

S Suresh Phd

Technical Officer

Palynology Laboratory, Division of conservation Biology

JNTBGRI, Palode

Trained in systematic palynology, pollen analysis in relation to plant animal interaction, seed dispersal ecology, pollination ecology and plant population demography from the Division of Conservation Biology at Jawaharlal Nehru Tropical Botanic garden and Research Institute (JNTBGRI) has got more than 20 years of research experience in these fields. He is working on plant animal interaction with special emphasis on pollination and seed dispersal in tropical evergreen forests of the Western Ghats, conservation of endemic and critically endangered plants employing demographic methods, reintroduction of critically endangered plant species in to natural or near natural habitats and addressing taxonomic issues and ecological problems employing pollen as a proxy.

He is entrusted with the charge of the sporotheca in the palynology laboratory associated to the division of Conservation Biology. The pollen collection maintained in the laboratory now harbours more than 8000 pollen slides which belong to ca. 1000 species under 532 genera across 86 families.

Academic Qualifications

Degree/Diploma Certificate	Year	University/Board/Institute
Doctorate	2022	Kannur university
Master of Science (By Research)	2001	University of Mumbai

Positions Held (professional appointments)

1. 1992-1998: Technical Assistant, Palynology laboratory, Division of Conservation Biology, Jawaharlal Nehru Tropical Botanic Garden and Research Institute, Palode, Thruvananthapuram, Kerala, India.
2. 1998-Present: Technical Officer, Palynology laboratory, Division of Conservation Biology, Jawaharlal Nehru Tropical Botanic Garden and Research Institute, Palode, Thruvananthapuram, Kerala, India.

Professional Skills

1. Trained in quaternary pollen preparation. French Institute of Pondicherry, Pondicherry.
2. Methods of pollen preparation for studying pollen morphology.
3. Methods in pollination and seed dispersal ecology.
4. Methods in plant animal interaction in tropical evergreen forests and mangroves.

5. Methods in plant population demography
6. Methods in species reintroduction to natural or near natural habitats
7. Photoshop
8. Designing and layout of posters and reports
9. Photography.
10. Photomicrography.

Research Projects Associated/Associating

1. **2019- Present.** Conservation of Vulnerable Sandalwood (*Santalum album* L.) through propagation and reintroduction. Associated. Date of sanction: P4-20197/2018 dated 12/04/2019. 17.09.2019 (4 years). INR 18, 39, 200. Kerala Forest Department.
2. **2017-Present.** Studies in conservation biological aspects of selected flowering plant wealth of Kerala. Date of sanction: 2017 (5 years). Co-Investigator. INR 35, 45, 000. Kerala State Council for Science Technology and Environment Plan Grant, Government of Kerala.
3. **2021.** Pollen Morphology of the Family Arecaceae of Kerala with Special Emphasis on Forensic Science.
4. **2019-2020.** Conservation of endemic and Endangered *Buchanania barberi* in India. Associated. Date of sanction: 2019 (2 years). INR 2, 50, 000. Muhammed bin Zayed species conservation fund, UAE.
5. **2017-2020.** Pollen morphology of the variants of *Clitoria turnatea*. Position: Associated. Funding: JNTBGRI.
6. **2017-2020.** Study on the relationship between number of stomata and sporangia to understand how the competition between photosynthesis and reproduction defines adaptive evolution in ferns. Position: Associated. Funding: Indian Institute of Science Education and Research.
7. **2017-Present.** Pharmacopalynology of Ayurvedic drugs. Positon: Co-Investigator. Funding: JNTBGRI.
8. **2017-Present.** Conservation of *Dialium travancoricum* Bourd. (Leguminosae: Dialioideae), a critically endangered and endemic tree in the Western Ghats. Position: Associated. Funding: JNTBGRI.
9. **2017-2020.** Pollen morphology of the variants of *Pellionia heyneana* Wedd. Position: Associated. Funding: JNTBGRI.
10. **2017-2020.** Pollen morphology of the family Oxalidaceae of the southern Western Ghats. Position: Associated. Funding: JNTBGRI.

