Name: Dr. PRADEESH S. Department: BOTANY

Dr. Pradeesh S. has graduated from Christian College, Kattakada, Thiruvananthapuram and post graduation from University College, Palayam, Thiruvananthapuram under University of Kerala. He procured his Doctoral Degree in "**Tissue culture and Phytochemistry**" from University of Kerala (under the guidance of **Dr. T. S. Swapana**, Associate Professor & Head, Dept. of Botany, University of Kerala, Kariavattom, Thiruvananthapuram). He has also worked as **Botanical Assistant** at **Botanical Survey of India (BSI)** Southern Regional Centre, Coimbatore, Tamil Nadu. He has published over 26 research papers in International and National Journals and Conferences.



Name	Dr. PRADEESH S.
Designation	Assistant Professor.
Department	Botany.
Address	Pradeesh Bhavan, Anavoor, Anavoor P O., Kunnathukal, Neyyattinkara, Pin – 695 124, Trivandrum.
Mobile number	8086235375.
E-mail address	pradeeshnair10@gmail.com
Academic qualifications	MSc, Ph. D.
Area of Interest /	Plant Tissue culture, Phytochemistry, Pharmacology, Plant Taxonomy, Plant
Specialisation	Anatomy, Plant Physiology and Plant Biotechnology.
Area of Research	Pharmacology, Phytochemistry and Plant Biotechnology.
Major / Minor Research	Nil
Projects	
Membership in Professional Bodies	1. Member of board of question paper setter for first semester MSC Plant Science with Bioinformatics Degree Exams under University of Kannur
	from 25/08/2022 onwards.
	2. Member of board of question paper setter for first semester <i>MSC Plant</i>
	Science with Bioinformatics Degree Exams under University of Kannur from 20/09/2024 onwards.
Whether Research Guide	Research Guide
or not	Number of Research Scholars – 2
Number of Publications	National – 14
	International -12
Participation/Presentation	National – 7
in Workshops/Seminars	International - 7
	() NGC C N

Responsibilities Undertaken: (at NSS College, Pandalam)

- 1). Member Core committee in third criteria (Research and extension activities) regarding NAAC visit.
- 2). Mentor Complementary Botany.
- 3). Member Tourism Club and Nature Club (2019-2020).

4). Member – NET-SLET coaching, Campus Beautification Committee, Nature Club, Tourism Club and Film Club (2020-2021).

Responsibilities Undertaken: (at MG College, Trivandrum)

- 1). Mentor BSc Botany (2021-2023).
- 2). Member Film Club, Forestry Club, Remedial Teaching Committee, Tourism Club, Health Club, Nature Club, Science Club and Website Committee (2021-2022).
- 3). Member PG admission Committee (2023-2024).
- 4). Convenor Bhoomithrasena (2022-2023).
- 5). Mentor S1 FYUGP (2024 Batch).

List of papers published in Journals:

