

BIO-DATA

Dr E. S. SANTHOSH KUMAR

Technical Officer

Jawaharlal Nehru Tropical Botanic Garden and Research Institute, Palode,

Thiruvananthapuram Kerala-695562. India.

Ph: +91 8547825373.

Residence:

Sruthy-Keerthana, Vattappara P.O.,

Vattappara Kerala- 695028 India.

Mob: +918547825373

E mail: santhoshkumares@gmail.com

www.drsanthosh.wikifoundry.com

SKILLS AND AREAS OF EXPERTISE

-
- ❖ Systematic botany
 - ❖ Plant identification and nomenclature
 - ❖ Floristic surveys
 - ❖ Herbarium Management
 - ❖ Live Plants ex-situ conservation
 - ❖ Garden Pest Management
 - ❖ Plant Nursery Management

EDUCATIONAL QUALIFICATIONS :

Exams passed	Name of University	Year of passing	Subjects	Division	Percentage of marks obtained
B. Sc.	Mahatma Gandhi University, Kottayam	1991	Botany (main) Chemistry and Zoology (Sub)	I	68.2%
M.Sc (By Research)	University of Mumbai	2000	Botany: Floristic study	NA	NA
Ph D	University of Mumbai	2003	Botany: Floristic study	NA	NA

RESEARCH EXPERIENCE

I had my Ph.D. from University of Mumbai in 2003 and presently working as a Technical Officer in the Garden Management Division of JNTBGRI. I am the Fellow of the Linnaean Society (FLS), Fellow and Life member of the Indian Association of Angiosperm Taxonomy (FIAT), Fellow and Life member, Association for the Advancement of Biodiversity Science (FABSc.), and an active member of half a dozen of professional bodies.

More than 30 years of research experience in floristic study, plant taxonomy, botanical nomenclature, ex-situ conservation of wild plants genetic resources, etc. . I have published 2 books, 185 research papers in peer-reviewed national and international journals, described 35 species as new to science and rediscovered 30 species, 5 new combinations proposed, 9 taxa reported for the first time for India, 3 taxa recorded for the first time for south India and 16 taxa as an addition to Kerala. Also having 5 years of experience as an Estate Manager in the British Aerospace Head Quarters, Kingdom of Saudi Arabia, in maintaining the large English style gardens, pest control, irrigation systems, waste management, etc. I have been actively conducting systematic research on various plant groups such as: *Acrotrema*, *Biophytum*, *Begonia*, *Biophytum*, *Cinnamomum*, *Eugenia*, *Jasminum*, *Ophiorrhiza*, *Syzygium* and *Thottea* of the Western Ghats. Establishment of a Systematic Garden at JNTBGRI is the highlight of my career. This garden serves as a ‘botanical buffet’ for the students and researchers for learning Plant Taxonomy.

PROFESSIONAL MEMBERSHIPS

Fellow of the Linnaean Society, London (FLS) (2007+)

Fellow (FIAT) and Life Member, Indian Association of Angiosperm Taxonomy (IAAT) (2006+)

Fellow (FABSc) and Life member, Association for the Advancement of Biodiversity Science, Bangalore (2013+)

Member, IUCN SSC Western Ghats Plant Specialist Group, India (2021+)

Life Member, Kerala Academy of Sciences, Kerala. (2014 +)

Associated member : Botanical Society of America (2007-2009)

Member, American Society of Plant Taxonomists (ASPT) (2007-2008)

Member, International Association of Angiosperm Taxonomy (2008-2009)

Member, Gene Pool Conservation Area team, Kerala Forest Department (2007-2009)

Member, World Taxonomist Database (www.eti.uva.nl/Database).

Member, BioNET International, UK.

Research Guide, University of Kerala, Thiruvananthapuram.(2014 +)

Garden Editor for JNTBGRI, Botanical Garden Conservation International, UK.