11. **2016-2019.** Systematic Palynology of *Garcinia*. Positoin: Associated. Funding: JNTBGRI.
12. **2016-2019.** Pollen morphology of *Clitoria turnatea*. Positoin: Associated. Funding: JNTBGRI.
13. **2015-2017.** Integrating ecological and genetic approaches in developing conservation strategies for critically small populations: a case study of the endemic and Critically Endangered cycad, *Cycas annaikalensis* in the Western Ghats. Funding: KSCSTE Plan Grant (budget: INR 12, 45, 000/). Position: Co-Investigator.
14. **2015-2017.** Pollen morphology among wild *Musa* of Agastyamala biosphere reserve. Position: Associated. Funding: JNTBGRI.
15. **2012-2017.** Population studies and gene flow system in selected endemic trees of the southern Western Ghats of Kerala. Funding: KSCSTE Plan Grant (budget: INR 50, 00, 000/). Position: Co-Investigator.
16. **2008-2020.** Population demography of *Cullenia exarillata* in relation to the conservation of the tropical rainforest ecosystem in Silent Valley in the Western Ghats, India. PhD program, Kannur University.
17. **2008-2012.** Identification of nuclear tree species and assessment of its impact in landscape conservation: A case study with reference to the tropical rainforests in Silent Valley in the Western Ghats. Ministry of Environment, Forest and Climate Change, New Delhi. Position: Associated.
18. **2008- Present.** Spore morphology of Pteridophytes of Kerala. Position: Associated. Funding: JNTBGRI.
19. **2007-2012.** Plant-pollinator interaction, sexual systems and level of gene flow in populations of four endemic species (*Palaquium ellipticum*, *Cassine kedarnathii*, *Cullenia exarillata* and *Janakiya arayalpathra*) in the Western Ghats. Funding: KSCSTE Plan Grant (budget: INR 42, 50, 000/). Position: Co-Investigator.
20. **2007-2012.** Tree Pollen of the Western Ghats. Funding: KSCSTE Plan Grant (budget: INR 25, 00, 000/). Position: Co-Investigator.
21. **2007-2009.** Study on nectar reward in *Bombax ceiba* L. Associated. Funding: JNTBGRI.
22. **2007- Present.** Pollen analysis of fur of Malabar Giant Squirrel, Nilgiri langur, Lion Tailed Macaque, Flying Squirrel. Associated. Funding: JNTBGRI.
23. **2006-2010.** Study of Plant crab association in the mangrove ecosystem o Kerala state. Associated. Date of sanction: 2006 (3 years). INR 25, 66, 400. Ministry of Environment Forest and Climate Change New Delhi.

24. **2004-2007.** Identification of keystone species and associated in the Western Ghats. Associated. Date of sanction: 2004. WWF India.
25. **1998-2000.** Pollen morphology and harmomegathy of Indian *Rauvolfia* L. (Apocynaceae). Associated. Funding: JNTBGRI.
26. **1998-2000.** Systematic Palynology of Indian *Thottea*. Associated. Funding: JNTBGRI.
27. **1997-2002.** Population biology of *Janakiya arayalpathra*. Associated. Date of sanction: 9/592(4)/97-EMR-1. 20th August 1997 INR 11, 00, 000. University Grand Commission, New Delhi.
28. **1996-1998.** Pollen morphology of *Cassia* species of Kerala. Associated. Date of sanction: 1996 INR 1, 50, 000. Kerala State Science and Technology, Government of Kerala.
29. **1996-1998.** Pollen morphology of cultivars of *Mangifera indica* L. and *Artocarpus heterophyllus* Lam. Kerala State Science and Technology. Position: Associated.

Publications

Books

2019

1. Mathew Dan, Anurag Dhyani, P S Jothish, A Rasiya Beegam, A Nazarudeen, **S Suresh**, C Anilkumar and R Prakashkumar 2019. Modern trends in Biosystematics of angiosperms. Invited talks and abstracts of 29th Annual conference of Indian Association for Angiosperm taxonomy and national Symposium. 11-13 November, 2019. KSCSTE-Jawaharlal Nehru Tropical Botanic Garden and Research Institute, Palode, Thiruvananthapuram, Kerala, India 22+174 pages.