a. International Papers

- 1. Phytochemical investigation of *Bidens biternata* (Lour.) Merr. & Sheriff a nutrient rich leafy vegetable from Western Ghats of India. 2012. *Applied Biochemistry & Biotechnology*. Part A: Enzyme Engineering & Biotechnology. Springer. ISSN: 0273-2289.
- 2. The assessment of phytoremediation potential of invasive weed *Amaranthus spinosus* L. 2012. *Applied Biochemistry & Biotechnology*. Part A: Enzyme Engineering & Biotechnology. Springer. ISSN: 0273-2289.
- 3. Free-radical scavenging activity of leaves of *Bidens biternata* (Lour.) Merr. & Sheriff. 2014. *International Journal of Pharmaceutical Research and Development*. 6(8): 127-135.
- 4. *In vitro* hepatoprotective activity of a wild medicinal plant from Western Ghats *Bidens biternata* (Lour.) Merr. & Sheriff. 2015. *International Journal of Research and Reviews in Pharmacy and Applied Sciences*. 5(2): 1246-1250.
- 5. HPLC and GC-MS analysis of *Bidens biternata* (Lour.) Merr. & Sheriff a wild ethno medicinal plant. 2015. *Asian Journal of Research in Chemistry and Pharmaceutical Sciences*. 3(3):103 108.
- 6. Stress induced elicitation of flavanoids in the suspension culture of *Diplazium esculentum* (Retz.) Sw A wild edible fern of Western Ghats. 2015. *International Journal of Agriculture, Environment and Biotechnology Citation: IJAEB:* 8:1017-1024.
- 7. Antioxidant activity in leaves of *Sesbania grandiflora* (L.) Pers. 2018. *Asian Journal of Pharmaceutical and Clinical Research*. 11(1): 116-119.
- 8. Preliminary phytochemical screening and antimicrobial activity of *Bidens biternata* (Lour.) Merr. & Sheriff of Southern Western Ghats. 2017. *Open Access International Journal of Science and Engineering*. 2(Special Issue): 63-69.
- 9. *In vitro* anticancer activity of *Bidens biternata* (Lour.) Merr. & Sheriff an ethno medicinal plant of kerala. 2018. *Open Access International Journal of Science and Engineering*. 3(1): 15-20.
- 10. Isolation and characterisation of quercetin from *Bidens biternata* (Lour.) Merr. & Sheriff an ethno medicinal plant of kerala. 2018. *Science Chronicle*. 8(1&2): 18-32.
- 11. *In vitro* anticancer activity of a trailing herb *Boerhaavia diffusa* L. in DLA and EAC cell lines. 2018. *Science Chronicle*. 8(1&2): 33-39.
- 12. Phytoplankton of Vamanapuram River at Vamanapuram, Thiruvananthapuram District, Kerala. 2018. *Science Chronicle*. 8(1&2): 52-60.

b. National Papers

1. *Bidens biternata* (Lour.) Merr. & Sheriff – a potential plant to solve nutritional deficiency problems. 2012. *Journal of Phytological Research*. 25(2): 295-299.

- 2. *In vitro* propagation of a rare medicinal fern of Western Ghats *Diplazium esculentum* (Reytz.). 2013. *Indian Journal of Experimental Biology*. 51: 919-923.
- 3. Nutritional and antioxidant potential of green leafy vegetables- a review. 2012. *Journal of Phytological Research*. 25(1): 23-30.
- 4. *Bidens biternata* (Lour.) Merr. & Sheriff A wild leafy vegetable with significant antioxidant potential. 2013. *Journal of Medicinal and Aromatic Plant Sciences*. 35(3-4): 128-135.
- 5. Conservation of vegetable fern (*Diplazium esculentum*) of Western Ghats through *in vitro* spore culture. 2014. *Journal of Aquatic Biology and Fisheries*. 2(2): 43-50.
- 6. High frequency embryogenesis and organogenesis in *Gloriosa superba* L. a plant in need of conservation. 2014. *Journal of Aquatic Biology and Fisheries*. 2(2): 398-402.
- 7. Conservation of an anti-inflammatory medicinal plant *Pseudarthria viscida* (L.) Wight & Arn. Through rapid *in vitro* clonal propagation. 2014. *Journal of Aquatic Biology and Fisheries*. 2(2): 594-599.
- 8. *In vitro* anti-inflammatory activity of *Bidens biternata* (Lour.) Merr. & Sheriff a wild medicinal plant of Waynadu District of Kerala. 2017. *Journal of Medicinal and Aromatic Plant Sciences*. 39(1):18-23.
- 9. Anticancer potential of *Bidens biternata* (Lour.) Merr. & Sheriff an ethno medicinal plant of Waynadu District of Kerala. 2018. *Trends in Bioscience*, 11(7): 1394-1397.
- 10. Enzymatic and non-enzymztic antioxidants in tribal leafy vegetable *Bidens biternata* (Lour.) Merr. & Sheriff. 2017. *Journal of Medicinal and Aromatic Plant Sciences*. 39(2-4): 93-100.
- 11. Phytochemical investigation and *in vitro* anticancer activity of *Sesbania grandiflora* (L.) Pers. A wild leafy vegetable of Southern Western Ghats. 2020. *Journal of Advances in Biological Science*. 7(1&2): 49-53.
- 12. Phytochemical screening of *Spilanthes acmella* (L.) L. ethno medicinal plant of Kerala. 2021. *Journal of Advances in Biological Science*. 8(2): 65-71.
- 13. Phytochemical investigation and *in vitro* conservation of *Amaranthus viridis* L. a leafy vegetable of Kerala. 2023. *Journal of Advances in Biological Science*. 10(1 & 2): 54-61.
- 14. Phytochemical investigation and *in vitro* anticancer analysis of *Cyclea peltata* (Lam.) Hook. F. & Thomson of Menispermaceae. 2023. *Journal of Advances in Biological Science*. 10(1 & 2): 29-35.

