & Thonn. (Pedaliaceae) is a new record for Thiruvananthapuram district, Kerala. This plant has been thriving here for the past 22 years. Now it is common and locally abundant in the coastal areas of Thumba, St. Andrews, Puthenthope, etc. The plant shows only simple leaves throughout the growth.

67. **Augustine, K.T. 2004.** "Seedling morphology of *Cassytha filiformis* L. (Lauraceae) from Thumba, Thiruvananthapuram, Kerala". *J. Econ. Taxon. Bot.* 28: 107–109.

Abstract:- Seeds collected showed dormancy for two months before germination. During germination cotyledons were fully intact inside the seed-coat and remained in the soil. Radicle tuberous, swollen, whitish–green. Plumule filiform, cord–like, light-green, with minute alternate leaves.

68. **Azeez, A., Leena, K.R. & Madhusoodanan, P.V. 1996.** "Spleenworts (*Asplenium* – Pteridophyta) of Kerala". *J. Econ. Taxon. Bot.* 20: 435–455.
Abstract:- The genus *Asplenium* L. is represented by 20 taxa in Kerala. Morphology, taxonomy, palynology, ecology and distribution of each species are critically discussed. A key to the identification of species is given.

69. **Babu, A. 1990.** *Flora of Malappuram district*. Ph.D. Thesis, University of Calicut, Calicut. 973 p. (Unpublished).

70. **Bahadur, K.N. & Raizada, M.B. 1968.** "*Limnocharis flava* (L.) Buchenau – A new record for India". *Indian Forester* 94: 641–644.
Abstract:- The present note records the occurrence of *Limnocharis flava* (L.) Buchenau for the first time in a naturalized condition from India (Quilon, Kerala). The note is supplemented by remarks on description, synonymy, biology, distribution, ecology and economic aspect of this species.

71. **Balagopalan, M. & Jose, A.I. 1995.** "Altitudinal effect of tropical and subtropical forest soils in Kerala, India". *Ann. Forest.* 3: 87–95.
Abstract:- Study of tropical and subtropical forest soil sampled in a hilly area of Kerala, India from 150 m (E_1), 750 m (E_2) and 1450 m (E_3) above sea level showed that their properties varied significantly with altitude. The organic matter content, water holding capacity and cation exchange capacity increased, while the pH, bulk density and Al_2O_3 content decreased with elevation. The clay and Al_2O_3 contents showed no trend and C:N ratio was constant 12:1 in soil from all three elevations. The study manifested that the decomposition rate of organic matter was lower at higher altitudes and this has effected other soil properties.

72. **Balakrishnan, N.P. & Chakrabarty, T. 1983.** "A new variety of *Croton caudatus* Geisel. (Euphorbiaceae) from Peninsular India". *Bull. Bot. Surv. India* 25: 190–191.
Abstract:- A new variety of *Croton caudatus* Geisel., viz., *C. caudatus* var. *obovoideus* has been described from Kerala and Tamil Nadu.

73. **Balakrishnan, V. & Anil Kumar, N. 2001.** "'Nilamanga' (*Sclerotium stipitatum*?) – A rare termite fungal sclerotia with medicinal properties known among the tribal and rural communities of Kerala". *Ethnobotany* 13: 9–14.
Abstract:- Mushrooms of India have been extensively studied for their nutritional qualities, but rarely for medicinal properties. Ethnobotanical studies in Kerala have revealed that rural and tribal people of this region know the medicinal usage of numerous mushrooms. Western Ghats, the biodiversity hotspot, is rich in mushroom diversity added with unique indigenous knowledge of many species. The present paper deals with a fungus locally

called Nilamanga a widely known but rare species, used by the local communities as an effective medicine against diarrhoea. Communities claim that Nilamanga cures earache, stomach pain, dehydration and even stomach cancer and jaundice. The identity of this plant could not ascertained due to lack of clarity over its taxonomic circumscription. A preliminary biochemical analysis has been carried out to know the various compounds present in it. Analysis of sclerotia has been done with and without the black outer coating for total free amino acid, $_{p}$H, ash, moisture, fat, total carbohydrate, crude protein, crude fibre, phenols, reducing sugars and starch. Among the 13 free amino acids in this fungus, phenylalanine and arginine are present in high concentrations.

74. **Balasubramanyan, K. & Induchoodan, N.C. 1996.** "Plant diversity in sacred groves of Kerala". *Evergreen* 36: 3–4.

Abstract:- A total of 761 sacred groves are scattered throughout the state of Kerala. Of these, 361 are found to be more than 200 m^2 in extent. Among these 74 are found to be above 0.5 ha. in size. Regarding the floral wealth, 722 species belonging to 129 families and 474 genera are encountered. They are spread over 108 dicot families, 10 monocotyledon families and 2 gymnosperm families. Among 722 species recorded 153 are endemic to Peninsular India.

75. **Balasubramanyan, K., Swarupanandan, K. & Sasidharan, N. 1985.** "*A field key to the Indentification of indigenous arborescent species of Kerala Forests*". Kerala Forest Research Institute, Peechi.

76. **Balasubramanyan, K., Swarupanandan, K. & Sasidharan, N. 1985.** "Field key to the identification of indigenous arborescent species of Kerala forests". KFRI Research Report No. 33. pp. 175.

Abstract:- A checklist of the dicotyledonous tree species with a minimum of 10 m height, indigenous to the Kerala forests (341 spp.), was prepared from the regional floras. Based on field observations made in the Kerala forests and studies on the collected specimens in the Institute Herbarium, Madras Herbarium (MH) and Central National Herbarium (CAL), a cardex set for characteristics of species was prepared. From this an artificial serial key based on vegetative characters has been compiled. A systematic compilation of the cardex data in the alphabetic sequence of binomials is given at the end, for convenience. Nomenclaturally correct and taxonomically accepted binomials, whenever available the basionym, the names given in Bourdillon's The Forest Trees of Travancore (1908) and Gamble and Fisher's Flora of the Presidency of Madras (1915-1935), correct citations, the commonest Malayalam names, family name, detailed annotations of the vegetative characters, a synopsis of the generative characters, ecological details and distribution

within the natural forests of the Kerala State are furnished. Indices of binomials and Malayalam names are also appended.

77. **Barnes, E. 1938.** "New or little known plants from South India VIII". *Bull. Misc. Inform. Kew* 1938: 32-37.

Abstract:- Eleven species have been reported from South India of which five are new species. Five new species described are *Impatiens munnarensis, I. pandata, Ophiorrhiza munnarensis* and *Didymocarpus macrostachya* from Kerala and *Sonerila barnesii* from Tamil Nadu. Two species are new reports to Tamil Nadu and rest four are new to Kerala.

78. **Barnes, E. 1939.** "The species of Geraniaceae occurring on the Travancore High Range, including the description of a new balsam". *J. Indian Bot. Soc.* 18: 95–105.

Abstract:- A total of 42 species of Geraniaceae have been recorded from the Travancore High Range which include one species each of *Geranium* and *Oxalis*, 3 species of *Biophytum* and 37 species of *Impatiens*. A new species of *Impatiens*, viz., *I. johnii* has been described from Kallar valley, Travancore High Range.

79. **Barnes, E. 1946.** "Some observations on south Indian Commelinas; two new species of *Commelina* from South India". *J. Bombay Nat. Hist. Soc.* 46: 70–89.

Abstract:- Eleven species of *Commelina* have been reported from South India along with the description of the flowers and spathes, sequence of flowering, fertilization, description of capsules and seeds and their distribution. Out of these 11 species, 2 new species, viz., *C. indehiscence* and *C. tricolor* have been described from Biligirirangan Hills, Tambaram and Karadimalai, Gudalur Ghat, Nilgiri, respectively.

80. **Barnes, E. 1946.** "A new species of *Arisaema*". *Kew Bull.* 1946: 44–46.

Abstract:- A new species of *Arisaema*, viz., *A. auriculata* allied to *E. barnesii* C.E.C. Fischer has been described from Nilambur Ghat, Wynaad, Kerala.

81. **Basha, S.C. 1987.** *Studies on the Ecology of Evergreen Forests of Kerala with special reference to Silent Valley and Attappady (South India).* Ph. D. Thesis. University of Kerala, Trivandrum (Unpublished).

82. **Basha, S.C. 1991.** "Distribution of mangroves in Kerala". *Indian Forester* 117: 439–448.

Abstract:- The mangrove vegetation of the Kerala coast in its present condition has been described. A brief historical background has been given in order to understand the reasons for the dwindling of the once existed very rich 700 sq km of mangrove forests to the present stage of discontinuous and isolated bits totally constituting a balance of about 17 sq km. The patches of mangrove vegetation existing on lands under the public and private ownership have been discussed with their approximate extents so as to decide the possibility

for preserving them in their natural home. Acquisition of mangrove pockets of reasonable and manageable extent belonging to the private ownership has been suggested. The necessity for bringing some bigger pockets under the Forest Act for the effective protection from illicit removal and encroachments of land has been stressed. Suggestion has been made for adopting artificial regeneration methods for increasing the area in suitable localities. Necessity for taking up extension activities for creating awareness among people staying near the mangrove locality has been suggested.

83. **Basha, S.C. 1992.** "Mangroves of Kerala – A fast disappearing asset". *Indian Forester* 118: 175–189.

Abstract:- The peculiarities in the distribution of mangrove vegetation found in the coastal tracts of the country in general has been dealt with special reference to Kerala. A brief historical review of the literature on Kerala mangroves has been given and distribution of mangroves in Kerala has been described in detail with few classified list of species appended. The present ecological status of the mangrove vegetation has also been dealt with. The factors which lead to the destruction of the mangrove vegetation have been indicated and rehabilitation measures urgently required have been suggested.

84. **Basha, S.C. 1999.** Forest types of Silent Valley. In: Manoharan, M., Biju, T.M., Biju, S.D., Nayar, T.S. & Easa, P.S. (Eds.), *Silent Valley – Whispers of Reason*. Kerala Forest Department, Thiruvananthapuram. pp. 109–116.

85. **Basha, S.C. & Kumar, M. 1994.** "Three little known species of *Ochlandra* Thwaites (Poaceae) from Western Ghats, India". *Rheedea* 4: 24–30.

Abstract:- Bamboos are among the taxonomically least known groups of plants. Being monocarpic and flowering gregariously, collection of infructescence has been a great problem for taxonomists and consequently many taxa are, even now, known only from vegetative materials. This paper deals with three such taxa of *Ochlandra*, a genus of 8 species, occurring in South India, Sri Lanka and Madagascar, viz., *O. setigera, O. beddomei* and *O. travancorica* var. *hirsuta*, the flowers and fruits of which have been recently collected and studied by the authors, for the first time. Their complete and amended descriptions are provided.

86. **Basha, S.C., Sankar, S. & Balasubramanyan, K. 1992.** "Biodiversity of Silent Valley National Park: A phytogeographical analysis". *Indian Forester* 118: 361–366.

Abstract:- The Silent Valley National Park is the largest chunk of comparatively undisturbed area aboding tropical rain forest in the whole of Western Ghats. The flora of the area is fascinating from the phytogeographical point of view with Asiatic endemic, Indo-Sri Lankan elements dominating the scenario. These are followed by Pantropic, Australo-

Asian, Indo-African and other forms. From the point of view richness in biodiversity, this Silent Valley stands out as an exceptional location harbouring highly diverse life forms.

87. **Basha, S.C. & Sasidharan, N. 1994.** "A new species of *Polyalthia* Bl. (Annonaceae) from Peninsular India". *Rheedea* 4: 21–23.
Abstract:- A new species of *Polyalthia,* viz., *P. shendurunii* allied to *P. coffeoides* (Thw. ex Hook.f. & Thoms.) from Shenduruny Wildlife Sanctuary of Kollam district in Kerala, Peninsular India is described and illustrated.

88. **Basu, S.K. 1988 (1987).** "*Corypha* palms in India". *J. Econ. Taxon. Bot.* 11: 477–486.
Abstract:- This paper deals with four species of *Corypha* in India. Two of these species, viz., *C. nutans* Lam. and *C. macropoda* Kurz occur in Andaman Islands, *C. umbraculifera* L. in Karnataka and Kerala and *C. taliera* Roxb. in West Bengal.

89. **Beegam, A.R. & Sibi, M. 2012.** "Two new combinations in *Acilepis* (Asteraceae)". *Rheedea* 22: 38.
Abstract:- Two new combinations, viz., *Acilepis peninsularis* var. *kodayarensis* and *A. salingna* var. *nilghirensis*, are proposed. These two varieties are endemic to Western Ghats, Tamil Nadu and Kerala.

90. **Bhagya, B. & Sridhar, K.R. 2009.** "Ethnobiology of coastal sand dune legumes of Southwest coast of India". *Indian J. Traditional Knowledge* 8: 611–620.
Abstract:- The information pertain to coastal sand dune (CSD) wild legumes of Southwest coast of India and their importance in traditional medicine, nutrition, bioactive compounds, industries and ecosystem restoration. The data were retrieved during 2003–2005 from 12 locations in 3 states of West Coast (Kerala, Karnataka and Goa). The study includes direct interviews of ethnic groups dwelling in the proximity of CSDs, native traditional healers, *Ayurvedic* practitioners and botanists intimately in touch with CSD wild plants. The study has a rural bias and presents traditional knowledge on food, fodder, fertilizer, pharmaceutical, religious and cultural values of CSD legumes. Information on use of legumes, mode of preparation, dosage, novelty and cure of ailments is given. To match the collected information, literature based information on each legume was also reviewed. Some legumes are edible, endowed with medicinal properties, generate a variety of bioactive compounds of health and industrial importance. Such CSD xeriscape vegetation needs protection in view of cultural and traditional heritage of coastal inhabitatnts and landscape.

91. **Bhargavan, P. & Mohanan, C.N. 1982.** "*Propax chandrasekharanii* Bhargavan *et* Mohanan – A new species of Orchid from Silent Valley". *Curr. Sci.* 51: 990–992.
Abstract:- A new species of orchid, viz., *Propax chandrasekharanii* Bhargavan *et* Mohanan

allied to *P. elwesii* (Reichb.f.) Kraenzl. has been described from Silent Valley R.F., Palghat district, Kerala.

92. **Bhargavan, P. & Rajan, R. 1987.** "Two noteworthy sedges from South India". *J. Econ. Taxon. Bot.* 9: 253–254.
Abstract:- Short descriptions with relevant field notes are given for two little known species of sedges from Idukki district of Kerala, South India, namely *Scleria pergracilis* (Nees) Kunth and *S. biflora* Roxb., the latter being recorded for the first time from South India.

93. **Bhat, A.V. & Nesamany, S. 1991.** "Botanical source of *Gajapippali* in Kerala". *Bull. Med.-Ethno-Bot. Res.* 12: 108–113.
Abstract:- In Ayurvedic Nighantus four types of Pippalis are mentioned. They are Pippali, Gajapippali, Souhali and Vanapippali. Gajapippali is a controversial drug. *Scindapus officinalis* and *Piper chaba* are considered as the source plants of Gajapippali. In Kerala market another drug from a non-allied botanical source was found traded and used by the Vaidyas and Pharmacies. The botanical identification of this drug and a discussion on Gajapippali are dealt in this paper.

94. **Bhat, A.V. & Padmaja, B. 1991.** Vulnerable medicinal plants of Munnar forest region, Idukki district, Kerala. In: Karunakaran, C.K. (Ed.), *The proceedings of the symposium on rare, endangered and endemic plants of the Western Ghats*. Kerala Forest Department, Thiruvananthapuram. pp. 246–254.

95. **Bhat, P.R. & Kaveriappa, K.M. 1996.** "Description of the female flower of *Myristica fatua* Houtt. var. *magnifica* (Beddome) Sinclair – A threatened taxon of the Western Ghats". *J. Econ. Taxon. Bot.* 20: 213–215.
Abstract:- Female flower of threatened taxa *Myristica fatua* Houtt. var. *magnifica* (Beddome) Sinclair has been reported and described from the Western Ghats (Tamil Nadu, Kerala, Karnataka).

96. **Bhatt, A.V., Nair, K.V., Nair, C.A.A. & Puri, H.S. 1982.** "Ethno-botanical studies in the Silent Valley and the adjoining areas". *Bull. Med.-Ethno-Bot. Res.* 3: 153–161.
Abstract:- Ethno-botanical surveys of Silent Valley and adjoining areas in the Palghat district of Kerala state, were undertaken twice and the folklore claims about the local plants with the help of local tribal chiefs were recorded. These relate to the effectiveness of the plants against rheumatic pains, filariasis, stomach disorders, jaundice, worm infestation, skin diseases, headache and for permanent sterility.

97. **Bhattacharyya, D. 2009.** "Diversity of Rhododendrons in India". *Phytotaxonomy* 9: 122–134.

Abstract:- An assessment of the diversity of the genus *Rhododendron* L. (Ericaceae) in India is presented here based on revisionary studies. Classification of Chamberlain *et al.* (1996) is followed with minor modification at subsectional level. The species belonging to India are grouped into 4 subgenera, consisting of 33 subsections. Subgenera *Azaleastrum* and *Tsutsusi* are represented by a single species each; subgenus *Rhododendron* contains 43 species and subgenus *Hymenanthes* contains 35 species making a total of 80 species for flora of India. These are widely distributed in different regions and altitudes, mainly in the Himalayas, particularly in the Eastern Himalayas. Eastern Himalayas alone, covering the states of Arunachal Pradesh, Sikkim and Darjeeling district of West Bengal, harbour 76 species. 6 species are recognized in Western Hiamalayas and 9 species in Northeast India. Only one subspecies *nilagiricum* of *R. arboreum* is found in Western Ghats (Tamil Nadu and Kerala). The highest species occurrence is recorded between the altitudes 3000 to 3500 m. 14 taxa are found to be endemic to India. Twenty-one taxa are categorized as rare. Eleven species are treated as excluded as there are no specimens seen in any of the Indian herbaria nor they could be collected from the field.

98. **Bhavanandan, K.V. & Ammal, L.S. 1991.** "Cytological investigations on family Aspidiaceae (sensu Copeland) from South India". *Indian Fern J.* 8: 78–86.

Abstract:- Cytological studies on 17 taxa under 16 species of Aspidiaceae such as *Polystichum auriculatum* (n = 82), *Arachnoides conifolia* (n = 82; 2n = 164), *Bolbitis kanarensis* (n = 41; 2n = 82), *B. presiliana* (n = 41; 2n = 82), *Elaphoglossum conforme* (n = 41; 2n = 82), *Dryopteris cristata* (n = 41; 2n = 82; n = 123), *Cyclosorus gongylodes* (n = 72), *Thelypteris paludosa* (n = 31), *T. pyrrhorhachis* (n = 90), *Anisocampium cumingianum* (n = 40), *Athyrium anisopterum* (n = 82; 2n = 164), *A. drepanphyllum* (n = 120), *Diplazium esculentum* (n = 82), *D. japonicum* (n = 82), *D. muricatum* (n = 82) and *D. travancoricum* (n = 41; 2n = 82) from Kerala and Tamil Nadu have been conducted. Out of these 17 taxa, only 8 taxa are diploid and other are polyploides. Existence of different cytotype has been discussed in some species complexes. Basic chromosome numbers for *Thelypteris* and *Athyrium* have been suggested.

99. **Bhavanandan, K.V. & Ammal, L.S. 1993.** "Studies on the spore morphology of some south Indian ferns". *Indian Fern J.* 10: 12–16.

Abstract:- Spore morphology of 15 species under 12 genera belonging to six families from Kerala and Tamil Nadu, South India have been studied. The spores of Ophioglossaceae, Pteridaceae, Cyatheaceae and Vittariaceae are trilete and tetrahedral whereas the spores of Davalliaceae and Polypodiaceae are monolete and bilateral. Perine may be present or absent.

100. **Bhosle, S.V., Thengane, S.R., Deodhar, S.R. & Sardesai, M.M. 2006.** "New distributional records of an endemic species *Calophyllum austroindicum* Kosterm. ex P. Stevens, Guttiferae (Clusiaceae)". *J. Econ. Taxon. Bot.* 30: 856–858.
Abstract:- *Calophyllum austroindicum* Kosterm. ex P. Stevens is rare taxon endemic to the Southern Western Ghats of India, which has been collected from three new localities from the Idukki district of Kerala state.

101. **Biju, H., Bagool, R.G. & Hosagoudar, V.B. 2005.** "Meliolaceous fungi on the campus of Tropical Botanic Garden and Research Institute, Palode, Thiruvananthapuram, Kerala". *J. Econ. Taxon. Bot.* 29: 338–345.
Abstract:- This paper gives an account of the meliolaceous fungi collected and studied during the years from June 2000 to March 2002. The present report includes 46 fungal taxa belonging to the genera: *Appendiculella, Asteridiella, Irenopsis* and *Meliola* of the family Meliolaceae.

102. **Biju, H., Bagool, R.G. & Nayaka, S. 2010.** "Additions to the lichen flora of Kerala state – I: Parmelioid macro lichens". *J. Econ. Taxon. Bot.* 34: 890–897.
Abstract:- The paper gives an account of 10 lichen species belonging to Parmelioid lichen group. Of these, *Bulbothrix tabacina, Hypotrachyna radiculata, Hypotrachyna rhabdiformis, Parmotrema pseudocrinitum* and *Parmotrema robustum* are new to Peninsular India, and *Hypotrachyna boquetensis, Myelochroa indica, Myelochroa perisidians, Parmotrema andinum* and *Parmotrema melanothrix* are new to Kerala.

103. **Biju, H., Bagool, R.G. & Nayaka, S. 2012.** "Additions to the lichen flora of Kerala state – II: Graphidaceae". *J. Econ. Taxon. Bot.* 36: 867–873.
Abstract:- The paper gives an account of eight lichen species belonging to the family Graphidaceae namely, *Graphis anfractuosa, G. angustata, G. grammitica, G. leptocarpa, G. lineola, G. sapii, G. subserpentina* and *Hemithecium aphanes* which are described as additions to the lichen flora of Kerala State. Chemical studies were carried out by thin layer chromatography using Merk F254 precoated silica gel aluminium plates and B.D.A. solvent systems.

104. **Biju, P., Prasad, K.S., Kumar, P.A., Augustine, J., Raveendran, K. & Ansari, R. 2012.** "*Eriocaulon cheemenianum* (Eriocaulaceae), a new species from Kerala, India". *Int. J. Pl. Animal & Environm. Sci.* 2: 176–179.
Abstract:- A new species of *Eriocaulon*, viz., *E. cheemenianum* P. Biju, K.S. Prasad, Jomy & R. Ansari, is described from the lateritic hillocks of Cheemeni in Kasaragod District, Kerala. It differs from the allied *E. odoratum* Dalz. in the enlarged and reflexed odd petals of the peripherally restricted female flowers giving a stellate appearance to the

heads, glabrous receptacles, sessile flowers, linear female sepals and in the number of setae in seed coat cells.

105. **Biju, S.D. 1997.** *Taxonomic and morphologic studies in the family Convolvulaceae of southern Peninsular India*. Ph. D. Thesis, University of Calicut, Calicut. (Unpublished)

106. **Biju, S.D. 2001.** "Relocation of *Impatiens anaimudica* C.E.C. Fisch. (Balsaminaceae) and the taxonomic status of *I. konalarensis* Chandrab. *et al.*". *Rheedea* 11: 109–113.
Abstract:- *Impatiens anaimudica* C.E.C. Fisch., described based on the collection of Barnes made in 1933 from the western side of High Ranges in Kerala and variously categorized as "endangered" or "possibly extinct" is relocated from the type locality. *I. konalarensis* Chadrab., V. Chandras. & N.C. Nair, described from the eastern side of High Ranges is found to be conspecific and hence reduced to a synonym of *I. anaimudica*. A detailed description, an illustration and relevant notes are provided.

107. **Biju, S.D. 2002.** "*Ipomoea parasitica* (Kunth) G. Don (Convolvulaceae): A new record for India". *Rheedea* 12: 77–79.
Abstract:- *Ipomoea parasitica* (Kunth) G. Don (Convolvulaceae) is reported for the first time for India from Kerala and Karnataka. Detailed description, illustration and relevant notes of the species are provided. Earlier this species was known from Mexico through Central America and Northern South America.

108. **Biju, S.D. & Kumar, V.M. 1999.** "Rediscovery of *Impatiens johnii* Barnes (Balsaminaceae), a balsam endemic to Eravikulam National Park, Kerala, India". *Indian J. Forest.* 22: 174–176.
Abstract:- *Impatiens johnii* Barnes is rediscovered from Eravikulam National Park, Idukki district, Kerala after a lapse of 67 years. A detailed description, illustrations and relevant notes are provided.

109. **Biju, S.D. & Mathew, P. 1993.** "*Merremia cissoides* ((Lam.) Hall.f. (Convolvulaceae) – A new record for India". *J. Bombay Nat. Hist. Soc.* 90: 121.
Abstract:- *Merremia cissoides* ((Lam.) Hall.f. (Convolvulaceae) is a new record to India from Pattom, Thiruvananthapuram, Kerala.

110. **Biju, S.D. & Mathew, P. 1994.** "*Merremia hirta* (L.) Merrill (Convolvulaceae) – A new record for Peninsular India". *J. Econ. Taxon. Bot.* 18: 181–183.
Abstract:- *Merremia hirta* (L.) Merrill is reported here for the first time from Peninsular India from Panambara, Malappuram district of Kerala. Its complete description, illustration and other relevant notes are provided for easy identification.

111. **Biju, S.D., Mathew, P. & Kumar, V.M. 1998.** "*Ipomoea mombassana* Vatke (Convolvulaceae) – A new record for India". *J. Econ. Taxon. Bot.* 22: 471–473.

Abstract:- *Ipomoea mombassana* Vatke of Convolvulaceae, is reported for the first time for India from Chinnar, Kerala. Earlier this species was known from Kenya. A brief description, illustration and other relevant notes are provided.

112. **Biju, S.D., Pushpangadan, P. & Mathew, P. 1999.** "*Strictocardia sivarajanii*, a new species of Convolvulaceae from Kerala, India". *Novon* 9: 147–149.
Abstract:- *Strictocardia sivarajanii*, a new species of Convolvulaceae from Rajamala shola edge, Idukki district, Kerala, India, is described and illustrated. A tabular comparison with its related species *S. tiliifolia* is given.

113. **Billore, K.V. 1998.** "On the occurrence of *Triumfetta tungarensis* Billore in Nepal and other parts of India". *J. Indian Bot. Soc.* 77: 241–242.
Abstract:- *Triumfetta tungarensis* Billore earlier described from Tungar hill near Bombay is now recorded from Gujarat, Kerala and Nepal. Only one specimen has been collected from Vettilapara forest, Travancore, Kerala state.

114. **Binojkumar, M.S. & Balakrishnan, N.P. 1991.** "*Euphorbia cotinoides* Miq. (Euphorbiaceae) – A new record for India". *J. Econ. Taxon. Bot.* 15: 463–464.
Abstract:- An interesting garden plant, *Euphorbia cotinoides* Miq. is recorded for the first time for India from Uttar Pradesh, Maharashtra, Karnataka and Kerala.

115. **Binojkumar, M.S. & Balakrishnan, N.P. 1991.** Endemic, rare and endangered Euphorbias of Western Ghats, India. In: Karunakaran, C.K. (Ed.), *The proceedings of the symposium on rare, endangered and endemic plants of the Western Ghats*. Kerala Forest Department, Thiruvananthapuram. pp. 56–64.
Abstract:- In India, *c.* 80 species of *Euphorbia* are found of which more than half are endemic and rare, to various phytogeographical regions of India. Nearly 30 species are endemic to Himalayas with its foot hills and Meghalaya, six species are endemic to Western Ghats, five species to Eastern Ghats and one is endemic to Andaman & Nicobar Islands. Out of the six endemics occurring in Western Ghats, three species, viz., *E. panchganiensis, E. khandallensis* and *E. katrajensis* are confined to northern parts of Western Ghats in Maharashtra, one species, viz., *E. laciniata* Panigr. from Karnataka and Maharashtra, *E. santapaui* from Tamil Nadu and Kerala and *E. vajravelui* from Tamil Nadu.

116. **Binojkumar, M.S., Das, Rahi & Vinesh, R. 2000.** "*Turnera subulata* J.E. Sm. (Turneraceae) – A fast naturalized weed in Indian subcontinent". *J. Econ. Taxon. Bot.* 24: 300–302.
Abstract:- *Turnera subulata* J.E. Sm., a Tropical American species is almost naturalized in Indian subcontinent, particularly southern part (Kerala, Tamil Nadu). This species is described in detail along with illustrations and relevant notes for easy identification.

117. **Binoy, P.C., Rajkumar, G. & Mohanan, N. 1991.** Rare and endemic plants located on the western slopes of Agasthyamala, coming in the Thiruvananthapuram district of Kerala state. In: Karunakaran, C.K. (Ed.), *The proceedings of the symposium on rare, endangered and endemic plants of the Western Ghats*. Kerala Forest Department, Thiruvananthapuram. pp. 29-55.

Abstract:- Agasthyamala range, a compact block of hills situated at the southern most end of the sub-continent has one of the richest and most diverse vegetation among the Western Ghats. It is estimated that *c*. 100 to 150 species of the area are endemic, many of which are very rare and endangered. On studying the flora of Agasthyamala hills coming under the Kerala region, the authors came across several such plants, a list of which is given. The constraints leading to the rarity/vulnerability of some of the species are also being investigated and discussed in the present communication.

118. **Binu, S. 2008.** "Uses of pteridophytes among the tribals in Pathanamthitta district, Kerala, India". *J. Non-Timber Forest Products* 15: 129–131.

Abstract:- The ethnobotanical investigators have concentrated on higher plants (Angiosperms). The pteridophytes are totally ignored group of plants. Pteridophytes are a dominant group of vascular plant communities being the second largest group of vascular plants. These plants are used in Ayurveda, Homeopathy, Unani, Tribal and Folk system of medicines. The present paper highlights the medicinal uses of six pteridophytes.

119. **Binu, S. 2009.** "Medicinal plants used by the tribals in Pathanamthitta district of Kerala for treating cuts and wounds". *Indian J. Bot. Res.* 5: 137–142.

Abstract:- This paper deals with the medicinal properties of seven plants used for treating cuts and wounds among the tribals in Pathanamthitta district. The cuts and wounds are common findings among the tribals because they are walking in inhospitable terrain and climb on trees for collecting wild edibles and non wood forest products, etc. The plant name, local name, parts used and method of preparation and application of seven species are described.

120. **Binu, S. 2009.** "Medicinal plants used for treating diarrhoea and dysentery by the tribals in Pathanamthitta district, Kerala, India". *J. Non-Timber Forest Products* 16: 131–134.

Abstract:- The paper highlights the medicinal plants used for treating diarrhoea and dysentery by the tribals in Pathanamthitta district, Kerala. There are about six tribal communities inhabiting this area with a very good knowledge of medicinal plants in their surrounding forest. Although eight plant species are used to cure diarrhoea and dysentery.

121. **Binu, S. 2009.** "Medicinal plants used for treating jaundice (Hepatitis) by the tribals in Pathanamthitta district of Kerala". *J. Non-Timber Forest Products* 16: 327–330.

Abstract:- Six plant species, used by the tribals of Pathanamthitta district in Kerala for curing jaundice are enumerated in this paper. The use of *Bridelia scandens* in treating jaundice is being reported for the first time.

122. **Binu, S. 2010.** "Medicinal plants used for treating snake bite by the tribals in Pathanamthitta district, Kerala, India". *Indian J. Bot. Res.* 6: 17–22.
Abstract:- The paper is based on the medicinal plants used for treating snake bite by the tribals in Pathanamthitta district. There are six tribal communities inhabiting this area. They have a very good knowledge of medicinal plants in their surrounding forests. Six plant species are used for this purpose.

123. **Binu, S. 2010.** "Wild edible plants used by the tribals in Pathanamthitta district, Kerala". *Indian J. Traditional Knowledge* 9: 309–312.
Abstract:- The paper is based on the wild edible plants used by the tribals of Pathanamthitta district. There are about six tribal communities inhabiting this area. They have a very good knowledge of wild edible plants in their surrounding forest. Plants parts are mostly consumed as direct food. A total of 41 species of wild edible plants were enumerated during the survey.

124. **Binu, S. 2010.** "An enumeration of medicinal plants used by the tribals in Pathanamthitta district of Kerala, India, Part – II". *J. Econ. Taxon. Bot.* 34: 607–613.
Abstract:- This species enumerates the medicinal plants used by the tribals in Pathanamthitta district of Kerala state, India. The plants name, local name, parts used and methods of preparation and application of 25 species are described.

125. **Binu, S. 2011.** "Medicinal plants used for treating body pain by the tribals in Pathanamthitta district, Kerala, India". *Indian J. Traditional Knowledge* 10: 547–549.
Abstract:- This paper is based on the medicinal plants for treating body pain by the tribals in Pathanamthitta district. There are six tribal communities (*Malappandaran, Urali, Mala-arayan, Ulladan, Malavedan* and *Malakurava*) inhabiting this area. They have a very good knowledge of medicinal plants in their surrounding forest. Information about 10 plant species used for treating body pain is collected.

126. **Binu, S. 2011.** "An enumeration of medicinal plants used by the tribals in Pathanamthitta district of Kerala, India – Part – III". *J. Econ. Taxon. Bot.* 35: 700–706.
Abstract:- This paper enumerates the medicinal plants used by the tribals in Pathanamthitta district of Kerala state, India. The plants name, local name, parts used and methods of preparation and application of 25 species are described.

127. **Binu, S. 2012.** "An enumeration of medicinal plants used by the tribals in Pathanamthitta district of Kerala, India – Part – 1". *J. Econ. Taxon. Bot.* 36: 177–183.

Abstract:- This paper enumerates the medicinal plants used by the tribals in Pathanamthitta district of Kerala State, India. The botanical name, local name, parts used and methods of preparation and application of 25 species are described.

128. **Binu, S. 2012.** "Ethnoveterinary plants used by the tribals in Pathanamthitta district of Kerala, India". *J. Econ. Taxon. Bot.* 36: 306–309.
Abstract:- The present communication deals with the ethnoveterinary practices among the tribals in Pathanamthitta district of Kerala. The tribal information presented here is the out come of exploration trips conducted during 1990 to 1996. Most of the data presented were found to be new as compared with the available literature.

129. **Binu, S., Khan, A.E.S., Kumar, E.S.S. & Pushpangadan, P. 2003.** "Plants used as medicine by the Irulas of Palghat district, Kerala, India". *J. Econ. Taxon. Bot.* 27: 808–814.
Abstract:- A survey of the ethnomedicinal plants used by the Irula tribe of Palghat district, Kerala, India was conducted and 40 medicinal plant species belonging to various genera of 23 families are reported. The botanical identity of the plant with local name, mode of preparation of medicine, application and administration are communicated in this paper.

130. **Bourdillon, T.F. 1892.** *Report on the Forests of Travancore*. The Govt. Press. Trivandrum.

131. **Bourdillon, T.F. 1897.** "The re-discovery of *Strychnos rheedei* Cl.". *J. Bombay Nat. Hist. Soc.* 10: 690–691.
Abstract:- *Strychnos rheedei* Cl. has been re-discovered from Travancore forest after more than two centuries.

132. **Bourdillon, T.F. 1899.** "Descriptions of some new or rare trees from Travancore". *J. Bombay Nat. Hist. Soc.* 12: 349–353.
Abstract:- *Garcinia imberti* (Guttiferae), *Dysoxylum purpureum*, *Aglaia maiae* (Meliaceae), *Canthium pergracile* (Rubiaceae) and *Diospyros humilis* (Ebenaceae) have been described as new species from Travancore and *Terminalia angustifolia* has been reported for the first time from Travancore.

133. **Bourdillon, T.F. 1900.** "Description of a new species of *Ficus* from Travancore". *J. Bombay Nat. Hist. Soc.* 13: 155–156.
Abstract:- *Ficus rama-varmae* (allied to *F. benghalensis* L.) has been described from Travancore.

134. **Bourdillon, T.F. 1904.** "*Dialium travancoricum*: A new species communicated". *Indian Forester* 30: 243–244.
Abstract:- *Dialium travancoricum* allied to *D. ovoideum* Thwaites has been described from Ponmudi, South Travancore.

135. **Bourdillon, T.F. 1905.** "On the two species of blackwood in South India". *Indian Forester* 31: 124–127.
Abstract:- Two species of blackwood, viz., *Dalbergia latifolia* and *D. sissoides* have been reported from Tamil Nadu and Kerala, South India.

136. **Bourdillon, T.F. 1908.** "*The forest trees of Travancore*". The Govt. Press, Trivandrum.
Abstract:- A total of 582 tree species have been treated.

137. **Braun, U., Hosagoudar, V.B. & Abraham, T.K. 2001.** "*Diplococcium atrovelutinum* sp. nov. from India". *J. Econ. Taxon. Bot.* 25: 284–286.
Abstract:- A new species, viz., *Diplococcium atrovelutinum* (Hyphomycetes) on *Scleria laevis* Retz. (Cyperaceae) is described and illustrated from TBGRI, Palode, Kerala, India.

138. **Bremekamp, C.B.E. 1974.** "A new species of *Oldenlandia* from India with remarks on its inflorescence morphology". *Kew Bull.* 29: 359–361.
Abstract:- A new species, *Oldenlandia hygrophila* allied to *O. pumila* (L.f.) DC. is described from Malampuzha near Palghat, Kerala, India, followed by an attempt at a morphological evaluation of the flowering parts of the shoot in the subgenus *Oldenlandia*.

139. **Brijithlal, N.D., Mabel, J.L. & Daniels, A.E.D. 2008.** "Additions to the moss flora of Peninsular India from the Neyyar Wildlife Sanctuary, Kerala, India". *Indian J. Forest.* 31: 643–646.
Abstract:- Three mosses, viz., *Acroporium baviense, Cyathophorum adiantum* and *Lindbergia koelzii*, earlier known to be distributed in the Khasia hills, Western Himalaya and Northeast India and Western Himalaya respectively are recorded for Peninsular India from Neyyar Wildlife Sanctaury, Kerala. Each species is described in detail and illustrated.

140. **Bruggen, H.W.L. van 1968.** "Revision of the genus *Aponogeton* (Aponogetonaceae) – A new species of *Aponogeton* from India". *Blumea* 16: 264–265.
Abstract:- A new species of *Aponogeton,* viz., *A. appendiculatus* allied to *A rigidifolius* van Bruggen has been described from Aleppy, Kerala.

141. **Bruyns, P.V. 1997.** "A note on *Ceropegia* L. (Asclepiadaceae) of Silent Valley, Kerala, India". *Rheedea* 7: 107–114.
Abstract:- In this paper a few comments on the relationships of the Indian species of the genus *Ceropegia* (Asclepiadaceae) in the broad geographical and morphological context are given along with additional observations on the nomenclature, identity and distribution of six species collected in and around the Silent Valley National Park, Kerala, India.

142. **Chakrabarty, T. & Gangopadhyay, M. 1993.** "A revision of *Aporusa* Bl. (Euphorbiaceae) for Indian subcontinent". *J. Econ. Taxon. Bot.* 17: 155–171.
Abstract:- A taxonomic revision of the genus *Aporusa* Bl. (Euphorbiaceae) is presented

for the Indian subcontinent with 13 species. Out of which two species are from Kerala, one from Tamil Nadu and Kerala, one species from Western Ghats, one species from Northeast India and other from Myanmar and Bangladesh. *A. clellandii* Hook.f., *A. oblonga* Muell.-Arg. and *A. villosa* (Lindl.) Baill. are combined with *A. octandra* (Buch.-Ham. ex D. Don) A.R. Vickery. *A. yunnanensis* (Pax & Hoffm.) Metc. is merged with *A. wallichii* Hook.f. and a new variety of the latter is proposed from Myanmar.

143. **Chakravarty, H.L. 1952.** "New finds of Indian Cucurbitaceae". *J. Bombay Nat. Hist. Soc.* 50: 894–901.

Abstract:- Five new taxa of Cucurbitaceae, viz., *Tricosanthes tomentosa, Schizoppepon wardii* and *Melothria assamica* var. *scabra* have been described from Assam, *Melothria ritchiei* (allied to *M. zeylanica* Clarke) from Maharashtra and Kerala and *Melothria angulata* [allied to *M. heterophylla* (Lour.) Cogn.] from Gomata, Perumal, Southern India.

144. **Chanda, S., Pramanik, A. & Maiti, G.G. 2012.** "Taxonomic status of *Salix ichnostachya* (Salicaceae) and its extended distribution in Kerala". *Rheedea* 22: 91–94.

Abstract:- *Salix ichnostachya* Lindl. ex Andersson belonging to the family Salicaceae is endemic to southern India. Taxonomically this species has variously been treated from time to time due to its apparent similarity with *S. tetrasperma* Roxb. in certain characters. So far this species has been reported from Tamil Nadu, Karnataka and Assam (?) only. Present study has confirmed that the distribution is extended up to Kerala based on a specimen that was earlier mistreated as *S. tetrasperma*. The distinct characters of the species are discussed in detail along with illustration and special note on distribution for east and effective determination.

145. **Chandra, R. & Azeez, P.A. 2010.** "Floral diversity of Kottuli: a wetland of national importance, Kozhikode, Kerala". *J. Econ. Taxon. Bot.* 34: 440–450.

Abstract:- An investigation of the Kottuli area in Kozhikode was undertaken with the objectives to document the floral diversity. The survey resulted in a total of 219 species (terrestrial and aquatic species) belonging to 75 families and 176 genera. One new record for the state of Kerala, *Melaleuca quinquenervia* (Cav.) S.T. Blake is reported. The mangrove species recorded were *Acanthus ilicifolius* L., *Aegiceras corniculatum* (L.) Blanco, *Avicennia marina* (Forsskal) Vierh., *A. officinalis* L. and *Excoecaria agallocha* L. The highest IVI values for tree species were for *Cocos nucifera* L. (89–59), followed by *Tectona grandis* L.f. (81.89) and *Mangifera indica* L. (15.06). In the case of shrubs and herbs it was for *Grewia lawsoniana* Drummond (51.5) and *Mimosa pudica* L. (42.44) respectively. The Shannon-Wiener Index (H') of species diversity of trees, shrubs and herbs was 2.3251, 2.1136 and 2.2514 respectively. According to the frequency diagram,

the plant community studied was homogenous.

146. **Chandrabose, M. & Nair, N.C. 1981.** "The genus *Polygala* L. (Polygonaceae) in Andhra Pradesh, Kerala and Tamil Nadu (South India)". *Proc. Indian Acad. Sci., Pl. Sci.* 90(B): 107–127.

Abstract:- Since much confusion exists on the identity and nomenclature in certain Polygalas, a taxonomic revision of the genus *Polygala* L. of Andhra Pradesh, Kerala and Tamil Nadu has been attempted, based on the observations in the field and critical studies on the specimens represented in various herbaria. Illustrations of some important characters for each species have been provided, for easy comparison and identification.

147. **Chandrabose, M., Nair, N.C. & Chandrasekaran, V. 1980.** "Notes on some rare and interesting plants from South India". *Indian J. Bot.* 3: 176–177.

Abstract:- The paper records the rediscovery of three rare and interesting plants of South India, viz., *Gynura travancorica* W.W. Smith, *Impatiens wightiana* Bedd. and *Mackenziea gracilis* (Bedd.) Brem. after a lapse of several decades. These species are all found in Kerala.

148. **Chandrabose, M. & Srinivasan, S.R. 1975.** "*Leucas lavanduliifolia* Rees and its varieties (Lamiaceae) in South India". *Bull. Bot. Surv. India* 17: 164–167.

Abstract:- A new variety of *Leucas lavanduliifolia*, viz., *L. lavanduliifolia* var. *nagalapuramiana* has been described from Nagalapuram hills in Chittoor district, Andhra Pradesh. A new combination *L. lavanduliifolia* var. *decipiens* (Hook.f.) Chandr. & Srin. is proposed. The variety *decipiens* has been reported from Kerala and Tamil Nadu.

149. **Chandrabose, M. & Srinivasan, S.R. 1976.** "Notes on some rare and interesting plants from South India". *Bull. Bot. Surv. India* 18: 236–237.

Abstract:- The occurrence of *Aeschynomene americana* L. has been recorded for the first time from Kerala in South India. The other two rare and little known plants namely, *Hedyotis membranacea* Thwaites has been collected from Kerala and *Indigofera constricta* (Thwaites) Trimen from Karnataka and Kerala.

150. **Chandrabose, M. & Srinivasan, S.R. 1981.** "Notes on two rare and interesting plants from south India". *J. Bombay Nat. Hist. Soc.* 78: 630–632.

Abstract:- The description of hitherto undescribed fruits and seeds of *Lasianthus dichotomus* Wight, a rare and endemic species which has been collected after a lapse of over 100 years from Mahendragiri peak of Tirunelveli district is given. *Pueraria phaseoloides* (Roxb.) Benth. is reported for the first time in South India from Angamuzhi, Ranni R.F., Quilon district, Kerala.

151. **Chandrabose, M., Srinivasan, S.R. & Nair, N.C. 1979.** "*Ipomoea trilobata* Linn.

(Convolvulaceae): A new record for South India". *Indian J. Forest.* 2: 23–24.

Abstract:- *Ipomoea trilobata* L. has been recorded for the first time in South India from Kerala.

152. **Chandramohanan, K.T. & Mohanan, K.V. 2012.** "*Kaipad* rice farming in North Kerala – An indigenous saline resistant organic farming system". *Indian J. Traditional Knowledge* 11: 185–189.

Abstract:- Rice, the most important cereal and staple carbohydrate source of Asia is cultivated in diverse ecological conditions and many such agro-ecosystems are fragile and critically endangered. Some such systems are very special in terms of their ecological singularity and subsistence value and their conservation would variably add to availability of food and protection of genetic diversity. The present study is an investigation into a very unique rice farming system in Kerala state of India in which rice is cultivated in the first crop season in saline wetlands that are subjected to regular tidal action, taking advantage of the heavy South West monsoon which results in flushing out the salt content from the farmland. In Central Kerala, the system is known as *pokkali* and in the North Kerala as *kaipad*. *Kaipad* system of rice farming has been studied presently, based on specialities of the area, soil and water conditions and the varieties used. The study showed that soil salinity of the area in summer varied from 10.9 mmhos/cm to 19.9 mmhos/cm and water salinity in summer varied from 35.9 mmhos/cm to 49.9 mmhos/cm and in the month of July in the middle the South West monsoon it varied from 1.6 mmhos/cm to 4.7 mmhos/cm. Soil pH during April ranged from 4.9 to 6.6. Water pH ranged between 6.71 and 7.45 in April and in July it ranged from 6.15-6.71. Availability of NPK in the soil ranged as follows in April N: 1.12% to 2.0%; P: 7.2 kg/ha to 34.2 kg/ha; K: 480 kg/ha. The major rice varieties cultivated in the area are the native cultivars *Kuthiru, Orkazhama, Kuttusan, Orthadiyan* and *Chovverian* among which *Kuthiru* is the most popular and the best performing.

153. **Chandran, M. 1998.** "*Brachiaria cruciformis* (J.E. Sm.) Griseb. – A new record for Kerala". *J. Bombay Nat. Hist. Soc.* 95: 543.

Abstract:- *Brachiaria cruciformis* (J.E. Sm.) Griseb. has been reported for the first time for Kerala from Kozhikode district. Earlier this species was known from Bihar, Karnataka, West Bengal and Andhra Pradesh.

154. **Chandrasekaran, R. 1993.** "*Luisia macrantha* Blatt. & McC. – A rare orchid from Moozhiar forest, Kerala". *J. Econ. Taxon. Bot.* 17: 69–70.

Abstract:- A brief description along with analytical sketches of *Luisia macrantha* Blatt. & McC., a rare orchid from Moozhiar forest, Kerala is given.

155. **Chandrasekaran, R. 1995.** "Amended description of flower of *Symplocos macrocarpa* Wight ex Clarke subsp. *kanarana* (Talbot) Nooteb. (Symplocaceae)". *J. Econ. Taxon. Bot.* 19: 446–448.

Abstract:- *Symplocos macrocarpa* Wight ex Clarke subsp. *kanarana* (Talbot) Nooteb. is a vulnerable plant, endemic to southern Western Ghats. Flower of this plant was not sufficiently known for the past two decades. Description of this flower based on fresh collection from Devarmalai, Goodrical forest, Pathanamthitta district, Kerala is provided in this paper.

156. **Chandrasekharan, C. 1962.** "A general note on the vegetation of Kerala state". *Indian Forester* 88: 440–441.

157. **Chandrasekharan, C. 1962.** "Ecological study of the forests of Kerala state". *Indian Forester* 88: 473–480.

Abstract:- Physical features, physiographic factors, geology, soil, climate, biotic factors, climax type, secondary types, secondary succession in the tropical evergreen forest and grasslands and the ecological status of forests of Kerala state have been discussed.

158. **Chandrasekharan, C. 1962.** "Forest types of Kerala State I – III". *Indian Forester* 88: 660–674.

Abstract:- Five different forest types, viz., tropical wet evergreen forests, tropical moist deciduous forests, tropical dry deciduous forests, montane subtropical forests and montane temperate forests of Kerala have been discussed.

159. **Chavan, S.Y. & Sardesai, M.M. 2012.** "Range extension of *Alysicarpus naikianus* Pokle (Fabaceae) in western India". *J. Threatened Taxa* 4: 2590–2592.

Abstract:- The genus *Alysicarpus* Desv. of family Fabaceae is distributed in the dry zones of Peninsular India, with 15 species and 7 varieties. *A. naikianus* Pokle, an endemic species, described in 1999 was only known from few localities. In recent surveys, a number of additional populations were found in Western India. Thereby, now known to be chiefly distributed along the eastern escarpments of Western Ghats and coastal plains of Kerala, Karnataka, Goa, Maharashtra and Gujarat. It is common, widespread and fairly abundant and found along road sides, on grazing grounds, in open, dry and waste places.

160. **Commelin, C. 1696.** *Flora Malabarica*. Leiden.

161. **Cherian, T.T. 2006.** "A systematic study of *Scenedesmus* spp. and vars. in the Poyyachira pond at Thrikkakara, Kerala". *Indian J. Bot. Res.* 2: 191–194.

Abstract:- The present paper deals with the systematic account of 11 spp. and varieties of *Scenedesmus* collected from the Poyyachira pond, Thrikkakara, Kochi, about 23 km from the Cochin International Air Port along the Sea Port- Pir Port Road, during the monsoon

months of 2004 and 2005. Number of cells in each colony, size of the cells, size of colony and size of spines with diagrams are given. Slight variations in the size of the cells and colonies and spines were observed. No significant variations were noticed in 2004 and 2005.

162. **Dan, M. & Khan, A.E.S. 1991.** A glance to some rare medicinal plants of Western Ghats. In: Karunakaran, C.K. (Ed.), *The proceedings of the symposium on rare, endangered and endemic plants of the Western Ghats*. Kerala Forest Department, Thiruvananthapuram. pPp. 221–226.

Abstract:- The features, uses, distribution and status of *Coscinium fenustratum, Embelia ribes, Helminthostachys zeylanica, Heracleum candolleanum, Holostemma ada-kodian* and *Rauvolfia serpentina* are discussed. These plants are potentially becoming rare in southern parts of Western Ghats due to over exploitation for their medicinal value. The effective way to their conservation is by habitat preservation. Propagation methods of these plants should be standardized and cultivation also should be encouraged. The collection of raw drugs from forests should be allowed only in proper seasons. A study based on, purely, practical experiences and observations through plant collection explorations are depicted here.

163. **Dan, M., Kumar, E.S.S. & Thomas, J. 1997.** "On the identity of *Ixora johnsoni* (Rubiaceae) – A less known endemic plant of southern Western Ghats, India". *Rheedea* 7: 73–76.

Abstract:- *Ixora johnsoni* Hook.f. is a rare, endemic and less known taxon of southern Western Ghats (Kottayam district, Kerala). Its taxonomic identity was quite confused due to insufficient description, lack of illustration and poor representation in herbaria. Complete description, line drawing, pertinent notes, etc. are provided to resolve the problem.

164. **Dan, M., Mathew, P.J., Unnithan, C.M. & Pushpangadan, P. 1996.** "*Thottea abrahamii*, a new species of Aristolochiaceae from Peninsular India". *Kew Bull.* 51: 179–182.

Abstract:- *Thottea abrahamii* (Aristolochiaceae) a new species is described and illustrated from Thiruvananthapuram district of Kerala, Peninsular India. This species is allied to *T. dinghouii* Swarupan. Its phytogeographic significance is discussed.

165. **Daniel, P. (Ed.). 2005.** *Flora of Kerala.* Vol. 1. Ranunculaceae to Connaraceae. Botanical Survey of India, Kolkata.

Abstract:- In this volume a total of 59 families from Ranunculaceae to Connaraceae, consisting 265 genera and 687 species, including few novelties have been treated.

166. **Daniels, A.E.D. & Felix, R. 2009.** "The endemic and rare *Notothylas anaporata* Udar &

D.K. Singh (Notothylaceae: Anthocerotae) rediscovered". *Nelumbo* 51: 217–218.

Abstract:- *Notothylas anaporata* Udar & D.K. Singh has been rediscovered from Shendurney Wildlife Sanctuary, Kollam district, Kerala, which is more than 1000 km away from the type locality, Khandala, Pune district (Maharashtra).

167. **Daniels, A.E.D., Kariyappa, K.C. & Daniel, P. 2011.** "The moss genus *Ochrobryum* Mitt. (Leucobryaceae) added to the bryoflora of the Western Ghats". *Nelumbo* 53: 155-160.

Abstract:- The moss genus *Ochrobryum*, with the lone species *O. kurzianum*, earlier known to occur in the Garo Hills (Meghalaya) and The Eastern Ghats (Orissa) in India is recorded as additions to the Western Ghats from the Kerala part of the Agasthyamalai Biosphere Reserve. The species is described in detail, illustrated and its distribution mapped. It is pointed out in the discussion that no Indian bryologist/musicologist had seen any Indian material earlier and that the present material has been collected after more than a century.

168. **Daniels, A.E.D. & Mabel, J.L. 2009.** "Two mosses new to the bryoflora of the Indian mainland". *Nelumbo* 51: 179–182.

Abstract:- Tow mosses, viz., *Calymperes moluccense* and *C. taitense*, earlier known to occur only in the Andamans in India, are recorded for the Indian mainland. The first species is from Tamil Nadu and the second one from Tamil Nadu and Kerala. They are described in detail and illustrated.

169. **Das, K.D. & Menon, A.R.R. 2011.** "Phytodiversity of Eringole sacred grove of Kerala". *Indian Forester* 137: 629–634.

Abstract:- Eringole sacred grove is a specialized and fragile ecosystem, located within the dense human habitations of Perumbavoor Municipal area in Ernakulam district of Kerala state. The vegetation of the sacred grove is considered to be the remnants of the old cover types existed years before. Most of the groves are under heavy pressure of degradation, mainly due to anthropogenic influence. The present work envisages analyzing qualitatively and quantitatively, the plant diversity of the ecosystem.

170. **Datta, A. 1985.** "Rheede's ferns in Hortus Malabaricus". *Bull. Bot. Surv. India* 27: 129–141.

Abstract:- Rheede named 19 species of ferns in Malayalam in his *Hortus Malabaricus* (Vol. 12, 1703). The botanical identity of these species made by eminent authors through ages has been studied. The study reveals that the names which were ascribed to these taxa earlier are mostly invalid now. The present work is devoted to establish their current botanical names through close examination of Rheedean plates and literature and current nomenclatural studies.

171. **Davis, T.A. 1947.** "Abnormal palms of South Travancore". *J. Bombay Nat. Hist. Soc.* 47: 398–400.

Abstract:- Three-crowned coconut palm (*Cocos nucifera* L.) has been observed from Kulasekaram near Pechipparai dam of South Travancore. Description of this palm has been given.

172. **Davis, T.A. 1948.** "Abnormal palms of Travancore. A bulbilliferous coconut palm (*Cocos nucifera* L.)". *J. Bombay Nat. Hist. Soc.* 47: 527–529.

Abstract:- A bulbilliferous coconut palm has been observed from Manguzhi, Travancore. Detailed description of this palm has been given.

173. **Davis, T.A. 1948.** "Abnormal bananas of Travancore". *J. Bombay Nat. Hist. Soc.* 47: 700–704.

Abstract:- A banana plant (*Musa paradisiaca* L.) with 4-branched inflorescence has been observed and described from Travancore.

174. **Davis, T.A. 1948.** "Abnormal palms of Travancore. Polycarpy in coconut (*Cocos nucifera* L.)". *J. Bombay Nat. Hist. Soc.* 47: 704–706.

Abstract:- Polycarpy in coconut (*Cocos nucifera* L.) has been observed and described from Travancore.

175. **Deb, D.B. & Dutta, R. 1985.** "A new species of *Hedyotis* L. (Rubiaceae) from South India". *J. Bombay Nat. Hist. Soc.* 82: 619–621.

Abstract:- A new species of *Hedyotis*, viz., *H. devicolamensis* allied to *H. leschenaultiana* DC. and *H. eualata* (Bedd. ex Gamble) Henry & Subram. has been described from Devicolam, Kottayam district, Kerala.

176. **Deb, D.B. & Gangopadhyay, M. 1983.** "New taxa of the genus *Psychotria* (Rubiaceae) in India". *Bull. Bot. Surv. India* 25: 211–216.

Abstract:- Three new species of *Psychotria*, viz., *P. balakrishnii* allied to *P. kurzii* Deb & Gang., *P. burkillii* allied to *P. denticulata* Wall. and *P. keralensis* allied to *P. flavida* Talb. are described from Andaman & Nicobar Islands, Arunachal Pradesh and Kerala, respectively. One new variety *P. nudiflora* W. & A. var. *latifolia* has been described from Tamil Nadu.

177. **Devi, K.U. & Panikkar, M.V.N. 1991.** "Observations on the lateral conjugation of *Spirogyra jogensis* Iyenger var. *minor* Iyenger from Kerala". *J. Econ. Taxon. Bot.* 15: 473–474.

Abstract:- *Spirogyra jogensis* Iyenger var. *minor* Iyenger is recorded from different parts Kerala state and studied its reproduction. The zygospore wall of this species has been reported as smooth by Iyenger. However by the acid base mothod of Tiffany, it has been

found as outer wrinkled and inner smooth.

178. **Devi, K.U. & Panikkar, M.V.N. 1991.** "Observations on the conjugation of *Temnogametum prescottii* Patel from Kerala". *J. Econ. Taxon. Bot.* 15: 475–476.
Abstract:- *Temnogametum prescottii* Patel is recorded from Kerala state and reproduction studied. The conjugation of this species is recorded for the first time. The asexual reproduction by azygospores is also reported and discussed in detail.

179. **Devi, K.U. & Panikkar, M.V.N. 1991.** "A new species of *Spirogyra* Link from Kerala, South India". *J. Econ. Taxon. Bot.* 15: 743–745.
Abstract:- A new species of *Spirogyra* Link is reported from Quilon, Kerala. The new species *S. patelensis* is unique in its sexual reproduction. The same pattern of sexual reproduction found in other species is compared and discussed in detail.

180. **Devi, K.U. & Panikkar, M.V.N. 1993.** "New records of the genus *Spirogyra* Link from Kerala – III". *J. Econ. Taxon. Bot.* 17: 699–700.
Abstract:- Three taxa of *Spirogyra* Link, collected from different parts of Kerala are described. All these taxa, viz., *S. glabra* Czurda, *S. pelpingensis* Jao and *S. crassa* Kutz are the first reports from India.

181. **Devi, K.U. & Panikkar, M.V.N. 1993.** "Oedogoniales of Kerala – II". *J. Econ. Taxon. Bot.* 17: 61–68.
Abstract:- The present paper deals with the taxonomic descriptions of 20 taxa of *Oedogonium* from Kerala. Of these, three represent macrandrous homothallic, seven macrandrous heterothallic, six nannandrous gynandrosporous and four nannandrous idioandrosporus. Seven species are new to India and all the rest are the first report from Kerala.

182. **Devi, K.U. & Panikkar, M.V.N. 1993.** "Oedogoniales of Kerala – III, *Bulbochaete* Agardh". *J. Econ. Taxon. Bot.* 17: 147–149.
Abstract:- Six species of *Bulbochaeta* collected from Quilon district of Kerala state have been described. Of these, three species are new to India, and all are new to Kerala.

183. **Devi, K.U. & Panikkar, M.V.N. 1993.** "Zygnemataceae of Kerala – *Spirogyra* Link – I". *J. Econ. Taxon. Bot.* 17: 705–709.
Abstract:- The present paper deals with the taxonomic account of the genus *Spirogyra* Link from Kerala. Taxonomic enumeration of 18 taxa are given, of which 9 are supposed to be new to India and all are reported for the first time from Kerala.

184. **Dey, S. & Prasanna, P.V. 2005.** "On the distribution and status of *Scleria sumatrensis* Retz. (Cyperaceae), in India". *J. Non-Timber Forest Products* 12: 231–233.
Abstract:- *Scleria sumatrensis* Retz. (Cyperaceae), collected from different regions of

India during 19 th century is reported to be endangered/extinct in recent publications. However, recent collection of this species from coastal districts of Kerala along with its present collection from Tropical Botanical Garden and Research Institute campus, Thiruvananthapuram, Kerala reveals that it is quite common in this Southern most State of India and belies the theory of being 'extinct'. A detailed description of the sedge along with the distribution and illustration is provided to facilitate easy identification.

185. **Dhar, T.P. & Vijayakumar, N. 2009.** "Palynological studies in selected species of *Ipomoea* Linn.". *Indian J. Bot. Res.* 5: 269–276.

Abstract:- In the present paper, an attempt has been made to examine the relation of palynology with classification. Palynology is supposed to be an important tool for classifying the plants. The morphological characters of the pollen is categorized under aperture, size, shape, exine ornamentation, nature and length of spine. The aperture character is considered to be primary importance, the exine surface pattern as secondary and others as tertiary. For the present investigation 16 species of *Ipomoea* were selected. Plants used in this study were collected from different localities of Kerala and Tamil Nadu. All the 16 members of the genus *Ipomoea* showed pantoporate aperture morphotype, spinose exine ornamentation and spheroidal shape.

186. **Dilip Kumar, E.K. & Janardhana, G.R. 2012.** "Ethno Botanical polypharmacy of traditional healers in Wayanad (Kerala) to treat type 2 diabetes". *Indian J. Traditional Knowledge* 11: 667–673.

Abstract:- The aboriginal medical system prevalent among traditional healers of Wayanad has demonstrated a good practice, so bright future in the therapy of type 2 diabetes. Therefore, present study focused on identification validation and documentation of such Ethnobotanical polypharmacy prevalent in the district. A total of 47 species belonging to 44 genera under 29 families were identified being utilized in 23 different compound medicinal recipes for diabetic healthcare in Wayanad. These preparations and the herbal ingredients need scientific evaluation about their mechanism of action in living organism in health as well as disease condition to confirm their activity against type 2 diabetes.

187. **Dillwyn, L.W. 1839.** *A review of the references to the Hortus Malabaricus of H. van Rheede van Draakenstein*. Swansea.

188. **Dixit, R.D. 1984.** "Two new species of *Selaginella* from India". *Bull. Bot. Surv. India* 26: 104–107.

Abstract:- Two new species of *Selaginella*, viz., *S. ganguliana* allied to *S. pallida* (Hook. & Grev.) Spring and *S. nairii* allied to *S. minutifolia* Spring have been described and illustrated from Kerala and Orissa respectively.

189. **Dixit, R.D. 1985.** "Two new species of *Selaginella* P. Beauv. from Kerala, India". *Bull. Bot. Surv. India* 27: 123–125.

Abstract:- *Selaginella keralensis* Dixit (allied to *S. cataractro* Alston) and *S. nayarii* Dixit (allied to *S. rajasthanensis* Gena, Bharadwaja & Yadav) have been described in detail with illustrations from the state of Kerala, as new to science.

190. **Dixit, R.D., Ghosh, S.R. & Ghosh, R.K. 1995.** "*Adiantum latifolium* Lam. – An introduced fern in India". *Bull. Bot. Surv. India* 37: 117–119.

Abstract:- *Adiantum latifolium* Lam. has been reported as new record of fern from Andamans and Kerala in wild state, probably introduced as a pot plant in the past by Britishers and is now getting naturalised in the islands. The species is described in detail with illustrations.

191. **Dixit, R.D. & Mondal, P. 1993.** "Fern-allies of Southern India". *Indian Fern J.* 10: 157–171.

Abstract:- The present paper provides up to date data on the fern-allies of Kerala, Karnataka and Tamil Nadi, Southern India for the first time. Six families, 9 genera and 43 species have been recorded, of which 9 species are endemic. Keys to the genera and species are provided to facilitate easy identification. Enumeration of species with correct nomenclature, basionym and important synonyms, notes on the habitat and distribution in India and specimens examined have been provided.

191a. **Easa, P. 2003.** *Biodiversity Documentation for Kerala*. *Part 5: Pteridophytes.* Kerala Forest Research Institute, Peechi.

Abstract:- A total of 337 pteridophytes have been documented with their distribution in Kerala, global distribution, habit, habitat and status.

192. **Ellis, J.L. & Chadrasekaran, V. 1972.** "A new variety of *Nothopegia beddomei* Gamble (Anacardiaceae) from Kerala, South India". *Bull. Bot. Surv. India* 12: 257–258.

Abstract:- A new variety of *Nothopegia beddomei* Gamble (Anacardiaceae), viz., *N. beddomei* var. *wynaadica* has been described from Chandanathode, Peria R.F., Cannanore district, Kerala.

193. **Ellis, J.L. & Karthikeyan, S. 1973.** "Notes on some interesting plants from South India – II". *J. Bombay Nat. Hist. Soc.* 70: 594–598.

Abstract:- Three taxa, viz., *Alloteropsis semialata* (R. Br.) Hitchc. var. *viatica* (Griff.) Ellis & Karthik., *Mikania cordata* (Burm.f.) B.L. Robinson and *Eryngium foetidum* Linn. have been reported for the first time for Peninsular India from Kerala and one species *Ichnanthus vicinus* (F.M. Bail.) Merr. from Tamil Nadu and Andhra Pradesh.

194. **Ellis, J.L., Swaminathan, M.S. & Chandrabose, M. 1967.** "Studies on the vascular

flora of Sultan's Battery and Chedaleth forest ranges, Kozhikode district, Kerala". *Bull. Bot. Surv. India* 9: 1–16.

Abstract:- This paper deals with all the vascular plants of Sultan's Battery and Chedaleth ranges, Kozhikode district, Kerala collected during the year 1964–65. The ranges lie between 8^0 – 12^0N and 76^0 – 80^0E. Various types of vegetation ranging from tropical evergreen, semi-evergreen, moist and dry deciduous to scrub are seen. Altogether 528 plants, spread over 87 families and 370 taxa are enumerated. From a careful study of literature and collections made earlier by others and presently kept in the herbarium of the Southern Circle, Botanical Survey of India, 12 new records for the area are discovered.

195. **Erady, N.A. 1962.** "On self-conjugation in a new species of *Spirogyra* Link". *J. Bombay Nat. Hist. Soc.* 59: 700–703.

Abstract:- The process of sexual production by self-conjugation in a new species of *Spirogyra*, *S. palghatensis*, which comes near *S. crenulata* Singh and *S. corrugata* Transeau, is described. It is based on a study of living specimens collected in ditches near Malampuzha reservoir, Palghat, Kerala.

196. **Erady, N.A. 1967.** "A new species of *Christisonia* Gardn. from South India". *J. Bombay Nat. Hist. Soc.* 64: 10–12.

Abstract:- A new species, *Christisonia keralensis*, which comes close to *C. saulieri* Dunn is described. It is based on a study of living specimens collected at Nelliyampathi Hills in the Western Ghats, Kerala state, South India.

197. **Erlanson, E.W. 1936.** "Plant colonization on two new tropical islands". *J. Indian Bot. Soc.* 15: 193–214.

Abstract:- A brief comparison is given between the course of plant colonization on Willingdon Island and on Krakatau of Cochin Harbour. Twelve species were found common to both.

198. **Felix, R. & Daniels, A.E.D. 2012.** "Four mosses new to the bryoflora of the Western Ghats and collected after the type". *Indian J. Forest.* 35: 397–402.

Abstract:- *Dicranella macrospora* Gangulee, *Entodon subplicatus* Renauld & Cardot, *Fissidens ranuii* Gangulee and *Leiodontium surculare* (Dixon) W.R. Buck & B.C. Tan are recorded as new records to the Western Ghats from the Shendurney Wildlife Sanctuary in Kerala. Specimens of all species have been collected after the type. Detailed descriptions and illustrations are provided for each species.

199. **Fischer, C.E.C. 1932.** "New or little known plants from South India I". *Bull. Misc. Inform. Kew* 1932: 245–247.

Abstract:- Three new species, viz. *Hopea Jacobi* allied to *H. jucunda* Thw., *Eriochrysis*

rangacharii allied to *E. purpurata* Stapf and *Isachne setosa* allied to *I. lisboae* Hook.f. have been described from Karnataka, Tamil Nadu and Kerala, respectively. *Embelia adnata* Bedd. has been reported here for the first time from Tamil Nadu.

200. **Fischer, C.E.C. 1933.** "New or little known plants from south India: II". *Bull. Misc. Inform. Kew* 1933: 339–357.

Abstract:- A total of 12 species and 1 variety have been described from south India, of which 5 species and 1 variety have been reported from Tamil Nadu, 2 from Karnataka, 3 from Maharashtra and 2 from Kerala. *Ischaemum rangacharianum* and *I. travancorense* have been described from Kerala.

201. **Fischer, C.E.C. 1934.** "New or little known plants from South India 3". *Bull. Misc. Inform. Kew* 1934: 165–172.

Abstract:- Four new species, viz., *Sonerila tinnevellinensis* allied to *S. brunonis* Wight & Arn.*, Arisaema convolutum* allied to *A. leschenaultia* Bl. and *Tripogon pungens* have been described from Tamil Nadu and *Coelachne meeboldii* from Kerala. *Carex rara* Boot subsp. *capillacea* Boot has been reported here from Tamil Nadu.

202. **Fischer, C.E.C. 1934.** "New or little known plants from South India 4". *Bull. Misc. Inform. Kew* 1934: 389–394.

Abstract:- Three new species, viz., *Impatiens aliciae* allied to *I. ligulata* Bedd.*, I. coelotropis* allied to *I. walker* Hook. and *I. platyadena* allied to *I. wightiana* Bedd. have been described from Kerala. *Impatiens leptura* Hook.f. has been reported here from Kerala and Tamil Nadu.

203. **Fischer, C.E.C. 1935.** "New or little known plants from South India 5". *Bull. Misc. Inform. Kew* 1935: 92–97.

Abstract:- One new species, viz., *Impatiens anaimudica* allied to *I. travancorica* Bedd. has been described from Kerala and one new variety viz., *Oxytenanthera nigrociliata* Munro var. *hohenackeri* from Karnataka. *Lagenandra ovata* Thw. has been reported here from Kerala and *L. toxicaria* Dalz. from Karnataka.

204. **Fischer, C.E.C. 1935.** "New or little known plants from South India 6". *Bull. Misc. Inform. Kew* 1935: 157–160.

Abstract:- Two new species, viz., *Impatiens dendricola* allied to *I. laticorne* C.E.C. Fischer and *Sonerila nemakddensis* allied to *S. grandiflora* Wall. have been described from Karnataka and Kerala, respectively. 12 species and one variety have been reported here from South India of which 3 species from Kerala.

205. **Fischer, C.E.C. 1936.** "New or little known plants from South India: VII". *Bull. Misc. Inform. Kew* 1936: 274–278.

Abstract:- A total of 12 species have been recorded from south India, of which 6 have been reported from Tamil Nadu and 2 from Karnataka. Three species, viz., *Quisqualis malabarica* Bedd., *Ariopsis peltata* Nimmo and *Arisaema wightii* have been reported from Kerala. Two species, viz., *Arisaema attenuatum* and *A. peltatum* have been described from Kerala.

206. **Fischer, C.E.C. 1938.** "New or little known plants from South India VIII". *Bull. Misc. Inform. Kew* 1938: 32–37.

Abstract:- Four new species, viz., *Impatiens munnarensis* E. Barnes allied to *I. pusilla* Heyne, *Didymocarpus macrostachya* E. Barnes allied to *D. gambleana* C.E.C. Fischer, *Ophiorrhiza munnarensis* C.E.C. Fischer allied to *O. pallida* Thw. and *Impatiens pandata* E. Barnes allied to *I. akka* Bedd. have been described from Kerala and another new species *Sonerila barnesii* C.E.C. Fischer from Tamil Nadu. Two new names, viz., *Didymocarpus gambleana* C.E.C. Fischer and *Osbeckia kewensis* C.E.C. Fischer have also been proposed. *Osbeckia wynaadensis* C.B. Clarke, *Exacum pumilum* Griseb. and *Amorphophallus commutatus* Engl. from Kerala and *Biophytum intermedium* Wight from Tamil Nadu have been reported.

207. **Fischer, C.E.C. 1938.** "New or little known plants from South India 9". *Bull. Misc. Inform. Kew* 1938: 123–127.

Abstract:- Two new species, viz., *Ophiorrhiza incarnata* C.E.C. Fischer allied to *O. pectinata* Arn. and *Osbeckia caudata* C.E.C. Fischer allied to *O. pectinata* Arn. have been described from Tamil Nadu and Kerala, respectively. One new variety, viz., *Lagenandra toxicaria* Dalz. var. *barnesii* C.E.C. Fischer has been described from Tamil Nadu. Two species, viz., *Cheirostylis pauciflora* Lindl. and *Portulaca wightiana* Wall. from Tamil Nadu and four species, viz., *Arundinaria walkeriana* Munro, *Osbeckia truncate* D. Don ex Wight & Arn., *O. reticulata* Bedd. (Ker.) and *Medinilla malabarica* Bedd. from Kerala have been reported.

208. **Fischer, C.E.C. 1939.** "New or little known plants from South India: X". *Bull. Misc. Inform. Kew* 1939: 247–251.

Abstract:- A total of 8 species and 1 variety has been recorded from South India, of which 3 are reported from Tamil Nadu and one from Karnataka. *Mimulus nepalensis* Benth. and *Didymocarpus humboldtiana* Gardn. var. *racedens* have been reported from Kerala. Three species, viz., *Begonia aliciae, Ophiorrhiza barnesii* and *Anaphalis barnesii* have been described from Kerala.

209. **Florence, E.J.M. & Yesodharan, K. 2000.** "Macrofungal flora of Peechi-Vazhani Wildlife Sanctuary". KFRI Research Report No. 191. pp. 43.

Abstract:- A survey of macrofungi occurring in the Peechi-Vazhani Wildlife Sanctuary, situated in Trichur district was conducted for a period of three years (1995–1997) and 600 hundred macrofungal specimens were collected. Macrofungi are represented by 57 species belonging to 37 genera. Most of the species (61%) belonged to Aphyllophorales; 11 species from Agaricales were also collected. Among the Agaric macrofungi, *Termitomyces microcarpus* and *T. eurrhizus* are known to be edible. *Ascomycotina* (Pezizales and Sphaeriales) was represented by only four species.

210. **Gamble, J.S. 1925.** "New Lauraceae from Southern India". *Bull. Misc. Inform. Kew* 1925: 126–132.

Abstract:- *Cryptocarya anamalayana* Gamble (Anamalai Hills, Tamil Nadu), *C. beddomei* Gamble (Karnataka), *C. bourdillonii* Gamble (Tamil Nadu, Karnataka, Kerala), *C. lawsonii* Gamble (Tamil Nadu), *Cinnamomum riparium* Gamble (Kerala, Tamil Nadu), *C. travancoricum* Gamble (Kerala), *Actinodaphne bourneae* Gamble (Tamil Nadu), *A. bourdillonii* Gamble (Tamil Nadu, Karnataka, Kerala), *A. lawsonii* Gamble (Tamil Nadu), *A. tadulingami* Gamble (Tamil Nadu, Karnataka), *Litsea mysorensis* Gamble (Karnataka, Kerala), *L. insignis* Gamble (Tamil Nadu, Kerala), *L. bourdillonii* Gamble (Tamil Nadu, Kerala), *L. travancorica* Gamble (Kerala), *Neolitsea fischeri* Gamble (Tamil Nadu, Kerala) have been described as new species.

211. **Gamble, J.S. & Fischer, C.E.C. 1915–1936.** *Flora of the Presidency of Madras*. Parts I–XI. Adlard & Son & Co. Ltd., London (3 volumes, Repr. ed. 1957, Botanical Survey of India).

Abstract:- The volume I contains three parts (Part – I Ranunculaceae to Aquifoliaceae; Part – II Celastraceae to Leguminosae-Papilionatae and Part – III Leguminosae–Caesalpinioideae to Caprifoliaceae), volume II contains four parts (Part – IV Rubiaceae to Ebenaceae; Part – V Ebenaceae to Scrophulariaceae; Part – VI Scrophulariaceae to Plantaginaceae and Part – VII Nyctaginaceae to Euphorbiaceae) and volume III contains three parts (Part – VIII Ulmaceae to Xyridaceae; Part – IX Commelinaceae to Cyperaceae and Part – X Gramineae).

212. **Geethakumary, M.P., Deepthikumary, K.P. & Pandurangan, A.G. 2009.** "A note on new distribution and undescribed fruits of the little known plant *Xanthophyllum manickamii* Murugan, Kerala, India". *Indian J. Bot. Res.* 5: 239–241.

Abstract:- *Xanthophyllum manickamii* Murugan is reported for the first time from Kerala along with the description of the fruit as additional information to the protologue.

213. **Geethakumary, M.P., Kumar, E.S.S. & Pandurangan, A.G. 2008.** "A new variety of *Phyllocephalum rangacharii* (Gamble) Narayana (Asteraceae) from Kerala, India". *Indian*

J. Forest. 31: 119–120.

Abstract:- A new variety of *Phyllocephalum rangacharii*, viz., *P. rangacharii* var. *agastyamalayanum* from Ponmudi, Thiruvananthapuram district, Kerala, India is described and illustrated.

214. **Geethakumary, M.P., Kumar, E.S.S., Pandurangan, A.G. & Shaju, T. 2007.** "*Cinnamomum dubium* Nees (Lauraceae) – A new record for India". *Indian J. Forest.* 30: 73–74.

Abstract:- *Cinnamomum dubium* Nees, reported for the first time for India from Agastymalai hills of Kerala state. This species was earlier known to occur in Sri Lanka. A detailed description, illustration and relevant notes are provided.

215. **Geethakumary, M.P., Padurangan, A.G. & Kumar, E.S.S. 2012.** "*Cinnamomum litseaefolium* (Lauraceae) – A ew distributional record for India". *Rheedea* 22: 127–130.

Abstract:- The present collection of *Cinnamomum litseaefolium* Thwaites in southern Western Ghats (Chemunji hills, Thiruvananthapuram district, Kerala) forms a new distributional record for India since, it was thought to be endemic to Sri Lanka. An illustrated account with relevant notes is provided, for further studies on this species.

216. **Geethakumary, M.P., Pandurangan, A.G., Kumar, E.S.S. & Shaju, T. 2010.** "On the occurrence and phytogeographical significance of three little known flowering plants of Southern Western Ghats, India". *Indian J. Forest.* 33: 127–130.

Abstract:- Two little known species, viz., *Elaeocarpus rugosus* Roxb. ex G. Don and *Memecylon variens* Thw. are reported for the first time from Southern Western Ghats and thus form an addition to the flora of Kerala. The occurrence of *Cinnamomum walaiwarense* Kosterm. in Kerala is also confirmed. They are described and illustrated based on fresh specimens.

217. **Geetha, C.K., Gopikumar, K. & Aravindakshan, M. 1994.** "Comparative growth of multipurpose (Indigenous vs. Exotic) tree species in the warm humid tropics of Kerala". *Indian J. Forest.* 17: 134–136.

Abstract:- Performance of 17 multipurpose (indigenous vs. exotic) tree species were compared in terms of early growth characters under warm humid tropical conditions of Kerala. *Acacia auriculiformis* attained maximum height and was closely followed by *Casuarina equisetifolia*. In terms of girth, *Bauhinia galpinii* attained the maximum. The data on the bole volume clearly displayed that indigenous species such as *Mangifera indica, Artocarpus heterophyllus, Terminalia paniculata*, etc. have an edge over exotic species.

218. **Geetha, T. & Balagopalan, M. 2010.** "A comparative evaluation of the soil micronutrient

status in Eucalypt plantations of different rotations in Kerala". *Indian J. Forest.* 33: 49–54.

Abstract:- A study was carried out in the South Indian Moist deciduous forest and Eucalypt plantations of different rotations in the Thrissur Forest Division, Kerala to assess the micronutrient status of soils and the variation with rotation. Among the four micronutrients studied (exchangeable iron, copper, manganese and zinc), there was a significance increase in iron and a decrease in copper concentrations with subsequent rotations under *Eucalyptus* plantations in comparison to the natural forest of the region. As regards to the zinc and manganese, no significant difference was observed between soils under Eucalypt plantations and natural forest. A significant correlation was observed between iron and $_{p}$H and organic carbon and also between manganese and organic carbon.

219. **Ghosh, S.R. 1985.** "A note on a species of fern genus *Phymatosorus* Pic. Serm. in India". *J. Econ. Taxon. Bot.* 6: 433–434.

Abstract:- A new species of *Phymatosorus*, viz., *Phymatosorus beddomei* [allied to *P. cuspidatus* (Don) Pic. Serm.] has been described from Kerala and Tamil Nadu.

220. **Ghosh, S.R. & Biswas, A. 1984.** "Notes on two species of fern genus *Nephrolepis* Schott in India". *J. Econ. Taxon. Bot.* 5: 7–8.

Abstract:- Two species of fern genus *Nephrolepis* Schott, viz., *N. multiflora* (Roxb. ex Griff.) Jarrett ex Morton and *N. falcata* (Cav.) C. Chr. have been reported for the first time from Kerala and West Bengal, respectively. *N. multiflora* was previously reported from West Bengal and *Nephrolepis falcata* from Kerala and Tamil Nadu.

221. **Ghosh, S.R. & Biswas, A. 1984.** "The little known fern genus *Arthropteris* J. Sm. (Nephrolepidaceae) in India". *J. Econ. Taxon. Bot.* 5: 123–124.

Abstract:- *Arthropteris palisotii* (Desv.) Alston has been reported from Kerala, previously known from Tamil Nadu and Sri Lanka.

222. **Giri, G.S. & Nayar, M.P. 1984.** "A new species and notes on two species of *Sonerila* Roxb. (Melastomataceae) from south India". *Bull. Bot. Surv. India* 26: 174–180.

Abstract:- A new species of *Sonerila*, viz., *S. sahyadrica* allied to *S. rheedei* Wight & Arn. has been described and illustrated from Quilon district, Kerala and notes are given on two species, viz., *S. rheedei* Wight & Arn. and *S. wallichii* Benn. from south India.

223. **Giri, G.S. & Nayar, M.P. 1984.** "A new species of *Osbeckia* Linn. (Melastomataceae) from Kerala (India)". *J. Bombay Nat. Hist. Soc.* 81: 434–436.

Abstract:- A new species of *Osbeckia* L., viz., *O. abrahamii* is described here with illustrations from Travancore, Kerala. A disgnostic key is also provided for easy identification.

224. **Giri, G.S. & Nayar, M.P. 1985.** "A new species of *Sonerila* (Melastomataceae) from India". *Blumea* 31: 235–238.

Abstract:- During study of the materials of the genus *Sonerila* Roxb. (Melastomataceae) in the Central National Herbarium of the Botanical Survey of India (CAL) the authors came across some specimens collected from different parts of Southern India. These specimens after critical study felt closer to *S. wightiana* Arn., a Ceylonese species, but can be easily distinguished by several characters. The distinguishing characters are keyed. The new taxon, viz., *Sonerila gamblei* is described here with illustrations. The species is named after its collector, J.S. Gamble, who has made an eminent work on the flora of South India.

225. **Giri, G.S. & Nayar, M.P. 1985.** "A new variety of *Sonerila elegans* Wight (Melastomataceae) from Kerala, India". *Bull. Bot. Surv. India* 27: 72–74.

Abstract:- A new variety of *Sonerila elegans* Wight, viz., *S. elegans* var. *beddomei* has been described and illustrated from Palghat hills, Kerala.

226. **Giri, G.S. & Nayar, M.P. 1985.** "A new species of *Sonerila* Roxb. (Melastomataceae) from Southern India". *Bull. Bot. Surv. India* 27: 86–89.

Abstract:- A new species of *Sonerila* Roxb., viz., *S. cannanorensis* allied to *S. zeylanica* Wt. & Arn. has been described and illustrated from Chandanathode, Cannanore district, Kerala.

227. **Giri, G.S. & Nayar, M.P. 1986.** "A new species of *Osbeckia* (Melastomataceae) from Southern India". *Kew Bull.* 41: 429–431.

Abstract:- A new species *Osbeckia mehrana*, allied to *O. gracilis* Bedd. is described and illustrated from Chemungi, Trivandrum district, Kerala, Southern India.

228. **Girijakumari, R., Vijayavalli, B. & Mathew, P.M. 2005.** "Pollen morphology of the Papilionaceae from South India". *Indian J. Bot. Res.* 1: 43–52.

Abstract:- Pollen morphology of 99 species representing 52 genera under seven tribes of the Papilionaceae (Fabaceae) from South India has been studied. The pollen grains of the group were monads, and were mostly isopolar and radiosymmetric. The Papilionaceae is a eurypalynous group with different apertural types such as 3-colpate, 3-colporoidate, 3–4-colporate, 3–syncolporate, 3–4-porate, of which the 3-colporate condition was predominant. The primitive colpate condition occurs in one tribe, Hedysareae with colporate condition co-existing in a number of species. The Papilionaceae, being dominantly endowed with the advanced pollen morphotypes, it is apparent that it occupies an advanced position among the Rosalean taxa. It is suggested that morphological evolution of pollen grains in the group has occurred along two directions: (1) tricolpate-

tricolporoidate-tricolporate, and (2) tricolpate-triporate. It is suggested that the tribe Hedysareae with tricolpate pollen is the most primitive, while the Phaseoleae with predominance of triporate pollen the most advanced. The other tribes with tricolporate pollen are suggested to have evolved along two independent lines from the Hedysareae. The Papilionaceae with the characteristic and distinctive floral structure coupled with recognizable pollen morphological distinction from the Caesalpiniaceae and Mimosaceae is suggested to merit separate family rank.

229. **Gitte, T., Ingle, P. & Dhabe, A. 2012.** "*Tephrosia voyelii* (Fabaceae) – An addition to the Flora of Kerala". *Bioinfolet* 9(3): 429.
Abstract:- During the field survey, *Tephrosia vogelii* was collected from near Tea estate in Vandi Periar, Munnar, Kerala. This forms a new record for Kerala. This species was earlier in India from Tamil Nadu. This species is native to Africa.

230. **Gopal, S.G., Kiran Raj, M.S., Mohanan, N. & Omana Kumary, N. 2004.** "*Ischaemum impressum* Hack. (Poaceae) – An addition to the flora of Kerala state". *J. Econ. Taxon. Bot.* 28: 549–551.
Abstract:- *Ischaemum impressum* Hack., hitherto known to be an endemic to Maharashtra state, is reported for the first time for Kerala state from Pakshipathalam, Wayanad district. Detailed description with illustrations is provided.

231. **Gopal, S.G. & Nair, K.N. 2002.** "Taxonomic notes on two species of *Jasminum* Linn. (Oleaceae) of South India". *J. Econ. Taxon. Bot.* 26: 128–132.
Abstract:- Taxonomic identity of two closely related species of *Jasminum* Linn., viz., *J. rottlerianum* Wall. ex DC. and *J. multiflorum* (Burm.f.) Andrew is clarified. *J. rottlerianum* has been reported from Andhra Pradesh, Karnataka, Kerala and Tamil Nadu and *J. multiflorum* from Kerala.

232. **Gopalakrishnan Nair, N. 1991.** "A study on the tree legumes endemic to Western Ghats of Kerala". KFRI Research Report No. 74. pp. 5.
Abstract:- A total of 12 species and 1 variety of leguminous trees endemic to the Western Ghats of Kerala and adjoining areas are enumerated in this report. They are *Acacia wightii, Calliandra cynometroides, Cynometra beddomei, C. bourdillonii, C. travancorica, Dialium travancoricum, Humboldtia bourdillonii, H. brunonis, H. decurrenns, H. unijjuga, H. unijuga* var. *trijuga, H. vahliana* and *Ormosia travancorica*. Brief notes on their distribution are also given.

233. **Gopalakrishnan Nair, N. 1991.** "Distribution of important forest tree species in Kerala (Southern Circle)". KFRI Research Report No. 75. pp. 17.
Abstract:- Occurrence of the 124 taxa of indigenous trees is reported from the Southern

Circle of the forests of Kerala with notes on their distribution within the area. With the shrinkage in forest cover, many trees are becoming rare and getting confined to isolated patches. Developmental activities like construction of dams and the subsequent alterations in the reservoir catchments are threatening their survial. It is suggested that urgent steps are to be taken to grow them.

234. **Gopalakrishnan, K. & Prasad, V.A.K. 1992.** "Some folklore medicines of the tribals (Irulars) of Attappady region (Kerala state)". *J. Econ. Taxon. Bot.*, Addit. Ser. 10: 385–388.

Abstract:- An ethnomedical survey was conducted at the Irular's pockets of Attappady region. This paper describes 20 number of plants. The description includes among other things Sanskrit names, local names, family and medicinal uses.

235. **Gopalan, R. & Chandrasekaran, V. 2000.** "*Isachne jayachandranii* (Gramineae) – A new grass from southern Western Ghats, India". *Kew Bull.* 55: 1005–1007.

Abstract:- *Isachne jayachandranii*, a new species of grass allied to *I. bourneorum* C.E.C. Fisch. from Thiruvananthapuram district, Kerala, southern Western Ghats, India, is described and illustrated.

236. **Gopalan, R. & Henry, A.N. 2000.** *Endemic plants of India.* CAMP for the strict endemics of Agasthiyamalai hills, southern Western Ghats. Bishen Singh Mahendra Pal Singh, Dehra Dun.