Research Articles

1998

1. Prakashkumar,R. and **S. Suresh** 1998. Ultra structure features of the pollen grains of five varieties of *Artocarpus heterophyllus* Lam. **Journal of Palynology** 34: 85-98

2000

2. Prakashkumar, R. and **S. Suresh** 2000. Pollen wall ornamentation in relation to varietal diversity in *Mangifera indica* L. **Proceedings on National Symposium on Recent Trends in Plant Science Research**. Kerala University, Thiruvananthapuram, April 17 – 19, pp

2001

3. Prakashkumar, R. and S. Suresh. 2001. Scanning electron microscopic observations on the inner testa of the varieties of *Mangifera indica*. **Annals of Plant and Soil Research** 3:234-237
4. Prakashkumar, R. and S. Suresh 2001. Ultra structure features of seeds of some Mango varieties. **Proceedings of the 13th Kerala Science Congress**, pp 415-417.

2002

5. Prakashkumar, R. and S. Suresh 2002 External morphology of testa in mango *Mangifera indica* and its value in the cultivar characterisation of the crop. **Journal of Bombay Natural History Society** 99. 359-361.
6. Prakashkumar R, S Suresh. 2002. A note on the pollen wall ornamentation of a *Mangifera indica* hybrid and its varieties. **South Indian Horticulture** 50 (4-6), 515-516.

2008

7. Suresh, S. 2008. Review on 'Common Trees of KAU (Kerala Agricultural University) Main Campus' by S. Gopakumar. **Rheedea** 18:111
8. Nayar, T. S. and S. Suresh 2008. Review on 'Indian plant reproductive ecology' by A J Solomon Raju. **Rheedea** 18:110

2009

9. Suresh, S. 2009. Pollen Morphology and Angiosperm Taxonomy. In Satishkumar, C. and K. C. Koshy (eds) **Refresher Course in Plant Taxonomy**. TBGRI, Thiruvananthapuram, pp 104-116.

2010

10. Suresh, S. 2010. Pollen Morphology and Angiosperm Taxonomy: principles and practices. In Pandurangan, A. G. and N. Mohanan (eds) **New Vistas in Plant Taxonomy**. TBGRI, Thiruvananthapuram, pp 136-142.
11. Nayar, T. S. and S. Suresh 2010. '*Janakia aryalpathra* Joseph et. Chandras. (Periplocaceae): The extinction risk as revealed by reproductive ecology' **Proceedings of the International Conference on Mountain Biodiversity**. Doon University, Dehradun from 13th to 15th March 2010, p

2012

12. Nayar, T. S., Praveen, V. P. and S. Suresh 2012. Species preference of the crab *Sesarmops intermedius* to seedling predation in Mangrove ecosystem of Kerala, India. In: Dahdouh-Guebas F And B Sathyanarayana (Eds) **Proceedings of the International**

conference 'Meeting on Mangrove Ecology, Functioning and Management-MMM3'. Galle, Sri Lanka, 2-6 July. VLIZ special publication 57,xxxix+192 pp, p 125.

2013

13. **Suresh, S** 2013. Pollen morphology and angiosperm taxonomy: principles and practices. In **Frontiers in plant taxonomy**. Pandurengan, A.G. Vrinda, K. B and Mathew Dan (editors). JNTBGRI, Thiruvananthapuram, pp 163-170.
14. Anoop, V., Praveen, V. P., **Suresh, S.** and T. S. Nayar 2013. Conservation implications of seed rain in mid elevation grasslands of Silent Valley: A case study. **Proceedings of Student Conference on Conservation Science**. Indian Institute of Science Bangalore, 25 to 28 September 2013. <https://sccs-bng.org/archive/abstract/46>

2015

15. **Suresh, S.**, Anilkumar, S. and T. S. Nayar 2015. Pollination Ecology of *Cullenia exarillata* A. Robyns, a key Food plant in the tropical evergreen forest ecosystem of the Western Ghats. In '**Plant reproductive biology and conservation**' Rupam Kapoor, Inderdeep Kaur and Monika Koul (editors). I.K. International publishing house Pvt. Ltd., New Delhi, pp 389-400.
16. Praveen, V. P., Shanij, K., **Suresh, S.** and Peroth Balakrishnan. 2015. Kunhimangalam, the largest mangrove of Kerala needs immediate conservation attention. Sarovar Sourabh, **ENVIS News Letter on Wetland Ecosystem including Inland Wetlands**. 11: 1-2.
17. Praveen, V. P., Shanij, K., **Suresh, S.** and T. S. Nayar 2015. Cannibalistic behaviour in the mangrove crab *parasesarma plicatum* (latreille, 1803). **Journal of Bombay Natural History Society**. 112: 41-44. <https://doi.org/10.17087/jbnhs/2015/v112i1/92347>