List of Books Published:

International Book

 In vitro studies and phytochemical evaluation of Bidens biternata. 2018. Lap Lambert Academic Publishing, International Book Market Service Ltd., member of OmniScriptum Publishing group, 17 Meldrum Street, Beau Bassin 71504, Mauritius. ISBN: 978-613-9-58537-3.

Books Chapters Published:

a. International Books Chapters

- 1. Biochemical and nutritional evaluation of *Monochoria vaginalis* Presl. 2013. *Prospects in Bioscience: Addressing the Issuues*. Springer. 93-101. DOI 10.1007/978-81-322-0810-5 11.
- 2. Diplazium esculentum: a wild nutrient rich leafy vegetable from Western Ghats. 2013. Prospects in Bioscience: Addressing the Issuues. Springer. 293-301. DOI 10.1007/978-81-322-0810-5_35.
- 3. *In vitro* conservation of a wild leafy vegetable from Western Ghats *Bidens biternata* (Lour.) Merr. & Sheriff. 2019. *Proceedings Provectus Plantae 19*. ISBN: 978-81-940888-0-6.
- 4. Potential ecotechnological utilization of *Micrasterias foleacea* a dominant micro alga of

- "Kakkatar" the main tributary of river Pampa, Western Ghats, Kerala. *Proceedings Provectus Plantae* 19. ISBN: 978-81-940888-0-6.
- 5. *In vitro* anticancer potential of *Talinum portulacifolium* (Forssk.) Asch. ex. Schweinf. a wild leafy plant of Kerala. *Proceedings Provectus Plantae 19*. ISBN: 978-81-940888-0-6.

b. National Books Chapters

- 1. Nutritional and anti-nutritional factors in a wild leafy vegetable from Western Ghats: *Diplazium esculentum*. 2012. *Agrobiodiversity: Status, Trends & Prospects*. 11-16.
- 2. Tissue culture studies of a wild leafy vegetable from Southern Western Ghats *Bidens biternata* (Lour.) Merr. & Sheriff. 2021. *Plant Genetic Resource Utilization: an appraisal*. Published by Department of Botany, University of Kerala, Kariyavattom, Thiruvananthapuram. ISBN: 978-81-951912-4-6. p. 83-92.

Papers presented in seminars:

a) International Seminars

- 1. Phytochemical investigation of *Bidens biternata* (Lour.) Merr. & Sheriff a nutrient rich leafy vegetable from Western Ghats of India. 2012. Accepted in International Conference on New Horizons in Biotechnology & 8th Annual Convention of the Biotech Research Society, India. NHBT-2011.
- 2. Nutritional evaluation of *Bidens biternata* (Lour.) Merr. & Sheriff an ethno medicinal plant. Presented in International Symposium on Genomics of Crops, Medicinal Plants & Microbes. Department of Botany, University of Kerala, Thiruvananthapuram.
- 3. Biochemical and nutritional evaluation of *Monochoria vaginalis* Presl. 2013. Accepted in International Conference on Advances in Biological Sciences. Kannur University, Kerala, India.
- 4. Antioxidant factors in *Bidens biternata* (Lour.) Merr. & Sheriff. A wild leafy vegetable of Western Ghats. Presented in International Seminar on World Bio-heritage Concerns over climate change, with special reference to Ethnic Vegetables. Botanica, 2012.
- 5. *In vitro* conservation of a wild leafy vegetable from Western Ghats *Bidens biternata* (Lour.) Merr. & Sheriff. Presented in International Confeence on exploring the scope of Plant Genetic Resources. Department of Botany, University of Kerala, Kariavattom, Thiruvananthapuram, 2019.
- 6. Potential ecotechnological utilization of *Micrasterias foleacea* a dominant micro alga of "Kakkatar"the main tributary of river Pampa, Western Ghats, Kerala. Presented in International Confeence on Exploring the scope of Plant Genetic Resources. Department of Botany, University of Kerala, Kariavattom, Thiruvananthapuram, 2019.
- 7. *In vitro* anticancer potential of *Talinum portulacifolium* (Forssk.) Asch. ex. Schweinf. a wild leafy plant of Kerala. Presented in International Confeence on exploring the scope of Plant Genetic Resources. Department of Botany, University of Kerala, Kariavattom, Thiruvananthapuram, 2019.