RESEARCH PROJECTS UNDERTAKEN

I have undertaken the following projects as Principal Investigator/Co-investigator. The detailed work carried out in each projects are mentioned below:-

1. Floristic study on the evergreen forests of Kalakkadu Mundanthurai Tiger Reserve (KMTR), Tamil Nadu. August 1998-August 1999, funded by Wildlife Institute of India, Dehra Dun. (Co-Investigator).
2. Development of a Systematic Garden of herbal plants- funded by Kerala State Science, Technology and Environment (KSCSTE), Govt. of Kerala. 2005-2006; 2009-2012; 2014- still continuing. (Principal Invesigator)
3. Development of a national collection of medicinal plants- funded by Kerala State Science, Technology and Environment, Govt. of Kerala. 2005-2006. (Co-Investigator).
4. Variability studies on medicinal plants-funded by Kerala State Science, Technology and Environment, Govt. of Kerala. 2005-2006. (Co-Investigator).
5. Systematic study of Piper-funded by Kerala Forest Department, Govt. of Kerala. (Co-Investigator) 2010-2012.
6. Setting up a garbage Plant for Conversion of garden waste to useful waste and an alternate medium for potting and planting. Funded by NABARD, Thiruvananthapuram. 2011-2012 (Co-Investigator).
7. Preparation of a bilingual field guide for the identification of fruits and seeds of medicinal plants and their seedlings in Kerala. Funded by Kerala Forest Department, Govt. of Kerala. 2011-2012. (Co-Investigator).
8. Economic and bio-geographic evaluation of the *Cinnamomum* species in India through morphological, chemical and molecular biology studies.Funded by Department of Science and Technology, Govt of India, 2012- 2018 . (Co-Investigator).
9. Conservation of endemic and critically endangered *Buchanania barberi*, funded by The Mohammed bin Zayed Species Conservation fund, Abu Dhabi, UAE. (2019-2021). PI: Dr Anurag Dhyani; Co.PIs: Dr S Bindu, Dr E S Santhosh Kumar.

ON GOING RESEARCH PROJECTS

1. Analysis of species distribution and reinforcement of two threatened trees in Kerala region of the Western Ghats for the improvement of their conservation status. PI: Dr R K Radha; Co.Investigators: Dr E S Santhosh Kumar, S.M. Shareef. Funded by KSCSTE.
2. Green Kerala Initiative funded by KSCSTE. (2022-2026) (Nodal Officer & Co.PI). Funded by KSCSTE.
3. Conservation, Eco-restoration and Popularisation of three endemic and threatened tree species of Kerala, India (2023-2024) (Co-PI). Funded by Kerala Forest Department.
4. Biotechnological interventions for defensible conservation and restoration of *Dialium travancoricum* Bourd., a Critically Endangered Endemic Tree of the Southern Western Ghats".(Co PI) Funded by SERB, DST Government of India. (2023-2026).

LIST OF SELECTED PUBLICATIONS

I BOOKS PUBLISHED

Santhosh Kumar E.S. and S.S. Yeragi 2012. *Flora of the Sacred Groves of Thiruvananthapuram district, Kerala state, India*. LAP LAMBERT Academic Publishing GmbH & Co. KG. Heinrich-Bocking Str. 6-8, Saarbrucken, Germany. pp.557. ISBN. 978-3-659-15670-0.

Pandurangan A.G, **Santhosh Kumar E.S.** and Lakhwinder Singh 2010. *Trade Regulation and Conservation of Medicinal Plants in Kerala*. Tropical Botanic Garden and Research Institute and Kerala Forest Department, Thiruvananthapuram, pp.130.

II CHAPTERS IN BOOKS

Pandurangan A.G., **Santhosh Kumar E.S.** and M.P. Geethakumary 2010. The history of botanical exploration in India, In: Pandurangan A.G. and N. Mohanan (eds.) *New Vistas in Plant Taxonomy*, Tropical Botanic Garden and Research Institute, Thiruvananthapuram, pp. 10-16.