237. **Govindarajalu, E. 1970.** "Studies in Cyperaceae 3. Novelties in *Scleria* Berg.". *Proc. Indian Acad. Sci.* 71B: 221–225.

Abstract:- Two new varieties under *Scleria lithosperma* (L.) Sw., viz., *S. lithosperma* var. *multispiculata* and *S. lithosperma* var. *muricata* have been described from Tamil Nadu and Kerala respectively.

238. **Govindarajalu, E. 1996.** "Cyperaceae Indiae Australis Precursores – Novelties in *Pycreus* Beauv.". *J. Econ. Taxon. Bot.* 20: 299–304.

Abstract:- Three new species of *Pycreus* Beauv., viz., *P. mahadevanii* [allied to *P. latispicatus* (Boeckeler) C.B. Clarke] from Karnataka*, P. pyramidalis* [allied to *P. pumilus* (L.) Domin] from Tamil Nadu and *P. fasciculatus* [allied to *P. polystachya* Beauv.] C.B. Clarke] from Kerala and Tamil Nadu have been described and illustrated.

239. **Govindarajalu, E. 1996.** "Two new species of *Biophytum* from South India". *J. Econ. Taxon. Bot.* 20: 311–315.

Abstract:- Two new species of *Biophytum* DC. from W. Ghats, Kerala state, South India are described and illustrated. One of them is characterized by its branched perennial habit, prominent lunate crowded leaf scars, contracted inflorescence, congested flowers,

turbinate fruits and muricately ridged ovoid seeds (*B. congestiflorum*); the other by unbranched herbaceous annual habit without leaf scars, longer peduncled inflorescence, lax flowers, obovoid fruits and bipyramidal somewhat tetragonous tubercled seeds (*B. longipedunculatum*).

240. **Govindarajalu, E. 1996.** "Monographia Indicorum Fimbristylium Praecursores – Novelties in *Fimbristylis* Vahl". *Rheedea* 6: 59–64.
Abstract:- Three new species of *Fimbristylis*, viz., *F. bispicula, F. breviculma* and *F. stigmatotecta* have been described and illustrated from India. The first two species are from Karnataka and third one from Kerala.

241. **Govindarajalu, E. 1997.** "Monographia Indicorum Fimbristylium Praecursores – Novelties in *Fimbristylis* Vahl – II". *Rheedea* 7: 115–126.
Abstract:- Six new species of *Fimbristylis*, viz. *F. benthamiana, F. humerosa, F. ultragluma, F. dimorphonucifera, F. mycosa* and *F. pandurata* have been described and illustrated from India. The first species is from West Bengal, second from Kerala, third Maharashtra, fourth Karnataka and last two species from Tamil Nadu.

242. **Govindarajalu, E. & Ramani, K. 1994.** "Cyperaceae Indiae Australis Precursores- Two new species and one new record in *Kyllinga* Rottb. and scanning electron microscopic observations". *J. Econ. Taxon. Bot.* 18: 335–343.
Abstract:- Two new species and one new record to India are described and illustrated. Two new species viz., *Kyllinga eglandulosa* allied to *K. monocephala* Rottb. from Bababudan hills, Karnataka and *K. pluristaminea* allied to *K. brevifolia* Rottb. from Thuvanam, High Wavy mountains, Madurai district, Tamil Nadu. *K. pumila* Michx. Has been recorded for the first time for India from Kerala, Tamil Nadu and Karnataka. Previously this species is known to occur in N. America, Central and South America, tropical Africa, West Africa, Sudan, Nigeria, Congo and East Africa. The micromorphological epicarpic structures of these taxa are studied under SEM & compared with their respective related species. The SEM data differs not only among the different taxa but corroborate further the distinctness of the species. A key based on SEM data is presented.

243. **Govindarajalu, E. & Sasidharan, N. 1997.** "Monographia Indicorum Fimbristylium Precursores – Novelties". *J. Econ. Taxon. Bot.* 21: 373–376.
Abstract:- Two new species of *Fimbristylis*, viz., *F. hyalinae* [allied to *F. microcarya* F. Muell.] and *F. perspicua* [allied to *F. glabra* Hochst. ex Steud.] have been described and illustrated from Thrissur, Kerala, India.

244. **Green, P.S. 1984.** "A new combination in *Chionanthus* (Oleaceae) from southern India".

Bull. Bot. Surv. India 26: 123–124.

Abstract:- A new combination in *Chionanthus* (Oleaceae), viz., *C. mala-elengi* (Dennst.) P.S. Green has been proposed based on *Forsythia mala-elengi* Dennst. of southern India.

245. **Green, P.S. 1985.** "Notes on two Jasmines from south India and Ceylon". *Kew Bull.* 40: 225–230.

Abstract:- *Jasminum sessiliflorum* Vahl is reduced to a variety of *J. angustifolium* (L.) Willd. which is distributed in Kerala, Karnataka and Tamil Nadu, and a new variety *hirsutum* from Sri Lanka added. Ceylon representative of *J. bignoniaceum* Wall. ex G. Don is recognized as a new subsp. *zeylanicum*.

246. **Green, P.S. 1990.** "*Ligustrum* (Oleaceae) in southern India". *Kew Bull.* 45: 693–696.

Abstract:- A critical review of the material in the Kew Herbarium of *Ligustrum* from the Western Ghats, including some recent collections, has led to the conclusion that only one species *L. perrottetii* A. DC., should be recognized, although one or two aberrant forms need to be studied in the field.

247. **Hameed, C.A. & Madhusoodanan, P.V. 1998.** "*Microgonium sublimbatum* (C. Mull) v.d.B: Hymenophyllaceae – A new record for South India". *J. Bombay Nat. Hist. Soc.* 95: 534-535.

Abstract:- *Microgonium sublimbatum* (C. Mull.) v.d.B has been reported for the first time for South India from Thommankuthu, Idukki district, Kerala. Previously it was known from Khasia hills, Eastern Himalayas.

248. **Hameed, C.A. & Madhusoodanan, P.V. 1998.** "*Meringium acanthoides* (V.d.B.) Copel. (Hymenophyllaceae) – A new record for South India". *J. Econ. Taxon. Bot.* 22: 465–467.

Abstract:- *Meringium acanthoides* (V.d.B.) Copel., a rare species of filmy fern is reported for the first time from Boothathankettu, Ernakulam district, Kerala, South India. The taxon is described and illustrated.

249. **Hameed, C.A. & Madhusoodanan, P.V. 2003.** "*Trichomanes vamana*, a new filmy species (Hymenophyllaceae – Pteridophyta) from India". *Nordic J. Bot.* 23: 437–439.

Abstract:- *Trichomanes vamana*, a new species of filmy fern from South India is described and illustrated. Key to South Indian species of *Trichomanes* subg. *Didymoglossum* sect. *Microgonium* and affinities of this taxon with *T. mindorense* are discussed.

250. **Hema, E.S., Sivadasan, M. & Anil Kumar, N. 2006.** "Studies on edible species of Amaranthaceae and Araceae used by the Kuruma and Paniya tribes in Wayanad district, Kerala, India". *Ethnobotany* 18: 122–126.

Abstract:- Wayanad district of Kerala state, India, has the highest concentration of tribals in Kerala and they constitute one-fifth of the total population of this district. Kuruma and

Paniya tribes prefer to live on hill tops or near paddy fields in small colonies comprising 10–12 huts. Ethnobotanical studies were conducted in Mutharikunnu Paniya colony and Puthoorvayal Kuruma and Paniya colonies. Edible plants belonging to Amaranthaceae and Araceae families used by these two tribes were collected and identified and the data were documented. During the present study, a total of 15 taxa have been identified and recognized as being used by Kuruma and Paniya of Wayanad district. The Amaranthaceae comprise 10 taxa and the Araceae 5 belonging to 4 genera of each family.

251. **Hemadri, K. & Bhargavan, P. 1982.** "Notes on *Abelmoschus manihot* (L.) Medik. ssp. *tetraphyllus* (Roxb. ex Hornem.) Borss. var. *megaspermus* Hemadri and *Manisuris divergens* (Hack.) O. Ktze. and their distributions". *Bull. Bot. Surv. India* 24: 158–159.
Abstract:- In the present paper, a variety *megaspermus* of *Abelmoschus manihot* has been fully described in absence of its detailed description alongwith the key of all its three varieties and another species *A. ficulneus*. Also *Manisuris divergens* (Hack.) O. Ktze has been recorded for Kerala.

252. **Henry, A.N., Chandrabose, M., Swaminathan, M.S. & Nair, N.C. 1984.** "Agastyamalai and its environs: A potential area for a biosphere reserve". *J. Bombay Nat. Hist. Soc.* 81: 282–290.
Abstract:- Agastyamalai, a towering peak of 1868 m in the tail-end of the Western Ghats and the adjoining forests in Tirunelveli and Kanniyakumari districts of Tamil Nadu and Trivandrum district of Kerala, covering a total area of about 2000 sq km and skirting the peak, form the most diverse and unknown ecosystem in Peninsular India. This area has substantial natural vegetation cover ranging from scrub forests to wet evergreen (rain forest) formations. Since Tropical rain forest is entering a period of rapid decline as a natural resource, Agastyamalai must be regarded as a prime example of this ecosystem in Southern India. Further, the complexity and diversity of flora make it an ideal genepool sanctuary. This area also harbours a number of endemic species of plants that are unique to Peninsular India. In terms of uniqueness, number of endemics, endangered species, floral and faunal representations and the ease of protection, this pocket is an ideal choice for a biosphere reserve.

253. **Henry, A.N., Vivekananthan, K. & Nair, N.C. 1979.** "Rare and threatened flowering plants of south India". *J. Bombay Nat. Hist. Soc.* 75: 684–697.
Abstract:- A catalogue of 224 species of flowering plants presumably in danger of extinction in South India is given, based on the information from the distribution of species available in MH and relevant literature. It is hoped that the list, which provides the essential preliminary to any Nature Conservation programme in South India, will be used by the

Conservationists to select suitable biotic communities for the preservation of flora and fauna.

254. **Hosagoudar, V.B. 1984.** "Two interesting fungi on *Cinnamomum malabatrum* from Idukki, Kerala, India". *J. Econ. Taxon. Bot.* 5: 209–211.

Abstract:- Two interesting fungi were collected on *Cinnamomum malabatrum* (Burm.f.) Blume from the forests of Idukki, Kerala. *Caeama keralensis* is described as new species and *Exobasidium cinnamomi* Petch is recorded for the first time from South India.

255. **Hosagoudar, V.B. 1985.** "Miscellaneous fungi from South India". *J. Econ. Taxon. Bot.* 7: 45–47.

Abstract:- The paper gives an account of 141 fungi collected from Karnataka, Kerala and Tamil Nadu. Of these, *Puccinia microspora* is a new record to India; *Oidium tamarindi, Phyllachora dendrocalami* and *Macrophoma crinicola* are new records to South India; *Aecidium ocimi* is recorded for the first time from Karnataka, while *Meliola holigarnae* is recorded for the first time from Kerala. *Clematis gouriana, Ocimum sanctum, Imperata cylindrica* and *Urochloa setigera* are the new host records to their pathogens.

256. **Hosagoudar, V.B. 1986.** "*Meliola petrakii* Stev. & Rold., a new record to India". *J. Econ. Taxon. Bot.* 8: 473–474.

Abstract:- *Meliola petrakii* Stev. & Rold. is reported here as a new record for India based on collection from Chandanathode forest, Kerala on a hitherto unrecorded host *Dysoxylum malabaricum* Bedd.

257. **Hosagoudar, V.B. 1987.** "A new 'Tar Spot' disease on *Aporusa lindleyana* (Wight) Baill. from Idukki, Kerala, India". *J. Econ. Taxon. Bot.* 11: 185–187.

Abstract:- A new species of *Phyllachora*, viz., *P. shettyi* causing 'tar spot' disease on *Aporusa lindleyana* (Wight) Baill. has been described for the first time for India from Idukki district, Kerala.

258. **Hosagoudar, V.B. 1988.** "Uredinales of Kerala". *J. Econ. Taxon. Bot.* 12: 265–272.

Abstract:- The present paper deals with the list of Uredinales so far reported from Kerala state. The list gives an account of 93 species distributed among 22 genera of rust fungi.

259. **Hosagoudar, V.B. 1989.** "The genus *Phyllachora* Nke. in FCKL in Kerala state". *J. Econ. Taxon. Bot.* 13: 121–124.

Abstract:- A list of 37 species of *Phyllachora* from Kerala is given.

260. **Hosagoudar, V.B. 2004.** "Studies on Foliicolous fungi – VII". *J. Econ. Taxon. Bot.* 28: 187–195.

Abstract:- This paper gives an account of six foliicolous fungi from Kerala. Of these, two are new genera, namely *Mahanteshamyces* with the type, *M. agrostistachydis*

(Coelomycetes) and *Shivamyces* with the type *S. ligustri* (Hyphomycetes) are proposed. While, *Asterina ligustricola, Echidnodella polyalthiae, Prillieuxina garciniae* and *Shivamyces jasmine* are the new species.

261. **Hosagoudar, V.B. 2004.** "Studies on Foliicolous fungi – VIII". *J. Econ. Taxon. Bot.* 28: 196–201.

Abstract:- This paper gives an account of three new synanamorphs of the genus *Schiffnerula*, namely *Questieriella malloti, Q. strychni* and *Sarcinella catharanthi* from Kerala.

262. **Hosagoudar, V.B. 2005.** "Foliicolous fungal flora of Idukki hydroelectric project area, Kerala, India". *J. Econ. Taxon. Bot.* 29: 434–460.

Abstract:- The survey of foliicolous micromycetes was conducted in the immediate neighbourhood forest areas of the Idukki hydroelectric project area of Kerala state during the years from 1981-1985. Subsequent few more collections also have been added to complete the list. This resulted in recording 242 taxa belonging to 68 genera distributed among the groups Ascomycetes, basidiomycetes and Fungi Imperfecti.

263. **Hosagoudar, V.B. 2006.** "Taxonomy of *Meliola* species on *Citrus* plants". *J. Econ. Taxon. Bot.* 30: 947–950.

Abstract:- Two species of the genus *Meliola*, namely *M. butleri* Sydow and *M. citricala* Sydow have been collected on the host *Citrus maxima* (Burm.f.) Merr. from Kerala. The descriptions and the line drawings have been provided to distinguish these two taxa.

264. **Hosagoudar, V.B. 2009.** "Studies on Foliicolous Fungi – XXVI – a new species and three new records". *J. Threatened Taxa* 1: 375–377.

Abstract:- This paper gives an account of four foliicolous fungi. Of these, *Balladyna indica* forms a new species, *Eupelte amicta* is a less known species, *Hansfordiellopsis lichenicola* (Bat. & H. Maia) Deighton and *Sporidesmium aburiense* are reported for the first time for India from Kerala.

265. **Hosagoudar, V.B. & Abraham, T.K. 1996.** "*Diplococcium atrovelutinum* sp. nov. from India". *New Botanist, Int. Quart. J. Pl. Sci. Res.* 23: 1–4.

Abstract:- A new species, viz., *Diplococcium atrovelutinum* (Hyphomycetes) on *Scleria levis* (Cyperaceae) is described from Kerala, India.

266. **Hosagoudar, V.B. & Abraham, T.K. 1997.** "Some interesting foliicolous fungi from Kerala, India". *New Botanist, Int. Quart. J. Pl. Sci. Res.* 24: 109–119.

Abstract:- This paper gives an account of five new and interesting foliicolous fungi. *Asterolibertia nothopegiae, Asterostomella scolopiaecrenatae, Cyclotheca filici* and *Lembosia lagerstroemiae* are the new species described and illustrated in detail.

Balladynocallia glabra (Hansf.) Batista is reported here for the first time from India and also forms the new generic record to India.

267. **Hosagoudar, V.B., Abraham, T.K. & Biju, C.K. 1996.** "Some interesting Hyphomycetes from southern India". *New Botanist, Int. Quart. J. Pl. Sci. Res.* 23: 211–218.
Abstract:- This paper gives an account of four hyphomycetous fungi. Of these, *Questieriella braunii* is described as a new species. *Spiropes capensis* and *S. japonicas* are reported for the first time from India, while *Zygosporium minus* forms a new record to Kerala.

268. **Hosagoudar, V.B., Abraham, T.K. & Biju, C.K. 1997.** "A new species of *Asterostomella* from Southern India". *New Botanist, Int. Quart. J. Pl. Sci. Res.* 24: 19–22.
Abstract:- *Asterostomella dilleniacearum* has been described as a new species from Kerala. Key to the species of the genera *Asterina* and *Asterostomella*, infecting the members of the family Dilleniaceae, has been provided.

269. **Hosagoudar, V.B., Abraham, T.K., Biju, C.K. & Shiburaj, S. 1997.** "*Asterina theacearum* sp. nov. from Kerala, India". *New Botanist, Int. Quart. J. Pl. Sci. Res.* 24: 23–25.
Abstract:- During a survey of foliicolous fungi in the high ranges of Munnar, Idukki, Kerala, authors collected an infected Theaceae plant. Microscopic examination and critical review of the literature revealed that it was hitherto an undescribed species of the genus *Asterina*.

270. **Hosagoudar, V.B. & Antony, V.T. 1988.** "Two new species of Meliolaceae from South India". *J. Swamy Bot. Club* 5: 73–75.
Abstract:- Two new species, viz., *Amazonia abaremae* Hosagoudar & Antony and *Meliola taxocarpi* Hosagoudar & Antony are described and illustrated. These two fungi have been growing on *Abarema bigemina* (L.) Kosterm. (Mimosaceae), which is collected from Kerala and *Taxocarpus beddomei* Gamble (Asclepiadaceae) from Tamil Nadu.

271. **Hosagoudar, V.B. & Archana, G.R. 2009.** "Meliolaceae of Kerala, India – XXVIII". *J. Threatened Taxa* 1: 348–350.
Abstract:- Several foliicolous fungi have been collected from the Western Ghats regions of Kerala State. Of these, *Meliola aristolochigena, M. pycnosporae, M. sairandhriana* are from Silent Valley, while, *M. strebli* from Shendhurney Wildlife Sanctuary are described and illustrated in detail.

272. **Hosagoudar, V.B. & Archana, G.R. 2009.** "A new species of the genus *Schiffnerula* (Englerulaceae) from Kerala, India". *J. Threatened Taxa* 1: 378.
Abstract:- *Schiffnerula canthii* sp. nov. collected from living leaves of *Canthium* sp., from Ponmudi forest area in Thiruvananthapuram district of Kerala is described and

illustrated in detail in the present article.

273. **Hosagoudar, V.B. & Archana, G.R. 2010.** "Meliolaceae of Kerala, India- XXXI new species and a new variety". *J. Threatened Taxa* 2: 889–891.
Abstract:- This paper gives an account of four taxa of Meliolaceae members. Of these, *Asteridiella ixorae, Irenopsis kleinhoviae* and *Meliola ebeni* are the new species, while, *Meliola filicii* var. *indica* is a new variety. All these taxa are described and illustrated in detail.

274. **Hosagoudar, V.B. & Archana, G.R. 2010.** "A new species of the genus *Ectendomeliola* (Meliolaceae) from Kerala, India". *J. Threatened Taxa* 2: 1092–1095.
Abstract:- *Ectendomeliola* is characterized by its ectophytic and endophytic appressoria was known with its type, *E. walsurae*. The recent collection on an endemic plant from the Western Ghats region of Kerala revealed the second species, *E. otonephelii*, differs from the type species in having longer mycelial setae with acute to furcate tip and larger perithecia, is described and illustrated here in detail.

275. **Hosagoudar, V.B., Archana, G.R. & Sabu, T. 2009.** "*Asteridiella ficicola* sp. nov. (Meliolaceae) from Kerala, India". *J. Threatened Taxa* 1: 474.
Abstract:- *Asteridiella ficicola* infected the leaves of *Ficus microcarpa* in Kerala. Hence, it is described and illustrated here in detail.

276. **Hosagoudar, V.B., Archana, G.R., Rajendraprasad, M. & Nazarudeen, A. 2009.** "A new black mildew fungus *Meliola erumeliensis* from Idukki, Kerala, India". *J. Threatened Taxa* 1: 347.
Abstract:- Reporting a new species of black mildew fungus, *Meliola erumeliensis* infecting the leaves of *Drypetes elata* in Kerala State.

277. **Hosagoudar, V.B., Biju, C.K. & Abraham, T.K. 2000.** "Meliolaceae of Kerala, India – VIII". *J. Econ. Taxon. Bot.* 24: 474–480.
Abstract:- The paper gives an account of five membes of the family Meliolaceae. Of these *Meliola mackenzieae* is the new species, *Amazonia goosii* var. *microspora* and *Meliola phyllostachydis* Yamam. var. *microspora* are the new varieties, *Meliola oldenlandiae* and *M. tetradeniae* are reported for the first time from India.

278. **Hosagoudar, V.B., Biju, C.K. & Abraham, T.K. 2001.** "Meliolaceae of Kerala, India– X". *J. Econ. Taxon. Bot.* 25: 6–74.
Abstract:- This paper gives an account of eight species of the genus *Meliola* from Kerala. Of these, *M. adenanthericola, M. canthiicola, M. lepianthedis* and *M. toonae* are the new species, while, *M. clavulata, M. clerodendricola, M. hemidesmicola* and *M. spigeliae* are reported here with notes.

279. **Hosagoudar, V.B., Biju, C.K. & Abraham, T.K. 2001.** "*Sarcinella vernoniae* (Dearn. & Barth.) Hughes and it's parasite from Kerala, India". *J. Econ. Taxon. Bot.* 25: 281–283.
Abstract:- This paper gives an account of *Sarcinella* and *Questieriella* synanamorphs of the genus *Schiffnerula* on *Vernonia penisularis*. *Acromoniula sarcinellae* occurs as hyperparasite from Kerala.

280. **Hosagoudar, V.B., Biju, C.K. & Abraham, T.K. 2001.** "Diversity in the foliicolous micromycobionts in Peppara and Neyyar Wildlife Sanctuaries, Thiruvananthapuram, Kerala, India". *J. Econ. Taxon. Bot.* 25: 297–307.
Abstract:- The floristic account of 137 taxa of foliicolous micromycobionts infected 137 host plants in Pappara and Neyyar Wildlife Sanctuaries, Thiruvananthapuram, Kerala, India has been given. The fungal taxa are distributed among 24 genera, namely *Aecidium, Amazonia, Armatella, Asteridiella, Asterina, Asterinella, Asterolibertia, Asterostomella, Balladynocallia, Cyclotheca, Echidnodella, Echidnodes, Ferrarisia, Hemileia, Irenopsis, Lembosia, Meliola, Oidium, Phakopsora, Phyllachora, Prillieuxina, Puccinia, Schiffnerula* and *Zygosporium*. This forms the pioneering work for the area studied.

281. **Hosagoudar, V.B., Biju, C.K. & Abraham, T.K. 2001.** "Meliolaceae of Kerala, India – IX". *J. Econ. Taxon. Bot.* 25: 553–559.
Abstract:- This paper gives an account of five new taxa of the family Meliolaceae from Kerala. Of these *Asteridiella dilleniae, Irenopsis murrayae* and *Meliola invisiae* are the new species. While, *M. caesalpiniae* Hansf. & Deight. var. *indica* and *M. memecylicola* Hansf. var. *longiseta* are the new varieties.

282. **Hosagoudar, V.B., Biju, C.K. & Abraham, T.K. 2004.** "Studies on Foliicolous fungi". *J. Econ. Taxon. Bot.* 28: 175–182.
Abstract:- This paper gives an account of five taxa of the genus *Asterina*, collected from Kerala state. Of these, *Asterina miliusae* and *A. suttonii* are the new species. *Asterina hibisci* (Doidge) Hosagoudar, comb. nov. is effected here, while, *Asterina lobulifera* and *A. pogostemonis* are reported here for the first time from India.

283. **Hosagoudar, V.B., Biju, C.K. & Abraham, T.K. 2004.** "Studies on Foliicolous fungi–II". *J. Econ. Taxon. Bot.* 28: 183–186.
Abstract:- *Ishwaramyces flacourtiae*, a new genus and a new species has been proposed. This species has recorded from TBGRI campus, Thiruvananthapuram, Kerala. *Ishwaramyces* is similar to the genus *Asterinia* but differs from it in possessing more than two appressoria in one place to make them in clusters.

284. **Hosagoudar, V.B., Biju, C.K., Abraham, T.K. & Agarwal, D.K. 2002.** "*Spiropes armatellicola* sp. nov. from Kerala, India". *J. Econ. Taxon. Bot.* 26: 603–604.

Abstract:- A new species of hyperparasite of the genus *Spiropes*, viz., *S. armatellicola* has been reported and described from Wyanad, Kerala.

285. **Hosagoudar, V.B., Biju, C.K., Abraham, T.K. & Pradeep, C.K. 2001.** "*Asterina diospyri* sp. nov. from Kerala, India". *J. Econ. Taxon. Bot.* 25: 279–280.
Abstract:- A new species of foliicolous fungi, viz., *Asterina diospyri* on leaves of *Diospyros* sp. has been described and illustrated from Kallar, Thiruvananthapuram district, Kerala.

286. **Hosagoudar, V.B., Manian, S. & Pandurangan, A.G. 1993.** "New and hitherto unrecorded *Phyllachora* species from Southern India". *J. Econ. Taxon. Bot.* 17: 441–444.
Abstract:- *Phyllachora isonandrae* and *P. ramamurthyi* are described here as new species from Karnataka and Kerala. *P. javanica* (Koord.) Petrak is reported here for the first time for India from Tamil Nadu.

287. **Hosagoudar, V.B., Manian, S. & Vasuki, S. 1988.** "Miscellaneous fungi from South India – IV". *J. Econ. Taxon. Bot.* 12: 421–423.
Abstract:- *Phyllachora balakrishnanii* and *P. keralense* are the two new species described from the Western Ghats forests of Tamil Nadu and Kerala states, respectively.

288. **Hosagoudar, V.B. & Nair, N.C. 1985.** "A new species of *Uredo* Pers. on *Dalbergia latifolia* Roxb. from Idukki, Kerala, India". *J. Econ. Taxon. Bot.* 7: 519–520.
Abstract:- A new species of *Uredo*, viz., *U. dalbergiae-latifoliae* on *Dalbergia latifolia* has been described from India (Idukki district, Kerala).

289. **Hosagoudar, V.B. & Nair, N.C. 1985.** "Two new species of Phyllachoraceae from Idukki, Kerala, India". *J. Econ. Taxon. Bot.* 7: 549–551.
Abstract:- Two new species, viz., *Ophiodothella lagerstroemiae* and *Phyllachora ehretiae* have been described from Idukki, Kerala, India.

290. **Hosagoudar, V.B. & Nair, N.C. 1987.** "Miscellaneous fungi from South India". *J. Econ. Taxon. Bot.* 9: 373–377.
Abstract:- This paper presents 28 species of fungi collected from Andhra Pradesh, Karnataka, Kerala and Tamil Nadu. *Aecidium justiciae* P. Henn. and *Puccinia thunbergiaealatae* P. Henn. are recorded for the first time from India. While, 3 pathogens from Andhra Pradesh, 2 pathogens from Karnataka, 1 pathogen from Kerala and 7 pathogens from Tamil Nadu have been recorded for the first time and 15 pathogens form new host records from India.

291. **Hosagoudar, V.B. & Raghu, P.A. 1993.** "Meliolaceae of Southern India – XV". *New Botanist, Int. Quart. J. Pl. Sci. Res.* 20: 65–72.
Abstract:- This paper gives an account of six meliolaceous fungi, of which five were collected from Karnataka and one from Kerala. Of these, *Asteridiella lophopetali, Meliola*

cryptocariicola and *M. ilicis-malabaricae* are new species and *M. pterospermi* Stev. var. *microspora* is new variety from Karnataka. *Meliola jasmine* Hansf. & Stev. has been reported from Kerala.

292. **Hosagoudar, V.B. & Riju, M.C. 2010.** "Meliolaceae of Kerala, India- XXX new species and new records". *J. Threatened Taxa* 2: 824–826.

Abstract:- This paper gives an account of four new Meliolaceous fungi, namely, *Irenopsis trichiliae, Meliola ailanthicola, M. kamettiae* and *M. psophocarpi*, collected from Wayanad forests of Kerala state are described and illustrated in detail.

293. **Hosagoudar, V.B. & Riju, M.C. 2011.** "Three new fungi from Silent Valley National Park, Kerala, India". *J. Threatened Taxa* 3: 1615–1619.

Abstract:- In the present paper, three new Meliolaceae members, namely, *Asteridiella toddaliae, Meliola clausenae* and *M. strombosiigena*, collected from the Silent Valley National Park have been described and illustrated in detail.

294. **Hosagoudar, V.B. & Riju, M.C. 2011.** "Two new *Asterina* species on *Michelia champaca* from Kerala, India". *J. Threatened Taxa* 3: 1942–1946.

Abstract:- This paper deals with two new species, namely, *Asterina michelifolia* and *A. micheligena*, infecting the leaves of *Michelia champaca*, collected from the Wayanad region of Kerala State. They have been described and illustrated in detail.

295. **Hosagoudar, V.B. & Robin, P.J. 2011.** "Four new Meliolaceae (Sordariomycetes: Meliolales) members from Kottayam forests in Kerala state, India". *J. Threatened Taxa* 3: 1782–1787.

Abstract:- This paper gives an account of five meliolaceous fungi collected from the Kottayam forest area of Kerala state. Of these, *Appendiculella elaeocarpicola, Meliola sterculicola* and *M. lophopetaligena* are the new species, *Meliola gouaniae* Hansf. var. *keralica* is the new variety, while, *Meliola garugae* is reported here for the first time from India. All these taxa are described and illustrated in detail.

296. **Hosagoudar, V.B., Robin, P.J. & Shivaraju, B. 2010.** "Foliicolous fungi from the Achankovil forests in Kollam district of Kerala state, India". *J. Threatened Taxa* 2: 760–761.

Abstract:- The study reports 14 foliicolous fungi collected from the Achankovil forest region of Kollam district in Kerala State, India. These fungi belong to five genera, namely, *Asteridiella* (1), *Asterina* (3), *Asterostomella* (1), *Colemaniella* (1) and *Meliola* (8). The genus *Colemaniella* showed its extended distribution, while, *Asterina* and *Meliola* appear to be abundant in the forest region.

297. **Hosagoudar, V.B. & Sabeena, A. 2011.** "A black mildew fungus, *Schiffnerula*

azadirachtae sp. nov. (Ascomycota: Englerulaceae) from Kerala state, India". *J. Threatened Taxa* 3: 1620–1621.

Abstract:- A new species of the black mildew fungus, viz., *Schiffnerula azadirachtae* infected the leaves of *Azadirachta indica*. This has been described and illustrated in detail from Kerala, India.

298. **Hosagoudar, V.B. & Sabeena, A. 2011.** "The genus *Asterina* (Asterinaceae) on the members of Myristicaceae in Kerala state, India". *J. Threatened Taxa* 3: 2143–2146.

Abstract:- This paper gives an account of three *Asterina* species infecting members of the family Myristicaceae from Kerala, namely, *Asterina knemae attenuatae* infecting the leaves of *Knema attenuata, Asterina myristicae* infecting the leaves of *Myristica* sp. and *Asterina myristicacearum* infecting the leaves of *Myristica malabarica*. Of these, *Asterina myristicae and Asterina myristicacearum* are found to be new species. All these three species are described and illustrated in detail and a key is provided to them. Key to all the species of the genus *Asterina* reported on Myristicaceae is also supplemented to this study.

299. **Hosagoudar, V.B., Sabeena, A. & Riju, M.C. 2010.** "*Bheemamyces*, a new genus of the family Asterinaceae (Ascomycetes)". *J. Threatened Taxa* 2: 1323–1324.

Abstract:- *Bheemamyces* with its type *B. argyreicola*, a new genus and a new species of the family Asterinaceae, collected on the leaves of *Argyreia nervosa* from the Malabar Botanic Garden, Kozhikode, Kerala, has been described and illustrated in detail. This genus differs from other genera of the family Asterinaceae in having the mycelia originated from the main hyphae, lifted slightly above the host surface, appearing like a 'whip', possessing intercalary and sub intercalary or sub lateral appressoria. Another such taxon, *Asterina argyreiae* Hansf. has been brought under this genus as *Bheemamyces argyreiae* (Hansf.) comb. nov.

300. **Hosagoudar, V.B., Sabeena, A. & Riju, M.C. 2011.** "*Asterina hugoniae* sp. nov. (Dothideomycetes: Asterinaceae) from Kerala, India". *J. Threatened Taxa* 3: 1880–1881.

Abstract:- A new species of the genus *Asterina* collected on the leaves of *Hugonia mystax* from Malabar Botanic Garden, Kozhikode, Kerala, is described and illustrated in detail.

301. **Hosagoudar, V.B., Thomas, J. & Agarwal, D.K. 2010.** "Additions to Meliolales of India". *Nelumbo* 52: 1–8.

Abstract:- This paper gives an account of seven new meliolaceous fungi collected from Kerala state belonging to three genera, namely *Amazonia dikesinghii, Asteridiella amomi, Meliola aganopes, M. cayratiae, M. cipadessae, M. mesuae* and *M. sanjappae*. They have been described and illustrated in detail.

302. **Husain, T. & Paul, S.R. 1991.** "*Ixora manantoddii*, a new species of *Ixora* L. *(*Rubiaceae – Pavetteae) from India". *Bull. Jard. Bot. Natl. Belg.* 61: 15–19.

Abstract:- A new species of *Ixora*, viz*., I. manantoddii*, from Wynaad, Kerala, India is described and illustrated. Pollen morphology of the new species has been studied using SEM and LM.

303. **Husain, T. & Paul, S.R. 1984.** "A note on *Ixora thwaitesii* Hook.f.". *J. Econ. Taxon. Bot.* 5: 233–236.

Abstract:- *Ixora thwaitesii* Hook.f. is redescribed, full synonymy is given, distribution mapped and affinities with notes have been appended. This species is known to occur also in Kerala.

304. **Ijinu, T.P., Anish N., Shiju, H., George, V. & Pushpangadan, P. 2011.** "Home gardens for nutritional and primary health security of rural people of south Kerala". *Indian J. Traditional Knowledge* 10: 413–428.

Abstract:- The present study comprises of field trips in different rural localities of Kollam and Thiruvananthapuram districts of Kerala. Information regarding the occurrence of plant species, their local names, parts used, formulations and vegetable preparations through interviews and discussions held with elderly persons of rural communities were recorded. The plant specimens were identified and herbarium sheets prepared for all the species. From the information documented and also from literature data, nine vegetable plants having high nutrient value were selected. Sixteen medicinal plants which are used to prepare primary health care remedies, suitable for cultivation and raising the home gardens were also selected. Quality seeds/planting materials were collected from Kerala Agricultural University (KAU) and supplied to selected rural families of each Gram Panchayat for raising home gardens. Awarwness programmes on healthy living, balanced diet, hygiene, maintaining clean environment, rain water harvesting and conservation of biodiversity in association with Gram Panchayat officials and selected Self Help Groups were conducted in these districts.

305. **Induchoodan, N.C. & Balasubramanyan, K. 1991.** Sacred Groves – savior of endemics. In: Karunakaran, C.K. (Ed.), *The proceedings of the symposium on rare, endangered and endemic plants of the Western Ghats*. Kerala Forest Department, Thiruvananthapuram. pp. 348–353.

Abstract:- Forty–eight endemic species found in four sacred groves, *viz*., Iringole, Mukkola, Kodumon and Chittar are listed which include 17 endemics from Iringole, 15 from Mukkola, 14 from Kodumon and 28 from Chittar. Some of the species like *Dysoxylum malabaricum, Anacolosa densiflora, Holigarna arnottiana, Diospyros bourdillonii,*

Poeciloneuron indicum and *Vateria indica* which are in heavy demand for their commercial value still continue to survive and flourish in the sacred groves, thus highlighting their importance.

306. **Irudayaraj, V. 1994.** "Observations on the morphological variations in *Christella parasitica* (L.) Lev. from the Western Ghats, South India". *Indian Fern J.* 11: 102–115.
Abstract:- A detailed morphological analysis of 102 gatherings of *Christella parasitica* (L.) Lev. from the Western Ghats of South India has been made. The results indicate that each character shows broad range of continuous variations. The variation of each character has been described and discussed separately. In addition, cytological details of each species complex from the area of investigation have also been provided. Nearly one-sixth of the present gatherings were seen to be of hybrid origin because of their morphological or cytological irregularities or spore sterility. The present study from the wild with regard to dominant/recessive characters in this species complex, is in aggrement with Panigrahi & Manton (1958) except the dominant character, the presence of glandular hairs which is yet to be confirmed.

307. **Irudayaraj, V. & Manickam, V.S. 1991.** "Cytology of an endemic fern – *Elaphoglossum beddomei* Sledge from South India". *Indian Fern J.* 8: 93–94.
Abstract:- Cytological observation was made on a Lomariopsidioid fern, *Elaphoglossum beddomei* Sledge, which is endemic to Kerala, South India. It was found to be a tetraploid with 82 regular bivalents in spore mother cell. This is the first report for this species.

308. **Jabbar, M.A., Krishnaraj, M.V. & Mohanan, N. 2010.** "*Crotalaria incana* subsp. *purpurescens* (Fabaceae) – A new record for India". *Rheedea* 20: 131–132.
Abstract:- *Crotalaria incana* L. subsp. *purpurescens* (Lam.) Milne-Redh. (Fabaceae), hitherto known only from Africa is reported here for the first time for India from Munnar, Idukki district, Kerala. Detailed description with illustration is provided.

309. **Jacob, J., Kariyappa, K.C., Kumar, E.S.S. & Mohanan, N. 2007.** "*Corypha umbraculifera* L. a fast depleting palm of South India". *J. Non-Timber Forest Products* 14: 79–80.
Abstract:- *Corypha umbraculifera* L., commonly known as 'Talipot Palm' belongs to the family Arecaceae and is a palm with great utility. The species is native to Peninsular India and Sri Lanka. The species is at great pressure of endangerment in South India owing to a variety of reasons. The present paper discusses the various reasons for its population decline.

310. **Jacob, J., Mohanan, N. & Kariyappa, K.C. 2008.** "A new species of *Calamus* L. (Arecaceae) from Silent Valley, the Western Ghats, India". *Rheedea* 18: 29–31.

Abstract:- *Calamus renukae* J. Jacob, N. Mohanan & Kariyappa, is described from Silent Valley National Park, the Western Ghats. The species is allied to *C. wightii* Griff. but differs from it in having seriate spines, highly branched short inflorescence and fruit scales arranged in 24 rows. The new species comes under the group VIII of Beccari (1908).

311. **Jacob, K.C. 1947.** "Some new species of South Indian plants". *J. Bombay Nat. Hist. Soc.* 47: 48–51.

Abstract:- Three new taxa of Poaceae, viz., *Dimeria kanijirapallilana* (allied to *D. ornithopoda* Trin.), *Dimeria kurumthotticalana* (allied to *D. lawsonii* C.E.C. Fischer), *Eragrostis unioloides* Nees var. *tremula* have been described from from Travancore and one new species of Malvaceae, viz., *Sida beddomei* (allied to *S. veronicaefolia* Lam.) from Kannoth, Malabar district.

312. **Jain, S.P., Singh, J. & Singh, S.C. 2000.** "*Achillea millefolium* Linn. (Asteraceae) – A new record for Kerala". *J. Bombay Nat. Hist. Soc.* 97: 458–459.

Abstract:- *Achillea millefolium* L. has been reported here for the first time for Kerala from Munnar forest area, Idduki district. This species was earlier known to occur in Kashmir to Kumaon, Maharashtra, Karnataka and Tamil Nadu.

313. **Janarthanam, M.K. & Henry, A.N. 1986.** "A new *Utricularia* L. (Lentibulariaceae) from Kerala, India". *Bull. Bot. Surv. India* 28: 195–197.

Abstract:- A new *Utricularia* L., viz., *U. nayarii* allied to *U. graminifolia* Vahl has been described and illustrated from Rajamallay, near Munnar in Idukki district, Kerala.

314. **Janarthanam, M.K. & Henry, A.N. 1989.** "*Utricularia malabarica* sp. nov. (Lentibulariaceae): A terrestrial bladderwort from southern India". *J. Bombay Nat. Hist. Soc.* 86: 84–85.

Abstract:- A terrestrial bladderwort, viz., *Utricularia malabarica* allied to *U. lazulina* P. Taylor has been described from Mulleriya, Kasaragod district, Kerala, Southern India.

315. **Janarthanam, M.K. & Henry, A.N. 1990.** "A new *Utricularia* L. (Lentibulariaceae) from Peninsular India". *J. Bombay Nat. Hist. Soc.* 87: 441–442.

Abstract:- A new species of *Utricularia*, viz., *U. subramanii* allied to *U. bifida* L. has been described from Pathanamthitta, Quilon district, Kerala.

316. **Jayakumar, G., Ajithabai, M.D., Sreedevi, S., Viswanathan, P.K. & Remeshkumar, B. 2010.** "Ethnobotanical survey of the plants used in the treatment of diabetes". *Indian J. Traditional Knowledge* 9: 100–104.

Abstract:- The paper deals with the plant based folk practices used in the treatment of diabetes. The study was conducted in two districts of Kerala, a state rich in floral diversity.

Even though modern medical facilities are available in these places, people in villages still use plant therapy to a considerable extent. This may be attributed to the rich floral wealth of the state, which makes the access to the medicinal plants comparatively easy, the lower cost factor, and to a popular belief that plant derived medicines are better suited for the body. The impact of modernization and commercialization of medical treatment has telling effect on the number of these users and so a proper documentation and preservation of these practices are essential.

317. **Jayakumar, K. & Madhuri, T.G. 2010.** "A survey on the therapeutic significance of aquatic macrophytes of Thiruvananthapuram district, Kerala". *Indian J. Bot. Res.* 6: 23–27.

Abstract:- The use of plants and plant products as medicine can be traced as far back as the beginning of human civilization. Even though in recent years, the use of traditional medicine information on plant research has received considerable interest; medicinal attributes of aquatic plants are often disregarded. The present sudy investigated the therapeutic aspects of some hydrophytes prescribed by local physicians of Thiruvananthapuram district in Kerala. The study shows that highest number of plant species was used for the treatment of dysentery. Maximum they use entire plant for medicine preparation. The form of medicinal preparation popular in the study site was paste, followed by decoction and juice.

318. **Jayakumar, R. & Nair, K.K.N. 2005.** "Flora of new Amarambalam Reserved forests in the Western Ghats of India". *J. Econ. Taxon. Bot.* 29: 113–172.

Abstract:- New Amarambalam Reserved Forests, a part of Nilgiri Biosphere Reserve, is situated in the Western Ghats of Indian Peninsula, in Nilambur South Forest Division of Malappuram district in Kerala state. It covers an area of about 265 km^2, at an altitudinal range of 40 to 2554 m. Almost all the forest types of the Indian peninsula are met within the reserve, namely moist deciduous, semievergreen, evergreen and shola forests, part from their subtypes, local derivatives, grasslands and teak plantations. A thorough floristic survey of the area during 1997 – 2000 revealed the occurrence of a total of 1135 taxa of angiosperms, which belonged to 136 families and 644 genera. The flora is composed of 78 per cent dicotyledons and 22 per cent monocotyledons. Herbaceous species out-numbered all other life forms in the flora with about 50 per cent of taxa, followed by trees (28%), shrubs (14%) and lianas (7%). Out of the total 1135 taxa, 21 per cent were those endemic to the southern Western Ghats, pointing to the phytogeographical significance of the area. The paper enumerates the floral diversity of the area with up-to-date botanical name, local name and occurrence of different taxa with endemics of peninsular India

marked with asterisks. The data can facilitate sustained utilization and conservation of the plant wealth of the region.

319. **Jayaraman, K. & Krishnankutty, C.N. 1991.** "Yield from *Eucalyptus* plantations in Kerala". *Indian J. Forest.* 14: 51–53.

Abstract:- A study on the first rotation yield from *Eucalyptus* plantation in Kerala indicated that *Eucalyptus tereticornis* gives an average yield of 72.59 m^3/ha at 10 years, whereas, *E. grandis* yields up to 137.64 m^3/ha at the same age. Geographical variation was found non-significant due to high region variation. Differences in the initial espacement did not have much influence on yield, probably due to high mortality induced by extraneous factors. Larger plantations in general showed lesser productivity.

320. **Jayasree, S. & Sabu, M. 2008.** "Anatomical studies on the genus *Amomum* Roxb. (Zingiberaceae) in South India". *Indian J. Bot. Res.* 4: 377–384.

Abstract:- A comparative anatomical study of six species of *Amomum* from South India with reference to their dermal morphology, sheath, petiole, midrib, lamina and leaf margin was conducted to provide some additional information for the correct identification of the different species even in the vegetative stage. A key based on the anatomical characters is provided.

321. **Joby, P., Nisha, P., Rameshan, M., Augustine, Toms, Thomas, R.P. & Unni, K.S. 2011.** "*Murdannia satheeshiana* – A new species of Commelinaceae from the Western Ghats, India". *Phytotaxa* 22: 41–46.

Abstract:- *Murdannia satheeshiana* (Commelinaceae) from Mathikettanshola National Park, Idukki district, Kerala (Western Ghats, India) is described and illustrated. The new species can be distinguished from the similar species, *M. pauciflora* Brückner by differences in the size of several parts of the plants and seed morphology. A key to the southern Indian species of *Murdannia* with axillary cymose inflorescence and orange-yellow flowers is also included.

322. **Johri, S.C. 1984.** "Note on three endemic taxa of the genus *Ipomoea* L. in India". *Bull. Bot. Surv. India* 26: 237.

Abstract:- The distribution of *Ipomoea clarkei* Hook.f., *I. cairica* (L.) Sweet var. *semine-glabra* (Blatt. & Hallb.) Bhandari and *I. deccana* D. Austin var. *lobata* (Clarke) Johri endemic to India are given. The recent collections deposited at BSI and BLAT have been cited. *I. clarkei* is found to occur in Madhya Pradesh and Maharashtra. *I. cairica* var. *semine-glabra* is from Rajasthan and *I. deccana* var. *lobata* is found in Maharashtra and Kerala. A new combination *I. deccana* D. Austin var. *lobata* (Clarke) Johri has been proposed. *I. deccana* var. *lobata* has been collected after a lapse of 100 years from the

date of its type collections.

323. **Joseph, Ginu & Joseph, J.P. 2009.** "Rediscovery of *Ophiorrhiza caudata* (Rubiaceae) from the Western Ghats of Kerala". *Rheedea* 19: 45–46.
Abstract:- *Ophiorrhiza caudata* C.E.C. Fischer is rediscovered from the Cardamon Hills of Mankulam along the Western Ghats of Kerala after a lapse of 70 years. A detailed taxonomic description and illustration of this species are provided.

324. **Joseph, J. 1974.** "*Phaius luridus* Thw. (Orchidaceae) – A new record for India, from Agastiya Hills, South India". *Bull. Bot. Surv. India* 16: 147–149.
Abstract:- *Phaius luridus* Thw. (Orchidaceae) has been recorded for the first time for India from Agastiya Hills, Trivandrum district, Kerala. Earlier this species was known to occur in Sri Lanka.

325. **Joseph, J., Ansari, R. & Mohanan, C.N. 1979.** "*Burmannia championii* Thw. – An addition to the flora of South India". *J. Bombay Nat. Hist. Soc.* 76: 552.
Abstract:- *Burnannia championii* Thw. has been reported for the first time for India from forests of Silent Valley, Palghat district, Kerala.

326. **Joseph, J. & Chandrasekaran, V. 1973.** "*Eria muscicola* (Lindl.) Lindl. var. *brevilinguis* – A new variety of orchid from Agastyamalai, South India". *Bull. Bot. Surv. India* 15: 267–269.
Abstract:- A new variety of orchid, viz., *Eria muscicola* (Lindl.) Lindl. var. *brevilinguis* has been described from Agastyamalai, Trivandrum district, Kerala.

327. **Joseph, J. & Chandrasekaran, V. 1978.** "*Janakia arayalpathra* – A new genus and species of Periplocaceae from Kerala, South India". *J. Indian Bot. Soc.* 57: 308–312.
Abstract:- Description of a new genus *Janakia* Joseph & Chandrasekaran and a new species *Janakia arayalpathra* Joseph & Chandrasekaran (Periplocaceae) from Kerala, South India are given along with analytic sketches.

328. **Joseph, J. & Chandrasekaran, V. 1980.** "*Wiesneria triandra* (Dalz.) Micheli (Alismataceae) – An interesting and rare addition to the flora of the Presidency of Madras, from Kerala, South India". *J. Bombay Nat. Hist. Soc.* 77: 169–171.
Abstract:- This paper deals with detailed description incorporating intraspecific variation and analytical sketches of *Wiesneria triandra* (Dalz.) Micheli. This is an addition to the flora of erstwhile Presidency of Madras based on collection of this species from the southern most part of India, i.e., Kerala.

329. **Joseph, J. & Chandrasekaran, V. 1982.** "An account on the flora and vegetation of Neyyar Wildlife Sanctuary and its vicinity, Trivandrum district, Kerala". *Indian J. Bot.* 5: 143–150.

Abstract:- The Neyyar Wildlife Sanctuary is situated in the district of Trivandrum in the South East of Kerala. The catchment area of the Neyyar Dam falling within Kerala has been formed into a Wildlife Sanctuary as per Govt. Order MS.871/58 dated 6.8.1958. The area thus notified comes to about 129.5 sq km. This includes about 113.96 sq km of reserved forests falling within the Kottur Reserve, Kottur extension reserve, Klamala reserve and Nattukkaltheri reserve and about 15.54 sq km of Kanipet lands and also private registered holdings.

330. **Joseph, J. & Chandrasekaran, V. 1984.** "A new variety of *Humboldtia unijuga* Bedd. (Caesalpiniaceae) from South India". *J. Bombay Nat. Hist. Soc.* 81: 729–731.
Abstract:- A new variety of *Humboldtia unijuga* Bedd., viz., *H. unijuga* var. *trijuga* has been described from Koviltherimalai, Trivandrum district, Kerala.

331. **Joseph, J. & Vajravelu, E. 1975.** "*Eulophia hirsuta* Joseph *et* Vajravelu (Orchidaceae) – A new species from South India". *Bull. Bot. Surv. India* 17: 192–194.
Abstract:- A new species, *Eulophia hirsuta* Joseph *et* Vajravelu allied to *E. ramentacea* Lindl. ex Wt. has been described from Karasuryamalai-Anamada area, Nemmara division, Palghat district, Kerala.

332. **Joseph, J. & Vajravelu, E. 1978.** "First report of *Oberonia brachyphylla* Blatt. & McCann and *Smithsonia straminea* Saldanha (Orchidaceae) in Kerala". *Bull. Bot. Surv. India* 20: 169.
Abstract:- *Oberonia brachyphylla* Blatt. & McCann and *Smithsonia straminea* Saldanha (Orchidaceae) have been reported for the first time from Kerala. *Oberonia brachyphylla* was earlier known to occur in North Canara and *S. straminea* was earlier known to occur in Hassan dist., Karnataka.

333. **Joseph, K.T. 1991.** "*Nymphoides sivarajanii* (Menyanthaceae), a new species from India". *Willdenowia* 20: 135–138.
Abstract:- *Nymphoides sivarajanii* [allied to *N. parvifolium* (Griseb.) Kuntze] from Chettipadi, Malappuram district, Kerala, India, is described as a species new to Science and illustrated.

334. **Joseph, K.T. & Sivarajan, V.V. 1988.** "*Rotala cookie*: A new species of Lythraceae from India showing *Hippuris* syndrome". *Pl. Syst. Evol.* 159: 141–144.
Abstract:- A new aquatic species of *Rotala*, viz., *R. cookii* is described from Kerala, India. Growing in the flooded lowlands, along the coastal belt, the plant is a "*Hippuris mimic*".

335. **Joseph, K.T. & Sivarajan, V.V. 1989.** "*Rotala* Linn. (Lythraceae) in Peninsular India". *Proc. Indian Acad. Sci., Pl. Sci.* 99: 179–197.
Abstract:- The paper deals with a revised taxonomic study of *Rotala* species in peninsular

India, where it displays maximum morphological diversity than in other parts of the subcontinent. Of the 19 species reported from India, 14 are distributed in Kerala. Besides, two new species of the genus, *Rotala cookie* Joseph & Sivarajan and *R. vasudevanii* Joseph & Sivarajan have also been discovered and described from Kerala, making the total number of species 16. An artificial key for the species, their nomenclature and synonymy, descriptions and other relevant notes are provided here.

336. **Joseph, K.T. & Sivarajan, V.S. 1990.** "A new species of *Nymphoides* (Menyanthaceae) from India". *Nordic J. Bot.* 10: 281–284.

Abstract:- A new species, viz., *Nymphoides krishnakesara* allied to *N. macrospermum* Vasudevan is described from India (Madai, Cannanore district, Kerala).

337. **Joseph, K.T. & Suresh, C.R. 1982.** "Notes on two interesting exotic species from South India". *Indian J. Bot.* 5: 126–127.

Abstract:- This paper deals with two exotic species *viz.*, *Indigofera teysmanii* Miq. and *Mecardonia procumbens* (Mill.) Small, which have been introduced to the southern parts of India and have got naturalized. This is the first report of the former from India. There is no report of the latter from Kerala and Tamil Nadu so far.

338. **Joseph, M.A., Sunilkumar, T. & Antony, V.T. 2011.** "*Ipomoea obscura* (L.) Ker-Gawl. – A wondrous plant against infertility, in the traditional medicine of Ullada tribes of Alappuzha district, Kerala". *J. Econ. Taxon. Bot.* 35: 639–641.

Abstract:- *Ipomoea obscura* (L.) Ker-Gawl., belonging to the family Convolvulaceae, is noted as a wondrous plant against infertility in women. The study was conducted among the Ullada tribes in Alappuzha district, Kerala in order to gather information on the medicinal use of *Ipomoea obscura*. All the tribal people interviewed practice their own traditional system of medicine. They also utilize a wide variety of herbs in treating the physical symptoms. This study aims at documenting the indigenous knowledge of the Ullada tribe and the necessity to protect this plant from human invasion, urbanization and industrialization.

339. **Joseph, T.S. & Mathew, M. 2007.** "Economics and cultivation of pineapple in Kerala". *J. Econ. Taxon. Bot.* 31: 990–995.

Abstract:- This paper describes pineapple cultivation in the state of Kerala, India. The climate and soil in the state are conducive to pineapple cultivation. This description includes the varieties cultivated in the state, their quality analysis, propagation and methods of cultivation, intercropping, fertilizer and hormone application, fruiting, harvesting, uses and economics of pineapple cultivation in Kerala.

340. **Joseph, T.S. & Mathew, M. 2007.** "Description and ecology of two medicinally important

species in the genus *Nervilia* Guad. in Kerala, India". *J. Econ. Taxon. Bot.* 31: 996–999.
Abstract:- This paper presents the ecology and distribution of the genus *Nervilia* Gaud. belonging to the Orchidaceae. The study showed that two species of *Nervilia*, viz., *N. aragoana* Gaud. and *N. plicata* (Andr.) Schltr., are distributed in the forest regions of Kerala, India. The former grows in forested as well as non-forested areas in the state, while the latter is a typical species of deep forests.

341. **Joseph, T.S. & Mathew, M. 2009.** "Morphological variations, ecology and uses of *Costus speciosus* (Koen) Smith: The locally known Insulin plant in Kerala, India". *J. Econ. Taxon. Bot.* 33: 594–597.
Abstract:- *Costus speciosus* (Koen) Smith is a traditionally medicinal plant used in the treatment of various diseases in the state of Kerala, India. In recent years this plant has become popular in the state in traditional practice of medicine for the treatment of diabetes. This paper describes the habitat, growth pattern, morphological variations, reproduction methods, ecology and uses of the so-called insulin plant growing in the Kerala state of India.

342. **Jyothi, P.V. & Madhusoodanan, P.V. 1993.** "Cheilanthoid ferns of South India". *J. Econ. Taxon. Bot.* 17: 31–36.
Abstract:- Twelve species of Cheilanthoid ferns under five genera are described with key for their identification. Nine species is reported from Kerala and three from Tamil Nadu. Morphology, palynology, ecology and distribution of each species are discussed.

343. **Kadavil, A. & Antony, V.T. 1988.** "On the occurrence of *Annona glabra* L. (Annonaceae) in Kerala, India". *J. Swamy Bot. Club* 5: 117–118.
Abstract:- *Annona glabra* L. has been reported from Kottayam district, Kerala. Previously it was known from Kumarakom.

344. **Kader, S.A. 2009.** "Occurrence of *Ficus palmata* Forssk. ssp. *virgata* (Roxb.) Browcz in Kerala, South India – An addition to the flora of Kerala". *J. Econ. Taxon. Bot.* 33: 339–341.
Abstract:- During the recent detailed study on *Ficus* species in Kerala, *F. palmata* Forssk. ssp. *virgata* (Roxb.) Browcz, not known earlier from Kerala, South India was collected from Vadakkanchery in Thissur district during April 2008. A small population was found on roadsides near Govt. Vocational Higher Secondary School on the wall of Mariamman temple and the nearby wasteland. This species was reported only from Simli in the Visakhapatnam hills in Andhra Pradesh at 3000 ft only (Gamble, 1921).

345. **Kader, S.A. & Jacson, J.C. 2009.** "Report on the occurrence of *Torenia cordifolia* Roxb. (Scrophulariaceae) in the Malappuram district (the erstwhile Malabar region) of Kerala

state – An addition to the flora of Kerala". *J. Econ. Taxon. Bot.* 33: 839–840.

Abstract:- The present paper records the occurrence of *Torenia cordifolia* Roxb. (Scrophulariaceae) from Kerala State as an addition to the flora. Earlier this species was known to occur in Orissa and Tamil Nadu.

346. **Kaladharan, P. 2005.** "*Gracilariopsis lemaneiformis* (Bory) Dawson – A red alga reported from certain backwaters of Kerala". *J. Bombay Nat. Hist. Soc.* 102: 378.

Abstract:- A long cylindrical thalloid multifariously branched red alga, *Gracilariopsis lemaneiformis* (Bory) Dawson has been reported for the first time for Kerala from Dhalawapuram (Ashtamudi lake), Kadalundi (Kadalundinagaram) and Mopla Bay (Kannur).

347. **Kaladharan, P. 2006.** "Occurrence of *Halophila beccarii* Asch. from Kumbala estuary, Kerala". *J. Bombay Nat. Hist. Soc.* 103: 137–138.

Abstract:- A sea grass *Halophila beccarii* Asch. has been reported for the first time for Kerala from Kumbala estuary. Earlier this species was known to occur in Goa.

348. **Kamble, S.Y. & Sharma, B.D. 1984.** "A note on the distribution of *Amoora beddomei* Kosterm. (Meliaceae) in India". *J. Econ. Taxon. Bot.* 5: 493.

Abstract:- In the present paper *Amoora beddomei* Kosterm. is reported from Kerala and Sikkim, previously reported from Tamil Nadu.

349. **Kammathy, R.V. & Subramanyam, K. 1967.** "*Limnocharis* H.B.K.: A genus new to India". *J. Bombay Nat. Hist. Soc.* 64: 389–390.

Abstract:- *Limnocharis flava* (L.) Buch.-Ham. has been reported here for the first time for India from Ambalapuzha, Alleppey district, Kerala. This species was earlier known to occur in Tropical and subtropical America, Siam, Burma, Sri Lanka and Malaysia. This genus also constitute a new record for India.

350. **Karthikeyan, S. 1974.** "A contribution to the family Gramineae of the *Flora of the Presidency of Madras*". *Bull. Bot. Surv. India* 13: 175-179.

Abstract:- This paper deals with the grasses added to the region since the publication of *Flora of the Presidency of Madras* (Fischer, 1934, 1936). Altogether 78 grasses are enumerated. From a careful study of the collections deposited in the herbarium of the Southern Circle, BSI, Coimbatore (MH), seven new records for the area; 13 species are from Kerala.

351. **Karthikeyan, S. 1975.** "A synopsis of the awned grasses of former Madras Presidency". *Bull. Bot. Surv. India* 14: 83–91.

Abstract:- The paper deals with the structure, importance and position of awns in some members of the family Gramineae, which is one of the largest families of angiosperms

occurring in the former Madras Presidency constituting the present states of Andhra Pradesh, Kerala, part of Karnataka and Tamil Nadu. An artificial key for the genera of grasses possessing awns that occurs in the area have been given to help in easy identification.

352. **Karthikeyan, S. 1980.** "A synopsis of the unawned grasses of former Madras Presidency". *Bull. Bot. Surv. India* 22: 91–95.

Abstract:- The grass flora of the former Madras Presidency- constituting the present states of Andhra Pradesh, Kerala, Tamil Nadu and parts of Karnataka – is represented by 146 genera, excluding subfamily *Bambusoideae*. This paper deals with the identification of 63 genera of unawned grasses and supplements an earlier paper on awned grasses (Karthikeyan, 1975).

353. **Karthikeyan, S. & Sharma, B.D. 1983.** "A catalogue of species added to Gamble's 'Flora of the Presidency of Madras'". *J. Bombay Nat. Hist. Soc.* 80: 63–79.

Abstract:- Sebastine (1962), Sebastine & Ramamurthy (1966) and Karthikeyan (1971) have compiled the species that have been added to Gamble's 'Flora of the Presidency of Madras'. In the present list 6 genera, 403 species, 10 subspecies, 61 varieties and 4 forma have been enumerated.

354. **Karthikeyan, S. & Sharma, B.D. 1985.** "A catalogue of species added to Gamble's 'Flora of the Presidency of Madras'". *J. Bombay Nat. Hist. Soc.* 80: 63–79.

Abstract:- Sebastine (1962), Sebastine & Ramamurthy (1966) and Karthikeyan (1971) have compiled the species that have been added to Gamble's 'Flora of the Presidency of Madras'. In the present list 6 genera, 403 species, 10 subspecies, 61 varieties and 4 forma have been enumerated.

355. **Kern, J.H. 1963.** "Florae Malesianae Precursores – XXXII. Some new Cyperaceae". *Blumea* 12: 20–30.

Abstract:- Three new species and one new variety of the family Cyperaceae have been described. *Fimbristylis aestivalvis* (Retz.) Vahl var. *trichopoda* Kern has been described from Concan and Malabar.

356. **Khan, A.E.S., Antony, R. & Thomas, J. 1995.** "Three rare ferns from Shendurney forests of Kollam district, Kerala". *J. Econ. Taxon. Bot.* 19: 624–626.

Abstract:- The occurrence of three rare ferns, viz., *Schizaea digitata* (L.) Sw., *Pteris mertensioides* Willd. and *Elaphoglossum nilgiricum* Krajina ex Sledge is reported from the Shendurney Wildlife Sanctuary of Thenmala division, Kerala state.

357. **Khan, A.E.S. & Kumar, E.S.S. 1995.** "Undescribed fruits of *Schefflera chadrasekharanii* Ramam. et Rajan (Araliaceae) from Kerala". *J. Econ. Taxon. Bot.* 19: 543–544.

Abstract:- The fruit of *Schefflera chadrasekharanii* Ramam. *et* Rajan has been described for the first time based on collections from Kerala.

358. **Khan, A.E.S., Kumar, E.S.S., Binu, S. & Pushpangadan, P. 1996.** "Rediscovery and *ex-situ* conservation of *Strobilanthes dupeni* Bedd. ex Clarke (Acanthaceae) – A rare/ endangered and endemic plant from Western Ghats – Kerala". *Ann. Forest.* 4: 200–202.
Abstract:- *Strobilanthes dupeni* Bedd. ex Clarke rediscovery from Pooyamkutty, Idukki district, Western Ghats, Kerala, after a lapse of 112 years.

359. **Khan, A.E.S., Kumar, E.S.S., Binu, S. & Pushpangadan, P. 1998.** "A new species of *Biophytum* DC. (Oxalidaceae) from Peninsular India". *Rheedea* 8: 79–81.
Abstract:- A new species of the genus *Biophytum* DC., viz., *B. veldkampii* allied to *B. reinwardtii* (Zucc.) Klotzsch and *B. longibracteatum* Tadul. & K.C. Jacob is described from Kerala state, India.

360. **Khan, A.E.S., Kumar, E.S.S. & Pushpangadan, P. 1998.** "A new species of *Ophiorrhiza* L. (Rubiaceae) from Kerala, India". *J. Bombay Nat. Hist. Soc.* 95: 317–318.
Abstract:- A new species of *Ophiorrhiza*, viz., *O. shenduruniii* allied to *O. eriantha* Wt. has been described and illustrated from Pandimotta, Kollam district, Kerala.

361. **Khan, A.E.S., Sivadasan, M., Ahmed, H.A. & Thomas, J. 2012.** "Ethnomedicinal aspects of angiospermic epiphytes and parasites of Kerala, India". *Indian J. Traditional Knowledge* 11: 250–258.
Abstract:- Studies on ethnomedicinal aspects of epiphytes and parasites of Kerala have been conducted and that revealed as the tribes of Kerala have a lot of terrestrial medicinal plants available around their premises, they seldom resorted to the epiphytic and parasitic medicinal plants occurring on all trees for their use as drugs for the treatment of ailments. Hence, their knowledge on epiphytes and parasites was found to be very limited, especially among the young generation of the tribes. The present study reported the use of 28 species (16 epiphytes and 12 parasites), which represent about 13.4% of the total epiphytes and parasites present in Kerala, and they are of valuable properties and use and are used for curing or corrective measures for several diseases. Majority of the properties and uses recorded are first reports pertaining to these special groups of plants. A through investigation on the phytochemistry and therapeutic values of the bioactive compounds contained in these epiphytes and parasites would result in the discovery of new and valuable drugs of high potentials and of interest to the nutraceutical and pharmaceutical industries.

362. **Khan, E.S.S., Yeragi, S.S., Babu, K.N. & Khan, A.E.S. 2001.** "A new variety of *Biophytum reinwardtii* (Zucc.) Klotsch. from Kerala". *J. Econ. Taxon. Bot.* 25: 745–747.
Abstract:- A new variety of *Biophytum reinwardtii* (Zucc.) Klotsch., viz., *B. reinwardtii*

var. *keralanum* is described and illustrated from Pampavalley, Kottayam district, Kerala.

363. **Khan, H.A. 1993.** "Vegetational history of Dam site area, Veliaparathode, Silent Valley, Kerala (India)". *J. Environm. Resources* 1: 20–26.

Abstract:- A comparative study of pollen analysis of a profile with modern pollen flora and phytosociological data of plant communities of Silent Valley, have revealed that there were fresh water pools during about 1,000 years B.P. In the open, there were grassland with *Phoenix* here and there. The woods were characterized by high water loving species. Gradual drying up of the pools took place during about 750 years B.P. with a subsequent increase of ground vegetation a dense forest with a *Cullinia* and *Palaquium* association which is also existing today. Further, diversification led to increase of tree taxa. The grasslands also expanded and *Phoenix* species increased in open areas exposed after the drying of pools with increase of species.

364. **Khan, M.A.W., Solanke, S.N. & Chavan, D.P. 2006.** "Novelties in Cyperaceae – III". *J. Econ. Taxon. Bot.* 30: 859–864.

Abstract:- The present paper deals with two new species of *Cyperus* L., viz., *C. diwakarii* W. Khan & S. Solanke and *C. yadavii* W. Khan, D.P. Chavan & S. Solanke from different parts of Western Ghats in Maharashtra and Kerala states. The important literature consulted on Cyperaceae is cited under references.

365. **Khan, M.A.W., Taur, R.D., Lakshminarasimhan, P., Sardesai, M.M. & Shaikh, R.I. 2011.** "Novelties in Cyperaceae IX – New specific and intraspecific taxa of *Eleocharis* R. Br.". *Bioinfolet* 8: 5–10.

Abstract:- Three new taxa belonging to genus *Eleocharis* – including one new species, viz., *E. zatei* W. Khan & Lakshminarasimhan from Kerala and two varieties, each belongs to *E. geniculata* and *E. atropurpurea* from Maharashtra have been described and illustrated.

366. **Khanna, L.P. 1936.** "On Indian species of the genus *Anthoceros* Linn. with a description of a new species from Travancore". *J. Indian Bot. Soc.* 15: 235–240.

Abstract:- A new species of *Anthoceros*, viz., *A. koshii* has been described from Travancore.

367. **Kostermans, A.J.G.H. 1983.** "The south Indian species of *Cinnamomum* Schaeffer (Lauraceae)". *Bull. Bot. Surv. India* 25: 90–133.

Abstract:- *Cinnamomum* is represented in south India by 12 endemic species and the imported cultivated *C. verum* (synonym *C. zeylanicum*) from Ceylon. Of these *C. filipedicellatum, C. walaiwarense, C. goaense* and *C. keralense* are here described for the first time. The first two species are from Tamil Nadu, third from Goa and last species from Kerala. *C. heyneanum* Nees reduced to *C. pedunculatum* var. *angustifolium* Hemsley by Allen and later to *C. burmanii* var. *angustifolium* Hemsley and quite recently reduced

to forma *heyneanum* by H.W. Li in 1978, is here reestablished. The known single collection is from S. India and is certainly different from the Chinese *C. angustifolium*; with *C. burmanii* it is not related to all. A complete bibliography of *C. malabatrum* (Burm.f.) Bl. is presented, this was in antiquity the source of *Cassia lignea* bark and of *Folium indum*. The history of this bark and the leaves is presented.

368. **Krishnan, R.J. 2009.** "New report of phytoplanktons from Mullaperiyar lake, Periyar Tiger Reserve, Western Ghats, Kerala". *Indian Forester* 135: 1750–1751.

Abstract:- Fifty nine taxa of phytoplanktons were identified from different samples from Mullaperiyar lake, Periyar Tiger Reserve, Western Ghats, Kerala. Among them 54 were identified up to the species level and five were identified up to the genus level. The most abundant species observed throughout the study period was diatom, *Melosira granulata*. This species was earlier reported from Kashmir valley. The second most abundant plankton noticed was *Staurastrum parasdoxum* var. *reductum* a desmid.

369. **Krishnan, R.M., Rammohan, H. & Ramesh, B.R. 1997.** "Ecological database of some South Indian medicinal plants". *J. Econ. Taxon. Bot.* 21: 625–637.

Abstract:- The paper outlines the method used to establish the database of some South Indian (Kerala, Karnataka & Tamil Nadu) medicinal plants to primarily explain the ecology and distribution patterns. Data are collected from three sources: herbaria, literature and fieldwork and stored in primary data deposits, the supplementary information pertaining to a location and bioclimate are called as secondary data deposits. Information from these data deposits are extracted by several processes. The scope of the database although specialized, can be enlarged by adding species based information from various fields in basic and applied sciences. The major use of the database would be to aid in habitat conservation. The future role of database in light of our increasing knowledge of biodiversity is discussed.

370. **Krishnankutty, C.N. 1989.** "Long-term price trend of timber in Kerala". *Indian J. Forest.* 12: 7–12.

Abstract:- The paper analyses the long-term trend in prices obtained during timber auctions in the Kerala Forest Department depots. The analysis based on real prices of timbers of 8 species for the period 1956–57 to 1984–85 showed that the general trend in prices of all the timbers is more or less the same. The prices initially declined slightly and then increased at a moderate rate till 1976–77. Since then, the prices of all the timbers increased rapidly.

371. **Krishnankutty, C.N., Thampi, K.B. & Mammen, C. 2010.** "Demand and supply of Teakwood in Kerala". *Indian J. Forest.* 33: 1–5.

Abstract:- This paper analyses the demand-supply situation of Teakwood in Kerala state,

India. The total demand for teakwood during 2000-2001 was 96,294 m^3, which was 4.7 per cent of the total demand for all timbers. Among the timber-using sectors, housing was the largest teakwood-using sector. Teakwood export to other states within the country was 13,812 m^3 of which 6335 m^3 was teak poles. The international export was only 113 m^3. Of the total teakwood supply, forest plantations accounted for 52 per cent, import 15 per cent and areas outside forests contributed the remaining 33 per cent. Production and consumption of teakwood was more or less matched, with only a small deficit of 667 m^3. Kerala, a traditional exporter, has now become a net importer. Shortening of the rotation age of forest teak plantations to 50 years has reduced the production of larger girth logs. A policy for increasing the rotation age of forest teak plantations must be adopted to make available high value larger girth logs for the national and international markets.

372. **Krishnaraj, M.V., Mohanan, N. & Antony, V.T. 2011.** "A new variety of *Crotalaria assamica* (Fabaceae–Papilionoideae), from the Western Ghats, India". *Rheedea* 21: 153–156.

Abstract:- A new variety, viz., *Crotalaria assamica* Benth. var. *keralensis* is described and illustrated from Nelliampathy, Palakkad district, Kerala. The taxon differs from var. *assamica* and var. *philippinensis* in having glabrous, lenticellate or warty stem, and reticulately veined, glabrous calyx tube and lobes.

373. **Krishnaraj, M.V., Mohanan, N. & Antony, V.T. 2012.** "Leguminosae additions to the Flora of Kerala State". *J. Econ. Taxon. Bot.* 36: 604–608.

Abstract:- *Indigofera coerulea* Roxb., *Mucuna bracteata* DC. ex Kurz, *Sesbania speciosa* Taub. ex Engl. and *Vigna hosei* (Craib.) Backer, are reported new to Kerala State.

374. **Kulkarni, B.G. & Singh, N.P. 1973.** "On the distribution of *Polygala jacobii* Chandr.". *Curr. Sci.* 42: 359.

Abstract:- *Polygala jacobii* is reported for the first time from Poona (Maharashtra) and Ariankaru (Kerala). Earlier this species was reported from Tamil Nadu.

375. **Kumar, A.K.G. & Roopesh, T. 2004.** "Leguminous plants on the campus of N.S.S. College, Nemmara, Palakkad district, Kerala: A survey". *J. Econ. Taxon. Bot.* 28: 529–531.

Abstract:- The family Leguminosae is one of the most important families of Angiosperms. The plants of Leguminosae are economically important because they produce protein-rich pulses and vegetables. They enhance soil fertility also. About 22 species under 18 genera of this family have been collected from the campus of N.S.S. College, Nemmara in Palakkad district and studied.

376. **Kumar, C.S. 1986.** Endemic orchids of Western Ghats. In: Nair, K.S.S., Gnanaharan, R.

& Kedharnath, S. (Eds.), *Eco-development of Western Ghats*. Kerala Forest Research Institute, Peechi. pp. 51–54.

377. **Kumar, C.S. 1989.** "Two novelties in the genus *Trias* Lindl. (Orchidaceae)'. *Blumea* 34: 103–109.

Abstract:- One new orchid, *Trias bonaccordensis* Sathish, is described from the Bonaccord forests of Trivandrum, Kerala state, India. Affinities with the related *T. stocksii* Benth. ex Hook.f., *T. disciflora* (Rolfe) Rolfe and *T. nasuta* (Reichb.f.) Stapf are discussed. One new combination, *viz*., *T. crassifolia* (Thw. ex Trimen) Sathish, is proposed for the Sri Lankan *Bulbophyllum crassifolium*. Operculum features of the genus are illustrated and a distribution map is supplied.

378. **Kumar, C.S. 1999.** Orchids of Silent Valley. In: Manoharan, M., Biju, T.M., Biju, S.D., Nayar, T.S. & Easa, P.S. (Eds.), *Silent Valley – Whispers of Reason*. Kerala Forest Department, Thiruvananthapuram. pp. 191–216.

379. **Kumar, C.S. & Kumar, P.C.S. 1998.** "The reappearance of *Vanda thwaitesii* J.D. Hook. (Orchidaceae)" *Rheedea* 8: 249–253.

Abst: *Vanda thwaitesii* J.D. Hook., a supposedly extinct orchid species of Sri Lanka is rediscovered from Kerala, India after a lapse of its first collection. A detailed description, notes and an illustration are provided.

380. **Kumar, C.S. & Kumar, P.C.S. 2001.** "*Gastrodia exilis* Hook.f. (Orchidaceae), a new genus and species record for South India". *Rheedea* 11: 49–52.

Abstract:- *Gastrodia exilis* Hook.f., a saprophytic orchid, known earlier from North East India and Thailand is reported for the first time from Agastymala region of Kerala, South India. With the collection of this species, the genus *Gastrodia* is as addition to South Indian flora. A brief description, illustration and notes are provided.

381. **Kumar, C.S., Kumar, P.C.S. & George, E. 2006.** "Rediscovery of Robert Wight's *Vanda wightii* Rchb.f. (Orchidaceae)". *Rheedea* 16: 49–54.

Abstract:- *Vanda wightii* Rchb.f., first collected in 1849, is rediscovered from Karnataka and Kerala after 150 years. Evidence of its occurrence in Sri Lanka is confirmed. A historical sketch, an exhaustive taxonomic description and a detailed illustration of this species are provided. Leaves of this species are characteristically very long (35 cm or more) and inflorescence is 2 or 3–flowered. Morphological characters which make this species distinct from *V. thwaitesii* Hook.f., with which it is often confused, are tabulated.

382. **Kumar, C.S., Kumar, P.C.S. & Saleem, M. 2001.** "A new species of *Bulbophyllum* Du Petit-Thou. (Orchidaceae) from Kerala, India". *Rheedea* 11: 97–100.

Abstract:- *Bulbophyllum rosemarianum* Sathish, Suresh & Saleem, a new species of orchid

belonging to *Bulbophyllum* sect. *Careyana* Pfitz. is described and illustrated from Kerala, India. Affinities of the novelty with the related *B. rubilabrum* Par. ex Hook.f., *B. tridentatum* Krzl. and *B. lilacinum* Ridl. are highlighted.

383. **Kumar, C.S., Kumar, P.C.S., Sibi, M. & Anil Kumar, S. 2008.** "A new species of *Gastrodia* R. Br. (Orchidaceae) from Silent Valley, Kerala, India". *Rheedea* 18: 107–110.
Abstract:- *Gastrodia silentvalleyana* Sathish, Suresh, Sibi & Anil (Orchidaceae), a new species is described from Silent Valley National Park, Palakkad, Kerala, India. It is related to *G. pubilabiata* Y. Sawa of *G. verrucosa* group but differs in having a glabrous rhizome, globose flowers, sepaline tube warty on abaxial surface at margins, rhomboid petals and a deltoid acuminate lip with a tongue–like thickening at the epichile.

384. **Kumar, C.S. & Manilal, K.S. 1986.** "Nomenclatural changes in two Indian orchids". *Taxon* 35: 719–720.
Abstract:- A new name, *Habenaria indica* Sathish Kumar & Manilal, and a new combination, *Eria chandrasekharanii* (Bhargavan & Mohanan) Sathish Kumar & Manilal, are proposed for two Indian orchids.

385. **Kumar, C.S. & Manilal, K.S. 1992.** "Epiphytic orchids of India". *Rheedea* 2: 80–100.
Abstract:- Orchids constitute a major share of the epiphytic flora of India with 630 species in 85 genera occurring from 5 m to 500 m, covering all types of vegetation except the alpine zone in the Himalayas and representing a mixed comglomeration of various interesting elements. Pantropical genera are represented by *Bulbophyllum, Polystachya* and *Vanilla*; palaeotropic by *Acampe, Agrostophyllum, Oberonia* and *Taeniophyllum*; Indo-Sri Lankan by *Cottonia, Diplocentrum, Seidenfadeniella* and *Sirhookera* and endemic by *Jejosephia, Smithsonia* and *Xenikophyton*. The monotypic *Dickasonia* extends to Burma. *Rhinerrhiza* is found only in Assam and eastern Australia. Others are Indo-Malesian. *Polystachya concreta* is the only pantropical species. Pantropic species is represented by *Acampe rigida*. Thirty species are in common with Sri Lanka. *Aerides emericii* extends from Andamans to Cocos Islands. The rest of the species extend to neighbouring, Indo-China and even Malesia. Genera-wise analysis is given with due emphasis on ecological data. Conservation efforts to save the rare taxa in Arunachal Pradesh, Meghalaya, Sikkim, West Bengal, Orissa, Tamil Nadu and Kerala are discussed.

386. **Kumar, C.S. & Manilal, K.S. 1993.** "*Vanilla aphylla* Blume report on an addition to India's orchid flora". *Amer. Orchid Soc. Bull.* 1993: 394–397.
Abstract:- *Vanilla aphylla* Blume, has been reported for the first time for India from Kerala and Tamil Nadu. Previously this species was known from Thailand, Laos, Vietnam, Malaya and Java.

387. **Kumar, C.S. & Manilal, K.S. 2004.** Orchids of Kerala, India. In: Manilal, K.S. & Kumar, C.S. (Eds.), *Orchids Memories – A tribute to Gunnar Seidenfaden*. Mentor Books, Calicut. pp. 155–254.

Abstract:- A historical sketch of the orchid studies done in Kerala, India, since Rheede's work is presented. Altogether 252 species, 3 subspecies and a solitary variety of orchids belonging to 79 genera are known to occur in Kerala. This includes one new species (*Didymoplexis seidenfadenii* Sathish & Ormerod), one new generic record for South India (*Saccolabiopsis* J.J. Sm.) and four new state records [*Bulbophyllum careyanum* (Hook.) Spreng., *B. mysorensis* (Rolfe) J.J. Sm., *Diplocentrum congestum* Wight and *Habenaria peloroides* Par. & Rchb.f.], all illustrated based on new collections. Three species (*Eulophia emilianae* Saldanha, *Oberonia longifolia* Muktesh & Stephen and *O. pakshipadalensis* Muktesh & Stephen) and one variety [*Eria muscicola* (Lindl.) Lindl. var. *ponmudiana* Mohanan & Henry] are reduced to synonymy [of *Eulophia zollingerii* (Rchb.f.) J.J. Sm., *Oberonia agastyamalayana* Sathish, *O. wynadensis* Sivadasan & Balakrishnan and *Eria nana* A. Rich. respectively]. A new name, *Bulbophyllum orezii* Sathish, is proposed for *B. josephii* Muktesh & Stephen (2001), non *B. josephii* (Ktze.) Summerh. (1945). A generic summary of the orchid flora of the state is given along with an annotated enumeration of all species hitherto recorded.

388. **Kumar, C.S. & Rasmussen, F.N. 1987.** "*Cheirostylis seidenfadeniana* sp. nov. (Orchidaceae) from India". *Nordic J. Bot.* 7: 409–411.

Abstract:- A new species, viz., *Cheirostylis seidenfadeniana* is described from Kerala in India. The new species appears to be related to *C. parvifolia* and shares some characteristics with *C. thailandica* and *C. montana*, but differs in floral characters.

389. **Kumar, E.S.S., Chitra, C.R. & Khan, A.E.S. 2001.** "*Erythroxylum lanceolatum* (Wight) Walp. and *Vernonia peninsularis* var. *kodayarensis* Henry & Gopalan – New records for Kerala". *J. Econ. Taxon. Bot.* 25: 599–601.

Abstract:- *Erythroxylum lanceolatum* (Wight) Walp. Earlier known from Courtallum hills of Tamil Nadu and *Vernonia peninsularis* var. *kodayarensis* Henry & Gopalan earlier known from Kodayar of Tamil Nadu are reported for the first time from Kerala. Their brief description, line drawing and pertaining notes etc. are provided.

390. **Kumar, E.S.S., Chitra, C.R. & Khan, A.E.S. 2002.** "Re-investigation of three rare and endangered *Begonia* of the Western Ghats". *J. Econ. Taxon. Bot.* 26: 136–140.

Abstract:- Three threatened species of *Begonia*, viz., *B. cordifolia* (Wt.) Thw., *B. crenata* Dryand. and *B. trichocarpa* Dalz. have been recollected from Western Ghats of Kerala.

391. **Kumar, E.S.S., Chitra, C.R. & Khan, A.E.S. 2002.** "A note on the occurrence of unisexual

flower in *Thottea siliquosa* (Lamk.) Ding Hou (Aristolochiaceae)". *J. Econ. Taxon. Bot.* 26: 256–258.

Abstract:- An unusal flower of *Thottea siliquosa* (Lamk.) Ding Hou is described and illustrated from Pathanamthitta district of Kerala.

392. **Kumar, E.S.S., Geethakumary, M.P., Pandurangan, A.G. & Shaju, T. 2003.** "Rediscovery of *Cinnamomum heyneanum* Nees (Lauraceae) – A species endemic to the Western Ghats". *Indian J. Forest.* 26: 409–411.

Abstract:- *Cinnamomum heyneanum* Nees is rediscovered from the Western Ghats, after a lapse of 185 years since its first collection. A detailed description, illustration and relevant notes are provided based on fresh specimens. Its affinity with allied species and phytogeographic significance are also discussed.

393. **Kumar, E.S.S., Gopal, S.G. & Nair, G.M. 2007.** "*Jasminum caudatum* Wall. ex Lindl. (Oleaceae) – A new record for Peninsular India". *J. Econ. Taxon. Bot.* 31: 411–413.

Abstract:- *Jasminum caudatum* Wall. ex Lindl. is reported for the first time for southern Peninsular India from Kerala. Earlier this species was known to occur in Sikkim, Assam, Arunachal Pradesh, Tripura, Meghalaya and West Bengal. Detailed description, illustration and relevant notes are provided.

394. **Kumar, E.S.S., Jabbar, M.A., Khan, A.E.S., Binu, S. & Vikraman, R.R. 2002.** "A new species of *Strobilanthes* Bl. (Acanthaceae) from South India". *Rheedea* 12: 73–76.

Abstract:- A new species, viz., *Strobilanthes pushpangadanii* allied to *S. lanatus* Nees and *S. lawsonii* Gamble from Kerala, South India is described and illustrated.

395. **Kumar, E.S.S., Jabbar, M.A. & Saleem, M. 2002.** "Rediscovery of *Begonia aliciae* C.E.C. Fisch. (Begoniaceae) from the Western Ghats of Kerala". *Rheedea* 12: 185–188.

Abstract:- *Begonia aliciae* C.E.C. Fisch., an endangered species of the Western Ghats, is rediscovered from its type locality after a lapse of 64 years of its first collection. A detailed description and illustrations are provided based on recent collection.

396. **Kumar, E.S.S. & John, J.A. 2011.** "Discovery of *Pittosporum viridulum* Nayar & al. (Pittosporaceae) from Kerala and note on their undescribed flowers". *Indian J. Forest.* 34: 175–176.

Abstract:- *Pittosporum viridulum* M.P. Nayar, G.S. Giri & V. Chandras., a Nilgiri endemic species is reported for the first time from Kerala. This species was described based on fruiting specimens collected from Kozhipalam in Nadugani forest of Tamil Nadu and their floral details are unknown yet. It is described and illustrated based on a fresh collection to facilitate its easy identification.

397. **Kumar, E.S.S., Khan, A.E.S. & Binu, S. 2000.** "A new species of *Thottea* Rottb.

(Aristolochiaceae) from Kerala, South India". *Rheedea* 10: 117–120.

Abstract:- A new species of *Thottea* Rottb., viz., *T. sivarajanii* allied to *T. ponmudiana* Sivar. is described and illustrated form Kerala, South India.

398. **Kumar, E.S.S., Khan, A.E.S. & Binu, S. 2001.** "*Sida unicornis* Marais (Malvaceae), a new record for India". *Rheedea* 11: 53–56.

Abstract:- *Sida unicornis* Marais is reported here for the first time for India from Bonaccord forest in Thiruvananthapuram district of Kerala. A complete description, illustration and other relevant notes are provided.

399. **Kumar, E.S.S., Khan, A.E.S., Binu, S. & Almeida, S.M. 2001.** "*Grewia palodensis* (Tiliaceae), a new species from Kerala, India". *Rheedea* 11: 41–43.

Abstract:- A new species *Grewia palodensis* Santhosh, Shanavas, Binu *et* Almeida allied to *G. umbellifera* Bedd. is described and illustrated from Thiruvananthapuram, Kerala.

400. **Kumar, E.S.S., Khan, A.E.S., Binu, S. & Pushpangadan, P. 1998.** "Taxonomic and palynological notes on two species of *Rauvolfia* L. (Apocynaceae) from South India". *Ann. Forest.* 6: 221–224.

Abstract:- Critical taxonomic and palynological notes on two species of *Rauvolfia* L., viz., *R. hookeri* and *R. micrantha* with illustrations are provided from South India (Kerala).

401. **Kumar, E.S.S., Khan, A.E.S., Binu, S. & Pushpangadan, P. 2000.** "A note on the occurrence and identity of *Biophytum umbraculum* Sch. (Oxalidaceae) in Kerala". *J. Econ. Taxon. Bot.* 24: 746–748.

Abstract:- *Biophytum umbraculum* Sch. has been reported from Palode, Thiruvananthapuram district, Kerala and a brief description, line drawing and notes have been given in this paper. Earlier this species was known to occur in Tropical Africa, Madagascar and Tropical South East Asia.

402. **Kumar, E.S.S., Khan, A.E.S. & Gopal, S.G. 2004.** "*Andrographis chendurnii* – A new species of Acanthaceae from India". *Nordic J. Bot.* 22: 683–685.

Abstract:- A new species of *Andrographis*, viz., *Andrographis chendurnii* has been described and illustrated from Kerala, India.

403. **Kumar, E.S.S., Nair, G.M. & Yeragi, S.S. 2004.** "An enumeration of the rare, endangered and threatened flowering plants from the sacred groves of Thiruvananthapuram district, Kerala, India". *J. Econ. Taxon. Bot.* 28: 706–711.

Abstract:- Twenty species of threatened angiosperms are reported from the sacred groves of Thiruvananthapuram district of Kerala state. A short taxonomic diagnosis, phenological data, area of occurrence and other relevant notes are provided.

404. **Kumar, E.S.S., Nair, G.M. & Yeragi, S.S. 2004.** "Additions to the flora of

Thiruvananthapuram district, Kerala, India". *J. Econ. Taxon. Bot.* 28: 741–763.

Abstract:- Additions of 103 species/varieties of angiosperms to the flora of Thiruvananthapuram district is provided with their nomenclature, precise taxonomic diagnosis, phenology, distribution and area of occurrence. These plants are from the sacred groves of the district.