b) National Seminars

- 1. Nutritional and antinutritional factors in a wild leafy vegetable from Western Ghats: *Diplazium esculentum*. 2012. Accepted in First Indian Biodiversity Congress IBC 2010.
- 2. Pharmacological activities of *Bidens biternata* (Lour.) Merr. & Sheriff a wild medicinal plant. 2015. Accepted in 2nd National Biodiversity Congress, 2015, Kerala State Biodiversity Board, Thiruvananthapuram.
- 3. Anticancer potential of *Bidens biternata* (Lour.) Merr. & Sheriff an ethno medicinal plant of Waynadu District of Kerala. 2018. Accepted in "Insights in to the Interdisciplinary Perspectives of Chemical and Biosciences", Govt. Arts College, Thiruvananthapuram-14.
- 4. Phytochemical investigation and *In vitro* anticancer activity of *Androgrphis paniculata* (Burm. f.) Nees. Accepted in National Conference on Future Trends in Marine Biotechnology (FTMBT 2019) 2019, Vivekananda Kendra, Kanyakumari.
- 5. Phytochemical investigation and *in vitro* anticancer activity of *Talinum portulacifolium* (Forssk.) Asch. ex Schweinf. –a wild leafy vegetable of Kerala. Accepted in National Seminar on Climate Change, Biodiversity Conservation and Sustainable Development: Challenges and Prospects in 21st century. Organised by Post Graduate Department of Zoology and Research Centre, Mahatma Gandhi College, Thiruvananthapuram on 24th and 25th January 2020.
- 6. Phytochemical investigation of *Eclipta prostrata* (L.) L. Accepted in National Seminar on Current Trends and Advances in Biological Sciences (CTAB- 2020). Organised by the Post Graduate

- Department of Botany and Biotechnology, Bishop Moore College, Mavelikara, from 5th -7th 2020.
- 7. Phytochemical investigation and *in vitro* anticancer activity of *Sesbania grandiflora* (L.) Pers. a wild leafy vegetable of Southern Western Ghats. Accepted in National Seminar on Current Trends and Advances in Biological Sciences (CTAB- 2020). Organised by the Post Graduate Department of Botany and Biotechnology, Bishop Moore College, Mavelikara, from 5th -7th 2020.