Santhosh Kumar E.S. 2010. Introduction of Dicotyledons , In: Pandurangan A.G. and N. Mohanan (eds.) *New Vistas in Plant Taxonomy*, Tropical Botanic Garden and Research Institute, Thiruvananthapuram, pp. 78-87.

III RESEARCH PAPERS (List not exhaustive)

Akhilesh S.V.N., Gangaprasad A., Rameshkumar K.B. & **Santhosh Kumar E. S.** 2022. Taxonomy and Lectotypification of *Ophiorrhiza radicans* (Rubiaceae). *Annales Botanici Fennici* 59: 23–27.

Santhosh Kumar E.S. & Shareef S.M. 2022. *Buchanania abrahamiana* (Anacardiaceae), a new species from Kerala, India. *Annales Botanici Fennici* 59: 61–65.

Akhilesh S.V.N., Gangaprasad A., Rameshkumar K.B. & **Santhosh Kumar E. S.** 2022. *Ophiorrhiza sasidharaniana* (Rubiaceae), a new species from the Southern Western Ghats, Kerala, India. *Annales Botanici Fennici* 59: 149–152.

Santhosh Kumar E.S., Shailajakumari S. & Shareef S.M. 2021. *Madhuca balakrishnanii* (Sapotaceae), a new species from Kerala, India. *Phytotaxa* 510 (1): 78-82.

Santhosh Kumar E.S., Shailajakumari S, Sreekala A.K., Parthipan B. & R.Prakashkumar 2021. *Sida keralensis* (Malvaceae): a new species from Kerala, India. *Phytotaxa* 508(3): 289-294.

Jisha Daniel, **Santhosh Kumar E.S.**, William Decruse, M.R.Prasad 2020. A new species of *Biophytum* (Oxalidaceae) from the Western Ghats (Kerala, India). *Phytotaxa* 438(1): 49-52.

Santhosh Kumar E.S., R.Raj Vikraman and R.Prakashkumar 2020. Note on *Strobilanthes sanjappae* (Acanthaceae). *Phytotaxa* 437(2): 119-120.

Ananthakrishnan R., **E.S.Santhosh Kumar** and K.B.R. Kumar 2018. Comparative chemical profile of essential oil constituents of eight wild *Cinnamomum* species from the Western Ghats. *Natural Product Communications* 13(5): 621-625.

Jagadeesan R., Mathew S.P., Gangaprasad A., and **E.S.Santhosh Kumar** 2018. *Lasianthus agasthyamalyanus* (Rubiaceae) a new species from the Southern Western Ghats, Kerala. *Annals Botanici Fennici*. 55: 87-91.

Gnanasekaran G., **Santhosh Kumar E.S.** and G.V.S.Murthy 2017. Reinstatement and lectotypification of *Andrographis gracilis* (Acanthaceae), a lesser known endemic species from southern Western Ghats, India. *Journal of Japanese Botany*. 91(6): 351-357.