405. **Kumar, E.S.S., Nair, G.M. & Yeragi, S.S. 2004.** "*Eclipta prostrata* (L.) L. var. *dixitii* Anand Kumar & Khanna (Asteraceae) – A new record for South India (Kerala)". *J. Econ. Taxon. Bot.* 28: 507–509.

Abstract:- *Eclipta prostrata* (L.) L. var. *dixitii* Anand Kumar & Khanna is reported for the first time for South India from Sree Aryankuzhi Bhagavathi temple kavu, Thiruvananthapuram district, Kerala. Earlier this species was known to occur in Betul, Madhya Pradesh.

406. **Kumar, E.S.S., Nair, G.M. & Yeragi, S.S. 2004.** "Peninsular Indian endemic plants in the sacred groves of Thiruvananthapuram district, Kerala". *J. Econ. Taxon. Bot.* 28: 764–781.

Abstract:- Peninsular Indian endemic plants found in the sacred groves of Thiruvananthapuram district of Kerala state are enumerated with their correct nomenclatural citation, brief taxonomic diagnosis, phenology, distribution and area of occurrence.

407. **Kumar, E.S.S., Raju A. & Khan, A.E.S. 2003.** "*Memecylon agastyamalaianum* (Melastomataceae), a new species from India". *Bot. Bull. Acad. Sin.* 44: 175–177.

Abstract:- *Memecylon agastyamalaianum* Santhosh, Raju & Shanavas, a new species of Melastomataceae from Agastyamala Hills, Thiruvananthapuram district, Kerala, India, is described and illustrated. This new species is allied to *M. manickamii* C. Murugan, Sundaresan & Jothi.

408. **Kumar, E.S.S., Radhakrishnan, K., Kunhikannan, C., Veldkamp, F.J. & Mohanan, C.N. 2008.** "Rediscovery of *Maesa velutina* Mez (Maesaceae/Myrsinaceae): An endemic and endangered species of the Western Ghats, India". *Rheedea* 18: 39–42.

Abstract:- *Maesa velutina* Mez (Maesaceae/Myrsinaceae) is rediscovered after more than a century from Wayanad district of northern Kerala. It is described and illustrated with a brief history.

409. **Kumar, E.S.S., Roy, P.E., Renjith, N.B. & Dan, M. 2011.** "*Acrotrema uniflorum* var. *uniflorum* (Dilleniaceae) – A new record for India". *Rheedea* 21: 167–169.

Abstract:- *Acrotrema uniflorum* Hook. var. *uniflorum*, a Sri Lankan endemic is reported for the first time for India from Pathanamthitta district of Kerala, southern Western Ghats.

It is apparently similar to *A. arnottianum* Wight, an endemic species of the southern Western Ghats, but can easily be distinguished from the latter by its short-peduncled inflorescence, less number of stamens and green juvenile leaves. It is described here with photographs to facilitate easy identification.

410. **Kumar, E.S.S., Roy, P.E. & Shareef, S.M. 2013.** "Rediscovery of *Ophiorrhiza barnesii* C.E.C. Fisch. (Rubiaceae) from the southern Western Ghats, Kerala, India". *J. Threatened Taxa* 5: 4115–4117.

Abstract:- This species has been rediscovered from the Kallar Valley of the Idukki District in Kerala after 75 years of its first collection.

411. **Kumar, E.S.S., Roy, P.E., Shareef, S.M. & Usha, S.S. 2012.** "Rediscovery of *Uniyala multibracteata* (Gamble) H. Rob. & Skvarla (Asteraceae) from the southern Western Ghats, India". *J. Threatened Taxa* 4: 2587–2589.

Abstract:- *Uniyala multibracteata* (Gamble) H. Rob. & Skvarla has been rediscovered after 111 years of its first collection from Kerala. It is described and illustrated here to facilitate its easy identification.

412. **Kumar, E.S.S., Shaju, T., Jabbar, M.A. & Pandurangan, A.G. 2002.** "Rediscovery of *Buchanania barberi* Gamble (Anacardiaceae), an endangered and endemic species from the Western Ghats of Kerala, India". *Rheedea* 12: 197–200.

Abstract:- *Buchanania barberi* Gamble, an endangered species of the Western Ghats, is rediscovered from Kerala, India after a lapse of 97 years of its first collection. A detailed description, illustration and relevant notes are provided based on fresh specimens.

413. **Kumar, E.S.S., Thulasidas, G. & Gopal, S.G. 2002.** "*Phyllanthus rotundifolius* Klein ex Willd. (Euphorbiaceae) – A new record for Kerala". *J. Econ. Taxon. Bot.* 26: 486–488.

Abstract:- *Phyllanthus rotundifolius* Klein ex Willd., has been reported for the first time for Kerala from Thiruvananthapuram district. This species was earlier known to occur in Tamil Nadu and Karnataka. A detailed description and line drawings are also provided.

414. **Kumar, E.S.S., Thulasidas, G., Yeragi, S.S. & Nair, G.M. 2004.** "*Memecylon sylvaticum* Thw. (Melastomataceae) – A new record for India". *J. Econ. Taxon. Bot.* 28: 513–515.

Abstract:- *Memecylon sylvaticum* Thw. is reported for the first time for India from Indalayappan kavu, Thiruvananthapuram district, Kerala. Earlier this species was known to occur in Sri Lanka. A detailed description, illustration and other relevant notes are provided.

415. **Kumar, E.S.S. & Vikraman, R.R. 2001.** "A new variety of *Strobilanthes barbatus* Nees from Kerala state". *J. Econ. Taxon. Bot.* 25: 742–744.

Abstract:- *Strobilanthes barbatus* Nees var. *bonaccordensis* Santhosh *et* Raj Vikraman, a

new variety belonging to the family Acanthaceae is described and illustrated from Bonaccord, Thiruvananthapuram district, Kerala.

416. **Kumar, E.S.S. & Yeragi, S.S. 2003.** "*Eugenia terpnophylla* Thw. (Myrtaceae): A new record for India". *Rheedea* 13: 39–41.
Abstract:- *Eugenia terpnophylla* Thw., a Sri Lankan Myrtaceous tree species is reported for the first time for India from Thiruvananthapuram and Pathanamthitta districts of Kerala, the southern Western Ghats. Densely pubescent young shoots, penduncles and clustered axillary flowers distinguished this species from the allied *E. thwaitesii* Duthie and *E. heynei* (Spreng.) Rathakr. & N.C. Nair. Description and illustration of the species are given.

417. **Kumar, E.S.S., Yeragi, S.S., Babu, K.N. & Khan, A.E.S. 2001.** "*Pyrenacantha volubilis* Hook. (Icacinaceae) – A new record for Kerala state". *J. Econ. Taxon. Bot.* 25: 729–731.
Abstract:- *Pyrenacantha volubilis* Hook. is reported from Erumkulangara Bhagavathy Temple, Thiruvananthapuram district, Kerala for the first time. Earlier this species was known to occur in Tamil Nadu, Sri Lanka and Indo-China. A brief description and illustration are also provided.

418. **Kumar, E.S.S., Yeragi, S.S., Babu, K.N. & Nair, G.S. 2002.** "Sacred-grove flora of Kerala – I. New plant records for Kerala". *J. Econ. Taxon. Bot.* 26: 141–143.
Abstract:- *Cadaba trifoliata* (Roxb.) Wight & Arn., *Drypetes sepiaria* (Wight & Arn.) Pax & Hoffm. and *Justicia betonica* L. var. *ramosissima* (Nees) Clarke have been reported as a new records to Kerala.

419. **Kumar, K.J.L., Vikraman, R.R. & Mohandas, A. 2004.** "Conservation of two rare and endemic *Euphorbia* species of Agasthyamala Hills – A case study". *J. Econ. Taxon. Bot.* 28: 738–740.
Abstract:- Two rare and endemic *Euphorbia*, viz., *E. santapaui* Henry and *E. vajravelui* Binojk. & Balakr. found in Agasthyamala Hill ranges of the Western Ghats, Kerala are facing severe threat to their survival from pilgrims who visit this place seasonally. Conservation and propagation methods adopted to save these valuable species from extinction are explained in this paper.

420. **Kumar, K.K. 1997.** "Two new records of ferns for Kerala". *Indian Fern J.* 14: 110–112.
Abstract:- *Elaphoglossum stelligerum* (Wall. ex Baker) T. Moore ex Alston & Bonner (Lomariopsidaceae) and *Pleopeltis macrocarpa* (Bory ex Willd.) Kaulf (Polypodiaceae) are reported for the first time from the Kerala state.

421. **Kumar, K.K. & Goyder, D.J. 2001.** "*Brachystelma swarupa* (Apocynaceae): A new species from India". *Kew Bull.* 56: 209–216.

Abstract:- A new species of *Brachystelma* Sims, viz., *B. swarupa* Kishore & Goyder, from the states of Kerala and Tamil Nadu, South India is described and illustrated. The new species is allied to *B. ciliatum* Arekal & T.M. Ramakrishna and *B. laevigatum* Hook.f.

422. **Kumar, K.K., Jose, S. & Madhusoodanan, P.V. 1998.** "Rare, endangered and endemic pteridophytes from the shola forests of Kerala state, India". *Indian Fern J.* 15: 189–197.
Abstract:- Forty–three rare and endangered pteridophytes collected from the various shola forests of Kerala state, India are enumerated. The list includes species, such as, *Cyathea nilgirensis* Holttum, *Dicranopteris linearis* (Burm.f.) Underw. var. *sebastiana* Panigr. & Dixit, *Elaphoglossum beddomei* Sledge, *E. nilgiricum* Krajina ex Sledge, *Pseudocyclosorus ochthodes* (Kunze) Holttum var. *annamalyensis* Manickam & Irudayaraj and *P. ochthodes* (Kunze) Holttum var. *palniensis* Manickam & Irudayaraj which are endemic to south India. *Asplenium auritum* Sw., *A. erectum* Bory ex Willd., *A. tenuifolium* D. Don, *Arachniodes aristata* (Forst.f.) Tindale, *Botrychium lanuginosum* Wall. ex Hook.f. & Grev., *Ctenopteris subfalcata* (Bl.) Kunze, *Dryopteris juxtaposita* Christ, *Elaphoglossum stelligerum* (Wall. ex Baker) T. Moore ex Alston & Bonner, *Pleopeltis macrocarpa* (Bory ex Willd.) Kaulf., *Pteris cretica* L., *P. linearis* Poir., *Stenogramma pozoi* (Lagasca) K. Iwats and *Trichomanes schmidianum* Zenker ex Taschn. are new records to Kerala.

423. **Kumar, K.K. & Kumar, M. 1997.** "*Sinarundinaria microphylla* (Munro) Chao & Renv. (Poaceae): A new record of a bamboo for Peninsular India". *Rheedea* 7:11–14.
Abstract:- *Sinarundinaria microphylla* (Munro) Chao & Renv., a small bamboo hitherto known to be confined to Eastern Himalaya is reported from Eravikulam National Park, Kerala. A brief description of the species along with illustration is provided here.

424. **Kumar, K.K. & Madhusoodanan, P.V. 1998.** "Rare pteridophytes from Chinnar Wildlife Sanctuary, Kerala". *J. Econ. Taxon. Bot.* 22: 145–148.
Abstract:- Four rare pteridophytes are reported from the Chinnar Wildlife Sanctuary, Kerala. The list includes *Selaginella wightii*, a new record to Kerala and *Adiantum caudatum*, reported from Anamalais for the first time. The tribal uses of the plants are also described.

425. **Kumar, K.K. & Sasidharan, N. 2012.** "Floristic checklist and analysis of angiosperm diversity in the Tropical Montane (Shola) forests of Kerala State, South India". *J. Econ. Taxon. Bot.* 36: 712–735.
Abstract:- The angiosperm diversity of the Tropical Montane (Shola) forests of Kerala State, South India is analysed by surveying the major shola forest regions of the area. The study areas include Mannavan Shola (the largest shola forest of the state), Idlimottai Sholas, Pambadan Shola, Pullaradi Shola, Idivara Shola, Sholas of Eravikulam National

Park, Vellari Mala Sholas of Wayanad, etc. The list of angiosperms comprise about 669 taxa belonging to 369 genera under 111 families. These include 14 subspecies and 41 varieties. Dicotyledons are represented by 536 taxa belonging to 295 genera while monocotyledons are represented by 133 taxa belonging to 74 genera. Out of these 669 taxa, 188 are ethnobotanically important, 246 (37%) are endemics, 40 are exotics naturalized in the wild and 49 are new distributional records to Kerala. Seven 'Possibly Extinct' species are also rediscovered. The high rate of endemism and the threat factors affecting the shola forests are discussed thus highlighting their conservational importance.

426. **Kumar, K.K., Sasidharan, N. & Swarupanandan, K. 1999.** "Ethnobotanical studies on the hill tribes in the Shola forests of High ranges, Kerala, South India". *J. Econ. Taxon. Bot.* 23: 451–465.

Abstract:- Ethnobotanical information on 104 'Shola' (Tropical montane) forest species of Kerala state, South India, are dealt with. The various uses to which the shola species are put into by the Muthuva tribes and the Tamilian natives are described. The list includes 34 species used for various medicinal purposes, 16 as food and food supplements, 9 as fodder, and 2 as fish poison. Twelve species are collected solely for sale to the dry flower industry. Various causes for the decline of the tribal medical practinioners, practice of the traditional medicines and the need to document these informations are also discussed.

427. **Kumar, M. 1995.** "A re-investigation on the taxonomy of the genus *Ochlandra* Thw. (Poaceae – Bambusoideae)". *Rheedea* 5: 63–89.

Abstract:- The genus *Ochlandra* Thw., with eight species endemic to Western Ghats of India and one to Sri Lanka, is poorly represented in the herbaria and is taxonomically inadequately understood. This paper is a preliminary revision of the genus and presents an artificial key to the species, complete description and illustrations of this species, based on recent collections in flowers and fruits by the author and consultation of authentic specimens. The number of species found in Kerala is eight.

428. **Kumar, M. 1995.** "Orchids of Western Ghats: their distribution and classification". *J. Econ. Taxon. Bot.*, Addit. Ser. 11: 65–72.

Abstract:- Based on the floristic survey and from available literature, a complete list of South Indian orchids have been enumerated and are arranged as per the latest classification of Dressler (1981). The genera that represent the subfamily, tribes and subtribes from the Indian phytogeographic regions with special reference to Western Ghats alone are presented in this paper. Further exploration, conservation and development of orchid sanctuaries is emphasized.

429. **Kumar, M. 1998.** "Studies on the fern flora of Kerala with special reference to Sylvan

Valley, Munnar". KFRI Research Report No. 145. pp 46.

Abstract:- From the known 236 species of ferns and fern-allies in the Western Ghats, 159 species have been enumerated from the Sylvan Valley Fern Sanctuary in Munnar Forest Division, Kerala, India. Among the 159 fern species, which are enumerated with brief descriptions, 109 are terrestrial and 50 epiphytic. Live specimens of 125 species of ferns and fern-allies collected from different forests of Kerala were supplied to the Forest Department to be maintained in the fern house (green house) in the sanctuary, and presently 138 species are being maintained here (these are listed). A checklist of rare and endangered species found in the different forests of Munnar region is also provided. Rare and endangered species from other parts of the Kerala forests are also maintained in the sanctuary. *Ctenopteris subfalcata* (*Grammitis subfalcata*) and *Asplenium laciniatum* collected from Munnar are new records for Kerala, and *Asplenium auritum* and *A. tenuifolium* have been collected from the Munnar forests after a lapse of more than 100 years.

430. **Kumar, M. 2000.** "Lichen (Macrolichen flora) of Kerala part of Western Ghats". KFRI Research Report No. 194. pp. 186.

Abstract:- During intensive field explorations, 254 species of macrolichens under 43 genera belonging to 18 families were collected and enumerated.

431. **Kumar, M., Remesh, M. & Sequiera, S. 2001.** "*Ochlandra keralensis* (Poaceae – Bambusoideae) – A new reed-bamboo from southern Western Ghats, India". *J. Econ. Taxon. Bot.* 25: 49–51.

Abstract:- A new species of *Ochlandra*, viz., *O. keralensis* [allied to *O. wightii* (Munro) Fischer] has been described and illustrated from Pachakkanam, Pathanamthitta district, Kerala.

432. **Kumar, M., Remesh, M. & Sequiera, S. 2003.** "Medicinal pteridophytes of Kerala, South India". *Indian Fern J.* 20: 1–28.

Abstract:- The present paper deals with a comprehensive account of 66 medicinal pteridophytes occurring in Kerala, among which 22 are edible ferns, 5 species yield fibres, 10 species having miscellaneous uses. The distribution, vernacular names and chemical constituents and other uses for each species are provided.

433. **Kumar, M., Remesh, M., Sequiera, S. & Unnikrishnan, N. 2000.** "A little known bamboo – *Sinarundinaria microphylla* (Munro) Chao & Renv. from Southern Western Ghats, India". *J. Econ. Taxon. Bot.* 24: 215–219.

Abstract:- *Sinarundinaria microphylla* (Munro) Chao & Renv. hitherto known only from the vegetative characters, has been collected recently from Anaimudi hills, Kerala with

flowers. Amended and detailed description with illustrations have been provided and its distribution, rarity and conservation are discussed.

434. **Kumar, M. & Sasidharan, N. 1986.** "On the occurrence of *Dendrobium lawianum* Lindl. in Kerala". *Curr. Sci.* 55: 187–188.

Abstract:- *Dendrobium lawianum* Lindl. has been reported for the first time for Kerala from Sholayar, Trichur district. Previously this species was reported from Western Ghats of Karnataka.

435. **Kumar, M. & Sasidharan, N. 1986.** "Endemic orchids of South India". *J. Econ. Taxon. Bot.* 8: 265–269.

Abstract:- An enumeration of 91 species of orchids endemic to South India is given. Three genera *Diplocentrum, Proteroceras* and *Smithsonia* are found exclusively in South India. Need for further exploration and conservation of these valuable orchid wealth is emphasized.

436. **Kumar, M. & Sasidharan, N. 1986.** Orchids of Kerala and their conservation. In: Vij, S.P. (Ed.), *Biology, conservation and culture of orchids*. Affiliated East-West Press, New Delhi. pp. 363–376.

Abstract:- A total of 186 orchid species have been reported so far from Kerala of which 109 are epiphytic and 77 (including 5 saprophytic) are terrestrial in habit. Around 50% of the species are endemic to South India; 26 species are endangered or presumably extinct. *Dendrobium mabelae, Liparis wrayii, Pomatocalpa mannii* and *Smithsonia maculata* represent new records to this region; 13 species are of medicinal value.

437. **Kumar, M., Sasidharan, N. & Renuka, C. 1987.** "Medicinal orchids of Kerala forests". *Indian J. Forest.* 10: 216–219.

Abstract:- A large number of Indian orchids are being cultivated for ornamental purposes by the commercial growers, but they have not been exploited for their medicinal value. Collection of medicinal orchids from the natural forests and their cultivation in the green house should be encouraged to ensure the ready availability of the raw materials. During the exploration of the Kerala forests the authors have collected 13 species of orchids of medicinal importance. Brief description, phenology, properties and uses of each species are given. The need for correct identity of the plant is emphasized in order to obtain the genuine raw materials for use in the indigenous system of medicines.

438. **Kumar, M., Seethalakshmi, K.K. & Sequiera, S. 1999.** "Two new species of *Ochlandra* Thw. (Poaceae – Bambusoideae) from Southern India". *Rheedea* 9: 31–35.

Abstract:- Two new species of *Ochlandra* Thw., viz., *O. spirostylis* allied to *O. setigera* Gamble and *O. talboti* Brandis and *O. soderstromiana* allied to *O. talboti* Brandis are described from Kerala state, India.

439. **Kumar, M. & Sequiera, S. 1995.** "*Pseudoxytenanthera stocksii* (Munro) Naithani – A bamboo new record to Kerala". *J. Econ. Taxon. Bot.* 19: 525–528.
Abstract:- *Pseudoxytenanthera stocksii* (Munro) Naithani, a bamboo confined to Karnataka and Goa, is being reported for the first time from Kerala based on collection from Silent Valley National Park.

440. **Kumar, M. & Sequiera, S. 1996.** "*Impatiens sivarajanii* – A new species of Balsaminaceae from Silent Valley National Park, Kerala, India". *Rheedea* 6: 51–54.
Abstract:- A new species of *Impatiens* L., viz., *I. sivarajanii* allied to *I. agumbeana* Bhaskar & Razi is described and illustrated from Sispara, Silent Valley National Park, Palghat district, Kerala.

441. **Kumar, M. & Sequiera, S. 1997.** "New records of macrolichens from Silent Valley, Kerala". *J. Econ. Taxon. Bot.* 21: 67–73.
Abstract:- During the studies of the epiphytic flora of the Western Ghats especially in the Silent valley National Park the authors could collect 20 lichens which are reported in this paper.

442. **Kumar, M. & Sequiera, S. 1998.** "Some new records and little known species of ferns from Kerala, South India". *Indian Fern J.* 15: 102–105.
Abstract:- The ferns *Asplenium laciniatum, Blechum colensoi, Ctenopteris subfalcata* and *Vettaria montana* are reported for the first time from Kerala and *C. auritum* and *C. tenuifolium* have been reported as a rediscovery from Kerala. Brief description and critical notes for each species are given.

443. **Kumar, M. & Sequiera, S. 1998.** "Diversity, systematic, distribution and taxonomy of epiphytic pteridophytes of Kerala part of Western Ghats, South India". *Indian Fern J.* 15: 106–130.
Abstract:- The epiphytic flora of tropical forests of Western Ghats are inadequately known. Though studies on the pteridophytic flora in the Western Ghats have been undertaken by several authors yet none had attempted so far on the systematic distribution, taxonomy and ecology of epiphytic pteridophytes of Kerala part of Western Ghats. The present paper deals with the systematic distribution of the epiphytic pteridophytes based on the authors own observations and relevant published literature.

444. **Kumar, M. & Sequiera, S. 1998.** "Two new species of *Oberonia* Lindl. from Kerala, India". *J. Orchid Soc. India* 12: 29–33.
Abstract:- Two new species of orchids, viz., *Oberonia longifolia* Muktesh & Stephen and *Oberonia pakshipadalensis* Muktesh & Stephen are described and illustrated from Kerala, India.

445. **Kumar, M. & Sequiera, S. 1999.** "*Liparis walakkadensis*, a new species from Kerala, India". *J. Orchid Soc. India* 13: 29–31.
Abstract:- *Liparis walakkadensis* (Orchidaceae) allied to *L. barbata* Lindl. and *L. wightiana* Thw. is described and illustrated from Kerala, India.

446. **Kumar, M. & Sequiera, S. 1999.** "*Oberonia josephii* Saldanha (Orchidaceae) – A new record for Kerala". *Rheedea* 9: 173–175.
Abstract:- *Oberonia josephii* Saldanha, an epiphytic orchid earlier known from Karnataka is reported for the first time from Kerala. A brief description and an illustration are provided.

447. **Kumar, M. & Sequiera, S. 2000.** "A new species of *Schoenorchis* (Orchidaceae) from India". *Kew Bull.* 55: 241–244.
Abstract:- A new species of *Schoenorchis*, viz., *S. manilaliana* M. Kumar & Sequiera allied to *S. nivea* (Lindl.) Schltr. from Siruvani reserve forest, Palghat district, Kerala, southern India is described and illustrated.

448. **Kumar, M. & Sequiera, S. 2001.** "An a collection of macrolichens from new Amarambalam Reserve Forests, Southern Western Ghats, India". *J. Econ. Taxon. Bot.* 25: 239–246.
Abstract:- Forty species of macrolichens are enumerated from New Amarambalam Reserve forests, Malappuram district, Kerala. Nine species are new record to Peninsular India.

449. **Kumar, M. & Sequiera, S. 2001.** "Two new species of *Bulbophyllum* Thouars (Orchidaceae) from southern Western Ghats, India". *J. Bombay Nat. Hist. Soc.* 98: 87–91.
Abstract:- Two new species from Kerala, India namely, *Bulbophyllum keralensis* allied to *B. macraei* (Lindl.) Reichb.f. and *B. josephi* allied to *B. elegantulum* (Rolfe) J.J. Sm. and *B. acutiflorum* A. Rich. have been described and illustrated.

450. **Kumar, M. & Sequiera, S. 2001.** "Two new species of *Impatiens* (Balsaminaceae) from India". *Sida* 19: 795–801.
Abstract:- Two new species of *Impatiens*, viz., *I. sholayarensis* and *I. violacea* are described from Kerala, India.

451. **Kumar, M. & Sequiera, S. 2002.** "An enumeration of macrolichens from Palakkad district, Kerala state, India". *Indian J. Forest.* 25: 347–353.
Abstract:- The paper presents an enumeration of 112 species of macrolichens from Palakkad district of Kerala state, based on a field survey in order to assess the lichen diversity of the state.

452. **Kumar, M. & Sequiera, S. 2003.** "Notes on a collection of some lichens from Chembra and Thirunelly Hills of Wayanad district of Kerala state, India". *J. Econ. Taxon. Bot.*

27: 1029–1039.

Abstract:- Thirty–two species of macrolichens are enumerated from Wayanad Hills of Kerala state. About 22 species are found to be new record of occurrence from this region.

453. **Kumar, M. & Sequiera, S. 2008.** "A preliminary study of lower group of plants in the Neyyar Wildlife Sanctuary, Kerala (India)". *Indian J. Forest.* 31: 261–268.

Abstract:- A preliminary study of lower group of plants in the Neyyar Wildlife Sanctuary revealed the occurrence of 36 species of lichens, 20 species of bryophytes and 81 species of pteridophytes. Under bryophytes seven species, viz., *Campylopus flexuosus, Dicranum majus, Homaliodendron flabettum, Rhodobryum roseum, Theriotia* sp., *Thuidium delicatulum, Tortella tortuosa* are new records to Kerala. All species are enumerated along with their frequency of occurrence.

454. **Kumar, M., Sequiera, S. & Anto, P.V. 2000.** "*Bulbophyllum maskeliyense* Livera (Orchidaceae) – A new record of India". *J. Econ. Taxon. Bot.* 24: 207–209.

Abstract:- *Bulbophyllum maskeliyense* Livera, a Sri Lankan endemic orchid is a new record to India from Nelliampathy, Palghat district, Kerala.

455. **Kumar, M., Sequiera, S. & Wood, J. 2002.** "A new species of the hitherto monospecific genus *Xenikophyton* Garay (Orchidaceae) from India". *Kew Bull.* 57: 227–230.

Abstract:- *Xenikophyton seidenfadenianum* M. Kumar, S. Seq. & J. Wood from Siruvani area of Palakkad district of Kerala is described and illustrated.

456. **Kumar, M., Stephen, S. & Joy, C.C. 1996.** "Report of abnormal branching in two species of orchids from Kerala". *Indian Forester* 122: 343-345.

Abstract:- Branched inflorescence has been observed in two species of orchids, viz., *Liparis viridiflora* (Bl.) Lindl. and *Oberonia chandrasekharanii* V.J. Nair *et al.* from Wynad, Kerala.

457. **Kumar, M.G.P., Sabu, M. & Jayasree, S. 2002.** "*Alpinia fax* B.L. Burtt *et* R.M. Sm. (Zingiberaceae) – A new record for India". *Rheedea* 12: 179–183.

Abstract:- *Alpinia fax* B.L. Burtt *et* R.M. Sm., a native of Sri Lanka is reported for the first time for India from Periyar Tiger Reserve, Kerala. Detailed description, illustrations and other relevant notes are provided.

458. **Kumar, N.P., Antony, V.T. & Krishnaraj, M.V. 2009.** "Extended distribution of *Hedyotis pterita* Bl. (Rubiaceae: Hedyotideae) in Kerala". *J. Econ. Taxon. Bot.* 33: 64–66.

Abstract:- *Hedyotis pterita* Bl. hitherto reported from Tamil Nadu and Andhra Pradesh is newly recorded from Kovalam, Thiruvananthapuram district, Kerala. Present study forms an extended distributional record for the taxon, which is again an addition to the flora of Kerala state. Detailed description and illustration are provided.

459. **Kumar, N.P., Antony, V.T. & Krishnaraj, M.V. 2010.** "*Neanotis indica* (DC.) Lewis var. *deltoidea* (Wall. ex Wight & Arn.) Lewis (Rubiaceae – Hedyotideae): A new record for Kerala". *Indian J. Forest.* 33: 113–114.

Abstract:- *Neanotis indica* (DC.) Lewis var. *deltoidea* (Wall. ex Wight & Arn.) Lewis, so far known from Tamil Nadu is now reported as new to Kerala state. Detailed description with illustration is provided.

460. **Kumar, S.M., Binoy, P.C., Jose, J.C., Hemanthakumar, A.S. & Seeni, S. 1998.** "Occurrence of *Calamus nagabettai* Fernandez & Dey in Kerala". *J. Econ. Taxon. Bot.* 22: 205–206.

Abstract:- *Calamus nagabettai* Fernandez & Dey, a robust cane which requires urgent conservation measures is reported from Umayar forest of Kerala.

461. **Kumar, S.M. & Vijayan, K. 1990.** "A new record of *Calamus brandisii* Becc. (Arecaceae) from Kerala forest". *J. Econ. Taxon. Bot.* 14: 192–194.

Abstract:- A rare and interesting endemic palm *Calamus brandisii* Becc. (Arecaceae) is now recorded from Kerala thereby shows extended distribution from Tamil Nadu to Kerala.

462. **Kumar, Suresh S. & Kumar, Mohan B. 1997.** "Floristics, biomass production and edaphic attributes of the mangrove forests of Puduvyppu, Kerala". *Indian J. Forest.* 20: 136–142.

Abstract:- A field study was conducted to characterize the floristic diversity, biomass productivity and edaphic attributes of the mangrove forests of Puduvyppu (Kerala). We enumerated all trees and shrubs above 10 cm GBH in 50 quadrats (10 m ∞ 10 m) laid out along an east-west transect. Floristic diversity was generally low with only five tree species (Simpson' Diversity Index, D – 0.14). Despite minor variations in floristic composition along the transect, *Avicennia officinalis*, an early colonizer dominated in the entire area. It also recorded the highest importance value index, density and basal area. Owing to the juvenile nature of the stand, mean biomass productivity was relatively low (47 t ha^{-1}). Two profile pits were dug, one each in the *Avicennia* and grassland zone, to characterize the edaphic attributes of the site. Horizon-wise variations in physic-chemical properties (pH, EC total N, available P, K and exchangeable Na) were quite pronounced. In general, the surface horizons recorded higher values. Mineral element concentration was also higher in the *Avicennia* zone. Both profile, however, were characterized by a silty clay texture and blocky structure, indicating profound sediment deposition and inundation. Active fluvial dynamics of rivers draining into the adjoining Vemabanadu lake and/or the dredging operations going on in the adjacent Cochin bar mouth are perhaps responsible

for sediment deposition. Sand pockets, particularly in the lower layers of the grassland profile also provides supporting evidences in this respect.

463. **Kumar, T.G.V. & Antony, V.T. 1999.** "An extended distribution of *Eugenia singampattiana* Bedd. (Myrtaceae) to Kerala state". *J. Econ. Taxon. Bot.* 23: 719–720.
Abstract:- *Eugenia singampattiana* Bedd. hitherto known only from type locality has been recorded from Agastyamalai, Trivandrum district, Kerala, which extends its distribution.

464. **Kumar, Y., Joy, K.A. & Sharma, J. 1995.** "The biodiversity and conservation of Indian *Paphiopedilum*". *J. Orchid Soc. India* 9: 75–84.
Abstract:- The genus *Paphiopedilum* is commercially most important group of orchids. In all, there are nine species reported from India. Except for *P. druryi* which is confined only to the Agasthyamalai, Travancore Hills, Kerala, the other eight species are from North-Eastern India. Of these two species, viz., *P. charlesworthii* and *P. wardii* are feared to be extinct from India. The biodiversity within the species of *Paphiopedilum* genus is quite distinct. This incessant series of biological diversity, morphological variability (germplasm) should be utilized in breeding operations in India. A standardized staining test for this group to test the viability of seeds, consolidated account on biodiversity and conservation aspects are discussed here.

465. **Kumar, Y., Limasenla & Sharma, J. 1997.** "Indian Vandas – II: Biodiversity and sustainable use". *J. Orchid Soc. India* 11: 85–91.
Abstract:- The genus *Vanda* is important both for horticultural and medicinal purposes. It comprises some of the floriculturally most magnificient species which command great demand in the international market. There are about 40 species in this genus, distributed mainly in the Indo-Malayan region, of which 15 are met within India. Within 15 species, 12 are from North Eastern India and 2 from southern India (Tamil Nadu & Kerala) and one cultivated. An account of the biodiversity of Indian Vandas and the current status of their distribution range and frequency are presented herewith. An artificial key for identification and relevant notes are also provided for this species.

466. **Kumary, K.P.D., Pandurangan, A.G. & Kumar, E.S.S. 2010.** "Rediscovery of *Sonerila devicolamensis* Nayar (Melastomataceae) – A lesser know endemic species of the Western Ghats". *Indian J. Forest.* 33: 247–248.
Abstract:- *Sonerila devicolamensis* Nayar allied to *S. nemakkadensis* C.E.C. Fischer an endemic species of the Southern Western Ghats is rediscovered from its type locality (Devicolam, Idukki district, Kerala) after its first collection. Detailed description and illustration are provided, based on the fresh collection.

467. **Kuriachan, P.I. 1991.** "Cytology of *Marsilea coromandelina* Burm.f. from Kerala". *Indian Fern J.* 8: 151–155.

Abstract:- The rare species *Marsilea coromandelina* Burm.f. is reported from Kerala. It showed n = 21 and 2n = 42. The chromosome measured 1.1 to 1.9 μm length. The chromosome number n = 21 is suggested to be of aneuploid origin from x = 20 and is cited as evidence of the role of aneuploidy in species diversification in the genus.

468. **Kurup, K.K.N. 1982.** "Kazhakam: A traditional institution of Malabar". *Ancient Sci. Life* 2: 167–168.

Abstract:- In this paper the author describes about 'Kazhakam', a traditional institution of Malabar which under the spell of urbanization and social change is vanishing away from the various regions. Nevertheless, the author says it is still a living social institution with deep roots in traditional system.

469. **Kurup, K.M., Rajesh, K.P. & Madhusoodanan, P.V. 2001.** "*Adiantum tenerum* Sw. (Adiantaceae, Pteridophyta), a little known maidenhair fern from South India". *J. Econ. Taxon. Bot.* 25: 716–718.

Abstract:- *Adiantum tenerum* Sw. (Adiantaceae), a little known species in South India is found naturalized in Calicut, Kerala state. The plant is described with illustrations.

470. **Kurup, V.V., Babu, E.A. & Madhusoodanan, P.V. 2008.** "Wide occurrence of *Marattia fraxinea* Smith (Marattiaceae) in South India". *J. Econ. Taxon. Bot.* 32: 72–75.

Abstract:- Wide occurrence of *Marattia fraxinea* Smith, a rare fern in the Western Ghats, South India, is reported from Tamil Nadu and Kerala. The taxon is described and illustrated.

471. **Leena, K.R. & Madhusoodanan, P.V. 1992.** "Ecology and distribution of Thelypteroid ferns in South India". *Indian Fern J.* 9: 174–183.

Abstract:- Thelypteridaceae is the largest family of South Indian ferns represented by 28 species under 15 genera. This family represents a heterogenous assemblage of genera which are distinguished by the combination of characters rather than by conspicuous salient features. In South India most species grow in humid well-shaded forest floors and stream banks. The ecology of each species and world distribution are presented in the form of a table. Twenty-one species have been reported from Kerala.

472. **Leena, K.R. & Madhusoodanan, P.V. 1993.** "Taxonomy and distribution of the genus *Pseudocyclosorus* Ching (Thelypteridaceae) in South India". *J. Econ. Taxon. Bot.* 17: 645–650.

Abstract:- Species of *Pseudocyclosorus* in South India are described. *P. ochthodes* (Kunze) Holttum, Nayar & Kaur is reported from Kerala, Tamil Nadu and Andhra Pradesh and *P. tylodes* (Kunze) Ching from Kerala. A key is provided for the identification of species.

Morphology, taxonomy, palynology, ecology, cytology and distribution of each species are critically discussed.

473. **Leena, K.R. & Madhusoodanan, P.V. 1994.** "Taxonomy and distribution of *Sphaerostephanos* J. Sm. (Thelypteridaceae – Pteridophyta) in South India". *J. Econ. Taxon. Bot.* 18: 653–659.

Abstract:- The genus *Sphaerostephanos* J. Sm. is represented by four species in South India, viz., *S. arbuscula* (Willd.) Holttum, *S. subtruncatus* (Bory) Holttum, *S. unitus* (L.) Holttum and *S. wynadensis* Nayar *et* Geevarghese. Morphology, taxonomy, palynology, cytology, ecology and distribution of each species are critically discussed. A key for the identification of South Indian species is also included.

474. **Leena, K.R. & Madhusoodanan, P.V. 1996.** "The genus *Macrothelypteris* (Thelypteridaceae) in South India". *J. Econ. Taxon. Bot.* 20: 423–428.

Abstract:- Two species of *Macrothelypteris* (H. Ito) Ching, viz., *M. arnata* (Wall. ex Bedd.) Ching and *M. torresiana* (Gaud.) Ching have been reported and described from Kerala, South India. A key is provided for the identification of species. Morphology, taxonomy, palynology, cytology, ecology and distribution of each species are critically discussed.

475. **Leena, K.R. & Madhusoodanan, P.V. 1998.** "Pteridophyte flora of Wynad district, Kerala – A preliminary survey on ecology and distribution". *J. Econ. Taxon. Bot.* 22: 149–155.

Abstract:- Pteridophyte flora of Wynad district (part of Western Ghats, 700–1200 m altitude) is listed on the basis of their ecology; 119 species under 74 genera are reported from this area. Epiphytic and terrestrial species are well represented here and their distribution is influenced by altitude and topography. The larger genera in respect of the number of species include *Asplenium, Tectaria* and *Adiantum*.

476. **Madhuri, T.G. & Jaya, D.S. 2008.** "Studies on antioxidant status in selected plants with medicinal properties in Thiruvananthapuram district, Kerala, South India". *Indian J. Bot. Res.* 4: 53–58.

Abstract:- Plants are unending source for a number of compounds which can maintain the health of human beings. Antioxidants help to protect our body from radicals. There should be a balance between free radicals and antioxidants in our cellular systems. Oxidative stress is being imposed on us by modern lifestyle. Thus antioxidants become inevitable for our daily life. In addition to endogenous antioxidants, exogenous antioxidants must be supplemented to our body. In the present study the non-enzymatic antioxidants status in the mature and tender leaves of three selected plants with medicinal property were compared. The concentration of â-carotene, ascorbic acid, á-tocopherol, glutathione and selenium in the leaves of *Morus alba, Passiflora edulis* and *Rhinacanthus nasutus*

were determined and the result showed that all the three plants are rich sources of antioxidants. Among the plant leaves studied, ascorbic acid and â-carotene were high in the mature leaves of *Passiflora edulis* and *Rhinacanthus nasutus*, while the tender leaves of *Passiflora edulis* ware found to be the richest source of glutathione. It was also found that the tender leaves of *Morus alba* and *Passiflora edulis* had high concentration of selenium.

477. **Madhusoodanan, P.V. 1987.** "Taxonomy and distribution of the Water fern *Salvinia* Seguier in Asia". *J. Econ. Taxon. Bot.* 11: 497–503.

Abstract:- Morphology of Asian species of the aquatic fern *Salvinia*, viz., *S. cucullata, S. molesta* and *S. nutans* is described with a key for identification. Phytogeography, ecology, cytology and economics of the genus are discussed. A map showing world distribution of the genus is presented for the first time.

478. **Madhusoodanan, P.V. & Ajit Kumar, K.G. 1993.** "*Alternanthera philoxeroides* (Mart.) Griseb. – 'Alligator weed' – A fast spreading weed in Kerala, South India". *J. Econ. Taxon. Bot.* 17: 651–654.

Abstract:- The 'Alligator weed', *Alternanthera philoxeroides*, a South American weed introduced to Kerala recently has become a serious weed in the aquatic ecosystems of Kerala. The plant is reported and described and its economic importance and impact on the aquatic ecosystems of Kerala discussed.

479. **Madhusoodanan, P.V. & Ajit Kumar, K.G. 1994.** "Impact of alien weed invasions on the aquatic ecosystems of Kerala". *Geobios, New Rep.* 13: 24–27.

Abstract:- Three alien aquatic weeds (*Eichhornia crassipes, Salvinia molesta* and *Limnocharis flava*) have invaded Kerala waters and compete with native flora. They form large floating mats, enhance eutrophication, cause pollution and subsequent oxygen depletion, invade agro-ecosystems impede irrigation canals, jeopardize drainage system and pose health hazards.

480. **Madhusoodanan, P.V. & Dominic, T.K. 1996.** "Epiphytic cyanobacteria on mosses from Western Ghats of Kerala". *J. Econ. Taxon. Bot.* 20: 355–360.

Abstract:- Twelve species of five cyanobacterial genera growing on mosses, viz., *Chroococcus, Phormidium, Lyngbya, Nostoc* and *Scytonema* from Western Ghats of Kerala are described based on the characters evident in the natural populations as well as in culture.

481. **Madhusoodanan, P.V. & Hameed, C.A. 1998.** "*Crepidomanes agasthianum*, a new filmy fern species (Hymenophyllaceae – Pteridophyta) from India". *Nordic J. Bot.* 18: 169–170.

Abstract:- A new species of *Crepidomanes*, viz., *C. agasthianum* is described and illustrated from Agasthiamalai, Thiruvananthapuram district, Kerala, India.

482. **Madhusoodanan, P.V. & Jyothi, P.V. 1992.** "A new species of *Pellaea* from Silent Valley, South India". *Indian Fern J.* 9: 38–40.
Abstract:- A new species, viz., *Pellaea malabarica* allied to *P. boivini* Hook. is described from Silent Valley, South India. Detailed description and illustrations are given with ecological notes.

483. **Madhusoodanan, P.V. & Jyothi, P.V. 1992.** "*Cheilanthes viridis* (Forssk.) Sw. (Cheilanthaceae) – A species new to South India". *J. Econ. Taxon. Bot.* 16: 727–730.
Abstract:- A new species, viz., *Cheilanthes viridis* (Forssk.) Sw. [allied to *C. tenuifolia* (Burm.f.) Sw. and *C. mysuriensis* Wall. ex Hook.], from Western Ghats (Kothayar, Kerala), is described and illustrated.

484. **Madhusoodanan, P.V. & Leena, K.R. 1991.** "The genus *Christella* Lev. (Thelypteridaceae) in South India". *J. Econ. Taxon. Bot.* 15: 617–625.
Abstract:- Five species of *Christella* (Thelypteridaceae) from Kerala are described with a key to the identification of species. Morphology, taxonomy, palynology, ecology, cytology, distribution, etc. of each species is critically discussed.

485. **Madhusoodanan, P.V. & Leena, K.R. 1994.** "Spore morphology of South Indian Thelypteroid ferns". *Indian Fern J.* 11: 73–82.
Abstract:- The catholicity of the spores and their specific characteristics make them an important criterion in the taxonomy of ferns (Devi, 1977). In all the South Indian Thelypteroid ferns, the spore form is stable i.e. monolete, bilateral except in the genus *Trigonospora* Holttum. The occurrence of trilete and monolete spores in *Trigonospora* with intermediate forms is possibly due to change in ploidy or meiotic irregularities (Khare & Kaur, 1983). The spore coat is more developed on the distal half of the spore compared to the proximal half. The exine is generally smooth except in *Pseudophegopteris pyrrhorhachis* and *Pseudocyclosorus ochthodes*. In almost all the Thelypteroid ferns there is a well developed and conspicuous other layer over the exine, the perispore or perine, which is variously ornamented and folded. In some species there is a supralaesural fold of perine. Detailed description of the spores of each species is given below. The palynology of *Thelypteris confluens* (Thunb.) Morton could not be studied for want of adequate fertile material.

486. **Madhusoodanan, P.V., Leena, K.R. & Joseph, K.T. 1992.** "Aquatic pteridophytes of Kerala, S. India". *J. Econ. Taxon. Bot.* 16: 125–132.
Abstract:- The environmental condition of Kerala is highly congenial for the growth of

aquatic macrophytes. The aquatic pteridophytes of Kerala (two fern allies and six ferns) are described. A key for their identification is presented. Ecology, distribution, cytology, palynology, etc. of each species critically discussed.

487. **Madhusoodanan, P.V., Leena, K.R. & Nampy, S. 1993.** "Taxonomy and ecology of the aquatic pteridophytes of Kerala, South India". *J. Econ. Taxon. Bot.* 17: 635–643.
Abstract:- The tropical humid climate with plenty of rainfall is highly congenial for the growth of aquatic macrophytes in Kerala. The aquatic pteridophytes of Kerala (two fern allies and six ferns) are described with a key for their identification and the distribution, cytology, palynology, etc. of each species are critically discussed.

488. **Madhusoodanan, P.V. & Nair, M.C. 2003.** "*Ricciocarpus natans* (L.) Corda (Ricciaceae) and *Notothylas levieri* Schiffn. ex Steph. (Notothylaceae), two new bryophyte records for South India". *Indian J. Forest.* 26: 295–298.
Abstract:- *Ricciocarpus natans* (L.) Corda (Ricciaceae) and *Notothylas levieri* Schiffn. ex Steph. (Notothylaceae) are reported from the Western Ghats of Kerala, as new records for South India.

489. **Madhusoodanan, P.V. & Nair, M.C. 2004.** "Pleurocarpous mosses of Eravikulam National Park, Kerala – I". *J. Econ. Taxon. Bot.* 28: 338–346.
Abstract:- The paper describes eight species of pleurocarpous mosses, viz., *Chaetomitriopsis glaucocarpa* (Schwaegr.) Fleisch., *Cryptopapillaria fuscescens* (Hook.) Jaeg., *Diaphanodon blandus* (Harv.) Ren. & Card., *D. procumbens* (C. Muell.) Ren. & Card., *Hedwigidium integrifolium* (P. Beauv.) Dix., *Racopilum orthocarpum* Wils. & Mitt., *Symphyodon perrottetii* Mont. and *Trachypus bicolor* Reinw. & Card. from the Eravikulam National Park, Idukki district, Kerala.

490. **Madhusoodanan, P.V. & Nampy, S. 1993.** "The genus *Microsorum* Link in South India". *J. Econ. Taxon. Bot.* 17: 43–47.
Abstract:- The genus *Microsorum* Link is represented by four species, viz., *M. linguaeforme* (Mett.) Copel. from Kerala, *M. membranaceum* (Don) Ching from Andhra Pradesh, Tamil Nadu and Kerala, *M. pteropus* forma *minor* (Bedd.) Ching from Karnataka, Tamil Nadu and Kerala and *M. punctatum* (L.) Copel from Karnataka, Tamil Nadu and Kerala. Enumeration of each taxon with critical notes on their taxonomy and nomenclature is discussed with special emphasis on their ecology. A key for the identification of South Indian species is also included.

491. **Madhusoodanan, P.V. & Nampy, S. 1994.** "*Selaginella dixitii*, a new species of Selaginellaceae from India". *Nordic J. Bot.* 14: 527–529.
Abstract:- A new species of *Selaginella*, viz., *S. dixitii* is described and illustrated from

Palakkad district, Kerala, India.

492. **Madhusoodanan, P.V. & Nampy, S. 1998.** "Biodiversity of the ferns and fern allies of Kerala". *J. Econ. Taxon. Bot.* 22: 183–189.
Abstract:- Kerala is one of the floristically rich areas of South India, facing fast devastation of natural vegetation. The tropical humid climate favours the growth of ferns and fern allies. A total of 238 species of pteridophytes have been reported from this area, which include many new taxa. They show great diversity and a wide spectrum of ecological types such as small filmy ferns (*Hymenophyllum*), tree ferns (*Cyathea*), climbers (*Lygodium, Stenochlaena*), epiphytes (*Drynaria*), xerophytes (*Actinopteris*), halophytes (*Acrostichum*), hydrophytes (*Isoetes, Salvinia*), lithophytes (*Bolbitis*), etc. This paper deals with the ecology and diversity of the ferns and fern allies of Kerala with special emphasis on their conservational aspects.

493. **Madhusoodanan, P.V., Rajasree, T. & Leena, K.R. 1996.** "Club mosses (*Lycopodium sensu lato*) of Western Ghats, South India". *Indian Fern J.* 13: 67–74.
Abstract:- Ten species of *Lycopodium sensu lato* (Pteridophyta) in Kerala, Western Ghats of S. India are described and illustrated. Keys are provided for easy identification at the genus and species level.

494. **Madhusoodanan, P.V. & Rejani, A. 1989.** "*Turnera subulata* J.E. Smith (Turneraceae) – An interesting exotic weed in Kerala". *J. Econ. Taxon. Bot.* 13: 128–132.
Abstract:- *Turnera subulata* J.E. Smith, a Tropical American weed naturalized in Kerala, S. India is described in detail. Its taxonomy, distribution, palynology, pollination and seed morphology are also discussed. The species status for this taxon is emphasised.

495. **Madhusoodanan, P.V. & Rejani, A. 1994.** "Reinvestigation of the present status of the ferns and fern allies of Hortus Malabaricus". *Indian Fern J.* 11: 12–19.
Abstract:- Ferns and fern–allies described and illustrated in *Hortus Malabaricus* are reinvestigated. Their identity and present status in Kerala (Malabar) flora are discussed based on materials collected from the Malabar region.

496. **Madhusoodanan, P.V. & Sevichan, P.J. 1991.** "The genus *Adiantum* in Kerala, South India". *J. Econ. Taxon. Bot.* 15: 143–153.
Abstract:- Ten native and naturalized species of *Adiantum* in Kerala (South India) described with a key to their identification. Ecology, distribution, palynology, cytology and economic importance of each species are also discussed.

497. **Madhusoodanan, P.V. & Sevichan, P.J. 1992.** "*Azolla microphylla* Kaulfuss – An economically important biofertilizer for paddy fields of Kerala". *J. Econ. Taxon. Bot.* 16: 73–76.

Abstract:- The application of chemical fertilizers in the paddy fields is expensive and seriously upset agro-ecosystems. This could be avertet to a great extent by utilizing *Azolla* spp. as a biofertilizer. The pot experiments using *A. pinnata* and *A. microphylla* as dual crop with paddy have shown that *A. microphylla* which increased 46.35 per cent rice yield over the control is an efficient, economic biofertilizer. *Azolla microphylla, A. filiculoides* and *A. pinnata* produced sporocarps under low temperature.

498. **Madhusoodanan, P.V., Sijimol, P.S. & Rajesh, K.P. 2001.** "Fifty years of Pteridology in India" (1947–1997) Pteridology in South India – A retrospection". *Indian Fern J.* 18: 18–34.

Abstract:- The pteridological studies done in South India during past 50 years (1947 – 1997) has been reviewed. The bibliography on South Indian ferns has been updated.

499. **Madhusoodanan, P.V. & Singh, N.P. 1992.** "A new species of *Lepidagathis* (Acanthaceae) from South India". *Kew Bull.* 47: 301–303.

Abstract:- A new species of *Lepidagathis*, viz., *L. keralensis* allied to *L. prostrata* Dalz. is described and illustrated from Kannur district, Kerala, South India.

500. **Maesen, L.J.G. van der 1995.** "*Rhynchosia courtallensis* van der Maesen, a new name for the South Indian *Dunbaria latifolia* Wt. & Arn. (Leguminosae – Papilionoideae)". *Rheedea* 5: 54–59.

Abstract:- *Dunbaria ferruginea* and *D. latifolia* are easily confused. They are based on two different specimens from the same gathering (*Wight* Herb. Prop. 878). Later authors always considered these taxa as conspecific. The correct generic position of the latter is in *Rhynchosia*. Since none of the earlier epithets given to this taxon is available in its new generic position, a new name, viz., *Rhynchosia courtallensis* is proposed. A detailed description and other relevant notes are also provided.

501. **Magesh, G. & Menon, A.R.R. 2011.** "Vegetation status, species diversity and endemism of Sulimudi forests in southern Western Ghats of Kerala, India". *Indian Forester* 137: 304–311.

Abstract:- The present study deals with floristic analysis, phytodiversity and endemism of Sulimudi area in Idamalayar Forest Range of Malayattur Forest Division in Kerala state. From the study area 124 species of flowering plants belonging to 114 genera under 56 families were recorded. Among these, 34 species were reported as endemic to different geographical areas. Of these, *Vateria indica* is critically endangered, *Euphorbia santapaui* is endangered, species like *Belosynapsis vivipara, Bentinckia condapanna, Dalbergia latifolia* and *Drypetes wightii* are vulnerable and *Pothos armatus* is threatened. Phytosociological studies revealed that *Mesua ferrea, Vateria indica, Palaquium ellipticum*

and *Cullenia exarillata* are the dominant species. Diversity indices such as Shannon's Index and Simpson's index are also worked out. The paper highlights the base line information on the rich floral wealth and endemic diversity of the Sulimudi area, one of pristine patches in southern Western Ghats of Kerala, aiming the forest managers for better conservation planning.

502. **Mahajan, M. & Azeez, P.A. 2004.** "Observations on the weed flora of Nilgiri Biosphere Reserve, South India". *J. Econ. Taxon. Bot.* 28: 693–705.

Abstract:- Nilgiri Biosphere Reserve is well known for its rich biodiversity. It falls in Western Ghats, one of the 18 biodiversity hotspots in the world. Eighty percent of flowering plants reported from Western Ghats are found in NBR, out of which 82 species are endemic to the area. Invasion by weeds is seriously affecting the biodiversity of the biosphere reserve. Surveys were conducted in different vegetation types of NBR such as evergreen, moist and dry deciduous forests, scrub jungle, shola and plantations to study the distribution of weedy species. Distribution and a brief floristic information of aggressive colonizer plants found in the study area, commonly referred as weeds of agricultural fields, fallow lands, plantations and natural forests is discussed.

503. **Majeed, A.K.K., Leena, K.R. & Madhusoodanan, P.V. 1994.** "The genus *Elaphoglossum* Schott ex J. Smith (Lomariopsidaceae: Pteridophyta) in Kerala". *J. Econ. Taxon. Bot.* 18: 661–664.

Abstract:- Two species of *Elaphoglossum* Schott ex J. Smith, viz., *E. beddomei* Sledge and *E. nilgiricum* Krajina ex Sledge have been reported from Kerala. Morphology, taxonomy, ecology, palynology, cytology and distribution are critically discussed.

504. **Majeed, A.K.K., Leena, K.R. & Madhusoodanan, P.V. 1994.** "The genus *Egenolfia* Schott (Lomariopsidaceae: Pteridophyta) in Kerala, India". *J. Econ. Taxon. Bot.* 18: 741–745.

Abstract:- Species of *Egenolfia* Schott in Kerala, viz., *E. appendiculata* (Willd.) J. Smith and *E. asplenifolia* (Bory) Fee are described. A key is provided for identification of each species. Taxonomy, morphology, ecology and distribution are critically discussed.

505. **Mangaly, J.K. & Sabu, M. 1987.** "*Curcuma pseudomontana* Grah. (Zingiberaceae): A revised description". *J. Econ. Taxon. Bot.* 10: 159–162.

Abstract:- Earlier descriptions of *Curcuma pseudomontana* Grah. based on plants from Bombay and Khandala are partly incomplete and do not agree fully with those from Silent Valley in Kerala, the southern part of its distributional range. A re-description of the species and clarification of inflorescence position are provided.

506. **Mangaly, J.K. & Sabu, M. 1988.** "*Curcuma raktakanta* (Zingiberaceae) – A new species from South India". *J. Econ. Taxon. Bot.* 12: 475–477.
Abstract:- A new species of *Curcuma* (Zingiberaceae), *C. raktakanta* Mangaly & Sabu allied to *C. caesia* Roxb. and *C. zedoaria* (Christm.) Rosc. is described from Kerala, India. The plants grow at sea level, their pseudostem and peduncle purple, leaf entirely green and corolla pink.

507. **Mangaly, J.K. & Sabu, M. 1988.** "A new species of *Curcuma* from South India". *Notes Royal Bot. Gard. Edinburgh* 45: 429–431.
Abstract:- A new species of *Curcuma* (Zingiberaceae) is described from Kerala, India: *C. coriacea* Mangaly & Sabu allied to *C. plicata* Wall.. It is characterized by coriaceous leaves with pubescence on both surfaces, and is probably restricted to open grasslands at higher elevations of Western Ghats.

508. **Mangaly, J.K. & Sabu, M. 1993.** "A taxonomic revision of the South Indian species of *Curcuma* Linn. (Zingiberaceae)". *Rheedea* 3: 139–171.
Abstract:- The genus *Curcuma* Linn. in South India is revised. There are, in all, 17 species falling under two subgenera, viz., subgen. *Eucurcuma* Schum. and subgen. *Hitcheniopsis* (Baker) Schum. The latter, characterized by unspurred anther lobes, is presented by a single species, *C. ecalcarata*. Artificial keys for the identification of the taxa, their description, illustrations and other relevant notes are provided here. A new species, *C. haritha* is also described. Sixteen species have been reported from Kerala.

509. **Mangaly, J.K. & Swarupanandan, K. 1981.** "*Boesenbergia* O. Kuntze (Zingiberaceae): new records from Kerala". *Bull. Bot. Surv. India* 23: 235–236.
Abstract:- *Boesenbergia pulcherrima* (Wall.) O. Kuntze and *B. tiliaefolia* (Baker) O. Kuntze have been collected for the first time from Kerala. This genus also forms a new report to Kerala.

510. **Manickam, V.S. & Irudayaraj, V. 1990.** "Thelypteridaceae of the Western Ghats, South India". *Indian Fern J.* 7: 100–112.
Abstract:- Twenty four species of Thelypteridaceae in the Western Ghats of South India have been listed. The genus *Glaphyropteridopsis* Ching is a new record for South India. Four rare species *Metathelypteris flaccida* (Bl.) Ching, *Macrothelypteris ornata* (Wall. ex Bedd.) Ching, *Pronephrium triphyllum* (Swartz) Holttum, *Sphaerostephanos subtruncatus* (Bory) Holttum together with the newly recorded *Glaphyropteridopsis erubescens* (Wall. ex Hook.) Ching and two new varieties of *Pseudocyclosorus ochthodes* (Kunze) Holttum, have been described in detail with illustrations. Distributional, ecological and cytological notes have also been given. Chromosome number n = 72 for *Pronephrium*

triphyllum (Swartz) Holttum is reported for the first time from South India.

511. **Manilal, K.S. 1985.** "*Hortus Malabaricus* and the ethnoiatrical knowledge of ancient Malabar". *Ancient Sci. Life* 4: 96–99.

Abstract:- *Hortus Malabaricus* is the oldest important printed book on Indian Medicinal Plants. The 1st of its 12 volumes was published in 1678 from Amsterdam. This book, written by H.A. van Rheede is perhaps the only authentic record of the ethnoiatrical knowledge of ancient Malabar, available to us today. Several hundred medicinal plants which were successfully used by the Ayurvedic physicians of 17th century are described in this, along with their medicinal powers and methods of application. The identity of many of the plants described has not yet been accurately established, which would be of considerable interest to Ayurveda.

512. **Manilal, K.S. 1988.** *Flora of Silent Valley Tropical Rain Forest of India*. Mathrubhumi Press, Calicut. pp. xi+398.

Abstract:- A total of 966 species of angiosperms, belonging to 559 genera under 134 families are treated of which 113 families are dicotyledons and 21 are monocotyledons.

513. **Manilal, K.S. 2003.** van Rheedes Hortus Malabaricus with English edition with Annotations and Modern Botanical Nomenclature. 12 Vols. University of Kerala, Thiruvananthapuram.

Abstract:- The book contains illustrations of 742 plants belonging to 691 modern species, together with their description, medicinal and other uses.

514. **Manilal, K.S. 2005.** "*Hortus Malabaricus*, a book on the plants of Malabar, and its impact on the religions of Christianity and Hinduism in the 17th century Kerala". *Indian J. Bot. Res.* 1: 13–28.

Abstract:- *Hortus Malabaricus* is a 12–volume book on the plant wealth of Malabar (Kerala), compiled by the then Dutch Governor of Cochin H.A. van Rheede, written in Latin and published from Amsterdam during the period 1678 – 1693. This is the first comprehensive work on the flora of any tropical region of the world and occupies a pre-eminent position in the field of world botany and the medical traditions of indigenous people. Though basically it is an account of plants and their uses, the book also contains valuable data on a variety of diverse subjects and can be used as a resource to launch researches in them. Apart from its immense current economic importance, it is intimately implicated with the social, cultural and political history of India and the mediaeval European maritime powers in general, and Kerala in particular. The present paper is an attempt to study the impact of this book on the flora of Malabar, on the two major religions, Christianity and Hinduism in the 17th century Kerala.

515. **Manilal, K.S. 2007.** "The *Hortus Malabaricus*: An account of heritage plants of Malabar". *Ethnobotany* 19: 17–31.

Abstract:- There is a recorded history of plants of Malabar for a period of about 3000 years. Most of these were highly valuable medicines. Supernatural powers are attributed to a few other plants by the native. Till a few centuries back this special knowledge was preserved by a select band of local people through oral tradition, with very few recorded on ancient palm-leaf manuscripts in private possession. While original ancinet documents about this subject are not known to be extant now, *Hortus Malabaricus* published in 1678 contains at least some remnants of this subject. This and especially the unrecorded information still available with a handful of natives are worth investigation with utmost care so that such knowledge is not misused by vested interests. A history of the special plants of Malabar and their magnetism to outside world in general is discussed in this manuscript.

516. **Manilal, K.S. & Kumar, C.S. 1983.** "Two new records of Oberonias from Kerala". *J. Econ. Taxon. Bot.* 4: 987–988.

Abstract:- Two rare Oberonias, viz., *O. bicornis* and *O. tenuis*, are recorded from Kerala for the first time. They have been collected from Silent Valley, a remnant of the tropical evergreen rain forest in the region.

517. **Manilal, K.S. & Kumar, C.S. 1984.** "*Oberonia thwaitesii* Hk.f. – An addition to the orchid flora of India". *Curr. Sci.* 53: 1106–1107.

Abstract:- *Oberonia thwaitesii* Hk.f. has been reported for the first time for India from Thenmalai, Quilon district, Kerala. Earlier this species was known to occur in South Africa, Sri Lanka and S.E. Asia.

518. **Manilal, K.S. & Kumar, C.S. 1984.** "A new species of *Eria* Lindl. (Orchidaceae) from India". *J. Econ. Taxon. Bot.* 5: 483–486.

Abstract:- A new species of *Eria* Lindl. (Orchidaceae), viz., *E. tiagii* Manilal, Sathish Kumar *et* Wood is reported from Silent Valley forests, Kerala, India. This is related to *E. muscicola* var. *brevilinguis* Jos. *et* Chandr. and *E. dalzelli* Lindl.

519. **Manilal, K.S. & Kumar, C.S. 1984.** "A new species of *Oberonia* (Orchidaceae) from India". *Kew Bull.* 39: 121–122.

Abstract:- A new species, viz., *Oberonia bisaccata* Manilal & S. Kumar allied to *O. brunonianae* Wight and *O. sebastiana* Vivek. & Shetty from Silent Valley, Kerala, Southern India is described and illustrated.

520. **Manilal, K.S. & Kumar, C.S. 1984.** "A new species of *Liparis* (Orchidaceae) from India". *Pl. Syst. Evol.* 145: 155–158.

Abstract:- *Liparis indiraii* spec. nova from Silent Valley, Palghat district, Kerala (India) is close to *L. alata* A. Rich. and *L. atropurpurea* Lindl.

521. **Manilal, K.S. & Kumar, C.S. 1984.** "Orchids of Silent Valley sensitive to ecological disturbances". *J. Indian Bot. Soc.* 63(Suppl.): 37.

Abstract:- Orchids which are generally sensitive to ecological disturbances thrive well in the Silent Valley tropical evergreen rain forests of Kerala. Over 100 species of orchids are recorded from here, including several endemics. The collection includes 12 species of rare Neottioides, which are considered as highly sensitive to their surroundings. They vary in habit from delicate and flimsy saprophytic form like *Didymoplexis pallens* Griff. and *Epipogium roseum* (D. Don) Lindl., to woody and stout *Cerymborkis veratrifolia* (Reinw.) Bl. and *Tropidia angulosa* Bl. Many of the Neottioides are under threat of extinction. It is suggested that adequate measures be taken to protect the Silent Valley forests and their rare flora.

522. **Manilal, K.S. & Kumar, C.S. 1984.** "*Robiquetia josephiana* Manilal & Sathish Kumar – A new orchid from India". *Orchid Rev.* 92: 293–295.

Abstract:- *Robiquetia josephiana* Manilal & Sathish Kumar, a new species of orchid allied to *R. rosea* (Lindl.) Garay is described from Silent Valley, Kerala, India.

523. **Manilal, K.S. & Kumar, C.S. 1985.** "*Dendrobium panduratum* Lindl. (Orchidaceae) – A new record for India". *J. Indian Bot. Soc.* 64: 299–301.

Abstract:- *Dendrobium panduratum* Lindl. (Orchidaceae) has been recorded for the first time for India from Silent Valley reserve forest, Palghat district, Kerala. This species was earlier known from Sri Lanka.

524. **Manilal, K.S. & Kumar, C.S. 1985.** "Ground orchids of Silent Valley tropical rain forest". *Proc. Natl. Acad. Sci. India* 55(B): 51–65.

Abstract:- Forty–three species of ground orchids belonging to 28 genera are reported from Silent Valley tropical evergreen rain forests, Kerala. *Habenaria* Willd. is the most prolific genus with over seven species, followed by *Liparis* L. C. Rich. with 4 species, *Maxlais* Sol. ex Sw. with three species and *Peristylis* Bl. with 2 species. Saprophytic forms are represented by *Aphyllorchis praini* Hook.f., *Epipogium roseum* (D. Don) Lindl., etc. *Dendrobium panduratum* Lindl., an epiphytic orchid endemic to Sri Lanka was located in Silent Valley growing on moist rocks in the riverine forests. *Ipsea malabarica* (Reichb.f.) Hook.f., an endemic orchid of Malabar was recollected for the first time after a lapse of over 120 years, from the grasslands in the valley. A few probable new species are also collected.

525. **Manilal, K.S. & Kumar, C.S. 1986.** "*Thrixspermum pulchellum* (Thw.) Schltr.

(Orchidaceae) – A new record for India". *Indian J. Bot.* 9(1): 11–13.

Abstract:- *Thrixspermum pulchellum* (Thw.) Schltr. is an epiphytic orchid thought to be endemic to Sri Lanka. It has been collected recently from Palode, Trivandrum district. Where it is very rare and fruiting was not observed. The present report forms the first record of its occurrence in India. Differences of the Indian specimens from the typical Sri Lankan plant and the main differences from its allied species *Thrixspermum hystrix* Reichb. f. are discussed.

526. **Manilal, K.S. & Kumar, C.S. 1991.** "The reappearance of Van Rheede's *Tsjerou Tecka Maravara* as a new species of *Bulbophyllum* Thouars (Orchidaceae)". *Rheedea* 1: 52–56.

Abstract:- *Tsjerou Tecka Maravara* described and illustrated by Van Rheede 300 years ago is now found to be a new species of *Bulbophyllum* sect. *Cirrhopetalum*, here called *B. rheedei* Manilal & Sathish from Palode, Trivandrum district, Kerala. It is related to *B. frostii* Summerh. and *B. spathulatum* (Rolfe) Seidenf. Except for a sterile collection made in 1915 (*s. coll.* 11867, MH) from Karnataka, this mysterious species remained largely unknown since Rheede's discovery and its identity was elusive. It is described here in detail with analytical sketches, notes on phenology, ecology, affinities and seed characters based on SEM studies.

527. **Manilal, K.S. & Kumar, C.S. 1993.** *Field key for identification of the native orchids of Kerala*. Mentor Books, Calicut.

528. **Manilal, K.S., Prasannakumar, K.S. & Sivarajan, V.V. 1985.** "A new species of *Sauropus* Bl. (Euphorbiaceae) from India". *J. Indian Bot. Soc.* 64: 294–296.

Abstract:- A new species, viz., *Sauropus saksenianus* allied to *S. androgynus* (L.) Merr. and *S. rhamnoides* Bl. has been described from Silent Valley, Palghat district, Kerala, India.

529. **Manilal, K.S. & Raveendrakumar, K. 1998.** "Additions to the Flora of Kerala since Gamble (1935)". *Rheedea* 8: 179–241.

Abstract:- In the absence of a separate Flora of Kerala, Gamble's *Flora of the Presidency of Madras* (1915–1935) is the usual authority that is consulted by general taxonomists and students for the study and identification of flowering plants of Kerala. As a large number of new species and records reported since then, has made Gamble's Flora obsolete, an attempt is made here to collect all the scattered published information available on the subject. Details regarding 625 new taxa that belong to 103 families, of which seven families are new to Kerala are compiled and presented. Of these new taxa, 240 are new to the world flora, with six new genera, 190 new species, three new subspecies and 41 new varieties. The maximum number of new reports is from Orchidaceae with 118.9% increase

in comparison with Gamble, followed by Zingiberaceae (88.2%) and Araceae (69.2%). The localities from where the maximum new reports have been recorded are from Silent Valley of Palghat district (36) and Chandanathode of Kannur district (33). Possible reasons for these are suggested. A complete list of references is provided for verification of details and further information about the additions to the Flora recorded.

530. **Manilal, K.S. & Sabu, T. 1984.** "Discovery of two species of *Syzygium* Gaertn.f., hitherto endemic to Sri Lanka, from Silent Valley, India". *J. Econ. Taxon. Bot.* 5: 418–420.
Abstract:- Two species of *Syzygium* Gaertn.f., viz., *S. makul* Gaertn.f. and *S. neesianum* Arn., hitherto considered as endemic to Sri Lanka, is reported from Silent Valley forests, Kerala, India. The discovery of these species here is of much biogeographical interest. Detailed description of the plants are provided for their identification and preservation.

531. **Manilal, K.S. & Sabu, T. 1985.** "*Cyclea barbata* Miers (Menispermaceae): A new record of a medicinal plant from South India". *Ancient Sci. Life* 4: 229–231.
Abstract:- *Cyclea barbata* Miers is reported for the first time from South India (Silent Valley forests, Kerala). This is commonly used as a medicinal plant in Java, for stomach troubles and as a prophylactic against fever. Nomenclature, description and other relevant notes are provided.

532. **Manilal, K.S., Sabu, T. & Mathew, P. 1985.** "A new species of *Cucumella* Chiov. (Cucurbitaceae) from India". *Acta Bot. Indica* 13: 283–284.
Abstract:- A new species of *Cucumella* Chiov., viz., *C. silentvalleyii* is described from Silent Valley tropical rain forests, Kerala, India. This species is allied to *C. ritchiei* (Chakr.) Jeffrey.

533. **Manilal, K.S., Sabu, T. & Sivarajan, V.V. 1983.** "A new species *Hydnocarpus* Gaertn. (Flacourtiaceae) from India". *Trop. Pl. Sci. Res.* 1: 355.
Abstract:- A new species *Hydnocarpus* Gaertn., viz., *H. pendulus* has been described from Silent Valley forest, Palghat district, Kerala, India. This species is allied to *H. alpina* Wt.

534. **Manilal, K.S. & Shylaja, M. 1986.** "A new species of *Cinnamomum* Schaeffer (Lauraceae) from Malabar". *Bull. Bot. Surv. India* 28: 111–113.
Abstract:- A new species of *Cinnamomum*, viz., *C. nicolsonianum* allied to *C. malabathrum* (Burm.f.) Bercht. & Presl has been described and illustrated from Malabar region of India.

535. **Manilal, K.S. & Sivarajan, V.V. 1975.** "Two little known plants from India". *Sci. & Cult.* 41: 436–438.
Abstract:- Two little known plants of Euphorbiaceae, viz., *Meineckia parvifolia* (Wight)

Webster and *Suregada angustifolia* (Muell.–Arg.) Airy Shaw are reported from Calicut, Kerala.

536. **Manilal, K.S. & Sivarajan, V.V. 1976.** "*Hedyotis erecta* Manilal & Sivarajan (Rubiaceae), a new species from S. India". *Bot. Not.* 129: 191–192.
Abstract:- A new species of *Hedyotis*, viz., *H. erecta* collected from Calicut, Kerala, India is described and illustrated. This is related to *H. corymbosa* L., but differs from it in several important characters.

537. **Manilal, K.S. & Sivarajan, V.V. 1978.** "A contribution to the study of Hydrophytic flora of Kerala". *Proc. Natl. Acad. Sci. India* 45B: 225–231.
Abstract:- Enumeration of 122 hydrophytic species from Kerala is given.

538. **Manilal, K.S. & Sivarajan, V.V. 1982.** "*Flora of Calicut*". Bishen Singh Mahendra Pal Singh, Dehra Dun.
Abstract:- In this flora, 983 species belonging to 566 genera under 132 families have been treatd.

539. **Manilal, K.S. & Suresh, C.R. 1984.** "New combination for *Thunbergia wightian* T. Anderson". *J. Econ. Taxon. Bot.* 5: 421–422.
Abstract:- A new combination *Thunbergia bicolor* (Wight) Manilal & Suresh has been proposed based on *Schmidia bicolor* Wight. The latter name has priority over *Thunbergia wightiana* T. Anderson.

540. **Manilal, K.S. & Suresh, C.R. 1984.** "The Pandani in Rheede's Hortus Malabaricus". *New Botanist, Int. Quart. J. Pl. Sci. Res.* 11: 120–125.
Abstract:- van Rheede (1678–1693) described four species of Pandanaceae in his Hortus Malabaricus. They are identified as *Pandanus kaida* Kurz (Kaida), *P. odoratissimus* L.f. (Kaida Taddi), *Pandanus canaranus* Warb. (Perin Kaida Taddi) and *P. furcatus* Roxb. (Kaida Tsjeria). *P. kaida* is now very rare in Malabar. No specimen of *P. furcatus* has been collected from Malabar in recent times and it seems that this species has altogether disappeared from its original locality. The other two species are still found in Malabar. The etymology of the local name is given, clarifying the confusion about certain illustrations by Rheede. Translation of the original Latin description are also given for the first time, along with photographs of the fruits, to help distinguish the taxa.

541. **Manithottam, J. & Francis, M.S. 2007.** "Ethnobotany of Finger millet among *Muthuvan* tribes of Idukki district, Kerala". *Indian J. Traditional Knowledge* 6: 160–162.
Abstract:- *Muthuvan* tribes of Idukki district adopt slash and burn method of cultivation for *Eleusine coracana* (L.) Gaertn. The selection of land is based on ecological indicators such as *Carex mysurus* Nees and *Scleria terrestris* (L.) Fasset. Their intercropping pattern,

seed material storage and shifting cultivation remain unique in several ways. *Katty* is a special dish prepared from the powdered grains of *Eleucine* by these people.

542. **Manithottam, J. & Francis, M.S. 2007.** "*Arenga wightii* Griff. – A unique source of starch and beverage for *Muthuvan* tribes of Idukki district, Kerala". *Indian J. Traditional Knowledge* 6: 195–198.

Abstract:- *Arenga wightii* Griff. is a palm seen along the slopes of Western Ghats in Idukki district of Kerala state. *Muthuvan* tribal community living in Idukki district utilizes the plant for extraction of starch and palm vine. They have developed and standardized their own techniques for extraction of starch and palm vine. The starch extracted is used for preparation of various dishes while palm vine is consumed directly without fermentation. The paper deals with the method of extraction of starch and palm vine and its usage.

543. **Manithottam, J. & Francis, M.S. 2008.** "Preparation of *Maravuri* from *Antiaris toxicaria* (Pers.) Lesch. by *Muthuvans* of Kerala". *Indian J. Traditional Knowledge* 7: 74–76.

Abstract:- Tribal populations of Kerala are rich in ethnobotanical information. *Muthuvan* tribes of Idukki district are experts in preparing *Maravuri*, a type of cloth from the bark of tree, *Aranjali* [*Antiaris toxicaria* (Pers.) Lesch.]. This skilled work was carried out after constructing tall supports around the tree, require much experience. The cork is carefully removed with a sharp knife; bark is softened by beating with wooden hammers, and separated and cured by sun drying. It is used as bed spread. As modernization is fast progressing, the new generation is unaware of the technical know how to prepare the bark for cloth. So, it is highly important to record and preserve such valuable information.

544. **Manju, C.N. & Rajesh, K.P. 2010.** "*Leptohymenium* Schwaegr. (Hylocomiaceae: Bryopsida): A new generic record for Western Ghats, Peninsular India". *J. Econ. Taxon. Bot.* 34: 391–393.

Abstract:- *Leptohymenium* Schwaegr. with the species *L. tenue* (Hook.) Schwaegr. belonging to the family Hylocomiaceae is reported for the first time for the Western Ghats of Peninsular India from Eranthodumala, Idukki district, Kerala.

545. **Manju, C.N. & Rajesh, K.P. 2011.** "*Grimmia funalis* (Schwägr.) Bruch & Schimp. (Grimmiaceae: Bryophyta) from India". *Taiwania* 56: 81–83.

Abstract:- *Grimmia funalis* (Schwägr.) Bruch & Schimp. (Grimmiaceae) is reported for the first time for India from Parambikulam Tiger Reserve, Palakkad district, Kerala.

545a. **Manju, C.N., Rajesh, K.P. & Madhusoodanan, P.V. 2008.** Checklist of the bryophytes of Kerala, India. *Tropical Bryology Research Reports* 7: 1–24.

Abstract:- Bryophytes that have been recorded from Kerala state, India, including some

taxa that are reported for the first time from the state. The checklist includes a total of 465 taxa, comprising 148 taxa of liverworts, 10 taxa of hornworts and 307 taxa of mosses.

546. **Manju, C.N., Rajesh, K.P. & Madhusoodanan, P.V. 2009.** "Contribution to the Bryophyte Flora of India: *Agasthyamalai* Biosphere Reserve in Western Ghats". *Taiwania* 54: 57–68.

Abstract:- The bryophyte flora of the *Agasthyamalai* Biosphere Reserve is catalogued. There is no previous report of bryophytes from this area. The checklist consists of 90 taxa (58 mosses, 32 liverworts), of which 16 species are newly reported for the Peninsular India (*Asterella reticulata, Bazzania sumbavensis, Cephalozia pandei, Clastobryopsis muelleri, Cyathophorella adiantum, Dicranoloma subreflexifolium, Herbertus dicranus, Himantocladium cyclophyllum, Hypnum plumaeforme, H. sikkimense, Leucobryum cucullifolium, Radula grandifolia, Symblepharis vaginata, Symphyodon echinatus, Trichocolea udarii* and *Trichostelium boschii*) and another 6 are new for the Kerala State (*Campylopus involutus, Cephaloziella willisiana, Frullania ericoides, Macromitrium moorcroftii, Metzgeria decipiens* and *Leucobryum mittenii*).

547. **Manudev, K.M., Weber, A. & Nampy, S. 2012.** "*Henckelia pradeepiana*, a new species of Gesneriaceae from the southern Western Ghats, India". *Rheedea* 22: 119–123.

Abstract:- A new species of Gesneriaceae, *Henckelia pradeepiana*, is described from the southern Western Ghats, India (Muthappanpuzha, Kozhikode district, Kerala). The species is remarkable by the presence of flat tubers, from which shoots with a single or few basal leaves and large and lax inflorescence (pair-flowered cymes) emerge. The corolla is white or pale violet and obliquely campanulate. Also remarkable is the bright yellow stigma with strongly expanded and sometimes slightly emarginate lower lip. This "chiritoid" stigma form supports the recent inclusion of most species of *Chirita* sect. *Chirita* into the newly defined genus *Henckelia*. The closest relative of *H. pradeepiana* is probably *H. missionis* (R. Br.) A. Weber & B.L. Burtt known from the Western Ghats of Kanyakumari district, Tamil Nadu, some 400 km away from the former.

548. **Mathew, Abraham & Malathy, M.R. 2006.** "Occurrence of arbuscular mycorrhizal fungi in some medicinal plants of Kerala". *Ancient Sci. Life* 26: 46–49.

Abstract:- The occurrence of mycorrhiza in 40 selected medicinal plants was studied. The percentage of mycorrhizal colonization in each of the plant was calculated. The colonization was found to be very less in four plants and very high in six plants. All others showed a moderate level of colonization. The present work suggests the use of mycorrhiza as a biofertilizer to enhance the growth and yield of medicinal plants.

549. **Mathew, B.P., Kuppuswamy, G. & Pillai, R.G. 2005.** "Cassava, an alternate component

crop of the sustainable rice-based cropping system of southern Kerala". *Indian J. Bot. Res.* 1: 37–42.

Abstract:- Investigations were undertaken in a rice-based cropping system with Cassava as a component crop in Vellayani, Kerala. Three field experiments were conducetd in farmer's field near College of Agriculture, Vellayani, Thiruvananthapuram, Kerala in three seasons, viz., Rabi 1999, Summer 1999–2000 and Kharif of 2000. The effects of integrated nutrient management (INM) on the growth and yield attributes, uptake pattern of nutrients of the component crops of the cropping system, availability of nutrients and microbial population in the post havest soil were critically studied. Studies evidently proved the suitability and sustainability if an alternate cropping system with rice-cassava-rice in southern Kerala with emphasis on INM in place of a traditionally followed cropping system of rice-rice fallow/blackgram-rice, which in recent years, is becoming unattractive to the farmers due low benefit cost ratio and poor energy use efficiency.

550. **Mathew, C.J. & Satheesh, V.K. 1996.** "*Zeylanidium maheshwarii* – A new species of the family Podostemonaceae from India". *Aquatic Bot.* 54: 73–78.

Abstract:- A new species of *Zeylanidium*, viz., *Z. maheshwarii* Mathew & Satheesh [allied to *Z. olivaceum* (Gardn.) Engl.] has been described and illustrated from fresh water streams of high ranges of Kerala (Kaliyar, Idukki district), India.

551. **Mathew, C.J. & Satheesh, V.K. 1997.** "Taxonomy and distribution of the Podostemonaceae in Kerala, India". *Aquatic Bot.* 57: 243–274.

Abstract:- The taxonomy and distribution of the Podostemonaceae of Kerala are described with figures and maps. It includes 9 genera and 13 species. Kerala is the southwestern state of India. Most rivers of Kerala originate in the Western Ghats. Two genera that occur in the state (*Dalzellia, Indotristicha*) represent subfamily Tristichoideae, whereas the remaining seven represent subfamily Podostemodeae. Four species [*Dalzellia zeylanica* (Gardn.) Wight, *Farmeria metzgeriodes* (Trimen) Willis, *Podostemum subulatum* Gardn. and *Zeylanidium olivaceum* (Gardn.) Engl.] are restricted to southern India and Sri Lanka. A new combination, namely, *Podostemum munnarense* (Nagendran & Arekal) Mathew & Satheesh is made herein. Two species (*Podostemum munnarense, Zeylanidium maheshwarii* Mathew & Satheesh) are endemic to one locality each in Kerala. Six species are restricted to western and southern India [*Indotristicha ramosissima* (Wight) van Royen, *Farmeria indica* Willis, *Griffithella hookeriana* (Tul.) Warm., *Hydrobryopsis sessilis* (Willis) Engl., *Polypleurum stylosum* (Wight) J.B. Hall and *Willisia selaginoides* (Bedd.) Warm. ex Willis]. *Zeylanidium lichenides* (Kurz) Engl. has a broad distribution. The extensive morphological variability of *Polypleurum stylosum* is discussed.

552. **Mathew, L. & Teresa, M.V.M. 2007.** "Palynological studies of *Polygala* Linn. of South India". *Indian J. Bot. Res.* 3: 319–328.
Abstract:- The morphology of 16 species of *Polygala* Linn. of South India has been studied. The micromorphological features of pollen reveal that they are specific for each taxon and are highly useful in the identification of the different species of the genus. The pollen grains of all the taxa were multicolporate, synorate and stephanocolporate, the colpi number varing from 12–24.

553. **Mathew, P. 1988.** *Floristic studies on the flowering plants of Nilambur forest division*. Ph.D. Thesis. University of Calicut, Calicut. (Unpublished).

554. **Mathew, P. & Biju, S.D. 1991.** "*Lepistemon verdcourtii*, a new species of Convolvulaceae from India, with notes on *L. binectariferum* and *L. leiocalyx*". *Kew Bull.* 46: 559–562.
Abstract:- A new species of *Lepistemon*, *L. verdcourtii* (allied to *L. leiocalyx* Stapf) is described from lower hills of the Western Ghats, India. The delimitation of *L. binectariferum* and *L. leiocalyx* is further elucidated using fruit characters.

555. **Mathew, P., Manilal, K.S. & Sivarajan, V.V. 1984.** "Two Ceylonese element new to Indian flora". *J. Econ. Taxon. Bot.* 5: 501–503.
Abstract:- The authors have discovered two species, viz., *Scuttellaria oblonga* Benth. (Lamiaceae) and *Anodendron rhinosporum* Thw. (Apocynaceae) hitherto believed to be endemic to Ceylon from the Indian subcontinent.

556. **Mathew, P. & Mathew, P.M. 2002.** "Classification of South Indian species of *Piper* L. (Piperaceae) by metric method". *Rheedea* 12: 123–131.
Abstract:- Thirteen indigenous species of *Piper* have been subjected to cluster analysis by metric method. They are grouped into five objectively delimited clusters based on phenetic resemblances determined in terms of values of similarity coefficients (S) using 50 charcters from three disciplines (morphology, cytology and palynology). On the five clusters I and V constitute phenons of very high ranks of 83 and 88%, respectively, the other two – II and IV are related each at 66% phenons, and the cluster III is a single member. The inter-cluster similarity values indicate that the groups I and II are most distantly affiliated, while groups I and II are least distant. The grouping based on phonetic resemblances shows some agreement with the morphological groupings proposed by Hooker (1886) and Gamble (1925) and so certain other obvious disagreements between the two exists. The notable disagreement is concerning the placement of *Piper nigrum* L.

557. **Mathew, P. & Sivarajan, V.V. 1983.** "*Sida elongata* Blume and *S. javensis* Cav. (Malvaceae), new records for India". *J. Econ. Taxon. Bot.* 4: 617–619.
Abstract:- Two new species of *Sida*, viz., *S. elongata* Blume (earlier known from East

Java) and *S. javensis* Cav. (earlier known from West Indies, S.E. Asia and Malesia) are reported for the first time from India from Nilambur forests, Kerala. Their nomenclature, description and other relevant notes are provided.

558. **Mathew, P. & Umadevi, C.N. 1992.** "Reinstating *Leea robusta* Roxb. (Leeaceae)". *Rheedea* 2: 64–68.

Abstract:- *Leea macrophylla* Roxb. ex Hornem., *L. robusta* Roxb. and *L. venkobarowii* Gamble, which have been considered to be conspecific by Ridsdale (1974), were subjected to a revised taxonomic study using live specimens and herbarium material. The latter two were found to be so closely similar that they are treated here as conspecific under the priorable name *Leea robusta*. However, *L. macrophylla* differed from *L. robusta*, as treated here, significantly in several different morphological features. So, *L. robusta* is reinstated here, as a distinct species.

559. **Mathew, S.P., Mohandas, A. & Nair, G.S. 2004.** "Genetic conservation of tropical medicinal and aromatic plants through field gene bank – A case study". *J. Econ. Taxon. Bot.* 28: 403–426.

Abstract:- Genetic conservation and sustainable utilization of rare, endangered and endemic medicinal and aromatic species from the Peninsular India and the Andaman Islands through the orientation of a field gene bank at Tropical Botanic Garden and Research Institute (TBGRI), Trivandrum, Kerala have been discussed in detail.

560. **Mathew, T., Umamaheswaran, K., Suresh Babu, K.V. & Mohan Kumar, B. 1997.** "Evaluation of some fast growing multipurpose tree species for Kerala". *Geobios* (Jodhpur) 24: 31–34.

Abstract:- Among the tree species evaluated, *Acacia mangium* had recorded maximum growth and productivity, followed by *A. auriculiformis, Azadirachta indica, Ailanthus triphysa, Albizzia lebbeck* and *Acacia mellifera* recorded slow initial growth rate and were inferior to *A. mangium* and *A. auriculiformis*. The height growth, radial growth and root growth in *C. mangium* were highest resulting in maximum biomass production. Hence, *A. mangium* and *A. auriculiformis* are considered as fast growing multipurpose tree species suitable for Kerala.

561. **Maya, S. 2002.** "A study on the nutritional composition of selected freshwater plants of Kerala (India)". *J. Econ. Taxon. Bot.* 26: 562–565.

Abstract:- During the present study, 18 species of commonly occurring aquatic plant species were collected from the freshwater tanks of southern Kerala. These were shade-dried and analysed to determine the total concentration of crude proteins, lipids, soluble sugars, starch and free amino acids and their energy values were also calculated. Results

indicate that all the above constituents except lipids, are found to be present in the plants in reasonably high quantities and the possibilities of utilizing selected aquatic plant species as animal feed/food need to be explored further.

562. **Maya, S. 2002.** "Occurrence of *Anabaena beckii* De Toni G.B. in Peninsular India". *J. Econ. Taxon. Bot.* 26: 625–626.

Abstract:- During a study carried out on the algal flora of temple tank of Kerala, the Cyanophyceae alga, *Anabaena beckii* De Toni G.B. occurring in profuse bloom was collected from a polluted temple tank of Alappuzha district of Kerala. Since this taxon has not been recorded from Kerala, the peninsular state of India, a taxonomic study was undertaken which is enumerated here.

563. **Maya, S., Menon, V.S. & Nair, G.S. 2002.** "Economic importance of river vegetation of Kerala – A case study". *J. Econ. Taxon. Bot.* 26: 649–656.

Abstract:- River Chittar is a perennial stream that runs along the eastern and southern boundaries of Tropical Botanic Garden & Research Institute situated at Palode, Thiruvananthapuram district. In the year 1997 an ecotaxonomic study was undertaken to analyse the flora in and around this river (approximate length of 25 km) which revealed that the plants recorded fell under 4 divisions, 50 families, 78 genera and 81 species. The present report is an effort to analyse the above recorded plants in terms of their economic importance, especially with reference to the local communities; it has come to light that 35 plant species including trees, ferns and aquatic angiosperms constituting the river vegetation have innumerable uses which are enumerated here.