c) Seminars Participated

- 1. 23rd Kerala Science Congress, conducted by KSCSTE, Pattom, Thiruvananthapuram.
- 2. 26th Kerala Science Congress, conducted by KSCSTE, Pattom, Thiruvananthapuram.
- 3. Three days national seminar on "Frontier Areas of Life Science" conducted by Department of Botany, University College, Palayam, Thiruvananthapuram (2012).
- 4. One day national seminar on "Methodology & Perspectives in Plant Science" conducted by Department of Botany, University College, Palayam, Thiruvananthapuram (2013).
- 5. Three days National Seminar on "Problems of Wetland Conservation with special reference to Wetlands of Kerala, 2018", conducted by Postgraduate and Research Dept. of Zoology, NSS College, Pandalam, Pathanamthitta.
- 6. One day national seminar on Intellectual Property Rights (IPR), 21st June 2018, conducted by the Department of Botany, St. Berchmans College, Changanassery, Kottayam.
- 7. Two days workshop on "Botanical illustration and herbarium techniques" organised by the Department of Botany, Government College, Kottyam on 21st and 22nd November, 2018.
- 8. Three days National Workshop on "Real Time PCR and Western Blotting" organised by the postgraduate Department of Botany and Research Centre, Govt. College for Women, Thiruvananhapuram held on 27th, 28th and 29th of November, 2018.
- 9. National Seminar on Transcriptome: The Genome Readout organised by the Inter University Centre for Genomics and Gene Technology, University of Kerala, Kariavattom, Thiruvananthapuram on November 29, 2018.
- 10. Science Academies Lecture Workshop on "Taxonomy and Conservation of Plant Diversity" held at KSCSTE-JNTBGRI, Palode on 24th & 25th January 2019.
- 11. Two days national workshop on "Resarch Methodoloy, Writing practices, Language and Soft Skills" organisd by PG Department of Physics, NSS College, Pandalam on 30th and 31st January 2019.
- 12. National Seminar on Biomedical Research: Changing Paradigms Acros Time organised by Department of Biochemistery, Govt. College, Kariavattom, Thiruvananthapuram, on 30th January 1st February 2019.
- 13. Two days national workshop on "Research Methodology" organised by Department of Zooogy, Mahatma Gadhi College, Kesavadasapuram, Thiruvananthapuram on 22/03/2019 23/03/2019.
- 14. National Conference on Bouquet of Modern Chemistry. Organised by the Post Graduate Department of Chemistry, Govt. College, Attingal on 23rd 25th October 2019.
- 15. Two day National Worshop on Molecular techniques in microbial identification organised by the Pst Graduate Department of Botany & Research Centre and Department of Biochemistry & Microbiology, Govt. College for Women, Thiruvananthapuram held on 20th and 21st November 2019.
- 16. One day State Level Academic Seminar on Higher Education System in India: Shifting Structures and Paradigms in connection with the Annual State Convention 2020 of KPCTA held at Mar Gregorios Renewal Centre, Mar Ivanios Vidya Nagar, Nalanchira, Thiruvananthapuram on 7th February 2020.
- 17. National Seminar on Cyber Security and Digital Marketing, organized by the Post Graduate and Research Department of Commerce, Mahatma Gandhi College, Thiruvananathapuram held on 02nd March 2020.

Abstract Published

a) International Conference/Seminars

1. Phytochemical investigation of *Bidens biternata* (Lour.) Merr. & Sheriff – a nutrient rich leafy vegetable from Western Ghats. International Conference on New Horizons in Biotechnology

(NHBT). 2011.

- 2. The assessment of phytoremediation potential of an invasive weed *Amaranthus spinosus* L. International Conference on New Horizons in Biotechnology (NHBT). 2011.
- 3. Nutritional evaluation of *Bidens biternata* (Lour.) Merr. & Sheriff an ethno medicinal plant. International Symposium on Genomics of Crops, Medicinal Plants and Microbes. 2011.
- 4. *In vitro* somatic embryogenesis in *Sesbania grandiflora* Pers. a highly important medicinal tree. International Symposium on Genomics of Crops, Medicinal Plants and Microbes. 2011.
- 5. *Diplazium esculentum* a wild nutrient rich leafy vegetable from Western Ghats. International Conference on Advances in Biological Sciences (ICABS). 2012.
- 6. Phytochemical and nutritional evaluation of *Monochoria vaginalis* Presl. International Conference on Advances in Biological Sciences (ICABS). 2012.
- 7. Nutritional evaluation of *Diplazium esculentum* (Retz.) a wild fern from Western Ghats. Botanica. 2012.
- 8. Antioxidant factors in *Bidens biternata* (Lour.) Merr. & Sheriff a wild leafy vegetable of Western Ghats. Botanica. 2012.
- 9. Somatic embrogenesis in *Gymnema sylvestre* R.Br. a valuable medicinal plant. Botanica. 2012.
- 10. *In vitro* studies of *Pseudathria viscida* (L.) Wight & Arn. a valuable medicinal plant. Botanica. 2012.