2016

18. Shanij, K., Praveen, V. P., **Suresh, S.**, Mathew M. Oommen and T. S. Nayar 2016. Leaf litter translocation and consumption in mangrove ecosystems: the key role played by the sesarmid crab *Neosarmatium malabaricum*. **Current Science** 110(10):1969-1976. **Impact Factor: 1.10** <https://doi.org/10.18520/cs/v110/i10/1969-1976>
19. Shanij, K., Praveen, V. P., **Suresh, S.**, Mathew M. Oommen and T. S. Nayar 2016. Tree Climbing and Temporal Niche Shifting: An Anti-predatory Strategy in the Mangrove Crab *Parasesarma plicatum* (Latreille, 1803). **Current Science** 111(7):1201-1207. **Impact Factor: 1.10**. <https://doi.org/10.18520/cs/v111/i7/1201-1207>

2017

20. Vineesh, P. S., Silpa, B. S., Rahul, R., **Suresh, S.**, Mukunthakumar, S. and P. Padmesh 2017. Molecular characterisation, genomic DNA content estimation and pollen morphology among wild *Musa* of Agastyamala biosphere reserve. **Proceedings of the 29th Kerala Science Congress**, pp 167-168.
21. Praveen, V. P., Shaniij, K., **Suresh, S.**, Mathew M Oommen and T. S. Nayar. 2017. Species preference in seedling predation by the Sesarmid crab *Neosarmatium malabaricum* (De Haan) in a mangrove forest in India. **Wetlands** 37(1): 59–66. DOI: <https://doi.org/10.1007/s13157-016-0839-3>. **Impact Factor: 2.20**

2021

22. Anurag Dhyani, **Suresh, S.**, Santhosh Kumar, E. S., Shareef, S. M. and R. Prakashkumar 2021. Conserving *Dialium travancoricum*, a Critically Endangered endemic tree. **Oryx** 55(4): 489–496. DOI: <https://doi.org/10.1017/S0030605321000429>. **Impact Factor: 2.69**
23. **Suresh, S.** and T. S. Nayar 2021. Forest Gaps and Regeneration of *Cullenia exarillata*: A Case Study in the Forest Ecosystem of Silent Valley in the Western Ghats, India. In **Sudheer, K. P.**, Pradeep Kumar, S., Jyothish P. S., Sanjai R. J., Arunan, C., Harinarayanan, P. and K. Vijayakumar (eds) **Abstracts, 33rd Kerala Science Congress** 25-30 January 2021. Kerala State Council for Science, Technology and Environment, Sasthra Bhavan, Pattom, Thiruvananthapuram. Pp 43.
24. **Suresh, S.** and T. S. Nayar 2021. Population Structure as Indicator of Population Health: *Cullenia exarillata* in Silent Valley in the Western Ghats, India - A Case Study. In Swapna T. S. and P. M. Radhamany (eds). **Extended Abstracts. International Conference on New Horizons in Plant Science.** 04-09 January 2021. Department of Botany University of Kerala, Kariavattom, Thiruvananthapuram, Kerala, India. pp82-83.
25. Dani, K. G. S., Mathew, J., Nila-Mohan, T. M., Raju Antony, Suresh, S. and U. Kodandaramaiah 2021. Competition between photosynthesis and reproduction is constrained by leaf mass per unit area (LMA) in ferns. **Biological Journal of the Linnean Society** 132: 346–357. **Impact Factor: 1.96**

2022

26. Raju Antony and **S. Suresh**. Ethnobotanical uses of Ferns and Lycophytes of Kerala. In 'Ferns: propagation, biotechnology, medicinal use and environmental regulation. Johnson M, Helena Fernandez, Ashwani Kumar, T Shibila (eds). Elsevier. pp 423-441. <https://doi.org/10.1007/978-981-16-6170-9>

27. Santhosh Kumar, E. S., Shareef, S. M., **Suresh, S.** and Anurag Dhyani 2022. Lectotypification of *Dialium travancoricum* (Fabaceae: Dialioideae). *Rheedea* 32(1): 106-108. DOI: <https://dx.doi.org/10.22244/rheedea.2022.32.01.08>
28. Abinlal, K. C., Anurag Dhyani, **Suresh, S.**, Shareef, S. M. and Santhosh Kumar E. S., 2022. Conservation of *Garcinia gamblei*, a rare tree endemic to the Western Ghats, India. *Oryx* 56(4): 489-490. <https://doi.org/10.1017/S003060532200045x> **Impact Factor: 2.69.**
29. Dhyani, A., Abinlal, K.C., Bindu, S., Wilson, V.K., **Suresh, S.**, Kumar, E.S.S., Anilkumar, C., Barstow, M., 2022. *Buchanania barberi*, a Tree on the Edge of Extinction. In: DellaSala, D.A., Goldstein, M.I. (Eds.), *Imperiled: The Encyclopedia of Conservation*, vol. 1. Elsevier, pp. 744–750.