564. **Maya, S., Menon, V.S. & Nair, G.S. 2003.** "Economic importance of river vegetation of Kerala – A case study". *J. Econ. Taxon. Bot.* 27: 796–803.

Abstract:- River Chittar is perennial that runs along the eastern and southern boundaries of Tropical Botanic Garden & Research Institute, situated at Palode, Thiruvananthapuram district. In the year 1997, an ecotaxonomic study was undertaken to analyse the flora in and around this river (approximate length of 25 km) which revealed that the plants recorded fell under 4 divisions, 50 families, 78 genera and 81 species. The present report is an effort to analyse the above recorded plants in terms of their economic importance, especially with reference to the local communities; it has come to light that 35 plant species including trees, ferns and aquatic angiosperms constituting the river vegetation have innumerable uses which are enumerated here.

565. **Maya, S., Prameela, K.S. & Menon, V.S. 2003.** "Ethnobotanical notes on the flora of sacred tanks of Kerala". *Ethnobotany* 15: 55–59.

Abstract:- Kerala has innumerable temples and associated with these are the sacred

freshwater tanks forming water sources for religious rituals, and in some cases provide bathing and washing facilities for local folks. These tanks are protected habitats harbouring a variety of useful/medicinal flora in their moist surroundings; these have been used variously by local people from time immemorial. During the present enquiry, more than 200 such tanks were studied in detail to gather information on the traditional use of flora by the local communities based on ancient knowledge. Sixty such plant species and their uses could be recorded which are enumerated here.

566. **Maya, S., Prameela, K.S. & Menon, V.S. 2005.** "Nature and composition of periphytic algae in a fresh water tank in Kerala (S. India)". *J. Econ. Taxon. Bot.* 29: 837–842.

Abstract:- The periphytic algae which grow on virtually all submerged objects in marine, estuarine and freshwater environment have been neglected owing to difficulties encountered in quantitative collection. Nevertheless quite a few attempts have been made along these lines, especially by employing various types of artificial substrates. The present inquiry was carried out to study the nature and composition of periphytic algae settling on concrete panels introduced into a fresh water tank in Thiruvananthapuram district, Kerala. The attached algae are found to fall under 3 major subdivisions; 12 families, 22 genera and 32 species in contrast to the 8 phytoplankton species recorded. However, seasonal studies need to be conducted on various artificial and natural substrate to get a clear and true picture of periphytic algal species.

567. **Maya, S., Prameela, K.S. & Menon, V.S. 2006.** "A study on the nature of epipelon of selected freshwater tanks of Kerala (India)". *J. Econ. Taxon. Bot.* 30: 727–736.

Abstract:- Epipelon or the sediment algae are widespread, occurring in all types of sediments into which light penetrates. The present paper deals with the nature of epipelic flora of fifty selected freshwater tanks attached to the temples (temple tanks) of Kerala. The analysis of different types of sediments shows that the epipelon of the tanks fall under three major groups, viz., Cyanophyceae, Chlorophyceae and Bacillariophyceae, comprising of 105 species and 64 genera. The minor groups of epipelon are found to be made up of Cryptophyceae, Euglenophyceae and water fungi. It could be deciphered that the different groups of epipelon exhibit specificity to the type of soil.

568. **Menon, A.R.R. & Abhilash, E.S. 2005–2006.** "Ecological notes on *Nageia wallichiana* (Presl) O. Ktze. habitats in Goodrical Reserved Forests, Kerala". *Evergreen* 55 & 56: 7–8.

Abstract:- *Nageia wallichiana* (Presl) O. Ktze. is the only living gymnospermous tree found in West Coast Tropical Forests of Goodrical Reserve Forest, Quilon district, Kerala. The ecological notes of this species has also discussed in this paper.

569. **Menon, A.R.R. & Thriveen C.S. 2011.** "Landscape evaluation of Shendurney Wildlife Sanctuary of Kerala using remote sensing techniques". *Indian J. Forest.* 34: 41–54.

Abstract:- In the present work, remote sensing data viz., aerial photographs were used for vegetation mapping of Shendurney Wildlife Sanctuary of Kerala forests. Survey of India topographic sheets were used to prepare the base map and contour maps of the area. Slope class analysis was done on the contour map prepared. Vegetation analysis was also done using the photosociological methods. The present study give valuable information about the dominant forest types, state of degradation, areas of wildlife corridors, areas of encroachment and human interference. All these data can be used for the critical evaluation of forest management plans for the future.

570. **Menon, A.R.R., Varghese, A.O. & Pious, O.L. 2010.** "Vegetation status of southern secondary moist mixed deciduous forests of Trichur district in Kerala". *Indian J. Forest.* 33: 293–296.

Abstract:- Vegetation characteristics of southern secondary moist mixed deciduous forest of Trichur district of Kerala were assessed by random sampling through census quadrate method. Twenty plots (0.1 ha.) were evaluated from Chalakudy, Chimmony, Peechi and Vazhani regions of the district, with 0.5 ha. area from each locality, covering 2 ha area in total. A sum total of 2919 individuals belonging to 208 species of 89 families were recorded from the 20 ha. area studied comprising, 81 tree species (38.94%), 21 shrubs (10.10%), 58 herbs (27.88%) and 48 climbers (23.08%). In terms of number of species per unit area, an average of 34 species recorded per quadrate (0.1 ha.). For trees, shrubs, herbs and climbers this values were 16, 5, 6 and 7, respectively. The dominant association of the study area is of *Xylia xylocarpa – Lagerstroemia microcarpa – Grewia tiliifolia* and *Terminalia paniculata*. Comparatively high species diversity index value is registered for trees but with a very low value for shrubs.

571. **Menon, V.S., Seeni, S., Decruse, William S. & Gangaprasad, A. 1995.** "A preliminary study on the habitat, distribution and population density of *Paphiopedilum druryi* Bedd. (Stein) at Agasthymalai in Southern India". *J. Orchid Soc. India* 9: 55–67.

Abstract:- The legendary Agasthymalai was successfully surveyed to relocate *Paphiopedilum druryi*, the only slipper orchid of the Southern India, otherwise presumed to be extinct. Profuse distribution and growth of the orchid at 7 locations, at 1400-1550 m altitude range covering a distance of 3 km in the south-east and south-west directions, was observed. The exposed and withered rocky surface surrounded by *Ochlandra* thickets and open montane grasslands bordering shoal forests with the partial shade provided by scrub grass (*Zenkeria sebastiana*), shrubs (*Osbeckia* sp., *Melastoma* sp., *Lobelia* sp.,

Pouzolzia sp.) and small trees (*Aralia* sp., *Syzygium* sp.) seemed to favour growth and maximum population density of the orchid. However, an analysis of the floristics, soil, and atmospheric factors did not indicate any specific associates or requirements. The ability of *P. druryi* to withstand complete exposure to sun during summer months (March–April) and to get hidden under the cover of associated vegetation during the post-monsoon period (October–December) indicated its high survival value. Characteristics such as poor-set (13.3%), low percentage (26.1%) of embryo formation in seeds, and rare chances of division and spread of perennating rhizome seemed to indicate existing natural barriers for its multiplication and dispersal to otherwise suitable habitats.

572. **Teresa, M.V.M. 2005.** "*Cabomba furcata* Schultes & Schultes f. – New record from India". *Geobios* (Jodhpur) 32: 91–92.
Abstract:- *Cabomba furcata* Schultes & Schultes f., commonly known as 'Red Cadomba', a native of South American, is reported for the first time for India from Alappuzha district, Kerala.

573. **Teresa, M.V.M. & Rekha, K. 2002.** "*Anabaena flos-aquae* (Lyngb.) Breb. ex Born. *et* Flah – New record from Kerala". *Geobios* (Jodhpur) 29: 199.
Abstract:- A blue green alga, *Anabaena flos-aquae* (Lyngb.) Breb. ex Born. *et* Flah has been recorded for the first time for Kerala from a pond in North Parur of Ernakulam district.

574. **Mini, P.V. 2010.** "Preparation techniques of pigments for traditional mural paintings of Kerala". *Indian J. Traditional Knowledge* 9: 635–639.
Abstract:- In Kerala, traditionally the mural painting is done in five colours – red, yellow, green, black and white. Colours are prepared from vegetables and minerals pigments. Red is derived from red laterite, yellow is derived from yellow laterite, white from lime, and black from soot of oil-lamps. Leaves of *Neelamari* or *Neelachedi* plants are squeezed and the extract is used after drying up to be mixed with *Eravikkara* for obtaining the green pigment. Wooden utensils are used for mixing the colours and the binding media used is derived from tender coconut water and extracts from the *neem* tree (*Azadirachta indica*). The wall preparation for the mural is arduous and time consuming process. The line drawing is made initially on the prepared wall and subsequently the five colours are applied. The entire process of a mural painting involves meticulous balancing of various components. The perfection and the finer aspects of the work depend on the preparation of pigments. An understanding of the traditional knowledge developed by its early practitioners enhances the life of the mural paintings.

575. **Mini, V. & Sivadasan, M. 2007.** "Plants used in ethnoveterinary medicine by Kurichya

tribe of Wayanad district in Kerala, India". *Ethnobotany* 19: 94–99.

Abstract:- Kurichya tribe inhabits different parts in Wayanad district of Kerala. The present study deals with the ethnoveterinary knowledge of the Kurichyas and the medicinal plants used by them for the treatment of diseases of domestic animals, such as cattle, dogs and poultry. The study revealed that 39 species of flowering plants are used as veterinary medicines. Of these, 4 species belong to Asteraceae, 3 each to Myrtaceae, Rutaceae, Zingiberaceae and Fabaceae. Among the cattle alone, 13 diseases are recorded which are cured by 36 species. Eight species are used for curing 5 diseases in dogs, and 3 species for the poultry diseases.

576. **Mohan Kumar, B. 1997.** "Bamboos in the home gardens of Kerala – A shrinking resource base". *J. Non-Timber Forest Products* 4: 156–159.

Abstract:- Two stratified random sample survey were conducted to charactise bamboo distribution in the home gardens in Kerala and to examine the nature of interrelationships between bamboo occurrence (abundance) and the size of operational holdings. Methods included a species inventory of the homegardens, besides semi-structured interviews to elucidate the indigenous ecological knowledge on bamboo cultivation. Three hypotheses were tested, viz., (1) the larger operational holdings have a higher frequency of bamboo occurrence, (2) homestead bamboo represents a shrinking resource base, and (3) that the indigenous ecological knowledge on bamboo cultivation is adequate. Results show that only 3% of the 584 operational holdings surveyed had bamboo, the predominant species being *Bambusa arundinacea*. Larger holdings and midlands were characterized by a greater abundance of bamboos. Commercialization of the homegarden system, fragmentation of holdings, construction activities, etc., may lead to a substantial obliteration of the state's rural bamboo resources. Inter-specific competition, allelopathic influences, enhanced rodent population under bamboo cover and the general afflictions to carry out farm operations in the presence of bamboo clumps have created a general apathy towards bamboo. Boundary planting, trenching around the clumps and shade regulation may represent ecologically rational local practices *in vogue*.

577. **Mohanan, C., Kumar, K.C.R. & Yesodharan, K. 2010.** "*Coniella* causing foliage diseases in forests species in Kerala, India". *Indian J. Forest.* 33: 355–360.

Abstract:- *Coniella australiensis, C. fragariae, C. granati, C. minima* and *C. petrakii* causing foliage infection in 18 forest species in natural forests, plantations and forest nurseries in Kerala state, India are reported. Six species of *Eucalyptus*, viz., *E. camaldulensis, E. citriodora, E. grandis, E. pellita, E. urophylla, E. teretocornis* and many clones and provenances of *E. tereticornis* were found affected with various species

of *Coniella*. *Careya arborea, Cleistanthus collinus, Garcinia gummi-gutta, Gmelina arborea, Macaranga peltata, Mikania micrantha, Myristica* sp., *Persea macrantha, Syzygium caryophyllatum, Tabernaemontana heyniana, Terminalia chebula* and *T. paniculata* and were the other host plants affected with *Coniella* species. Among the five species of *Coniella* affecting forests tree species, *C. fragariae* was the most widespread and predominant pathogen and caused foliage disease in 12 forest tree species.

578. **Mohanan, C.N. 1981.** "A contribution to the botany of Quilon district, Kerala". *Bull. Bot. Surv. India* 23: 60–64.

Abstract:- An account of the vegetation of Quilon district has been given. Six species have been recorded for the first time from India and two from South India (Quilon district, Kerala); 13 rare, endangered and endemic species have also been recorded. *Zornia quilonensis* Ravi has been mentioned as a new species from this district.

579. **Mohanan, C.N. 1984.** "Some rare and interesting angiosperm taxa from the forests of Idukki Hydroelectric Project". *J. Econ. Taxon. Bot.* 5: 455–459.

Abstract:- A total of 15 rare and interesting species representing 13 angiosperm families are reported from the left-over evergreen forests of Idukki Hydroelectric Project area, Kerala, India.

580. **Mohanan, C.N. 1984.** *Studies on the Flora of Quilon District, Kerala*. Ph. D. Thesis. University of Madras, Madras (Unpublished).

581. **Mohanan, C.N. & Nair, N.C. 1981.** "*Kunstleria* Prain – A new genus record for India and a new species in the genus". *Proc. Indian Acad. Sci.* 90(B): 207–209.

Abstract:- A new species, viz., *Kunstleria keralensis* C.N. Mohanan & N.C. Nair is described and illustrated. The genus is new to the flora of India from Kerala, earlier reports being from Malaya, Philippines and Australia. The present report on the occurrence of the genus from India is of phytogeographical significance.

582. **Mohanan, C.N., Pandurangan, A.G. & Ramachandran, V.S. 1984.** "A note on unknown fruits of *Phaeanthus malabaricus* Bedd. (Annonaceae) – A rare and endemic plant from Southern India". *J. Econ. Taxon. Bot.* 5: 399–400.

Abstract:- Description of fruits of *Phaeanthus malabaricus* Bedd. has been given. This species was collected from Pooyamkutty project area, Idukki district of Kerala.

583. **Mohanan, C.N., Remadevi, S. & Binojkumar, M.S. 2002.** "A new species of *Gymnostachyum* (Acanthaceae) from the state of Kerala". *J. Econ. Taxon. Bot.* 26: 38–40.

Abstract:- A new species of *Gymnostachyum*, viz., *G. sahyadricum* allied to *G. canescens* Anders. has been described and illustrated from Chokkampatty, Quilon district, Kerala.

584. **Mohanan, M. 1981.** "Floristic studies in Trivandrum district, Kerala". *Bull. Bot. Surv. India* 23: 69–73.

Abstract:- A total of 700 plant species have been enumerated from Trivandrum district of Kerala.

585. **Mohanan, M. & Henry, A.N. 1980.** "Rediscovery of three rare and endemic plants of India". *Bull. Bot. Surv. India* 22: 236–237.

Abstract:- Three rare and endemic plants, viz., *Humboldtia unijuga* Bedd., *Pogostemon travancoricum* Bedd. and *Vanilla wightiana* Lindl. ex Hook.f. have been rediscovered after a lapse of over 100 years from Kerala.

586. **Mohanan, M. & Henry, A.N. 1986.** "A new variety of *Eria muscicola* (Lindl.) Lindl. (Orchidaceae) from Trivandrum district, Kerala, Southern India". *J. Econ. Taxon. Bot.* 8: 425–426.

Abstract:- A new variety of *Eria muscicola* (Lindl.) Lindl., viz., *E. muscicola* var. *ponmudiana* has been described from Ponmudi forest, Trivandrum district, Kerala.

587. **Mohanan, M. & Henry, A.N. 1987.** "*Syzygium parameswaranii* (Myrtaceae) – A new species from southern India". *J. Bombay Nat. Hist. Soc.* 84: 408–409.

Abstract:- A new species of *Syzygium*, viz., *Syzygium parameswaranii* allied to *S. calophyllifolium* Walp. has been described from western slopes of Agastyamalai, Trivandrum district, Kerala.

588. **Mohanan, M. & Henry, A.N. 1991.** "*Cinnamomum chemungianum* (Lauraceae) – A new species from Kerala, southern India". *J. Bombay Nat. Hist. Soc.* 88: 97–99.

Abstract:- *Cinnamomum chemungianum*, a new species allied to *C. filipedicellatum* Kosterm. and *C. travancoricum* Gamble has been described from Chemungi, Trivundrum district of Kerala.

589. **Mohanan, M. & Henry, A.N. 1994.** *Flora of Thiruvananthapuram*. Botanical Survey of India, Calcutta.

Abstract:- In this work, 1270 species belonging to 710 genera under 163 families are treated, of which 939 are dicots, 328 monocots and 3 are gymnosperms.

590. **Mohanan, M., Henry, A.N. & Nair, N.C. 1980.** "Some rare and fast disappearing plants discovered in Trivandrum district, Kerala, India". *Bull. Bot. Surv. India* 22: 105–108.

Abstract:- Notes on seven endemic plant taxa of India, observed rare and fast disappearing, are given on the basis of collections made in Trivandrum district, Kerala from 1977 onwards.

591. **Mohanan, M., Henry, A.N. & Nair, N.C. 1982.** "Notes on three rare and interesting orchids collected from Trivandrum district, Kerala". *J. Bombay Nat. Hist. Soc.* 79: 234–236.

Abstract:- Three rare and interesting orchids, viz., *Aphyllorchis montana* (Thw.) Reichb.f, *Eulophia cullenii* (Wight) Blume and *Malaxis latifolia* Sm. have been collected for the first time for Kerala from Trivandrum district.

592. **Mohanan, M., Henry, A.N. & Nair, N.C. 1982.** "*Exacum walkeri* Griseb. (Gentianaceae) – A new record for India". *J. Bombay Nat. Hist. Soc.* 79: 450–451.
Abstract:- *Exacum walkeri* Griseb., a species endemic to Sri Lanka, has been recorded for the first time for India from Ponmudi, Trivandrum district, Kerala.

593. **Mohanan, M., Henry, A.N. & Nair, N.C. 1982.** "On a collection of three rare vascular taxa from Trivandrum district, Kerala". *J. Econ. Taxon. Bot.* 3: 648–650.
Abstract:- Three rare vascular taxa, viz., *Adenosma subrepens* (Thw.) Benth. ex Hook.f., *Asplenium affine* Sw. f. *affine* and *Mitrasacme pygmaea* R. Br. var. *malaccensis* (Wight) Hara have been reported from Trivandrum district, Kerala.

594. **Mohanan, M. & Sreekumar, P.V. 1982.** "On the occurrence of *Eragrostis cumingii* Steud. (Poaceae) in India". *J. Econ. Taxon. Bot.* 3: 447–448.
Abstract:- *Eragrostis cumingii* Steud. has been reported for the first time for India from Trivandrum, Kerala.

595. **Mohanan, M. & Sudhakar, J.V. 2008.** "*Sesbania sericea* (Willd.) Link (Leguminosae: Papilionoideae) – A new record for India". *Bull. Bot. Surv. India* 50: 171–172.
Abstract:- *Sesbania sericea* (Willd.) Link has been recorded for the first time for India from Ayiramthengu, Kollam district, Kerala.

596. **Mohanan, N. 1996.** "Rediscovery of *Syzygium bourdillonii* (Gamble) Rathakr. & N.C. Nair (Myrtaceae), an endemic and little known species of Western Ghats". *J. Econ. Taxon. Bot.* 20: 729–731.
Abstract:- *Syzygium bourdillonii* (Gamble) Rathakr. & N.C. Nair has been rediscovered from southern ends of Agasthyamala Hills, Thiruvananthapuram district, Kerala, after a lapse of 94 years. Detailed description and illustration are provided.

597. **Mohanan, N., Jayakumar, R., Shaju, T. & Kiran Raj, M.S. 2000.** "On the rediscovery of *Nothopegia aureo–fulva* Bedd. ex Hook.f. (Anacardiaceae), a rare and narrow endemic species of Western Ghats". *J. Econ. Taxon. Bot.* 24: 78–80.
Abstract:- *Nothopegia aureo–fulva* Bedd. ex Hook.f. has been rediscovered over 100 years after its earlier only collection. The present collection also forms an addition of this species to the flora of Kerala state from Agasthyamala hills, Thiruvananthapuram district. Detailed description with illustration is provided.

598. **Mohanan, N. & Kumar, E.S.S. 2003.** "A new species of *Litsea* (Lauraceae) from India". *Nordic J. Bot.* 23: 611–613.

Abstract:- *Litsea beei*, a new species of Lauraceae from Attayar, Thiruvananthapuram district, Kerala, India is described and illustrated. The new species is allied to the Burmese-Malayan species *L. myristicaefolia*.

599. **Mohanan, N., Martin, Gerald, Arunkumar, N.S. & Thulasidas, G. 2001.** "*Memecylon subramanii* A.N. Henry (Melastomataceae) – A new record for Kerala". *J. Econ. Taxon. Bot.* 25: 337–338.

Abstract:- *Memecylon subramanii* A.N. Henry (Melastomataceae) has been recorded as new to Flora of Kerala from Chemungi, Bonnaccord, Thiruvananthapuram district. Earlier this species was known to occur in Tirunelveli district, Tamil Nadu.

600. **Mohanan, N., Rajkumar, G. & Usha, V.S. 2000.** "Five new records for the flora of Kerala state, India". *J. Econ. Taxon. Bot.* 24: 75–77.

Abstract:- *Euodia lunu-amkenda* (Gaertn.) Merr. var. *tirunelvelica* Henry & Chandr., *Exacum courtallense* Arn., *Homalium jainii* Henry & Swamin., *Hoya kanyakumariana* Henry & Swamin. and *Vernonia gossypina* Gamble are recorded as addition to the flora of Kerala from Agasthymala, Thiruvananthapuram district. Correct nomenclature, short descriptions and field data regarding these species are provided.

601. **Mohanan, N. & Ravi, N. 1996.** "*Dimeria sivarajanii* (Poaceae), a new species from Kerala, India". *Rheedea* 6: 47–50.

Abstract:- A new species of *Dimeria* R. Br., viz., *D. sivarajanii* allied to *D. lawsonii* (Hook.f.) C.E.C. Fischer is described and illustrated from Kochu Pampa Hills, Pathanamthitta district, Kerala, India.

602. **Mohanan, N., Ravi, N., Kiran Raj, M.S. & Shaju, T. 2001.** "A new species of *Memecylon* (Melastomataceae) from India". *Nordic J. Bot.* 21: 493–494.

Abstract:- *Memecylon sivadasanii*, a new species of Melastomataceae from India is described and illustrated. The new species is allied to *M. angustifolium* and *M. rivulare*.

603. **Mohanan, N. & Shaju, T. 2004.** "On the rediscovery of *Pavetta wightii* Hook.f. (Rubiaceae), a rare and little known endemic species of Western Ghats". *J. Econ. Taxon. Bot.* 28: 78–80.

Abstract:- *Pavetta wightii* Hook.f. has been rediscovered after a long lapse of 75 years from Agasthyamala hills, Thiruvananthapuram district, Kerala. Present collection forms an extended distributional record for the taxon, which is again an addition to the flora of Kerala state. Detailed description with illustration is provided.

604. **Mohanan, N., Shaju, T., Kiran Raj, M.S. & Ravi, N. 1999.** "Rediscovery of *Poeciloneuron pauciflorum* Bedd. (Bonnetiaceae), an endemic and little known species

of Western Ghats, presumed to be extinct". *Ann. Forest.* 7: 87–89.

Abstract:- *Poeciloneuron pauciflorum* Bedd., has been rediscovered 70 years after its earlier collection from Agasthymala hills in Thiruvananthapuram district of Kerala. Detailed description with illustration is provided.

605. **Mohanan, N., Shaju, T., Rajkumar, G. & Pandurangan, A.G. 1997.** "Rediscovery of *Garcinia imberti* Bourd. (Clusiaceae), a little known endemic species of Western Ghats". *Indian J. Forest.* 20: 383–385.

Abstract:- *Garcinia imberti* Bourd. has been rediscovered after about a century. Detailed description with illustration is provided.

606. **Mohanan, N. & Sivadasan, M. 1996.** Some rare and endemic plants from Agasthyamala, Western Ghats in Kerala. In: Manilal, K.S. & Pandey, A.K. (Eds.), *Taxonomy and Plant Conservation*. CBS Publishers & Distributors, New Delhi. pp. 71–78.

607. **Mohanan, N. & Sivadasan, M. 2002.** *Flora of Agasthyamalai*. Bishen Singh Mahendra Pal Singh, Dehra Dun.

Abstract:- Nearly 1117 species of flowering plants belonging to 585 genera under 126 families were documented.

608. **Mudaliar, C.R. 1952.** "A new variety of *Cucurbita maxima*". *J. Bombay Nat. Hist. Soc.* 49: 242–243.

Abstract:- A new variety of *Cucurbita maxima*, viz., *C. maxima* var. *badagarensis* has been described from Badagara, Malabar district, Kerala.

609. **Mudaliar, C.R. & Kamath, H.S. 1954.** "Backwater flora of the West coast of South India". *J. Bombay Nat. Hist. Soc.* 52: 69-82.

Abstract:- The backwaters of Malabar and South Kanara districts from Chetwayi to Baindur were surveyed up to a distance of about 4 to 5 miles from the sea-coast. The flora has been compiled, taking into account those plants already recorded by other workers. The vernacular names of plants are also given with their economic importance wherever possible.

610. **Mukerjee, S.K. 1980.** "Sapindaceae of Peninsular India". *J. Econ. Taxon. Bot.* 1: 77–81.

Abstract:- The paper deals with the plants of the family Sapindaceae of Peninsular India. This gives an account of 22 species under 15 genera occurring in that region. A key to the genera is provided and key to species has also been given wherever necessary. Nomenclature has been revised and the distribution of every species in the area has been given.

611. **Mukherjee, A.K. 1985.** "Migration of temperate flora to Peninsular India". *J. Econ. Taxon. Bot.* 7: 361–364.

Abstract:- The presence of temperate floral elements on the hill tops of the Peninsular India possess a problem for a long time. Many phytogeographers had the opinion that these elements might have migrated from the temperate Himalaya. The theories put forward in this respect are not convincingly supported by proper arguments. The present paper put forward the geological, ecological and palaeogeographical supporting arguments to show that the temperate elements of the Peninsular India might have migrated from their place of origin in the South-East Asia via Assam and Rajmahal hills during the Cretaceous epoch; long before the upheaval of the Himalayas.

612. **Mukunthakumar, S. & Vijayan, K. 1991.** "Undescribed fruits of two species of *Calamus* L. (Arecaceae) from India". *J. Econ. Taxon. Bot.* 15: 482–484.
Abstract:- Fruits of two recently established new species of *Calamus*, viz., *C. vattayila* Renuka and *C. dransfieldii* Renuka undescribed from Kerala are described.

613. **Muraleedharan, P.K. & Anitha, V. 2000.** "The economic impact of *Mikania micrantha* on teak plantation in Kerala". *Indian J. Forest.* 23: 248–251.
Abstract:- *Mikania micrantha*, an aggressive invasive plant known for its rapid growth, is posing a serious threat to various forestry crops in Kerala. This weed, a perennial climber, affects both trees and subsistence crops either through cost escalation or through income reduction or both, in addition to other ecological damage. This paper attempts to examine the economic impact of *Mikania*, especially in terms of cost and income, on teak plantations in Kerala. The study, based on primary data, has observed that it has enhanced the cost of planting and has adversely affected the profitability of teak plantation in the study area.

614. **Muraleedharan, P.K., Jayasankar, B. & Rugmini, P. 1996.** "Some economic aspects of cane harvesting in Kerala". *J. Non-Timber Forest Products* 3: 93–99.
Abstract:- Cane collection provides seasonal livelihood opportunities for local communities living near the forests. In Kerala, the Forest Department has leased out the right of collection of cane to Kerala State Scheduled Castes and Schedules Tribes Development Federation, aiming to avoid middlemen and to provide more employment to the tribal people. But in the absence of permanent set up for collection to the Federation, a number of agencies are engaged for collection. Consequently significant part of collection charge offered by the Federation is taken away by the middlemen/agencies, thereby reducing the share of actual collectors. Due to variety of reasons present arrangement could not engage maximum number of tribals for collection. Another disadvantage of this is that there exits unsustainable collection practices, as the Forest Department is not able to supervise the collection activities. The study argues that harvesting policies adopted by the Forest Department should be reviewed and re-oriented.

615. **Muraleedharan, P.K., Krishnankutty, C.N. & Anitha, V. 2008.** "An assessment of bamboo resources in agroforestry home gardens of Kerala". *J. Non-Timber Forest Products* 15: 141–145.

Abstract:- This paper attempts to assess bamboo resources in agroforestry home gardens of Kerala during 2004–2005 and to examine the extent of its decline between 1987–1988 and 2004–2005. Total standing crop of bamboo in home gardens in Kerala was estimated as 13.61 million culms and its green weight was 0.331 million tones during 2004–2005. There are six species of bamboo, including reed, available in Agroforestry home gardens of which *Bambusa bambos* is the dominant species, accounting for 96 per cent. A comparison of the growing stock of bamboo during 1987–1988 and 2004–2005 indicates that there was a reduction in the growing stock 0.077 million tones (37 per cent) from 0.408 million tones during 1987–1988 to 0.331 million tones during 2004–2005. The study also highlights that due to massive harvesting of bamboo in recent past, availability of matured clumps was not high in the state. Some socio-economic reasons of the decline in Bamboo resources are also cited in the paper.

616. **Murthy, G.V.S. 2000.** "*Dillenia suffruticosa* (Griffith) Martelli (Dilleniaceae), a new addition to Indian flora". *Rheedea* 10: 77–80.

Abstract:- *Dillenia suffruticosa* (Griffith) Martelli (Dilleniaceae) has been reported for the first time for the Indian flora from Konni Reserve forest, Kerala. Earlier this species was known from Malay Peninsula, Sumatra, Java, Borneo and Philippines.

617. **Murugan, C., Chithra, V. & Murthy, G.V.S. 2008.** "Two additions to the Asteraceae (Compositae) of India". *Indian J. Forest.* 31: 449–450.

Abstract:- *Cyanthillium hookerianum* (Arn.) H. Rob. and *Vernonia pectiniformis* DC. subsp. *puncticulata* (DC.) Grierson (Asteraceae) are reported as addition to the flora of India from Tamil Nadu and Kerala, southern Western Ghats respectively. Short descriptions with illustrations and other details are provided here.

618. **Murugan, C., Chithra, V. & Murthy, G.V.S. 2008.** "*Vernonia wightiana* Arn. – An addition to Indian Asteraceae from Kerala". *J. Econ. Taxon. Bot.* 32: 557–558.

Abstract:- *Vernonia wightiana* Arn. (Asteraceae), a Sri Lankan species, is new distributional record for India from Silent Valley National Park, Kerala.

619. **Murugan, C. & Gopalan, R. 2003.** "A new species of *Eugenia* (Myrtaceae) from the Western Ghats, India". *Nordic J. Bot.* 23: 625–627.

Abstract:- *Eugenia shettyana*, is described and illustrated as a new species from the Vaguvarai shoal, Idukki district, Kerala, Western Ghats, India. The differences to similar taxa are discussed.

620. **Murugan, C. & Murthy, G.V.S. 2012.** "Three additions to the angiosperm flora of India". *Indian J. Forest.* 35: 119–122.

Abstract:- Three taxa, viz., *Blumea milnei* Seem (Asteraceae), *Strobilanthes viscosa* T. Anderson var. *viscosa* and *S. viscosa* T. Anderson var. *digitalis* (Nees) Clarke (Acanthaceae) are distributional records for India from the southern Western Ghats, India. The first species is from Kerala and last two varieties are from Tamil Nadu. A short description with illustrations and relevant notes is provided here for further collection and identification in field.

621. **Murugan, K., Ramachandran, V.S., Swarupanandan, K. & Remesh, M. 2008.** "Socio-cultural perspectives to the sacred groves and serpentine worship in Palakkad district, Kerala". *Indian J. Traditional Knowledge* 7: 455–462.

Abstract:- Sacred groves (*Kavukal*) are seen throughout Kerala, having varied forms, cultural practices and belief systems. The vegetation in the groves is highly varied, viz., mangroves, fresh water swamps, or other tropical forest types. Deities worshipped in the groves are also highly varied. One such type is the sacred grove dedicated to serpent God and serpent worship is considered to be one of the oldest and most prevalent forms of nature worship in the world. While serpent worship is seen throughout India, only in Kerala, people worship serpent in the sacred groves dedicated to them called *Sarpa kavu*. The study brought out three broad types of groves in Palakkad, viz., the primitive, the recent and the sacraments devoid of groves. Worship, rites and rituals associated with the grove include both primitive ones like *Noorum palum, Kalemezhuthupattu* and the *Vedic* types like *Sarpa bali* and *Payasa homam*. Beside these, the myths and beliefs associated with serpent worship are also discussed in detail. The study brings to light the existence of groves devoid of any vegetation, indicating that sacred groves can be relicts from a past socio-cultural epoch, which served to transmit the cultural heritage generations from pre-historic time. Conservation of natural resources in the past involved many *taboos*, rituals and other religious practices and sacred groves was such a traditional socio-cultural mechanism aiming at nature conservation that integrated socio-cultural aspects for conservation.

622. **Nadaf, A.B., Zanan, R.L. & Wakte, K.V. 2011.** "A new endemic species of Pandanaceae from India: *Pandanus palakkadensis*". *Kew Bull.* 66: 183–186.

Abstract:- *Pandanus palakkadensis*, a new species from Palakkad, Kerala state, India is described and illustrated. The new species can be easily distinguished from the other members of the genus it most closely resembles, *P. canaranus* Warb. and *P. furcatus* Roxb. in having a drupe with flat pileus, endocarp broadly truncate, concave on either side with distinctly elevated shoulders, a sharp, obliquely pointed stigma and cylindrical

fruit. This distinctive species is endemic to the region of collection and is classified as Critically Endangered (CR) based on IUCN Red List criteria.

623. **Nadanakunjidam, S. 2003.** "Traditional botanical knowledge of the tribals of Attapadi hills, Western Ghats on some economically useful plants". *Ethnobotany* 15: 6–10.

Abstract:- The present study reveals the usage of 51 plant species belonging to 48 genera and 39 families by the tribals of Attapadi hills in Western Ghats as: timber, fibre, fuel, fence, thatching grass, wild food, fodder, manure, insecticides, pesticides, piscicides, tooth brush, soap, hair and body wash, ornamental and in rituals, wicker works and in the manufacture of agricultural implements. Irulas, Mudugas and Kurumbas are the three tribal groups inhabiting these hills. The hamlets are managed by a regularly constituted hierarchy of social functionaries. The use of stem bark of *Callicarpa tomentosa* as mastigatory, fruit of *Casearia tomentosa* as piscicide, and latex of *Streblus asper* as milk curdling agent are some of the interesting observations.

624. **Nadanakunjidam, S. 2003.** "Ethnomedicinal observations from Attapadi Hills of Western Ghats". *J. Econ. Taxon. Bot.* 27: 732–740.

Abstract:- The tribals of Attapadi hills, a part of Western Ghats in Kerala state, use 48 plant species (including 1 gymnosperm and 2 pteridophytes) belonging to 47 genera under 35 families as herbal remedy for their ailments. These plants are used as antidote, anthelmintic, pain reliever, cooling tonic, emetic, general health vitalizer, lactogen, purgative and for skin diseases. The use of *Acalypha fruticosa* for cold and cough, *Cryptolepis buchananii* for dental caries, *Naringi crenulata* for ulcer and *Thespesia populnea* for fungal infection are some of the interesting observations.

625. **Nadanakunjidam, S. 2003.** "Some less known wild food plants of Attapadi Hills, Western Ghats". *J. Econ. Taxon. Bot.* 27: 741–745.

Abstract:- The present investigation revealed the use of 59 plant species belonging to 56 genera as wild food by the tribals of Attapadi Hills in Western Ghats of Palghat district in Kerala. The rhizomes, tubers, fruits, seeds, grains, leaves and young shoots of these plants are used for this purpose. The use of fruits of *Baccaurea courtallensis* (Onapazham) and the seed of *Cycas circinalis* (Eendhu) is specific to this region. *Dioscorea bulbifera* (Perukku), *D. pentaphylla* var. *pentaphylla* (Noorakizhanghu) and *D. oppositifolia* (Kavalakizhanghu) are also used as famine food.

626. **Nagendran, C.R. & Arekal, G.D. 1979.** "A new species of *Polypleurum* (Podostemonaceae) from India". *Bot. Not.* 132: 49–50.

Abstract:- A new species, viz., *Polypleurum munnarense* Nagendran & Arekal is described from Munnar, Kerala, S. India.

627. **Nair, K.K.N. 1982.** "A note on nomenclature of two Peninsular Indian plants". *J. Bombay Nat. Hist. Soc.* 79: 453–454.

Abstract:- The nomenclature of two endemic species of Peninsular India has been discussed. The correct name of *Oldenlandia wightii* Hook.f. is *Hedyotis wightii* (Hook.f.) K.K.N. Nair and *Reidia ovalifolia* Wt. is *Eriococcus ovalifolia* (Wt.) K.K.N. Nair.

628. **Nair, K.K.N. 1983.** "Southern Peninsular Indian endemic trees in the proposed Pooyamkutty Hydroelectric Project area". *J. Econ. Taxon. Bot.* 17: 265–273.

Abstract:- The paper records the occurrence of 15 endemic tree species of southern Peninsular India in the proposed Pooyamkutty Hydroelectric Project area, situated in the Western Ghats of central Kerala. Details on the narrow distribution range in which each of the species survives in South–West Peninsular India has been elucidated with notes on their occurrence within the project area and utilitarian aspects, wherever known.

629. **Nair, K.K.N. 1984.** "*Dalbergia* – Its diversity and distribution in Kerala". *Evergreen* 12: 11–12.

Abstract:- Seventeen species and one variety of the genus *Dalbergia* have been recorded from Kerala.

630. **Nair, K.K.N. 1985.** "Additions to Gamble's Flora of the Presidency of Madras (1915–1935) from the state of Kerala, Tamil Nadu, Karnataka and Andhra Pradesh up to 1982". *Indian J. Forest.* 8: 250–261.

Abstract:- Gamble's *Flora of the Presidency of Madras* (1915–1935) is an account of the flowering plants of Kerala, Tamil Nadu and major parts of Karnataka and Andhra Pradesh. Since the publication of this Flora, a number of plants have been reported from this region either as new to science or as new distributional records. The present catalogue is the result of an attempt to compile all those additions to *Flora of the Presidency of Madras* with original citation for new taxa and the publication reporting in the case of new distributional records. Thus a total of 581 taxa are listed here in alphabetical order.

631. **Nair, K.K.N. 1985.** "Identity and distribution of *Dalbergia benthamii* Prain and *D. rubiginosa* Roxb. (Fabaceae)". *J. Econ. Taxon. Bot.* 7: 561–565.

Abstract:- *Dalbergia benthamii* Prain (Fabaceae), so far known to be confined in its distribution to Hongkong in South China, is collected from a sacred grove in central Kerala which forms the first record of the occurrence of the species in the Indian subcontinent. Closely allied to and often confused with *D. rubiginosa* Roxb., the paper throws light on the identity and distribution of both the taxa.

632. **Nair, K.K.N. 1985.** "Two unrecorded species of *Dalbergia* L.f. (Fabaceae) in Kerala". *J. Econ. Taxon. Bot.* 7: 730–734.

Abstract:- While studying the herbarium materials of the genus *Dalbergia* L.f. from Kerala state represented in Madras Herbarium (MH), Coimbatore and herbarium of the University College, Trivandrum, few specimens belonging to the species *D. acaciifolia* Dalz. and *D. pseudo-sissoo* Miq. were located. In literature, these two species were not earlier recorded from Kerala. Description and illustrations of the two taxa are provided in the paper to facilitate their fiture collection and identification.

633. **Nair, K.K.N. 1986.** "Additions to Gamble's Flora of the Presidency of Madras (1915–1935) from the state of Kerala, Tamil Nadu, Karnataka and Andhra Pradesh up to 1982". *Indian J. Forest.* 9: 204–219.

Abstract:- Gamble's *Flora of the Presidency of Madras* (1915–1935) is an account of the flowering plants of Kerala, Tamil Nadu and major parts of Karnataka and Andhra Pradesh. Since the publication of this Flora a number of plants have been reported from this region either as new to science or as new distributional records. A total of 342 taxa are listed as additions to the Flora of the Presidency of Madras in alphabetical order.

634. **Nair, K.K.N. 1986.** "An amended description of *Dalbergia beddomei* Thoth. (Fabaceae) relocated from Silent Valley". *J. Econ. Taxon. Bot.* 8: 242–245.

Abstract:- This endemic species was first described in 1983 based on a collection made in 1885. Subsequently it was collected by the author from Silent Valley, Kerala, its type locality, during 1985. The paper provides an amended description of the species with illustrations and notes on its phenology and ecology.

635. **Nair, K.K.N. 1989.** "Genus *Dalbergia* L.f. (Fabaceae) in Kerala state". *J. Econ. Taxon. Bot.* 13: 567–590.

Abstract:- *Dalbergia* is represented in Kerala by 18 species and 1 variety of which *D. melanoxylon* Guill. & Perr. and *D. sissoo* Roxb. are introduced. On the remaining species, *D. acaciifolia* Dalz., *D. beddomei* Thoth., *D. horrida* (Dennst.) Mabberley, *D. horrida* var. *glabrescens* (Prain) Thoth. & K.K.N. Nair, *D. malabarica* Prain, *D. sissoides* Grah. ex Wt. & Arn. and *D. travancorica* Thoth. are endemic to Peninsular India and *D. benthamii* Prain earlier known from Hongkong is recorded from central Kerala for the first time. A taxonomic outline of the genus in Kerala is presented with illustrations and notes on the rare endemics.

636. **Nair, K.K.N. 1991.** "Phytogeographical analysis of the flora of the proposed Pooyamkutty Hydroelectric Project area in the Western Ghats of Kerala, India". *J. Econ. Taxon. Bot.* 15: 173–183.

Abstract:- The proposed Pooyamkutty Hydroelectric Project is situated in the Western Ghats of Kerala, at an altitude of 10°0' to 10°15' North, and longitude of 76°40' to 77°10'

East. The submergible and catchment areas of a chain of dams to be constructed for this project was florictically surveyed during 1985–87, as part of a multi-disciplinary study, to generate baseline data on various aspects that may contribute to the ecological degradation of the area once the project is implemented. During this survey, a total of 340 taxa of angiosperms were recorded from the submergible and the catchment areas of phase I of the project, namely the Peninsular dam and its power house, and 171 taxa from the Anamalai-Manali region in the upper ghat where the remaining 5 dams and 3 power houses are contemplated. The phytogeographical patterns of distribution of various taxa recorded from the two regions are elucidated in the paper with notes on the affinity and significance of the flora from a conservation point of view.

637. **Nair, K.K.N. 1992.** "*Mikania micrantha* H.B.K. – A noxious weed in the forests of Kerala". *Evergreen* 20: 13–14.

Abstract:- A noxious weed *Mikania micrantha* H.B.K. has spread widely in Pooyamkutty Hydroeletric project area of Idukki district, Kerala. The identity of this weed, ecology and how to control this weed are discussed in the present paper.

638. **Nair, K.K.N. 1992.** "South-West Indian endemic Psychotrias (Rubiaceae) in the proposed Pooyamkutty Hydroelectric Project area". *J. Econ. Taxon. Bot.* 16: 433–436.

Abstract:- In the submergible and catchment areas of the proposed Pooyamkutty Hydroelectric Project, situated in the Idukki district of Kerala state, there are seven species of South-West Indian endemic species of the genus *Psychotria* L. (Rubiaceae). Many of them are species not located after type collection and almost all of them are now very rare in the area. It is also significant to note that this part of the Western Ghats where the project is proposed to be implemented is found to be the largest habitat of endemic Psychotrias in the whole of the Western Ghats and also Peninsular India. The paper enumerates those south-west Indian endemic species of *Psychotrias* in the Pooyamkutty project area with notes on their distribution and conservation status.

639. **Nair, K.K.N. 1992.** "Flora of the proposed Pooyamkutty Hydroelectric Project area in the Western Ghats of Kerala, India". *J. Econ. Taxon. Bot.* 16: 605–636.

Abstract:- The Pooyamkutty Hydroelectric Project is proposed to be constructed in the Western Ghats of Idukki district in Kerala state and its submergible and catchment areas come within 10°0' to 10°15' North latitude and 76°40' and 76°10' East longitude, in the Periyar river basin. The project envisages the construction of six major dams, three supporting dams and four power houses, with a total of approximately 456 sq km of the forest area as its submergible and catchment coverage. As part of a pre-construction stage analysis to assess the present ecological make-up of the region, floristic surveys were

conducted during 1985–87 and the paper enumerates 340 and 171 taxa of angiosperms recorded from Pindimedu and Anamalai-Manali sectors of the project area.

640. **Nair, K.K.N. 1992.** "Endemic wild relatives of cultivated clove and rose-apple in the proposed Poooyamkutty Hydroelectric Project area". *J. Econ. Taxon. Bot.* 16: 653–656.
Abstract:- In the catchment and submergible areas of the six dams proposed to be constructed for the Pooyamkutty Hydroelectric Project, there are seven species of the Clove genus, *Syzygium* Gaertn. (Myrtaceae). Four of them, namely *Syzygium laetum* (Buch.-Ham.) Gandhi, *S. mundagam* (Bourd.) Chithra, *S. munronii* (Wt.) Chandr. and *S. occidentale* (Bourd.) Gandhi are species endemic to southern Peninsular India. The paper elucidates their distribution in south-west India and population status within the project area, pointing to their significance as endemic, wild germplasm relatives of the cultivars, *S. aromaticum* (L.) Merr. *et* Perr. (Clove) and *S. jambos* (L.) Alston (Rose-apple).

641. **Nair, K.K.N. 1996.** "A manual of non-wood forest produce plants of Kerala State, India". KFRI Research Report No. 115. pp 298.
Abstract:- The manual provides exhaustive details on selected 150 species of non wood or non-timber forest produce plants of Kerala State. The plant taxa dealt with belong to categories of products like medicine, spices and condiments, gums and resins, dyes, tanning materials, essential oils, detergents and cosmetics, narcotics and beverages, fibres and floss, food and fodder, fats and oils, paper and pulp, poisons and pesticides, cottage industries and few others with certain specific uses. For each taxon, the details provided are nomenclature, local names of plants and products, detailed plant descriptions, ecology and phenology, district-wise distribution in Kerala, world distribution and information on products extracted and their uses. For each taxon, distribution map for Kerala is provided and wherever illustrations are not referred to in the nomenclature part, a sketch of the plant is also given to facilitate easy identification.

642. **Nair, K.K.N. 1997.** "A contribution to the bibliography on the angiosperm flora of Kerala state, India". *J. Econ. Taxon. Bot.* 21: 441–462.
Abstract:- As per precursor to the preparation of 'Kerala Flora', a complete list of taxonomic references pertaining to the flowering plants of Kerala state, India, is presented in this paper. This cover, apart from references gathered during this search, several other bibliographies published earlier for this part of the country or for India as a whole. This bibliography will serve as a single, ready reference, to throw light on the present status of knowledge on the angiosperm flora of Kerala. Coupled with the enumeration of all the plant taxa added to Gamble's *Flora of the Presidency of Madras* (1915–35) from the South Indian states of Kerala, Karnataka, Tamil Nadu and Andhra Pradesh, published by

the author earlier, this bibliography will facilitate, to a great extent, in bringing out an up-to-date and complete flora of the State of Kerala which is an immediate necessity. Altogether 544 references are given in this bibliography.

643. **Nair, K.K.N. & Basha, S.C. 1995.** "Centres in Kerala rich in endemic angiosperms as potential sites for biodiversity preservation". *J. Econ. Taxon. Bot.* 19: 719–734.

Abstract:- Kerala state, situated in the Western Ghats region of Peninsular India, is the natural abode for a much diverse flora, very rich in endemics. About 6.5% of the Western Ghat endemic angiosperms are strictly confined to Kerala in their distribution. In addition to this, there are several other Western Ghat endemic angiosperms reported for the state which enjoy more wider distribution in the Western Peninsular India. Majority of the endemic angiosperms of Kerala are 'paleoendemics' or neoendemics'. Conservation oriented management strategies to protect and regenerate the endemic angiosperms in Kerala, needs data on their present availability in the state, to facilitate their relocation. In this context, it is also essential to understand their distribution patterns within the state, habitat preference, population structure and also ecological constraints rendering them endemic. In almost all cases, such details are lacking or very sparse, pausing practical problems in chalking out suitable conservation programmes – *in situ* or *ex situ* to preserve and multiply them. Therefore, in this paper, an attempt has been made to analyse the distribution patterns of the endemic angiosperms of Kerala with a view of identify centres of endemic concentration within the state. Protection of such areas as 'gene sanctuaries' can facilitate the conservation of endemics and also biodiversity which are interlinked.

644. **Nair, K.K.N. & Jayakumar, R. 1998.** "Ethnobotany of Muthuva tribe in the context of biodiversity rehabilitation at Chinnar Wildlife Sanctuary, Western Ghats of India". *J. Non-Timber Forest Products* 5: 159–172.

Abstract:- Chinnar Wildlife Sanctuary lies within 10°15' and 10°22' North latitude and 77°08' and 77°18' East longitude, in Devikulam taluk of Idukki district, Kerala state. The sanctuary covers an area of 90.44 sq km in the Western Ghats of India and was established in 1984. The major vegetation types of the area are dry deciduous forests, thorny scrubs, riparian forests, shola forests and grasslands. The sanctuary is also the abode of 11 tribal settlements of which 4 are of Hill–Pulayas and 7 are of Muthuvas. Muthuva settlements are Thayannan-kudi, Iruttala-kudi, Pathu-kudi, Olla-vayal, Oli-kudi and Mangappara, where a total of 642 Muthuvas reside at present. Traditionally, Muthuvas were hunter-gatherers, fully dependent on the forest resources of the area. Over-exploitation of several species by them coupled with degredation of the forests of the area due to various factors,

the plant diversity of the sanctuary had drastically declined. In order to rehabilitate the biodiversity of the area by artificial regeneration of the species excessively exploited and rendered rare by the tribals, a study was undertaken to identify all the ethnobotanical species related to the traditional life of the Muthuvas. The survey had revealed that 83 species of the wild plants are exploited by the tribals at present for their domestic use or for marketing. They also cultivate Lemon grass (*Cymbopogon flexuosus* Wats.) on a large scale in addition to few other crops for sale of their products to meet their financial needs. Among the 83 ethnobotanical species of Muthuvas in the sanctuary, few are excessively exploited by them and based on their role in the ecosystem functioning and also social linkage with the tribals, they have been designated as key-stone species in the context of biodiversity rehabilitation. The paper deals with the traditional lifestyle of Muthuvas, ethnobotanical species, their habitat, part used, tribal uses, distribution in different settlement areas and also key-stone species identified for artificial regeneration and rehabilitation of the biodiversity of the sanctuary.

645. **Nair, K.K.N. & Jayakumar, R. 1999.** Ethnobotany of Hill–Pulaya tribe in the context of biodiversity rehabilitation at Chinnar Wildlife Sanctuary, Western Ghats of India". *J. Econ. Taxon. Bot.* 23: 431–449.

Abstract:- Chinnar Wildlife Sanctuary lies within 10°15' and 10°22' North latitude and 77°08' and 77°18' East longitude, in Devikulam taluk of Idukki district, Kerala state. The sanctuary covers an area of 90.44 km^2 in the Western Ghats of India and was established in 1984. The major vegetation types of the area are dry deciduous forests, thorny scrbs, riparian forests, shola forests and grasslands. The sanctuary is also the abode of 11 tribal settlements of which 4 are of Hill-Pulayas and 7 are of Muthuvas. Hill-Pulayas settlements are Champakad, Alam-patti, Pala-patti and Ichampatti, where a total of 637 Hill–Pulayas reside at present. The survey revealed that 113 species of wild plants are exploited by the tribals at present for their domestic use or for marketing. The paper deals with the traditional lifestyle of Hill-Pulayas, ethnobotanical species, their habit, parts used, tribal uses, distribution in different settlement areas and also key-stone species identified for artificial regeneration and rehabilitation of the biodiversity of the sanctuary.

646. **Nair, K.K.N. & Jayakumar, R. 2000.** "Ethnobotany of Hill-Pulaya and Muthuva tribes in Chinnar Wildlife Sanctuary, Western Ghats of India". *J. Non-Timber Forest Products* 7: 16–45.

Abstract:- Chinnar Wildlife Sanctuary is located in Idukki district of Kerala state, India. The sanctuary covers an area of 90.44 km^2 in the Western Ghats and forms part of the Idukki-Eravikulam Wildlife Division. The characteristic vegetation type of the area is the

dry deciduous forests with patches of thorny scrubs, grasslands, riverine forests and also shoal forests, depending on location and altitude factors. The sanctuary is also the abode of two tribal groups, namely Hill-Pulayas and Muthuvas, who stay in 11 settlements and their total population comprises of 1279 individuals. The paper deals with the traditional life and dependence of the tribals on the natural flora of the area and enumerates 140 species of ethnobotanical importance in the sanctuary. For each of the species, up to date nomenclature, tribal name, part(s) exploited, tribal uses and distribution pattern within the sanctuary in relation to the tribal colonies are given. In conclusion, major ethnobotanical species of Hill-Pulayas and Muthuvas are identified as key-stone species based on their social and ecological significance in the context of preservation of the traditional lifestyle of the tribals and conservation of the floral diversity of the sanctuary.

647. **Nair, K.K.N. & Jayakumar, R. 2008.** "Phytogeography, endemism and affinities of the flora of new Amarambalam Reserve Forests in the Western Ghats of India". *Indian J. Forest.* 31: 85–94.

Abstract:- Floristic analysis of New Amarambalam Reserve Forest, situated in the Western Ghats of India and forming part of Nilgiri Biosphere Reserve, based on surveys conducted during 1997–2000, has been presented in the paper. The forest area extents to about 265 km^2, at an altitudinal range of 40–2600 m above msl. The area is the abode of almost all the forest types of the Indian Peninsula, preserved in an almost pristine state. Intensive floristic survey of the area recorded a total of 1135 taxa of angiosperms, which belonged to 136 families and 644 genera. The flora is composed of 78 per cent dicotyledons and 22 per cent monocotyledons. Phytogeographical analysis of the flora revealed very high endemism, and almost 21 per cent of the total flowering plants recorded from there were those endemic to Western Ghats of India. Among them, 12.5 per cent were species restricted to southern part of the Western Ghats. Peninsular Indo-Sri Lankan elements represented 15 per cent of the total flora, which demonstrates the affinity of the region with that of the adjacent ocean Island. Regarding the pattern of distribution of various species outside India, 66 per cent of them were of Indo-Malayan and South and South-East Asian range and 30 per cent of the total flora were composed of pluri-regional species or wides. There were only four per cent taxa in the flora, which are either exotic weeds or escapes from cultivation, showing the less disturbed status of the vegetation.

648. **Nair, K.K.N. & Soniya, E.V. 1990.** "Further additions to Gamble's Flora of the Presidency of Madras (1951–1935) from the states of Kerala, Tamil Nadu, Karnataka and Andhra Pradesh". *Indian J. Forest.,* Addit. Ser. 1: 125–144.

Abst: An enumeration of taxa added to Gamble's 'Flora of the Presidency of Madras'

from the states of Kerala, Tamil Nadu, Karnataka and Andhra Pradesh since 1982 till date, is given.

649. **Nair, K.K.N., Yesodharan, K. & Unni, K.K. 1997.** "Flora of KFRI campuses, Peechi, Nilambur and Velupadam in Trichur and Malappuram Districts, Kerala State". KFRI Research Report No. 124. pp. 106.

Abstract:- The three campuses of Kerala Forest Research Institute at Peechi (Headquarters), Nilambur (Subcentre) and Velupadam (Field Research Station) cover an area of 118.96 ha in Trichur (Thrissur) and Malappuram districts, Kerala State. In total, the flora of the three campuses is composed of 565 taxa of angiosperms and 3 species of gymnosperms. The angiosperm flora is of 404 taxa of dicotyledons and 161 species of monocotyledons. The flora enumerates both natural elements and also the introduced or cultivated species growing in the three campuses. For each of the natural element of the flora, up-to-date nomenclature, diagnositic description, flowering and fruiting period and brief note on the occurrence in the campus(es) are given. For introduced or cultivated species appended towards the end of each family, up-to-date name and details of their distribution in the campus(es) are provided. Among the total 568 taxa, about 150 are tree species, excluding several bamboos, arborescent in habit. A campus-wise analysis of the flora had shown that in Peechi campus there are 438 taxa of angiosperms and 3 species of gymnosperms. Out of the total 441 taxa, 356 are natural elements of the flora and the remaining 65 taxa are introduced or cultivated species. From Nilambur campus, the total number of species recorded is 268, of which 202 taxa are of natural occurrence and 66 species are introductions. At Velupadam, out of the total 202 taxa reported, 157 species are natural elements of the flora and the remaining 45 taxa are either introduced, cultivated or grown as part of the bamboo germplasm bank.

650. **Nair, K.N., Jayakumar, R. & Prathapachandran, R. 1997.** "Rediscovery of *Arisaema psittacus* (Araceae), a little known endemic and threatened species". *Rheedea* 7: 101–106.

Abstract:- *Arisaema psittacus*, a narrow endemic and threatened aroid species has been rediscovered from Mannavan Shola, one of its type localities, in the High Ranges of Idukki district of Kerala state, after it was first discovered by E. Barnes in 1937. A detailed description together with illustrations are provided to facilitate easy identification of this little known species.

651. **Nair, K.N. & Nayar, M.P. 1990.** "A new variety of *Atalantia racemosa* Wight (Rutaceae) from South India". *Indian J. Forest.* 13: 69–70.

Abstract:- A new variety of *Atlantia racemosa* Wight, viz., *A. racemosa* Wight var.

bourdillonii Narayanan & Nayar has been described from Tamil Nadu, Kerala and Karnataka.

652. **Nair, M.C. 2008.** "*Cryptoleptodon* Renauld & Cardot (Leptodontaceae: Bryophyta), a new genus record for Western Ghats, Peninsular India". *J. Indian Bot. Soc.* 87: 287–288.
Abstract:- The bryophyte genus *Cryptoleptodon* Renauld & Cardot with the species *C. pluvinii* (Brid.) Broth. of the family Leptodontaceae is reported for the first time from Parambikulam Wildlife Sanctuary, Palakkad district, Kerala, Western Ghats of Peninsular India.

653. **Nair, M.C. & Madhusoodanan, P.V. 2001.** "Contribution to the bryophyte flora of Eravikulam National Park, Kerala". *J. Econ. Taxon. Bot.* 25: 569–576.
Abstract:- A preliminary exploration for bryophytes in Eravikulam National Park, Idukki district, Kerala, situated in the high altitude mountainous areas with grassland shola vegetation, revealed 16 genera with 19 species of liverworts and mosses. These include 6 new records for Kerala.

654. **Nair, M.C. & Madhusoodanan, P.V. 2002.** "Studies on the bryophyte flora of Kerala (South India) – An introduction". *J. Econ. Taxon. Bot.* 26: 697–708.
Abstract:- The work on bryophytes of Kerala state has been reviewed in chronological order. The need for detailed study is emphasized.

655. **Nair, M.C. & Madhusoodanan, P.V. 2006.** "A preliminary checklist of bryophytes of Vellarimala in the Western Ghats of Kerala". *Indian J. Forest.* 29: 191–196.
Abstract:- A checklist of bryophytes collected from the Vellarimala situated in the Western Ghats mountains of Kozhikode district, Kerala is presented. Preliminary survey shows the occurrence of 53 species of mosses and leafy liverworts. The need for conservation is also discussed.

656. **Nair, M.C. & Rajesh, K.P. 2009.** "*Notoscyphus pandei* Udar & Kumar (Jungermanniaceae, Marchantiophyta), an endemic Indian species from the Western Ghats of Kerala, India". *J. Econ. Taxon. Bot.* 33: 342–344.
Abstract:- *Notoscyphus pandei* Udar & Kumar an endemic species of Jungermanniaceae is reported for the first time from the Western Ghats of Kerala state.

657. **Nair, M.C., Rajesh, K.P. & Madhusoodanan, P.V. 2006.** "Additions to the bryoflora of Peninsular India". *J. Econ. Taxon. Bot.* 30: 221–224.
Abstract:- The present paper is an illustrated account of three species of pleurocarpic mosses, viz., *Neckeropsis fimbriata* (Harv.) M. Fleisch. (Neckeraceae), *Ectropothecium sikkimense* (Renauld & Cardot) Renauld & Cardot and *Vesicularia vesicularis* (Schwaegr.) Broth. (Hypnaceae) reported as new records for Peninsular India from

Wayanad district, Kerala.

658. **Nair, M.C., Rajesh, K.P. & Madhusoodanan, P.V. 2007.** "Three new bryophyte records for Peninsular India". *Indian J. Forest.* 30: 349–352.

Abstract:- An illustrated account of three pleurocarpic mosses, viz., *Calyptothecium wightii* (Mitt.) M. Fleisch. (Neckeraceae), *Fabronia schensiana* C. Muell. (Fabroniaceae) and *Pelekium gratum* (P. Beauv.) Touw (Thuidiaceae) recorded for the first time for Peninsular India from Wayanad district, Kerala is given.

659. **Nair, M.C., Rajesh, K.P. & Madhusoodanan, P.V. 2008.** "*Pinnatella minuta* (Mitt.) Broth. (Neckeraceae: Bryopsida) – A new record for Kerala, South India". *J. Econ. Taxon. Bot.* 32: 547–549.

Abstract:- An illustrated account of *Pinnatella minuta* (Mitt.) Broth. of Neckeraceae, reported for the first time for the Indian subcontinent from Tholpetty range, Wayanad Wildlife Sanctuary, Kerala, is given.

660. **Nair, M.C., Rajesh, K.P. & Madhusoodanan, P.V. 2009.** "*Lindbergia* Kindb. (Leskeaceae: Bryopsida) – A genus new to Peninsular India". *Indian J. Forest.* 32: 295–296.

Abstract:- The genus *Lindbergia* Kindb. is reported here with the species *L. koelzii* R.S. Williams as new to Peninsular India from Wayanad district, Kerala. Earlier this species was known to occur in Himalaya.

661. **Nair, M.C., Rajesh, K.P. & Madhusoodanan, P.V. 2009.** "*Groutiella tomentosa* (Hornsch.) Wijk & Margad. (Orthotrichaceae: Bryopsida), a new record for Peninsular India". *Indian J. Forest.* 32: 471–472.

Abstract:- *Groutiella tomentosa* (Hornsch.) Wijk & Margad. of Orthotrichaceae is reported for the first time for the Peninsular India from Kerala.

662. **Nair, M.R., Nayar, N.M. & Sahadevan, P.C. 1964.** "On the occurrence of *Oryza* species in South-Western India and its significance". *Curr. Sci.* 33: 515–517.

Abstract:- Of the 27 species in the genus *Oryza*, as many as 7 species have been found to occur in India. In South-Western India, in the area primarily covered by Kerala, the occurrence of 4 species, viz., *O. granulata, O. coarctata, O. malampuzhensis* and the cultivated species *O. sativa* have been recorded so far. Collections of one more species, viz., *O. officinalis* are at CAL from South Canara and Courtallam.

663. **Nair, N.C. 1960.** "*Brucea amarissima* (Lour.) Merr. – A new record for South India". *J. Bombay Nat. Hist. Soc.* 57: 237–238.

Abstract:- *Brucea amarissima* (Lour.) Merr. is recorded for the first time for South India from Perunnai, Changanacherri, Kerala. Earlier this species was known to occur in Assam,

Andaman Islands, Tennaserim, Singapore, Borneo, Sumatra, Java, Philippines Islands, S. China and Australia.

664. **Nair, N.C. 1962.** "*Physalis longifolia* Nutt., a new record for Kerala state". *J. Bombay Nat. Hist. Soc.* 59: 323–324.
Abstract:- *Physalis longifolia* Nutt., an American weed is reported here for the first time from Changanacherry, Kerala. Previously this species was known to occur in Bombay and Andhra Pradesh.

665. **Nair, N.C. 1964.** "*Mimosa invisa* Mart. (Mimosaceae) – A new record for India". *J. Bombay Nat. Hist. Soc.* 61: 469–471.
Abstract:- *Mimosa invisa* Mart., a native of Tropical America, has been reported for the first time for India from Perunna, Changanacherry, Kerala. A key to the seven species of *Mimosa* is also given.

666. **Nair, N.C. 1972.** "*Amaranthus polygonoides* Linn.: A new record for south India". *J. Bombay Nat. Hist. Soc.* 69: 687.
Abstract:- *Amaranthus polygonoides* L. has been recorded for the first time for south India from N.S.S. Hindu College, Perunna in Changanacherry, Kerala. It was previously reported only from Osmanabad.

667. **Nair, N.C. 1991.** Endemism on the Western Ghats with special reference to *Impatiens* Linn. In: Karunakaran, C.K. (Ed.), *The proceedings of the symposium on rare, endangered and endemic plants of the Western Ghats*. Kerala Forest Department, Thiruvananthapuram. pp. 93–102.
Abstract:- A total of 51 genera are considered to be endemic to the Western Ghats of which 43 are monotypic. The family Poaceae have 11 endemic genera and Acanthaceae 7.

668. **Nair, N.C. & Bhargavan, P. 1980.** "*Pteris dactylina* Hook. from Silent Valley – A new record for Peninsular India". *J. Bombay Nat. Hist. Soc.* 77: 356–357.
Abstract:- The present record of *Pteris dactylina* Hook. from the Dam site in Silent Valley, Kerala, is another addition to the Fern Flora of Peninsular India and it is certainly one among the threatened taxa of ferns from the area in view of the proposed Silent Valley Project. Earlier this species was reported from Sikkim and Meghalaya.

669. **Nair, N.C. & Bhargavan, P. 1982.** "Recent finds of some rare and little known plants from Silent Valley and its close vicinity". *J. Econ. Taxon. Bot.* 3: 295–302.
Abstract:- Rare plants, such as *Antistrophe serratifolia* (Bedd.) Hook.f. (Myrsinaceae), *Dichanthium filiculme* (Hook.f.) Jain *et* Deshpande (Poaceae), *Eulophia emilianae* Sald. (Orchidaceae), *Ipomoea pileata* Roxb. (Convolvulaceae), *Peucedanum anamallayense*

Clarke (Umbelliferae), *Reissantia grahamii* (Wight) Ding Hou (Celastraceae), *Symplocos macrocarpa* Wight ex Clarke subsp. *kanarana* (Talbot) Noot. and *Symplocos pulchra* Wight subsp. *pulchra* (Symplocaceae) are reported from Silent Valley and its close vicinity. The flowers of *Symplocos macrocarpa* Wight ex Clarke subsp. *kanarana* (Talbot) Noot. are unknown even today and therefore more intensive explorations to collect them are called for. The fruits of *Symplocos pulchra* Wight subsp. *pulchra* are described for the first time.

670. **Nair, N.C. & Bhargavan, P. 1985.** "Notes on four interesting species of flowering plants from Kerala". *J. Econ. Taxon. Bot.* 6: 709–710.
Abstract:- *Ardisia gardneri* Clarke var. *zeylanica* Trimen is a new record for India from Palghat district Kerala. Extended distribution of *Dysoxylum filiciforme* (Wight) Gamble, *Podostemon subulatus* Gardn. and *Willisia selaginoides* (Bedd.) Warming ex Willis is given along with other notes.

671. **Nair, N.C. & Bhargavan, P. 1985.** "Recent finds of five rare or little known pteridophytes from Silent Valley and neighbourhood". *J. Econ. Taxon. Bot.* 6: 267–270.
Abstract:- Notes on five pteridophytes – *Lindsaea malabarica* (Bedd.) Baker ex Christ., *Macrothelypteris ornata* (Wall. ex Bedd.) Ching, *Pteris geminata* Wall. ex Ag., *Pyrrosia ceylanica* (Gies.) Sledge and *Tectaria paradoxa* (Fée) Sledge from Silent Valley are provided. They are very poorly represented in Indian Herbaria.

672. **Nair, N.C., Chandrabose, M. & Srinivasan, S.R. 1980.** "A further contribution to the weed flora of South India". *Indian J. Forest.* 3: 56–59.
Abstract:- The paper enumerates 49 weeds not recorded in "*A Handbook of some South Indian Weeds*" by Tadulingam & Venkatanarayana revised and enlarged by Rajasekhara Mudaliar & Sakharam Rao (1955). Data on the frequency of distribution, flowering and fruiting period have also been given for each species. The number of species recorded from Kerala is 18.

673. **Nair, N.C., Chandrabose, M. & Srinivasan, S.R. 1980.** "A further contribution to the weed flora of South India". *Indian J. Forest.* 3: 111–115.
Abstract:- The paper enumerates 79 weeds not recorded in "*A Handbook of some South Indian Weeds*" by Tadulingam & Venkatanarayana revised and enlarged by Rajasekhara Mudaliar & Sakharam Rao (1955). Data on the frequency of distribution, flowering and fruiting period have also been given for each species. The number of species recorded from Kerala is 14.

674. **Nair, N.C., Chandrabose, M. & Srinivasan, S.R. 1980.** "A further contribution to the weed flora of South India". *Indian J. Forest.* 3: 231–237.

Abstract:- The paper enumerates 108 weeds not recorded in "*A Handbook of some South Indian Weeds*" by Tadulingam & Venkatanarayana revised and enlarged by Rajasekhara Mudaliar & Sakharam Rao (1955). Data on the frequency of distribution, flowering and fruiting period have also been given for each species. The number of species recorded from Kerala is 19.

675. **Nair, N.C. & Ghosh, S.R. 1973.** "*Ophioglossum gramineum* Willd. var. *gramineum* in Kerala". *Bull. Bot. Surv. India* 15: 130–131.

Abstract:- *Ophioglossum gramineum* Willd. var. *gramineum* has been reported for the first time from Sasthomkotah, Quilon district, Kerala. Earlier this species was known to occur in Bombay, Tamil Nadu, Uttar Pradesh, Madhya Pradesh and Andhra Pradesh.

676. **Nair, N.C. & Ghosh, S.R. 1976.** "A new species of *Pteris* from Peninsular India". *J. Indian Bot. Soc.* 55: 38–40.

Abstract:- A new species of *Pteris*, viz., *P. furunculata* has been described from Ponmudi, Trivandrum district, Kerala. This species is closely allied to *P. quadriaurita* Retz. and *P. confusa* T.G. Walker.

677. **Nair, N.C., Ghosh, S.R. & Bhargavan, P. 1988.** "Fern-allies and ferns of Kerala, India – Part I". *J. Econ. Taxon. Bot.* 12: 171–209.

Abstract:- The present work was based on earlier collections housed in the Central National Herbarium, Howrah (CAL) and the Madras Herbarium, Coimbatore (MH) as well as field collections made from Kerala from 1968 to 1983. A total account of 43 species and two varieties under 13 genera of fern and fern-allies have been presented.

678. **Nair, N.C., Ghosh, S.R. & Bhargavan, P. 1992.** "Fern-allies and ferns of Kerala – Part II". *J. Econ. Taxon. Bot.* 16: 251–282.

Abstract:- The present work on fern-allies and ferns of Kerala is based on earlier collections housed in the Central National Herbarium, Howrah (CAL) and the Madras Herbarium, Coimbatore (MH) as well as field collections made from this state from 1968 to 1983. A taxonomic account of 61 species belonging to 17 genera belonging to 10 families has been presented.

679. **Nair, N.C., Ghosh, S.R. & Bhargavan, P. 1992.** "Fern-allies and ferns of Kerala – Part III". *J. Econ. Taxon. Bot.* 16: 501–550.

Abstract:- The present work on fern-allies and ferns of Kerala is based on earlier collections housed in the Central National Herbarium, Howrah (CAL) and the Madras Herbarium, Coimbatore (MH) as well as field collections in this state from 1968 to 1983. A taxonomic account of 103 species belonging to 35 genera under 10 families has been presented.

680. **Nair, N.C., Ghosh, S.R. & Bhargavan, P. 1994.** "Fern-allies and ferns of Kerala – Part IV". *J. Econ. Taxon. Bot.* 18: 449-476.
Abstract:- The present work on fern-allies and ferns of Kerala is based on earlier collections housed in the Central National Herbarium, Howrah (CAL) and the Madras Herbarium, Coimbatore (MH) as well as field collections in this state from 1968 to 1983. A taxonomic account of 41 species and 3 varieties belonging to 22 genera under 7 families has been presented.

681. **Nair, N.C. & Mohanan, C.N. 1981.** "On the rediscovery of four threatened species from the sacred groves of Kerala". *J. Econ. Taxon. Bot.* 2: 233–235.
Abstract:- The present paper reports four threatened plant species from two sacred groves in Quilon district, Kerala. *Buchanania lanceolata* Wight and *Syzygium travancoricum* Gamble are recollected for the first time after the type collections. *Blepharistemma membranifolia* (Miq.) Ding Hou and *Pterospermum reticulatum* Wight & Arn. have been collected after more than 75 years since the last collection.

682. **Nair, N.C. & Mohanan, C.N. 1982.** "*Diospyros hirsuta* L.f. and *Thrixspermum album* (Ridl.) Shltr. – Two new records from Peninsular India". *J. Econ. Taxon. Bot.* 3: 285–286.
Abstract:- *Diospyros hirsuta* L.f. so far known only from Sri Lanka is reported for the first time for India from Quilon district Kerala. *Thrixspermum album* (Ridl.) Schltr. is recorded for the first time from the mainland of India from Kerala.

683. **Nair, N.C. & Mohanan, C.N. 1982.** "Notes on four endemic and rare taxa from Kerala". *J. Econ. Taxon. Bot.* 3: 575–577.
Abstract:- Notes on four endemic and rare taxa from Kerala, viz., *Calamus travancoricus* Bedd. ex Becc. & Hook.f., *Litsea travancorica* Gamble, *Palaquium bourdillonii* Brandis and *Vernonia beddomei* Hook.f. are provided. The first is recorded after a lapse of 90 years, the second after 68 years, the third after 84 years and last after 60 years. All the species are very rare in the localities mentioned and therefore deserve protection.

684. **Nair, N.C., Mohanan, C.N. & Ansari, R. 1982.** "*Oberonia longibracteata* Lindl. – An addition to the orchid flora of India". *J. Econ. Taxon. Bot.* 3: 623–624.
Abstract:- *Oberonia longibracteata* Lindl. so far known only from Sri Lanka is reported for the first time for India from Sivagiri hills near Elatheri, Idukki district, Kerala.

685. **Nair, N.C., Mohanan, C.N. & Sreekumar, P.V. 1982.** "*Stachytarpheta cayennensis* (L.C. Rich.) Schau. – A new record for India and with a key to the Indian species". *J. Bombay Nat. Hist. Soc.* 79: 230–232.
Abstract:- *Stachytarpheta cayennensis* (L.C. Rich.) Schau. has been recorded for the first time for India from Placherry, Ranni R.F., Quilon district, Kerala. Earlier this species was

known to occur in Tropical America and Africa. A key of the Indian species of *Stachytarpheta* has also given.

686. **Nair, N.C. & Nair, V.J. 1964.** "*Boerhavia punarnava* Saha *et* Krishnam.: A new record for Kerala state". *J. Bombay Nat. Hist. Soc.* 61: 216–217.
Abstract:- *Boerhavia punarnava* Saha *et* Krishnam. is reported here for the first time for the state of Kerala from Cochin. This species was earlier known to occur in Pondicherry.

687. **Nair, N.C., Nair, V.J. & Ansari, R. 1980.** "Notes on some rare plants from South India". *Bull. Bot. Surv. India* 22: 205–207.
Abstract:- Some rare plant species, viz., *Fuirena trilobites* C.B. Clarke, *Hedyotis bourdillonii* (Gamble) Rolla Rao & Hemadri, *Isachne gracilis* C.E. Hubbard and *Nervilia crispata* (Bl.) Schltr. have been rediscovered from South India. The first species is reported from Tamil Nadu and last three species from Kerala.

688. **Nair, N.C. & Sreekumar, P.V. 1985.** "A new species of *Ischaemum* Linn. (Poaceae) from Kerala, India". *Blumea* 30: 385–387.
Abstract:- *Ischaemum tadulingamii* allied to *I. commutatum* Hackel has been described as a new species from Eravikulam National Park, Idukki district of Kerala, India.

689. **Nair, N.C., Sreekumar, P.V. & Nair, V.J. 1981.** "Some rare and interesting plants from Kerala state (India)". *J. Econ. Taxon. Bot.* 2: 223–225.
Abstract:- Eight rare and interesting plants from Kerala are reported. *Bergia capensis* L. is known earlier only from Carnatic. *Bonamia semidigyna* (Roxb.) Hallier f. has not been collected after 1928. *Crotalaria willdenowiana* DC. has not been discovered after 1914. There is no earlier report of *Hydrocera triflora* Wight & Arn. from Kerala. No earlier collection from Kerala of *Mucuna gigantea* DC. is present in MH. So also is the case with *Phaseolus adenanthus* Meyer and *Psychotria sermentosa* Blume. No collection of *Strychnos minor* Dennst. is known after Bourdillon's collection in 1895. Variations from the earlier description of *Psychotria sermentosa* Blume and *Hydrocera triflora* Wight & Arn. are pointed out.

690. **Nair, N.C., Sreekumar, P.V. & Nair, V.J. 1981.** "*Zenkeria jainii* – A new species of Poaceae from Kerala". *J. Bombay Nat. Hist. Soc.* 78: 352–354.
Abstract:- A new species, viz., *Zenkeria jainii* allied to *Z. sebastinei* Henry & Chandrab. is described from Eravikulam Sanctuary, Idukki district, Kerala.

691. **Nair, N.C., Sreekumar, P.V. & Nair, V.J. 1983.** "*Dimeria keralae* – A novelty from Kerala, India". *J. Bombay Nat. Hist. Soc.* 80: 626–629.
Abstract:- A new species, viz., *Dimeria keralae* allied to *D. santapaui* Almeida is described from Paramba, Cannanore district, Kerala.

692. **Nair, N.C. & Srinivasan, S.R. 1982.** "*Erechtites valerianifolia* (Wolf) DC. and *Crassocephalum crepidioides* (Benth.) S. Moore (Asteraceae): Their identity and distribution in south India". *J. Econ. Taxon. Bot.* 3: 289–294.
Abstract:- *Erechtites valerianifolia* (Wolf) DC. and *Crassocephalum crepidioides* (Benth.) S. Moore are often confused. Distinguishing characters of the two taxa are given for easy determination. Both the species occur in south India (Kerala, Tamil Nadu, Kerala). Photographs of the species involved are provided.

693. **Nair, N.G. 1986.** "Endemic trees of Western Ghats: *Parinarium travancoricum* Bedd. (Rosaceae)". *Evergreen* 14: 16.
Abstract:- Diagnostic characters, vernacular names, distribution, wood character of *Parinarium travancoricum* Bedd. have been given.

694. **Nair, N.G. 1987.** "Endemic trees of Western Ghats: *Ormosia travancorica* Bedd. (Fabaceae)". *Evergreen* 15: 14.
Abstract:- Diagnostic characters, vernacular names, distribution, wood character of *Ormosia travancorica* Bedd. have been given.

695. **Nair, N.G. 1989.** "Endemic trees of Western Ghats: *Humboldtia unijuga* Bedd. (Caesalpiniaceae)". *Evergreen* 17: 2.
Abstract:- Diagnostic characters, vernacular names, distribution, wood character of *Humboldtia unijuga* Bedd. have been given.

696. **Nair, N.G & Sasidharan, N. 1985.** "Distribution of important forest tree species in Kerala (Central Circle)". KFRI Research Report No. 28. pp. 31.
Abstract:- Habit, habitat and distribution are described for 108 well known and less well known indigenous tree species based on field observations and herbarium studies.

697. **Nair, P.K.K. 1984.** "Studies in the economic botany of Kerala (India)". *New Botanist, Int. Quart. J. Pl. Sci. Res.* 11: 102–119.
Abstract:- The present investigation relates to the non-agricultural aspects of the economic botany of Kerala, resolved into (i) plant materials in festivals, ceremonies and related social affairs, (ii) plant materials in public and domestic affairs and (iii) plants as energy resources. The present account is based on field studies and examination of relevant documents, in and around the city of Trivandrum, particularly.

698. **Nair, P.N. & Nair, C.N. 1985.** "*Keralathile Vanasasysngal (Malayalam)*". Kerala Bhasha Institute, Trivandrum.

699. **Nair, V.J. & Ansari, R. 1982.** "*Clerodendrum calamitosum* L. – A naturalized weed forming new record for India". *J. Econ. Taxon. Bot.* 3: 605–606.
Abstract:- *Clerodendrum calamitosum* L., native of Malaya and Java is reported here for

the first time for India from Kasaragod, Cannanore district, Kerala.

700. **Nair, V.J., Ansari, R. & Sreekumar, P.V. 1985.** "On the collection of *Limnopoa meeboldii* (Fischer) C.E. Hubb. (Gramineae): An extremely rare endemic and endangered species of Kerala". *J. Econ. Taxon. Bot.* 7: 210–212.

Abstract:- An extremely endemic and endangered species, viz., *Limnopoa meeboldii* (Fischer) C.E. Hubb. (Gramineae) has been reported from Kasargod district of Kerala.

701. **Nair, V.J., Binojkumar, M.S. & Ansari, R. 1990.** "*Euphorbia katrajensis* Gage var. *kasaragodensis* (Euphorbiaceae) – A new variety from Kerala, India". *J. Econ. Taxon. Bot.* 14: 471–472.

Abstract:- A new variety, viz., *Euphorbia katrajensis* Gage var. *kasaragodensis* has been described from Bela, Cannanore district, Kerala.

702. **Nair, V.J. & Ramachandran, V.S. 1980.** "Five plant records for Kerala". *Bull. Bot. Surv. India* 22: 193–194.

Abstract:- Five plant species, viz., *Dendrobium crepidatum* Lindl., *Eragrostis zeylanica* Nees & Mey., *Hugonia belli* Sedgw., *Ischaemum zeylanicola* Bor and *Phalaenopsis mysorensis* Saldanha have been recorded for the first time from Kerala.

703. **Nair, V.J., Ramachandran, V.S. & Ansari, R. 1983.** "A new *Oberonia* (Orchidaceae) from Kerala, India". *Blumea* 28: 361–362.

Abstract:- A new species of *Oberonia*, viz., *O. chandrasekharanii* allied to *O. mucronata* (D. Don) Ormerod & Seidenf. has been described from Chandanathode, Cannanore district, Kerala.

704. **Nair, V.J., Ramachandran, V.S. & Sreekumar, P.V. 1982.** "*Chandrasekharania*: A new genus of Poaceae from Kerala, India". *Proc. Indian Acad. Sci.* 91(B): 79–82.

Abstract:- A new genus, *Chandrasekharania* and a new species *Chandrasekharania keralensis* under it are being described from Cannanore district, Kerala.

705. **Nair, V.J. & Sreekumar, P.V. 1984.** "*Ischaemum nairii* – A new species of Poaceae from Kerala, India". *J. Econ. Taxon. Bot.* 5: 1205–1208.

Abstract:- A new species *Ischaemum nairii* V.J. Nair & P.V. Sreekumar allied to *I. bombaiense* Bor and *I. molle* Hook.f. has been described from Calicut district, Kerala, India.

706. **Nair, V.J., Sreekumar, P.V. & Nair, N.C. 1982.** "Notes on the distribution of some rare grasses in Kerala state". *J. Econ. Taxon. Bot.* 3: 270–272.

Abstract:- The paper briefly deals with distribution of six rare grasses collected from Kerala. *Arthraxon lanceolatus* (Roxb.) Hochst., *Panicum auritum* Presl ex Nees and *Setaria barbata* (Lam.) Kunth are very rare and are poorly represented in MH. *Arthraxon villosus*

C.E.C. Fischer is so far reported only from Mysore and Maharashtra in India. There is no earlier report of *Panicum psilopodium* Trin. var. *coloratum* Hook.f. from the former Madras Presidency. *Pennisetum orientale* Rich. forms a new record for South India.

707. **Nair, V.J., Sreekumar, P.V. & Nair, N.C. 1983.** "*Arundinella cannanorica* – A new species of Poaceae from Kerala, India". *J. Bombay Nat. Hist. Soc.* 80: 396–399.
Abstract:- A new species, viz., *Arundinella cannanorica* allied to *Arundinella laxiflora* Hook.f. is described from Cannanore district, Kerala.

708. **Nair, V.J., Sreekumar, P.V. & Nair, N.C. 1983.** "*Dimeria raizada* – A new species of Poaceae from Kerala, India". *Indian J. Forest.* 6: 163–165.
Abstract:- A new species of Poaceae, viz., *Dimeria raizada* V.J. Nair, P.V. Sreekumar *et* N.C. Nair allied to *D. thwaitesii* Hack. has been described from Calicut district, Kerala.

709. **Nair, V.J., Sreekumar, P.V., Vajravelu, E. & Bhargavan, P. 1982.** "*Silentvalleya* – A new genus of Poaceae from Kerala, India". *J. Bombay. Nat. Hist. Soc.* 79: 654–657.
Abstract:- *Silentvalleya nairii* has been described as a new species from Silent Valley Dam site, Palghat district, Kerala.

710. **Nair, V.K.B. 1967.** "*Mikania cordata* B.L. Robin. – An alien new to South India". *Rubber Board Bull.* 9: 28–29.
Abstract:- An alien weed, *Mikania cordata* B.L. Robin. has been reported for the first time for South India from a tea garden at Poonjar, Kottayam, Kerala. This was previously reported from West Bengal.

711. **Nair, V.K.B. 1968.** "A note on the occurrence of *Mikania cordata* (Burm.f.) B.L. Robinson in south India". *Sci. & Cult.* 34: 254–255.
Abstract:- *Mikania cordata* (Burm.f.) B.L. Robinson has been reported for the first time for South India from Kottayam district, Kerala. This species was previously known from West Bengal, Assam, Tripura and Sikkim.

712. **Nair, V.R. 1964.** "New record for *Hydrolithrum wallichii* Hook.f. in India". *J. Bombay Nat. Hist. Soc.* 61: 718–719.
Abstract:- *Hydrolithrum wallichii* Hook.f. is reported for the first time for India from Alwaye, Kerala. Earlier this species was known to occur in Tavoy and Moulmein.

713. **Nair, V.R. 1965.** "New record of *Utricularia minutissima* Vahl in South India". *J. Bombay Nat. Hist. Soc.* 62: 180–182.
Abstract:- *Utricularia minutissima* Vahl has been reported for the first time for South India from water-logged soil at Palghat, Kerala growing in association with *U. caerulea* L. and *U. uliginosa* Vahl.

714. **Nair, V.R. 1966.** "*Struchium sparganophorum* (L.) O. Kuntze – A new record for India".

Bull. Bot. Surv. India 8: 202–203.

Abstract:- *Struchium sparganophorum* (L.) O. Kuntze belonging to the tribe Vernonieae of family Asteraceae has been recorded for the first time for India from Trivandrum, Kerala. It is a native of tropical America but now common throughout the wetter parts of tropical America, Africa and Malesia.

715. **Nair, V.R. 1968.** "A new record for *Ammania auriculata* Willd. (*A. senegalensis* Lamk.) from South India". *Bull. Bot. Surv. India* 10: 238–239.

Abstract:- *Ammannia auriculata* Willd. has been reported for the first time for South India from Government Brennen College, Telicherry, Kerala. Earlier this species was known to occur in Punjab.

716. **Nair, V.R. 1968.** "A new species of *Nymphoides* (Menyanthaceae) from South India". *Kew Bull.* 22: 101–106.

Abstract:- *Nymphoides macrospermum* has been described from Badagara, Calicut district, Kerala, South India.

717. **Nair, V.R. 1975.** "A new species of *Rotala* from Palghat, Kerala". *J. Bombay Nat. Hist. Soc.* 72: 56–60.

Abstract:- A new species, viz., *Rotala malampuzhensis* allied to *R. mexicana* Cham. & Schltdl. is described from Malampuzha, Palghat, Kerala state, first collected in August, 1964 and subsequently from other places.

718. **Nair, V.R. 1984.** "Observation on populations of *Biophytum reinwardtii* Edgew. & Hook.f.". *Bull. Bot. Surv. India* 26: 191–192.

Abstract:- Heteromorphic and monomorphic populations of *Biophytum reinwardtii* Edgew. & Hook.f. in Kerala have been studied for their taxonomic significance.

719. **Nair, V.R. & Nair, K.K. 1967.** "*Myriophyllum tuberculatum* Roxb. – New record from Kerala state, S. India". *J. Bombay Nat. Hist. Soc.* 64: 391–394.

Abstract:- *Myriophyllum tuberculatum* Roxb. has been recorded here for the first time from fresh pond at Alwaye, Kerala. Previously this species was known to occur in West Bengal, Assam, Orissa and Karnataka.

720. **Nair, V.R. & Nambiar, V.P.K. 1967.** "A new record for *Ammania pygmaea* Kurz from South India". *J. Bombay Nat. Hist. Soc.* 63: 784–785.

Abstract:- *Ammania pygmaea* Kurz has been reported for the first time for South India from Palghat, Kerala. Earlier this species was known to occur in Chota Nagpur, Khasia mountains, Rajamahal hills and Botanic Garden, Calcutta.

721. **Nambiar, G.R. & Raveendran, K. 2011.** "*Arenariomyces triseptatus* and *Halosphaeria appendiculata*: Two new records of marine fungi from India". *Geobios* (Jodhpur) 38: 17–20.

Abstract:- This paper deals with *Arenariomyces triseptatus* Kohlm and *Halosphaeria appendiculata* Linder, which form additions to the marine mycoflora of India from Kerala and Maharashtra respectively.