- Geethakumary M.P., Deepu S., Pandurangan A.G. and **E.S. Santhosh Kumar** 2016. Rediscovery, extended enumeration and conservation assessment of *Henckelia lyrata* (Gesneriaceae) in Western Ghats, India. *Phytotaxa* 284 (2): 147-150.
- Santhosh Kumar E.S.**, Shareef S.M. and P.E. Roy 2015. A new species of *Clausena* (Rutaceae) from Kerala, India. *Nordic Journal of Botany* . 33: 151-154.
- Santhosh Kumar E.S.** 2014. A new combination in *Henckelia* (Gesneriaceae). *Polish Botanical Journal*. 59(1):149.
- Santhosh Kumar E.S.** and D. Vijayadas 2014. *Phyllanthus amarus* Schumach. & Thonning (Phyllanthaceae)- a new record for the Kingdom of Saudi Arabia. *Journal of Global Biosciences* 3(3): 639-640.
- Santhosh Kumar E.S.** and M. Abdul Jabbar 2014. Taxonomic status of *Cinnamomum alexei* Kosterm. (Lauraceae). *Journal of Scientific Research* 6(2): 395-397.
- Santhosh Kumar E. S.**, Veldkamp, J.F. and S.M. Shareef 2014. Notes on *Eugenia gracilis*, *E. mooniana* and *E. phyllyreiodes* (Myrtaceae). *Webbia: Journal of Plant Taxonomy and Geography* 69(1): 101-103.
- Santhosh Kumar E. S.** 2014. A new combination in *Baccharoides* Moench (Asteraceae) from India. *Journal of Scientific Research* 6 (1): 191-192.
- Santhosh Kumar E. S.** and P.E. Roy 2012. *Begonia aliciae* C.E.C. Fischer – A little known critically endangered species of the Southern Western Ghats, Kerala, India. *The Begonian* 79 (January/February): 16-17.
- Santhosh Kumar E. S.** and Sam P. Mathew 2012. Rediscovery of *Begonia arnottiana* (Wight) A.DC. – A little known south Indian endemic species. *The Begonian* 79 (March/April): 71-75.
- Santhosh Kumar E. S.**, Roy, P.E., Renjith N.B. and Mathew Dan 2011. *Acrotrema uniflorum* Hook. var. *uniflorum* (Dilleniaceae) – A new record for India. *Rheedea* 21(2) : 167-169.
- Santhosh Kumar E.S.** and A. Sabeena 2013. Taxonomic notes on two *Jasminum* species (Oleaceae) from India. *Taprobanica* 5 (2): 144-147.
- Santhosh Kumar E.S.** and N. Mohanan 2015. Taxonomic status of *Pavetta bourdillonii* Sivadas. & N. Mohanan (Rubiaceae). *Taprobanica* 7(2): 96-97.

Santhosh Kumar E.S. and Sam P Mathew. 2013. *Piper velayudhanii* (Piperaceae), a new name for *P. pseudonigrum* Velay. & Amalraj. *Journal of Scientific Research* 5 (3), 579-580.

Santhosh Kumar E.S., Geethakumary M.P. and A.G. Pandurangan 2011. *Cinnamomum alexei* Kosterm. (Lauraceae)- A New Record for India. *Bangladesh J. Plant Taxonomy* 18(2): 199-201.

Santhosh Kumar E.S., Abdul Jabbar M. and M. Saleem 2002. The Rediscovery of *Begonia aliciae* C.E.C. Fischer (Begoniaceae)- an endangered species of the Western Ghats. *Rheedea* 12(2):185-188.

Santhosh Kumar E.S., Geethakumary M.P. and A.G. Pandurangan 2013. Rediscovery of *Mallotus intercedens* (Euphorbiaceae). *Taprobanica* 5 (2): 140-141.

Santhosh Kumar E.S., Mathew Dan and G.M. Nair 2007. A new species of *Acrotremma* Jack.. (Dilleniaceae) from India. *Nordic Journal of Botany*.24 (5): 543-545.

Santhosh Kumar E.S., Pandurangan A.G. and P.E. Roy 2012. A Taxonomic note on *Impatiens disotis* Hooker, 1906 (Family: Balsaminaceae). *Taprobanica* 4(2): 118-119. 2 pls.

Santhosh Kumar E.S., Raju Antony and A.E.Shanavas Khan 2003. *Memecylon agastyamalayanum* (Melastomataceae) – a new species from India. *Botanical Bulletin of Academia Sinica* 44: 175-177.

Santhosh Kumar E.S., Rathakrishnan, K., Kunhikannan, C., Veldkamp J.F. and C.N. Mohanan 2008. Rediscovery of *Maesa velutina* Mez. (Myrsinaceae/Maesaceae)–An endemic and endangered species of the Western Ghats. *Rheedea* 18(1): 39-42.