2023

30. Shaniij, K., **Suresh, S.**, V. Jilesh and T. S. Nayar 2023. Leaf litter production and decomposition in a Riverine Mangrove forest in India. *Wetlands Ecology and Management*. Online. <https://doi.org/10.1007/s11273-023-09961-0> **Impact Factor: 1.9**
31. Dhyani, A., **Suresh, S.**, Abinlal, K.C., and C. Anilkumar 2022. Empowering conservation of the Critically Endangered tree *Buchanania barberi* through an education campaign. *Oryx* **(*) : ****. **Impact Factor: 2.69**

Presentations

1998

1. Nayar, T. S. and **S. Suresh** 1998. Pollen morphology and harmomegathy of Indian *Rauvolfia* L. Pollen and Spores 1998: Morphology and Biology. The Royal Botanic Gardens, Kew and National History Museum, London, UK. July 6 – 9. 1998.

2000

2. Prakashkumar, R. and **S. Suresh** 2000. Pollen wall ornamentation in relation to varietal diversity in *Mangifera indica* L. **National Symposium on Recent Trends in Plant Science Research**. Kerala University, Thiruvananthapuram, 17 – 19April 2000.
3. Prakashkumar, R. and **S. Suresh** 2000. Ultra structure features of seeds of some Mango varieties. **13th Kerala Science Congress**. Kerala Institute of Local Administration (KILA) Thrissur, 29-31January 2000.

2006

4. Prakashkumar, R. and **S. Suresh** 2006. Ultra structure features of pollen grains as an aid in the varietal characterisation of fruit crops'. **28th Annual meeting of Electron Microscope Society of India**. Regional Research Laboratory, Thiruvananthapuram. 19-21April 2006.

2009

5. **Suresh, S.** 2009. Pollen Morphology and Angiosperm Taxonomy. **Refresher Course in Plant Taxonomy**, TBGRI, Thiruvananthapuram, 9-14 November 2009

2010

6. **Suresh, S.** 2010. Pollen Morphology and Angiosperm Taxonomy: principles and practices. **Refresher Course in Plant Taxonomy**, TBGRI, Thiruvananthapuram 9-14 November 2010.
7. Nayar, T. S. and **S. Suresh** 2010. '*Janakia aryalpathra* Joseph et. Chandras. (Periplocaceae): The extinction risk as revealed by reproductive ecology' **International Conference on Mountain Biodiversity**. Doon University, Dehradun, 13-15 March 2010.

2011

8. **Suresh, S.** 2011. 'Importance of Species Interaction in Ecosystem'. **Invited lecture for the MSc Agriculture Biotechnology students of Kerala Agricultural University, Vellayani**, 10th January 2011.
9. Nayar, T. S., Amol R. Kulavmode, Praveen, V. P. and **S. Suresh** 2011. '*Lantana camara* L. as seed trap for forest nucleation in Silent Valley'. **Students Conference on Conservation Science**. Indian Institute of Science, Bangalore, 14-16 September 2011.

2012

10. Nayar, T. S., Praveen, V. P. and **S. Suresh** 2012. Species preference of the crab *Sesarmops intermedius* to seedling predation in Mangrove ecosystem of Kerala, India. International conference '**Meeting on Mangrove Ecology, Functioning and Management-MMM3**'. Galle, Sri Lanka, 2-6 July 2012

2013

11. **Suresh, S** 2013. Pollen morphology and angiosperm taxonomy: principles and practices. **Refresher Course in Taxonomy**. Jawaharlal Nehru Tropical Botanic Garden and Research Institute, 11-16 February 2013.
12. Anoop V, V P Praveen, **S Suresh** and T S Nayar 2013. Conservation implications of seed rain in mid elevation grasslands of Silent Valley: A case study. **Student Conference on Conservation Science**. Indian Institute of Science Bangalore, 25-28 September 2013.