722. **Nambiar, G.R. & Raveendran, K. 2011.** "*Lautisporopsis circumvestita, Morosphaeria ramunculicola* and *Saccardoella mangrovei*: Additions to marine mycoflora of India". *Geobios* (Jodhpur) 39: 25–28.

Abstract:- This paper deals with *Lautisporopsis circumvestita* (Kohlm) Jones, Yusoff *et* Moss*, Morosphaeria ramunculicola* (Hyde) Suetrong, Sakayaroj, Jones *et* Schoch and *Saccardoella mangrovei* Hyde, which form additions to the marine mycoflora of India from Kerala.

723. **Nambiar, G.R. & Raveendran, K. 2011.** "*Halosarpheia kandeliae* Abdel–Wahab & Jones: An addition to marine mycoflora of India". *Indian Forester* 137: 1466–1467.

Abstract:- A marine fungi, viz., *Halosarpheia kandeliae* Abdel-Wahab & Jones is a new record to India from north Malabar region of Kerala. This fungi has been collected from decaying wood of *Avicennia* and *Kandelia*.

724. **Nambiar, G.R. & Raveendran, K. 2012.** "*Carinispora velatispora, Herpotrichea nypicola* and *Pleospora spartinae*: New reports of marine fungi from India". *Geobios* (Jodhpur) 39: 67–69.

Abstract:- *Carinispora velatispora* Hyde*, Herpotrichea nypicola* Hyde *et* Alias and *Pleospora spartinae* (Webster *et* Lucas) Apinis *et* Chesters, are being reported as additions to the marine mycoflora of India from Kerala.

725. **Nambiar, V.P.K., Sasidharan, N., Renuka, C. & Balagopalan, M. 1986.** "Studies on the medicinal plants of Kerala forests". KFRI Research Report No. 42. pp. 200.

Abstract:- A checklist of the medicinal plants of the Kerala forests was prepared from Ayurvedic texts and floras; naturalized exotics frequent in plantations and forest clearings are included. Information included under each species is: local names, distribution, description, properties, uses, and other data, such as soil requirements. This was compiled from a study of collected live specimens, herbarium specimens, and raw drug materials, and from Ayurvedic texts and practitioners, and tribal people. The species are arranged systematically by family in alphabetic sequence.

726. **Nameer, P.O., Kumar, B.M. & Minood, C.R. 1992.** "Floristics, zonation and above ground biomass production in the mangroves of Puduvyppu, Kerala". *Indian J. Forest.* 15: 317–325.

Abstract:- In Kerala, at certain locations, mangrove formations of recent origin are observed. The authors enumerated five sample plots (each 900 m^2) along an East-West

transect from shore-line to inland, over a distance of about 1500 m at Puduvyppu to characterize floristic diversity and above ground biomass productivity. For the estimation of the above ground biomass, two random sample plots of 100 m^2 each were also harvested. Floristic diversity and above ground biomass productivity were generally low. A total of seven strict mangrove species were encountered in the whole of Puduvyppu. The stand was clearly dominated by *Avicennia officinalis* L., an early colononizer which tends to extend others. *Excoecaria agallocha* L. and *Bruguiera sexangula* (Lour.) Poir. were only marginally present in the sample plots. Density, basal area, abundance and importance value index and their relative indexes increased from shore-line plot to inland in the case of *Avicennia*, while that of *Excoecaria* decreased and *Bruguiera* remained constant. The girth class frequency distribution generally followed an inverse 'J' shaped distribution pattern indicating a balanced unevenaged stand structure. The trees were generally short statured.

727. **Nampy, S. & Madhusoodanan, P.V. 1992.** "Polypodioid ferns of South India". *Indian Fern J.* 9: 204–220.

Abstract:- The polypodioid ferns constitute a heterogenous assemblage of various characters and have undergone so much vicissitude of classification by different authors. From South India 26 species of 12 genera of polypodioid ferns under 3 families, viz., Polypodiaceae. Loxogrammaceae and Grammitidaceae are reported. They are either epiphytic or lithophytic. The predominant genera include *Microsorum, Pyrrosia* and *Phymatosorus*. Most of them are adapted to live in higher altitudes above 700 m but some like *Drynaria quercifolia, Pyrrosia lanceolata* and *P. piloselloides* are frequent in the disturbed lower elevations. Key for the identification of families, genera and species are given with notes on ecology and distribution. A total of 19 species have been reported from Kerala.

728. **Nampy, S. & Madhusoodanan, P.V. 1994.** "A new variety of *Helminthostachys zeylanica* (L.) Hook. (Ophioglossaceae: Pteridophyta) from Kerala, South India". *J. Econ. Taxon. Bot.* 18: 189–190.

Abstract:- A new variety of *Helminthostachys zeylanica* (L.) Hook., viz., *H. zeylanica* var. *brachyspicae* has been discovered and is described and illustrated from Prakadavu, Malappuram district, Kerala.

729. **Nampy, S. & Madhusoodanan, P.V. 1995.** "*Loxogramme cuspidata*: A little known polupodioid fern from South India". *J. Econ. Taxon. Bot.* 19: 741–744.

Abstract:- The specimens from South India (Tamil Nadum, Kerala, Karnataka) belonging to *Loxogramme cuspidata* (Zenker) Price were formerly treated under *L. involuta* (Don)

Presl Detailed description, illustration and taxonomical notes of it are provided for easy identification.

730. **Nampy, S., Manudev, K.M. & Pradeep, A.K. 2011.** "Two new species of *Eriocaulon* (Eriocaulaceae) from India". *Edinburgh J. Bot.* 68: 257–263.
Abstract:- Two new species of *Eriocaulon* L. (Eriocaulaceae), viz., *E. malabaricum* Pradeep & Nampy (allied to *E. sollyanum* Royle) and *E. pykarense* Nampy & Manudev (allied to *E. ansarii* Pradeep & Sunil) are described and illustrated from Kuppadi hills, Sulthan Battery, Wynad district, Kerala, India.

731. **Nampy, S. & Paul, J. 2008.** "On the identity of *Murdannia juncoides* (Wight) R.S. Rao & Kammathy (Commelinaceae)". *Rheedea* 18: 57–60.
Abstract:- The little known, rare and endemic *Murdannia juncoides* (Wight) R.S. Rao & Kammathy is often considered conspecific with *M. semiteres* (Dalz.) Sant. Critical study of the types and live specimens have shown that both the species are distinct. Detailed description and illustration of *M. juncoides* are provided. Distinguishing characters separating *M. juncoides* from the allied *M. semiteres* are given. These two species are also found in Kerala.

732. **Nampy, S. & Paul, J. 2011.** "*Cyanotis racemosa* (Commelinaceae), a new record for India". *Rheedea* 21: 8–9.
Abstract:- *Cyanotis racemosa* B. Heyne ex Hassk. earlier known only from Sri Lanka is recorded for the first time for India from Tamil Nadu (Dindigul district, Palni hills, Tirunelveli district and Kodaikanal), Karnataka and Kerala (Lockhert gap, Kottayam district). A detailed description with an illustration of the species is provided here.

733. **Nath, V. & Bansal, P. 2008.** "*Actinodontium* Schwagr – A taxon new to Kerala". *Phytotaxonomy* 8: 117–119.
Abstract:- The present paper deals with the study of *Actinodontium rhaphidostegium* (C. Mull) Bosch & Sande Lac., which is reported for the first time from Kerala state. Description and illustration of the species are also provided.

734. **Nath, V. & Bansal, P. 2009.** "*Pohlia ludwigii* (Schwaegr.) Broth. – An addition to bryoflora of South India". *Geobios* (Jodhpur) 36: 245–248.
Abstract:- The moss genus *Pohlia* Hedw., a member of family Bryaceae is represented by 13 taxa in India. *Pohlia ludwigii* (Schwaegr.) Broth., previously known only from eastern and western Himalayas, have been collected from Munnar (Kerala) for the first time. It is characterized by erect, branched plants, ovate-lanceolate leaves with rhomboid-hexagonal cells, yellow-brown propagula, capsule ovoid to pyriform with a short neck.

735. **Nayaka, S. & Upreti, D.K. 2007.** "Notes on some interesting microlichens from India".

Indian J. Forest. 30: 509–510.

Abstract:- *Bactrospora lamprospora* (Opegraphaceae) and *Monoblastia pellucida* (Monoblastiaceae) are described as new records for Indian Lichen flora from Kerala and Goa, respectively.

736. **Nayar, B.K. 1980.** *Flora and fauna of Silent Valley, Attappady and Sabarigiri Forests*. Govt. of Kerala, Trivandrum.

737. **Nayar, B.K. & Geevarghese, K.K. 1986.** "Four new taxa of ferns from Wynad, South India". *Bull. Bot. Surv. India* 28: 133–145.

Abstract:- Four new taxa of ferns, *Adiantum ramyam* (Adiantaceae), *Tectaria macrocarpa, T. periya* (Dryopteridaceae) and *Sphaerostephanos wynadensis* (Thelypteridaceae) are described from Wynad, Kerala, South India.

738. **Nayar, M.P. 1966.** "Contribution to the knowledge of Indo-Malaysian and other Asiatic Melastomataceae". *Blumea* 20: 155–161.

Abstract:- In this paper, three species of *Dalenia* Korth., 1 new species and 4 new combinations of *Neodissochaeta* Bakh.f. has been made from Indo-Malayan region. *Clidenia hirta* (L.) D. Don has been reported for the first time for India from Kowdiyar, Trivandrum district of Kerala.

739. **Nayar, M.P. 1969.** "A new species of *Sonerila* Roxb. (Melastomataceae) from south India". *Proc. Indian Acad. Sci.* 69(B): 256–258.

Abstract:- A new species of *Sonerila*, viz., *S. sadasivanii* Nayar allied to *S. brunonis* Wight & Arn. from South India (Madras and Kerala), has been described with illustrations.

740. **Nayar, M.P. 1969.** "New species and notes on the genus *Sonerila* Roxb. (Melastomataceae)". *J. Indian Bot. Soc.* 48: 321–325.

Abstract:- The present paper deals with a new species, *Sonerila wynaadensis* allied to *S. rotundifolia* Bedd. from Wynaad, Kerala, South India.

741. **Nayar, M.P. 1976.** "A new species of *Sonerila* (Melastomataceae) from Kerala, S. India". *J. Bombay Nat. Hist. Soc.* 71: 632–633.

Abstract:- A new species of *Sonerila*, viz., *Sonerila devicolamensis* allied to *S. sadasivanii* Nayar has been described from Devicolam, Kerala.

742. **Nayar, M.P. 1980.** "Endemic flora of Peninsular India and its significance". *Bull. Bot. Surv. India* 22: 12–23.

Abstract:- There is comparatively high degree of endemism in Peninsular India and thus the flora is distinct. Blasco (1971) has estimated about 1,268 endemic dicotyledons in South India. The Peninsular India has an endemic concentration of 32% while rest of India has about 27% endemics. Out of the 304 families of flowering plants recorded from

India, there is not a single endemic family. In this paper, the phytogeography of endemic genera and characteristic endemic species of Peninsular India are analysed in relation to its distribution and affinities. The distribution is also analysed in relation to plate tectonics. The endemic angiosperms of Peninsular India consist of 56 genera and they are distributed over 25 families. The families with the largest number of endemic genera are Gramineae (10 genera) and Acanthaceae (9 genera). There are about 2100 endemic species in Peninsular India of which 890 are woody species, 254 semi-woody and the rest 859 are herbaceous species. The endemic flora of Peninsular India is considered to be old one and the nature of endemics is analysed in terms of phytogeography, taxonomy and palaeobotany. The dynamics of characteristic endemic genera and their speciation is given. According to the analysis, majority of the endemics are palaeoendemics belonging to humid tropic belt. Wherever interphase of climatic shifts occur with different ecotones some endemic genera show epibiotic speciation.

743. **Nayar, M.P. & Ahmed, M. 1984.** "Phytogeographical significance of endemic genera (Angiosperms) in Peninsular India and Sri Lanka". *Bull. Bot. Surv. India* 26: 65–70.
Abstract:- The presence of endemic genera of restricted distribution occurring in Peninsular India and Sri Lanka is analysed in terms of their phytogeography. The genera are mainly of the palaeoendemic type. There are about 56 endemic genera in Peninsular India (Nayar, 1980) while in Sri Lanka there are only 20 genera. The presence of common genera (27 genera) with restricted distribution in Peninsular India and Sri Lanka is interesting from the phytogeographical angle.

744. **Nayar, M.P. & Giri, G.S. 1982.** "*Mimosa invisa* Mart. var. *inermis* Adelb. – A new entrant to the Indian flora". *J. Econ. Taxon. Bot.* 3: 603–604.
Abstract:- *Mimosa invisa* Mart. var. *inermis* Adelb. so far known from Java is reported here for the first time for India from Trichur, Kerala.

745. **Nayar, M.P. & Giri, G.S. 1988.** *Key works of Floristics of India*. Kerala Part. Vol. 1. Botanical Survey of India, Howrah. pp. 288–313.
Abstract:- A total of 177 references pertaining to the floristics of Kerala have been given.

746. **Nayar, M.P. & Karthikeyan, S. 1984.** "Catalogue of additions of flowering plants of India, Nepal & Bhutan (1979–1982)". *J. Econ. Taxon. Bot.* 5: 261–272.
Abstract:- A catalogue of flowering plants, i.e., 268 new species, varieties and new records added to the Flora of India, Nepal and Bhutan, for the period 1979 to 1982, are enumerated in alphabetical sequence, with citations.

747. **Nayar, T.S. 1990.** "Occurrence of *Voacanga grandifolia* (Miq.) Rolfe (Apocynaceae) in India and the Asian continent". *Bull. Bot. Surv. India* 32: 167–168.

Abstract:- *Voacanga grandifolia* (Miq.) Rolfe is reported as a new record to Kerala from Trivandrum. It was earlier reported from Valpoy forest, North Goa.

748. **Nayar, T.S., Koshy, K.C., Kumar, C.S., Mohanan, N. & Kumar, M. 1986.** *Flora of Tropical Botanic Garden, Palode*. Tropical Botanic Garden and Research Institute, Trivandrum, Kerala.

749. **Nayar, T.S., Rasiya Beegam, A., Mohanan, N. & Rajkumar, G. 2006.** *Flowering Plants of Kerala – A* Handbook. Tropical Botanic Garden and Research Institute, Thiruvananthapuram, Kerala.

Abstract:- This book provides correct name, important synonyms, habit, reference to good descriptions and illustrations, distribution in the world, the Western Ghats and Kerala, indigenous, endemic and exotic nature, conservation status, phenology, uses, Malayalam names and other important details. The work treats 4681 species, 58 subspecies and 287 varieties as occurring in Kerala.

750. **Nayar, T.S., Sibi, M., Rasiya Beegam, A., Mohanan, N. & Rajkumar, G. 2008.** "Flowering plants of Kerala: Status and statistics". *Rheedea* 18: 95–106.

Abstract:- This paper provides a preliminary analysis of the flowering plants of Kerala based on 1303 publications appeared until 2008. The state harbours 4694 species under 1418 genera and 188 families (*s.l.*). Of these, 4078 are indigenous, 199 are exotic naturalized and 417 are cultivated/planted. Of the 4078 indigenous species, 1568 are endemic to India and of these, 865 are endemic to the Western Ghats. Of these 865 Western Ghats endemics, 237 species are endemic to Kerala. This includes two monotypic genera, *Silentvalleya* and *Haplothismia*. About 5% of the flora come under one or other IUCN red list category. Of all the life forms, herbs constitute more than 50% of the flora and shrubs and trees 15% each. Continent-wise analysis shows that 389 species found in Kerala share their distribution with Australia, 442 species with Africa, 31 species with Europe, 190 species with America and 2194 species with different countries in Asia. There are 115 species common to Kerala and South East Asia. Sri Lanka and Malaysia together share 26 species with Kerala and 1866 species share their distribution with Sri Lanka, out of which 538 are exclusively common to Peninsular India and Sri Lanka. Kerala constitutes only 1.18% of the geographical area of India but it accommodates 27.57% of the flowering plants occurring in the country. It has been found that 1170 species possess established medicinal properties. Absence of a comprehensive flora dealing with all the flowering plants of the state is the major gap; nearly 8% of the flora are not represented in any of the Indian herbaria and illustrations of 35% of the species are not available. The analysis is supported with 12 figures and two appendices.

751. **Nazarudeen, A. 2001.** "Occurrence of *Psidium guineense* Sw. (Myrtaceae) – A lesser-known edible fruit plant from Peninsular India". *Rheedea* 11: 57–59.

Abstract:- The occurrence of *Psidium guineense* Sw. (Myrtaceae) is been reported from Kerala, South India which has been wrongly treated as *P. guajava* L. by many authors. A detailed description of the species, illustration and artificial key for the identification of Indian species of *Pisdium* are provided.

752. **Nazarudeen, A. 2001.** "Two endemic plants new to Kerala". *J. Econ. Taxon. Bot.* 25: 607–608.

Abstract:- *Garcinia gummi-gutta* var. *conicarpa* (Wight) N.P. Singh (Clusiaceae) and *Trichosanthes anamalaiensis* Bedd. endemic to Western Ghats are reported as new records to Kerala.

753. **Nazarudeen, A. 2003.** "Leech repellents of plant origin used by the tribal communities of Kerala". *J. Econ. Taxon. Bot.* 27: 804–807.

Abstract:- Land leeches are a real menace to the forest workers and researchers in tropical wet evergreen forests of Kerala. The present communication deals with some plant-based remedial measures to keep off land leeches based on first-hand information collected from six major tribal communities in the state.

754. **Nazarudeen, A. 2009.** "Some lesser-known wild plants for food and folk-use among Kani tribes in Southern Kerala, India". *J. Econ. Taxon. Bot.* 33: 741–746.

Abstract:- Kerala faces a tow-way depletion with regard to its indigenous knowledge capital and phytodiversity due to modernization in the food and living habits and also due to various biophysical pressure. This is particular among Kanikkar – the major tribal community in Thiruvananthapuram district. The use of unique herbal heals and plant-based foods once prevalent among this tribal group is fast vanishing. Such 'mouth to ear' knowledge capital with regard to the folk use of 30 wild plants collected from among this tribal group as a part of our survey based studies on the economically useful wild plants of Kerala is communicated.

755. **Nazarudeen, A. 2010.** "Nutritional composition of some lesser-known fruits used by the ethnic communities and local folks of Kerala". *Indian J. Traditional Knowledge* 9: 398–402.

Abstract:- Wild edible fruits play a significant role in the dietary requirements of the tribal and local communities of Kerala. Out of 218 species of fruit plants collected from the wild, fruits of 10 species based on their individual merit were selected for chemical analysis. Examination of moisture, protein, fats reducing and non-reducing and total sugars, fibre, total mineral matter, vitamin C, iron, sodium, potassium and energy value were

carried out and the result are compared with the nutritive value of ten common cultivar fruits.

756. **Nazarudeen, A., Koshy, K.C., Seeni, S. & Pandurangan, A.G. 2007.** "Notes on new distribution of *Desmodium dolabriforme* Benth.: A little known taxa from Southern Western Ghats, India". *Indian J. Forest.* 30: 65–68.

Abstract:- *Desmodium dolabriforme* Benth. (Fabaceae), so far known to occur only in Tamil Nadu has been newly located from Kerala at Arienkavu in Kollam district. Inflormation about its distribution and possible reasons of rarity are discussed. Detailed description and illustration are also provided based on fresh specimens, as supplement to the protologue.

757. **Nazarudeen, A., Seeni, S., Koshy, K.C. & Pushpangadan, P. 1996.** "Folk plants of food, medicine, adornment and repellent used by the Paniyar community in north Kerala". *J. Econ. Taxon. Bot.*, Addit. Ser. 12: 299–305.

Abstract:- Plant resource utilization practices of Paniyar in north Kerala are fast changing due to modernization in the food habits and treatment systems. The indigenous knowledge capital of this aboriginal group needs conservation. Information about the traditional uses of 34 plant species belonging to 34 genera under 25 families, collected through field surveys and personal interviews with this ethnic group is provided.

758. **Nazarudeen, A. & Shareef, S.M. 2008.** "Enumeration of exotic fruit species grown in Kerala, India". *J. Econ. Taxon. Bot.* 32: 333–341.

Abstract:- Sixty–six species of fruit plants of exotic origin is listed in the present paper. These plants are given under five heads, viz., raw fruits (43 species), nuts & seeds (3 species), culinary, spicy & vegetables plants (15 species), cash crops (3 species) and grains (2 species).

759. **Nazarudeen, A., Shareef, S.M. & Pandurangan, A.G. 2007.** "The success story of rescuing of *Salacia beddomei* Gamble, a Red Listed species from Southern Western Ghats, India". *Indian J. Bot. Res.* 3: 193–196.

Abstract:- *Salacia beddomei* Gamble (Hippocrateaceae), an endemic species from southern Western Ghats of India facing threat of extinction due to over-exploitation and habitat destruction is multiplied in the *ex-situ* condition as part of the rescue and restoration programme conducted in Tropical Botanic Garden and Research Institute, Kerala. The organized team work was successful in saving the species from extinction. The results are discussed.

760. **Nettar, P.S. & Panikkar, M.V.N. 2004.** "Phaeophyceae of South India – I. *Stoechospermum* Kuetzing (Dictyotales, Dictyotaceae)". *J. Econ. Taxon. Bot.* 28: 370–375.

Abstract:- Detailed morpho-anatomical studies of the tetrasporic and oogonial plants of *Stoechospermum marginatum* (Ag.) Kutz. have been studied in detail from Thirumullavaram coast of Kollam, Kerala and Tuticorin coast of Tamil Nadu with suitable illustration. Its structural characteristics were also compared with the similar features of the other members of Dictyotales.

761. **Nettar, P.S. & Panikkar, M.V.N. 2004.** "Phaeophyceae of South India – III. *Spatoglossum* Kutzing (Dictyotales, Dictyotaceae)". *J. Econ. Taxon. Bot.* 28: 376–381.
Abstract:- The detailed vegetative and reproductive morphology of the two Indian species of *Spatoglossum*, viz., *S. asperum* J. Agardh and *S. variabile* Figari & De Notaris collected from Kerala and Tamil Nadu coasts are given. Morphological and anatomical details of both sporophytic and gametophytic plants are described in detail. The antheridial and oogonial plants of these two Indian species are described for the first time from this region.

762. **Nettar, P.S. & Panikkar, M.V.N. 2004.** "Phaeophyceae of South India – IV. *Chnoospora* J. Agardh (Chnoosporaceae, Scytosiphonales)". *J. Econ. Taxon. Bot.* 28: 382–386.
Abstract:- The vegetative and reproductive morphology of the two species of *Chnoospora*, viz., *C. bicanalculata* Krishnamurthy & Thomas and *C. minima* (Hering) Papenfuss collected from various localities of Kerala and Tamil Nadu are studied in detail.

763. **Nicolson, D.H., Suresh, C.R. & Manilal, K.S. 1988.** *An Interpretation of van Rheede's Hortus Malabaricus*. *Regnum Veg.* 119: 1-378.

764. **Nidheesh, K.B. 2010.** "Agriculture knowledge and perception in tribal communities". *Indian J. Traditional Knowledge* 9: 531–535.
Abstract:- The study was conducted to assess the knowledge and perception tribals' adults in a Kerala state regarding natural resources, food and agriculture. Data were collected from 500 respondents of Wayand district, Kerala to assess the level of agriculture knowledge and perceptions amongst tribal adults. Respondents were most positive about the natural resources concept and were the least positive about the agricultural policy concept. Respondents living on rural forms were more knowledgeable about agriculture concept than respondent living on city. Respondents with high levels of education were more knowledgeable about modern concept of agriculture than those with less education.

765. **Ninan, C.A., Abraham, Susan & Pillai, P.G. 1975.** "A note of the wild yams (*Dioscorea* spp.) of Kerala". *New Botanist, Int. Quart. J. Pl. Sci. Res.* 2: 169–170.
Abstract:- The sapogenin-bearing wild species of *Dioscorea* have attained considerable importance due to their medicinal value. Nine varieties belonging to six wild species of

Dioscorea namely, *D. bulbifera, D. wallichii, D. pentaphylla, D. tomentosa, D. hispida* and *D. oppositifolia* were collected from forest areas of Kerala, and described. Most species contain a low percentage of sapogenin, but there are much scope for genetic and breeding investigations of the genus.

766. **Nisha, P., Nampy, S. & Joby, P. 2010.** "*Selaginella lakkidiana* sp. nov. (Selaginellaceae) from India". *Nordic J. Bot.* 28: 665–666.
Abstract:- *Selaginella lakkidiana* Nisha, Nampy & Joby, sp. nov. from Lakkidi, Kerala, the Western Ghats of India is described and illustrated. The new species is closely allied to *S. chrysorrhizos* Spring, but differs by a serrate and smaller sporophyll, smooth megaspores, and reddish brown and pitted microspores.

767. **Nisha, V.M. & Sivadasan, M. 2007.** "Enthnodermatologically significant plants used by traditional healers of Wayanad district, Kerala". *Ethnobotany* 19: 55–61.
Abstract:- Wayanad district of Kerala is the homeland of various tribal and non-tribal communities practicing traditional systems of medicine. The details of the medicinal plants of ethnodermatological significance used by rural and tribal communities for the treatment of skin diseases and related problems have been studied. The study revealed that 62 species of flowering plants are used to cure the skin diseases. Various plants and plant parts are used for the preparation of medicines. In many cases, a single plant can cure more than one disease. In some cases, a single diseases can be cured with more than one plant.

768. **Padmaja, B. & Gopakumar, K. 2009.** "Vulnerable medicinal plants of Munnar Forest region, Idukki district, Kerala". *J. Non-Timber Forest Products* 16: 195–199.
Abstract:- The survey of Medicinal Plants Unit, R.R.I., Trivandrum conducted seasonal medico botanical survey tours in Munnar Forest Division, Idukki district during 1981–2002. This division has all the types of forests with altitudes varying from 110' to 8441' above MSL. The paper deals with a few important medicinal plants collected from this area. Due to unscrupulous and unsystematic collection, there is a diminishing trend in their availability. The reasons for this trend and some corrective measures to preserve them are suggested.

769. **Paithane, V.A., Yadav, S.S., Bhuktar, A.S. & Dhabe, A.S. 2013.** "Two new records for Flora of Kerala State, India". *Bioinfolet* 10(1B): 303–304.
Abstract:- Two species, viz., *Crotalaria longipes* Wight & Arn. (earlier known from Andhra Pradesh & Tamil Nadu) and *Crotalaria obtecta* J. Graham ex Wight & Arn. (earlier known from Tamil Nadu) belonging to Leguminosae – Papilionoideae are new collections to the Flora of Kerala.

770. **Pandarasivan, S., Venkataraman, R. & Jesudoss, L.L. 2008.** "Medicinal plants used by the Kanikars in the traditional healing arts of South India". *J. Non-Timber Forest Products* 15: 297–299.
Abstract:- Kanikars solely depending on medicinal herbs to cure the various ailments. Over many years they are practicing their own medicinal system. In the present investigation 22 medicinal plants are enumerated which are being used by the Kanikars. The ethnobotanical work can lead to a new phytochemical, pharmacology and medicinal discovery.

771. **Pandurangan, A.G. & Nair, V.J. 1993.** "Some rare plants from Idukki Hydro–electric Project area in Kerala, India". *J. Econ. Taxon. Bot.* 17: 173–185.
Abstract:- Observations on 13 rare plants that are under various kinds of threats collected from Idukki Hydro–electric Project area in Kerala are presented.

772. **Pandurangan, A.G. & Nair, V.J. 1993.** "*Thottea idukkiana* – A new species of Aristolochiaceae from Kerala, India". *J. Econ. Taxon. Bot.* 17: 465–467.
Abstract:- A new species of Aristolochiaceae, viz., *Thottea idukkiana* allied to *T. siliquosa* (Lam.) Ding Hou has been described from Kanjiar, Idukki district, Kerala.

773. **Pandurangan, A.G. & Nair, V.J. 1994.** "*Pothos keralensis* – A new species of Araceae from Kerala, India". *Indian J. Forest.* 17: 64–65.
Abstract:- A new species of Araceae, viz., *Pothos keralensis* Pandurangan & Nair has been described from Idukki district of Kerala. This species is allied to *P. thomsonianus* Schott.

774. **Pandurangan, A.G. & Nair, V.J. 1994.** "*Lepidagathis chlorostachya* Nees (Acanthaceae) – A new record for India". *Indian J. Forest.* 17: 178–179.
Abstract:- *Lepidagathis chlorostachya* Nees has been collected from Kerala and which forms a new distributional record for India. The discontinuous distribution namely in Myanmar and the southern corner of India shows that it is of great phytogeographical interest.

775. **Pandurangan, A.G. & Nair, V.J. 1995.** "*Impatiens kulamavuensis* – A new species of Balsaminaceae from India". *Novon* 5: 57–58.
Abstract:- *Impatiens kulamavuensis*, a distinct new species from Meenmutt-Kulamavu, Idukki district, Kerala, India allied to *I. parasitica* Bedd., is described.

776. **Pandurangan, A.G. & Nair, V.J. 1996.** "Changing pattern of floristic composition in the Idukki Hydro-electric Project area, Kerala". *J. Econ. Taxon. Bot.* 20: 15–26.
Abstract:- The paper presents changing pattern of floristic composition in the Idukki Hydro-electric Project after the dam has been constructed. Forest types before construction

of dam and after construction of dam have been analysed and changes in vegetation have been highlighted.

777. **Pandurangan, A.G. & Nair, V.J. 1996.** "Three rare and threatened *Impatiens* L. (Balsaminaceae) of Kerala, India". *J. Econ. Taxon. Bot.* 20: 699–702.
Abstract:- At least 30 species of *Impatiens* of Peninsular India are rare and threatened. Relevant notes, detailed description and distribution of three such very rare *Impatiens*, viz., *I. acaulis* Arn., *I. floribunda* Wight and *I. stocksii* Hook.f. & Thoms. based on field observations and fresh collection from Kerala are presented.

778. **Pandurangan, A.G. & Nair, V.J. 1997.** "*Antistrophe glabra* – A new species of Myrsinaceae from India". *Nordic J. Bot.* 17: 367–368.
Abstract:- A new species, *Antistrophe glabra* [allied to *A. serratifolia* (Bedd.) Hook.f.] from Kanjiar, Idukki district, Kerala, India allied to *A. serratifolia* is described.

779. **Pandurangan, A.G., Mohanan, C.N. & Nair, N.C. 1985.** "Rare or little known vascular plants from Idukki Hydro-electric Project Area, Kerala, India". *J. Econ. Taxon. Bot.* 6: 271–274.
Abstract:- Four little known and rare angiosperms are reported from Idukki Hydro-electric Project Area, Kerala, India. They are *Ceropegia beddomei* Hook.f., *Diospyros trichophylla* Alston, *Hunteria zeylanica* (Retz.) Gardn. ex Thw. and *Schoenorchis latifolia* (C.E.C. Fischer) Saldanha. *Diospyros trichophylla* Alston is a new record for India. The specimens of this species collected from Idukki show some differences from the plants from Sri Lanka, and these are pointed out.

780. **Pandurangan, A.G., Ramachandran, V.S. & Mohanan, C.N. 1985.** "A new distributional record for *Hiptage acuminata* Wall. ex Juss. (Malpighiaceae) from Peninsular India". *J. Econ. Taxon. Bot.* 6: 227–228.
Abstract:- *Hiptage acuminata* Wall. ex Juss. (Malpighiaceae) was reported from North-east India and Burma. The occurrence of this species in the Idukki Hydro-electric Project area, Kerala, southern Western Ghats of Peninsular India forms an additional information about its distribution.

781. **Pandurangan, A.G., Ramachandran, V.S. & Nair, N.C. 1984.** "A note on new distribution and undescribed fruits of the rare plant *Meteoromyrtus wynadensis* (Bedd.) Gamble (Myrtaceae) – Kerala, India". *J. Econ. Taxon. Bot.* 5: 1185–1188.
Abstract:- *Meteoromyrtus wynadensis* (Bedd.) Gamble, previously believed to be an endemic to Malabar is reported from Idukki district. Detailed description of the plant is provided and the fruit is described for the first time.

782. **Pandurangan, A.G., Raveendran, M. & Pushpangadan, P. 1996.** "Medicinal plant

diversity of Triveni MPCA". *J. Swamy Bot. Club* 13: 33–38.

Abstract:- Trivent MPCA contains 200 hectares of forest land, comprising evergreen and semi-evergreen forests. It is located in Pathanamthitta district of Kerala, southern Western Ghats and assume greater significance in conservation point of view by harbouring rich and varied flora including medicinal ones.

783. **Panikkar, M.V.N. & Ampili, P. 1988.** "*Temnogametum keralense* – A new species from South India". *J. Econ. Taxon. Bot.* 12: 397–400.

Abstract:- A new species of *Temnogametum*, viz., *T. keralense* which comes near *T. cylindrospermum* Iyeng. is described from Mayyanad, Kerala. The single plate–like chloroplast is with undulated margins and numerous scattered pyrenoids. The method of reproduction is only by azygospores.

784. **Panikkar, M.V.N. & Ampili, P. 1990.** "Two terrestrial species of *Oedogonium* Link. from Kerala". *Geobios, New Rep.* 9: 118–120.

Abstract:- Two terrestrial species of *Oedogonium* are being reported from Kerala, viz., *O. randhawae* Venk. is a first record and *O. tutuensis* is described as a new taxon.

785. **Panikkar, M.V.N. & Ampili, P. 1991.** "Species of *Temnogametum* W. and G.S. West from Kerala, South India". *Geobios, New Rep.* 10: 117–120.

Abstract:- Four species of the genus *Temnogametum* are being reported from Kerala. *Temnogametum malabaricum* is new and *T. mayyanadensis* and *T. keralense* are also collected from different parts of Kerala state and described in detail.

786. **Panikkar, M.V.N. & Ampili, P. 1992.** "A new species of *Draparnaldiopsis* Smith *et* Klyver (Chaetophorales, Chlorophyta) from Kerala". *J. Econ. Taxon. Bot.* 16: 24–25.

Abstract:- A new species of *Draparnaldiopsis* Smith *et* Klyver, viz., *D. eradii* has been described from paddy fields at Mayyanad in Quilon district, Kerala attached to the leaves of *Hydrilla* and *Blyxa*.

787. **Panikkar, M.V.N. & Ampili, P. 1992.** "Three new species of *Oedogonium* Link from the flowing waters of Kerala". *J. Econ. Taxon. Bot.* 16: 223–227.

Abstract:- Three new species of *Oedogonium* Link from a rare habitat is described. One species, *O. munnarensis* is collected from a waterfall of a hilly stream; while others, *O. kulathupuzhaensis* and *O. eradii* are collected from a rapidly flowing river.

788. **Panikkar, M.V.N. & Ampili, P. 1993.** "*Cloniophora capitellata* Tiffany – A new record for the algal flora of India". *J. Econ. Taxon. Bot.* 17: 460–461.

Abstract:- *Cloniophora capitellata* Tiffany has been recorded for the first time for India from Kerala.

789. **Panikkar, M.V.N. & Ampili, P. 1993.** "Taxonomic studies on the South Indian Dictyotales

– I *Dictyota* Lamouroux". *J. Econ. Taxon. Bot.* 17: 701–703.

Abstract:- This paper deals with a taxonomic account of nine species of *Dictyota*, collected from different parts of Kerala and Tamil Nadu. A taxonomic key is also prepared for their identification.

790. **Panikkar, M.V.N., Ampili, P. & Chauhan, V.D. 1989.** "Observations on *Cephaleuros virescens* Kunze from Kerala, India". *J. Econ. Taxon. Bot.* 13: 67–70.

Abstract:- The structure and reproduction of *Cephaleuros virescens* Kunze were studied from Kerala. The development of zoosporangia and gametangia were observed in detail. The systematic position and its adaptation have also been discussed.

791. **Panikkar, M.V.N., Usha Devi, K. & Ampili, P. 1997.** "A new species of *Mougeotia* (Zygnematales, Chlorophyceae) from Kerala". *J. Econ. Taxon. Bot.* 21: 691–693.

Abstract:- A new species of *Mougeotia* (*M. ravii*) has been described from Kollam, Kerala. It is an angiospermous species, showed marked differences from all other angiospermous species in cell size, shape and size of the zygote and the presence of inflated female gametangia.

792. **Panikkar, M.V.N., Usha Devi, K. & Ampili, P. 1997.** "New species of the genus *Zygnemopsis* (Skuja) Trans. (Zygnematales, Chlorophyceae) from Kerala, India". *J. Econ. Taxon. Bot.* 21: 143–148.

Abstract:- Four new species of the genus *Zygnemopsis* (Skuja) Trans., viz., *Z. keralensis, Z. thevalliensis, Z. denticulata* and *Z. palatharensis* have been described from Kerala, India.

793. **Panikkar, M.V.N. & Krishnan, Sreeja. 2007.** "Stages of zygospore formation in two species of desmids from Kerala". *J. Econ. Taxon. Bot.* 31: 913–914.

Abstract:- The different stages of zygospore formation in two species of desmids: *Closterium acerosum* (Schrank) Ehrenberg and *Tetmemorus brebissonii* (Menegh.) Rolfs., collected from different places of Kerala are given with the help of diagrams.

794. **Panikkar, M.V.N. & Sindhu, P. 1993.** "Species of *Trentepohlia* Martius from Kerala". *J. Econ. Taxon. Bot.* 17: 199–204.

Abstract:- Eight species of *Trentepohlia* Martius, collected from different parts of Kerala are described. Of these, three taxa: *T. thevalliensis, T. pathanamthittaensis* and *T. angadickalensis* are reported as new species.

795. **Panja, D. 2006.** "On the occurrence of *Thunbergia mysorensis* (Wight) T. Anders. (Acanthaceae) – A beautiful Indian endemic species". *J. Econ. Taxon. Bot.* 30: 399–400.

Abstract:- *Thunbergia mysorensis* (Wight) T. Anders., an endemic species was described in 1844–45. After more than one and half century, the species is found wild in forests of

Karnataka, Tamil Nadu, Kerala of South India.

796. **Patil, R.B. & D'Cruz, R. 1974.** "A new species of *Ischaemum* Linn. from India". *J. Bombay Nat. Hist. Soc.* 70: 324–325.

Abstract:- A new species of *Ischaemum*, viz., *I. vembanadense* allied to *I. magnum* Rendle has been described from Vembanad lake, Alleppy district, Kerala, India.

797. **Paulraj, K. 2007.** "Preliminary phytochemical screening of epidermal glands of selected South Indian ferns". *Indian J. Bot. Res.* 3: 137–146.

Abstract:- The presence of distinct epidermal glands is an important taxonomical characters in thelypteroid ferns. In order to know the chemical nature of the epidermal glands in the above species, the physico-chemical properties such as solubility, dry weight and chemical composition have been studied in six glandular thelypteroid ferns, *Amphineuron terminans* (Hook.) Holttum, *Christella parasitica* (L.) H. Lev., *Cyclosorus interruptus* (Willd.) H. Ito, *Sphaerostephanos arbuscula* (Willd.) Holttum, *Sphaerostephanos subtruncatus* (Bory) Holttum and *Sphaerostephanos unitus* (L.) Holttum from the Western Ghats, South India. The results show that, the glands in all the above species are completely soluble in acetone and insoluble in water. The glands of *C. parasitica* and *S. unitus* are partially soluble in chloroform, benzene, petroleum ether and ethanol with minor difference. The dry weight ranges from 5.39% in *S. arbuscula* to 1.86% in *S. subtruncatus*. The difference in dry weight is mainly due to the difference in the frequency and size of the glands. The preliminary phytochemical screening shows the presence of steroids, triterpenoids, alkaloids, phenolic groups, flavonoids, saponins and tannins uniformly in the glands of all the six species. Sugars, catechins, anthorquinones, amino acids, mucilage and reducing compounds are uniformly absent in all six species.

798. **Philcox, D. 1967.** "Two new species of *Limnophila* R. Br. (Scrophulariaceae)". *Kew Bull.* 21: 157–160.

Abstract:- *Limnophila crassifolia* [allied to *L. connata* (Buch.–Ham.) Hand.–Mazz.] and *L. glandulifera* [allied to *L. aromatica* (Lam.) Merr.] have been described as new species from Zambia and India (Travancore), respectively.

799. **Phukan, S. 2002.** "The genus *Kingidium* Hunt in India". *J. Orchid Soc. India* 16: 47–54.

Abstract:- The genus *Kingidium* has 5 species in India, out of which 2 species are endemic to South India. *Kingidium braceanum* (Hook.f.) Seidenf. from Arunachal Pradesh, *K. deliciosum* (Reichb.f.) Sweet from Uttaranchal, Sikkim, Arunachal Pradesh, Assam, Orissa and Kerala, *K. mysorensis* (Saldanha) Sathish from Karnataka and Kerala, *K. niveum* Sathish from Kerala and *K. taeniale* (Lindl.) Hunt. from Uttaranchal, Sikkim, Arunachal Pradesh, Assam, Meghalaya, Manipur, Mizoram and Nagaland. *Kingidium braceanum*

(Hook.f.) Seidenf. is a rediscovery after more than 100 years and forms a new record for India from Arunachal Pradesh.

800. **Pradeep, A.K. 1995.** "*Eleutherine bulbosa* (Miller) Urban (Iridaceae – Tigridieae): A little understood exotic in India". *Rheedea* 5: 180–183.
Abstract:- The taxonomy of the plant, commonly referred to as *Cipura paludosa* by Indian taxonomists, and commonly found under cultivation in Indian gardens, is discussed. This plant is also found in Kerala. The correct identification is *Eleutherine bulbosa*, detailed description and illustrations are provided.

801. **Pradeep, A.K. 1997.** "*Ixora sivarajiana*, a new species of Rubiaceae from India". *Nordic J. Bot.* 17: 315–317.
Abstract:- A new species, viz., *Ixora sivarajiana* allied to *I. agasthyamalayana* Sivad. & N. Mohanan and *I. leucantha* B. Heyne ex G. Don from Vellarimala on the northern part of the Western Ghats of Kerala in Peninsular India is described and illustrated.

802. **Pradeep, A.K. 1998.** "*Pogostemon peethapushpum* (Lamiaceae), a new species from India". *Candollea* 53: 419–422.
Abstract:- *Pogostemon peethapushpum* from Kerala, India is described as a species new to science and illustrated. Its relationship with *Pogostemon travancoricus* Bedd. and *P. hedgei* V.S. Kumar & Sharma is discussed.

803. **Pradeep, A.K. & Jayaram, K.M. 1991.** "Occurrence of *Clerodendrum wallichii* Merr. (Verbenaceae) in South India". *J. Bombay Nat. Hist. Soc.* 88: 467.
Abstract:- *Clerodendrum wallichii* Merr. (Verbenaceae) has been reported for the first time from Vythiri river banks, Wynad district, Kerala.

804. **Pradeep, A.K., Joseph, K.T. & Sivarajan, V.V. 1990.** "*Rotala malabarica*, a new species of Lythraceae from India". *Bot. Bull. Acad. Sin.* 31: 59–61.
Abstract:- A new species of *Rotala*, viz., *R. malabarica* is described from Kerala, India.

805. **Pradeep, A.K. & Sivarajan, V.V. 1990.** "*Stachytarpheta dichotoma* Vahl (Verbenaceae) – A new record for Peninsular India". *J. Econ. Taxon. Bot.* 14: 619–620.
Abstract:- *Stachytarpheta dichotoma* Vahl has been recorded for the first time for Peninsular India from Pookottu lake, Wynad district, Kerala. Earlier this species was known from Meghalaya.

806. **Pradeep, A.K. & Sivarajan, V.V. 1991.** "*Hibiscus hispidissimus*, the correct name for *H. furcatus* DC. non Willd. and *H. aculeatus* Roxb. non Walter (Malvaceae)". *Taxon* 40: 634–637.
Abstract:- *Hibiscus furcatus* Roxb. ex DC. and *H. aculeatus* Roxb. are illegitimate later homonyms of *H. furcatus* Willd. and *H. aculeatus* Walter, respectively. The earliest

available name for the common Indian taxon to which they pertain is *H. hispidissimus* Griffith.

807. **Pradeep, A.K. & Sivarajan, V.V. 1991.** "*Justicia ekakusuma*, a new species of Acanthaceae from Peninsular India". *Rheedea* 1: 40–43.
Abstract:- A new species of *Justicia* sect. *Restellaria*, viz., *J. ekakusuma* is described from Kerala in Peninsular India. It is allied to *J. procumbens*, but can be distinguished by its smaller habit, ovate or elliptic leaves and axillary, solitary flowers.

808. **Pradeep, A.K. & Sivarajan, V.V. 1993.** "A revision of the genus *Julostylis* Thwaites (Malvaceae) with new species from India". *Bot. Bull. Acad. Sin.* 34: 277–286.
Abstract:- The Indo-Srilankan genus, *Julostylis* Thw. is revised. Orginally considered as monotypic, this genus has three species, including *J. ampumalensis*, a new species described. *Julostylis angustifolia* is distributed in Sri Lanka and along the Western Ghats in Southern India, but *J. polyandra* and *J. ampumalensis* are found only in the Western Ghats. Critical studies of these three species have required amendments to the original generic description. An artificial key to species, their detailed characters, illustrations and relevant notes are also presented.

809. **Pradeep, A.K. & Sivarajan, V.V. 1993.** "*Sida linifolia* Cav. (Malvaceae) – A new record for India". *Rheedea* 3: 22–25.
Abstract:- *Sida linifolia* Cav. of the sect. *Stenindae* Griseb. is reported for the first for India from Thiruvananthapuram city, Kerala. Its complete description, illustration and other relevant notes are provided for easy identification.

810. **Pradeep, A.K. & Sunil, C.N. 1999.** "Two new species of *Tripogon* (Poaceae) from India". *Sida* 18: 809–814.
Abstract:- Two new species of Poaceae, *Tripogon sivarajanii* Sunil and *T. vellarianus* Pradeep from the Western Ghats of Kerala, India is described and illustrated.

811. **Pradeep, A.K. & Sunil, C.N. 2003.** "*Eriocaulon ansarii* Pradeep & Sunil (Eriocaulaceae), a new species from India". *Candollea* 58: 321–323.
Abstract:- *Eriocaulon ansarii* Pradeep & Sunil (Eriocaulaceae), a new species from Kerala, India, is described and illustrated. This species is allied to *E. sollyanum* Royle.

812. **Pradeep, C.K., Joseph, A.V., Vrinda, K.B. & Abraham, T.K. 1996.** "New records of Agaricales from India". *J. Econ. Taxon. Bot.* 20: 233–239.
Abstract:- Four agaric species, viz., *Hydropus anthidepas* (Berk. and Br.) Singer, *Inocybe littoralis* Pegler, *Pluteus martinicensis* Singer & Fiard and *Psathyrella trechispora* (Petch) Pegler have been recorded and described for the first time for India from Western Ghats of Kerala.

813. **Pradeep, S.V. & Balan, A.P. 2009.** "*Dalbergia malabarica* Prain (Fabaceae): A vulnerable species relocated from Kerala after a century". *J. Econ. Taxon. Bot.* 33: 821–823.
Abstract:- *Dalbergia malabarica* Prain is recorded after a century from Meenachil taluk, Kottayam district, Kerala state.

814. **Pradeep, S.V., Balan, A.P. & Kumar, R.P. 2009.** "*Senna septemtrionalis* (Viv.) Irwin & Barneby var. *pubescens* (Singh) Singh (Caesalpiniaceae) – recollected after 120 years from Kerala". *J. Econ. Taxon. Bot.* 33: 818–820.
Abstract:- *Senna septemtrionalis* (Viv.) Irwin & Barneby var. *pubescens* (Singh) Singh, known from type specimen only, is recollected from Munnar, Idukki district, Kerala state after more than a century of its original collection made from the Nilgiris, Tamil Nadu.

815. **Pradeep, S.V., Balan, A.P. & Kumar, R.P. 2009.** "Two legumes (*Indigofera* – Fabaceae) new to Kerala". *J. Econ. Taxon. Bot.* 33: 824–828.
Abstract:- *Indigofera vicioides* Jaub. & Spach (earlier known to occur in Tamil Nadu) and *I. trita* L.f. var. *scabra* (Roth) Ali (earlier known to occur in Andhra Pradesh, Tamil Nadu and Madhya Pradesh) are recorded as new records to Kerala from Chinnar Wildlife Sanctuary, Idukki district.

816. **Pradeep, S.V., Balan, A.P. & Prasad, V.P. 2008.** "*Senna uniflora* (Mill.) Irwin & Barneby (Fabaceae – Caesalpiniaceae) – A new record to Kerala". *Indian J. Forest.* 31: 435–436.
Abstract:- *Senna uniflora*, a native of tropical South America is newly recorded from the state of Kerala. The plant was earlier known from Maharashtra and Karnataka states of India. Description, nomenclature, illustration, etc. are provided to facilitate identification.

817. **Prakash, J.W., Raja, A.R.D., Anderson, A.N., Williams, C., Regini, G.S., Bensar, K., Rajeev, R., Kiruba, S., Jeeva, S. & Das, S.S.M. 2008.** "Ethnomedicinal plants used by *Kani* tribes of Agasthiyarmalai biosphere reserve, southern Western Ghats". *Indian J. Traditional Knowledge* 7: 410–413.
Abstract:- The paper deals with some less known ethnomedicinal uses of 15 palnt species belonging to 13 families. These plants are used as effective remedies by tribals of Agasthiyamalai region of Tamil Nadu and Kerala, southern Western Ghats.

818. **Pramod, C. & Pradeep, A.K. 2012.** "*Isachne veldkampii* Bhat & Nagendran (Poaceae) – A new record for Kerala, India". *J. Econ. Taxon. Bot.* 36: 59–61.
Abstract:- *Isachne veldkampii* Bhat & Nagendran hitherto known only from the type locality in Karnataka state is now reported from Madayippara, Kannur district, Kerala. The species is described and illustrated with a note on its ecology.

819. **Pramod, C., Sivadasan, M. & Anil Kumar, N. 2003.** "Ethnobotany of religious and

supernatural beliefs of Kurichya of Wayanad district, Kerala, India". *Ethnobotany* 15: 11–19.

Abstract:- Wayanad district, which lies on the north-eastern part of Kerala, is known for its rich biodiversity and abundance of ethnic groups. Kurichya is the second largest tribal community of this hilly district and has a rich tradition of religion and medicine. A study of the plants related to magico-religious beliefs of Kurichya revealed the use of 40 plant species belonging to 34 genera and 27 families. Among these, 23 species are used for religious functions, 14 for agricultural ceremonies, 7 for functions related with life cycle, 7 for ritual healing techniques and magical treatments, and 8 species are related with sacred or supernatural beliefs. Details of the uses of the plants and conservational practices employed by Kurichyas are provided.

820. **Prasad, A. & Ampli, P. 2008.** "Selected species of the family Chroococcaceae from Kerala". *J. Econ. Taxon. Bot.* 32: 786–796.

Abstract:- A total number of 27 taxa from the family Chroococcaceae are described with illustrations. These taxa belong to four genera, viz., *Gloeocapsa* (8 spp.), *Gloeotheca* (2 spp.), *Aphanocapsa* (9 spp.) and *Aphanotheca* (8 spp.). Among these, five species, viz., *Gloeocapsa livida, G. minuta, Gloeotheca dubia, Aphanocapsa parietina* and *Aphanotheca heterospora* are believed to be new to India.

821. **Prasad, A. & Panikkar, M.V.N. 2008.** "Species of *Oscillatoria* Vaucher from Kerala, India". *J. Econ. Taxon. Bot.* 32: 909–921.

Abstract:- A total number of 42 taxa of the genus *Oscillatoria*, including 38 species, 3 formae and 1 variety are described with illustrations. Among these 1 species (*O. anandii*) is new to science and 10 species are supposed to be new to India. All these taxa are collected from different parts of Kerala.

822. **Prasad, K.S., Biju, P., Raveendran, K. & Bhat, K.G. 2012.** "*Rotala tulunadensis* sp. nov. (Lythraceae) from Kerala, India". *Nordic J. Bot.* 30: 58–60.

Abstract:- A new aquatic species of the family Lythraceae (*Rotala tulunadensis*) collected from the lateritic plateau at Permade, Kerala, India is described and illustrated. It is closely allied to *R. pterocalyx* A. Raynal, but differs in having larger leaves, calyx tube not stretching laterally to include the capsule, calyx without interjected folds in fruit and larger petals.

823. **Prasad, K.S. & Raveendran, K. 2010.** "*Ipomoea aculeata* Blume (Convolvulaceae) – A new addition to the flora of Kerala". *Indian J. Forest.* 33: 449–450.

Abstract:- *Ipomoea aculeata* Blume is newly recorded for the state of Kerala. Description, nomenclature and illustrations are provided to facilitate identification.

824. **Prasad, K.S. & Raveendran, K. 2010.** "*Glyphochloa acuminata* (Hack.) Clayton var. *stocksii* (Hook.f.) Clayton – A little known plant from Kerala". *J. Econ. Taxon. Bot.* 34: 495–496.

Abstract:- *Glyphochloa acuminata* (Hack.) Clayton var. *stocksii* (Hook.f.) Clayton, a Poaceae member on rocky soil is being reported here from Kasaragod district as new record for Kerala.

825. **Prasad, K.S. & Raveendran, K. 2010.** "*Isachne veldkampii* K.G. Bhat & C.R. Nagendran (Poaceae) – A new record for Kerala". *J. Econ. Taxon. Bot.* 34: 624–625.

Abstract:- *Isachne veldkampii* K.G. Bhat & C.R. Nagendran (Poaceae), a rare and endemic species is described, illustrated and reported as a new record for Kerala.

826. **Prasad, K.S. & Raveendran, K. 2012.** "*Canscora bhatiana* (Gentianaceae), a new species from Kerala, India". *Int. J. Pl. Animal & Environm. Sci.* 2: 197–201.

Abstract:- A new species of *Canscora*, viz., *C. bhatiana* K.S. Prasad & K. Ravi, is described from the lateritic hillocks of Kasaragod district, Kerala. It differs from the allied *C. devendrae* R. Kr. Singh & Diwakar in clear dichotomous apical branching, winged stem, farinaceous leaves, much–reduced upper cauline leaves, pedicellate flowers, lanceolate bracts, two times longer filaments and much shorter ovary.

827. **Prasad, K.S. & Raveendran, K. 2012.** "Endemic plant diversity in selected sacred groves of Kasaragod district, Kerala". *Int. J. Pl. Animal & Environm. Sci.* 2: 240–244.

Abstract:- Sacred groves are one of the finest examples of traditional *in situ* conservation practices and act as treasure house of endemic, endangered and rare plants. Endemic species of any geographical region throw light on the biogeography of the area, areas of extinction and evolution of the flora. Six famous sacred groves of Kasaragod district, Kerala were selected for documentation of floristic diversity with special reference to endemic as well as RET plants and to know threats to them. Present inventory accounted for a total of 81 endemic angiosperms, of which 23 qualify for RET categories. Their role in germplasm conservation is evident from the fact that only 3 species are common to all the groves and 52 endemic species are restricted to any one of the groves. Out of 23 RET species 15 are highly traded for medicinal purposes. Like other groves of Kerala, these also facing the threat of extinction from increasing anthropogenic activities and there is an urgent need of complete protection and public awareness for the existence of these near-climax communities.

828. **Prasad, K.S. & Raveendran, K. 2013.** "*Calyptocarpus vialis* Less. (Asteraceae) – A new record for Kerala, India". *ZOO'S PRINT* 28: 23-24.

Abstract:- *Calyptocarpus vialis* Less (Asteraceae) collected from Kasaragod district for

the first time in Kerala. The detailed description, up-to-date nomenclature, ecological notes and photographs of this species have been presented.

829. **Prasad, K.S. & Raveendran, K. 2013.** "*Madhuca insignis* (Radlk.) H.J. Lam. (Sapotaceae) – A new addition to the flora of Kerala". *ZOO'S PRINT* 28: 25-26.
Abstract:- *Madhuca insignis* (Radlk.) H.J. Lam., a very narrow endemic and critically endangered species is described and reported as a new record for Kerala.

830. **Prasad, P.D. & Panikkar, M.V.N. 2000.** "A new form of *Chara* from Kerala, India". *J. Econ. Taxon. Bot.* 24: 257–259.
Abstract:- A new form of *Chara* (*Chara zeylanica* var. *zeylanica* f. *kilikolluriensis*) is collected from the paddy fields of Kilikollur (Kollam district). This form is established as a new one after comparing the characteristic features of all other forms of the variety *zeylanica*.

831. **Prasad, P.D. & Panikkar, M.V.N. 2000.** "Observations on a dioecious species of *Nitella* (Charophyta, Characeae) from Kerala, India". *J. Econ. Taxon. Bot.* 24: 395–399.
Abstract:- A dioecious species of *Nitella* (*Nitella gracillis* var. *leptosoma* f. *globulifera*) collected from different parts of Kerala is described in detail. This taxon is reported for the first time in India. The original description was incomplete (Pal, 1932) based on immature plants.

832. **Prasad, P.N. & Abraham, Z. 1984.** "Ethnobotany of the *Nayadis* of North Kerala". *J. Econ. Taxon. Bot.* 5: 41–48.
Abstract:- The *Nayadis*, one of the primitive hill tribes, are found in the southern taluks of North Kerala. A large number of these tribes live in the outskirts of the forests covering the lower slopes of the ghats and their spurs. The *Nayadis* are good herbalists and are frequently employed to collect medicinal plants available in the jungles. The present survey enumerates 74 species associated with the life of *Nayadis* in various aspects along with their tribal names and uses.

833. **Prasad, P.N., Jabadhas, A.W. & Janaki Ammal, E.K. 1987.** "Medicinal plants used by the Kanikkars of South India". *J. Econ. Taxon. Bot.* 11: 149–155.
Abstract:- The Kanikkars are one of the most primitive hill tribes of South India. They are commonly found in the slopes of the Western Ghats of Trivandrum, Kanyakumari and Tirunelveli districts. Kanikkars are good herbalists and they cure all the ailments by herbal medicine or by exercising the evil spirits by using herbs. The present survey enumerates 56 medicinal plant species with their tribal names and the various uses.

834. **Prasad, P.N. & Janaki Ammal, E.K. 1985.** "Chromosome number reports of some plants from Silent Valley – I". *Indian J. Forest.* 8: 205–207.

Abstract:- From the Silent Valley, 10 species of plants were collected and examined. The chromosome numbers of these species are listed. The chromosome numbers of *Alocasia montana, Habenaria multicaudata, Hypoxis aurea* and *Mucuna utilis* are reported for the first time.

835. **Prasad, P.N., Rekha, G.S. & Meena Devi, V.N. 2009.** "Ethnobotanical studies of Kalmatham, Kalchadai and Kalthamarai among the Kanikkars in the Western Ghats". *J. Non-Timber Forest Products* 16: 53–54.

Abstract:- The Kanikkars are ancient tribal people living on the slopes of the Western Ghats of South India. They are mainly found in the hills of Neyyatingara of Kerala, Pechipparai and Kothaiar hills of Kanyakumari and Papanasam hills of Tirunelveli district of Tamil Nadu. They are well versed with the herbal knowledge. The present study enumerates three drugs used as medicine for various ailments.

836. **Prasad, S.K. & Raveendran, K. 2010.** "*Petalidium barlerioides* (Roth) Nees (Acanthaceae) – A new addition to the flora of Kerala". *J. Non-Timber Forest Products* 17: 73–74.

Abstract:- *Petalidium barlerioides* (Roth) Nees, a little known species of Acanthaceae, a new addition to the flora of Kerala is described and illustrated. Earlier this species was known to occur in N.W. Himalaya, Karnataka, Orissa, Bihar and Andhra Pradesh.

837. **Prasad, S.K., Biju, P. & Raveendran, K. 2011.** "*Flemingia tuberosa* Dalz. (Fabaceae) – A new addition to the flora of Kerala, India". *J. Threatened Taxa* 3: 1548–1549.

Abstract:- *Flemingia tuberosa* Dalz., a little known species of Fabaceae is newly recorded from the state of Kerala. Brief description, economic importance and photographs are given for easy identification of this rare plant.

838. **Prasad, V.P. 2010.** "Extended distribution of *Kyllinga brevifolia* var. *stellulata* (J.V. Suringar) Ohwi (Cyperaceae) in India". *J. Econ. Taxon. Bot.* 34: 586–587.

Abstract:- Information on the extended distribution of *Kyllinga brevifolia* var. *stellulata* (J.V. Suringar) Ohwi (Cyperaceae) in India is given here along with detailed citations and particulars of the specimens located in different herbaria. This variety is reported from Kerala, Goa, Maharashtra, Uttar Pradesh, Punjab and Sikkim. Earlier this species was known from Karnataka.

839. **Prasad, V.P. & Prasad, M. 1993.** "A new variety of *Zehneria maysorensis* (Wight & Arn.) Arn. from Kerala, South India". *J. Econ. Taxon. Bot.* 17: 471–472.

Abstract:- A new variety of *Zehneria maysorensis* (Wight & Arn.) Arn., viz., *Z. maysorensis* var. *oblonga* has been described from lower camp to Kumily area, Idukki district, Kerala.

840. **Predeep, S.V. & Balan, A.P. 2010.** "*Dalbergia sericea* (Leguminosae – Papilionoideae): A new record of introduction in Southern India". *Rheedea* 20: 35–37.
Abstract:- *Dalbergia sericea* G. Don known so far from the Himalayas of India, Bhutan and Nepal is reported for the first time for Southern India from Kerala. A detailed description, illustration and relevant notes are provided.

841. **Preetha, S.S. & Binojkumar, M.S. 2006.** "*Croton hirtus* L'Herit. (Euphorbiaceae) – A fast naturalizing exotic weed in Indian subcontinent". *J. Econ. Taxon. Bot.* 30: 294–295.
Abstract:- *Croton hirtus* L'Herit., a troublesome weed, is naturalizing in the country with faster rate. Only little information is available about its identity and floral characters, hence, described here with illustration from the coastal regions of Kerala.

842. **Preetha, S.S. & Binojkumar, M.S. 2007.** "*Phyllanthus polyphyllus* Willd. (Euphorbiaceae) – An addition to the flora of Kerala". *J. Econ. Taxon. Bot.* 31: 451–452.
Abstract:- *Phyllanthus polyphyllus* Willd. (Euphorbiaceae) has been reported as new record to the flora of Kerala. Earlier this species was known to occur in Andhra Pradesh and Tamil Nadu.

843. **Priyadarsanan, D.R. 1999.** "*Ficus superba* Miq. and *F. fergusoni* (King) Worthington (Moraceae) – Two new reports from India". *J. Bombay Nat. Hist. Soc.* 96: 492–493.
Abstract:- *Ficus superba* Miq. and *F. fergusoni* (King) Worthington have been recorded here for the first time for India from Palghat and Trivandrum in Kerala, respectively. *Ficus superba* was earlier known from Japan, China, S.E. Asia to Australia. *Ficus fergusoni* was known to occur in Sri Lanka.

844. **Pushpangadan, P., Rajasekharan, S., Ratheeshkumar, P.K., Jawahar, C.R., Nair, V.V., Lakshmi, N. & Sarada Amma, L. 1988.** "'Arogyappacha' (*Trichopus zeylanicus* Gaertn.), the 'Ginseng' Kani tribes of Agasthyar hills (Kerala) for ever green health and vitality". *Ancient Sci. Life* 8: 13–16.
Abstract:- 'Arogyappacha' (*Trichopus zeylanicus*) found endemic to Agasthyar hills of Kerala is used by the local 'Kani' tribe as a health food for getting instant stamina, ever green health and vitality. The tonic effect of this plant is comparable to that of the famous health food/drug 'Ginseng'. A critical survey of the Ayurveda classics, suggests that the 'Arogyappacha' may be the divine 'Varahi' described by Sushruta. Chemical and Pharmacological evaluations of the plant have been initiated.

845. **Pushpangadan, P., Rajasekharan, A., Ratheeshkumar, P.K., Jawahar, C.R., Radhakrishnan, K., Nair, P.C.R., Sarada Amma, L. & Bhatt, A.V. 1990.** "'Amrithapala' (*Janakia arayalpatra* Joseph & Chandrasekharan), a new drug from the Kani tribe of Kerala". *Ancient Sci. Life* 9: 212–214.

Abstract:- Amrithapala (*Janakia arayalpatra*), a rare and endemic plant species found in the Southern forests of Western Ghat region of Kerala, is used by the local 'Kani' tribe as an effective remedy for peptic ulcer, cancer-like affictions and as a rejuvenating tonic. Search made in Ayurvedic literature indicates that the plant may be the divine drug named variously as *Mritha Sanjeevini* (the drug that can revive unconscious or dead) or *Sanjeevini, Thampra Rasayani* in the Oushadha Nighantu (Dictionary of Medicinal Drugs) of Tayyil Kumaran Krishnan (1906).

846. **Radhakrishnan, K., Pandurangan, A.G. & Pushpangadan, P. 2000.** "Tribal artefacts of Kerala". *Ethnobotany* 12: 67–71.

Abstract:- From time immemorial, the indigenous people, the tribals, all over the world, have been depending upon the ambient natural resources for meeting their various needs, viz., food, shelter, clothing, medicine, hunting, fishing, worship, magico-religious rituals and other material requirements. For these purposes, they have developed through trial and error, accessories or artifacts made of stones, minerals, metals, plants and animal products. The innumerable types of weapons, fish trap, musical instruments, utensils and ornaments used, display the characteristic style of living of the particular groups of tribes. Artefacts are man-made objects of prehistoric origin. The tribals inhabiting the Western Ghat forests of Kerala have developed their own artefacts to suit their requirements. Ethnobotanical studies conducted among them brought light the usage of a variety of artefacts. The present communication tries to offer a glimpse of such artefacts of plant origin which serve as key to trace out historical and evolutionary aspects and economic utility of wild plant species traditionally employed by the tribals of this origin.

847. **Radhakrishnan, K., Pandurangan, A.G., Pushpangadan, P. & Sasidharan, A. 1996.** "Less known ethnomedicinal plants of Kerala state and their conservation". *Ethnobotany* 8: 82–84.

Abstract:- Ethnomedicinal plant wealth of Kerala state is one of the richest in India. The knowledge of the tribals associated with the traditional healing practices using wild plants is now fast disappearing due to modernisation and the tendency to discard their traditional lifestyle and gradual migration to the mainstream. There is an urgent need to study and document this precious knowledge for posterity. The paper presents information on some lesser known plant species traditionally used by different tribal communities of Kerala for treating various ailments. Local names and therapeutic details are also given.

848. **Raizada, M.B. & Chatterjee, R.N. 1963.** "A new bamboo from South India". *Indian Forester* 89: 362.

Abstract:- A new bamboo, viz., *Ochlandra ebracteata* allied to *O. travancorica* Benth.

has been described from Parithipally range, Kottur reserve, Trivandrum district, Kerala.

849. **Raja, A.R.D. & Daniels, A.E.D. 2012.** "The liverwort, *Radula multiflora* Gottsche ex Schiffn. (Radulaceae) added to the bryoflora of India". *Indian J. Forest.* 35: 261–262.
Abstract:- The liverwort *Radula multiflora*, so far known to be distributed in Oceania, is recorded for India from the Silent Valley National Park in the Western Ghats. It is described in detail and illustrated.

850. **Rajalal, B., Pandurangan, A.G. & Pushpangadan, P. 1996.** "Systematic studies on Balsaminaceae in Peninsular India". *J. Swamy Bot. Club* 13: 59–62.
Abstract:- The family Balsaminaceae has its greatest development in the Indian region and is remarkably local. The group has *c*. 200 species of which 90 species occur in Peninsular India. Due to their high altitude habitats and delicate nature a comprehensive study has not so far been made. The present paper deals the group in a new angle based on fresh collections to unravel the extent of species diversity among the Balsams in Peninsular India.

851. **Rajan, Brilliant, Varghese, V.M. & George, K.V. 2009.** "Comparative analysis of phyto plankton diversity of two rivers of Kerala in relation to water quality". *Indian J. Bot. Res.* 5: 131–136.
Abstract:- The present study reveals the phytoplankton diversity of Karamana and Neyyar rivers of Southern Kerala with special reference to water quality. Sampling and analysis were carried out along 10 major sites on each river according to the standard methods (APHA, 1995). Altogether 23 genera of phytoplanktons from Neyyar and 20 from Karamana river have been noticed. Members of Chlorophyceae were found to predominate in the two rivers. Genera representing Desmidiaceae, Bacillariophyceae and Cyanophyceae were also noticed in the two rivers. Species diversity was found to be less in the downstream of the two rivers. Some of the pollution tolerant genera noticed in the lower reaches of rivers having high pollution load.

852. **Rajasekaran, A., Stephen, D. & Azeez, P.A. 2000.** "Additions to the flora of the proposed Puyankutty Hydro–electric Project area, Western Ghats". *J. Econ. Taxon. Bot.* 24: 711–722.
Abstract:- As a part of comprehensive Environmental Impact Assessment of proposed Puyankutty Hydroelectric Project located in the Idukki district of Kerala, floristic surveys were undertaken during 1998–1999. In the present list, 186 taxa belonging to 153 genera under 69 families, so far not reported from the area are enumerated.

853. **Rajasekharan, S., Pushpangadan, P., Ratheeshkumar, P.K., Jawahar, C.R., Nair, P.C.R. & Sarada Amma, L. 1989.** "Ethno-medico–botanical studies of *Cheriya arayan*

and *Valiya arayan* (*Aristolochia indica* Linn.; *Aristolochia tagala* Cham.)". *Ancient Sci. Life* 9: 99–106.

Abstract:- The paper presents two important species of plants used by the Kani tribes of Agastyar hills of Trivandrum district of Kerala against snake poison and insect bite.

854. **Rajeevan, P.K. 1995.** "The scenario of orchid industry in Kerala: Retrospection of a decade". *J. Orchid Soc. India* 9: 1–5.

Abstract:- The prevalence of salubrious climatic conditions greatly favours the cultivation of a vast majority of orchids in Kerala. The South-East Asian countries, especially Thailand, Singapore, and Malaysia, had triggered orchid trade in the state, through persons returning from these countries. Hybrids belonging to *Vanda, Dendrobium, Arachnis, Phalaenopsis,* and *Cattleya*, together with intergeneric hybrids, are popular here. The growth of orchid industry in Kerala was stupendous during the last decades, especially during the latter half. Several nurserymen and tradesmen have entered this lucrative field and a score of primitive laboratories have now undertaken tissue culture as well. Orchid societies, clubs, and groups are also coming up in every nook and corner of the state. Change in the orchid scenario of Kerala during the last decade with special reference to the farmers practices, entry of commercial sectors, their impact on the orchid industry in the state, future prospects, etc. are discussed in this paper.

855. **Rajeevan, P.K. 1997.** "An eco-compatible design for growing Dendrobiums in Kerala". *J. Orchid Soc. India* 11: 47–50.

Abstract:- The present investigations deals with a system for cultivation of *Dendrobium* orchids in Kerala, which involved a double layer roofing, the lower layer being at a height of about 2.5 m for the purpose of changing according to weather condition. The top layer of roofing material, which was permanently fitted to the main structure, was shade net (25%). The bottom roofing was provided with shade net (25%) during summer months, and with UV stabilized polythene sheet (70 sm) during rainy season. Polythene sheet improved sunlight during rainy season which lasts for over six months in this region. This further prevents the direct impact of rainfall, which may otherwise lead to incidence and spread of pests and diseases. The type of platform, method of planting, etc., practiced in the new system also took care of the humidity conditions and sanitation. The performance of plants and quality of flowers after a period of 18 months were much superior as compared to those grown under conventional system.

856. **Rajeevan, P.K. & Sobhana, A. 1993.** "Performance of certain epiphytic species in central Kerala". *J. Orchid Soc. India* 7: 31–35.

Abstract:- The floral characters of 41 orchid species, grown at Vellanikkara, Central Kerala were evaluated over a period of 5 years with a view to identifying species suited for commercial floriculture. The parameters employed included the length of the inflorescence and the number, size, colour, fragrance, and blooming period of the flowers.

857. **Rajendran, A., Ravikumar, K. & Henry, A.N. 2002.** "Some useful rare and endemic plants of the southern Western Ghats". *J. Econ. Taxon. Bot.* 26: 181–184.
Abstract:- The southern Western Ghats, a conglomeration of Travancore Hills of Kerala and Anamalais, Nilgiri and Tirunelveli hills of Tamil Nadu are repositories of many rare and endemic plants. The native population of this region are making use of the beneficial properties of these plants. A study was carried out to identify such plants and the way in which the plants are used, which resulted in 10 endemic species. This result may reflect the availability and intrinsic medicinal value of indigenous species.

858. **Rajesh, K.P., Augustine, J. & Sasidharan, N. 1996.** "Occurrence of *Rotala ritchiei* (Clarke) Koehne (Lythraceae) in Periyar Tiger Reserve, Kerala". *J. Econ. Taxon. Bot.* 20: 725–725.
Abstract:- *Rotala ritchiei* (Clarke) Koehne has been recorded for the first time from Periyar Tiger Reserve, Kerala. This species was earlier known to occur in Karnataka, Maharashtra and Tamil Nadu.

859. **Rajesh, K.P., Augustine, J. & Sasidharan, N. 1997.** "Rediscovery of *Taeniophyllum scaberulum* Hook.f., an endemic orchid from Periyar Tiger Reserve, Kerala, India". *Rheedea* 7: 43–46.
Abstract:- *Taeniophyllum scaberulum* Hook.f. (Orchidaceae), first collected in 1854 from 'Travancore', had so far not been located and was considered extinct. Now this species is collected after a gap of 140 years from Periyar Tiger Reserve, Kerala.

860. **Rajesh, K.P. & Kumar, K.K. 2004.** "*Taeniophyllum alwisii* Lindl. (Orchidaceae) – A new record for Kerala". *J. Econ. Taxon. Bot.* 28: 101–103.
Abstract:- *Taeniophyllum alwisii* Lindl., a tiny, leafless, rare and little known epiphytic orchid so far known only from Sri Lanka and Tamil Nadu is recorded from the Periyar Tiger Reserve, Idukki district of Kerala state.

861. **Rajesh, K.P., Nair, M.C. & Madhusoodanan, P.V. 2003.** "*Bolbitis crispatula* Wall. ex C.B. Clarke) Ching (Lomariopsidaceae: Pteridophyta) – A new record for Peninsular India". *J. Econ. Taxon. Bot.* 27: 1040–1042.
Abstract:- *Bolbitis crispatula* (Wall. ex C.B. Clarke) Ching is reported from Kozhikkode district of Kerala as a new record for southern India.

862. **Rajesh, K.P., Sasidharan, N. & Madhusoodanan, P.V. 1997.** "On the occurrence of

Anthropteris palisotii (Desv.) Alston (Oleandraceae), a little known climbing fern in India". *J. Econ. Taxon. Bot.* 21: 723–726.

Abstract:- The occurrence of a little known climbing fern *Anthropteris palisotii* (Desv.) Alston (Oleandraceae) has been reported from Periyar Tiger Reserve, Kerala, India.

863. **Raji, R. 2010.** "Ethnomedicinal studies of some edible weeds used by the Paniyas of Mananthavady, Wayanadu district of Kerala state". *J. Non-Timber Forest Products* 17: 353–356.

Abstract:- The traditional health care system is quite prevalent in the rural areas of Mananthavady taluk, Paniya tribe is a very prominent tribal group of Wayanadu district of Kerala state with unique culture and traditions. Many wild plants constitute a part of food as vegetables of Paniyas. The present study deals with enumeration of 42 plant species under 22 families, used as traditional medicine and food by local indigenous community of the area. The different parts of the weeds are used to cure several kinds of illnesses. The leaf is predominantly used for the source of food and medicine.

864. **Rajith, N.P., Ambily, D.V., Dan, V.M., Sreedevi, P., George, V. & Pushpangadan, P. 2012.** "A survey on ethnomedicinal plants used for menstrual disorders in Kerala". *Indian J. Traditional Knowledge* 11: 453–460.

Abstract:- There are distinct biological and gender related differences between man and woman. Because of their special reproductive role, women are at risk of some distinctly gender related disorders. A survey of ethnomedicinal plants used in the rural areas of Kerala gave valuable ethnomedico-botanical information regarding plants used for menstrual disorders. The present study enumerates 19 species against menorrhagia, 26 species against dysmenorrhoea, 25 species against oligomenorrhoea, 5 species against hypomenorrhoea, 4 species for amenorrhoea and 18 species which can be added in food during menstrual cycle.

865. **Rajith, N.P., Navas, M., Asha, N.L., Thaha, A.M., Vimalkumar, C.S., Anish, N., Rajasekharan, S., George, V. & Pushpangadan, P. 2009.** "Ethnobotanical studies on coconut palm (*Cocos nucifera* L.) with special reference to South Kerala". *Ethnobotany* 21: 32–40.

Abstract:- Biodiversity and associated traditional knowledge exist as an indispensable component of life, culture and tradition of the people. India is a treasure house of such Traditional Knowledge and cultural practices. In different parts of the country, people make use of natural resources according to their needs in day-to-day life. The practices followed by the indigenous communities are generally oral in nature. Ethnomedico-botanical investigations on coconut palm have been carried out in the two southern districts,

Kollam and Pathanamthitta of Kerala. The paper enumerates the traditional use of coconut in medicinal and religious practices.

866. **Rajith, N.P., Navas, M., Thaha, A.M., Manju, M.J., Anish, N., Rajasekharan, S. & George, V. 2010.** "A study on traditional mother care plants of rural communities of South Kerala". *Indian J. Traditional Knowledge* 9: 203–208.

Abstract:- Traditional knowledge has been used for centuries by indigenous and local communities in healthcare. It is an important factor for sustainability of natural resource management. The women folk of the country play a vital role in the use and mobilization of such biodiversity based knowledge system. The efficacy of this knowledge is time tested and capable of healthcare management in the form of nutraceuticals and pharma food. The study aimed to document the existing system of traditional knowledge and utility pattern of medicinal plants related to pre and post natal care. This resulted in the documentation of 52 plant species belonging to 49 genera and 38 families, as 17 single drugs, 8 formulations of medicated water for bath (*Vethuvellam*), 5 formulations of nutraceuticals (*Kurukkumarunnu*), 4 formulations of food (medicated porridge). The plants are enumerated along with local name, type of plants, family name, parts used and mode of administration.

867. **Rajith, N.P. & Ramachandran, V.S. 2010.** "Ethnomedicines of *Kurichyas*, Kannur district, Western Ghats, Kerala". *Indian J. Nat. Prod. & Resources* 1: 249–253.

Abstract:- The *Kurichyas* are one of the tribal communities of Kerala who have their settlements in Kannavam, Kannur district. Extensive field studies were undertaken in order to study the utilization of wild medicinal plants which has resulted in the collection of 50 species belonging to 31 families. The scientific name, family, vernacular name and ethno-botanical uses have been provided in this communication.

868. **Rajkumar, G. & Pandurangan, A.G. 2008.** "Air layering in *Goniothalamus rhynchantherus* Dunn: A rare and endemic plant of Agasthyamala in southern Western Ghats". *Indian J. Bot. Res.* 4: 155–159.

Abstract:- Air layering was successfully carried out under wild conditions in *Goniothalamus rhynchantherus* Dunn, a rare and endemic plant of Agasthyamala. The treatment with IBA at 1000 ppm on semi-hard branches induced 72% rooting while only 10% was in control during monsoon season. The success of air layering in this species being a first report and hence deserves scientific scrutiny. The method can readily be used for producing enough sapling for restoring the populations both in *ex-situ* and *in-situ* conditions.

869. **Raju, V.S. 1984.** "Distributional notes on *Margaritaria* L.f. (Euphorbiaceae) in southern India and Sri Lanka". *J. Bombay Nat. Hist. Soc.* 81: 526–528.

Abstract:- Distributional notes on two species of *Margaritaria* L.f. (Euphorbiaceae) have been given. *Margaritaria indica* (Dalz.) Airy Shaw is from southern India and *M. cyanosperma* (Gaertn.) Airy Shaw from Sri Lanka.

870. **Raju, V.S. 1985.** "Notes on two species of the genus *Desmodium* subg. *Sagotia* Sect. *Nicolsonia* from Southern India". *J. Econ. Taxon. Bot.* 7: 476–478.
Abstract:- A taxonomic account of two species from South India, viz., *Desmodium barbatum* (L.) Benth. subsp. *saulieri* (Schind.) Ohashi and *D. benthamii* Balakr. belonging to *Desmodium* sect. *Nicolsonia* has been given. The former occurs in Kerala and the latter in Andhra Pradesh.

871. **Raju, V.S. & Mohanan, C.N. 1984.** "*Claoxylon anomalum* Hook.f.: A little and imperfectly known endemic species from Southern India". *J. Econ. Taxon. Bot.* 5: 1201–1204.
Abstract:- *Claoxylon anomalum* Hook.f. – a rare and endemic species of Euphorbiaceae is reported from the wet evergreen forests of Idukki Hydro–electric Project area, Kerala. Its description has been emended and updated besides discussing its relationship with allied taxa at infrageneric and generic levels.

872. **Rama Rao, M. 1914.** "*Flowering Plants of Travancore*". The Government Press, Trivandrum.

873. **Ramachandran, V.S. 1981.** "Observations on the vegetation of Tellicherry division of Cannanore district, Kerala". *Bull. Bot. Surv. India* 23: 140–145.
Abstract:- Observations on the vegetation of Tellicherry division of Cannanore district, Kerala have been given. Nearly 1,250 field numbers of plants belonging to 825 species have been collected from the district. Some of these collections are rare and interesting plants and a few are new records for South India. New plants reported from the district include *Sida beddomei* K.C. Jacob and *Nothopegia beddomei* Gamble var. *wynaadica* Ellis & Chandras.

874. **Ramachandran, V.S. 1987.** "Further notes on the ethnobotany of Cannanore district, Kerala". *J. Econ. Taxon. Bot.* 11: 47–50.
Abstract:- The present paper deals with 38 plant species of ethnobotanical importance, belonging to 36 genera under 27 families. The local names, following their botanical names, have also been given.

875. **Ramachandran, V.S. & Bhargavan, P. 1984.** "*Diospyros trichophylla* Alston (Ebenaceae) – A new record for India". *Indian J. Forest.* 7: 247–248.
Abstract:- *Diospyros trichophylla* Alston has been recorded for the first time for India from Silent Valley, Kerala. This species was thought to be endemic to Sri Lanka so far.

876. **Ramachandran, V.S., Nair, N.C. & Nair, V.J. 1982.** "Rediscovery of *Meteromyrtus wynaadensis* (Bedd.) Gamble (Myrtaceae) more than a century after its earlier collection". *J. Bombay Nat. Hist. Soc.* 79: 461–462.
Abstract:- *Meteromyrtus wynaadensis* (Bedd.) Gamble (Myrtaceae) has been recollected from Theerthundamalai, Chandanathode after more than a century.

877. **Ramachandran, V.S. & Nair, V.J. 1981.** "Ethnobotanical studies in Cannanore district, Kerala state (India)". *J. Econ. Taxon. Bot.* 2: 65–72.
Abstract:- The present paper deals with 90 plant species of ethnobotanical value, belonging to 76 genera and 45 families. The local names, following their botanical names, have also been given.

878. **Ramachandran, V.S. & Nair, V.J. 1982.** "Plant records from Kerala state". *J. Econ. Taxon. Bot.* 3: 659–662.
Abstract:- A total of 14 species have been reported for the first time for the state of Kerala.

879. **Ramachandran, V.S. & Nair, V.J. 1988.** *Flora of Cannanore*. Botanical Survey of India, Calcutta.
Abstract:- In this work, 1132 species belonging to 658 genera under 157 families of angiosperms are treated, of which 875 are dicots and 257 monocots.

880. **Ramachandran, V.S., Nair, V.J. & Nair, N.C. 1980.** "On some very rare or noteworthy plants from Kerala state". *J. Econ. Taxon. Bot.* 1: 93–97.
Abstract:- The paper deals with 10 rare or otherwise interesting plants recently collected from Cannanore district, Kerala state.

881. **Ramachandran, V.S., Nair, V.J. & Nair, N.C. 1984.** "Notes on some interesting plants collected from Kerala". *J. Econ. Taxon. Bot.* 5: 135–137.
Abstract:- Based on the collections from Wynaad forests of Kerala, the occurrence of *Tylophora dalzellii* Hook.f. in the erstwhile Presidency of Madras is confirmed. *Crotalaria clarkei* Gamble and *Ixora lawsonii* Gamble have been relocated nearly after a century from this region since their previous collections. An endemic species, *Nilgirianthus lupulinus* (Nees) Bremek. has been collected after a lapse of 62 years.

882. **Ramachandran, V.S., Nair, V.J. & Nair, N.C. 1984.** "Some plant records from Kerala state". *J. Econ. Taxon. Bot.* 5: 139–141.
Abstract:- Ten rare and interesting plants were collected from different forest areas of Cannanore district of Kerala.

883. **Ramachandran, V.S., Nair, V.J. & Nair, N.C. 1984.** "*Stemodia verticillata* (Mill.) Hassl. (Scrophulariaceae) – A new record for India". *J. Econ. Taxon. Bot.* 5: 939–940.
Abstract:- *Stemodia verticillata* (Mill.) Hassl. earlier known only from South America,

Java and Sri Lanka is recorded for the first time for India from banks of Kabini river in Begur R.F., Cannanore district, Kerala.

884. **Ramachandran, V.S., Nair, V.J. & Nair, N.C. 1985.** "Notes on four endemic and rare species from Kerala, South India". *J. Econ. Taxon. Bot.* 6: 263–265.

Abstract:- Notes on four endemic and rare species from Kerala, viz., *Habenaria multicaudata* Sedgewick (Orchidaceae), *Loeseneriella bourdillonii* (Gamble) Raju (Hippocrateaceae), *Nilgirianthus urceolaris* (Gamble) Bremek. (Acanthaceae) and *Tropidia angulosa* (Lindl.) Bl. (Orchidaceae) are provided.

885. **Ramachandran, V.S., Sreekumar, P.V. & Nair, V.J. 1984.** "*Panicum humidorum* Buch.–Ham. ex Hook.f. – An addition to the grass flora of South India". *J. Econ. Taxon. Bot.* 5: 1009–1011.

Abstract:- *Panicum humidorum* Buch.–Ham. ex Hook.f. earlier known in India only from Assam is recorded for the first time from South India, Cannanore district, Kerala.

886. **Ramachandran, V.S. & Swarupanandan, K. 2006.** "Additional notes on the distribution of *Palaquium ravii* Sasidh. & Vink (Sapotaceae) and local vicariance and endemism in *Palaquium*". *J. Econ. Taxon. Bot.* 30: 225–230.

Abstract:- *Palaquium ravii* Sasidh. & Vink, formerly known from the districts of Trichur and Idukki has been collected from the Nelliampathy forests of Palakkad district. The species assumes to have a wider distribution than thought before, spanning from south of Palakkad (Palghat) gap up to Aryankavu pass. The genus *Palaquium* is a typical example for local variance and local endemism; while *P. ellipticum* (Dalz.) Baillon is distributed throughout the W. Ghats, *P. bourdillonii* Brandis is restricted to the Agasthyamalai ranges (Ashambu Hills) and *P. ravii* Sasidh. & Vink is restricted to the Anamalai-Palni-Cardamon hill complex.

887. **Ramakrishnan, P.S. 1984.** "The need to conserve Silent Valley and tropical rain forest ecosystems in India". *Environm. Conservation* 11: 170–171.

Abstract:- Silent Valley constitutes an important preserve of relict ecosystems that are practically unique for the Indian subcontinent and would seem suitable for a biosphere reserve and for future studies on tropical forest ecosystem functioning. Because of the existence of a wide variety of wild germ-plasm of food-plants of both conventional and unconventional type in the Silent Valley, the Silent Valley and tropical rain forest ecosystems in India need to be conserved.

888. **Ramamurthy, K. 1971.** "A new genus of Acanthaceae from Kerala state, South India". *Bull. Bot. Surv. India* 13: 153–155.

Abstract:- A new genus of Acanthaceae, viz., *Kanjarum* has been established with a species

K. palghatense from Kanjarumpuzha submergible area, Palghat district, Kerala based on *K. palghatense*.

889. **Ramamurthy, K. & Chandrasekaran, V. 1981.** "Floristic studies in Trichur district, Kerala". *Bull. Bot. Surv. India* 23: 38–41.
Abstract:- The observations on the vegetation of Trichur district of Kerala based on floristic studies have been dicussed in the present paper.

890. **Ramamurthy, K. & Joseph, J. 1964.** "A new species of *Dicraea* from South India". *Bull. Bot. Surv. India* 6: 333–334.
Abstract:- A new species of *Dicraea*, viz., *D. filifolia* allied to *D. dichotoma* (Gardn.) Tul. has been described from Parambikulam submergible area, Trichur district, Kerala.

891. **Ramamurthy, K. & Rajan, R. 1982.** "A new species of *Schefflera* J.R. & G. Forst. (Araliaceae) from Kerala state, India". *J. Bombay Nat. Hist. Soc.* 79: 163–164.
Abstract:- A new species of *Schefflera*, viz., *S. chandrasekharanii* allied to *S. bourdilloni* Gamble has been described from Munnar-Kumili road, Idikki district, Kerala.

892. **Ramamurthy, K. & Rajan, R. 1983.** "A new species of *Lagenandra* Dalzell (Araceae) from Kerala state, India". *J. Bombay Nat. Hist. Soc.* 80: 613–615.
Abstract:- A new species, viz., *Lagenandra nairii* (Araceae) allied to *L. undulata* Sastry is described from Kerala.

893. **Ramamurthy, K. & Rajan, R. 1983.** "A new species of *Psychotria* Linn. (Rubiaceae) from Kerala state, India". *J. Bombay Nat. Hist. Soc.* 80: 621–623.
Abstract:- A new species, viz., *Psychotria sekharana* (Rubiaceae) allied to *P. nudiflora* Wight & Arn. is described from banks of Kannankuzhi riverside, Trichur district, Kerala.