Santhosh Kumar E.S., Roy P.E. and M.P. Geetha Kumary 2013. Revisiting *Begonia fallax* A.DC. – an endemic species of the Peninsular India. *Begonia Australis* 23(2): 37-39.

Santhosh Kumar E.S., Roy P.E. and S.M. Shareef 2013. Rediscovery of *Ophiorrhiza barnesii* C.E.C. Fischer (Rubiaceae) from the southern Western Ghats, Kerala, India. *Journal of Threatened Taxa* 5 (7): 4115-4117.

Santhosh Kumar E.S., Roy P.E., Shareef S. M. and S.S. Usha 2012. Rediscovery of *Uniyala multibracteata* (Gamble) H. Rob & Skvarla (Asteraceae) from the southern Western Ghats. *Journal of Threatened Taxa* 4(5): 2587-2589.

Santhosh Kumar E.S., Seema G Gopal and A.E. Shanavas Khan 2002. A new species of *Andrographis* Wall. ex DC. (Acanthaceae) from Kerala, India. *Nordic Journal of Botany*. 22(6): 683-685.

Santhosh Kumar E.S., Shailaja Kumari S. and P.E. Roy 2013. Rediscovery of *Ophiorrhiza radicans* (Rubiaceae) from the southern Western Ghats, India. *Taprobanica* 5 (1): 69-70, 2 pls.

Santhosh Kumar E.S., Shaju, T., Roy P.E. and G. Raj Kumar 2013. A new species of *Goniothalamus* (Blume) Hook.f. & Thomson (Annonaceae) from Kerala, India. *Taiwania* 58(3): 171-175. DOI: 10.6165/tai.2013.58.171

Santhosh Kumar E.S., Shanavas Khan, A.E., Binu S. and S.M. Almeida 2001. *Grewia palodensis* (Tiliaceae)- a new species from Kerala. *Rheedea* 11(1): 41-43.

Santhosh Kumar E.S., Shanavaskhan A.E. and S. Binu. 2000. A new species of *Thottea* Rottb. (Aristolochiaceae) from India. *Rheedea* 10(2): 117-120.

Santhosh Kumar E.S., Shareef S.M. and P.E. Roy 2011. Rediscovery and lectotypification of *Eugenia argentea* Gamble (Myrtaceae)- an endemic and endangered species of the Western Ghats. *Journal of Scientific Research* 3 (1): 213-216.

Santhosh Kumar E.S., Shareef S.M. and P.E. Roy 2015. A new species of *Clausena* (Rutaceae) from Kerala, India. *Nordic Journal of Botany* 33: 151-154.

Santhosh Kumar E S, S Bindu, C Anil Kumar and Suchithra G Krishnan 2016. Reinstatement of *Rauvolfia membranifolia* Kerr and a note on *R. micrantha* Hook.f. (Apocynaceae). *NeBIO* 7(4): 166-169.

Gnanasekaran G., **Santhosh Kumar E.S.** and G.V.S.Murthy 2016. Reinstatement and lectotypification of *Andrographis gracilis* (Acanthaceae), a lesser known endemic species from southern Western Ghats, India. *Journal of Japanese Botany* 91(6): 351-357.

Jagadeesan R, Gangaprasad A, Sam P Mathew, **Santhosh Kumar E S**, Stephan J 2016. *Symplocos nicolsonii* (Symplocaceae) a new species from southern Western Ghats, India. *Annals of Plants Sciences* 5(7): 1389-1391.

Mohanan N. and **E.S Santhosh Kumar**. 2005. A new species of *Litsea* (Lauraceae) from Kerala, India *Nordic Journal of Botany*. 23: 611-613.

Pandurangan A.G., Geethakumary M.P. and **E.S. Santhosh Kumar** 2013. *Begonia hirtella* Link: A fast naturalized Tropical American *Begonia* from India. *The Begonian* 80(Jan/Feb): 22-24

Raju Antony, **Santhosh Kumar E.S.** and A.E. Shanavas Khan 2002. *Selaginella camusii*, a new species of Selaginellaceae from India. *Nordic Journal of Botany*. 22(3): 337-340.