2017

13. Vineesh, P. S., Silpa, B. S., Rahul, R., **Suresh, S.**, Mukunthakumar, S. and P. Pdmesh 2017. Molecular characterisation, genomic DNA content estimation and pollen

morphology among wild *Musa* of Agastyamala biosphere reserve. 29th Kerala Science Congress. Mar Thoma College, Thiruvalla, 28-30 January 2017.

2021

14. **Suresh, S.** and T. S. Nayar 2021 Forest Gaps and Regeneration of *Cullenia exarillata*: A Case Study in the Forest Ecosystem of Silent Valley in the Western Ghats, India. 33rd Kerala Science Congress 25-30 January 2021, Kerala State Council for Science, Technology And Environment, Sasthra Bhavan, Pattom, Thiruvananthapuram.
15. **Suresh, S.** and T. S. Nayar 2021. Population Structure as Indicator of Population Health: *Cullenia exarillata* in Silent Valley in the Western Ghats, India - A Case Study. **International Conference on New Horizons in Plant Science.** 04-09 January 2021. Department Of Botany University Of Kerala Kariavattom, Thiruvananthapuram, Kerala, India.

2022

16. Suresh, S. 2022. Population Demography of *Cullenia exarillata* in relation to conservation of the tropical rainforest ecosystem in Silent Valley in the Western Ghats, India. May 12th 2022. Open defence presentation on the thesis submitted for the award of the PhD degree of Kannur University.
17. Jisha Daniel, Rajendraprasad, M. and **S Suresh** 2022. Pollen morphology of Oxalidaceae in Kerala. National seminar on Biotechnology environment and conservation. 25-26 August 2022, Pst Graduate Department of Botany, St Dominic's College, Kanjirapally, Kottayam, Kerala, India.
18. Suresh, S. 2022. Introduction to pollen morphology and its applications. In Training on Methods of documentation of Biodiversity organised by Institute of Forest Biodiversity, Indian Council of Forestry Research and Education, Hyderabad on 20th October 2022.

Honors/Awards

2004

1. **Special mention Award in Photography:** Won the special mention Award in the 'Sanctuary-ABN Amro Wildlife Photography Contest' in 2004.

2006

2. **Best oral presentation:** Co-authored a paper with R Prakashkumar on Ultra structure features of pollen grains as an aid in the varietal characterisation of fruit

crops' in 28th Annual meeting of Electron Microscope Society of India. Regional Research Laboratory, Thiruvananthapuram. 19-21 April 2006 which won the **prize for the Best oral presentation** in the 28th Annual meeting of Electron Microscope Society of India in 2006.

3. My two photographs were selected as the cover images of '*Rheedeae*' an international journal for angiosperm taxonomy: *Vanda wightii* Vol. 16 (1), 2006 and *Viscum articulatum* Vol. 16 (2), 2006
4. My photograph of *Arisaema tortuosm* was selected as the back cover image of 'The flowering plants of Kerala – A hand book' published by JNTBGRI.

2011

5. My cover design was selected by IUCN for the publication "Towards Conservation and Management of Mangrove Ecosystem in India" edited by Bhatt, J. R., Macinthosh, D., Nayar, T. S., Pandey C. N. and B. P. Neelaratna. 2011.
6. My photograph of "*Acanthus ilicifolius*" was selected by IUCN for the back cover image in their book "Towards Conservation and Management of Mangrove Ecosystem in India" edited by Bhatt, J. R., Macinthosh, D., Nayar, T. S., Pandey, C. N. and B. P. Neelaratna. 2011.
7. My 17 photographs were selected by IUCN for including in their book "Towards Conservation and Management of Mangrove Ecosystem in India" edited by Bhatt, J. R., Macinthosh, D., Nayar, T. S., Pandey C. N. and B. P. Neelaratna. 2011.

2012

8. **Second runner up prize for the oral presentation:** Co-authored the paper 'Species preference of the crab *Sesarmops intermedius* to seedling predation in mangrove ecosystem of Kerala, India' (with V P Praveen and T. S. Nayar) which won the second runner up prize for the oral presentation in the MMM3 conference. MMM (Meeting on Mangrove Ecology, Functioning and Management) happens once in six years and this was the third held at Galle in Sri Lanka participated by 125 mangrove scientists from 34 countries. MMM3 organisers have selected this paper for publication in the Journal 'Marine Ecology Progress Series'. 2012.