894. **Ramamurthy, K. & Rajan, R. 1985.** "A new species of *Ophiorrhiza* L. (Rubiaceae) from Kerala state, India". *J. Bombay Nat. Hist. Soc.* 82: 174–176.
Abstract:- A new species of *Ophiorrhiza*, viz., *O. nairii* allied to *O. roxburghiana* Wight has been described from Adimali Reserve forest, Idukki district, Kerala.

895. **Ramamurthy, K. & Rajan, R. 1985.** "Two noteworthy plants from Kerala". *J. Econ. Taxon. Bot.* 7: 728–729.
Abstract:- *Triumfetta tungarensis* Billore (Tiliaceae) and *Julostylis angustifolia* (Arn.) Thw. (= *Kydia angustifolia* Arn.) (Malvaceae) are recorded as new distribution reports to Kerala and India respectively. Short description, relevant notes and field data regarding these taxa are presented in this paper.

896. **Ramesh, B.R. & de Franceschi, D. 1993.** "Two new species of *Diospyros* (Ebenaceae) from India". *Blumea* 38: 131–136.
Abstract:- *Diospyros ghatensis* allied to *D. philippinensis* A. DC. and *D. pyrrhocarpoides*

allied to *D. pyrrhocarpa* Miq. (Ebenaceae), two new tree species from the evergreen forests Kerala of South India are described.

897. **Ramesh, R.R. & Pascal, J.P. 1991.** Distribution of endemic arborescent tree species in the Western Ghats. In: Karunakaran, C.K. (Ed.), *The proceedings of the symposium on rare, endangered and endemic plants of the Western Ghats*. Kerala Forest Department, Thiruvananthapuram. pp. 20–29.

Abstract:- Nearly 490 woody taxa are found represented in the low and medium elevation evergreen forests of the Western Ghats, of these 308 are endemic to the region. These endemic taxa are spread over 58 families. Largest families are Euphorbiaceae and Rubiaceae with 34 taxa, followed by Lauraceae 33 and Myrtaceae 30. Arecaceae comprising 3 arborescent species is the only family from monocotyledons. Gymnosperm is represented by *Podocarpus wallichianus*.

898. **Rane, A.D., Ashokan, P.K. & Kumar, B.M. 2010.** "Succession pattern in the mangrove forest of Puduvyppu due to human interference". *Indian J. Forest.* 33: 21–24.

Abstract:- A young patch of mangrove on South-West coast of India is subjected to intense human interference. A succession pattern was in progress in the undisturbed areas, wherein, a monospecifically dominated *Avicennia officinalis* stand was facilitating an understorey of shade–loving species like *Bruguiera cylindrica* and *Excoecaria agallocha*. On the other hand, those parts of the forest which were subjected to human interference, the retrogression of the ecosystem was at play. The canopy gaps so created were covered by *Acanthus ilicifolius*, a light demanding under-shrub species, forming a thick bed of 2 – 3 ft. height entirely covering the forest floor, thus prohibiting the establishment of other tree species. However, undisturbed mangrove forest areas were devoid of this shrub species.

899. **Rangan, V.V., Sreekumar, V.B., Renuka, C. & Padmakumar, P. 2003.** "Report on three *Calamus* species (Arecaceae) new to Kerala, India". *Rheedea* 13: 77–78.

Abstract:- *Calamus karnatakensis* Renuka & Lakshmana, *C. lakshmanae* Renuka and *C. lacciferus* Lakshmana & Renuka described earlier from Karnataka are reported from the forests of Kerala. Extended distribution of these three taxa enhances total *Calamus* species occurring in Kerala from 15 to 18 in number.

900. **Rao, A.N. 1987.** "A note on the correct identity of *Liparis indiraii* Manilal *et* Sathish Kumar (Orchidaceae)". *J. Econ. Taxon. Bot.* 9: 249–250.

Abstract:- *Liparis indiraii* Manilal *et* Sathish Kumar (Orchidaceae) is reduced to the synonymy of *L. wrayii* Hook.f.

901. **Rao, A.N. 1988.** "*Goodyera fumata* Thw. (Orchidaceae) – A new record for South India". *J. Bombay Nat. Hist. Soc.* 85: 459–460.

Abstract:- *Goodyera fumata* Thw. (Orchidaceae) has been reported for the first time from Kerala. This species was previously known from Sikkim and Arunachal Pradesh. The present report of its occurrence in Kerala is interestingly a connecting link between Sri Lanka and Northeast India thereby giving a clue of its possible occurrence in intervening states namely, Tamil Nadu, Andhra Pradesh, Orissa and West Bengal.

902. **Rao, A.N. 1988.** "*Zeuxine clandestine* Bl. (Orchidaceae) – A new record to India". *Indian Forester* 114: 95–97.

Abstract:- *Zeuxine clandestine* Bl. is reported from Silent Valley R.F., Palghat district, Kerala as a new addition to the orchid flora of India. This species was earlier known from Thailand, Malaya and Java.

903. **Rao, A.V.N. 1966.** "A preliminary observation on the Orchidaceae of South India". *Bull. Bot. Surv. India* 8: 221–227.

Abstract:- In this paper information on 84 species of orchids of South India preserved in the Regional Herbarium, Coimbatore and under cultivation in the Orchidarium at Yercaud, is furnished. This is based on the data collected in the field and observations made in the Orchidarium. The nomenclature of these orchids has been brought up-to-date, wherever possible.

904. **Rao, G.V.S. & Gopalan, R. 1981.** "Notes on an interesting species of *Symplocos* Jacq.". *J. Bombay Nat. Hist. Soc.* 78: 191–192.

Abstract:- *Symplocos kurgensis* Clarke has been recorded from Chandanathode in Cannanore district, Kerala which is away from the type locality after about 100 years.

905. **Rao, M.A. 1995.** "Palaeoecological and stratigraphical significance of pteridophytic spores in the Kerala basin". *Indian Fern J.* 12: 97–104.

Abstract:- The Tertiary sediments of India, in general are replete with pteridophytic spores. The present paper deals with an exhaustive studies of these spores for palaeoecological and stratigraphical significance from the Quilon and Warkalli formations of Kerala Basin, South India. Of the total representation of 135 genera and 175 species, the pteridophytic spores are represented by 31 genera and 64 species. A careful morphotaxonomic study of the dispersed spores and their comparison with the spores of extant genera shows that they are referable to the following families: Schizaeaceae, Adiantaceae, Lycopodiaceae, Parkeriaceae, Polypodiaceae, Cyatheaceae, Pteridaceae, Osmundaceae, Gleicheniaceae, Ophioglossaceae and Dicksoniaceae. Among these the spores of Schizaeaceae, Polypodiaceae, Adiantaceae and Osmundaceae are dominant in the palyno–assemplage. The presence of pteridophytic spores of a co-dominant constituents of the Quilon and Warkalli assemblages convincingly indicates the prevalence of a tropical climate with

heavy precipitation at the time of deposition. From the composition of pteridophytic spores, a fresh water palaeo-environment is inferred. The presence of *Crassoretitriletes, Neyvelisporites, Striatriletes, Pteridacidites, Polypodiaceaesporites* spp. and *Polypodiisporites* spp. in addition to several other angiospermic pollen genera in the Kerala Basin provide a supporting evidence for Miocene age to the sediments studied.

906. **Rao, N.R. 1988.** "Three new varietal combinations in flowering plants of India". *J. Econ. Taxon. Bot.* 12: 378.

Abstract:- Three new combinations – *Cymbopogon nardus* (L.) Rendle var. *luridus* (Hook.f.) Ramarao, *Leucas flaccida* R. Br. var. *sebastiana* (Subbarao & Kumari) Ramarao and *L. indica* (L.) R. Br. ex Vatke var. *nagalapuramiana* (Chandr. & Srin.) Ramarao are proposed. The first one occurs in Tamil Nadu, Kerala and Andhra Pradesh and the other two varieties in Andhra Pradesh.

907. **Rao, N.R., Narasimhan, D. & Henry, A.N. 1987.** "The genus *Adenia* Forsskal (Passifloraceae) in Southern India". *J. Econ. Taxon. Bot.* 11: 241–245.

Abstract:- The genus *Adenia* Forsskal is represented by three species in Southern India, viz., *A. wightiana* (Wall. ex Wight & Arn.) Engler from Andhra Pradesh, Tamil Nadu and Kerala, *A. hondala* (Gaertn.) de Wilde from Tamil Nadu and Kerala and *A. cardiophylla* Engler from Andhra Pradesh, which forms a new distributional record to Southern India. A comprehensive account of the three species with key is provided.

908. **Rao, N.R., Ravisankar, T. & Narasimhan, D. 1988.** "Occurrence of *Ougeinia oojeinensis* (Roxb.) Hochr. (Papilionaceae) in Kerala". *Indian J. Forest.* 11: 338.

Abstract:- *Ougeinia oojeinensis* (Roxb.) Hochr. has been collected for the first time from Kerala (Munnar Ghat, Palghat district).

909. **Rao, R.S. 1964.** "New plants records from India". *Curr. Sci.* 33: 120–121.

Abstract:- Five species have been recorded for the first time from India, viz., *Beccarinda cordifolia* (Anthony) B.L. Burtt. (Gesneriaceae), *Dioscorea soortechinii* Prain & Burkill (Dioscoreaceae) and *Coelogyne carnea* Hook.f. (Orchidaceae) have been reported from Siang Frontier Division, N.E.F.A., *Phacellaria compressa* Benth. (Santalaceae) from Subansiri Frontier Division, N.E.F.A. and *Leptaspis urceolata* (Roxb.) R. Br. (Poaceae) from Kerala.

910. **Rao, R.S. 1966.** "Indian species of Commelinaceae – Miscellaneous notes II". *Blumea* 14: 346–348.

Abstract:- *Cyanotis arcotensis* Rolla Rao allied to *C. burmanniana* Wight and *C. vaginata* Wight has been described as a new species from Tamil Nadu and Kerala, India.

911. **Rao, R.S. & Ahuja, K.K. 1968.** "New and noteworthy plant records from India". *Bull. Bot. Surv. India* 10: 360–366.

Abstract:- Five species, viz., *Phacellaria compressa* Benth., *Beccarinda cordifolia* (Anthony) B.L. Burtt, *Agapetes nutans* Dunn, *Impatiens jurpia* Buch.–Ham. and *Dioscorea scortechinii* Prain *et* Burkill have been reported as new records to India from Arunachal Pradesh. *Tropidia curculigoides* Lindl. has been reported for the first time for South India from Kerala; previously this species was known from West Bengal, Sikkim and Assam.

912. **Rao, T.A. & Gas, G.C. 1974.** "*Limnocharis flava* (L.) Buch. – An aquatic plant on the move in Kerala state". *J. Bombay Nat. Hist. Soc.* 70: 577.
Abstract:- *Limnocharis flava* (L.) Buch. has been collected from the fringes of canal bank and paddy fields in Trichur and its vicinity. From the field survey, it is obvious that this adventive plant is making a fast headway northwards at several places in the Trichur district bounded on the north by Palghat, on the east by Coimbatore, on the south by Ernakulam and Kottayam districts and on the west by Arabian sea.

913. **Rao, V.G. & Varghese, Mani K.I. 1992.** "Two unreported foliar diseases from forests of Kerala (S. India)". *Indian J. Forest.* 15: 116–117.
Abstract:- The paper describes two new foliar diseases of *Dioscorea bulbifera* and *Morinda tinctoria* incited by two fungi, viz., *Phyllosticta kawakami* and *P. morindae*, respectively with illustrations, collected from Kerala.

914. **Rasiya Beegam, A. & Nayar, T.S. 2011.** "Plants used for natal healthcare in folk medicine of Kerala, India". *Indian J. Traditional Knowledge* 10: 523–527.
Abstract:- This paper deals with 66 preparations made out of 58 plant species specially employed in prenatal (14), postnatal (23) and child healthcare (29) in folk medicine of Kerala. Details about preparation and administration of medicine, plant parts used, local names, dosages and status of occurrence of species – wild, naturalized, cultivated or marketed, are provided. An analysis of these, 58 plant species shows that 37 species (63%) are native and the rest 21 species (36%) are naturalized exotics. Of the 37 native species, 14 species occur wild and the rest 23 species are either cultivated or planted.

915. **Rathakrishnan, N.C. 1971.** "Notes on the distribution, taxonomy and nomenclature of some South Indian orchids". *Bull. Bot. Surv. India* 13: 1–6.
Abstract:- This paper deals with (i) new distribution of 13 species and (ii) taxonomy and nomenclature of 43 taxa since the publication of the family Orchidaceae by C.E.C. Fischer (1928) in Gamble's *Flora of the Presidency of Madras*. Within new distributional record of 13 species, 8 species are recorded from Kerala.

916. **Rathakrishnan, N.C. & Chithra, V. 1984.** "Distribution of endemic orchids in Karnataka, Kerala and Tamil Nadu". *J. Econ. Taxon. Bot.* 5: 1001–1006.
Abstract:- The present paper deals with 65 orchids endemic to the states of Karnataka,

Kerala and Tamil Nadu. A total of 17 species of orchids hitherto considered as endemic to South India by various botanists have wider distribution and they are pointed out with appropriate references.

917. **Ratheesh Narayanan, M.K. & Anil Kumar, N. 2007.** "Gendered knowledge and changing trends in utilization of wild edible greens in Western Ghats, India". *Indian J. Traditional Knowledge* 6: 204–216.

Abstract:- The differences and trends in the use and management of wild edible greens and between households pertaining to three ethnic and one migrant community in Wayanad district, an agro-biodiversity hot spot in southern Western Ghats have been discussed. A total of 366 people were interviewed and 20 key informants were selected from each community to examine multiple uses, preferences, marketing and local availability of edible wild green, where 102 species were recorded. The paper also discusses how gender, ethnicity, age and socio-economic status affect wild green management and household nutritional security. Women are more skillful in managing the surrounding landscape and are main knowledge holders and conservationists. The implications of land use changes, agrochemicals, restrictions on forest access and alien species invasion on the availability of wild greens are highlighted. It was found that women are taking effective steps to sustainably manage landscapes and species that provide edible greens, but changing trends in gender relations inhibit their efforts; alien species invasion and modern agri-practices lead to local extinction of many greens, and the erosion of traditional knowledge especially among youth due to materialistic life style affects the sustainable use of many wild green.

918. **Ratheesh Narayanan, M.K., Manudev, K.M., Sujanapal, P., Anil Kumar, N., Sivadasan, M. & Alfarhan, A.H. 2010.** "*Oberonia swaminathanii* sp. nov. (Orchidaceae) from Kerala, India". *Nordic J. Bot.* 28: 713–715.

Abstract:- *Oberonia swaminathanii*, a new species of Orchidaceae from Wayanad district, Kerala, India is described and illustrated. The new species resembles *Oberonia balakrishnanii, O. chandrasekharanii* and *O. seidenfadeniana* by its 3-lobed labellum and 2-lobuled midlobe; but differs in having brick-red-coloured flowers, triangular labellum disc and a subglobose column.

919. **Ratheesh Narayanan, M.K., Sujanapal, P., Dhanya, C.S. & Anil Kumar, N. 2010.** "Rediscovery of *Eugenia argentea* Bedd. (Myrtaceae) with notes on its distribution range and conservation status". *J. Econ. Taxon. Bot.* 34: 501–504.

Abstract:- *Eugenia argentea* Bedd., a small tree endemic to Nilgiri phytogeographical region of southern Western Ghats, which was presumed to be extinct, is recollected from

Wayanad district, Kerala after a lapse of more than 140 years of its type collection. Population, distribution pattern and conservation status were assessed. Detailed description with illustration is provided.

920. **Ratheesh Narayanan, M.K., Anil Kumar, N. & Joseph, J.P. 2012.** "*Impatiens johnsiana* (Balsaminaceae), a new scapigerous Balsam from Western Ghats, India". *J. Bot. Res. Inst. Texas* 6: 113–118.

Abstract:- A new species, viz., *Impatiens johnsiana* Ratheesh & al. (Balsaminaceae) from the Wayanad district, Kerala, India, a new endemic epiphytic scapigerous balsam related to *I. dendricola* and *I. scapiflora* is described and illustrated.

921. **Ratheesh Narayanan, M.K., Sunil, C.N., Nandakumar, M.K., Sujana, K.A., Joseph, J.P. & Anil Kumar, N. 2012.** "*Lindernia madayiparense* (Linderniaceae) – A new species from Kerala, India". *Int. J. Pl. Animal & Environm. Sci.* 2: 59–62.

Abstract:- *Lindernia madayiparense* (Linderniaceae), a new species from Kannur district, Kerala, India is described and illustrated. The new species is allied to *L. parviflora*.

922. **Raveendran, T.P. & Mathew, P. 1990.** "*Farmeria metzgerioides* (Trim.) Willis (Podostemonaceae): A new plant record for India". *J. Econ. Taxon. Bot.* 14: 715–716.

Abstract:- *Farmeria metzgerioides* (Trim.) Willis (Podostemonaceae) is reported for the first time for India from Kasargod district of Kerala. The species is described and illustrated with an artificial key for easy identification.

923. **Raveendran, T.P. & Mathew, P. 1994.** "*Polypleurum wallichii* (R. Br. ex Griff.) Warm. (Podostemaceae) – A new plant record for South India". *Rheedea* 4: 106–108.

Abstract:- *Polypleurum wallichii* (R. Br. ex Griff.) Warm. (Podostemaceae) is reported for the first time in South India. Description and illustration have been provided to facilitate easy identification.

924. **Ravi, N. 1970.** "A new species of *Zornia* Gmel. from S. India". *J. Bombay Nat. Hist. Soc.* 66: 489–490.

Abstract:- A new species, *Zornia quilonensis*, which comes near *Zornia diphylla* (L.) Pers., is described here. It is based on the study of living specimens collected from Quilon, Kerala, South India.

925. **Ravi, N. 1970.** "A new species of *Borreria* Mey, from south India". *J. Bombay Nat. Hist. Soc.* 66: 539–541.

Abstract:- A new species of *Borreria*, viz., *B. eradi* (Rubiaceae) allied to *B. hispida* (L.) K. Schum. and *B. ocymoides* Burm. has been described and illustrated from Kerala.

926. **Ravi, N. 1970.** "A new record for *Crotalaria incana* Linn. from South India". *J. Bombay Nat. Hist. Soc.* 67: 132–133.

Abstract:- *Crotalaria incana* L., a South American species, hitherto known to occur in India only in the Kumaon hills, has been recorded for the first time for South India from Museum compound, Trivandrum, Kerala.

927. **Ravi, N. 1971.** "*Lindernia angustifolia* (Benth.) Wettst. (Scrophulariaceae) – A new record for south India". *J. Bombay Nat. Hist. Soc.* 67: 611–613.
Abstract:- *Lindernia angustifolia* (Benth.) Wettst., hitherto known to occur in India in subtropical Himalayas, Kumaon, Sikkim, Chota Nagpur, Assam, Bengal and Khasia mountains has been recorded for the first time from Punalur, Kerala.

928. **Ravi, N. 1976.** "*Indigofera benthamiana* Hance (Papilionaceae) – A new record from India". *J. Bombay Nat. Hist. Soc.* 73: 242–243.
Abstract:- *Indigofera benthamiana* Hance has been reported for the first time for India from three different parts of Quilon district namely, Chandanathoppu near Quilon, Chengamanadu near Punalur and Parakode near Adoor. Earlier this species was known to occur in S. China.

929. **Ravi, N. 1985.** "*Oxygonum* Burch. (Polygonaceae) – An interesting new record from India". *J. Bombay Nat. Hist. Soc.* 82: 442–444.
Abstract:- *Oxygonum sinuatum* (Hochst. *et* Steud. ex Meisn.) Dammer has been reported here for the first time for India from Quilon town, Kerala. Earlier this species was known to occur in Egypt. The genus is also an addition to Indian flora.

930. **Ravi, N. 1993.** "Two new species of *Fimbristylis* Vahl (Cyperaceae) from Kerala, India". *Rheedea* 3: 107–112.
Abstract:- Two new species of *Fimbristylis* Vahl, viz., *F. angamoozhiensis* allied to *F. dura* (Zoll. & Mor.) Merr. and *F. pseudonarayanii* allied to *F. narayanii* C.E.C. Fischer are described and illustrated from Western Ghats of Kerala, India.

931. **Ravi, N. 1995.** "Two new species of *Dimeria* R. Br. (Poaceae) from Kerala, India". *Rheedea* 5: 37–42.
Abstract:- Two new species of *Dimeria* R. Br., viz., *D. chelariensis* Llied to *D. copeana* Sreekumar & al. and *D. erodii* allied to *D. raizadae* V.J. Nair & al. are described and illustrated from Kerala, India.

932. **Ravi, N. 1996.** "Another two new species of *Dimeria* (Poaceae) from Kerala, India". *Blumea* 41: 251–256.
Abstract:- Two new species of *Dimeria* R. Br., viz., *D. coperi* and *D. kalavoorensis* have been described and illustrated from Kalavoor, Alappuzha district, Kerala.

933. **Ravi, N. & Anil Kumar, N. 1990.** "*Julostylis polyandra* (Malvaceae) – A new species from India". *J. Bombay Nat. Hist. Soc.* 87: 260–262.

Abstract:- *Julostylis polyandra*, a new species allied to *J. angustifolia* (Arn.) Thw. has been described and illustrated from forests of Kerala.

934. **Ravi, N. & Anil Kumar, N. 1992.** "New and interesting species of *Dimeria* R. Br. (Poaceae) from Kerala, India". *Rheedea* 2: 101–107.

Abstract:- A tropical and subtropical genus, comprised of *c*. 45 species, *Dimeria* R. Br. has been known to have 28 species in India of which 15 species occur in Kerala (Sreekumar & Nair, 1981). This genus of remarkably uniform morphology, is mostly montane. Presented in this paper are two new species, *D. sreenarayanii* and *D. iddukkiensis*. Besides, an amended description of *D. kurunthoticalana* Jacob, a highly variable species now known only from the type collection at MH, also is presented based on extensive collections in Kerala.

935. **Ravi, N. & Anil Kumar, N. 1994.** "A new species of *Fuirena* Rottb. (Cyperaceae) from Kerala, India". *Rheedea* 4: 102–105.

Abstract:- A new species of *Fuirena* Rottb., viz., *F. ponmudiensis* allied to *F. wallichiana* Kunth is described and illustrated.

936. **Ravi, N., Anil Kumar, N. & Balachandran, T.K. 1989.** "*Diodia* Linn. (Rubiaceae) – A new generic report from India". *J. Bombay Nat. Hist. Soc.* 86: 276–278.

Abstract:- *Diodia teres* Walter has been reported for the first time for India from Sree Narayana College campus in Chathannoor, Quilon district, Kerala, South India. Previously this species was known to occur in Angola, Senegal and Japan. The genus *Diodia* also forms a new record for India.

937. **Ravi, N., Kiran Raj, M.S., Mohanan, N. & Shaji, L. 2004.** "*Melinis minutiflora* P. Beauv. (Poaceae), an interesting new record for Peninsular India". *J. Econ. Taxon. Bot.* 28: 81–83.

Abstract:- *Melinis minutiflora* P. Beauv., a tropical African grass of many uses, is reported for the first time for Peninsular India from Thalayar, Idukki district, Kerala. The detailed description with illustration and necessary notes is provided here.

938. **Ravi, N. & Mohanan, N. 1997.** "*Dimeria namboodiriana*, another new species of Poaceae from Kerala, India". *Rheedea* 7: 1–4.

Abstract:- A new species of *Dimeria* R. Br., viz., *D. namboodiriana* Ravi & Mohanan allied to *D. ballardii* Bor is described and illustrated from Kerala.

939. **Ravi, N. & Mohanan, N. 2002.** "On the identity of *Ischaemum copeanum* Sreek. *et al.* and *Ischaemum karalense* Sreek. *et al.* (Poaceae) from Kerala, India". *Rheedea* 12: 137–142.

Abstract:- The Poaceous species, *Ischaemum karalense* Sreek., V.J. Nair & N.C. Nair is

merged with *I. copeanum* Sreek., V.J. Nair & N.C. Nair. The original description of this highly variable species is emended based on the study of the variants and illustrations are provided.

940. **Ravi, N., Mohanan, N. & Kiran Raj, M.S. 2001.** "Three new species of Poaceae from South India". *Rheedea* 11: 87–96.
Abstract:- Three new species of grasses, one of *Chrysopogon* Trin., viz., *C. copei* from Tamil Nadu and two of *Dimeria* R. Br., viz., *D. josephii* and *D. agasthyamalayana* from Kerala are described and illustrated.

941. **Ravi, N., Mohanan, N., Kiran Raj, M.S., Shaju, T. & Rajesh, R. 2000.** "Another new species of *Ischaemum* L. (Poaceae) from Kerala, India". *Rheedea* 10: 49–53.
Abstract:- A new species of *Ischaemum* L., viz., *I. pushpangadanii* Ravi, Mohanan & Kiranraj allied to *I. dalzellii* Bor ex Stapf is described and illustrated from Kakkayam Hills, Kozhikode district, Kerala.

942. **Ravi, N., Mohanan, N., Kiran Raj, M.S., Shaju, T. & Rajesh, R. 2000.** "Two new species of Poaceae from Kerala, India". *Rheedea* 10: 91–98.
Abstract:- Two new species of grasses, viz., *Ischaemum lanatum* allied to *I. semisagittatum* Roxb. and *Chrysopogon purushothamanii* allied to *C. polyphyllus* Blatter & McCann are described and illustrated from Kerala.

943. **Ravi, N., Mohanan, N., Kiran Raj, M.S., Shaju, T. & Rajesh, R. 2000.** "*Garnotia micrantha* Thwaites var. *micrantha* (Poaceae): A new record for India". *J. Econ. Taxon. Bot.* 24: 297–299.
Abstract:- *Garnotia micrantha* Thwaites var. *micrantha*, a Sri Lankan element, is recorded for the first time for India from Kakkayam hills, Kozhikode district, Kerala. Detailed description with illustrations is provided.

944. **Ravi, N., Mohanan, N. & Shaju, T. 2002.** "*Fuirena simpsonii* (Cyperaceae) – A new species of sedge from Kerala, India". *Nordic J. Bot.* 22: 329–332.
Abstract:- A new species of *Fuirena,* viz., *F. simpsonii* is described from Kerala, India. The new species is allied to *F. umbellata* Rottb.

945. **Ravi, N., Mohanan, N., Shaju, T., Kiran Raj, M.S. & Rajesh, R. 1998.** "Three new species of *Ischaemum* L. (Poaceae) from Kerala, India". *Rheedea* 8:149–158.
Abstract:- Three new species of *Ischaemum* L., viz., *I. kumarakodiensis* allied to *I. elimalayanum* Sreekumar & al.*, I. quilonensis* allied to *I. barbatum* Retz. and *I. mangaluricum* (Hack.) Stapf ex C.E.C. Fischer and *I. pappinisseriensis* are described and illustrated from Kerala, India.

946. **Ravi, N., Mohanan, N., Shaju, T., Kiran Raj, M.S. & Rajesh, R. 2001.** "Three more

new species of *Ischaemum* L. (Poaceae) from Kerala, India". *Bot. Bull. Acad. Sin.* 42: 223–230.

Abstract:- Three new species of *Ischaemum* L. (Poaceae), viz., *I. wayanadense* allied to *I. vembanadensis* Patil & D'Cruz*, I. abrahamii* and *I. fischeri* from Kerala, India are described and illustrated.

947. **Ravi, N. & Muraleedharan, P.N. 1988.** "*Cordia cylindristachya* Roem. & Schult. (Boraginaceae) naturalized in India". *Bull. Bot. Surv. India* 30: 171–173.

Abstract:- *Cordia cylindristachya* Roem. & Schult. (Boraginaceae) has been reported for the first time for India from Kallada, Quilon district, Kerala. Earlier this species was known to occur in Tropical America.

948. **Ravikumar, K. & Lakshmanan, V. 1989.** "A new variety of *Chionanthus ramiflorus* Roxb. (Oleaceae) from South India". *Bull. Bot. Surv. India* 31: 163–165.

Abstract:- A new variety of *Chionanthus ramiflorus* Roxb., viz., *C. ramiflorus* var. *peninsularis* has been described for South India from Tamil Nadu, Karnataka and Kerala.

949. **Ravindran, P., Gopi, T.V., Kumar, R.P. & Nair, P.K.K. 1991.** "Air borne Aspergilli concentration at Kerala". *New Botanist, Int. Quart. J. Pl. Sci. Res.* 18: 151–156.

Abstract:- The spores of *Aspergillus* causing aspergillosis in human beings were trapped abundantly during the aerobiological survey of Kerala state in 1986. The sampler (Gravity slide method) designed by Dr. Nair was used for this experimental study and was installed at 15 centres in Kerala. The seasonal variations and the effect of humidity of the spore concentration was identified and studied. The total spore concentration was 5464. The maximum counts were noticed in highlands zone and at Pathanamthitta locality. The average Relative Humidity and rainfall was noticed. Out of these 15 centres, 9 centres noticed the presence of *Aspergillus*. The spore dispersal was found to be closely linked with the high humidity, low temperature and rainfall. The airborne spores are known to be the main source of allergy in man, which warrants an understanding of the aerospora as an essential prerequisite to the clinical practice of allergy. The spore diagram of these centres was also made.

950. **Ravindran, P.N., Nair, M.K. & Nair, R.A. 1987.** "New taxa of *Piper* (Piperaceae) from Silent Valley Forest, Kerala". *J. Econ. Taxon. Bot.* 10: 167–169.

Abstract:- Two new taxa of *Piper*, viz., *P. silentvalleyensis* P.N. Ravindran, M.K. Nair & R.A. Nair allied to *P. mullesua* Buch.-Ham. ex D. Don and *P. nigrum* L. var. *hirtellosum* R.A. Nair & P.N. Ravindran allied to *P. nigrum* L. have been described from Kerala.

951. **Ravindran, S., Krishnaswamy, N.R., Manilal, K.S. & Ravindran, P.N. 1992.**

"Chemotaxonomy of *Cinnamomum* Schaef. occurring in Western Ghats". *J. Indian Bot. Soc.* 71: 37–41.

Abstract:- A chemotaxonomical investigation was carried out in *Cinnamomum* as part of a biosystematic study on this genus occurring in Kerala state. Eight species occurring in the Western Ghats were analysed for the terpenoids, steroids and flavonoids. *Cinnamomum malabatrum* the most common and complex species was studied in more detail. The results indicated much chemical variability among the species. Chemically *Cinnamomum verum, C. camphora* and *C. perrottetti* were the most complex, while some collections of *C. malabatrum* were the least complex. Chemically *C. camphora* was the most distinct species. *C. verum, C. camphora, C. cassia* and *C. riparium* are very distinct chemically. Much infraspecific variability was noticed in *C. malabatrum*. The complexity in flavonoid pattern in this genus, resulted from O-methylation which is considered as an advanced character. Flavonols were found to be replaced by flavones. Both these are advanced characters in the evolutionary history of flavonoids.

952. **Reddy, C.H.S. & Raju, V.S. 2000.** "On the occurrence of *Mazus pumilus* (Burm.f.) Steenis (Scrophulariaceae) in Kerala, India". *J. Econ. Taxon. Bot.* 24: 319.

Abstract:- *Mazus pumilus* (Burm.f.) Steenis (Scrophulariaceae) is recorded as an addition to the flora of Kerala from Nilambur. Earlier this species was known to occur in Andhra Pradesh, Tamil Nadu, Orissa, Bihar, Uttar Pradesh, West Bengal, Himachal Pradesh and Jammu & Kashmir.

953. **Reddy, M.H. & Raju, R.R.V. 1997.** "Taxonomic study of the family Amaranthaceae in South India". *J. Econ. Taxon. Bot.* 21: 577–586.

Abstract:- The family Amaranthaceae in South India (Andhra Pradesh, Tamil Nadu, Kerala and Karnataka) is represented by 51 taxa (including subspecies and varieties) under 17 genera *Amaranthus* (10); *Alternanthera* (9); *Allmania* (6); *Celosia* (4); *Aerva, Psilotrichum* and *Pupalia* (3 each); *Achyranthes, Gomphrena, Iresine* (2 each); remaining 7 genera are with 1 species each. Nomenclatural citation for each taxon and reference to 'The Flora of British India' (Hooker, 1885) and 'Flora of the Presidency of Madras' (Gamble, 1935) were given. The nomenclature is up-dated.

954. **Reddy, M.H. & Raju, R.R.V. 2000.** "Medico-botanical studies on Amaranthaceous crude drugs in South India". *J. Econ. Taxon. Bot.* 24: 623–626.

Abstract:- During ethnobotanical survey it has been found that many plants, which are considered as ordinary weeds, have great economic potential. The authors have come across a number of medicinally important plants in family Amaranthaceae. These plants though common, have not been fully exploited for their medicinal potential. The reports

about their uses are scattered and limited to tribal areas only. The present paper deals with the phytochemical evaluation of crude drug resources of different tribes inhabiting the forests of South India (Tamil Nadu, Kerala, Karnataka and Andhra Pradesh). Thirteen important medicinal plants belonging to the family Amaranthaceae have been collected and identified. The ethnomedical information regarding local name, parts used, purpose of usage and mode of administration were recorded.

955. **Rejani, A. 1991.** *Taxonomy of Cyperaceae of Kerala*. Ph. D. Thesis, University of Calicut, Culicut.

956. **Remadevi, S. & Binojkumar, M.S. 2000.** "*Acanthus ebracteatus* Vahl – An addition to the flora of mainland of India". *J. Econ. Taxon. Bot.* 24: 241–242.
Abstract:- *Acanthus ebracteatus* Vahl was known to occur in the Andaman Islands of India so far. This has been collected from Alappuzha, Kerala and this forms the first report from mainland of India.

957. **Remadevi, S. & Binojkumar, M.S. 2000.** "*Taeniandra micrantha* (Acanthaceae) – A new record for Kerala". *J. Econ. Taxon. Bot.* 24: 320–322.
Abstract:- *Taeniandra micrantha* (Wight) Bremek. has been recorded for the first time for the flora of Kerala from Munnar, Idukki district. This species was earlier known to occur in Tamil Nadu.

958. **Remadevi, S. & Binojkumar, M.S. 2000.** "*Lepidagathis fasciculata* (Retz.) Nees – A new record for Kerala". *J. Econ. Taxon. Bot.* 24: 731–732.
Abstract:- *Lepidagathis fasciculata* (Retz.) Nees has been recorded for the first time for the flora of Kerala from Munnar, Idukki district. Earlier this species was known to occur in Andhra Pradesh and Tamil Nadu.

959. **Remadevi, S. & Binojkumar, M.S. 2000.** "*Eranthemum nervosum* (Vahl) R. Br. – An addition to the flora of Kerala". *J. Econ. Taxon. Bot.* 24: 749–750.
Abstract:- *Eranthemum nervosum* (Vahl) R. Br. (Acanthaceae) has been recorded for the first time for the flora of Kerala from Cannanore. Earlier this species was known to occur in Tamil Nadu.

960. **Remadevi, S. & Binojkumar, M.S. 2001.** "*Strobilanthes homotropus* Nees – An addition to the flora of Kerala". *J. Econ. Taxon. Bot.* 25: 227–228.
Abstract:- *Strobilanthes homotropus* Nees (Acanthaceae) has been recorded for the first time for the flora of Kerala from Munnar, Idukki district. Earlier this species was known to occur in Nilgiri.

961. **Remadevi, S. & Binojkumar, M.S. 2001.** "*Lepidagathis spinosa* Wight – An addition to the flora of Kerala". *J. Econ. Taxon. Bot.* 25: 229–230.

Abstract:- *Lepidagathis spinosa* Wight (Acanthaceae) has been recorded for the first time for the flora of Kerala from Pathanamthitta. Earlier this species was known to occur in Tamil Nadu.

962. **Remadevi, S. & Binojkumar, M.S. 2001.** "*Barleria strigosa* Willd. – A new record for Kerala". *J. Econ. Taxon. Bot.* 25: 231–232.
Abstract:- *Barleria strigosa* Willd. (Acanthaceae) is reported as an addition to the flora of Kerala from Nedumangad. Earlier this species was known to occur in Assam, Orissa, Sikkim and Madhya Pradesh.

963. **Remadevi, S. & Binojkumar, M.S. 2001.** "*Hygrophila salicifolia* (Vahl) Nees var. *cochinensis* – A new variety from Kerala". *J. Econ. Taxon. Bot.* 25: 233–234.
Abstract:- *Hygrophila salicifolia* (Vahl) Nees var. *cochinensis* (Acanthaceae) has been described as a new variety for the state of Kerala from Arror, Alleppy district.

964. **Remadevi, S. & Binojkumar, M.S. 2001.** "Studies on the genus *Ecbolium* Kurz with reference to the state of Kerala". *J. Econ. Taxon. Bot.* 25: 235–237.
Abstract:- During the course of revisionary work on the family 'Acanthaceae' for the state of Kerala, the genus *Ecbolium* Kurz was studied critically. The study revealed the occurrence one species [*E. viride* (Forsskal) Alston] and two varieties including a new variety [*E. viride* (Forsskal) Alston var. *laetevirens* (Vahl) Raiz. and *E. viride* (Forsskal) Alston var. *chandrasekariana* Remadevi & Binoj Kumar] in Kerala.

965. **Remadevi, S. & Binojkumar, M.S. 2001.** "*Hypoestes phyllostachya* Baker – An addition to the flora of India". *J. Econ. Taxon. Bot.* 25: 621–622.
Abstract:- *Hypoestes phyllostachya* Baker (Acanthaceae) is reported as an addition to the flora of India from Kurisumala, Kottayam district, Kerala. Earlier this species was known to occur in Madagascar and North America.

966. **Remadevi, S. & Binojkumar, M.S. 2002.** "*Strobilanthes zenkerianus* T. Anders. – An addition to the flora of Kerala". *J. Econ. Taxon. Bot.* 26: 479–480.
Abstract:- *Strobilanthes zenkerianus* T. Anders. (Acanthaceae) has been reported as new record for the flora of Kerala from Marayoor, Idukki district. Earlier this species was known to occur in Pulney Hills.

967. **Remadevi, S. & Binojkumar, M.S. 2003.** "*Ecbolium ligustrinum* (Vahl) Vollesen var. *aryankavensis* – A new variety from Kerala, India". *J. Econ. Taxon. Bot.* 27: 1189–1191.
Abstract:- A new variety of *Ecbolium ligustrinum*, viz., *E. ligustrinum* var. *aryankavensis* has been described and illustrated from Aryankavu, Quilon district, Kerala.

968. **Remadevi, S. & Binojkumar, M.S. 2008.** "A new species of *Lepidagathis* (Acanthaceae) from Kerala, India". *J. Econ. Taxon. Bot.* 32: 554–556.

Abstract:- A new species, *Lepidagathis balakrishnanii* Remadevi *et* Binojk. (allied to *L. spinosa* Wight) is described and illustrated from Perunna, Changanacherry, Kerala, India. It differs from its allied species *Lepidagathis spinosa* Wight in having glabrous and mucronate leaves, short peduncle and glandular bracts.

969. **Remadevi, S. & Binojkumar, M.S. 2008.** "A new species of *Justicia* L. (Acanthaceae) from Kerala, India". *J. Econ. Taxon. Bot.* 32: 660–661.

Abstract:- A new species of Acanthaceae, *Justicia pathanamthittiensis* Remadevi *et* Binojk., is described and illustrated from Thannithode, Pathanamthitta district, Kerala, India. It differs from its allied species *Justicia simplex* D. Don in having stem branched from the base, leaves linear elliptic and bracts obovate and obtuse at apex.

970. **Remadevi, S., Binojkumar, M.S. & Bindu, P.K. 2010.** "Enumeration of some potential medicinal plants (Polypetalae) in the district of Alappuzha (Kerala) – I". *J. Econ. Taxon. Bot.* 34: 505–511.

Abstract:- The present paper provides data on certain medicinal plants collected from Alappuzha district of Kerala during a period of five years from 2004 to 2009. This includes data on medicinal importance of 41 species belonging to 25 families of the subclass polypetalae. The binomial, family, vernacular names, parts used and various medicinal properties of these species are provided.

971. **Renjith, M.K., Sreekumar, S., Menon, A.R.R. & Magesh, G. 2010.** "Vegetation pattern analysis of Karuvannur watershed, Kerala using Remote Sensing and GIS". *Indian J. Forest.* 33: 143–148.

Abstract:- The Karuvannur River is an important river of Kerala that drains into the Northern part of Vembanad Kole Wetland system, a Ramsar site. Urbanisation, changes in land-use practices and unscientific sand mining have resulted in the deterioration of water quality and also increases the water shortage especially during extreme summer season. Deforestation for food, fodder and fuel wood and indiscriminate sand mining in the catchments area have resulted the drop of water table level of the area. Unscientific land-use and cropping pattern changes in a watershed, often cause problems in water conservation, both in upland and down streams. In a watershed both uplands and down streams are closely interlinked. The nature and extent of their linkage especially in a forested ecosystem needs more attention. The Karuvannur watershed has a total extent of 956.95 sq. km and drainage density was estimated as 1.104. In the present study efforts have been made to use Remote Sensing Data and GIS Techniques for mapping and monitoring the vegetation pattern of watershed area. It is found that 36.48% of watershed areas is covered by forest, plantation (Rubber and Teak) occupies 5.49% of the area, and

1.35% of the area by scrublands. Reservoir and other water bodies occupy 9.08% of the watershed area.

972. **Renuka, C. 1986.** "Distribution of canes in Kerala and the need for their conservation". *J. Indian Bot. Soc.* 65(Suppl.): 54.

Abstract:- Ten species of *Calamus* have been recorded from Kerala forests which include two new species and a new record to Kerala. Distribution of canes in the Kerala forests and the present status of their availability are discussed. With the increasing demand for cane products and destruction of the primary forests, the natural supply of this important forest product is fast diminishing. Conservation measures to be taken, both *ex situ* and *in situ* are suggested.

973. **Renuka, C. 1987.** "A new species of *Calamus* (Palmae) from India". *Kew Bull.* 42: 433–435.

Abstract:- A new species of *Calamus*, viz., *Calamus dransfieldii* Renuka is described from Kerala, India.

974. **Renuka, C. 1987.** "A new species of the genus *Calamus* Linn. (Arecaceae) from India". *Curr. Sci.* 56: 1012–1013.

Abstract:- A new species of the genus *Calamus* L., viz., *C. vattayila* allied to *C. acanthospathus* Griff. has been described from Moozhiyar, Kerala.

975. **Renuka, C. 1992.** *Rattans of the Western Ghats. A taxonomic manual*. Kerala Forest Research Institute, Peechi.

Abstract:- Taxonomic descriptions based on vegetative characters of 19 species of rattans found in the Western Ghats are provided with suitable illustrations.

976. **Renuka, C. & Anto, P.V. 1998.** "*Calamus huegelianus* Mart. – A critically endangered rattan of Nilgiri biosphere". *J. Econ. Taxon. Bot.* 22: 193–195.

Abstract:- A critically endangered rattan of Nilgiri Biosphere, viz., *Calamus huegelianus* Mart. has been collected for the first time for Kerala from Silent Valley National Park. Its present distribution, the reasons which led this species to a critically endangered condition and the conservation measures to be adopted are discussed in this paper.

977. **Renuka, C. & Bhat, K.M. 1987.** "On the occurrence of *Calamus metzianus* Schlecht in Kerala". *Curr. Sci.* 56: 313–314.

Abstract:- *Calamus metzianus* Schlecht has been reported for the first time for Kerala from Nilambur forest. Previously this species was known from Karnataka.

978. **Renuka, C., Bhat, K.M. & Nambiar, V.P.K. 1987.** "Morphological, anatomical and physical properties of *Calamus* species of Kerala forest". KFRI Research Report No. 46. Final Report of the Project Bot. 05/1982–1987, pp. 58.

Abstract:- During the survey of Kerala forests, 10 species of *Calamus* were located of which 2 are new and another new record to Kerala. Correct botanical name, local names, ecology and phenology are given. Distribution of canes in the Kerala forests and the present status of their availability are discussed. Detailed taxonomical and anatomical descriptions are provided for each species.

979. **Renuka, C., Bhat, K.V. & Basha, S.C. 1996.** *Palm resources of Kerala and their utilization.* KFRI Research Report 116. pp. 31. Kerala Forest Research Institute, Peechi.
Abstract:- Besides the common cultivated palms like coconut, arecanut and oil palm, and over a dozen introduced ornamental palms and rattans (canes), there are seven species of wild and semi-wild palms presently found in Kerala State, India. Of these seven species, a few, namely, *Borassus flabellifer, Corypha umbraculifera* and *Caryota urens* are widely exploited in the state. They are sometimes cultivated in farmlands and homesteads. The remaining species, viz., *Arenga wightii, Bentinckia condapanna, Phoenix humilis* and *Pinanga dicksonii* are confined to certain remote forest localities and are not known for their utility. This report highlights the botanical, ecological and utilisation aspects of the 7 species of palms, mainly based on field studies and literature surveys, and discusses appropriate conservation measures to be adopted to augment the palm resources of the State.

980. **Renuka, C. & Sreekumar, V.B. 2006.** "*Calamus rivalis* Thw. ex Trim. (Arecaceae): A new record for India". *J. Econ. Taxon. Bot.* 30: 277–279.
Abstract:- *Calamus rotang* L. has been hitherto misapplied to the slender rattan occurring in the coastal areas and in the sacred groves of Kerala. Based on a detailed study, the slender rattan is identified as *C. rivalis* Thw. ex Trim. and its occurrence is reported for the first time from India from Quilon district, Kerala. Detailed description and illustration of the species are provided here.

981. **Renuka, C., Sasidharan, N. & Anto, P.V. 1997.** "A new species of *Calamus* (Arecaceae) from Silent Valley, Kerala, India". *Rheedea* 7: 69–71.
Abstract:- A new species of *Calamus*, viz., *C. neelagiricus* Renuka allied to *C. gamblei* Becc. and *C. delessertianus* Becc. is described from Silent Valley National Park, Kerala, India.

982. **Renuka, C., Thomas, J.P. & Sreekumar, V.B. 2007.** "Species selection for widening the resource base of rattans for cultivation in Kerala forests". *J. Non-Timber Forest Products* 14: 189–193.
Abstract:- Species selection is very important when large scale plantations are planned or when some of the commercially important species from other regions are adopted and

acclimatized for widening the resources base. A species trial of Rattans with four species from Karnataka and Goa, part of the Western Ghats was conducted at two different elevations, in Kacchithodu at 300 m above msl under Thrissur Forest Division and in Nelliampathy at 1000 m above msl under Nemmara Forest Division. Species planted were *Calamus prasinus, C. nagbettai, C. stoloniferus* and *C. thwaitesii* (Goa Provinces). Survival percentage and growth in height were monitored during the experimental period. *Calamus nagbettai* grew well at both elevations. Hence this species is recommended for raising large scale plantations at elevations up to 1000 m.

983. **Robi, A.J., Magesh, G. & Menon, A.R.R. 2008.** "*Pothos thomsonianus* Schott (Araceae): an addition to the angiosperm flora of Parambikulam Wildlife Sanctuary, Kerala, India". *J. Econ. Taxon. Bot.* 32: 628–631.

Abstract:- *Pothos thomsonianus* Schott is a climber, threatened and endemic to southern Western Ghats of Peninsular India. The present report is the first distributional record of this endemic taxon from Orukomban range in Parambikulam Wildlife Sanctuary, Palakkad district. It is a rare plant, occurs in evergreen forests. Formerly, this species has been reported only from Idukki and Thiruvananthapuram districts of Kerala. The species assumes to have a wider distribution beyond its known distribution. Specimens are deposited in the herbarium of Botany Department, KFRI, Peechi, Kerala.

984. **Roy Chowdhury, K.N. 1984.** "Foliicolous lichens from the Silent Valley, Kerala". *J. Econ. Taxon. Bot.* 5: 481–482.

Abstract:- This paper deals with 12 taxa of lichens (Foliicolous) collected by the author from Silent Valley, Kerala. Out of those *Strigula complanata* and *S. maculata* are reported for the first time from India as components of lichen flora. *Mezosia bambusae* (Vain.) R. Sant., previously reported from Andamans is reported for the first time from the mainland of India.

985. **Rugmini, P. & Balagopalan, M. 2006.** "Evaluation of factor patterns of soils in different plantations and natural forests in the Western Ghats, Kerala". *Indian J. Forest.* 29: 271–275.

Abstract:- An attempt is made in this paper to identify the factor pattern on soil properties in six vegetation types, viz., plantations of *Eucalyptus*, rubber and teak and natural forests of evergreen, semi-evergreen and moist deciduous types, using the factor analysis. The analysis identified three significant factors, viz., aggrading factor (38.81 per cent), texture and acidity factor (20.13 per cent) and cation exchange capacity (CEC) factor (9.82 per cent). They together accounted for 69 per cent of the total variation in the eleven selected soil properties. The three factor model explained = 80% of variance in total S; 75% of the

variance in gravel, sand, water holding capacity (WHC) and total P, = 65% of the variance in bulk density (BD), organic carbon (OC), total N and CEC, 60% variance in pH; 32% variance in silt. The inter factor correlation indicate that this factor model is suitable for assessing the soil status in plantations and natural forests of Western Ghats, Kerala.

986. **Sabeena, A., Mestry, A., Mulani, R.M., Kumar, E.S.S. & Sibin, N.T. 2007.** "A new species of *Jasminum* Linn. (Oleaceae) from Kerala, India". *Indian J. Forest.* 30: 123–125.

Abstract:- A new species of *Jasminum* Linn., viz., *J. agastymalayanum* from Agastymalai hills, Kerala, India is described and illustrated. This species is allied to *J. flexile* Vahl and *J. calophyllum* Wall. & G. Don.

987. **Sabu, M. 2000.** "*Hedychium spicatum* Ham. ex Smith var. *acuminatum* (Roscoe) Wall. – A new record for Peninsular India". *Rheedea* 10: 73–76.

Abstract:- *Hedychium spicatum* Ham. ex Smith var. *acuminatum* (Roscoe) Wall. is reported for the first time from southern Peninsular India. Detailed description, illustration and relevant notes are also provided.

988. **Sabu, M. & Jayasree, S. 2001.** "*Apocopis cochinchinensis* A. Camus (Poaceae) – A new record for Kerala". *J. Econ. Taxon. Bot.* 25: 611–613.

Abstract:- *Apocopis cochinchinensis* A. Camus (Poaceae) is reported for the first time for Kerala from Calicut University Campus, Calicut. Earlier this species was known to occur in Burma and South East Asia. Detailed description and illustrations are provided.

989. **Sabu, M. & Mangaly, J.K. 1987.** "*Curcuma vamana* (Zingiberaceae): A new species from South India". *J. Econ. Taxon. Bot.* 10: 307–309.

Abstract:- A new species of Zingiberaceae, viz., *Curcuma vamana* Sabu & Mangaly allied to *C. burttii* Larsen & Smith has been described from the Palghat, Kerala.

990. **Sabu, M. & Mangaly, J.K. 1988.** "*Globba cernua* Baker (Zingiberaceae) – A new record from India". *J. Econ. Taxon. Bot.* 12: 478–480.

Abstract:- *Globba cernua* Baker, hitherto known to exist only in Malaya Peninsula has its inflorescence with persistent, lax, spreading bracts, the lower ones subtending spherical bulbils and the upper ones with cincinni of flowers on small stalk, the lower ones 1 cm long, labellum with a reddish patch at the centre and rugose fruits. This species is collected from the Western Ghats of South India (Idukki and Palghat distrct, Kerala) and described.

991. **Sabu, M. & Mangaly, J.K. 1990.** "*Curcuma caesia* Roxb. (Zingiberaceae): A new record from South India". *Indian J. Forest.,* Addit. Ser. 1: 15–17.

Abstract:- *Curcuma caesia* Roxb. has been recorded for the first time in South India from Kerala.

992. **Sabu, M. & Mangaly, J.K. 1991.** "*Alpinia smithiae* (Zingiberaceae): A new species from South India". *Edinburgh J. Bot.* 48: 69–71.

Abstract:- A new species of *Alpinia* (Zingiberaceae), *A. smithiae* Sabu & Mangaly is described from Attappady, Palghat district, Kerala, Western Ghats of India. It is a member of section *Alpinia* subsect. *Catimbium* and is allied to *A. malaccensis* (Burm.f.) Roscoe.

993. **Sajeev, K.K. & Sasidharan, N. 1997.** "Ethnobotanical observations on the tribals of Chinnar Wildlife Sanctuary". *Ancient Sci. Life* 16: 284–292.

Abstract:- Studies on the flora and ethnobotany of the tribals of Chinnar Wildlife Sanctuary were carried out. Though the sanctuary has over 200 species of medicinal plants, the tribals are using 55 species. Ethnobotanical details of 64 species used by the tribals in the sanctuary are presented in this paper.

994. **Sajeev, K.K., Sasidharan, N. & Augustine, J. 1998.** "New records of grasses from Kerala". *J. Econ. Taxon. Bot.* 22: 491–494.

Abstract:- Floristic studies in Chinnar Wildlife Sanctuary and Periyar Tiger Reserve, two protected areas in Idukki district of Kerala state resulted in the findings of 12 species of grasses as new records to Kerala.

995. **Saldanha, C.J. 1963.** "The genus *Striga* Lour. in Western India". *Bull. Bot. Surv. India* 5: 67–70.

Abstract:- The nomenclature of the *Striga* is unsatisfactory. The name *Striga asiatica* has been a source of confusion as the original description is ambiguous and the Linnaean plant material is a mixture of several species. This names comes under purview of Art. 69 of the Code and has, therefore, been rejected. A study of the type material and of the original description of *Buchnera euphrasioides* Vahl indicates that it is quite distinct from *Striga euphrasioides* Benth. According to Art. 55 of the Code the name *Striga euphrasioides* (Vahl) Benth. has to be restricted to Vahl's plant. The plant commonly called *Striga euphrasioides* Benth. has been renamed as *Striga angustifolia* (Don) comb. nov. The third part of the paper gives a dichotomous key, the nomenclature of and distributional notes to the 5 species of *Striga* occurring in the wet, western part of Peninsular India. *Striga lutea* Lour. var. *coccinea* (Benth.) O. Kuntze and *S. angustifolia* (Don) Saldanha have been reported from Kerala.

996. **Saldanha, C.J. 1966.** "The genus *Torenia* Linn. in Western Peninsular India". *Bull. Bot. Surv. India* 8: 126–132.

Abstract:- The paper presents a taxonomic study of the seven species of *Torenia* native to the wet, western part of Peninsular India. *Torenia asiatica* L. has often been included among these. But it is actually a plant from S.E. Asia and not native to this region. The

plant usually called *T. cordifolia* is different from *T. cordifolia* Roxb. and has been described as *T. indica* sp. nov. Another plant, often confused with *Lindernia crustacea* (L.) F.v. Muell., has been described as *T. lindernioides* sp. nov. The paper also includes two new records for the regions, *T. violacea* (Azaolo ex Blanco) Pennell from Kerala and *T. thouarsii* (Cham. & Schult.) O. Kuntze from Karnataka.

997. **Salim, P.M., Sujanapal, P. & Anil Kumar, N. 2011.** "Occurrence of two rare and endemic medicinal plants in Kerala". *J. Econ. Taxon. Bot.* 35: 191–192.

Abstract:- *Sarcostemma intermedium* Decne. and *Tarenna agumbensis* Sundararaghavan, two rare and endemic medicinal plants known to central part of India and Deccan plateau are collected first time from Kerala with hitherto unknown fruit of 'Endangered' *Tarenna agumbensis*. Importance of these medicinal plants with respect to flora of Kerala is discussed.

998. **Sangeetha, S., Panicker, S. & Clarson, D. 2007.** "Studies on the relation between pH and distribution of Arbuscular Mycorrhizal fungi in Kerala soils". *Indian J. Bot. Res.* 3: 307–310.

Abstract:- Studies were conducted to find out the AM fungi population in Kerala soils. Maximum number of spore count was recorded in Kottayam soils, followed by Palakkad soils and the minimum in Thrissur soils. Characterization studies indicated that manily four genera were isolated from soils, viz., *Glomus, Gigaspora, Acaulospora* and *Sclerocystis*. Out of the four genera obtained from Kerala soils, genus *Glomus* was predominant. Also noticed that there was a correlation between pH of the soil and spore count of the AM fungi. Maximum numbers of spores were recorded by more acidic soil.

999. **Sanilkumar, M.G. & Thomas, K.J. 2006.** "Diversity and seasonal variation of algae in Muriyad wetland (part of Vembanad–Kol wetlands – A Ramsar site)". *J. Econ. Taxon. Bot.* 30: 656–666.

Abstract:- Muriyad wetland is a part of Kol lands of Thrissur district of Kerala. Algal diversity of the wetland was analysed with a view to assess the water quality, habitat integrity and trophic web stability of the wetland. More than 79 species of algae from 22 families were recorded from this wetland. Out of this, 40 species belonged to a single family, Desmidiaceae (Desmids). The gut content analysis of some herbivorous fresh water fishes collected from the wetland revealed that 14 genera of algae formed the major food source of the fishes of which desmids were the dominant group. The seasonal distribution of algae of the calss Chlorophyceae shows that 15 species were seen in pre-monsoon, monsoon, post-monsoon seasons. Fourteen species were seen exclusively during the pre-monsoon season, three species only during the monsoon and six species only in

post-monsoon season. In blue-greens, only two were exclusively found during post-monsoon season. Six species were represented during pre- and post-monsoon seasons but they were absent during the monsoon season.

1000. **Sanilkumar, M.G. & Thomas, K.J. 2007.** "Fringe plants of Muriyad wetlands (part of Vembanad–Kol Ramsar site) and its economic importance". *J. Econ. Taxon. Bot.* 31: 123–132.

Abstract:- Our knowledge on the diversity of plants associated with the wetlands is very scanty, despite of their economic, horticultural, medicinal, industrial and ecological potentialities. The Muriyad wetlands system is situated in Thrissur district and forms part of the Vembanad-Kol Ramsar site of Kerala. A fluvial central canal runs through the relatively stagnant water spread area of the wetland. In the present study, the taxonomic status of plants seen on the fringe of the water spread area as well as on the margins of the canal of the wetland was studied. Altogether 199 species of terrestrial plants belonging to 65 families are recorded from the wetland; from which, 61 plants having economic importance are described here with their vernacular names and short taxonomic description. The study demonstrates that fringe areas of Muriyad wetland support two threatened species of medicinal plants, viz., *Rauvolfia serpentina* and *Santalum album*.

1001. **Sanjeev, K.K. & Sasidharan, N. 1998.** "Rediscovery of *Albizia lathamii* Hole – A critically endangered species from Chinnar Wildlife Sanctuary". *J. Econ. Taxon. Bot.* 22: 629–630.

Abstract:- A critically endangered species *Albizia lathamii* Hole, hitherto reported only once from its type locality in Tamil Nadu has been reported for the first time for Kerala from Chinnar Wildlife Sanctuary.

1002. **Sankaranarayanan, A.S. 1988.** "Folk-lore medicines for jaundice from Coimbatore and Palghat districts of Tamil Nadu and Kerala, India". *Ancient Sci. Life* 7: 175–179.

Abstract:- Ethno-botanical explorations with regard to the folk-lore medicine in Coimbatore district of Tamil Nadu and Palghat district of Kerala for jaundice was carried out. Out of twenty remedies thus gathered two are found to be new reports and a few others have got interesting combinations. The specimens are identified at Botanical Survey of India, Coimbatore and deposited in the Herbarium of Ethnobiology, Department of International Institute of Ayurveda, Coimbatore. Two newly reported plants for jaundice namely *Alysicarpus vaginalis* DC. and *Justicia tranquebariensis* L.f., have been taken for phytochemical screening and pharmacological studies. The botanical name of the plant, local name, Sanskrit name and parts of the plant employed are given in Table I.

1003. **Sankari Ammal, L. & Bhavanandan, K.V. 1992.** "Cytological studies on some ferns from South India". *Indian Fern J.* 9: 113–118.

Abstract:- Cytological studies on *Cyathea nilgirensis* (n = 69), *Parathelypteris beddomei* (n = 90), *Tectaria polymorpha* (n = 40) and *Asplenium nidus* var. *phyllitidis* (n = 72; 2n = 144) have been carried out. The first species is from Tamil Nadu and last three species from Kerala. Detailed karyomorphological analysis has also been made on *A. nidus* var. *phyllitidis*. The karyotype belonged to 3C category. Autopolyploid origin for *A. nidus* var. *phyllitidis* is suggested.

1004. **Santhosh, V., Rajkumar, G., Anilkumar, E.S., Rajasekharan, S. & Pushpangadan, P. 1998.** "Market value of medicinal plant wealth: A case study of collection and marketing in southern districts of Kerala". *Bull. Med.-Ethno-Bot. Res.* 19: 119–134.

Abstract:- Medicinal plants play an important role in the health care of the people of Kerala. Both the urban and rural people of Kerala use many medicinal plants either directly as home remedies or indirectly as processed drugs manufactured by traditional Ayurvedic/ Siddha pharmaceuticals applying both traditional and modern techniques. Over 80% of the medicinal plants required in the above sectors are collected from forests. Tribals are the traditional plant collectors from the forest. Generally they collect medicinal plants along with other non timber forest produce in specific reasons and sell them to tribal co-operative societies or to middlemen or even to the raw drugs dealers. Due to the recent revival of interest in herbal drugs and pharmaceuticals, there has been increasing demand for medicinal plants from the forest leading to over-exploitation causing depletion or even extinction of many rare medicinal plant species. The present communication highlights the collection and marketing of 151 important medicinal plants which are most commonly used in traditional systems of medicine like Ayurveda, Siddha as well as in other local health traditions. The study also makes an attempt to fix the market value of these species based on the market price and opportunity cost of labour.

1005. **Sarbhoy, A.K., Hosagoudar, V.B. & Ahmad, Nasim. 1985.** "Three new Hyphomycetes from Idukki, Kerala, India". *J. Econ. Taxon. Bot.* 7: 521–526.

Abstract:- The paper presents three new species of hyphomycetes, viz., *Hadronema verrucosa, Mycovellosielia gmelinae-arboreae* and *Verrucispora brideliae* collected from Idukki, Kerala, India.

1006. **Sashikumar, J.M. & Janardhanan, K. 2002.** "Ethnomedicinal plants for womenfolk's health care in Nilgiri Biosphere Reserve, Western Ghats". *J. Non-Timber Forest Products* 9: 138–143.

Abstract:- During ethnopharmacobotanical investigation in Nilgiri Biospher Reserve, Western Ghats, 24 species of 16 families useful in womenfolk's health care were recorded along with their vernacular names, plant parts used and mode of administration. The

plants reported in this study are known to cure various female diseases and disorders.

1007. **Sasidharan, N. 1986.** "On the rediscovery and distribution of five endemic and endangered taxa in Kerala". *J. Indian Bot. Soc.* 65(Suppl.): 51.
Abstract:- Five endemic and endangered species namely, *Piper barberi* Gamble, *Syzygium travancoricum* Gamble, *Popowia beddomeana* Hook.f. & Thoms., *Morinda reticulata* Gamble and *Pothos armatus* Fischer could be relocated outside their type localities in Kerala. Brief notes on their habitat and distribution are also provided.

1008. **Sasidharan, N. 1987 (2004 rev. ed.).** *Forest Trees of Kerala – A checklist including exotics.* Kerala Forest Research Institute, Peechi.

1009. **Sasidharan, N. 1991.** Rare and endemic trees in the forests of Trichur. In: Karunakaran, C.K. (Ed.), *The proceedings of the symposium on rare, endangered and endemic plants of the Western Ghats*. Kerala Forest Department, Thiruvananthapuram. pp. 65–69.
Abstract:- During the floristic studies of the forests of Trichur, several rare and endemic plants were collected. In this paper, 10 rare and endemic tree species found in the forests of Trichur are discussed with brief notes on their habitat, distribution and occurrence. The conservation strategies to be adopted are also discussed.

1010. **Sasidharan, N. 1996.** "*Desmodium uncinatum* (Jacq.) DC. (Fabaceae): A new record for India". *Rheedea* 6: 71–73.
Abstract:- The occurrence of *Desmodium uncinatum* (Jacq.) DC. (Fabaceae) in India is reported from Munnar, Kerala. This species was earlier known to occur in Brazil and Africa. A brief description, illustration and relevant notes are provided.

1011. **Sasidharan, N. 1997.** *Studies on the Flora of Shenduruny Wildlife Sanctuary with emphasis on endemic species*. KFRI Research Report 128. Kerala Forest Research Institute, Peechi.
Abstract:- A study on the Flora of Shenduruny Wildlife Sanctuary (between 77º4' and 77º17' East longitude and 8º48' and 8º58' North latitude) with emphasis on endemic species was carried out during October 1992 – September 1995. The Sanctuary lies along the Arienkavu-Kulathupuzha Valley, in Kollam (Quilon) revenue district of Kerala and has an area of 100 sq km, including the Kallada dam reservoir having an extent of 13.72 sq km. During the present study 951 taxa (species and infraspecific) were collected and described. They belong to 118 families. Dicotyledons dominate with 715 species belonging to 432 genera and 100 families. Monocotyledons are represented by 236 species under 149 general and 18 families.

1012. **Sasidharan, N. 1998.** "Rediscovery of four threatened and possibly extinct endemic tree legumes from Kerala". *Indian J. Forest.,* Addit. Ser. 8: 205–213.
Abstract:- During the studies on the flora of Kerala forests, the author rediscovered four

threatened and four endemic tree legumes, viz., *Cynometra bourdillonii* Gamble, *Dialium travacoricum* Bourd., *Humboldtia bourdillonii* Prain and *Inga cynometroides* (Bedd.) Bedd. ex Baker from their type localities. These endemic species were thought to be possibly extinct.

1013. **Sasidharan, N. 1998.** "Studies on the flora of Periyar Tiger Reserve". KFRI Research Report No. 150.

Abstract:- A study on the flora of Periyar Tiger Reserve was carried out during June 1993 to September 1997. During the study, 1965 taxa (species and infraspecific) were collected and described. Dicotyledons dominate with 1440 species in 613 genera under 128 families. Monocotyledons are represented by 525 species in 210 genera under 23 families. One new species of Orchid, viz., *Habenaria periyarensis* Sasi. *et al.* was described from the Tiger Reserve during the present study. *Vanda thwaitesii, Symplocos obtusa* var. *pedicellata, Ficus costata* and *F. caulocarpa* are new records for India. The occurrence of 1965 species in an area of 777 sq km indicates the richness and diversity of flora of the Tiger Reserve. There are 1965 species recorded from the Tiger Reserve forms more than 50 percent of the estimated flowering plants of Kerala.

1014. **Sasidharan, N. 1999.** "A new species of *Orophea* (Annonaceae) from Western Ghats, India". *Nordic J. Bot.* 19: 301–303.

Abstract:- A new species of *Orophea*, viz., *O. sivarajanii* allied to *O. thomsonii* Bedd. from Periyar Reserve Forest, Wyanad district, Kerala, Western Ghats, India is described and illustrated.

1015. **Sasidharan, N. 1999.** *Study on the Flora of Chinnar Wildlife Sanctuary*. KFRI Research Report. 167. Kerala Forest Research Institute, Peechi.

Abstract:- The floristic study in Chinnar Wildlife Sanctuary, from 1994 to 1998 resulted in the documentation of an exclusive and concise flora of its own. During the study, 965 species of flowering plants were collected accounting for 578 genera representing 135 families. The angiosperms are represented by 964 taxa belonging to 577 genera under 134 families. Among the angiosperms, 794 taxa account for the major Dicotyledons representing 466 genera of 166 families. The other group, Monocotyledons is represented by 171 species belonging to 111 genera of 18 families. Gymnosperm is represented by only one taxon. There are 114 Peninsular Indian endemics which constitute about 11.8 per cent of the plant wealth of the Sanctuary. *Albizia lathamii, Kalanchoe olivacea, Chrysopogon velutinus, Cryptocoryne consobrina, Knoxia sumatrensis* var. *linearis* and *Theriophonum sivaganganum* belong to the endangered category. *Exacum anamallayanum* plant wase collected. *Ipomoea mombassana* collected from the sanctuary was a new record

to India. The sanctuary is a treasure house of medicinal plants with 355 species out of 964 recorded.

1016. **Sasidharan, N. 2002.** "Floristic studies in Parambikulam Wildlife Sanctuary". KFRI Research Report No. 246.

Abstract:- Situated on the lap of Anamalai hills, in the revenue district of Palakkad, the Parambikulam Wildlife Sanctuary occupies an area of 274 sq km. The sanctuary abodes all the major vegetation types of the Western Ghats. Teak is the major plantation species covering about 87 sq km. During the study, specimens with 2165 field numbers were collected from the diverse habitats of the sanctuary representing 1434 species belonging to 755 genera under 142 families, including 2 gymnosperms. Among the angiosperms, dicotyledons dominate with 1119 species under 587 genera and 120 families while monocotyledons with 313 species under 166 genera and 20 families.

1017. **Sasidharan, N. 2004.** *Biodiversity Documentation for Kerala*. *Part 6*: *Flowering Plants.* Kerala Forest Research Institute, Peechi.

Abstract:- This checklist of Flowering plants of Kerala comprises of 4679 taxa belonging to 1360 genera under 212 families. In this work detailed citation, local names, habit, habitat, district-wise distribution in Kerala and geographical distribution for each species is given. Index to scientific names and local names have also been provided.

1017a. **Sasidharan, N. 2012.** "*Flowering Plants of Kerala*" – *Version 2.0*. DVD No. 14. Kerala Forest Research Institute, Peechi, Kerala.

Abstract:- The DVD, Flowering Plants of Kerala Version 2.0 is a compilation of the flowering plants so far recorded from Kerala. There are 5094 taxa in the ckecklist which include 880 exotics introduced as agriculture, forestry as well as accidentally entered species. As many as 1494 taxa added in the checklist were not included in the Flora of Presidency of Madras, of which 355 are new and 1139 new recorded of occurrence. The Red-listed category is also indicated for taxa based on recent IUCN criteria. There are more than 18150 images of taxa including RET, as well as interesting species and 11353 scientific names (5054 valid names and 6299 synonyms). Besides scientific names, 6743 local/trade/common names are included in the new version.

1018. **Sasidharan, N. & Anto, P.V. 1997.** "New records of two rare and threatened plants for Kerala". *J. Econ. Taxon. Bot.* 21: 247–248.

Abstract:- *Calamus nagbettai* Fernandez & Dey and *Marsdenia raziana* Yoga. & Subraman. were considered to be restricted to their type localities in Karnataka state. The present collections of them during the studies on the flora of Shenduruny Wildlife Sanctuary of Kollam (Quilon) district of Kerala state, are new distributional records outside the

type localities and additions to the flora of Kerala. Brief descriptions with relevant notes are provided. The specimens cited are deposited in the Kerala Forest Research Institute Herbarium.

1019. **Sasidharan, N. & Anto, P.V. 1999.** Additions to the flora of Silent Valley. In: Manoharan, M., Biju, T.M., Biju, S.D., Nayar, T.S. & Easa, P.S. (Eds.), *Silent Valley – Whispers of Reason*. Kerala Forest Department, Thiruvananthapuram. pp. 135–144.

1020. **Sasidharan, N. & Augustine, J. 1999.** "A new species of *Syzygium* Gaertn. (Myrtaceae) from southern Western Ghats, India". *Rheedea* 9: 155–158.
Abstract:- A new species of *Syzygium* Gaertn., viz., *S. periyarensis* Augustine & Sasidh. allied to *S. firmum* Thw. is described from southern Western Ghats (Periyar Tiger Reserve, Idukki district, Kerala).

1021. **Sasidharan, N. & Augustine, J. 1999.** "*Ficus caulocarpa* Miq. and *F. costata* Ait. (Moraceae) – Additions to the flora of India". *Rheedea* 9: 77–80.
Abstract:- Two species of *Ficus*, viz., *Ficus caulocarpa* Miq. and *F. costata* Ait. are reported for the first time for the flora of India from Kerala.

1022. **Sasidharan, N. & Augustine, J. 2006.** "Ethnobotany of the tribes living in and around the Periyar Tiger Reserve, southern Western Ghats, India". *J. Econ. Taxon. Bot.* 30(Suppl.): 45–58.
Abstract:- Periyar Tiger Reserve, the largest Protected Area in Kerala, is the home of five ethnic tribes, viz., *Mannans, Paliyans, Uralis, Mala, Arayans* and *Malampandarams*. These indigenous communities are utilizing 159 species of plants for self use and income generation. The traditional knowledge on easing delivery, setting up of fractured bones, treatment against jaundice, mouth ulcer, diarrhoea, fatigue, eyelid bubbles, insect repellent, antidote for snake bite, etc. is worth scientific scrutiny.

1023. **Sasidharan, N., Basha, S.C. & Renuka, C. 1996.** "Botanical studies in the Medicinal Plant Conservation Areas in Kerala". KFRI Research Report No. 99. pp. 76.
Abstract:- Important Medicinal Plant Conservation Areas (MPCAs) are selected in areas of high plant diversity and endemism in different vegetation types and ecoclimatic zones. Botanical studies of five MPCAs namely, Athirapally, Peechi, Silent Valley, Perya and Eravikulam are made by KFRI and the results are reported. As part of the studies an inventory of the flora of the area are made. The important medicinal plants of these areas are identified and recorded their properties and uses. Rare, threatened and endemic species are also recorded.

1024. **Sasidharan, N. & Kumar, M. 1985.** "Three species of orchids new to Kerala forests". *J. Bombay Nat. Hist. Soc.* 82: 241.

Abstract:- Three species of orchids, namely, *Dendrobium mablae* Gammie, *Smithsonia maculata* (Dalz.) Saldanha and *Pomatocalpa mannii* (Reichb.f.) J.J. Sm. have been reported as additions to the flora of Kerala state.

1025. **Sasidharan, N., Kumar, M., Nambiar, V.P.K. & Renuka, C. 1990.** Establishment of an Orchidarium in the Institute Campus. KFRI Research Report 64. Kerala Forest Research Institute, Peechi.

Abstract:- Nearly 200 species of orchids have been recorded from Kerala, but several of them have a restricted distribution. Urgent steps have become necessary for the protection of orchids, especially the rare and endemic species. Although the best way to conserve a species is to conserve its habitat, this is not always practicable in the case of orchids as each species has its own habitat preferences. In addition to *in-situ* conservation, *ex-situ* conservation is possible through establishment of orchidaria. An orchidarium was constructed in the institute as per the design obtained from the orchidologist, National Orchidarium, Yercaud, for *ex-situ* conservation and multiplication of indigenous orchids. About one hundred species were collected during the study period and 84 species are maintained in the orchidarium, including some rare and endemic species. Herbarium specimens were also prepared and incorporated into the institute herbarium (KFRI). The specimens were identified with pertinent literature and by comparing with authentic specimens. Suitable planting methods were adopted for growing the orchids in the orchidarium depending on their habit and habitat. In general, epiphytic orchids come well under cultivation. Among the orchids collected, five species are records of occurrence for Kerala.

1026. **Sasidharan, N. & Muraleedharan, P.K. 2003.** "Consumption of medicinal plants by the drug industry in northern Kerala". *J. Non-Timber Forest Products* 10: 145–154.

Abstract:- The study carried out to assess the consumption of raw drugs by the drug industry in northern Kerala revealed that the annual consumption of 140 major raw drugs is 11,350 tonnes of which 83 percent is consumed by large units, 6 percent by medium units and 11 percent by small units. Among the 140 raw drugs, 117 occur in Kerala. Forty-five percent of the raw drugs are collected from the forests, 14 percent from non-forest areas, 14 percent from cultivation and 8 percent through imports. Another 20 percent occur in the forests as well as non-forest areas. The study also revealed that occasionally unrelated species are substituted for some of the preferred species of the raw drugs.

1027. **Sasidharan, N., Muraleedharan, P.K. & Sreedhar, S. 2011.** "Consumption of raw drugs by the Ayurvedic medicine manufacturing industry in Kerala". *J. Non-Timber Forest Products* 18: 205–220.

Abstract:- The study assessed the annual consumption of raw drugs by the Ayurvedic medicine manufacturing industry in Kerala. Although, about 400 raw drugs are used in the manufacture of various medicines. For the present study, 230 items which are consumed at the rate of over one thousand kg per year were selected. There are 713 pharmaceutical units having drug license from the Industries Department. The study focuses on the consumption/requirement of the licensed units. Based on the annual turn over, the medicine manufacturing units were classified into small (below 1 crore), medium (1–3 crores) and large (over 3 crores). The annual consumption of the 230 raw drug studied is 20,517 tonnes, of which 48% is consumed by the large units, 37% by small units and 15% by medium units. Annual consumption of 27 items of raw drugs is over 200 tonnes; 28 items between 200–100 tonnes; 39 items between 100–50 tonnes; 53 items between 50–25 tonnes and 53 items between 25–10 tonnes; 30 items below 10 tonnes. *Sida rhombifolia* ssp. *retusa* (Kurumthotti) [1,194 tonnes] and *Phyllanthus emblica* (Nellikkai) [860 tonnes] are most abundantly consumed items. The raw drugs consumption is highest in Thrissur (6,276 tonnes) and Malappuram (4,433 tonnes) districts, as some of the larger units are located here. The lowest consumption is in Kasaragod (22 tonnes) and Wayanad (133 tonnes), where the manufacturing units are very less.

1028. **Sasidharan, N. & Nambiar, V.P.K. 1981.** "*Eleutheranthera ruderalis* (Sw.) Sch.–Bip. (Compositae) – A new record for South India". *Indian J. Forest.* 4: 240–241.

Abstract:- Collection of *Eleutheranthera ruderalis* (Sw.) Sch.–Bip. has been collected from Kerala and it forms a new record for South India.

1029. **Sasidharan, N. & Nambiar, V.P.K. 1983.** "*Hedyotis pinifolia* Wall. ex G. Don (Rubiaceae), a new record for South India". *Indian J. Forest.* 6: 234.

Abstract:- *Hedyotis pinifolia* Wall. ex G. Don forms a new record for South India based on collections from Kerala.

1030. **Sasidharan, N., Rajesh, K.P. & Augustine, J. 1997.** "Orchids of High Wavy recollected". *J. Bombay Nat. Hist. Soc.* 94: 473–477.

Abstract:- The High Wavy Mountains are remarkable for their endemic flora, particularly orchids. Among the 34 orchids reported by Blatter in 1928, some of them could not be located and are considered as possibly extinct, mainly due to habit degradation. This paper deals with 64 species of orchids including all the species reported by Blatter, except *Chrysoglossum halberii* Blatt., *Odontochilus rotundifolius* Blatt. relocated. *Bulbophyllum agastyamalayanum* Gopalan & Henry is reduced to *B. xylophyllum* Par. & Reichb. f. Distribution analysis and relevant notes are provided.

1031. **Sasidharan, N., Rajesh, K.P. & Augustine, J. 1998.** "*Habenaria periyarensis*, a new orchid from India". *Rheedea* 8: 167–171.
Abstract:- *Habenaria periyarensis* Sasidh., K.P. Rajesh & Augustine (Orchidaceae) allied to *H. viridiflora* (Rottl. ex Sw.) R. Br. is described from Periyar Tiger Reserve, Idukki district, Kerala, Western Ghats of India.

1032. **Sasidharan, N., Rajesh, K.P. & Augustine, J. 1999.** "*Zeuxine affinis* (Lindl.) Benth. ex Hook.f. (Orchidaceae) – A new record for Peninsular India". *Rheedea* 9: 159–161.
Abstract:- *Zeuxine affinis* (Lindl.) Benth. ex Hook.f. (Orchidaceae), from Senduruny Wildlife Sanctuary, Kerala is reported as a new record for Peninsular India.

1033. **Sasidharan, N., Rajesh, K.P. & Augustine, J. 2000.** "Orchids of Periyar Tiger Reserve, South India". *J. Econ. Taxon. Bot.* 24: 611–621.
Abstract:- In this paper a total of 148 orchids collected from the Periyar Tiger Reserve, the largest protected area of Kerala state has been listed. This include one new species, *Habenaria periyarensis* and some interesting records. *Bulbophyllum mysorensis* (Rolfe) J.J. Sm., *B. macraei* (Lindl.) Reichb.f., *Eulophia pratensis* Lindl. and *Cheirostylis parvifolia* Lindl. are new records for Kerala state. *Taeniophyllum scaberulum* Hook.f. is rediscovered after more than 140 years. Distribution data and relevant notes are provided.

1034. **Sasidharan, N. & Sivarajan, V.V. 1988.** "*Curcuma peethapushpa*, a new species of Zingiberaceae from India". *Notes Roy. Bot. Gard. Edinburgh* 45: 425–427.
Abstract:- A new species of *Curcuma* L., viz., *C. peethapushpa* is described from Peechi forests in Trichur district, Kerala, India. This species is allied to *C. oligantha* Trimen.

1035. **Sasidharan, N. & Sivarajan, V.V. 1990.** "*Orophea malabarica* (Annonaceae), a new species from Peninsular India". *Blumea* 35: 269–271.
Abstract:- A new species *Orophea malabarica* (Annonaceae) allied to *O. hirsuta* King is described from Vengappara near Peechi in Central Kerala, Western Ghats of India.

1036. **Sasidharan, N. & Sivarajan, V.V. 1990.** "*Tarenna trichurensis* – A new species of Rubiaceae from Western Peninsular India". *J. Econ. Taxon. Bot.* 14: 243–245.
Abstract:- A new species in Rubiaceae, viz., *Tarenna trichurensis* allied to *T. attenuata* (Voigt) Hutch. and *T. alpestris* (Wight) N.P. Balakr. has been described from Trichur, Kerala.

1037. **Sasidharan, N. & Sivarajan, V.V. 1994.** "A new species of *Ardisia* Sw. (Myrsinaceae) from Peninsular India". *Rheedea* 4: 116–119.
Abstract:- *Ardisia stonei*, a new species belonging to the *Afrardisia* group is described and illustrated from the Peechi-Vazhani Wildlife Sanctuary in Thrissur district and Shenduruny Wildlife Sanctuary in Kollam district of Kerala.

1038. **Sasidharan, N. & Sivarajan, V.V. 1996.** *Flowering Plants of Thrissur Forests.* Scientific Publishers, Jodhpur.
Abstract:- A total of 1225 species of flowering plants belonging to 703 genera under 129 families are treated in this work, of which 965 are dicots and 260 monocots.

1039. **Sasidharan, N. & Sujanapal, P. 2000.** "Rediscovery of *Haplothismia exannulatum* Airy Shaw (Burmanniaceae) from its type locality". *Rheedea* 10: 131–134.
Abstract:- *Haplothismia exannulatum* Airy Shaw, an unique species of the monotypic genus of the tribe Haplothismieae is rediscovered from Parambikulam Wildlife Sanctuary, Kerala after an imbroglio of its existence. Detailed description and illustrations are provided based on recent collections.

1040. **Sasidharan, N. & Sujanapal, P. 2002.** "A new species of *Medinilla* (Melastomataceae) from Anamalai Hills, South India". *Sida* 20: 109–113.
Abstract:- An undescribed species of the genus *Medinilla* from the Anamalai Hills, South India is described and illustrated.

1041. **Sasidharan, N. & Sujanapal, P. 2003.** "*Pteroceras monsooniae* (Orchidaceae), a new species from India". *Sida* 20: 923–926.
Abstract:- A new species of the South East Asian Genus *Pteroceras* Hassak., viz., *P. monsooniae* is described and illustrated from Parambikulam Wildlife Sanctuary of Kerala and compared to its closest relative, *P. johorense*.

1042. **Sasidharan, N. & Sujanapal, P. 2005.** "The genus *Medinilla* Gaudich. ex DC. (Melastomataceae) in Peninsular India". *Rheedea* 15: 103–112.
Abstract:- Few species of *Medinilla* Gaudich. ex DC. are reported from Peninsular India. All are endemic and confined to the Southern Western Ghats. *Medinilla sahyadrica* is described as new from Kerala and Tamil Nadu. It is a species wrongly identified as *M. fuschioides*, a taxon confined to Sri Lanka and reported as new record for India from this region. Nomenclature, description, illustration and distribution map of these species are provided. Vegetative and reproductive characters were analysed in detail and used to key out the species.

1043. **Sasidharan, N. & Sujanapal, P. 2007.** "A new species of *Humboldtia* Vahl (Fabaceae – Caesalpinioideae) from the Western Ghats, India". *Rheedea* 17: 21–23.
Abstract:- A new species of *Humboldtia* Vahl, viz., *H. sanjappae* is described and illustrated. It was collected from Neriyamangalam forests of Idukki district in Kerala. It is allied to *H. vahliana* Wight but differs in having smooth glabrous pods and not having basal appendages of stipules.

1044. **Sasidharan, N. & Sujanapal, P. 2011.** "The genus *Atuna* (Chrysobalanaceae) in southern Western Ghats, India". *Rheedea* 21: 81–83.

Abstract:- *Atuna indica* (Bedd.) Kosterm. is rediscovered about 150 years later after the type collection from northern Kerala. Detailed description and illustration are provided for the southern Western Ghats species of *Atuna* based on the recent collections. Conservation status and distribution pattern are also discussed.

1045. **Sasidharan, N., Sujanapal, P. & Augustine, J. 2002.** "Reappearance of *Syzygium myhendrae* (Beddome ex Brandis) Gamble and *Ellipanthus tomentosus* Kurz in the southern Western Ghats". *J. Econ. Taxon. Bot.* 26: 609–611.
Abstract:- *Syzygium myhendrae* (Beddome ex Brandis) Gamble and *Ellipanthus tomentosus* Kurz, known only by their earlier collections are recollected after a century from Shenduruny Wildlife Sanctuary, Kollam district, Kerala. The fruit of the former is described and illustrated for the first time based on the recent collections.

1046. **Sasidharan, N., Sujanapal, P. & Binoy, P.C. 2006.** "A novelty in *Stereospermum colais* (Buch.–Ham. ex Dillwyn) Mabberley (Bignoniaceae) from the Sahyadri mountains in Kerala". *Rheedea* 16: 37–40.
Abstract:- A new variety of *Stereospermum colais* (Buch.-Ham. ex Dillwyn) Mabberley from the Sahyadri mountains in Kerala, var. *shendurunii* is described and illustrated. It is characterized by larger and pink corolla, ovate-acute calyx lobes and simple and glandular-haired filaments.

1047. **Sasidharan, N. & Swarupanandan, K. 1992.** "A new species of *Cassine* (Celastraceae) from India". *Reinwardtia* 11: 29–32.
Abstract:- The new species, *Cassine kedarnathii* Sasi. & Swarup. allied to *C. congylos* Kosterm. is described from the Silent Valley National Park, Kerala (India) and illustrated.

1048. **Sasidharan, N. & Swarupanandan, K. 1994.** "Discovery of some rare and interesting Asclepiads from Kerala". *J. Econ. Taxon. Bot.* 18: 631–637.
Abstract:- Observations on six rare species of Asclepiads, collected from some of the Wildlife Sanctuaries in Kerala are presented.

1049. **Sasidharan, N. & Vink, W. 1991.** "A new species of *Palaquium* Blanco (Sapotaceae) from India". *Blumea* 35: 385–387.
Abstract:- A new species of the genus *Palaquium, P. ravii* Sasidharan & Vink, is described from Kerala state, India.

1050. **Sasikala, K., Vajravelu, E. & Daniel, P. 2001.** "*Arisaema echinatum* (Wall.) Schott – An addition to the Araceae of Peninsular India". *J. Bombay Nat. Hist. Soc.* 98: 495–497.
Abstract:- *Arisaema echinatum* (Wall.) Schott has been recorded for thr first time for Peninsular India from Kerala. Earlier this species was known to occur in India from Manipur, Meghalaya and Sikkim.

1051. **Satheesh, K., Udayan, P.S., Anil Kumar, N. & Balachandran, I. 2008.** "A new location for *Gymnema khandalense* Santapau – A rare and little known endemic red listed medicinal plant from Vavala forest, near Chimmony Dam (Western Ghats), Thrisssur district of Kerala state, India". *J. Non-Timber Forest Products* 15: 251–254.

Abstract:- *Gymnema khandalense* Santapau, a rare species belonging to the family Asclepiadaceae is endemic and having a disjunct distribution in the Western Ghats regions of Maharashtra and Kerala. Present collection from Vavala forest, near Chimmony Dam (Western Ghats), Thrissur district is a new location for this species.

1052. **Satheesh, K., Udayan, P.S., Anil Kumar, N. & Balachandran, I. 2009.** "Notes on ten rare, endemic and threatened plants of Western Ghats of conservation concern". *J. Econ. Taxon. Bot.* 33: 240–247.

Abstract:- Botanical surveys were conducted in different forest areas of Western Ghats of Kerala as part of conservation studies on 80 endemic and threatened plant species of Western Ghats. This paper deals with taxonomic, ecological and conservation aspects of 10 important endemic and threatened species, viz., *Capparis rheedei* DC., *Decalepis hamiltonii* Wight & Arn., *Dysoxylum beddomei* Hiern, *Gymnema khandalense* Sant., *Humboldtia brunonis* Wall., *Hydnocarpus macrocarpa* (Bedd.) Warb., *Poeciloneuron indicum* Bedd., *Pterospermum reticulatum* Wight & Arn., *Salacia macrosperma* Wight and *Utleria salicifolia* Bedd. ex Hook.f. (Fig. 1). Live plants of all these species are maintained in healthy conditions in Arya Vaidya Sala's herb garden with an intention of large scale multiplication of each of them. The voucher specimens are deposited in the herbarium of Centre for Medicinal Plant Research (CMPR), Arya Vaidya Sala, Kottakal and the M.S. Swaminathan Research Foundation (MSSRF), Kalpetta, Wayanad district.

1053. **Savitha, A., Nair, M.C., Rajesh, K.P. & Ramani, M.P. 2007.** "*Mastigolejeunea auriculata* (Wilson & Hook.) Schiffn. (Lejeuneaceae: Marchantiopsida) – A new record for Peninsular India". *J. Econ. Taxon. Bot.* 31: 423–425.

Abstract:- *Mastigolejeunea auriculata* (Wilson & Hook.) Schiffn. of Lejeuneaceae is reported here as a new record for Peninsular India from Guruvayurappan College campus, Kozhikode, Kerala.