b) National Conference/Seminars

- 1. Nutritional and antinutritional factors in a wild leafy vegetable from Western Ghats *Diplazium esculentum*. First Indian Biodiversity Congress, IBC 2010.
- 2. Anticancer potential of *Bidens biternata* (Lour.) Merr. & Sheriff an ethno medicinal plant of Waynadu District of Kerala. Interdisciplinary Perspectives of Chemical and Biosciences-2018". Govt. Arts College, Thiruvananthapuram-14.
- 3. Anticancer potential of *Bidens biternata* (Lour.) Merr. & Sheriff an ethno medicinal plant of Waynadu District of Kerala. Insights in to the Interdisciplinary Perspectives of Chemical and Biosciences, 2018.
- 4. Phytochemical investigation and *in vitro* anticancer activity of *Androgrphis paniculata* (Burm. f.) Nees. National Conference on Future Trends in Marine Biotechnology (FTMBT 2019) 2019, Vivekananda Kendra, Kanyakumari.
- 5. Phytochemical investigation and *in vitro* anticancer activity of *Talinum portulacifolium* (Forssk.) Asch. ex Schweinf. –a wild leafy vegetable of Kerala. Climate Change, Biodiversity Conservation and Sustainable Development: Challenges and Prospects in 21st century. Post Graduate Department of Zoology and Research Centre, Mahatma Gandhi College, Thiruvananthapuram, 2020.
- 6. Phytochemical investigation of *Eclipta prostrata* (L.) L. Current Trends and Advances in Biological Sciences (CTAB- 2020). Post Graduate Department of Botany and Biotechnology, Bishop Moore College, Mavelikara.
- 7. Phytochemical investigation and *in vitro* anticancer activity of *Sesbania grandiflora* (L.) Pers. a wild leafy vegetable of Southern Western Ghats. Current Trends and Advances in Biological Sciences (CTAB- 2020). Post Graduate Department of Botany and Biotechnology, Bishop Moore College, Mavelikara.

Courses & Workshops attended:

- (1). Qualified 12 days Training Programme on "*Herbarium Methodology*" conducted by Botanical Survey of India (BSI), Southern Regional Centre (SRC), Coimbatore, 2014.
- (2). Qualified Science Academies Refresher Course on "*Plant Taxonomy*" held from 12th 26th December, 2018 at the Department of Biology, School of Sciences, The Gandhigram Rural Institute (Deemed to be University), Gandhigram, Dindigul, Tamil Nadu, India.
- (3). Qualified "Online Induction Programme" conducted by the UGC-Human Resource Development Centre, University of Kerala, Kariavattom, Trivandrum, from 06-09-2021 to 05-10-2021.
- (4). Participated in one day orientation programme on "Valuation of answer scripts" conducted by the University of Kerala 30/07/2022 at the Senate Chamber, SH Campus, University of Kerala.

Achievements year wise:

- 1. First Rank with Kerala University Gold Medal in BSc. Degree Examination (2007).
- 2. Fourth Rank with Dr. N. Sasidharan Endovement in MSc. Degree Examination (2009).
- 3. Qualified the KSCSTE Research Fellowship of 2010 in Life Sciences, conducted by the Kerala State Council for Science Technology & Environment (KSCSTE), Pattom, Thiruvananthapuram.
- 4. Qualified the Herbarium Methodology Training Programme (2014) conducted by Botanical Survey of India (BSI), Southern Regional Centre (SRC), Coimbatore.
- 5. Worked as 'Botanical Assistant' at Botanical Survey of India (BSI), Southern Regional Centre (SRC), Coimbatore since 28/10/2013 to 03/10/2017.
- 6. Worked as *Guest Lecturer* at Christian College, Kattakada, Thiruvananthapuram from 03/07/2017 to 05/02/2018.
- 7. Worked as *Assistant Professor* at Department of Botany, NSS College, Pandalam, Pathanamthitta District from 07/02/2018 to 05/07/2021.
- 8. Member of board of question paper setter for *MSC Plant Science with Bioinformatics* Degree Exams under *University of Kannur* from 25/08/2022 onwards.