2013

9. **First prize for the poster presentation:** Co-authored the poster 'Conservation implications of seed rain in mid elevation grasslands of Silent Valley: A case study' (Anoop V, Praveen, V. P., and **S Suresh** and T S Nayar) which won the first prize for the poster presentation in the 'Student Conference on Conservation Science'. Indian Institute of Science Bangalore, 25 to 28 September 2013.

2021

10. **Best oral presentation award:** Presenter of the best oral presentation award (Scientist) for research paper “Forest Gaps and Regeneration of *Cullenia exarillata*: A Case Study in the Forest Ecosystem of Silent Valley in the Western Ghats, India” under the Life Science Session at 33rd **Kerala Science Congress** 25-30 January 2021, Kerala State Council for Science, Technology And Environment, Sasthra Bhavan, Pattom, Thiruvananthapuram.

2022

11. Population Demography of *Cullenia exarillata* in relation to conservation of the tropical rainforest ecosystem in Silent Valley in the Western Ghats, India. Kannur University. Part fulfillment of doctor of philosophy, Kannur University, Kerala, India.

Research Reports

1. Balakrishnan, P., Padmesh, P., **Suresh, S.**, and Raju Antony 2016. Integrating ecological and genetic approaches in developing conservation strategies for critically small populations: a case study of the endemic and Critically Endangered cycad, *Cycas annaikalensis* in the Western Ghats. First Progress Report. Submitted to the Kerala Forests and Wildlife Department. Jawaharlal Nehru Tropical Botanic Garden and Research Institute, Thiruvannathapuram.
2. Nayar, T S, Jothish, P S and **S Suresh** 2017. Population studies and gene flow system in selected endemic trees of the southern Western Ghats of Kerala. Final Technical Report (12th Plan Report). Submitted to Jawaharlal Nehru Tropical Botanic Garden and Research Institute, Thiruvannathapuram.
3. Nayar, T S, Jothish, P S and **S Suresh** 2017. Tree pollen flora of the Western Ghats. Final Technical Report (12th Plan Report). Submitted to Jawaharlal Nehru Tropical Botanic Garden and Research Institute, Thiruvannathapuram.
4. Anurag Dhyani, Bindu, S., Santhosh Kumar, E. S., **Suresh, S.**, Abhinlal, K. C. and Wnicy K. Wilson 2022. Conservation of endemic and Endangered *Buchanania barberi* in India. Final Technical Report. Muhammed bin Zayed species conservation fund, UAE. pp21.

MSC Dissertations Supervised

1. Anjali George. 2018. Department of Botany, Iquebal College, Peringammala, Thiruvananthapuram, kerala, India. **Pharmacopalynology of the drug *Bala* and its adulterants.** Master of Science in Botany, University of Kerala, Thiruvananthapuram, Kerala, India.

2. Lakshmi Raghunath. 2022. Department of Forensic Science, Police Academy, Thrissur. **Pollen morphology of Arecaceae of Kerala with special emphasis on forensic science.** Master of Science in Forensic Science, University of Calicut.

Participation in professional meetings/ Conferences/Seminars

2009

1. Refresher Course in Plant Taxonomy organised by JNTBGRI, Thiruvananthapuram from 9th to 14th November 2009.

2010

1. 21st Kerala Science Congress, Kollam from 28th to 31st March 2010.
2. International Conference on Mountain Biodiversity held at Doon University, Dehradun from 13th to 15th March 2010.
3. Refresher Course in Plant Taxonomy organised by JNTBGRI, Thiruvananthapuram from 9th to 14th November 2010.

2011

4. MSc Agriculture Biotechnology students of Kerala Agricultural University, Vellayani, Thiruvananthapuram, Kerala on 10th January 2011.

2013

5. Refresher Course in Taxonomy, Plant Taxonomy organised by JNTBGRI, 2013.

2021

6. 33rd Kerala Science Congress 25-30 January 2021, Kerala State Council for Science, Technology And Environment, Sasthra Bhavan, Pattom, Thiruvananthapuram.
7. **International Conference on New Horizons in Plant Science.** 04-09 January 2021. Department Of Botany University Of Kerala Kariavattom, Thiruvananthapuram, Kerala, India.