1054. **Savitha, A., Nair, M.C., Rajesh, K.P. & Ramani, M.P. 2008.** "*Cololejeunea latilobula* (Herzog) Tixier and *Schiffneriolejeunea pulopenangensis* (Gott.) Gradst. (Lejeuneaceae: Marchantiopsida) two new bryophyte records for Kerala". *J. Econ. Taxon. Bot.* 32: 577–580.

Abstract:- *Cololejeunea latilobula* (Herzog) Tixier and *Schiffneriolejeunea*

pulopenangensis (Gott.) Gradst. of Lejeuneaceae are reported here as new records for Kerala state.

1055. **Sebastine, K.M. 1962.** "Some additions to 'Flora of the Presidency of Madras'". *Bull. Bot. Surv. India* 4: 219–225.

Abstract:- J.S. Gamble began the compilation of the *Flora of the Presidency of Madras* in the year 1912 and the first part was published in the year 1915. In 1925, after completing part VII Gamble died. The work was then continued by C.E.C. Fischer and finished with part XI in 1935. This monumental work on systematic botany deals with 4,516 species of plants from the Old Madras Presidency which comprises the present states of Madras, Kerala, parts of Mysore and Andhra Pradesh. During the 26 years that have elapsed since its publication several botanists have studied the flora of the region and have been able to discover many taxa new to science and several new records. The scattered information on the new taxa described by various authors in different journals and periodicals has been presented in this paper. The following data is given for each taxon: citation of the original publication, critical notes if any, the place of collection, collector's number and the Herbarium where the type specimen is permanently preserved (if known).

1056. **Sebastine, K.M. & Ramamurthy, K. 1966.** "Some additions to the flora of the Presidency of Madras – II". *Bull. Bot. Surv. India* 8: 80–81.

Abstract:- A list of additional 47 plants which were not recorded earlier from the Presidency of Madras has been enumerated.

1057. **Sebastine, K.M. & Ramamurthy, K. 1966.** "Studies on the flora of Parambikulam and Aliyar submergible areas". *Bull. Bot. Surv. India* 8: 169–182.

Abstract:- The paper deals with a detailed account of the vegetation of the Parambikulam and Aliyar submergible areas in Kerala and Madras state. Intensive botanical exploration was carried out in different seasons of the year during 1962–63. The Parambikulam submergible areas is situated in Trichur district, Kerala state at an altitude of ± 610 m. It covers 20.8 sq km of virgin forests and is formed by the construction of the dam across the Parambikulam river. The forest presents different layers of vegetation which is a continuation of that of Malabar Province and the Deccan Province as described by Sir J.D. Hooker. The luxuriant and thick vegetation comprises 159 species of angiosperms belonging to 63 families. The families Papilionaceae and Euphorbiaceae are dominant. This vegetation includes several economically important timber-yielding trees and medicinal plants. The Aliyar submergible area is situated in the Coimbatore district, Madras state and it is formed by the dam construction across the Aliyar river. It covers an area of 6.5 sq km. The vegetation is mostly the scrub jungle type with the combination of dry

deciduous type. It constitutes 229 species of angiosperms belonging to 71 families. The families like Papilionaceae, Euphorbiaceae, Gramineae, Cyperaceae, Acanthaceae, Malvaceae and Labiatae are largely represented.

1058. **Sebastine, K.M. & Ramamurthy, K. 1967.** "*Mitracarpus verticillatus* (Schum. & Thonn.) Vatke – A new record for India". *Bull. Bot. Surv. India* 9: 291–292.
Abstract:- *Mitracarpus verticillatus* (Schum. & Thonn.) Vatke has been recorded for the first time for India from Tamil Nadu and Kerala.

1059. **Sebastine, K.M. & Vivekananthan, K. 1967.** "A contribution to the flora of Devicolam, Kottayam district, Kerala". *Bull. Bot. Surv. India* 9: 163–185.
Abstract:- This paper deals with the floristic account of Devicolam in Kottayam district, Kerala. The area covered lies between 9°57'–10°21'N and 76°39'–77°17'E and the altitude varies from 457–2675 m. Five seasonal botanical tours were conducted during 1963–65 and altogether 478 taxa were collected. In addition, 60 species collected by the earlier botanists and which were not collected during the above mentioned tours are also included in this list. Thus the total number of taxa enumerated in this paper is 538 and they are spread over 125 families. Different types of vegetation are met with in Devicolam and they are broadly be classified as follows: Tropical dry deciduous, Tropical moist deciduous, Tropical wet evergreen, montane wet temperate and monatne wet grassland. The occurrence of *Argostemma rostratum* Wall. in this area constitutes a new record for Peninsular India.

1060. **Seeni, S. & Bejoy, M. 1997.** "Income generation through commercial multiplication, training and house-hold cultivation of orchids under Kerala condition". *J. Orchid Soc. India* 11: 61–66.
Abstract:- Since Kerala is identified as an intensive floriculture zone for orchids and anthuriums, it has become an urgent necessity for the local R & D institutions to formulate strategies and resort to appropriate means and methods to develop floriculture activities in the state. As a party to these developments, Tropical Botanical Garden Research Institute, Kerla has focused certain components of floriculture, namely: i) Technology/protocol development for rapid multiplication of commercially important orchids and anthuriums leading to technology transfer and plant production activities at village level; ii) supply of quality planting materials raised through tissue and embryo cultures to growers; iii) skilled human resource development through training in culture and cultivation of these twin crops; and iv) breeding and improvement leading to the release of new varieties. So far atleast 12 different hybrids of *Vanda, Cattleya, Phalaenopsis, Dendrobium* aand *Aranda* have been multiplied using embryo culture and 6 different hybrids of *Oncidium, Phalaenopsis* and *Dendrobium* by mericloning. Training in tissue culture first initiated to

support students of colleges and schools was later upgraded to include educated unemployed youths of rural sector, entrepreneurs and candidates sponsored by corporate bodies. Since early 1993, 275 persons from all over the country have been offered training in tissue culture production of orchids and anthuriums. Initially with an annual income of Rs. 11,000/- by way of charges for the training and sale of plants, the activities are strengthened to yield an amount of Rs. 2.8 lakhs during 1996–1997. About 45,000 seedlings and mericlones were sold out at reduced price during this year. An average annual two fold increase in production and income generation now realized will be increased to about 10 fold by the year 2000. Out of nearly 200 crosses between species and hybrids of orchids already tried, two were successful with the raising of a '*Dendrobium*' hybrid 40 and *Vandaenopsis* hybrid.

1061. **Seethalakshmi, K.K., Jijeesh, C.M. & Raveendran, V.P. 2010.** "Flowering seed production and natural regeneration of thorny bamboo, *Bambusa bambos* (L.) Voss after gregarious flowering in Wayanad, Kerala". *Advances Pl. Sci.* 23: 597–600.

Abstract:- *Bambusa bambos* (L.) Voss (thorny bamboo) is a commercially important bamboo species grown in natural forest and cultivated in homesteads in India. It flowered gregariously in Wayanad forest division, Kerala, Southern India during 1991-92. Previous flowering occurred in 1957–62 from the same locality. Seeds matured within four months and it was predated by the animals and birds. Seeds were collected from twelve selected clumps from three location, viz., Chethalayam, Noolpuzha and Tholpetti for two months and there was significant variation between seed samples from clumps in the same locality and samples collected during different period. The highest seedling density was recorded in Noolpuzha. To observe the status of natural regeneration in a Wildlife Sanctuary the area was revisited after 10 years in 2003. The highest clump density was recorded form Noolpuzha. The number of clumps and the height of the largest culm in the clumps varied significantly among three localities. The major factors that influenced the natural regeneration of the *B. bambos* were seed predators, out break of *Udonga montana* and disturbances in the form of anthropogenic and biotic interferences. Hence protective measures to avoid such incidents are to be taken at the time of flowering, seed production as well as in the initial stages of regeneration to avoid depletion of resource base of the species.

1062. **Sevichan, P.J. & Madhusoodanan, P.V. 1995.** "Comparative performance of three species of *Azolla* as a biofertilizer with different levels of chemical nitrogen fertilizer in the paddy fields". *J. Econ. Taxon. Bot.* 19: 683–686.

Abstract:- The effect of different species of *Azolla* on the grain and straw yield of rice with different doses of chemical Nitrogen fertilizer application in Rice Research Station,

Moncompu (Kerala Agricultural University), Alappuzha is discussed. *Azolla pinnata* and *A. microphylla* substituted 30 kg N/ha.

1063. **Shaji, C. 2004.** "A new variety of *Pleurotaenium* from Kerala". *J. Econ. Taxon. Bot.* 28: 602–603.

Abstract:- The paper describes a new variety of *Pleurotaenium* collected from a paddy field at Oyoor, Kollam district, Kerala. It differs from the type species in its larger dimensions and long vertical spines.

1064. **Shaji, C. & Panikkar, M.V.N. 1995.** "On some little known epiphytic algae from Kerala". *Geobios, New Rep.* 14: 51–52.

Abstract:- Three rare and interesting epiphytic algae, viz., *Characium obtusum* A. Braun (Chlorococcales), *Chaetosphaeridium globosum* (Nordst.) Klebahn (Chaetophorales) and *Peroniella planktonica* G.M. Smith (Heterococcales) have been collected from a canal at Meenad, Kollam district, Kerala. *Characium obtusum* and *P. planktonica* are additions to Indian freshwater algae and *Chaetosphaeridium globosum* is reported for the second time from this state.

1065. **Shaji, C. & Panikkar, M.V.N. 1996.** "Cyanophyceae of Kerala, India – II". *J. Econ. Taxon. Bot.* 20: 429–434.

Abstract:- An illustrated account of 29 taxa of Cyanophyceae belonging to 16 genera, viz., *Coelosphaerium, Merismopedia, Myxosarcina, Spirulina, Oscillatoria, Phormidium, Lyngbya, Schizothrix, Cylindrospermum, Anabaena, Scytonema, Tolypothrix, Calothrix, Rivularia, Gloeotrichia* and *Hapalosiphon* collected from different localities of Kerala during March to November 1994 is given. All the taxa are reported for the first time from Kerala.

1066. **Shaji, C. & Patel, R.J. 1991.** "*Glaucocystis indica* Patel from Kerala". *Geobios, New Rep.* 10: 99.

Abstract:- *Glaucocystis indica* Patel has been recorded for the first time from Chathannoor, Quilon district, Kerala.

1067. **Shaji, C., Sindhu, P. & Panikkar, M.V.N. 1995.** "Contributions to Euglenoids of Kerala, India – II". *J. Econ. Taxon. Bot.* 18: 269–272.

Abstract:- The Euglenophytes of Kerala were intensively studied on the basis of samples collected between March and May, 1994. In total 28 taxa belonging to 4 genera, viz., *Euglena* (2 taxa), *Phacus* (18 taxa), *Trachelomonas* (6 taxa) and *Petalomonas* (2 taxa) are characterized and illustrated.

1068. **Shaji, P.K., Shaju, T., Nair, P.K.K. & Sivadasan, M. 2009.** "*Lepironia* (Cyperaceae): A new genus record for Kerala". *Rheedea* 19: 41–44.

Abstract:- *Lepironia articulata* (Retz.) Domin, a sedge known to occur in India only by its reported type collection from the vicinity of Tranquebar (Tharangampadi in Tamil Nadu), was found growing in the coastal belt of Alappuzha district in Kerala. The present collection forms the second record for the species in India and marks the addition of genus *Lepironia* to the flora of Kerala. A detailed description, relevant notes, illustration and photographs are provided.

1069. **Shaji, S.S., Kumar, P.P.R. & Hosagoudar, V.B. 2009.** "*Glomus taiwanensis*: A new record to Kerala state". *Indian J. Bot. Res.* 5: 125–126.

Abstract:- The study of the mycorrhizal association in different forest types in Silent Valley National Park has been initiated. Three field tours conducted to the study area resulted in recording several mycorrhizal spores belonging to the genera: *Acaulospora, Gigaspora, Scutellospora, Glomus* and *Sclerocystis*. Of these, *Glomus taiwanensis* is recorded here for the first time from the soil of Kerala state.

1070. **Shaju, T. & Mohanan, N. 2004.** "A new species of *Arundinella* Raddi (Poaceae) from Kerala, India". *Rheedea* 14: 47–50.

Abstract:- A new species, *Arundinella ravii*, is described and illustrated. The species differs from its closely allied species, *A. pumila* (Hochst. ex A. Rich.) Steud. in having shorter culms, strictly glabrous nodes, one-nerved and one-keeled lower and upper glumes, shortly notched lower lemma, deeply bifid upper lemma, smoothly margined lower palea and lanceolate upper palea.

1071. **Shantha, T.R., Yoganarasimhan, S.N., Shetty, J.K.P. & Sudha, R. 1992.** "Pharmaco–botanical studies on the south Indian market sample of Gaja pippali [*Balanophora fungosa* Forst. & Forst. subsp. *indica* (Arn.) Hansen". *Bull. Med.-Ethno-Bot. Res.* 13: 24–34.

Abstract:- The south Indian market samples of Gaja pippali sold under the trade name Attithippali has been identified as *Balanophora fungosa* Forst. & Forst. subsp. *indica* (Arn.) Hansen which is a root parasite. The pharmaco-botanical studies of this drug has been carried out.

1072. **Shareef, S.M. 2012.** "*Ex-situ* conservation and multiplication of *Garcinia wightii* T. And. – A rare, endemic species of the southern Western Ghats". *Indian J. Forest.* 35: 85–88.

Abstract:- As part of *ex-situ* conservation of *Garcinia wightii*, softwood grafting by cleft method was carried out using root stocks of *G. gummi-gutta* and *G. hombroniana*. The intra-specific grafting carried out is found very successful in *G. hombroniana* and resulted 93% success, while *G. gummi-gutta* showed complete failure. All the saplings raised survived well in the field of Tropical Botanic Garden and Research Institute (TBGRI),

Trivandrum. So, in *G. wightii* grafting, this method using the rootstock of *G. hombroniana* can be adopted as an easy technique for its multiplication.

1073. **Shareef, S.M. & Raju, A. 2011.** "*Eugenia seithurensis* Gopalan *et* S.R. Sriniv. (Myrtaceae) – A new distributional record for Kerala". *J. Econ. Taxon. Bot.* 35: 633–635.

Abstract:- *Eugenia seithurensis* Gopalan *et* S.R. Sriniv., a myrtaceous species reported from Siethur Hills of Tamil Nadu state was recently collected from the Agasthyamalai Biosphere of Kerala, which forms a new distributional record to the state. A brief description is provided herewith to facilitate its easy identification and further collection of the species.

1074. **Shareef, S.M. & Geethakumary, M.P. 2011.** "Occurrence of *Eugenia agasthiyamalayana* Gopalan & Murugan (Myrtaceae) in Kerala, India". *J. Non-Timber Forest Products* 18: 157–158.

Abstract:- *Eugenia agasthiyamalayana* Gopalan & Murugan (Myrtaceae) is reported for the first time for Kerala from Chemunji hills of Thiruvananthapuram district. A short description, photograph, relevant notes, etc. are provided. This species was earlier known to occur in Tamil Nadu.

1075. **Shareef, S.M., Kumar, E.S.S. & Roy, P.E. 2011.** "*Eugenia terpnophylla* var. *keralensis* var. nov. (Myrtaceae) from Kerala, India". *Nordic J. Bot.* 29: 455–457.

Abstract:- The new variety, *Eugenia terpnophylla* Thw. var. *keralensis* S.M. Shareef, E.S. Santhosh Kumar *et* Roy is described and illustrated from Kerala, India. It differs from the typical variety by its narrowly to broadly elliptic leaves with more numerous lateral nerves, suborbicular petals and ellipsoidal fruits.

1076. **Shareef, S.M., Kumar, E.S.S. & Roy, P.E. 2012.** "*Syzygium fergusonii* (Trimen) Gamble (Myrtaceae) – A new record for Kerala". *J. Econ. Taxon. Bot.* 36: 379–380.

Abstract:- *Syzygium fergusonii* (Trimen) Gamble, an Indo-Sri Lankan Myrtaceous species reported from Anamalai hills of Tamil Nadu was recently collected from the Pettimudi forests of Kerala. It forms a new distributional record to the state, and described here to facilitate its easy identification.

1077. **Shareef, S.M. & Mathew, S.P. 2007.** "Edible wild relatives of Indo-Malesian fruit trees endemic to the Western Ghats of the Peninsular India". *J. Non-Timber Forest Products* 14: 57–62.

Abstract:- Western Ghats, the abode of several botanical entities with promising economic value in modern field of horticulture and plant breeding, covers a biogeographic region of 160,000 km^2 along the West Coast of the Peninsular India (Nayar, 1996). This biogeographic zone has multidimentional biological affinities with distant landmasses like Malesia, Africa and Polynesia. The present article discusses seven promising, but

mostly lesser-known, wild endemic fruit trees of common Indo-Malesian genera found to occur on the slopes of the Western Ghats.

1078. **Shareef, S.M. & Rajkumar, G. 2012.** "Occurrence of multiple albino seedlings in *Olea dioica* Roxb. in two habitats". *Indian J. Forest.* 35: 123–124.

Abstract:- Occurrence of albino seedlings as natural mutant in *Olea dioica* is reported for the first time from two different forest areas in Thiruvananthapuram district, Kerala. The observations also revealed that existence of location effect on the frequency and duration of expression of albinism in the population.

1079. **Shareef, S.M., Geethakumary, M.P., Kumar, E.S.S. & Shaju, T. 2010.** "*Syzygium claviflorum* (Myrtaceae) – A new record for South India". *Rheedea* 20: 53–55.

Abstract:- *Syzygium claviflorum* (Roxb.) Wall. ex A.M. Cowan *et* Cowan, a Myrtaceous tree species is reported for the first time for South India from Agasthyamalai Biosphere Reserve of the southern Western Ghats. A brief description and illustration of the species are provided herewith for easy identification.

1080. **Shareef, S.M. & Thulasidas, G. 2010.** "A note on *ex-situ* conservation and multiplication through air layering of *Syzygium travancoricum* Gamble – A critically endangered, endemic tree species of the southern Western Ghats". *J. Non-Timber Forest Products* 17: 331–332.

Abstract:- *Syzygium travancoricum* Gamble (Myrtaceae) is one of the critically endangered, endemic species of the southern Western Ghats of Kerala and Tamil Nadu. Inferior seedling survival and habitat destruction might be the reasons for its endangerment, which demands urgent *ex-situ* and *in-situ* conservation. The paper discusses the multiplication of this species through air layering carried out as part of its *ex-situ* conservation.

1081. **Sharma, B.D. & Rathakrishnan, N.C. 1979.** "New orchid records from Kerala state". *J. Bombay Nat. Hist. Soc.* 75: 524–525.

Abstract:- This paper deals with three orchids, viz., *Oberonia gammiei* King & Pantl., *Gastrochilus dalzellianus* (Sant.) Sant. & Kapadia and *Acampe ochracea* (Lindl.) Hochr. which constitute new records for the state of Kerala from Periyar Wildlife Sanctuary (Cardamon Hills of Western Ghats).

1082. **Sharma, B.D., Vivekananthan, K. & Rathakrishnan, N.C. 1974.** "*Cassia intermedia* (Caesalpiniaceae) – A new species from South India". *Proc. Indian Acad. Sci.* 80(B): 301–306.

Abstract:- A new species, *Cassia intermedia* Sharma, Vivek. & Rathak. is described and illustrated from Thekkady, Idukki district, Kerala. The natural interspecific hybridization between *C. occidentalis* Linn. and *C. hirsuta* Linn. has resulted in the evolution of the

new species. These findings have been corroborated by external morphological features and the phytochemical analysis.

1083. **Sharma, K.A., Pushpangadan, P., Chopra, C.L., Rajasekharan, S. & Sarada Amma, L. 1989.** "Adaptogenic acitivity of seeds of *Trichopus zeylanicus* Gaertn., the Ginseng of Kerala". *Ancient Sci. Life* 8: 212–219.

Abstract:- The alchoholic extract of seeds of *Trichopus zeylanicus* showed a potent adaptogenic or antistress properties against a variety of stresses in both rats and mice. The extract increased the swimming performance of normal and adrenalectomized mice significantly; prevented a variety of stress and chemical induced ulcerations in rats and also prevented milk-induced leucocytosis in mice. The extract further reduced the gastric secretary clume, pH and acid output in pylorusligated rat stomach. No mortality was observed up to a dose of 3 g/kg per oral in mice. The study indicated that *Trichopus zeylanicus* seeds induce a state of nonspecific increased resistance against a variety of stress induced biological changes in animals.

1084. **Sheela, D. 2007.** "*Spilanthes vazhachalensis*: A new species from Kerala, India". *J. Econ. Taxon. Bot.* 31: 474–477.

Abstract:- A new species, viz., *Spilanthes vazhachalensis* Sheela (Compositae) allied to *S. ciliata* H.B.K. is described and illustrated from Vazhachal, Trichur district, Kerala.

1085. **Sheela, D. 2010.** "*Spilanthes ghoshinis*: A new species from Kerala, India". *J. Econ. Taxon. Bot.* 34: 798–800.

Abstract:- A new species, viz., *Spilanthes ghoshinis* Sheela (Compositae) allied to *S. ciliata* H.B.K. and *S. calva* DC. is described and illustrated from Kerala, India.

1086. **Shepherd, K. 1964.** "A new species of Banana". *Kew Bull.* 17: 461–463.

Abstract:- A new species, viz., *Musa* (sect. *Musa*) *ochracea* Shepherd allied to *M. acuminata* Colla and *M. flaviflora* Simmonds has been described from Western Ghats, India.

1087. **Shetty, B.V. 1976.** "Notes on some interesting grasses from Southern India". *Bull. Bot. Surv. India* 15: 276–278.

Abstract:- *Eulalia thwaitesii* (Hack.) O. Ktze. is reported as a new record to India from Devicolam, Idukki district, Kerala. Two little known grasses namely *Andropogon polyptychus* Steud. and *Garnotia exaristata* F.W. Gould, which were inadequately represented in the Indian herbaria were collected from Devicolam, Idukki district, Kerala.

1088. **Shetty, B.V. & Singh, P. 1987.** "A new species of Vitaceae from Peninsular India". *Kew Bull.* 42: 933–935.

Abstract:- A new species of Vitaceae from Peninsular India (Wynaad), viz., *Tetrastigma*

gamblei, discovered during investigation of the nomenclature and identity of *T. canarense* Gamble, is described.

1089. **Shetty, B.V. & Singh, P. 1988.** "The Vitaceae in Hortus Malabaricus". *Taxon* 37: 169–174.
Abstract:- The identity and nomenclature of the nine species of Vitaceae in Rheede's Hortus Malabaricus are discussed and their types and distribution are also indicated.

1090. **Shetty, B.V. & Vivekananthan, K. 1968.** "New and little known taxa from Anaimudi and surrounding regions, Devicolam, Kerala – I: A new variety of *Leucas vestita* Benth.". *Bull. Bot. Surv. India* 10: 236–237.
Abstract:- A new variety of *Leucas vestita* Benth., viz., *L. vestita* var. *devicolamensis* has been described from Upper Vagavurrai, Devicolam, Kottayam district, Kerala.

1091. **Shetty, B.V. & Vivekananthan, K. 1969.** "New and little known taxa from Anaimudi and surrounding regions, Devicolam, Kerala – II: A new species of *Hedyotis* Linn.". *Bull. Bot. Surv. India* 11: 447–449.
Abstract:- A new species of *Hedyotis*, viz., *H. santapaui* allied to *H. articularis* R. Br. ex G. Don has been described from Umaiyamalai, Devicolam, Kottayam district, Kerala.

1092. **Shetty, B.V. & Vivekananthan, K. 1970.** "New and little known taxa from Anaimudi and surrounding regions, Devicolam, Kerala – III: A new species of *Vernonia* Schreb.". *Bull. Bot. Surv. India* 12: 266–268.
Abstract:- A new species of *Vernonia*, viz., *V. anaimudica* allied to *V. heynei* Bedd. ex Gamble has been described from Rajamallay, Devicolam, Kottayam district, Kerala.

1093. **Shetty, B.V. & Vivekananthan, K. 1971.** "Studies on the vascular flora of Anaimudi and the surrounding regions, Kottayam district, Kerala". *Bull. Bot. Surv. India* 13: 16–42.
Abstract:- The paper deals with an account of the vegetation of Anaimudi (2,695 m) – the highest peak in the Peninsular India and the surrounding regions situated in the Kottayam district of Kerala. The above area has not received much attention in the detailed studies undertaken by various workers on the vegetation of the South Indian hill tops. Based on the explorations carried out by the authors during the years 1965–70, 317 taxa of vascular plants, under 233 genera and 101 families are enumerated. An analysis of the distribution pattern of the shola and grassland species has shown that (1) the shola species are mainly of tropical stock, (2) quite a number of species on the shola fringes and the grassland are of temperate origin and (3) the temperate elements play a comparatively less important role in the composition of the vegetation at the higher altitudes (above 1,925 m), and that the predominant elements here are of tropical stock. The high incidence of endemic taxa in this region has been pointed out. Literature on the ecological status of the shola-grassland formation has been reviewed for a better understanding of the vegetation.

1094. **Shetty, B.V. & Vivekananthan, K. 1972.** "New and little known taxa from Anaimudi and surrounding regions, Devicolam, Kerala – IV: Notes on some rare species". *Bull. Bot. Surv. India* 14: 19–23.

Abstract:- *Juncus effusus* L. has been reported for the first time for South India from Anaimudi and surrounding regions, Devicolam, Kerala. Additional information on a few little known taxa from Kerala are also given.

1095. **Shetty, B.V. & Vivekananthan, K. 1973.** "New and little known taxa from Anaimudi and surrounding regions, Devicolam, Kerala – V: A new variety of *Pogostemon travancoricus* Bedd.". *Bull. Bot. Surv. India* 15: 155–157.

Abstract:- A new variety of *Pogostemon travancoricus* Bedd., viz., *P. travancoricus* var. *devicolamensis* has been described and illustrated from Anaimudi and surrounding regions, Devicolam, Kerala.

1096. **Shetty, B.V. & Vivekananthan, K. 1973.** "Notes on some interesting grasses from Southern India". *Bull. Bot. Surv. India* 15: 276–277.

Abstract:- *Eulalia thwaitesii* (Hack.) O. Ktze. is a new record to India from Devicolam, Idukki district, Kerala. The other two little known grasses, namely *Andropogon polyptychus* Steud. and *Garnotia exaristata* F.W. Gould, which are inadequately represented in the Indian herbaria have been recorded from Devicolam, Idukki district, Kerala. Earlier *Andropogon polyptychus* Steud. was reported from Tamil Nadu.

1097. **Shetty, B.V. & Vivekananthan, K. 1975.** "New and little known taxa from Anaimudi and surrounding regions, Devicolam, Kerala – VI: An undescribed species of *Oberonia* Lindl. (Orchidaceae)". *Bull. Bot. Surv. India* 17: 157–159.

Abstract:- A new species of *Oberonia* Lindl., viz., *O. sebastiana* allied to *O. wightiana* Lindl. has been described from Anaimudi and surrounding regions, Idukki district, Kerala.

1098. **Shetty, B.V. & Vivekananthan, K. 1991.** The endemic and endangered plants of the high range, Idukki district, Kerala. In: Karunakaran, C.K. (Ed.), *The proceedings of the symposium on rare, endangered and endemic plants of the Western Ghats*. Kerala Forest Department, Thiruvananthapuram. pp. 135–155.

Abstract:- Thirty-six endemic plant species new to science described from the High Range of Kerala are listed and discussed in the present paper.

1099. **Shetty, B.V., Karthikeyan, S. & Vivekananthan, K. 1976.** Notes on some interesting grasses from Southern India". *Bull. Bot. Surv. India* 15: 276–278.

Abstract:- *Eulalia thwaitesii* (Hack.) O. Ktze. is recorded for the first time for India from Kerala. *Andropogon polyptychus* var. *deccanensis* Bor is merged with the species proper. A note on *Garnotia exaristata* P.W. Gould has also been given.

1100. **Shiburaj, S. & Abraham, T.K. 1998.** "Studies on the distribution of antagonistic Actinomycetes in Neyyar and Peppara Wildlife Sanctuaries of Kerala state, India". *Geobios* (Jodhpur) 25: 221–226.

Abstract:- The Actinomycetes isolated from different forest habitats, analysed for their antagonistic properties as antibacterial, antifungal or both, were grouped into strong, moderate and weak. The habitat-wise correlation of the antagonists proves that the soil samples of deciduous forests lodge more potential as compared to other habitats by virtue of antibiotic production.

1101. **Shivamurthy, G.R. 1996.** "The floral biology and pollination in *Balanophora fungosa* ssp. *indica* var. *indica* (Balanophoraceae)". *J. Swamy Bot. Club* 13: 19–22.

Abstract:- The floral biolgy and pollination mechanism in *Balanophora fungosa* ssp. *indica* var. *indica*, a dioecious species are described. All the field observations were at natural habitats from Silent Valley dam site, Kerala, Pillar Rocks at Kodaikanal, Tamil Nadu, Abbi Falls in Mercara and Honnamatti Estate in Karnataka. Pollination is entomophilous and is aided by emission of scent, production of nectar and profuse output of pollen. The transfer of pollen by a special type of combing action peculiar to the genus *Balanophora* has been demonstrated. The existence of several morphological forms, display of wide distributional range and adaptability of the taxon have been discussed.

1102. **Shivamurthy, G.R. & Sadanand, K.B. 1997.** "A new species of *Willisia* Warm. (Podostemonaceae) from the Silent Valley, Kerala, India". *Kew Bull.* 52: 243–245.

Abstract:- A new species, viz., *Willisia arekaliana* Shivamurthy & Sadanand (Podostemonaceae) allied to *W. selaginoides* (Bedd.) Warm. ex Willis from Silent Valley, Kerala state, India, is described and illustrated.

1103. **Sijimol, P.S., Rajesh, K.P. & Madhusoodanan, P.V. 2000.** "On the ccurrence of *Thalia geniculata* L. (Marantaceae) in India". *J. Econ. Taxon. Bot.* 24: 727–730.

Abstract:- *Thalia geniculata* (Marantaceae), a recent introduction to Kerala, South India can become a potential weed in shallow freshwater marshes of Kerala. Earlier this species was known from Tropical America. The plant is described and illustrated.

1104. **Silja, V.P., Varma, S.K. & Mohanan, K.V. 2008.** "Ethnomedicinal plant knowledge of the *Mullu Kuruma* tribe of Wayanad district, Kerala". *Indian J. Traditional Knowledge* 7: 604–612.

Abstract:- *Mullu Kuruma* tribe is a very prominent tribal group of Wayanad district of Kerala state with unique culture and ethnobotanical practices. The study has revealed the use of 136 plant species for traditional medicinal purposes by the tribe. They use 14

plants for the treatment of skin diseases, 10 for inflammation, 3 as abortifacient, 9 for dandruff, 11 for dysentery, 6 for piles, 7 for epilepsy, 19 for asthma and other bronchial diseases, 11 for anaemia, 4 for constipation, 1 for tuberculosis, 8 for jaundice and other liver diseases, 6 for burns, 7 for leucorrhoea, 2 for migraine, 5 for wounds, 3 for malaria and 13 for urinary complaints and kidney stone.

1105. **Sindhu, P. & Panikkar, M.V.N. 1991.** "On the occurrence of *Chara gymnopitys* Braun from Kerala". *J. Econ. Taxon. Bot.* 15: 741–742.
Abstract:- An ecorticated species, *Chara gymnopitys* Braun is collected from the paddy fields of Kerala and described in detail.

1106. **Sindhu, P. & Panikkar, M.V.N. 1992.** "Two interesting species of *Chara* Linnaeus from Kerala, South India". *J. Econ. Taxon. Bot.* 16: 573–574.
Abstract:- The present communication deals with two rare and interesting species of *Chara* collected from Quilon district of Kerala. Of these, *C. burmanica* Pal represents a new record from India while *C. erythrogyna* Griffith constitutes a new record for the state of Kerala.

1107. **Sindhu, P. & Panikkar, M.V.N. 1993.** "Oedogoniales of Kerala – I". *J. Econ. Taxon. Bot.* 17: 89–94.
Abstract:- The present paper deals with a taxonomic account of the genus *Oedogonium* Link from Kerala. Twenty-four taxa are treated with descriptions and illustrations. Of these, eleven taxa are reported for the first time from India and also form the first reports from Kerala.

1108. **Sindhu, P. & Panikkar, M.V.N. 1994.** "Desmid flora of Quilon, Kerala. 3. *Staurastrum* Meyen". *J. Econ. Taxon. Bot.* 18: 331–334.
Abstract:- Taxonomic descriptions of twenty–two taxa of *Staurastrum* Meyen, collected from the paddy fields of Kerala are presented. Of these, 15 are believed to be new to India.

1109. **Sindhu, P. & Panikkar, M.V.N. 1994.** "Occurrence of Desmid flora from the paddy fields of Quilon, Kerala. 1. *Pleurotaenium* Nageli". *J. Econ. Taxon. Bot.* 18: 601–603.
Abstract:- In the present study, 12 species of *Pleurotaenium* collected from the paddy fields of Quilon have been described. Of these 8 species are new to India which include *P. trabecula* (Ehr.) Nag. var. *elongatum* Ceder., *P. trabecula* var. *rectum* (Delp.) West *et* West, *P. baculoides* (Roy & Biss.) Playf., *P. caldense* Nordst., *P. eugenium* (Turn.) W. & G.S. West, *P. rectum* Delp. and *P. crenulatum* (Her. ex Ralfs) Rebenh.

1110. **Sindhu, P. & Panikkar, M.V.N. 1994.** "Desmid flora of Kerala. 2. *Closterium* Nitsch.". *J. Econ. Taxon. Bot.* 18: 604–606.

Abstract:- Twenty–one species of *Closterium* Nitsch. collected from the paddy fields of Kerala are described. Among these, seven taxa, *C. atteuatum* Ehr., *C. costatum* Corda, *C. directum* Arch., *C. jeneri* Ralfs, *C. laterale* Nordst., *C. turgidum* Ehr. and *C. praelongum* Breb. are new to India.

1111. **Sindhu, P. & Panikkar, M.V.N. 1994.** "Occurrence of *Netrium* (Nagel') Itzigsohn & Rothe from Kerala". *J. Econ. Taxon. Bot.* 18: 627–628.
Abstract:- Seven species of *Netrium* (Nageli) Itz. & Roth collected from different parts of Kerala are described. Of these, four: *N. oblongum* (De Bary) Luet., *N. digitus* (Ehr.) Itzigs. & Rothe var. *rhomboideum* Gron., *N. interruptum* (Breb.) Luet. and *N. digitus* var. *parvum* Borge are new to India.

1112. **Sindhu, P. & Panikkar, M.V.N. 1994.** "Observations on the two interesting members of Chaetophorales from Kerala". *J. Econ. Taxon. Bot.* 18: 629–630.
Abstract:- Two taxa of the order Chaetophorales, *Iwanoffia terrestris* (Iwan.) Pascher and *Trichodiscus elegans* Welsford are reported for the first time from Kerala. *Trichodiscus elegans* is considered as an addition to the algal flora of India.

1113. **Sindhu, P. & Panikkar, M.V.N. 1994.** "Desmid flora of Quilon, Kerala. 3. *Cosmarium* Corda". *J. Econ. Taxon. Bot.* 18: 711–714.
Abstract:- A total of 26 species of *Cosmarium* Corda have been described, of these 11 are new reports to India and all the rest are new to Kerala.

1114. **Sindhu, P. & Panikkar, M.V.N. 1994.** "Observations on the two species of *Coleochaete* Brebisson from Kerala". *J. Econ. Taxon. Bot.* 18: 738–740.
Abstract:- Two species of the genus *Coleochaete*, viz., *C. pulvinata* A. Braun and *C. nitellarum* Jost have been reported for the first time from Kerala state.

1115. **Singh, B.G. & Subramanian, K.N. 1991.** Endemic plants of Kerala and need for its conservation. In: Karunakaran, C.K. (Ed.), *The proceedings of the symposium on rare, endangered and endemic plants of the Western Ghats*. Kerala Forest Department, Thiruvananthapuram. pp. 314-327.

1116. **Singh, J. 1985.** "Biological spectrum of a tropical grassland community at Idukki, Kerala". *Indian J. Forest.* 8: 231–233.
Abstract:- The present paper deals with the biological spectrum of a tropical humid grassland community at Idukki in Kerala. The spectrum represented by four life-form groups of Raunkiaer, viz., phanerophytes (39.3%), hemicryptophytes (16.1%), cryptophytes (26.8%) and therophytes (17.8%). The phanerophytes and cryptophytes were dominating the community hence the vegetation may be termed as phanero-cryptophytes. The present observations have been compared with other works done elsewhere in India.

1117. **Singh, J. 1987.** "Studies on successional pattern around Idukki hydel project in Kerala". *Indian J. Forest.* 10: 31–37.

Abstract:- The present study deals with the environmental impacts on the successional pattern of plant communities around Idukki hydel project in Kerala. The vast destruction of the evergreen forests which once occupied the whole area leads to the formation of grasslands, deciduous and semi-evergreen types of communities. Detailed information on the characters and constituents of the different storeys in each type is given in the present study. The evergreen tree species are restricted only to the valleys and depressions and their regeneration in open places is almost absent due to the adverse ecological conditions while some of the fast growing light demanding species become dominant in the deciduous or semi-evergreen forests and savannas. The grasslands are of sub-climax stage which are controlled by fire factor. A definite correlation could be observed in the distribution of climax forests and the moisture regime.

1118. **Singh, J.N., Chaturvedi, S.P. & Selvam, A.B.D. 2007.** "Medicinal plant species – their hydro–edaphic properties in woodland habitat of Nilgiri Biosphere Reserve, Kerala". *J. Econ. Taxon. Bot.* 31: 975–989.

Abstract:- The present investigation deals with eighteen major taxa of medicinal plants, their habit, distribution, chief uses and principal associates along with their hydro-edaphic properties in the woodland habitat of Nilgiri Biosphere Reserve – Kerala. It is held from the results that soils irrespective of their location and elevation possess a high pool of energy content in their reserve, but, it is a declined status in comparison to 1982 values. Besides energy content, their other relevant properties, such as soil proteins, available phosphorus, cation exchange capacity, water holding capacity, porosity etc. are quite conducive for the proper growth and development of these plant species, and as such these taxa are found in very healthy state on one hand, and on other, the soils are quite balanced at present. Results further illustrate that habitats, other potent agent, i.e., their water regimes are quite bereft of charge carrying particles in their respective per unit volume irrespective of their sources and location, but they are free of all alkali hazards. The hydro-edaphic chemistry of the region appears to be complementary to each other.

1119. **Singh, J.N., Singh, S.P., Saxena, A.K. & Rawat, Y.S. 1984.** "India's Silent Valley and its threatened rain-forest ecosystems". *Environm. Conservation* 11: 223–233.

Abstract:- The proposed construction of a dam and large flooding reservoir threatens to bring about several undesirable alterations in the environment of the Silent Valley rain- and riparian forests, and the disturbances that would follow such construction and flooding would be highly detrimental to the diversity of the forests and to the complexity of their

structure. Hence, a plea is made for setting aside forthwith of a proposed major 'Silent Valley Biosphere Reserve', which could safeguard a unique part of the world's genetical heritage and one of its most interesting complexes of natural ecosystems.

1120. **Singh, N.P. & Dawre, M.S. 1983.** "On the occurrence of *Acampe rigida* (Buch.–Ham. ex J.E. Smith) P.F. Hunt (Orchidaceae) in Peninsular India". *J. Econ. Taxon. Bot.* 4: 1021–1022.

Abstract:- *Acampe rigida* (Buch.-Ham. ex J.E. Smith) P.F. Hunt has been recorded for the first time for Peninsular India from Karnataka, Kerala, Maharashtra and Goa. Previously it was known from Assam, Sikkim, Arunachal Pradesh and Uttar Pradesh. So this is a case of disjunct distribution from northern to southern parts of India.

1121. **Singh, S. & Sandhu, D.K. 1987.** "Thermophilous fungi isolated in culture from soils of Silent Valley, Kerala". *Geobios, New Rep.* 6: 39–42.

Abstract:- The present investigation is apparently the first study of thermophilous fungi from soils of Silent Valley. A study of 3757 colony forming units representing 13 species were isolated by soil dilution method. The fungi were tabulated in order of their absolute densities. *Acrophialophora fusispora* was the most common fungus followed by a sterile mycelium. The temperature response of these fungi revealed 3 microthermophiles, 7 thermotolerant and 3 true thermophilic species.

1122. **Sivadasan, M. 1985.** "A new species of *Arisaema* (Araceae) from South India". *Kew Bull.* 40: 801–803.

Abstract:- *Arisaema muricaudatum*, a new species of *Arisaema* from South India (Thalichola, Malappuram district, Kerala) allied to *A. filiforme* (Reinw.) Bl. is described.

1123. **Sivadasan, M. 1986.** "*Amorphophallus nicolsonianus* (Araceae), a new species from India". *Pl. Syst. Evol.* 153: 165–170.

Abstract:- *Amorphophallus nicolsonianus* species nova, with cylindrical or napiform corms, is the only representative of the sect. *Rapyogkos* in India from Silent Valley dam site, Palghat district, Kerala. All the other hitherto known species of this region have globose or depressed globose corms. The new species is related to some Indochinese species and to *A. hildebrandtii* (Engl.) Engl. & Gehrm. from Madagascar.

1124. **Sivadasan, M. 1989.** "*Amorphophallus smithsonianus* (Araceae), a new species from India, and a note on *A.* sect. *Synantherias*". *Willdenowia* 18: 435–440.

Abstract:- *Amorphophallus smithsonianus* from near Attayar on the way to Agasthyamala peak from Bonacord, Trivandrum district, Kerala, India is described as a species new to science. It belongs to *A.* sect. *Rhaphiophallus* but differs from the hitherto known species of the genus by having a long bent or hanging spadix-appendix, an echinate stigma and

erose leaflet-margins. The monotypic *A.* sect. *Synantherias* is merged with *A.* sect. *Rhaphiophallus*.

1125. **Sivadasan, M. & Anil Kumar, N. 1996.** "*Sida ravii*, a new species of Malvaceae from India". *Willdenowia* 25: 651–654.
Abstract:- *Sida ravii* (Malvaceae) from Kerala state, India, is described as a species new to science, illustrated and its relationships are briefly discussed.

1126. **Sivadasan, M. & Babu, C.M. 1995.** "A little known Indian endemic and rare variety of *Lagenandra toxicaria* Dalzell (Araceae)". *Rheedea* 5: 187–190.
Abstract:- *Lagenandra toxicaria* Dalzell var. *barnesii* Fischer (Araceae) is a rare and endemic taxon restricted in distribution to S.W. India. In the absence of any documented morphological description other than that in the protologue, elaborate description and illustrations are provided for easy recognition of the little known variety.

1127. **Sivadasan, M. & Balakrishnan, R.T. 1989.** "*Oberonia wynadensis*, a new species of Orchidaceae from India". *Nordic J. Bot.* 9: 395–397.
Abstract:- A new species, viz., *Oberonia wynadensis* is described from India (southern Western Ghats, Wynad district, Kerala). It belongs to the subgenus *Oberonia* and is related to *O. acaulis* and *A. verticillata* in having the flowers arranged in whorls.

1128. **Sivadasan, M. & Jaleel, V.A. 2002.** "Two new varieties of *Amorphophallus commutatus* (Schott) Engl. (Araceae) from India". *Rheedea* 12: 159–168.
Abstract:- Two new varieties of *Amorphophallus commutatus* (Schott) Engl. (Araceae) – one from Anmod Ghat in Goa var. *anmodensis* and the other from Wayanad Ghat in Kerala state var. *wayanadensis* have been discovered. Detailed description, illustration and relevant notes are provided.

1129. **Sivadasan, M., Jaleel, V.A. & Thomas, B. 2001.** "*Lagenandra keralensis* (Araceae), a remarkable new species from India". *Bot. Bull. Acad. Sin.* 42: 153–157.
Abstract:- A new species, *Lagenandra keralensis* Sivadasan & Jaleel, is described, illustrated and relationships discussed. The discovery of the new species enhances the number of Indian species of the genus to six.

1130. **Sivadasan, M. & Khan, A.E.S. 1994.** "Redescription and lectotypification of *Biophytum insigne* (Oxalidaceae), an endangered, endemic species of India". *Rheedea* 4: 65–69.
Abstract:- *Biophytum insigne* Gamble (Oxalidaceae), has been collected more than sixty–five years after its first collection from Kulathupuzha forests of Quilon district of Kerala. Detailed description with illustrations, and lectotypification of this rare, endangered and endemic species with notes on an unusual mode of proliferation are provided.

1131. **Sivadasan, M. & Mohanan, N. 1991.** "*Ixora agasthyamalayana*, a new species of

Rubiaceae from India". *Bot. Bull. Acad. Sin.* 32: 313–316.

Abstract:- *Ixora agasthyamalayana*, a new species of Rubiaceae from India is described from Agasthyamala Hills on the southern end of Western Ghats in Thiruvananthapuram district of Kerala. It belongs to *Ixora* sect. *Otobractum* Brem. of subgenus *Ixora*. The new species is allied to *I. elongata* Heyne ex G. Don and *I. barbata* Roxb. ex Sm.

1132. **Sivadasan, M. & Mohanan, N. 1999.** "*Pavetta bourdillonii* (Rubiaceae), a new species from India". *Bot. Bull. Acad. Sin.* 40: 61–63.

Abstract:- *Pavetta bourdillonii* Sivad. & N. Mohanan, a new species of Rubiaceae from Agasthymala Hills, Thiruvananthapuram district, Kerala, India, is described and illustrated. This new species is allied to *P. concanica* Bremek., *P. lutea* Bremek. and *P. travancorica* Bremek.

1133. **Sivadasan, M., Mohanan, N. & Kumar, C.S. 1989.** "*Pothos crassipedunculatus*, a new species of *Pothos* sect. *Allopothos* (Araceae) from India". *Pl. Syst. Evol.* 168: 221–225.

Abstract:- *Pothos crassipedunculatus* Sivadasan & Mohanan (Araceae), a new species closely related to the SW. Indian endemic and little known species, *P. thomsonianus* Schott is described. It is characterized by the non-ligulate, shortly vaginate petiole, thickly peduncle inflorescence, broadly ovate spathe and a sessile spadix. It is included in ser. *Brevivaginati* Engler of sect. *Allopothos* Schott.

1134. **Sivadasan, M., Mohanan, N. & Rajakumar, G. 1994.** "*Amorphophallus bonaccordensis*, a new species of Araceae from India". *Blumea* 39: 295–299.

Abstract:- *Amorphophallus bonaccordensis*, a new species allied to *A. borneensis* Engl. & Gehrm. belonging to *Amorphophallus* sect. *Rhaphiophallus* of the family Araceae, is described from Agasthyamala Hills on the southern end of Western Ghats in Trivandrum district of Kerala, India. The section is characterized by the presence of a zone of neuter flowers between the pistillate and staminate zones.

1135. **Sivadasan, M., Mohanan, N. & Rajakumar, G. 1997.** "A new subspecies of *Symplocos macrophylla* Wall. ex DC. (Symplocaceae) from India". *Rheedea* 7: 89–92.

Abstract:- *Symplocos macrophylla* Wall. ex DC. subsp. *namboodirianus* Sivadasan *et* Mohanan (Symplocaceae), a new subspecies closely related to *S. macrophylla* (Wight) Nooteb. is described from Agasthyamala hills, Thiruvananthapuram district of Kerala. It is characterized by small leaves usually with 4–6 pairs of lateral veins, solitary axillary flowers, and peduncles with 3 or 4 prominent scars of the early deciduous bracts.

1136. **Sivadasan, M. & Sajeev, U. 1996.** "*Lasia spinosa* (L.) Thwaites (Araceae) – A new report for South-West Peninsular India". *Rheedea* 6: 97–101.

Abstract:- *Lasia spinosa* (L.) Thwaites (Araceae) has been collected recently from

Kozhikode district of Kerala state, and it forms a new report of the species from South-West Peninsular India. Earlier this species was known to occur in Andhra Pradesh, Maharashtra, Orissa, West Bengal, Sikkim and Assam. Detailed description, illustrations and updated nomenclature of the species are provided.

1137. **Sivarajan, V.V. 1975.** "*Ipomoea macrantha* Roem. & Schult. in Malabar – A new record". *Geobios* (Jodhpur) 2: 122–123.

Abstract:- *Ipomoea macrantha* Roem. & Schult. has been reported for the first time for Malabar from Kadalundi, near Calicut, Kerala. Earlier this species was known to occur in Tamil Nadu and Maharashtra.

1138. **Sivarajan, V.V. 1976.** "A new species of *Lindernia* (Scrophulariaceae) from India". *Kew Bull.* 31: 151–153.

Abstract:- A new species, *Lindernia manilaliana* allied to *L. parviflora* (Roxb.) Haines and *L. hyssopioides* (L.) Haines, from Calicut on the Malabar coast of India, is described.

1139. **Sivarajan, V.V. 1981.** "Taxonomic notes of the genus *Portulaca* Linn. in India". *J. Bombay Nat. Hist. Soc.* 78: 256–260.

Abstract:- Geesink (1969, 1971), while revising the genus *Portulaca* Linn., of Indo-Australia and the Pacific has amended the circumscription of the species drastically and considered the genus (formerly believed to include about 200 species) to have not more than 40 'good species'. In this note in accordance with Geesink's concept of species, 4 species in India are recognized, where formerly 7 are reported. This paper also attempts to discuss Geesink's concept of infraspecific categories and has made certain deviations for reasons discussed in the text.

1140. **Sivarajan, V.V. 1984.** "A new species of *Argostemma* (Rubiaceae) from India". *J. Indian Bot. Soc.* 63: 462–463.

Abstract:- A new species, viz., *Argostemma anupama* allied to *A. courtallense* Arn. has been described from Calicut University Campus, Kerala, India.

1141. **Sivarajan, V.V. 1985.** "*Lobelia zeylanica* Linn. – A misunderstood species and related Indian taxa". *J. Econ. Taxon. Bot.* 7: 221–223.

Abstract:- The identity of *Lobelia zeylanica* Linn., as described in Indian Floras is highly confusing. This paper elucidates the correct identity of this species and reports it for the first time from Peninsular India from Ponmudi near Trivandrum. The correct nomenclature and description of this taxon along with an artificial key for the identification of Indian species of *Lobelia* Sect. *Hotopogon* Benth. are also provided.

1142. **Sivarajan, V.V. 1985.** "A new species of *Thottea* (Aristolochiaceae) from India". *Pl. Syst. Evol.* 150: 201–204.

Abstract:- *Thottea ponmudiana* sp. nova from Ponmudi, Kerala (India) can readily be distinguished from its closest ally *T. siliquosa* and all the other known species of the genus by its yellow flowers with purple eyes, deeply lobed perianth with strongly reflexed margins, uniseriate stamens united in three bundles and strongly 4–angled, glabrescent, green fruits.

1143. **Sivarajan, V.V. & Babu, A. 1984.** "Floristic notes on some new elements in Indian flora". *J. Econ. Taxon. Bot.* 5: 941–944.

Abstract:- A new variety *Geissaspis tenella* Benth. var. *malabarica* has been described from Kerala. *Stemodia verticillata* (Mill.) Sprague is recorded for the first time in India from Kerala.

1144. **Sivarajan, V.V., Babu, A. & Kunju, T.U.A. 1985.** "*Hyptis capitata* Jacq. (Lamiaceae), a new record for India". *J. Econ. Taxon. Bot.* 7: 224–225.

Abstract:- *Hyptis capitata* Jacq. is recorded for the first time for India from Calicut University Campus, Kerala. Earlier this species was known to occur in Tropical America, Java and Malesia.

1145. **Sivarajan, V.V., Babu, A. & Balachandran, Indu. 1985.** "A new species of *Thottea* Rottb. (Aristolochiaceae) with notes on the identity of *Thottea siliquosa* (Lam.) Ding Hou". *Indian J. Forest.* 8: 265–268.

Abstract:- A new species of *Thottea* Rottb. (Aristolochiaceae), *T. duchartrei* is described from India. Critical notes on the identity of *T. siliquosa* (Lam.) Ding Hou and *Bragantia wallichii* Wt. & Arn. and an artificial key for identification of the five Indian species of the genus described so far are also provided.

1146. **Sivarajan, V.V. & Balachandran, Indu. 1983.** "A new species of *Curcuma* from southern India". *Notes Roy. Bot. Gard. Edinburgh* 41: 321–323.

Abstract:- A new species of *Curcuma* (Zingiberaceae), *C. ecalcarata* Sivarajan & Indu, is described from the Arya Vaidya Sala Herbal Garden, Kottakal, Kerala Western Ghats of India. It is a member of subgenus *Hitcheniopsis* and is closely related to *C. parviflora* Wall., a native of Thailand and Burma.

1147. **Sivarajan, V.V. & Balachandran, Indu. 1984.** "*Sauropus varierii* – A new Euphorbiaceae from India". *J. Econ. Taxon. Bot.* 5: 917–919.

Abstract:- A new species of *Sauropus* Blume, viz., *S. varierii* of Euphorbiaceae Sect. *Ceratogynum* is described from Kottakkal, Kerala. This species is allied to *S. quadrangularis* (Willd.) Muell.Arg. and *S. pubescens* Hook.f.

1148. **Sivarajan, V.V. & Balachandran, Indu. 1985.** "Botanical notes on the identity of certain herbs used in Ayurvedic medicines in Kerala. I – Thamalaki". *Ancient Sci. Life* 4: 103–105.

Abstract:- In this paper, the authors have attempted to clarify the botanical identity of Thamalaki, a controversial herb used in Kerala in Ayurvedic medicine.

1149. **Sivarajan, V.V. & Balachandran, Indu. 1985.** "Botanical notes on the identity of certain herbs used in Ayurvedic medicines in Kerala. II". *Ancient Sci. Life* 4: 217–219.
Abstract:- In the first part the authors have discussed the botanical identity of the drug 'Thamalaki' as it is used in Kerala. The second part deals with the identity of a few more drugs namely, *Puskaramula, Punarnava, Suryavartha* and *Nirgundi*.

1150. **Sivarajan, V.V. & Balachandran, Indu. 1985.** "*Cleistanthus sankunnianus*, a new species of Euphorbiaceae from India". *Kew Bull.* 40: 121–123.
Abstract:- A new species of *Cleistanthis, C. sankunnianus* Sivarajan & Indu, of section *Stipulati* Jabl., closely related to *C. travancorensis* Jabl. is described from Kottakkal, Kerala, India.

1151. **Sivarajan, V.V. & Balachandran, Indu. 1986.** "Botanical notes on the identity of certain herbs used in ayurvedic medicines in Kerala. III. *Hribera* and *Amragandha*". *Ancient Sci. Life* 5: 250–254.
Abstract:- The identity of the drugs, '*Hribera*' and '*Amragandha*', as they are chosen currently is discussed here. '*Hribera*' is identified as *Coleus zeylanicus*. An artificial key and identifying features of the accepted source of '*Amragandha*' and related taxa which are possibly mixed with it are also provided.

1152. **Sivarajan, V.V. & Balachandran, Indu. 1987.** "Botanical notes on the identity of certain herbs used in Ayurvedic medicines in Kerala – IV: Sooranam". *Ancient Sci. Life* 6(3): 155–158.
Abstract:- The identity of the drug 'Sooranam' is elucidated. The current botanical nomenclature and distinguishing features of the wild and cultivated forms of this drug are also provided.

1153. **Sivarajan, V.V., Biju, S.D. & Mathew, P. 1992.** "Revision of the genus *Psilanthus* Hook.f. (Rubiaceae tribe Coffeeae) in India". *Bot. Bull. Acad. Sin.* 33: 209–224.
Abstract:- *Psilanthus* Hook.f., of Rubiaceae tribe Coffeeae in India is revised. There are seven species in all (including three new species described in this communication). Six of these are native to India, while *P. fragrans*, originally described from Sylhet in Bangladesh, is known only from cultivation. An artificial key, correct nomenclature, description and illustrations are provided for the seven species.

1154. **Sivarajan, V.V. & Manilal, K.S. 1970.** "Note on the occurrence of *Evolvulus nummularius* Linn. in Kerala state". *Bull. Bot. Surv. India* 12: 279.
Abstract:- *Evolvulus nummularius* L. has been reported for the first time for Kerala from

Feroke, Calicut district. Earlier this species was known to occur in Bombay, West Bengal, Bihar, Madhya Pradesh and Andhra Pradesh.

1155. **Sivarajan, V.V. & Manilal, K.S. 1972.** "A new species of *Heliotropium* L. from South India". *J. Indian Bot. Soc.* 51: 348–350.
Abstract:- The authors during their exploration in and around Calicut have observed this weed (*Heliotropium keralense*) in moist fields during the rainy season, growing both isolated and also in close association with *Heliotropium indicum* L. The plant appears to be new and a description of it based on fresh specimens is given.

1156. **Sivarajan, V.V. & Manilal, K.S. 1972.** "*Anisomeles indica* var. *albiflora* (Hassk.) Back., a new record from India". *Proc. Natl. Acad. Sci. India* 42(B): 225–226.
Abstract:- A new variety, *Anisomeles indica* var. *albiflora* (Hassk.) Back. has been reported for the first time for India from Calicut, Kerala. Earlier this species was known to occur in Djakarta.

1157. **Sivarajan, V.V. & Manilal, K.S. 1973.** "A little known *Cereus* (Cactaceae) from India". *Proc. Natl. Acad. Sci. India* 43(B): 128.
Abstract:- *Cereus forbesii* Hort. Berol ex Först. has been reported for the first time for India from Feroke, Kerala. Earlier this species was known to occur in Argentina.

1158. **Sivarajan, V.V. & Manilal, K.S. 1975.** "A new record of *Meineckia parvifolia* (Wight) Webster from India". *J. Bombay Nat. Hist. Soc.* 72: 237.
Abstract:- *Meineckia parvifolia* (Wight) Webster has been recorded for the first time for India from Calicut, Kerala.

1159. **Sivarajan, V.V. & Manilal, K.S. 1975.** "A taxonomic note on *Borreria articularis* (Linn.f.) Williams". *New Botanist, Int. Quart. J. Pl. Sci. Res.* 2: 88–90.
Abstract:- On the basis of a study of the South Indian forms of *Borreria articularis* (Linn.f.) Williams, two varieties, namely var. *articularis* and var. *hispida* have been recognized.

1160. **Sivarajan, V.V. & Manilal, K.S. 1975.** "Taxonomic notes on *Portulaca oleracea* L. in India". *New Botanist, Int. Quart. J. Pl. Sci. Res.* 4: 29–31.
Abstract:- The variation within *Portulaca oleracea*, a pantropic species, is discussed and a new variety, *P. oleracea* L. var. *linearfolia* Sivarajan & Manilal, is described.

1161. **Sivarajan, V.V. & Manilal, K.S. 1977.** "A new species of *Phyllanthus* from Kerala". *J. Indian Bot. Soc.* 56: 165–168.
Abstract:- A new species of *Phyllathus*, viz., *P. kozhikodianus* allied to *P. rheedei* Wt. is described from Kozhikode, North Kerala. The diagnostic features of the species and its differences from allied taxa are also described.

1162. **Sivarajan, V.V. & Manilal, K.S. 1982.** "Notes on some interesting species of Verbenaceae from South India". *J. Econ. Taxon. Bot.* 3: 813–817.

Abstract:- Some interesting species of Verbenaceae, viz., *Citharexylum spinosum* L., *Clerodendrum heterophyllum* (Poir.) R. Br., *C. calamitosum* L., *C. philippinum* Schau., *Vitex trifolia* L. var. *simplicifolia* Cham. and *V. trifolia* L. var. *subtrisecta* (Kuntze) Moldenke has been reported for the first time from South India from Calicut, Kerala.

1163. **Sivarajan, V.V. & Mathew, P. 1984.** "Notes on three new immigrant species of *Spilanthes* Jacq. (Asteraceae) in India and the identity of the common 'tooth-ache' plant". *Ancient Sci. Life* 3: 169–173.

Abstract:- Three new immigrant species of *Spilanthes* Jacq. (Asteraceae) are described for the first time from India. Their current nomenclature and an artificial key for the identification of the five Indian species are provided. The identity of the commonly used 'tooth-ache' plant is also discussed. Of these five species, four species, viz., *S. radicans* Jacq., *S. ciliata* H.B.K., *S. calva* DC. and *S. paniculata* Wall. ex DC. reported from Kerala and *S. uliginosa* Sw. from Tamil Nadu.

1164. **Sivarajan, V.V. & Mathew, P. 1997.** *Flora of Nilambur*. Bishen Singh Mahendra Pal Singh, Dehra Dun.

Abstract:- A total of 1132 species distributed in 665 genera belonging to 130 families have been reported in the present book of which 870 are dicot and 262 monocot.

1165. **Sivarajan, V.V. & Mathew, P. 1983.** "The genus *Lindernia* All. (Scrophulariaceae) in India". *J. Bombay Nat. Hist. Soc.* 80: 131–140.

Abstract:- The Indo-Burmese species of the genus *Lindernia* All. have been revised by Mukherjee (1945). Since then, there have been considerable change in the circumscription and nomenclature of many of the taxa. The present paper is a taxonomic revision of the Indian species of the genus. In all, 22 species have been recognized, two of them, *L. molluginoides* and *L. elata*, being new records for India. A new variety, *L. tenuifolia* var. *pygmaea* Sivarajan & P. Mathew is described from Kerala. An artificial key for the species, their current nomenclature, and notes on their salient features, habitat and world distribution are provided.

1166. **Sivarajan, V.V. & Mathew, P. 1984.** "Notes on Indian species of *Alternanthera* Forssk. (Amaranthaceae) (Kashmir Valley excluded) with a new record". *Indian J. Forest.* 7: 46–53.

Abstract:- This paper deals with the Indian species of *Alternanthera* Forssk. (excluding Kashmir Valley). Five species of the genus have been reported so far from this region of which *A. sessilis* (Linn.) R. Br. ex DC., *A. pungens* Kunth, *A. paronychioides* St. Hill. and

A. philoxeroides (Mart.) Griseb. are from wild. *Alternanthera bettzickiana* is known mainly under cultivation. Another tropical American species, *A. tenella* Colla is reported here for the first time for India from Kerala. Artificial key for their identification, current nomenclature and diagnostic features of the species are provided.

1167. **Sivarajan, V.V., Nair, R.V. & Kunju, T.U.A. 1987.** "Genus *Spermacoce* Linn. (Rubiaceae) in India". *Proc. Indian Acad. Sci.* (Pl. Sci.) 97: 347–358.

Abstract:- An artificial key for identification of 10 species of *Spermacoce*, their diagnostic features and other relevant information are provided, along with their updated nomenclature. *Spermacoce assugens* Ruiz & Pavon is recorded for the first time from the Indian mainland and a new combination, *Spermacoce malabarica* (Sivar. & Mani.) Sivar. *et al.* is proposed.

1168. **Sivarajan, V.V. & Pradeep, A.K. 1988.** "*Wedelia trilobata* (Linn.) A.S. Hitchc. (Heliantheae: Asteraceae), a new plant record for India". *Indian J. Forest.* 11: 161–162.

Abstract:- *Wedelia trilobata* (L.) A.S. Hitche has been recorded for the first time for India from Calicut, Kerala.

1169. **Sivarajan, V.V. & Pradeep, A.K. 1989.** "A new species of *Aristolochia* (Aristolochiaceae) from India with co-evolutionary notes on *A. indica* and papilionid butterflies". *Pl. Syst. Evol.* 163: 31–34.

Abstract:- *Aristolochia krisagathra*, a new species from the Western Ghats of Peninsular India is described, illustrated and included into a key to the four Indian species of the genus. Notes on the host-relationships of these species are also provided, particularly of *A. indica* to papilionid butterflies.

1170. **Sivarajan, V.V. & Pradeep, A.K. 1990.** "*Sida fryxellii*, a new species of Malvaceae from Peninsular India". *Kew Bull.* 45: 725–727.

Abstract:- A new species of *Sida*, viz., *S. fryxellii* allied to *S. cordifolia* L. has been discovered and is described from coastal belt of Kerala, India.

1171. **Sivarajan, V.V. & Pradeep, A.K. 1993.** "*Argostemma courtallense* and *A. anupama* (Rubiaceae) revisited". *J. Bombay Nat. Hist. Soc.* 90: 124–126.

Abstract:- Previously different authors mentioned *Argostemma anupama* as a synonym of *A. courtallense*. But in the present paper the authors have shown that *A. courtallense* and *A. anupama* are distinct species. An artificial synoptic key and comparative illustrations of these species have also given.

1172. **Sivarajan, V.V. & Pradeep, A.K. 1994.** "Taxonomy of the *Sida rhombifolia* (Malvaceae) complex in India". *Sida* 16: 63–78.

Abstract:- The *Sida rhombifolia* complex in India is revised. *Sida rhomboidea* and *S.*

scabrida are reinstated as distinct species; *S. retusa*, also reinstated as a distinct species, is treated under the older name *S. alnifolia*. An artificial key for identification, amended synonymy, descriptions and illustrations are provided.

1173. **Sivarajan, V.V. & Pradeep, A.K. 1995.** "*Aristea ecklonii* Baker (Iridaceae) – A new record for India". *Rheedea* 5: 173–176.

Abstract:- *Aristea ecklonii* Baker of Iridaceae, is reported for the first time for India from Kerala. Its detailed description, illustration and other relevant notes are provided.

1174. **Sivarajan, V.V. & Pradeep, A.K. 1996.** *Malvaceae of Peninsular India – A Taxonomic Monograph*. Daya Publishing House, Delhi.

Abstract:- In this work, 78 species, 7 infraspecific taxa of 19 genera coming under 5 different tribes are described. This book is an intensive taxonomic studies of the Malvaceous plants of southern Peninsular India covering Kerala, Karnataka, Tamil Nadu and Andhra Pradesh.

1175. **Sivarajan, V.V., Pradeep, A.K. & Biju, S.D. 1990.** "*Pterocymbium tinctorium* (Blanco) Merr. var. *javanicum* (R. Br.) Kosterm. (Sterculiaceae) – A new introduction to India". In: Higher Plants of Indian Subcontinent Vol. 2: 5–8. *Indian J. Forest.,* Addit. Ser. 5. Bishen Singh Mahendra Pal Singh.

Abstract:- *Pterocymbium tinctorium* (Blanco) Merr. var. *javanicum* (R. Br.) Kosterm. (Sterculiaceae) is recorded for the first time for India from Peruvannamuzhi area, near Calicut, Kerala. Earlier this species was known to occur in Burma and Java.

1176. **Sivarajan, V.V., Pradeep, A.K. & Pandey, A.K. 1994.** "On the taxonomy and infraspecific classification of *Abelmoschus angulosus* Wall. ex Wt. & Arn. (Malvaceae)". *Rheedea* 4: 1–12.

Abstract:- *Abelmoschus angulosus* Wall. ex Wt. & Arn. is currently treated as a highly polymorphic taxon, specially with respect to indumentum, leaf size and shape, and flower colour. Thwaites (1858) recognized two varieties in this species and was followed by Masters (1874). None of the recent authors have made attempts for its infraspecific classification. The present study shows the existence of three distinct varieties. The white-flowered one is the typical form of the species (var. *angulosus*), while var. *grandiflorus* (yellow-flowered) and var. *purpureus* Thw. (pink-flowered) are reinstatedin this article. *Abelmoschus angulosus* var. *angulosus* and *A. angulosus* var. *grandiflorus* are reported from Tamil Nadu and Kerala and *A. angulosus* var. *purpureus* from Tamil Nadu, Kerala, and Karnataka.

1177. **Sivarajan, V.V. & Rejani, A. 1987.** "*Cyperus longus* Linn. and *C. amabilis* Vahl. – Two interesting sedges from South India". *J. Econ. Taxon. Bot.* 10: 229–231.

Abstract:- *Cyperus longus* Linn. – a Mediterranean – Atlantic species is reported for the first time in India and *C. amabilis* Vahl from South India. Both these species are reported from Kerala. Their nomenclature, description and detailed illustrations are provided.

1178. **Sivarajan, V.V. & Sunil, C.N. 1993.** "*Annona glabra* L. (Annonaceae): A new record for India". *Rheedea* 3: 90–93.
Abstract:- *Annona glabra* L., so far known only from the mangrove swamps of tropical America, West Africa and Sri Lanka, has been discovered and described from Alappuzha district, Kerala, the western coast of India. It is an addition to the Indian flora.

1179. **Sivarajan, V.V. & Sunil, C.N. 1995.** "*Cleome spinosa* Jacq. (Capparaceae), a new record for Peninsular India". *Rheedea* 5: 184–186.
Abstract:- *Cleome spinosa* Jacq., a native of tropical America, has been reported to occur in the wild in West Bengal of India. This is the first report of this species in peninsular part of the country from wet banks of Sholayar and Karapara rivers in the Parambikulam Wildlife Sanctuary, Kerala.

1180. **Sivaram, M. 2003.** "Socio-economic causes of deforestation in Kerala state: An exploration". *Indian J. Forest.* 26: 291–294.
Abstract:- The annual rate of deforestation in the state of Kerala, India, for the period 1961 to 1988 was examined in relation to population density, literacy rate, livestock density, land use pattern and per capita demand and production of wood, using district level data. In multiple regression analysis, the differential literacy alone emerged significant explaining as much as 50 per cent variance in the annual deforestation rate, in contrast to our general expectation that the increase in deforestation was found in districts having lower level of literacy. The reasons could be that the literacy rate is population centric and strongly related to developmental processes and thus leading to pressure on neighbouring forests. The results indicate that the conservation policies should be formulated at district level taking into consideration their social and economic scenario also.

1181. **Sivu, A.R., Ratheesh Narayanan, M.K., Pradeep, N.S., Anil Kumar, N. & Pandurangan, A.G. 2012.** "*Memecylon wayanadense* (Melastomataceae), a new species from the Western Ghats, India". *Edinburgh J. Bot.* 69(3): 1–8.
Abstract:- *Memecylon wayanadense* Ratheesh & al., a new species of Melastomataceae allied to *M. angustifolium*, *M. rivulare* and *M. sivadasanii* from the Wayanad forests of Kerala, India is described and illustrated.

1182. **Skornickova, J., Sabu, M. & Prasanthkumar, M.G. 2004.** "*Curcuma mutabilis* (Zingiberaceae): A new species from South India". *Gard. Bull. Singapore* 56: 43–54.

Abstract:- *Curcuma mutabilis* Skornickova, M. Sabu & M.G. Prasanthkumar, sp. nov. is described from Northern Kerala, South India, including illustrations and notes.

1183. **Sleumer, H. 1972.** "A taxonomic revision of the genus *Scolopia* Schreb. (Flacourtiaceae)". *Blumea* 20: 25–64.

Abstract:- A taxonomic revision of *Scolopia*, based on the collections has been carried out. Of the names of about 80 taxa previously described in the genus, 28 remained valid; for 2 species and 1 variety, a new combination had to be made, 7 new species and 1 new variety were added, and 5 species had to be transferred to other genera. This resulted in a total of 37 species (and 2 varieties); of these, 21 species are found in Africa (15 of them in Madagascar, the Comores, and the Mascarenes), 15 in Southeast Asia and Malesia (incl. New Zealand) and 1 in Australia.

1184. **Sreedevi, B. & Binojkumar, M.S. 1999.** "*Eriocaulon melanocephalum* Kunth (Eriocaulaceae) – A new record for India". *J. Econ. Taxon. Bot.* 23: 758–760.

Abstract:- *Eriocaulon melanocephalum* Kunth, a species hitherto reported only from S. America has been reported from Alappuzha district of Kerala, as a new record for India.

1185. **Sreedevi, B. & Binojkumar, M.S. 2001.** "*Eragrostis burmanica* Bor (Poaceae), an addition to the flora of India". *J. Econ. Taxon. Bot.* 25: 727–728.

Abstract:- *Eragrostis burmanica* Bor (Poaceae) hitherto recorded from Burma has been reported for the first time for India from Thottappally, Alappuzha district, Kerala.

1186. **Sreedevi, B. & Binojkumar, M.S. 2003.** "*Cabomba furcata* Schultes & Schultes f. (Cabombaceae) – A new record for India". *J. Econ. Taxon. Bot.* 27: 1192–1194.

Abstract:- The New World species, *Cabomba furcata* Schultes & Schultes f. (*C. piauhyensis* Gardner) is reported for the first time from India from Alappuzha district, Kerala. Detailed description and illustration of the species are provided.

1187. **Sreedevi, B., Remadevi, S. & Binojkumar, M.S. 2003.** "A new species of *Ruellia* Linn. (Acanthaceae) from South India". *J. Econ. Taxon. Bot.* 27: 1186–1188.

Abstract:- A new species of *Ruellia*, viz. *R. sivarajanii* allied to *R. tuberosa* L. is described and illustrated from Alappuzha, Kerala.

1188. **Sreekala, K., Prakash Kumar, U., Rema Shree, A.B. & Balachandran, I. 2011.** "Scientific validation of a traditional ethnomedicine for jaundice". *Gregor Mendel Foundation Seminar* Abst. G & B 6.

Abstract:- The present study is an attempt to prepare standards using modern techniques for evaluating one of such ethnic formulations frequently used by traditional healers in seven northern districts of Kerala for the treatment of jaundice. This formulation was characterized taxonomically, pharmacognostically and phytochemically. The diagnostic

characters of plant ingredients were identified using pharmacognosy. The HPTLC profiles of the formulation were compared with the ingredient raw drugs. The corresponding bands of each ingredient were detected in the profile of the formulation.

1189. **Sreekumar, P.V. 1990.** "*Eragrostis subsecunda* (Lam.) Fourn. (Poaceae) – A new record for India". *J. Econ. Taxon. Bot.* 14: 626–628.

Abstract:- *Eragrostis subsecunda* (Lam.) Fourn. (Poaceae) has been recorded for the first time for India from Kumarakodi, Alappuzha, Kerala. Earlier this species was known to occur in Sylhet, Mauflong, Sri Lanka and China.

1190. **Sreekumar, P.V. 1991.** "Two new grass records for India". *J. Econ. Taxon. Bot.* 15: 353–354.

Abstract:- Occurrence of one variety and another subvariety of the species *Ischaemum indicum* in India is reported here for the first time from Kerala. A key to the infraspecific taxa of this is also provided.

1191. **Sreekumar, P.V. 1993**. "Some remarkable grasses from Kerala". *Indian J. Forest.,* Addit. Ser. 4:161–168.

Abstract:- Working on the grasses of Kerala, the author collected 12 rare and noteworthy species of grasses of which 4 species, viz., *Anthoxanthum borii* S.K. Jain & D.C. Pal, *Apocopis mangalorensis* (Hochst.) Henr., *Eragrostis tef* (Zucc.) Trotter and *Ischaemum dalzellii* Stapf ex Bor are new distributional records for the state, 5 of them, viz., *Dimeria bialata* C.E.C. Fischer, *D. deccanensis* Bor, *D. fischeri* Bor, *D. hohenackeri* Hochst. ex Miq. and *D. lawsonii* (Hook.f.) C.E.C. Fischer are endemic to South India and *Ischaemum barbatum* Retz., *I. tumidum* Stapf ex Bor and *Streptogyna crinita* P. Beauv. are extremely rare or new representations at MH.

1192. **Sreekumar, P.V., Janarthanam, M.K. & Henry, A.N. 1987.** "*Ischaemum agastyamalayanum* – A new species of Poaceae from Kerala, India". *J. Bombay Nat. Hist. Soc.* 84: 643–645.

Abstract:- A new species of Poaceae, viz., *Ischaemum agastyamalayanum* allied to *I. thomsonianum* Stapf ex C.E.C. Fischer has been described from western slopes of Agastyamalai, Trivandrum district, Kerala.

1193. **Sreekumar, P.V., Malathi, C.P. & Nair, V.J. 1988.** "*Bothriochloa parameswaranii* – A new species of Poaceae from Kerala, India". *J. Bombay Nat. Hist. Soc.* 85: 163–165.

Abstract:- A new species, viz., *Bothriochloa parameswaranii* allied to *B. kuntzeana* (Hack.) Henr. is described from Eravikulam National Park, Idukki district, Kerala.

1194. **Sreekumar, P.V., Mohanan, C.N. & Nair, V.J. 1982.** "*Acroceras munroanum* (Balansa) Henr. – An addition to the grass flora of South India". *J. Econ. Taxon. Bot.* 3: 267–269.

Abstract:- *Acroceras munroanum* (Balansa) Henr., earlier known in India only from Assam is described here for the first time for South India from Alleppey and Quilon districts of Kerala.

1195. **Sreekumar, P.V. & Nair, N.C. 1981.** "*Melochia nodiflora* Swartz (Sterculiaceae) – A new record for India". *J. Bombay Nat. Hist. Soc.* 78: 424–425.
Abstract:- *Melochia nodiflora* Swartz has been recorded for the first time for India from Trivandrum, Kerala. Earlier this species was known to occur in Tropical America.

1196. **Sreekumar, P.V. & Nair, V.J. 1987.** "*Themeda sabarimalayana* – A new species of Poaceae from Kerala, India". *Bull. Bot. Surv. India* 29: 127–128.
Abstract:- A new species of Poaceae, viz., *Themeda sabarimalayana* allied to *T. cymbaria* Hack. has been described from Sabarimala, Pathanamthitta district, Kerala.

1197. **Sreekumar, P.V. & Nair, V.J. 1991.** *Flora of Kerala – Grasses*. Botanical Survey of India, Calcutta.
Abstract:- This work comprises, 296 species distributed in 103 genera (including 10 species and 5 genera of the tribe 'Bambuseae'), which consists of about 26 taxa new to science (2 new genera and 26 new species).

1198. **Sreekumar, P.V., Nair, V.J. & Nair, N.C. 1981.** "*Dimeria copeana* – A new grass from Kerala, India". *J. Bombay Nat. Hist. Soc.* 78: 577–579.
Abstract:- A new species, viz., *Dimeria copeana* allied to *D. trimenii* Hook.f. is described from Thrikkunnapuzha, Alleppey district, Kerala.

1199. **Sreekumar, P.V., Nair, V.J. & Nair, N.C. 1982.** "*Dimeria borii* (Poaceae) – A new species from Kerala, India". *J. Econ. Taxon. Bot.* 3: 657–658.
Abstract:- A new species, viz., *Dimeri borii* P.V. Sreekumar, V.J. Nair & N.C. Nair allied to *D. mooneyi* Raizada ex Mooney has been described from Kerala. India.

1200. **Sreekumar, P.V., Nair, V.J. & Nair, N. 1983.** "*Tripogon anantaswamianus* Sreekumar, V.J. Nair *et* N.C. Nair – A new grass from Kerala, India". *Bull. Bot. Surv. India* 25: 185–187.
Abstract:- A new grass, *Tripogon anantaswamianus* Sreekumar, V.J. Nair *et* N.C. Nair allied to *T. bromoides* Roem. & Schult. has been described from India (Eravikulam Sanctuary, Idukki district, Kerala).

1201. **Sreekumar, P.V., Nair, V.J. & Nair, N.C. 1983.** "*Dimeria jainii* (Poaceae) – A novelty from Kerala, India". *Curr. Sci.* 52: 259–260.
Abstract:- *Dimeria jainii*, a new species allied to *D. bialata* C.E.C. Fischer has been described from Nanminda, Calicut district, Kerala.

1202. **Sreekumar, P.V., Nair, V.J. & Nair, N.C. 1983.** "*Tripogon narayanii* – A new species of

Poaceae from Kerala, India". *J. Bombay Nat. Hist. Soc.* 80: 196–198.
Abstract:- A new species, viz., *Tripogon narayanii* allied to *T. bromoides* Roem. & Schult. is described from Idukki district, Kerala.

1203. **Sreekumar, P.V., Nair, V.J. & Nair, N.C. 1983.** "*Chrysopogon tadulingamii* – A new species of Poaceae from Kerala, India". *J. Bombay Nat. Hist. Soc.* 80: 198–200.
Abstract:- A new species, viz., *Chrysopogon tadulingamii* allied to *C. lancearius* (Hook.f.) Haines is described from Periye, Cannanore district, Kerala.

1204. **Sreekumar, P.V., Nair, V.J. & Nair, N.C. 1983.** "Novelties in *Ischaemum* Linn. (Poaceae) from Kerala, India". *J. Econ. Taxon. Bot.* 4: 1007–1012.
Abstract:- Two new species of *Ischaemum*, viz., *I. calicutensis* allied to *I. tumidum* Stapf ex Bor and *I. cannanorensis* allied to *I. commutatum* Hook. have been described from Calicut and Cannanore of Kerala, India.

1205. **Sreekumar, P.V., Nair, V.J. & Nair, N.C. 1984.** "*Ischaemum malabaricum*, a new species of Gramineae from India". *Kew Bull.* 39: 743–746.
Abstract:- *Ischaemum malabaricum* is described from Paramba, Cannanore district, Kerala. This is allied to *I. tumidum* Bor and *I. semisagittatum* Roxb. The distinguishing characters are tabulated.

1206. **Sreekumar, P.V., Nair, V.J. & Nair, N.C. 1985.** "*Ischaemum keralensis*, a new species of Poaceae from Kerala (India)". *Bull. Mus. Natl. Hist. Nat.*, *B*, *Adansonia* 7: 135–137.
Abstract:- *Ischaemum keralensis*, a new species of Poaceae from Cherkala, Cannanore district, Kerala (India), allied to *I. burmanicum* Bor is described.

1207. **Sreekumar, P.V., Nair, V.J. & Nair, N.C. 1985.** "A new *Ischaemum* Linn. (Poaceae) from Kerala, India". *J. Bombay Nat. Hist. Soc.* 82: 390–393.
Abstract:- A new species, viz., *Ischaemum copeanum* allied to *I. burmanicum* Bor has been described from Cherkala, Cannanore district, Kerala.

1208. **Sreekumar, P.V. & Shetty, B.V. 1987.** "*Bhidea fischeri*, a new species of Gramineae from India". *Kew Bull.* 42: 683–685.
Abstract:- *Bhidea fischeri* sp. nov. from India is described. This is allied to *B. burnsiana* Bor. The distinguishing characters are tabulated.

1209. **Srinivasan, S.R. 1988.** "Rediscovery of two rare and interesting plants of Annonaceae from South India". *J. Econ. Taxon. Bot.* 12: 373–374.
Abstract:- Notes on two rare and interesting plants from South India, viz., *Orophea thomsonii* Bedd. and *O. uniflora* Hook.f. & Thoms. (Annonaceae) are given. They were collected after type collection for the first time after a lapse of more than 100 years. *Orophea thomsonii* has been collected from Karian Shola, Coimbatore district, Tamil

Nadu and Palghat district, Kerala and *O. uniflora* from Thirukurungudi, Tirunelveli district, Tamil Nadu and Chandanathode, Cannanore district, Kerala.

1210. **Srinivasan, S.R. & Sreekumar, P.V. 1987.** "*Isachne henryi* – A new species of Poaceae from Kerala, India". *J. Bombay Nat. Hist. Soc.* 84: 647–649.
Abstract:- A new species of Poaceae, viz., *Isachne henryi* allied to *I. miliacea* Roth ex Roem. & Schult. has been described from Hiladale R.F., Poothumoola, Wynad district, Kerala.

1211. **Srivastava, O.N., Srivastava, M. & Singh, A.K. 1987.** "Occurrence of *Tribonema utriculosum* (Kutzing) Hazen in India". *New Botanist, Int. Quart. J. Pl. Sci. Res.* 14: 155.
Abstract:- The occurrence of *Tribonema utriculosum* (Kutzing) Hazen has been recorded for the first time for India from Kumarakam, Kerala.

1212. **Srivastava, S.C. & Srivastava, S. 2004.** "Two new *Metzgerias* from Peninsular India". *Phytotaxonomy* 4: 79–86.
Abstract:- Two new species of *Metzgeria*, viz., *M. coorgense* and *M. raoii* have been described from Peninsular India, making a total of 23 validly recognized species from India. *Metzgeria coorgense* from Karnataka and Tamil Nadu is characterized by 18–28 cells wide wing on either side of the midrib, gemmae on the dorsal surface of thallus, hair single at margins, epidermal cells over midrib 2–3(–4)/4–6. *Metzgeria raoii* from Kerala is characterised by 13–17 cells wide wing on either side of the midrib, gemmae marginal, hair single at margins, epidermal cells over the midrib 2/2, or 2/2–3(4), monoicous sexuality and '*M. furcata*'– type of capsule wall thickening.

1213. **Stone, B.C. & Nair, K.N. 1994.** "A new species of *Clausena* (Rutaceae) from India". *Nordic J. Bot.* 14: 491–493.
Abstract:- Southern Indian plants hitherto identified as *Clausena heptaphylla* by Gamble have been found to differ consistently in several features from that species and are here distinguished as *C. austroindica*, a new species. Description, relationship, relevant comparisons, habitat, variation and specimens examined are given.

1214. **Subhedar, R.P. 1985.** "A little known plant from South India". *J. Bombay Nat. Hist. Soc.* 82: 234.
Abstract:- *Entada monostachya* DC. is reported for the first time from South India (Kerala).

1215. **Subramanian, C.V. 1954.** "Three new Hyphomycetes". *J. Indian Bot. Soc.* 33: 28–35.
Abstract:- Three new hyphomycetes, viz., *Lacellinopsis levispora, Lomaantha pooga* on dead stem of *Areca catechu* L. and *Polydesmus indicus* on dead spathe of *Cocos nucifera* L. have been described. The first species is from Karnataka and last two species from Kerala.

1216. **Subramanian, K.N. 1961.** "A note on *Centrosema virginianum* (L.) Benth.". *Bull. Bot. Surv. India* 3: 201–203.

Abstract:- This note provides a full description of *Centrosema virginianum* (L.) Benth. (with a plate) an introduced ornamental plant from Tropical America now spreading in the forests of Tenmalai, Kerala. The history of its introduction and nomenclature is also briefly discussed.

1217. **Subramanian, K.N. 1970.** "Some plant records for Kerala state". *Indian Forester* 96: 527–529.

Abstract:- A total of 21 species have been reported for the first time for the state of Kerala from Thenmala forest division, Quilon district. *Taraktogenus kurzii* King, *Momordica balsamina* L. and *Cyathula tomentosa* are new records for South India.

1218. **Subramanian, K.N. 1980.** *Floristic studies of Thenmalai area of Western Ghats, Quilon district, Kerala state*. Ph.D. Thesis. University of Calicut, Calicut (Unpublished).

1219. **Subramanian, K.N. 1992.** *Forest Flora of Thenmalai*. Book Traders, Dehra Dun.

1220. **Subramanian, K.N., Jayachandran, C.K. & Venkatasubramanian, N. 1982.** "Occurrence of *Vateria macrocarpa* B.L. Gupta in Kerala state". *J. Econ. Taxon. Bot.* 3: 620.

Abstract:- The occurrence of *Vateria macrocarpa* B.L. Gupta, a rare and endemic species collected from Muthikulam forest area of Palghat Forest Division, Kerala state after a lapse of 50 years from the type locality is described in this paper.

1221. **Subramanian, K.N., Kalyani, K.B. & Mahadevan, N.P. 1982.** "A note on *Reissantia grahamii* (Wight) Ding Hou (*Hippocratea grahamii* Wight)". *J. Econ. Taxon. Bot.* 3: 663–664.

Abstract:- A note on *Reissantia grahamii* (Wight) Ding Hou which is a new distributional record for Kerala state and little known from Southern India is provided. A brief description of the species is also given for easy identification.

1222. **Subramanian, K.N. & Mahadevan, N.P. 1983.** "The biological spectrum of Thenmalai forests of Western Ghats, Quilon district, Kerala state". *J. Econ. Taxon. Bot.* 4: 377–382.

Abstract:- The statistical synopsis and the biological spectrum of the forests of Thenmalai area are presented in this paper. The spectrum of Thenmalai is also compared with the normal spectrum of Raunkiaer; 43.6% of the flora are phanerophytes followed by therophytes. The percentage of phanerophytes is not significant of a humid tropical area, perhaps because of the existence of distinct physiographic units, i.e., lowland and uplands in the area studied, which differs from each other climatically. Thus, the area as a whole shows somewhat unnatural picture of life-form distribution.

1223. **Subramanian, K.N. & Singh, B.G. 1987.** "Notes on the Orchidaceae of Kerala state". *J. Econ. Taxon. Bot.* 11: 9–11.

Abstract:- *Papilionanthe subulata* (Koenig) Garay, *Nervilia prainiana* (King & Pantling) Seidenfaden & Smitin. and *Zeuxine gracilis* (Breda) Bl. have been reported as new distribution records for the state of Kerala. An illustration and a brief description of *Zeuxine gracilis* (Breda) Bl. has been given.

1224. **Subramanian, K.N., Singh, B.G. & Mahadevan, N.P. 1989.** "Growing orchids in hot tropics and their *ex-situ* conservation". *J. Econ. Taxon. Bot.* 13: 327–330.

Abstract:- An account of the growth and development of 25 species belonging to 22 genera of wild orchids collected from Western Ghats forest areas of Kerala and Tamil Nadu states and introduced in the Botanical Garden of Forest Research Centre, Coimbatore to study their performance *ex-situ* under a different ecoclimatic zone is presented in this paper.

1225. **Subramanian, K.N., Singh, B.G. & Sasidharan, K.R. 1988.** "*Glycosmis macrocarpa* Wight – A rare species and new distributional record to Kerala state". *J. Econ. Taxon. Bot.* 12: 233–234.

Abstract:- The present report of *Glycosmis macrocarpa* Wight shows its extended distribution towards further north in central Kerala, previously reported from Kannikatti area of Tirunelveli district and Courtallum of Tamil Nadu.

1226. **Subramanian, K.N., Singh, B.G. & Sasidharan, K.R. 1989.** "*Mezoneuron hymenocarpum* Prain: A new distributional record for Indian mainland". *J. Bombay Nat. Hist. Soc.* 86: 271–272.

Abstract:- *Mezoneuron hymenocarpum* Prain was earlier known from the Andaman Islands. It has been recorded for the first time from Indian mainland from Panjanamkattu area of Vazhachal forest division, Kerala.