Sam P.Mathew, **E.S. Santhosh Kumar** and C. Murugan 2013. Natural History of *Begonia andamensis*- an endangered wild Begonia from Andaman islands in the Bay of Bengal. *Begonia Australis* 23(1): 37-39.

Geetha Kumary M.P., Pandurangan A.G. and **Santhosh Kumar E.S.** 2013. Rediscovery of *Cinnamomum travancoricum* Gamble (Lauraceae) from the southern Western Ghats. *Journal of Bombay Natural History Society* 110 (1): 89-90.

Geethakumar M P., **Santhosh Kumar E.S.** and A.G. Pandurangan 2008. A new variety of *Phyllocephalum rangacharii* (Gamble) Narayana (Asteraceae) from Kerala, India. *Indian Journal of Forestry*. 31(1): 119-120.

Geethakumary M.P., Pandurangan A.G. and **E.S. Santhosh Kumar** 2012. *Cinnamomum litseaefolium* (Lauraceae) – A new distributional record for India. *Rheedea* 22(2): 127-130.

Shaju T., Shaji, P.K., Geetha Kumary M.P. and **E.S. Santhosh Kumar** 2010. *Begonia tenera* Dryander: A new report for India. *The Begonian* 77(July/Aug.) 129-131.

Shanavas Khan, A.E., Binu, S., Unnithan, C.M., **Santhosh Kumar E.S.**, and P. Pushpangadan 1997. Detoxification techniques of traditional physicians of Kerala, India on some toxic herbal drugs. *Fitoterapia* LXVIII (1): 69-74.

Shanavas Khan, A.E., **Santhosh Kumar E.S.**, Binu S. and P. Pushpangadan 1998. A new species of *Biophytum* DC. (Oxalidaceae) from Peninsular India. *Rheedea* 8(1): 79-81.

Shareef , S.M., **Santhosh Kumar E.S.** and P.E. Roy 2011. A new variety of *Eugenia terpnophylla* Thw. (Myrtaceae) from Kerala India. *Nordic Journal of Botany*. 29: 455-457. doi: 10.1111/j.1756-1051.2011.01126.x,

Shareef S.M., Geetha Kumary, M.P., **Santhosh Kumar E.S.** and T.Shaju. 2010. *Syzygium claviflorum* (Myrtaceae) – a new record for south India. *Rheedea* 20 (1): 53-55.

Shareef S.M., Roy, P.E., **Santhosh Kumar E.S.** and M.V. Krishnaraj 2013. *Syzygium rama-varma* (Myrtaceae) from southern Western Ghats, India. *Taprobanica* 5 (2): 148-150.

Shareef S.M., **Santhosh Kumar E.S.** and P.E. Roy 2013. A new species of *Syzygium* (Myrtaceae) from Kerala, India. *Phytotaxa* 129(1): 34-38. <http://dx.doi.org/10.11646/phytotaxa.129.1.2>

Shareef, S.M., **Santhosh Kumar E.S.** and T. Shaju 2012. A New species of *Syzygium* (Myrtaceae) from the southern Western Ghats of Kerala, India. *Phytotaxa* 71: 28-33.

Sivu A. R., Ratheesh Narayanan, **Santhosh Kumar, E.S.**, Sujana, K.A., Anil Kumar , N., Pradeep N.S. and A.G. Pandurangan 2012. *Memecylon clarkeanum* Cogn. (Melastomataceae)- a threatened species, new record for India. *Taiwania* 57(3): 327-330.

Sivu A.R., Narayanan, M.K.R., Pradeep, N.S., **Santhosh Kumar E.S.** and A.G. Pandurangan 2014. A new species of *Memecylon* (Melastomataceae) from the Western Ghats, India. *Phytotaxa* 162(1): 44-50.