1227. **Subramanian, K.N., Singh, B.G., Venkatasubramanian, N. & Sasidharan, K.R. 1989.** "*Litsea ghatica* Saldanha – A new distributional record to Kerala state". *Indian Forester* 115: 117–119.

Abstract:- *Litsea ghatica* Saldanha hitherto recorded from Western Ghats of Karnataka is now traced from futher south in Begur Range, Wynad Forest Division, Kerala state. A brief description of the taxon for easy identification and the salient differences of the same with *Litsea deccanensis* Gamble, a closely allied species, are given. The need for the conservation and protection of the species is highlighted.

1228. **Subramanian, K.N., Venkatasubramanian, N. & Sasidharan, K.R. 1986.** "*Sonerila zeylanica* W. & A. – A new record to the flora of Kerala state". *Indian J. Forest.* 9: 173–174.

Abstract:- *Sonerila zeylanica* W. & A. has been recorded for the first time for the flora of Kerala. The present finding of this species thus extends its distribution from Sri Lanka to Peninsular India.

1229. **Subramanian, K.N., Venkatasubramanian, N. & Sasidharan, K.R. 1987.** "Some interesting and new observation of two threatened plant species of Kerala state". *Indian J. Forest.* 10: 140–142.

Abstract:- During the floristic survey for preparing the Forest Flora of Kerala state, the authors have come across two little known and interesting species of trees, namely *Syzygium travancoricum* Gamble and *Buchanania lanceolata* Wight.

1230. **Subramanyam, K. & Banerjee, L.K. 1968.** "*Utricularia roseo-purpurea* Stapf ex Gamble (Lentibulariaceae) – A little known species". *Bull. Bot. Surv. India* 10: 103–106.

Abstract:- A little known species, *Utricularia roseo-purpurea* Stapf ex Gamble (Lentibulariaceae) has been reported for South India from Kerala and Tamil Nadu. This species was earlier known to occur in Sri Lanka.

1231. **Sudhadevi, P.K. 1999.** "Folkloric plant remedies for rheumatism". *Ancient Sci. Life* 18: 264–265.

Abstract:- Investigations were carried out on folkloric plant remedies among the tribal communities of Thrissur district, Kerala; majority of which are the Malayans. This paper describes the common plant remedies for rheumatism. Preparation and mode of use of twelve plants either as single or in combination with other plants are given in detail.

1232. **Sudhadevi, P.K. & Aravindakshan, M. 1994.** "Folkloric plant remedies for stings of insects from the tribals of Thrissur district, Kerala". *Ancient Sci. Life* 14: 86–87.

Abstract:- The authors conducted survey of medicinal plants used by the tribal of Thrissur district. The investigation revealed several plant remedies to escape from the attack of insects and flies which are described in this paper. These could be used as saft common remedies in our households also.

1233. **Sudhakara, K., George, P.M., Subhash, K.B. & Damodaran, A. 2006.** "Field identification key to the tree species of Shola forests of Idukki district, Kerala". *Indian J. Forest.* 29: 231–238.

Abstract:- A study was conducted in three shola forests of Idukki district in Kerala namely Mannavan Shola, Pambadum Shola and Mangladevi Shola to document the vegetative characters of the tree species seen in these forests and to develop a field identification key for the same. A total of 86 species were recorded during the study – 81 from Mannavan Shola, 77 from Pambadum Shola and 34 from Mangladevi Shola. The most dominant family was Lauraceae with 13 species. A field identification key for these 86 species was

prepared based on dichotomous characterization and elimination with the aid of vegetative characteristics like phyllotaxy, shape, size, structure and texture of leaves, stipules, etc. The key is user friendly and enables identification of arborescent tree species of shola forests in the field itself even in the absence of reproductive structures. This key is not an exhaustive one. Possibly some more species might not have been recorded during study. Also shola forests in other districts have not been considered for this study. Therefore, the key is of limited value. Also features like bark, blaze character, habitat, phenology, etc. may be included to further enhance the precision to identify the tree species of shola forests. Hence, there is further possibility to widen the scope of this key.

1234. **Sudheendrakumar, V.V., Nair, K.S.S. & Chacko, K.C. 1993.** "Phenology and seasonal growth trend of teak at Nilambur (Kerala), India". *Ann. Forest.* 1: 42–46.

Abstract:- The phenology of leaf and seasonal pattern of basal area increament of teak were studied in 6–8 years old plantations at Nilambur, India. In general, flushing began in late March and was completed by late April. Most leaf fall occurred during December to February. The rate of increament of basal area followed a bell-shaped annual curve with most growth occurring in the months of June, July, August and September, when the monthly rate of increment averaged 3.8 cm per tree.

1235. **Sujana, K.A., Ratheesh Narayanan, M.K. & Anil Kumar, N. 2012.** "A new combination and a new species in *Combretum* (Combretaceae) from India". *J. Bot. Res. Inst. Texas* 6: 453–458.

Abstract:- *Quisqualis malabarica* Bedd. is transferred to *Combretum* and a new combination, viz*., Combretum malabaricum* (Bedd.) Sujana & al. is proposed. *Combretum recurvatum* Sujana & al., a new species allied to *C. malabaricum* (Bedd.) Sujana & al. is described from south Western Ghats of Kerala (Kannur district) with illustration and photographs.

1236. **Sujanapal, P. 2005.** Vascular Flora of Parambikulam Wildlife Sanctuary. Ph. D. Thesis, submitted to University of Calicut (Unpublished), Calicut.

Abstract:- In this work 1438 taxa of angiosperms belonging to 756 genera under 141 families are treated. Besides, 81 taxa of pteridophytes belonging to 43 genera under 27 families and 2 taxa of gymnosperms of 2 families have been treated.

1237. **Sujanapal, P. & Sasidharan, N. 2002.** "Relocation of *Syzygium palghatense* Gamble (Myrtaceae) and description of its hitherto unknown fruits". *Rheedea* 12: 189–191.

Abstract:- *Syzygium palghatense* Gamble (Myrtaceae), is relocated after a gap of about 140 years from its type locality. Fruit is described for the first time based on the present collections.

1238. **Sujanapal, P. & Sasidharan, N. 2004.** "Dry deciduous forests of Parambikulam Wildlife Sanctuary and its significance to the flora of Kerala". *Indian J. Forest.* 27: 291–293.

Abstract:- Kerala flora is endowed with Malabar floristic elements. The extent of dry deciduous forests and its floristic representatives in the state is very low. Flora of Parambikulam Wildlife Sanctuary is significant in this context. This paper deals with the dry deciduous forests in the sanctuary and peculiarity of its flora, including ten new records to the flora of Kerala.

1239. **Sujanapal, P. & Sasidharan, N. 2009.** "Diversity and ethnobotanical uses of pteridophytes in Parambikulam Wildlife Sanctuary, Kerala, South India". *J. Econ. Taxon. Bot.* 33: 109–119.

Abstract:- Parambikulam Wildlife Sanctuary, situated in the Palakkad revenue district of Kerala, falls under the Anamalai phytogeographical region of the Western Ghats. Floristic studies in the sanctuary resulted in the documentation of 81 taxa of pteridophytes including 7 endangered taxa. Ethnobotanical information of 17 taxa of pteridophytes were also recorded, which include 3 edible ferns.

1240. **Sujanapal, P. & Sasidharan, N. 2010.** "*Zingiber anamalayanum* sp. nov. (Zingiberaceae) from India". *Nordic J. Bot.* 28: 288–293.

Abstract:- *Zingiber anamalayanum* (Zingiberaceae), a new species from the southern Western Ghats, India is described and illustrated. A phenetic analyses to assess the similarity indices and the uniqueness of the new species have been performed. A diagnostic key to *Zingiber* spp. in South India is provided.

1241. **Suma, B.S., Lissy, M.B. & Shaji, C. 2010.** "Algal flora of effluent canal of KMML Industry, Chavara, Kollam dist., Kerala". *J. Econ. Taxon. Bot.* 34: 943–946.

Abstract:- The present paper deals with systematic enumeration of 20 algal taxa belonging to 9 genera collected from KMML industrial effluent canal during the period from September, 2007 to August, 2009. The effluent contained objectionable amounts of total hardness (30–2200 mg/l), chloride (42.6–1162 mg/l), sulphate (64.8–561-6 mg/l), phosphate (0.32–2.4 mg/l), TDS (143–3826 mg/l), BOD (11–40 mg/l), COD (260–380 mg/l), iron (9.4–14.2 mg/l), lead (0.2 mg/l) and chromium (0.2 mg/l). Of the 20 taxa, 10 taxa have been reported as pollution tolerant and 8 taxa have been recorded for the first time from the state.

1242. **Sundaraghavan, R. 1984.** "On *Cleome burmanni* Wt. & Arn. (Capparaceae) – Its identity and distribution". *J. Econ. Taxon. Bot.* 5: 463–466.

Abstract:- The type of *Cleome burmanni* is from Peninsular India but since 1914 this species has not been recollected and hence it is quite rare. Though its distribution is

reported to extend to Sri Lanka, there are no authentic specimens from Sri Lanka at BM, CAL, K, L, MH, P and PDA, hence its occurrence in Sri Lanka is doubtful. It has however been collected from Java by Horsfield between 1802 and 1817. At Leiden specimens collected from Malesia and neighbourhood and identified as *C. aspera* are referable to either *C. burmanni* or *C. rutidosperma*. In India, *C. rutidosperma* is often misidentified as *C. burmanni* in the various herbaria. Incidentally, the distribution of *C. rutidosperma* extends besides Assam and W. Bengal, to Andaman & Nicobar Islands, Maharashtra, Kerala and Tamil Nadu, from where it has not been earlier reported.

1243. **Sunil, C.N. & Sivadasan, M. 2000.** "*Kyllinga polyphylla* Willd. ex Kunth (Cyperaceae): A new record for India". *Rheedea* 10: 81–83.

Abstract:- *Kyllinga polyphylla* Willd. ex Kunth (Cyperaceae) is reported for the first time for India from Ezhupunna, Alappuzha district, Kerala. Earlier this species was known from Tropical Africa, Sri Lanka, Malesia, Fiji and West Indies.

1244. **Sunil, C.N. & Sivadasan, M. 2000.** "*Cenchrus echinatus* L. (Poaceae): A new record for Peninsular India". *Rheedea* 10: 153–155.

Abstract:- *Cenchrus echinatus* L. (Poaceae), from Kerala is reported here as a new record for Peninsular India. Detailed description and illustrations are provided.

1245. **Sunil, C.N. & Sivarajan, V.V. 1994.** "*Voacanga grandifolia* (Miq.) Rolfe (Apocynaceae): A new record for southern Peninsular India". *Rheedea* 4: 109–112.

Abstract:- The Malesian species, *Voacanga grandifolia* (Miq.) Rolfe, is reported for the first time for southern Peninsular India from Alappuzha district, Kerala. Detailed description, illustration and relevant notes are also provided.

1246. **Sunilkumar, M.G. & Thomas, J. 2007.** "Indigenous medicinal usages of some macrophytes of the Muriyad wetland in Vembanad–Kol, Ramsar Site, Kerala". *Indian J. Traditional Knowledge* 6: 365–367.

Abstract:- Indigenous medicinal practices are an important component of the traditional knowledge. Wetlands provide a unique habitat for several medicinal plants. Apart from their commercial value, the local community utilizes a good number of these plants for various curative purposes, which are unknown to the people at large. Several of these plants are very sensitive to the fluctuations in the normal physic-chemical parameters of the wetland. A slight alteration or degredation of the wetland may result in the disappearance or the extinction of these plants. This will ultimately result in large scale economic loss in terms of the medicinal products synthesized from these plants. Apart from the loss of plants, which are exclusively used by a community for their health-related uses, this will also result in the loss of local knowledge on the medicinal properties

of these plants, which very often cannot be retrieved. Attempt has been made to document some of the little known medicinal properties of wetland/wetland-associated plants used by the local community living around Muriyad wetland system, Kerala.

1247. **Sunilkumar, T. & Antony, V.T. 2010.** "The magical relief of *Vitex negundo* L. practiced by Ullada tribes in Alappuzha district of Kerala state". *J. Econ. Taxon. Bot.* 34: 940–942.
Abstract:- The magical relief by the dried leaves of *Vitex negundo* L. (Verbenaceae) is noted as a new contribution to the ethnobotanical studies in Kerala. Studies were carried out to gather information on the medicinal use of the plant, *Vitex negundo* L., particularly from *Ullada* tribe in Alappuzha district of Kerala state. This study aims at documentation of the indigenous knowledge of the *Ullada* tribe and conservation of this plant.

1248. **Sunilkumar, T. & Antony, V.T. 2012.** "*Clerodendrum cordatum* D. Don (Verbenaceae) – An addition to flowering plants of Kerala". *J. Econ. Taxon. Bot.* 36: 46–48.
Abstract:- *Clerodendrum cordatum* D. Don is a new report from Kerala. The present finding is a part of taxonomic investigations by the authors throughout Kerala. Authors collected it from Sultans Battery of Wayanadu district, Kerala state.

1249. **Sunilkumar, T., Joseph, M.A. & Antony, V.T. 2012.** "Some medicinal plants of Verbenaceae by traditional medical practitioners of Alappuzha district, Kerala state". *J. Econ. Taxon. Bot.* 36: 393–396.
Abstract:- An investigation for the medicinal uses of the members of the family Verbenaceae was conducted during the period 2008–2009. This family has some important plants with high medicinal value. This study has been concentrated in Alappuzha district in Kerala, where two different famous traditional medical practitioner's families live. They use a good number of plants traditionally for healing purposes. Some of the plants of Verbenaceae were found to be very miraculous in providing remedy for various diseases.

1250. **Sunilkumar, T., Varghese, K.S., Thomas, S., Kumar, N.P., Joseph, J., Krishnaraj, M.V. & Antony, V.T. 2012.** "*Lippia alba* (Mill.) N.E. Br. (Verbenaceae) – An addition to flowering plants of Kerala". *Indian J. Forest.* 35: 105–106.
Abstract:- *Lippia alba* (Mill.) N.E. Br. is reported new to Kerala from Kumaramkari of Alappuzha district, Kerala state, a place having altitude below sea level. Earlier this species was known to occur in Andhra Pradesh, Andaman Islands, Assam, Bihar, Gujarat, Madhya Pradesh, Meghalaya, Orissa, Tamil Nadu, Uttar Pradesh and West Bengal.

1251. **Sunojkumar, P. & Mathew, P. 2002.** "*Leucas beddomei* (Hook.f.) Sunojkumar & P. Mathew (Lamiaceae), a new status and name for *Leucas hirta* var. *beddomei* Hook.f. – A little known endemic from India". *Rheedea* 12: 169–174.
Abstract:- *Leucas hirta* var. *beddomei* Hook.f., a variety described based on Beddome's

collection from the peak of Chembra hills, Wayanad of Kerala has been rediscovered from its type locality after over 120 years. After critical analysis, it is ascribed a species status. Description, illustration and relationships are provided.

1252. **Sunojkumar, P., Smitha, K. & Joseph, J.P. 2012.** "*Plectranthus verticillatus* (L.f.) Druce (Lamiaceae): A new distributional record for India". *J. Econ. Taxon. Bot.* 36: 823–825.
Abstract:- *Plectranthus verticillatus*, an African species is reported for the first time for India from Kalpetta, Wayanad district, Kerala. A detailed description and illustration are provided for the taxon.

1253. **Suresh, C.R. & Nicolson, D.H. 1986.** "Two nomenclatural novelties based on Rheede's 'Hortus Malabaricus'". *Taxon* 35: 354–355.
Abstract:- *Ellertonia* Wight (1848, Apocynaceae) is an illegitimate remaining of *Kamettia* Kostel. (1834). *Kamettia caryophyllata* is a new combination for the taxon previously known as *Ellertonia rheedei* Wight, nom. illeg. pro *Echites caryophyllata* Roxb. (1814). *Phrynium rheedei* (Marantaceae) is a new name for *Phrynium capitatum* Willd., nom. illeg. pro *Pontederia ovata* L., non *Phrynium ovatum* Nees *et* Mart. (1823). *Ellertonia* R. Wight (Icon. 4(2): 2, t. 1295. 1848, Apocynaceae) is antedated by the previously overlooked (although cited as nomen prius in Index Kewensis) but valid publication of *Kamettia* Kostel. (Allg. Med.-Pharm. Fl. 2: 1062. 1834). Since the genus now has only one species a conservation proposal is not justified and a new combination is proposed.

1254. **Suresh, H.S. & Sukumar, R. 1999.** "Phytogeographical affinities of flora of Nilgiri Biosphere Reserve". *Rheedea* 9: 1–21.
Abstract:- Vegetation of the Nilgiri Biosphere Reserve (NBR) was characterized. A total of 5373 individuals above 3 cm DBH (Diameter at Breast Height) belonging to 364 species were enumerated. Phytogeographical affinities of the species were looked into by obtaining information about the species distribution at local and global level. An analysis of the affinities reveals that NBR flora has strong Indo-Malayan (27.7%) and Indian (30.3%) affinities. Flora of moist vegetation types had strong affinities with Indo-Malayan (20.1%), Indian (38.6%) and Indo-Lankan (9.7%) flora while flora of dry vegetation types had species with Afrotropical and Pantropical affinities. Tropical montane forest type had maximum number of endemic species (20%) suggesting that the vegetation is highly specialized and requires high priority for conservation.

1255. **Suxena, M.R., Venkateswarlu, V., Subba Raju, N. & Rao, V.S. 1973.** "The algae and Testacea of Cranganore, Kerala state – India". *J. Indian Bot. Soc.* 52: 316–341.
Abstract:- A systematic survey of the algae and testacea of Kerala state has been made. A total of 119 taxa are described along with their records of distribution in India and

adjacent countries. One taxon is new to science. Thirty species are reported for the first time from India.

1256. **Swapna, M.M., Rajilesh, V.K., Anoop, K.P., Ansari, R. & Prakashkumar, R. 2012.** "A floristic analysis of the wetlands of Wayanad district, Kerala, South India". *J. Econ. Taxon. Bot.* 36: 310–319.

Abstract:- In the present investigation, the wetland flora of Wayanad district is documented along with a discussion on their dominance, diversity, endemism and need for conservation. It forms a part of the exploration of wetlands of Kerala for the preparation of the wetland flora of the whole state. The main centres of wetland plant diversity in the district are stream sides, river banks, paddy fields, ponds, etc. In the present study, a total of 215 species of flowering plants (belonging to 40 families) and 16 species of pteridophytes (belonging to 11 families) are reported from this area. The wetlands of the district being under severe threat of encroachment for construction/cultivation purposes demand for application of urgent conservation strategies especially for the endemic species like *Eriocaulon wayanadense, Lagenandra meeboldii, Cryptocoryne spiralis*, etc. A comparison of the wetland flora of the district with flora of other areas of Kerala and India is alo provided, which reveals the high floristic diversity of the district when compared to the wetland flora of the whole country.

1257. **Swarupanandan, K. 1983.** "A new species of *Thottea* Rottb. (Aristolochiaceae) from India". *Blumea* 28: 407–412.

Abstract:- A new species, viz., *Thottea dinghoui* Swarup. is described from Kerala, India. This is the first record of a species of *Thottea* with biseriate stamens from India.

1258. **Swarupanandan, K. 1984.** *Asclepiadaceae of Kerala*. Ph.D. Thesis. University of Calicut, Calicut. (Unpublished).

1259. **Swarupanandan, K. 1991.** An analysis of physical basis and causes of rarity in the Asclepiadaceae R. Br. (s.l.) of Kerala. In: Karunakaran, C.K. (Ed.), *The proceedings of the symposium on rare, endangered and endemic plants of the Western Ghats*. Kerala Forest Department, Thiruvananthapuram. pp. 230–236.

1260. **Swarupanandan, K. & Mangaly, J.K. 1992.** "A new species of *Ceropegia* L. from the Western Ghats of India". *Nordic J. Bot.* 12: 699–701.

Abstract:- A new species of *Ceropegia*, viz., *C. schumanniana* allied to *C. maculata* Bedd. belonging to Asclepiadaceae is described and illustrated from the evergreen forests of the Kerala-Tamil Nadu boundary.

1261. **Swarupanandan, K. & Nicolson, D.H. 1993.** "A new variety of *Tylophora tetrapetala* (Asclepiadaceae)". *Blumea* 38: 231–235.

Abstract:- In the species *Tylophora tetrapetala* (Dennst.) Suresh two varieties are recognized, var. *tetrapetala* [India (Kerala, Gujarat and Tamil Nadu), Sri Lanka, Burma, Malaysia, Singapore and Java] and var. *tenuissima* Swarupanandan [India (Karnataka, Kerala, Tamil Nadu and West Bengal) and Burma].

1262. **Swarupanandan, K., Sasidharan, N., Chacko, K.C. & Basha, S.C. 1998.** "Studies on the Shola forests of Kerala". KFRI Research Report No. 158. pp. 143.

Abstract:- 'Shola forest' (s.I.) are tropical forest vegetations comprising subtropical hill forests and the montane temperate forests, generally inhabiting over 1,500 msl. The present study on the shola forest of Kerala has generated benchmark information on the floristics, community, ecology and forest dynamics of the two major chunks of the shola forests, the Mannavan Shola and the Eravikulam National Park, both situated in the Idukki district of the Kerala state. The data were analysed for details of structure and composition, dominance, species richness, biodiversity content, and population structure of selected tree species. The most dominant tree species in the community were: *Cinnamomum wightii, Litsea* sp., *Mastixia arborea, Hydnocarpus alpina, Isonandra candolleana, Persea macrantha, Syzygium* sp. and *Gomphandra coriacea*. Diveristy of herbs was very high in grassland ecotones and in disturbed (e.g. burned) region in comparison to the undisturbed regions. Species richness of trees, as well as all species taken together of the semi-permanent plots showed a decreasing trend with increasing elevation. Results of population analysis did not provide evidence of any serious constraints in the natural regeneration of trees within the shola groves. Mannavann Shola and the Eravikulam National Park are two living musea of shola forests. Of these, only Eravikulam has the status of a National Park. Mannavan Shola, the largest shola forest patch in the state, which contains many botanical rarities and novelties should also be considered for a better protective status.

1263. **Swarupanandan, K., Sasidharan, N. & Mangaly, J.K. 1989.** "A reconsideration of the generic circumscription of *Heterostemma* Wight & Arn. (Asclepiadaceae) and a new species from India". *Bot. J. Linn. Soc.* 101: 249–259.

Abstract:- *Heterostemma vasudevani* Swarupanandan & Mangaly, a new species belonging to Asclepiadaceae is described and illustrated. The discoid-urceolate corolla and the stamina coronal scales with a ventral appendage show this species to be intermediate between the two genera *Heterostemma* and *Oianthus*. Basically, the concepts of the two genera differ only in a pair of characters which, in the light of the new species seem to be particularly diagnostic. On this basis, it is proposed to merge the two genera together, by reducing *Oianthus* as a section under *Heterostemma*. Consequently, three new combinations are

proposed. Examination of recent collections extends the distribution of what was *O. decanense*, earlier considered to be endemic to Maharashtra, further south to Kerala.

1264. **Tandyekkal, D. 1997.** "*Desmodium tortuosum* (Sw.) DC. (Fabaceae): A new record for Kerala". *J. Econ. Taxon. Bot.* 21: 663–666.
Abstract:- *Desmodium tortuosum* (Sw.) DC. of Fabaceae is reported for the first time from Kerala state, India. Detailed description, illustrations and relevant notes are provided.

1265. **Tandyekkal, D., Dan, M. & Mathew, P. 1997.** "*Petiveria alliacea* L. (Phytolaccaceae): A new record for Peninsular India". *Rheedea* 7: 37–39.
Abstract:- *Petiveria alliacea* L., a native of Central America, was earlier known to occur in wild in West Bengal. This is the first report of this species in Peninsular India from waste lands of Thiruvananthapuram district of Kerala. Detailed description, illustration and relevant notes are provided.

1266. **Tandyekkal, D. & Mathew, P. 1995.** "*Staurogyne glutinosa* (Wall. ex Clarke) O. Kuntze (Acanthaceae): A new record for Peninsular India". *Rheedea* 5: 60–62.
Abstract:- *Staurogyne glutinosa* (Wall. ex Clarke) O. Kuntze (Acanthaceae) is reported for the first time from Peninsular India (Kerala). This species was earlier known to occur in Uttar Pradesh, Bihar, West Bengal and Bangladesh. Detailed description, illustrations and relevant notes are provided.

1267. **Tandyekkal, D. & Mathew, P. 1995.** "*Desmodium scorpiurus* (Swartz) Desvaux (Leguminosae – Papilionaceae): A new record for India". *Rheedea* 5: 177–179.
Abstract:- *Desmodium scorpiurus* (Swartz) Desvaux (Leguminosae) is reported for the first time for India from Kerala. Detailed description, illustrations and relevant notes are provided.

1268. **Tandyekkal, D. & Mohanan, N. 2010.** "*Lindernia ciliata* subsp. *sivarajanii* subsp. nov. (Scrophulariaceae) from India". *Nordic J. Bot.* 28: 202–205.
Abstract:- A new subspecies of *Lindernia ciliata* (Colsm.) Pennell is described and illustrated. *Lindernia ciliata* (Colsm.) Pennell subsp. *sivarajanii* Dhruvan *et* Mohanan differs from *L. ciliata* subsp. *ciliata* by its creeping habit, rooting from almost all nodes, distant and sub-aristate leaf serrations, upper lip of corolla almost equal in length to the lower lip and straight staminodes.

1269. **Tandyekkal, D. & Ramla, K. 1997.** "*Phyllanthus tenellus* Roxb. (Euphorbiaceae): A new record for Kerala". *J. Econ. Taxon. Bot.* 21: 731–733.
Abstract:- *Phyllathus tenellus* Roxb., a native of Mascarene Islands, was earlier known to occur in the wild in Maharashtra and Tamil Nadu states of India. This is the first report of this species in Kerala.

1270. **Tesssy, P.P. & Sreekumar, R. 2009.** "Assessment of the biodiversity and seasonal variation of freshwater algae in the Thrissur Kol Wetlands (Part of Vembanad–Kol, Ramsar Site), Kerala". *J. Econ. Taxon. Bot.* 33: 721–732.

Abstract:- The Kol Wetlands constitute a significant part of one of the largest wetland systems on the southwest coast of India, namely Vembanad–Kol, a Ramsar Site of Kerala. The study was conducted at the Kol Wetlands of Thrissur district. One hundred and sixty–nine taxa of phytoplankton belonging to sixty–one genera were enumerated from four stations. These algal components come under the six taxonomic classes namely, Chlorophyceae, Desmidiaceae, Bacillariophyceae, Chrysophyceae, Euglenophyceae and Cyanophyceae. Desmidiaceae was the dominant group with seventy–three species under nineteen genera. The most abundant genus was *Closterium* with 13 species. The Bacillariophyceae was less dominant throughout the period of study in all the sites studied. The seasonal assessment of the phytoplanktons showed marked differences in the composition and distribution of various algal groups.

1271. **Tewary, P.K. & Sarkar, A.K. 1986.** "Taxonomic revision of the genus *Vatica* L. (Dipterocarpaceae) in India". *J. Econ. Taxon. Bot.* 8: 419–424.

Abstract:- Present paper deals with the two Indian species of the genus *Vatica* L. giving detailed citation, type, description, flowering and fruiting, distribution, ecology, taxonomic notes, etc. An artificial key has been prepared, illustrations of the species are drawn and the distribution map is prepared based upon data collected from fields as well as herbaria.

1272. **Thapliyal, M., Selvi, K.G., Lakshminarayan, U. & Mohan, E. 2002.** "A comparative study of ground flora of unilocational monoculture of *Acacia auriculiformis, Casuarina equisetifolia, Eucalyptus tereticornis* and *Tectona grandis* in Panampally, Palakkad district, Kerala". *Indian J. Forest.* 25: 82–86.

Abstract:- The study was conducted on the ground flora of *Acacia auriculiformis* A. Cunn. ex Benth., *Casuarina equisetifolia* L., *Eucalyptus tereticornis* Sm. and *Tectona grandis* L.f., plantations in Panampally, Palakkad district of Kerala. The age of the plantations varied from three and a half of five years. A total of 59 species were recorded from the area. *Eucalyptus* supported the maximum number of species (36) and the least number (15) were recorded from open area. The highest density of 105 plants per m^2 was found in *Casuarina* stand and least (39 plants per m^2) in *Acacia*, while was probably because the plantation had accumulated a lot of leaf litter which had some allelopathic effect on the seed germination of the species. The dominant species were *Ageratum conyzoides, Chromolaena odorata, Hemidesmus indicus* and *Mimosa pudica*. Fabaceae was the dominant family represented by a total of 11 species.

1273. **Thapliyal, M. & Venkatasubramanian, N. 2004.** "Some observations on two rare endemic Dipterocarps of southern Western Ghats". *J. Bombay Nat. Hist. Soc.* 101: 475–477.

Abstract:- Vernacular names, distribution, descriptions, natural regenerations and economic importance of two rare endemic Dipterocarps of southern Western Ghats (Kerala and Tamil Nadu), viz., *Dipterocarpus bourdilloni* Brandis and *Vateria macrocarpa* B.L. Gupta have been given in this paper.

1274. **Theuerkauf, W. & Seshan, S. 2004.** Conservation of orchids of Western Ghats at the Gurukula Botanical Sanctuary, Wayanad, India. In: Manilal, K.S. & Kumar, C.S. (Eds.), *Orchids Memories – A tribute to Gunnar Seidenfaden*. Mentor Books, Calicut. pp. 117–124.

Abstract:- Gurukula Botanical Sanctuary (GBS) since its inception in 1981 has been in the forefront of conservation of plants of Western Ghats with particular emphasis on endemics of Southern India. The sylvan setting of the sanctuary with its myriad microclimates favours a conducive haven for effective and meaningful conservation of a wide spectrum of rare and endangered plants. Orchids are undoubtedly a key group of GBS has the best collection in South India. They are propagated in conditions simulating their natural preferences in the wild, so that a genetically varied and robust population can be established. Re-introduction of some native species into degraded areas can now begin, so that complex habitats can be restored. Knowledge of taxonomy and basic botany is an indispensable aid to biodiversity conservation and it is very important for lay persons to develop an understanding of the species that surround them in order to protect them better.

1275. **Theuerkauf, W.D. 1993.** "South Indian Pteridophytes – *ex situ* conservation". *Indian Fern J.* 10: 219–225.

Abstract:- South Indian pteridophytes are threatened by rapid destruction of their environment. Botanic gardens play an important role in the conservation of plant diversity. The *ex-situ* conservation programme of the Gurukula Botanical Sanctuary in Wynad, Kerala, focuses on Western Ghats pteridophytes. Nearly 250 species have been surveyed in the wild and collected, then cultivated and multiplied at the sanctuary.

1276. **Thirugnanakumar, S., Inasi, K.A., Anandan, A., Antony, A., Kumar, C.P.S. & Vasline, A. 2012.** "Investigation of genetic diversity associated with altitude in naturally distributed populations of Gamboge trees (*Garcinia gummi-gutta* L.) in central Kerala of India". *J. Non-Timber Forest Products* 19: 23–28.

Abstract:- Genetic diversity among naturally distributed populations of Gamboge tree

(*Garcinia gummi-gutta* L.) in three different altitudes was studied. The study area included 29 Panchayats of 3 districts of Central Kerala of India. D^2 estimates based on 15 fruit characters were used for obtaining the clustering pattern and their inter and intra-cluster distances. It was found out that regional diversity (geographic diversity) was not related with genetic diversity. Hydroxy citric acid contributed maximum towards genetic diversity.

1277. **Thirupurasundari, G., Ganapathi, A. & Irudayaraj, V. 2006.** "Morphology and distribution of trichomes in *Datura* from South India". *J. Non-Timber Forest Products* 13: 95–98.

Abstract:- Morphological and topographic variations of trichomes were studied by light microscope in four different taxa [*Datura innoxia* Mill., *D. meteloides* DC., *D. metel* L., *D. metel* var. *fastuosa* (L.) Saff] of South India. All the four variants of *Datura* are having unbranched glandular trichomes, unbranched eglandular trichomes and storied glandular with unicellular as well as multicellular head. The storied glandular trichomes are absent on the pedicel and on anther filament of all the four taxa of *Datura*. The anther filament of *Datura innoxia* shows unbranched, eglandular trichomes and the other three unbranched, glandular trichomes. Ecology plays an important role in the distribution of trichome in a particular species. Species growing in drier and warm places have dense hairs, in contrast to the species growing in wet and cool places. The size of the trichomes varies considerably between different parts of the plant. Generally, they are larger in anther filament followed by leaf. They are usually shorter in calyx.

1278. **Thiyagaraj, J.G. & Daniel, P. 2002.** "On the distribution of some South Indian Araceae". *J. Econ. Taxon. Bot.* 26: 685–692.

Abstract:- *Amorphophallus smithsonianus, Theriophonum infaustum* and *Typhonium bulbiferum* are added to the flora of Tamil Nadu. Earlier overlooked report of *Arisaema translucens* from Travancore is now confirmed and *A. tylophorum* is recorded for the southern end of the Western Ghats. *Lagenandra ovata* is restricted to southern Kerala and Tamil Nadu only. *Theriophonum sivaganganum* is not restricted in distribution and the occurrence of *Typhonium trilobatum* on the East Coast is confirmed.

1279. **Thomas, A., Bhaskaran, S., Kurien, S. & Ajit, C.E. 2006.** "Dominance–diversity profile analysis of home garden systems in Southern Kerala". *J. Non-Timber Forest Products* 13: 117–124.

Abstract:- Home gardening is a very old tradition that has evolved over a long time from the practices of the hunters/gatherers and continued in the ancient civilizations upto modern times. In the due course of this evolving process of home gardens, from ancient to modern times, the stress on food, nutritional and cultural sustainability has transformed to economic

sustainability. Thus it has evolved as a system for the production of subsistence crops for the gardener and family with or without the involvement of cash crops. It is this evolving nature that has brought in significance to the structure of home garden which is contributed by its cropping and farming systems.

1280. **Thomas, A., Bhaskaran, S., Kurien, S., Ajit, C.E. & Thomas, C.U. 2007.** "Diversity profile of home–garden systems in southern Kerala". *Ann. Forest.* 15: 71–80.

Abstract:- Home-garden is one of the oldest and unique forms of agricultural production system that is present in all types of agro-ecological zones in Kerala, a small state in India. Home-garden farmers utilize the available land around their house for poly cropping with a variety of crop components along with or without animal husbandry components or other specialized components of their choice for production of various produces based on their household requirements and surplus production, if any for marketing according to market demand. This structural composition and the functional diversity of home-gardens are very much related and support the dynamic nature of this ever-evolving system. This study was undertaken in southern Kerala comprising Thiruvananthapuram, Kollam, Alappuzha and Pathanamthitta districts during the year 2005, covering a sample size of 208 home-gardens using multi-stage stratified random sampling technique which examines the structural configuration of home-gardens in terms of species diversity index. Structural configuration was assessed based on the diversity index and its measurement. Shannon-Wiener Index was used to measure diversity index. Variability in home-gardens exists within regions, within and between districts, but was not influenced by holding size.

1281. **Thomas, B., Aravindhan, V., Maharajan, M. & Rajendran, A. 2010.** "Wild edible roots and tubers and their contribution to the food security of Shola Naikans tribes of Kerala, India". *J. Non-Timber Forest Products* 17: 449–451.

Abstract:- The present study emphasis the potential of the 24 species of wild edible roots and tubers and the need for the documentation of traditional ecological knowledge pertaining to the food plants utilization for the greater benefit of mankind.

1282. **Thomas, B. & Rajendran, A. 2011.** "Leafy vegetables used by Mullu Kuruma tribe in Wayanad district of Kerala". *J. Econ. Taxon. Bot.* 35: 711–714.

Abstract:- During the field survey, 25 plant species belonging to 14 families have been identified as leafy vegetables which are commonly used by Mullu Kuruma tribe of the Wayanad district, Kerala.

1283. **Thomas, G. & Abraham, G. 2003.** "An evaluation of some common plants of medicinal importance from Kerala". *Bull. Med.-Ethno-Bot. Res.* 24: 64–96.

Abstract:- A field survey was conducted to evaluate the medicinal potential of some

common plants of Tiruvalla Taluk in Pathanamthitta district, Kerala. The information generated has been used to catalogue the various medicinal plants on the basis of their systematic position. This data could be exploited by botanists, pharmacologists and chemo-taxonomists to propagate, conserve and to characterize the potential bio-molecules/novel medicinally active principles from plants.

1284. **Thomas, J., Jabbar, M.A. & Kumar, E.S.S. 1996.** "Note on collections of two little known wild ornamental plants from Western Ghats". *Indian J. Forest.* 19: 98–99.
Abstract:- Two little known wild ornamental plants, viz., *Anisochilus argenteus* Gamble and *Orthosiphon comosus* Wight ex Benth. belonging to the family Lamiaceae have been collected from Western Ghats of Kerala.

1285. **Thomas, J., Kumar, E.S.S. & Jabbar, M.A. 1995.** "*Stenosiphonium wightii* Bremek. (Acanthaceae) – A new record from Kerala forests". *J. Econ. Taxon. Bot.* 19: 483–485.
Abstract:- The search for wild plants of ornamental value in Western Ghats (Kerala) resulted in the collection of *Stenosiphonium wightii* Bremek., reported here for the first time from Kerala, the only known collection of this species after 1904.

1286. **Thomas, J., Kumar, E.S.S., Jabbar, M.A., Jose, P.A. & Rajvikraman, R. 1998.** "Wild ornamental plants of Western Ghats (Kerala)". *J. Econ. Taxon. Bot.* 22: 477–489.
Abstract:- A large number of wild plants from Kerala, Western Ghats was screened for their ornamental values. Data on about 139 species with desirable features which were identified for popularization and conservation are presented.

1287. **Thomas, Jerry & De Britto, A.J. 1999.** "An ethnobotanical survey of Naduvil Panchayet in Kannur district, Kerala". *Ancient Sci. Life* 18: 279–283.
Abstract:- The present paper reports the ethnobotanical uses of 32 plant species belonging to 31 genera of 25 families being practiced by tribals in Naduvil panchayet near 'Paithalmala' hills in Kannur district in Kerala. The researchers collected information from the tribals about their medicinal practices. Vernacular name, botanical name, family, morphology of the useful parts and uses of medicinal plants and preparations of medicines are given. This study throws light on the plant human interaction.

1288. **Thomas, Jerry & De Britto, A.J. 2003.** "Ethnobotanical study in Wynad district in Kerala". *J. Econ. Taxon. Bot.* 27: 815–824.
Abstract:- Wynad district of Kerala (India) inhabited by several tribal communities use plants for their common ailments. The paper reports botanical names, family, local name and their mode of use in different ailments for these plants.

1289. **Thomas, K.J. 1962.** "A survey on the vegetation of Veli (Trivandrum) with special reference to ecological factors". *J. Indian Bot. Soc.* 41: 104–131.

Abstract:- The present report deals with a survey on the vascular vegetation of Veli (Trivandrum) in relation to ecological habitats. Altogether 249 species are recorded and these include different ecological categories like hydrophytes, halophytes, xerophytes and a variety of mesic and psammophytic plants many of which are true representatives of the vegetation of Trivandrum. The common associations are also mentioned.

1290. **Thomas, K.J. 1963.** "A contribution to our knowledge of *Dalechampia tamnifolia* Lam.". *J. Bombay Nat. Hist. Soc.* 60: 475–478.

Abstract:- *Dalechampia tamnifolia* Lam. has been recorded for the first time for South India from Trivandrum. Detailed description has also been given.

1291. **Thomas, V.P., Sanoj, E., Babu, M. & Prasanth, A.V. 2009.** "On the identity and occurrence of *Amomum fulviceps* (Zingiberaceae) in India". *Rheedea* 19: 13–17.

Abstract:- *Amomum fulviceps* Thwaites is correctly identified for the first time for India from Agasthyamala hills of Western Ghats (Kerala). Previous record regarding the occurrence of the species is discussed. Detailed description, illustration, photographs, distributional and ecological details are provided.

1292. **Thomas, V. & Dave, Y. 1990.** "Branched stem in *Cocos nucifera* L. – A rare occurrence in palms". *J. Econ. Taxon. Bot.* 14: 195–197.

Abstract:- A rare occurrence of branched stem of *Cocos nucifera* L. has been found in Cochin and Palai of Kerala.

1293. **Thothathri, K. 1964.** "Studies in Leguminosae – 4. New varieties of *Crotalaria paniculata* Willd. and *Derris brevipes* Baker". *Bull. Bot. Surv. India* 6: 67–68.

Abstract:- Two new varieties, viz., *Crotalaria paniculata* Willd. var. *nagarjunakondensis* Thoth. var. nov. from the hills surrounding the Nagarjunakonda valley, Nalconda district, Andhra Pradesh and *Derris brevipes* Baker var. *travancorensis* Thoth. var. nov. from Velleva mallay, Travancore are described in this paper.

1294. **Thothathri, K. 1972.** "Studies in Leguminosae 15. New taxa of *Dalbergia* Linn.f. from India and Burma". *Reinwardtia* 8: 329–331.

Abstract:- A new species of *Dalbergia*, viz., *D. travancorica* allied to *D. rubiginosa* Benth. has been described from Travancore and new variety *D. obtusifolia* Prain var. *rogersii* has been described from Burma.

1295. **Thothathri, K. 1983.** "Studies in Leguminosae 31. New taxa and notes on *Dalbergia* Linn.f. and *Derris* Lour". *Proc. Indian Acad. Sci., Pl. Sci.* 92: 23–28.

Abstract:- *Derris beddomei* and *D. kingdonwardii* are described as new to science, *Dalbergia kingiana* Prain is reported from Burma for the first time after its type collection from Kachin Hills. The collection of *D. pseudo-sissoo* Miq. from Thirunelveli Hills, South

India represents a rare species. The pod characters of *Derris ovalifolia* Wt. are given for the first time.

1296. **Thothathri, K. & Das, D.N. 1991.** "A new species of *Tephrosia* Pers. from Kerala". *Rheedea* 1: 57–58.
Abstract:- A new species of *Tephrosia*, viz., *T. travancorica* Thoth. & Das has been described from Kerala, India.

1297. **Thothathri, K. & Nair, K.K.N. 1980.** "Dalbergias in Hortus Malabaricus". *Taxon* 30: 43–47.
Abstract:- The taxonomy and nomenclature of Rheede's names, *Noel seu Minari, Tsjeria-Cametti-Valli, Noel-Valli, Karin-Tagera* and *Ana-Mullu* in Hortus Malabaricus (1686–88), are discussed. A new combination, *Dalbergia horrida* (Dennst.) Mabberley var. *glabrescens* is proposed.

1298. **Thothathri, K. & Prasad, R. 1970.** "On *Centrosema virginianum* (Linn.) Benth. in India". *Curr. Sci.* 39: 353.
Abstract:- *Centrosema virginianum* (L.) Benth. has been reported as growing to be wild in India from Kerala, Karnataka and West Bengal. Earlier this species was known to occur in Virginia.

1299. **Thothathri, K. & Ravikumar, S. 1997.** "A new variety of the tribal pulse, *Mucuna pruriens* (L.) DC. from the Thekkady forest, Kerala". *J. Econ. Taxon. Bot.* 21: 703–704.
Abstract:- A new variety of *Mucuna pruriens* (L.) DC., viz., *M. pruriens* var. *thekkadiensis* has been described from the Thekkady forest, Kerala.

1300. **Udar, R. & Awasthi, U.S. 1983.** "A new species of *Lopholejeunea* (Spruce) Schiffn. from India". *Bull. Bot. Surv. India* 25: 174–176.
Abstract:- A new species of *Lopholejeunea* (Spruce) Schiffn., viz., *L. indica* is described and illustrated from India (Meghalaya and Kerala).

1301. **Udar, R. & Awasthi, U.S. 1984.** "*Schiffneriolejeunea indica* (St.) Udar *et* Awasthi in Kerala". *J. Indian Bot. Soc.* 63: 460–461.
Abstract:- *Schiffneriolejeunea indica* (St.) Udar *et* Awasthi, earlier reported from Mangalore and Karnataka has recently been collected from the bark surface of *Hevea brasiliensis* growing in the campus of the Rubber Research Institute, Kottayam and M.E.S. Kalladi College, Munnar Ghat in the vicinity of Silent Valley, Kerala.

1302. **Udar, R. & Jain, Anita. 1984.** "Liverworts of Kerala – I. Marchantiales". *Indian J. Forest.* 7: 300–304.
Abstract:- Liverworts of Kerala have been investigated for the first time in Indian bryology. The Marchantiales are represented by 8 genera and 14 species. All these taxa form new

records for this state.

1303. **Udar, R. & Shaheen, F. 1985.** "The genus *Ceratolejeunea* in India". *J. Indian Bot. Soc.* 64: 400–402.

Abstract:- *Ceratolejeunea singapurensis* (Lindenb.) Schiffn. has been reported for the first time for India from Lakkidi, Kerala state. This genus is also a new record for India.

1304. **Udayan, P.S. & Balachandran, I. 2006.** "*Cleistanthus sankunnianus* Sivar. & Indu Balach. – A rare and little known endemic plant rediscovered from wild populations in Kollam district of Kerala state, India". *Bull. Bot. Surv. India* 48: 217–218.

Abstract:- A rare and little known endemic plant species, *Cleistanthus sankunnianus* Sivar. & Indu Balach. has been rediscovered from wild populations in Kollam district of Kerala state, India. This species was previously known from Herb Garden, Kottakal, Malappuram district.

1305. **Udayan, P.S., George, S., Tushar, K.V. & Balachandran, I. 2005.** "Medicinal plants used by the Kaadar tribes of Sholayar forest, Thrissur district, Kerala". *Indian J. Traditional Knowledge* 4: 159–163.

Abstract:- The paper reports the traditional medicinal uses of 41 plant species belonging to 27 families. The paper also has taken into account the perception of local people about the effectiveness of the plants (ethnomedicine) for specific diseases for which they are prescribed.

1306. **Udayan, P.S., George, S., Tushar, K.V. & Balachandran, I. 2006.** "Ethnobotanical information from the Muduga tribe of Mukkali forest, near Silent Valley National Park, Palakkad district, Kerala, India". *J. Econ. Taxon. Bot.* 30(Suppl.): 27–30.

Abstract:- This paper enumerates the traditional uses of some plants used by the Muduga community of Mukkali forest, near Silent Valley National Park, Palakkad district, Kerala, India. Information on the medicinal uses of 21 plant species gathered from the tribals along with their botanical identity are highlighted in this paper.

1307. **Udayan, P.S., George, S., Tushar, K.V. & Balachandran, I. 2007.** "Ethnomedicine of *Malapandaram* tribes of Achenkovil forest of Kollam district, Kerala". *Indian J. Traditional Knowledge* 6: 569–573.

Abstract:- The paper enumerates the traditional uses of 27 plants used by *Malapandaram* tribes of Achenkovil forest of Kollam district, Kerala. Information on the medicinal uses gathered from the tribals together with their botanical identity is presented.

1308. **Udayan, P.S., Harinarayanan, M.K., Tushar, K.V. & Balachandran, I. 2008.** "Some common plants used by *Kurichiar* tribes of Tirunelli forest, Wayanad district, Kerala in medicine and other traditional uses". *Indian J. Traditional Knowledge* 7: 250–255.

Abstract:- The paper enumerates the traditional uses of 48 plants used by *Kurichiar* tribes inhabiting the Tirunelli forest of Wayanad district in Kerala. Information on the medicinal and other traditional uses gathered from the tribals together with their botanical identity is presented.

1309. **Udayan, P.S., Pradeep, A.K. & Balachandran, I. 2009.** "A new species of *Tinospora* (Menispermaceae) from South India". *Edinburgh J. Bot.* 66: 77–80.
Abstract:- A new species of *Tinospora* (Menispermaceae), viz., *T. formanii* Udayan & Pradeep from the Western Ghats of Thrissur district, Kerala, South India, is described and illustrated.

1310. **Udayan, P.S., Tushar, K.V. & George, S. 2004.** "Notes on rare, endemic and red listed plants as additions to the flora of Cannanore district (Kannur), Kerala state". *Indian J. Forest.* 27: 341–346.
Abstract:- This paper enumerates 11 species of angiosperms from 10 families, which have not been reported earlier from Kannur district, Kerala. They are collected from Kottiyoor Reserve Forest near Amabayathode, Kannur district. Brief descriptions together with phenological and distributional data are provided.

1311. **Udayan, P.S., Tushar, K.V., George, S. & Balachandran, I. 2008.** "Notes on some endemic, medicinal, rare and red listed plants from the Western Ghats of Kakkayam forest, Kozhikode (Calicut) district, Kerala, India". *J. Econ. Taxon. Bot.* 32: 581–594.
Abstract:- Exploratory survey was conducted to assess the distribution and status of medicinal plants in Kakkayam forest, Kozhikode district, Kerala state and for the collection of medicinal plants for the *ex-situ* gene bank in Kottakkal. During this survey, 29 rare, endemic, red listed and medicinal plant species were collected, which have taxonomical and distribution merits. Among them 25 species are added to the flora of Calicut district.

1312. **Udayan, P.S., Tushar, K.V., George, S. & Balachandran, I. 2005.** "*Sauropus saksenanus* Manilal *et al.* (Euphorbiaceae) – A rare and little known endemic plant from Ambayathode forest of Western Ghats, Kannur district, Kerala, India". *J. Non-Timber Forest Products* 12: 15–17.
Abstract:- *Sauropus saksenanus* Manilal, Prasann. & Sivar., a rare species belonging to the family Euphorbiaceae, is endemic to Kerala state, reported only from two localities, Palakkad and Thrissur districts in the Western Ghats. Present collection from Ambayathode forest, near Kottiyur (Western Ghats), Kannur district shows that its distribution extends to North Kerala.

1313. **Upadhyay, G.K., Ansari, A.A. & Behera, B. 2006.** "*Dorstenia contrajerva* L. (Moraceae) – A new record for India". *J. Non-Timber Forest Products* 13: 77–79.

Abstract:- *Dorstenia contrajerva* L., hitherto unreported from India is recorded for the first time from TBGRI Campus, Palode, Thiruvananthapuram, Kerala. Earlier this species was known to occur in Mexico to the West Indies through Central America to Columbia and Northern Venezuela. Detailed description along with distribution, ecological observation, illustration and photoplates, etc. are provided to facilitate easy identification of the species in the field.

1314. **Upadhyay, G.K., Ansari, A.A. & Dalai, A.K. 2008.** "*Dorstenia bahiensis* Klotzsch ex Fisch. & C.A. Mey. (Moraceae) – First naturalized record for India". *Indian J. Forest.* 31: 479–482.

Abstract:- *Dorstenia bahiensis* Klotzsch ex Fisch. & C.A. Mey. introduced in India is recorded in wild for the first time from Peechi, Thrissur, Kerala. Detailed description, distribution, ecological observation, illustration, photoplates, etc. are provided to facilitate easy identification of the species in the field.

1315. **Usha, V.S., Jesudass, L. & Menon, V.S. 2012.** "An inventory of the climbers of the sacred groves of Thiruvananthapuram district, Kerala". *Indian Forester* 138: 758–760.

Abstract:- The present survey recorded 56 dicotyledonous, 13 monocotyledonous species of angiosperms, under 39 dicotyledonous and 8 monocotyledonous families from sacred groves of Thiruvananthapuram district, Kerala. The lonely gymnospermous member *Gnetum ula* of Gnetales is also seen.

1316. **Vajravelu, E. 1987.** "Studies on the endemic species of Palghat district, Kerala". *J. Econ. Taxon. Bot.* 9: 101–112.

Abstract:- This paper briefly deals with the endemic species of the Flora of Palghat district, Kerala. About 65 endemic species have been enumerated with short descriptions. Their distribution and particulars about the herbarium specimens are also dealt with.

1317. **Vajravelu, E. 1987.** "Materials for the Flora of Palghat district, Kerala". *J. Econ. Taxon. Bot.* 11: 249–289.

Abstract:- The paper presents a brief account of topography, soil, climate and general aspects of forest types in addition to the uniqueness of vegetation of Palghat district of Kerala. An enumeration of 1208 species comprising of 144 families is also given.

1318. **Vajravelu, E. 1988.** "Collection of rare and little known plants from southern states". *J. Econ. Taxon. Bot.* 12: 55–69.

Abstract:- In the present communication, 126 species of rare and little known plants collected from the southern states, viz., Karnataka, Kerala and Tamil Nadu have been dealt.

1319. **Vajravelu, E. 1990.** *Flora of Palghat District including Silent Valley National Park, Kerala*. Botanical Survey of India, Calcutta.

Abstract:- In this work, 1355 species belonging to 732 genera spread over 146 families of flowering plants have been treated.

1320. **Vajravelu, E. & Bhargavan, P. 1981.** "Studies on the Flora of Palghat district, Kerala". *Bull. Bot. Surv. India* 23: 56–59.

Abstract:- A synoptic account has been provided on the Flora of Palghat district. Nearly 1988 field numbers comprising about 1200 species of angiosperms have been collected and studied from this district. Ferns have also been collected and studied.

1321. **Vajravelu, E. & Bhargavan, P. 1982.** "Notes on some rare plants from South India". *J. Econ. Taxon. Bot.* 3: 969–973.

Abstract:- The paper briefly deals with the occurrence of three rare plants in Palghat district, Kerala. Though these species, viz., *Amorphophallus bulbifer* Bl., *Kalanchoe glandulosa* Hochst. and *Stachyphrynium spicatum* (Roxb.) K. Schum. are reported in the Flora of the Presidency of Madras, they are not or poorly represented in MH. Hence brief notes have been given for better understanding of these species.

1322. **Vajravelu, E. & Bhargavan, P. 1984.** "Notes on some rare plants from South India – II". *J. Econ. Taxon. Bot.* 5: 423–429.

Abstract:- Notes on four rare species of flowering plants from Palghat district are given. *Anodendron rhinosporum* Thw. forms an addition to the flora of South India, while the other three species, viz., *Amomum microstephanum* Baker, *Ficus rigida* var. *bracteata* (Corner) Bennet and *Tolypanthus lagenifer* (Wight) Tiegh are very poorly represented in MH.

1323. **Vajravelu, E., Joseph, J. & Chandrasekaran, V. 1968.** "A contribution to the flora of Palghat district, Kerala". *Bull. Bot. Surv. India* 10: 67–83.

Abstract:- This paper presents an account of the floristic composition of Walayar, Malampuzha and Dhoni Reserve Forests, Palghat district, Kerala state. An enumeration of species, genera and families of angiosperms and pteridophytes is given.

1324. **Vajravelu, E. & Ramachandran, V.S. 1985.** "Notes on some rare plants from South India – IV". *J. Econ. Taxon. Bot.* 7: 614–616.

Abstract:- Six rare/endemic species collected from southern state are dealt with briefly in this paper. *Beilschmiedia bourdilloni* Brandis, *Dipterocarpus bourdilloni* Brandis and *Symplocos pulchra* Wight subsp. *villosa* (Brand) Nooteb. have been reported from Kerala, *Croton gibsonianus* Nimmo and *Orophea zeylanica* Hook.f. & Thoms. from Karnataka and *Cleistanthus travancorensis* Jablonszky from Tamil Nadu and Karnataka. Short descriptions with particulars of herbarium specimens are also given.

1325. **Vajravelu, E. & Rathakrishnan, N.C. 1968.** "*Aphyllorchis prainii* Hook.f. (Orchidaceae) – A new record for South India". *Bull. Bot. Surv. India* 10: 97–99.
Abstract:- *Aphyllorchis prainii* Hook.f. has been recorded for the first time for South India from Kerala (Silent Valley Reserve Forest, Palghat district). Earlier this species was known to occur in Naga Hills and Tamil Nadu.

1326. **Vajravelu, E., Rathakrishnan, N.C. & Bhargavan, P. 1983.** "*Hedyotis silent-valleyensis* (Rubiaceae) – A species from South India". *J. Bombay Nat. Hist. Soc.* 80: 402–404.
Abstract:- During the botanical exploration in the Silent Valley R.F., Palghat district, Kerala in 1966 the authors collected a *Hedyotis* species on the grassy slopes of Kunthipuzha dam-site. On scrutiny and in consultation with Central National Herbarium, Howrah and Royal Botanic Gardens, Kew, it is described as a new species, viz., *Hedyotis silent-valleyensis*.

1327. **Varghese, A.O. & Menon, A.R.R. 1998.** "Assessment of biodiversity of Peppara wildlife Sanctuary, Trivandrum district, Kerala". *J. Econ. Taxon. Bot.* 22: 609–615.
Abstract:- A major impediment in documenting forest vegetation in the country has been the lack of any quantitative information. Forest vegetation has been largely described on the basis of qualitative criteria such as, the physiognomy and species dominance (Malhotra & Hajra, 1977). A plot size of 0.1 ha was laid out in forests of 2.1 ha area. Among the 9 forest types, a total of 151 tree species, spread over 52 families were recorded. The species richness, diversity and evenness of the tree species of Peppara Wildlife Sanctuary were assessed by stratified random sampling through census quadrate method.

1328. **Varghese, A.O. & Menon, A.R.R. 1998.** "An interpretation key using aerial photographs for the land cover mapping of the forests of Kerala". *Indian J. Forest.* 21: 27–30.
Abstract:- The inventory and monitoring of forest resources have become increasingly important in recent years. The process has been accelerated with the introduction of photointerpretation techniques in the forestry sector. Because of the different bioclimatic and geographic conditions prevailing in the Western Ghats, the vegetation exhibits highly heterogenous nature and it is very difficult to distinguish the forest types. Very little work has been done in the field of cover type classification of Western Ghats region, Kerala using remote sensing techniques. A broad classification of the forest types, like evergreen, moist deciduous, etc. was adopted in the earlier works of this region. In the present paper an interpretation key is developed successfully for the identification of climatic climax forests with their seral and edaphic types.

1329. **Varghese, A.O. & Menon, A.R.R. 1998.** "Vegetation characteristics of southern secondary

moist mixed deciduous forests of Agasthyamalai region of Kerala". *Indian J. Forest.* 21: 337–344.

Abstract:- Vegetation characteristics of southern secondary moist mixed deciduous forest in the Agasthyamalai part of Kerala was assessed by random sampling through census quadrate method. Twelve localities were selected from Peppara Wildlife Sanctuary, Neyyar Wildlife Sanctuary and Agasthyavanam Biological Park; 0.1 ha area was sampled from each locality totaling 1.2 ha. A total of 694 individuals (<15 cm GBH) belonging to 49 species and spreading over 29 families were recorded. Stand density, species density and basal area were 535 trees/ha, 12 species per 0.1 ha and 26.57/ha respectively. Plant diversity shows species richness of 2.81, concentration of dominance of 0.15, diversity 1.89 and evenness 0.73. The dominant association of this study area is *Terminalia paniculata, Pterocarpus marsupium* and *Careya arborea*. Among the three protected areas studied, Peppara W.L.S. shows comparatively higher stand density, basal area cover, species richness, diversity and evenness but compared to other regions of the Western Ghats, the Agasthyamalai part shows lower values for basal area, species diversity and evenness.

1330. **Varghese, M.C., Sunilkumar, T. & Antony, V.T. 2011.** "Ethnobotanical investigations among the Ulladan tribes of Alappuzha district in Kerala state, India". *J. Econ. Taxon. Bot.* 35: 449–454.

Abstract:- This paper reports traditional uses of 57 plants used by Ulladan tribes of Alappuzha district of Kerala. Alappuzha district is a sandy strip of land intercepted by lagoons, rivers and canals. There are neither mountains nor hills in Alappuzha, except some scattered hillocks lying between Bharanikkavu and Chengannur blocks in the eastern portion of the district. The only tribal group inhabiting in this district is Ulladans. The study revealed that most of the species of flowering plants are used to cure ailments. Among the plants used, 17 are trees (29.8%), 14 are shrubs (24.5%), 18 are herbs (31.5%) and 8 are climbers (15.2%) (Figure– 1). Analysis of the plant parts used by the tribes shows that leaves are most widely used parts, followed by fruits/flowers, roots, whole plant, stem, bark and tubers/rhizomes. A single disease can be cured with more than one plant and a single plant can cure more than one disease.

1331. **Varghese, T.G. 1979.** "Record of *Hyptis capitata* Jacq. (Labiatae) from Peninsular India". *J. Bombay Nat. Hist. Soc.* 76: 200.

Abstract:- *Hyptis capitata* Jacq. has been recorded for the first time for Peninsular India from Kottayam. Earlier it was recorded from Lower Bengal and Andaman Islands.

1332. **Variar, P.R. 1985.** "The Ayurvedic heritage of Kerala". *Ancient Sci. Life* 5: 54–64.

Abstract:- Ayurveda has a long history of being enriched by different types of contributions

from different stages befitting their geographical, climatic and cultural situations, and based on their thinking and living patterns, especially the practical aspects. Kerala has its own great role in this process of enrichment. It is unique and invaluable. The historical aspects, the literary contributions by Kerala to the Ayurvedic system, the traditional and special treatments of Kerala, etc., are discussed in this paper.

1333. **Velayudhan, K.C. & Amalraj, V.A. 1992.** "*Piper pseudonigrum* – A new species from Western Ghats". *J. Econ. Taxon. Bot.* 16: 247–250.

Abstract:- A new hitherto undescribed species of genus *Piper* initially collected from Silent Valley and later from other areas has been recorded. Though it is related to *P. nigrum* it is quite different in many aspects.

1334. **Velayudhan, K.C., Amalraj, V.A., Abraham, Z. & Asha, K.I. 2003.** "Six new cultivars of *Curcuma longa* L. (Zingiberaceae) from India". *Rheedea* 13: 63–69.

Abstract:- Six cultivars of *Curcuma longa* L. (Zingiberaceae) – the typical 'Alleppey', 'Bilaspur'. 'Kasturi', 'PCT13', 'Kattumanjal' and 'Himachal'- are recognized based on 568 indigenous germplasm collections from different agroclimatic regions of India. All the cultivars are described and floral parts are illustrated in detail except 'Himachal' for which flowers were not available. Based on subjective techniques, 21 morphotypic groups were identified. Sixty four descriptor status were observed and coefficient of correlation was worked out. Inter and intra group CEC values were used to substantiate six major subjective groups among the morphotypes.

1335. **Velayudhan, K.C., Amalraj, V.A. & Muralidharan, V.K. 1988.** A note on 'viviparous' germination of bulbils in greater yam (*Dioscorea alata* L.)". *J. Econ. Taxon. Bot.* 12: 235–236.

Abstract:- Viviparous germination of bulbils in greater yam, *Dioscorea alata* L., has been observed in collections from Kerala and Tamil Nadu.

1336. **Velayudhan, K.C., Amalraj, V.A. & Muralidharan, V.K. 1990.** "*Curcuma malabarica* (Zingiberaceae) – A new species from West coast of South India". *J. Econ. Taxon. Bot.* 14: 189–191.

Abstract:- A new species of *Curcuma*, viz., *Curcuma malabarica* allied to *C. caesia* Roxb. has been described from Pavaratty, Trichur district, Kerala.

1337. **Velayudhan, K.C., Amalraj, V.A. & Muralidharan, V.K. 1991.** "A note on *Curcuma cannanorensis* as a distinct species". *J. Econ. Taxon. Bot.* 15: 437–438.

Abstract:- In the present paper *Curcuma cannanorensis* is treated as a distinct species which is conspecific to *C. oligantha*. Live specimens of *C. cannanorensis* is maintained at Vellanikkara, NBPGR, Trichur.

1338. **Velayudhan, K.C., Unnikrishnan, M., Asha, K.I. & Nair, C.M. 2009.** "A note on the finger bearing species of the genus *Curcuma* L. of Western Ghats and the report of a new taxon *Curcuma amada* Roxb. var. *glabra* from Kerala, India". *J. Econ. Taxon. Bot.* 33: 162–171.

Abstract:- The paper deals with listing of various *Curcuma* spp. (Sect. Tuberosa) bearing sessile tubers occurring in Western Ghats of India as per the existing taxonomic information on the genus and the report of a new taxon, namely *Curcuma amada* Roxb. var. *glabra*. Its distribution and comparative performance with *C. amada* accessions in a separate field trial at Vellanikkara are also furnished.

1339. **Venu, P. & Daniel, P. 2003.** "What is *Kanjarum palghatense* Ramam. (Acanthaceae)?". *Bull. Bot. Surv. India* 45: 97–104.

Abstract:- The long established *Kanjarum palghatense* Ramam. is now proved that it is nothing but the less known *Strobilanthes dupeni* Bedd. ex C.B. Clarke. It is described, illustrated and its critical status reviewed.

1340. **Vidyasagaran, K. & Anilkumar, K.K. 2011.** "Structural analysis of forest ecosystems of Attappady, Kerala". *Indian J. Forest.* 34: 439–446.

Abstract:- The present study was envisaged to conduct a quantitative analysis of various ecosystems of Attappady, Kerala to document plant diversity and structural parameters. Floristic composition and structural features of evergreen forests revealed that the occurrence of a total 42 species belonged to 25 families. Euphorbiaceae are represented by maximum genera (6 species). Importance Value Index (IVI) recorded was maximum for *Cullenia exarillata,* which is the most dominant species of this evergreen community. This forest is identified as the only natural habitat from which *Vateria macrocarpa*, the rare endemic tree of Western Ghats is recorded. Structural analysis of moist deciduous forests revealed a total 36 species belonging to 24 families. *Wrightia tinctoria* was the most dominant species in this community, as it constituted highest IVI. Other dominant species in this community were *Terminalia bellirica* and *Grewia tiliifolia*. Taxonomic inventory of dry deciduous forests revealed the occurrence of a total 27 tree species belonging to 18 families. Euphorbiaceae represented maximum genera of 4 species. Structural analysis showed that though the density was reported maximum for *Albizia amara,* the species with highest basal area (*Givotia moluccana*) represented the maximum IVI. The canopy levels of the forests were relatively few with predominance of *Albizia amara* and *Cassine albens*. Plant diversity of these forest ecosystems indicated that the evergreen forests had highest diversity as indicated by maximum value for Shannon Weiner Index and Simpson's Index followed by moist deciduous forests. Dry deciduous forests

registered lowest values for all diversity indices.

1341. **Vijaya Sankar, R., Ravikumar, K. & Babu, G.N.M. 2006.** "A new species of *Eriocaulon* L. (Eriocaulaceae) from Anamalai Hills of Kerala, India". *Rheedea* 16: 59–61.

Abstract:- *Eriocaulon devendranii*, a new species in Eriocaulaceae, is described and illustrated from Anamalai in the Western Ghats of Kerala. This species is allied to *E. xeranthemum* Mart. found almost throughout India, Nepal and Myanmar but differs in having spathes nearly equaling the peduncles, involucral bracts with multifid apices, obtuse floral bracts and obtuse male perianth lobes.

1342. **Vijaya Sankar, R., Ravikumar, K., Babu, G.N.M. & Ved, D.K. 2007.** "Botany of Anapady MPCA, Palghat district, Kerala with special emphasis on species of conservation concern". *Bull. Bot. Surv. India* 49: 165–172.

Abstract:- Detailed botanical survey was carried out in Anapady Medicinal Plant Conservation Area (MPCA) during November 2003 which resulted in the documentation of 442 taxa of flowering plants including several endemic and threatened ones. Screening of literature showed that 58 taxa are additions to the flora of Palghat district. Of these, *Desmodium zonatum* Miq., *Digitaria tomentosa* (Koenig ex Willd.) Henrard and *Peperomia pseuso-rhombea* C. DC. form new reports to the state of Kerala; 34 of these taxa belong to the category of Red Listed medicinal plant species.

1343. **Vijayakumar, K. & Abraham, T.K. 2001.** "Mycorrhizal association of two endemic trees of Western Ghats: *Gluta travancorica* and *Myristica malabarica*". *Indian J. Forest.* 24: 301–304.

Abstract:- Arbuscular mycorrhizal colonization and spore density of the two endemic plant growing in the natural forests of Agastyamalai, Kerala were determined. Variation in spore number and colonization rate were observed in both the plants. The most frequent fungi present in the rhizosphere were also different. The AM colonization and sporulation were influenced by pH and phosphorus content of the soil.

1344. **Vijayan, A., Liju, V.B., John, R., Parthipan, B. & Renuka, C. 2007.** "Traditional remedies of *Kani* tribes of Kottoor forest, Agasthyavanam, Thiruvananthapuram, Kerala". *Indian J. Traditional Knowledge* 6: 589–594.

Abstract:- *Agasthya Vanam* is known for its floral diversity and is a part of Western Ghats. Kottoor reserve forest is a rich source for medicinal plants that has long been utilized by the people, and hence this region is remarkable for rich medicinal folk knowledge. The paper provides information on about 50 plant species used by the *Kani* tribes to treat 39 ailments. In addition to the scientific names, vernacular names, family, habit, procedure for preparation of medicine, dosage and dietary control are given.

1345. **Vijayan, A.S., Gopakumar, S. & Ashraf, K. 2012.** "Dendrobotany and woody plant diversity of home gardens of Cherpu block, Kerala state, India". *J. Non-Timber Forest Products* 19: 239–244.

Abstract:- A survey was conducted in the home gardens of Cherpu block in Thrissur district of Kerala state to elucidate the floristic attributes of the wood perennials and to document the associated dendrobotanical information. Plant diversity analysis revealed 81 tree species in different families with a Simpson's Index of diversity of 0.91. The collected dendrobotanical information confirms the role and value of trees in providing multiple ecosystem services to the society.

1346. **Viji, A.R., Suja, J.S., Shaju, T., Pandurangan, A.G. & Kumar, E.S.S. 2010.** "Rediscovery of a forgotten sedge *Rhynchospora submarginata* Kuek. (Cyperaceae) from Kerala, India". *Indian J. Forest.* 33: 285–288.

Abstract:- A rare sedge, *Rhynochospora submarginata* Kuek., thought to be extinct from India, was rediscovered recently from the coastal belt of Kollam district in Kerala. It was last seen by Robert Wight from Kollam during 1868 and then it was never collected again from the political boundary of Indian subcontinent. Its rediscovery is of great scientific interest especially as it shows disjunct distribution by occurring in Malaysia, Thailand and Australia apart from India.

1347. **Vikraman, R.R., Pandurangan, A.G. & Thulasidas, G. 2008.** "A study on the garden escaped exotics of Thiruvananthapuram district, Kerala". *J. Econ. Taxon. Bot.* 32: 765–782.

Abstract:- One of the major ways of exotic plant entry in to the flora of a region is escape from the ornamental gardens. The garden escaped exotic species may establish along with the natural flora or even subdue the latter and lead to the degeneration of indigenous species. Mostly such escapes are from established cities and towns with many public and private gardens. Thiruvananthapuram being the capital city of the erstwhile kingdom of Travancore as well as the present Kerala state, chances of exotic plant introduction and escapes are relatively high. This paper documents such exotic ornamental plants that have spread beyond cultivation, affecting the indigenous flora in their different levels of distribution in Thiruvananthapuram district.

1348. **Vinayak, M., Kumar, M.G.S., Harinarayanan, M.K., Suresh, K.C. & Sankar, S. 1996.** "*Nageia wallichiana* a rare tree species in Kerala forests". *Evergreen* 37: 5.

Abstract:- A rare tree species, *Nageia wallichiana*, has been reported from Goodrickal Forest Range (Ranni Forest Division) of Kerala.

1349. **Viswanathan, M.B. & Lakshmanan, K.K. 1990.** "*Rostellularia latispica* (C.B. Clarke)

Bremek. (Acanthaceae) – A new record to the *Eastern Ghats* in Peninsular India". In: Higher Plants of Indian Subcontinent Vol. 2: 13–16. *Indian J. Forest., Addit. Ser.* 5. Bishen Singh Mahendra Pal Singh.

Abstract:- *Rostellularia latispica* (C.B. Clarke) Bremek. (Acanthaceae) is recorded for the first time for India from Tamil Nadu and Kerala.

1350. **Viswanathan, M.B. & Rajendran, A. 1993.** "*Memecylon rivulare* Bremer (Melastomataceae) – An addition to the Indian flora". *Bull. Bot. Surv. India* 35: 124–126.

Abstract:- *Memecylon rivulare* Bremer is reported for the first time for Indian flora from Karnataka (Bangalore), Kerala (Kasaragod) and Tamil Nadu (Courtallum). Earlier this species was known to occur in Sri Lanka.

1351. **Vivek, C.P., Swapna, M.M. & Suresh, K.K. 2010.** "*Eriocaulon wayanadense* (Eriocaulaceae), a new species from Kerala, India". *Rheedea* 20: 25–27.

Abstract:- *Eriocaulon wayanadense* Vivek, Swapna *et* K.K. Suresh, a new species from Wayanad district, Kerala is described and illustrated. The species is allied to *E. elenorae* Fyson, but differs by the transversely elongated seed coat cells, presence of setiform appendages on seeds and in having a black gland on each female petal.

1352. **Vivekananthan, K. 1968.** "Notes on the occurrence of *Clerodendrum paniculatum* Linn. and *Trias stocksii* Benth. ex Hook.f. in South India". *Bull. Bot. Surv. India* 10: 240–241.

Abstract:- *Clerodendrum paniculatum* L. and *Trias stocksii* Benth. ex Hook.f. have been reported for the first time for South India from Peermade hills, Kottayam district, Kerala. *Clerodendrum paniculatum* was earlier known to occur in Andaman & Nicobar Islands, Burma, China, Cochin China, Java, Formosa, Malaya and Siam and *T. stocksii* was earlier known to occur in Konkan and Canara.

1353. **Vivekananthan, K. 1981.** "Floristic studies in Idukki district, Kerala". *Bull. Bot. Surv. India* 23: 100–104.

Abstract:- A total of 1500 species of plants have been recorded from Idukki district of Kerala.

1354. **Vivekananthan, K., Gopalan, R. & Ansari, R. 1983.** "A new species of *Gomphostemma* (Labiatae) from Kerala, India". *Kew Bull.* 38: 189–190.

Abstract:- *Gomphostemma keralensis*, a new species from Kerala, South India allied to *G. parviflorum* Wall. ex Benth. is described.

1355. **Vrinda, K.B. & Leelavathy, K.M. 1996.** "New records of *Agaricus* from India". *J. Econ. Taxon. Bot.* 20: 345–349.

Abstract:- Four species of the genus *Agaricus* L., viz., *A. annae* Pilat, *A. carminescens* Heinem. & Gooss., *A. hemilasius* Berk. & Br. and *A. parasilvaticus* Heinem. are described

and illustrated based on collections from Calicut University Campus, Kerala. All of them are new records for India.

1356. **Vrinda, K.B., Pradeep, C.K. & Abraham, T.K. 1997.** "Some *Inocybes* new to India". *J. Econ. Taxon. Bot.* 21: 41–45.
Abstract:- Four species of the genus *Inocybe* (Fr.) Fr., viz., *I. acuta* Boud., *I. ionides* Corner & Horak, *I. lasseri* Dennis and *I. umbrina* Massee collected from Western Ghats of Kerala are reported. Full description are offered and all of them are new records for India.

1357. **Vrinda, K.B., Pradeep, C.K., Pradeep, N.S. & Abraham, T.K. 1995.** "New records of *Hygrocybe* from India". *J. Econ. Taxon. Bot.* 19: 576–584.
Abstract:- Eight species of *Hygrocybe* (Fr.) Kummer, are reported and described for the first time for India from Western Ghats of Kerala.

1358. **Vrinda, K.B., Pradeep, C.K., Pradeep, N.S. & Abraham, T.K. 1997.** "Agaricales from Western Ghats – II". *Indian J. Forest.* 20: 314–318.
Abstract:- Four species of *Agaricus*, viz., *A. nivescens* (F.H. Moller) F.H. Moller, *Amanita angustilamellata* (Hoehnel) Boedijin, *A. aureofloccosa* Bas and *Tricholoma titans* Bigelow & Kimbrough are recorded and described for the first time for India from Kerala.

1359. **Vrinda, S.L. & Panikkar, M.V.N. 1999.** "The genus *Rhopalephora* Hassk. with reference to India flora". *J. Econ. Taxon. Bot.* 23: 683–686.
Abstract:- The genus *Rhopalephora* is represented by *R. scaberrima* (= *Aneilema scaberrimum*) from India. The present study shows the existence of two taxa in this genus from Kerala. A new combination, viz., *R. scaberrima* (Bl.) Faden var. *fruticosa* (Hooker) Vrinda & Panikkar is proposed for the other taxon on varietal level.

1360. **Vrinda, S.L. & Panikkar, M.V.N. 1999.** "A taxonomic note on the much confused *Murdannia semiteres* (Dalz.) Santapau and *M. juncoides* (Wt.) Rolla *et* Kammathy". *J. Econ. Taxon. Bot.* 23: 687–690.
Abstract:- Investigation on the morphological aspects of the two species, *Murdannia juncoides* and *M. semiteres* has been carried out and they are found to be distinct. The former is from Courtallum, Tamil Nadu and the latter from Alappuzha, Kerala.

1361. **Wadhwa, B.M. & Chowdhery, H.J. 1990.** "A new species of *Peucedanum* L. (Apiaceae) from Southern India". *Indian J. Forest.* 13: 78–79.
Abstract:- A new species, viz., *Peucedanum josephianum* Wadhwa & Chowdhery allied to *P. japonicum* Thunb. has been described from Agastyamalai, Kerala.

1362. **Yesodharan, K. & Sujana, K.A. 2006.** "Ethnomedicinal plants used by the tribals of Parambikulam Wildlife Sanctuary, Kerala to cure cuts and wounds". *J. Econ. Taxon. Bot.* 30(Suppl.): 365–369.

Abstract:- The study has been carried out in Parambikulam Wildlife Sanctuary, Western Ghats, Kerala. Dominant tribal groups of this region are Kadar, Malasar, Mamalasar and Muthuvas. This study has been carried out to bring to light the wild plants used by the tribal of this sanctuary as remedy for cuts and wounds. The paper deals with 28 species of plants found in the region. The plants have been enumerated in the alphabetical order of scientific names, followed by plant parts used, methods of administration.

1363. **Yesodharan, K. & Sujana, K.A. 2007.** "Status of ethnomedicinal plants in the Parambikulam Wildlife Sanctuary, Kerala, South India". *Ann. Forest.* 15: 322–334.

Abstract:- Parambikulam Wildlife Sanctuary is characterized by a rich diversity of ethnomedicinal plants and a rich heritage of traditional medicine practices. The present study showed that 139 species of plants belonging to 51 different families were used in tribal medicine of this region. However, 27 per cent of medicinal plants of this region are under different categories of threat. Therefore conservation of important medicinal plants of this region is utmost necessity.

1364. **Yesodharan, K. & Sujana, K.A. 2007.** "Ethnomedicinal knowledge among *Malamalasar* tribe of Parambikulam Wildlife Sanctuary, Kerala". *Indian J. Traditional Knowledge* 6: 481–485.

Abstract:- The paper examines traditional uses of some plants used by the *Malamalasar* tribe of Parambikulam Wildlife Sanctuary in Palakkad district of Kerala state. Forests have provided tribals with enough material for use in the traditional medicine. During the survey of the tribal colonies, data on 80 medicinal plant species used to cure common ailments were collected. Of which, 10 species were found to be used for healing and wounds, 4 species for cold and cough, 4 species for treating snakebite, 4 species for headache, 4 species to control dysentery, 3 species for jaundice, etc. Details of the study have been discussed.

1365. **Yesodharan, K. & Sujana, K.A. 2007.** "Wild edible plants traditionally used by the tribes in the Parambikulam Wildlife Sanctuary, Kerala, India". *Natural Product Radiance* 6: 74–80.

Abstract:- This paper reports an ethnobotanical investigation performed during 2003 and 2005 to collect, identify and document information on the wild food plants traditionally used by the tribes in the Parambikulam Wildlife Sanctuary in Palakkad district of Kerala state, India. Eightythree species are used by the tribes as vegetables, wild fruits, beverages or in other preparations. Wild vegetables formed the largest group which included roots, tubers, young leaves and buds, inflorescences, unripe/ripe fruits and seeds. Analysis of the information revealed that out of 83 species, 82 belong to Angiosperms (63 dicot and

19 monocot) and one species belongs to Gymnosperms. Among them 30 species are used as leafy vegetables, 31 species for fruits, 16 species for seeds and 10 species as food in the form of rhizomes/tubers/corms and 6 species as food from stem/shoot. *Amaranthus spinosus* Linn., *Centella asiatica* (Linn.) Urban, *Euphorbia hirta* Linn., *Oxalis corniculata* Linn. and *Mollugo pentaphylla* Linn. are used by tribals more extensively. Among the wild fruits, consumption of jackfruit and mango are more common. *Vigna vexillata* (A. Rich.) Linn. and *Ensete superbum* (Roxb.) Cheesm. are used for suppressing hunger. Many wild food plants are also used for medicinal purposes, e.g. *Amorphophallus paeoniifolius* (Dennst.) Nicol., *Boerhaavia chinensis* (Linn.) Asch. & Schweinf. and *Ensete superbum*.

1366. **Yesodharan, K. & Sujana, K.A. 2009.** "Ethnobotanical plants used by the primitive tribe Kadar of Parambikulam Wildlife Sanctuary, Southern Western Ghats, Kerala". *J. Econ. Taxon. Bot.* 33: 148–154.

Abstract:- The present paper deals with the plants used by the Kadar tribe of Parambikulam Wildlife Sanctuary of Palakkad district in Kerala. The authors gathered the data during their field trips. The article includes wild plants used for food, medicine, construction of houses, etc. For each species scientific name, local name and uses are given. Altogether 67 species are enumerated. Among them, *Asparagus racemosus, Canarium strictum, Coscinium fenestratum* and *Dendrocalamus strictus* are used widely in the sanctuary.

1367. **Yesodharan, K. & Sujana, K.A. 2009.** "Ethnomedicinal plants used by the tribals of Parambikulam Wildlife Sanctuary in Palakkad district, Kerala state, India". *J. Econ. Taxon. Bot.* 33(Suppl.): 5–18.

Abstract:- The paper reports 102 plants medicinally used traditionally by the tribals of Parambikulam Wildlife Sanctuary in Palakkad district of Kerala state. The study was conducted during the period 2003 to 2006. The Parambikulam Wildlife Sanctuary is the home of four tribal communities, viz., Kadars, Malasars, Malamalasars and Muduvans. Data were collected by Participatory Rural Appraisal, questionnaire survey and interview with elder people. During the study, data on 102 plants used to cure common ailments were collected. Among them, 10 species are used for cuts and wound healing, 13 species for cough and cold, 4 species for treating snake-bite, 4 species for head-ache, 7 species used to control dysentery, 3 species for jaundice, etc. Besides botanical identity of the plants, local names, application and administration of medicines are communicated in this paper.

1368. **Yesodharan, K., Padmanabhan, P. & Cini, N.U. 2011.** "Wild food traditionally used by the indigenous people of Parambikulam Wildlife Sanctuary, Western Ghats, Kerala, India". *J. Bombay Nat. Hist. Soc.* 108: 41–46.

Abstract:-This paper attempts an ethnobiological investigation, performed during 2003 to 2006, to collect, identify and document information on wild food traditionally used by the indigenous people of the Parambikulam Wildlife Sanctuary in Palakkad district of Kerala, India. During the investigation, 83 species of plants were found to be used by the tribes as vegetables, wild fruits, beverages and in other preparations. Vegetables formed the largest group which included roots, tubers, young leaves and buds, inflorescence, ripe/unripe fruits and seeds. Among fauna, 34 species of mammals, 65 of fishes, 3 of reptiles, 5 of frogs and toads, 10 of birds and 5 of insects were recorded to be used as food by tribals of the sanctuary. Besides meat, other products like honey, larvae of honey bees, eggs of crocodile and birds are consumed by the tribals. A paste of Red Ants, *Oecophylla amaragdina* is eaten as a condiment with curry. The tongue of *Varanus* and meat of fruit bat is used to treat chronic asthma. Many food plants in the wild are also used for medicinal purposes such as *Amorphophallus paeoniifolius* (Dennst.) Nicol., *Boerhavia chinensis* (L.) Rottb. and *Ensete superba*, which serve both as food and medicine. There is much scope for improving the quality of food resources in the wild by using modern agronomic research, experimental, cytogenetical and molecular studies.

1369. **Zachariah, P.K. 1991.** Rare, endangered, endemic tree species of Shendurni Valley. In: Karunakaran, C.K. (Ed.), *The proceedings of the symposium on rare, endangered and endemic plants of the Western Ghats*. Kerala Forest Department, Thiruvananthapuram. pp. 123–127.

Abstract:- Nineteen rare, endangered and endemic tree species have been recorded from Shendurni Valley.

ABBREVIATION OF JOURNALS

[The journals titles have been standarised following Botanico-Periodicum-Huntianum (1968), BPH Supplementum I (1991) & BPH Supplementum II (2004). The journals which are not in BPH (1968, 1991, 2004) have been abbreviated as given in the journals]

Acta Bot. Indica	:	Acta botanica Indica. Meerut
Advances Pl. Sci.	:	Advances in plant sciences; an international journals of plant research. Muzaffarnagar.
Amer. Orchid Soc. Bull.	:	American Orchid Society bulletin
Ancient Sci. Life	:	Ancient Science Life
Ann. Forest.	:	Annals of Forestry
Aquatic Bot.	:	Aquatic botany
Bioinfolet	:	Bioinfolet
Blumea	:	Blumea
Bot. Bull. Acad. Sin.	:	Botanical bulletin of Academia Sinica
Bot. J. Linn. Soc.	:	Botanical journal of the Linnean Society. London.
Bot. Not.	:	Botaniska notiser
Bull. Bot. Surv. India	:	Bulletin of the Botanical Survey of India (up to Vol. 50, 2008)
Bull. Jard. Not. Natl. Belg.	:	Bulletin du Jardin Botanique National de Belgique
Bull. Med.-Ethno-Bot. Res.	:	Bulletin of medico-ethno-botanical research
Bull. Misc. Inform. Kew	:	Bulletin of miscellaneous information, Royal Gardens, Kew
Bull. Mus. Natl. Hist. Nat., B, Adansonia	:	Bulletin du Muséum National d'Histoire Naturelle. Section B, Adansonia
Candollea	:	Candollea
Curr. Sci.	:	Current Science
Edinburgh J. Bot.	:	Edinburgh journal of Botany
Environm. Conservation	:	Environmental Conservation
Ethnobotany	:	Ethnobotany
Evergreen	:	Evergreen

Gard. Bull. Singapore	:	Gardens' bulletin Singapore
Geobios (Jodhpur)	:	Geobios; an international (bimonthly) journal of the life sciences. Jodhpur.
Geobios, New Rep.	:	Geobios, New Reports
Indian Fern J.	:	Indian Fern Journal
Indian Forester	:	The Indian Forester
Indian J. Bot.	:	Indian journal of botany; half-yearly journal of research. Hyderabad
Indian J. Bot. Res.	:	Indian journal of botanical research
Indian J. Forest.	:	Indian Journal of Forestry
Indian J. Forest., Addit. Ser.	:	Indian Journal of Forestry, Additional Series
Indian J. Nat. Prod. & Resources	:	Indian journal of Natural Products & Resources
Indian J. Traditional Knowledge	:	Indian Journal of Traditional Knowledge
Int. J. Pl. Animal & Environm. Sci.	:	International journal of Plant, Animal & Environmental Sciences
J. Bombay Nat. Hist. Soc.	:	Journal of the Bombay Natural History Society
J. Bot. Res. Inst. Texas	:	Journal of botanical research institute Texas
J. Econ. Taxon. Bot.	:	Journal of Economic and Taxonomic Botany
J. Econ. Taxon. Bot., Addit. Ser.	:	Journal of Economic and Taxonomic Botany. Additional Series
J. Environm. Resources	:	Journal of Environmental Resources
J. Indian Bot. Soc.	:	The Journal of the Indian Botanical Society
J. Non-Timber Forest Products	:	Journal of Non-timber Forest Products
J. Orchid Soc. India	:	Journal of the Orchid Society of India
J. Swamy Bot. Club	:	Journal of the Swamy Botanical Club
J. Threatened Taxa	:	Journal of Threatened Taxa
Kew Bull.	:	Kew Bulletin
Natural Product Radiance	:	Natural Product Radiance
Nelumbo	:	Nelumbo (Bull. Bot. Surv. India renamed from Vol. 51, 2009)
New Botanist, Int. Quart. J. Pl. Sci. Res.	:	New Botanist; an international quarterly journal of plant science research

Nordic J. Bot.	:	Nordic journal of botany
Notes Roy. Bot. Gard. Edinburgh	:	Notes from the Royal Botanic Garden, Edinburgh
Novon	:	Novon
Orchid Rev.	:	The Orchid Review
Phytotaxa	:	Phytotaxa
Phytotaxonomy	:	Phytotaxonomy
Pl. Syst. Evol.	:	Plant systematic and evolution
Proc. Indian Acad. Sci.	:	Proceedings of the Indian Academy of Sciences
Proc. Indian Acad. Sci., Pl. Sci.	:	Proceedings, Indian Academy of Science, Plant Sciences
Proc. Natl. Acad. Sci. India	:	Proceedings of the National Academy of Sciences of India
Regnum Veg.	:	Regnum Vegetabile
Reinwardtia	:	Reinwardtia
Rheedea	:	Rheedea
Rubber Board Bull.	:	Rubber board bulletin
Sci. & Cult.	:	Science and Culture
Sida	:	Sida; contributions to botany. Dallas.
Taiwania	:	Taiwania
Taxon	:	Taxon
Tropical Bryology Research Reports	:	Tropical Bryology Research Reports
Trop. Pl. Sci. Res.	:	Tropical Plant science research
Willdenowia	:	Willdenowia
ZOO'S PRINT	:	ZOO'S PRINT

AUTHOR INDEX WITH ABSTRACT NUMBER IN PARENTHESIS

Bauhinia phoenicea Wight & Arn.

Desmos viridiflorus (Bedd.) Saff.

Ilex gardneriana Wight

Bulbophyllum fischeri Seidenf.

Shola-grassland complex

Impatiens parasitica Bedd.

Nothopegia aureofulva Bedd. ex Hook.f.

Pimpinella pulneyensis Gamble