Dr. E. SUJATHA

Professor Department of Botany University College of Science Osmania University Hyderabad-500017 – India

Mobile: +91 9908945640 E-mail: <u>sujatha@osmania.ac.in</u> <u>esujathaou@gmail.com</u> <u>sujatha.edupuganti@gmail.com</u>



Research Area:

My research integrates Phytochemistry, Pharmacognosy, and Metabolomics to elucidate the therapeutic potential of medicinal plants, blending traditional knowledge with scientific methods. Focusing on bioassay guided drug discovery, we investigate natural products for novel therapeutic agents. We identify bioactive compounds with diverse health benefits with advanced extraction, isolation, and analytical techniques. We explore structure-activity relationships to innovate pharmaceuticals, nutraceuticals and cosmeceuticals while considering the ecological significance of secondary metabolites in our studies.

Research Objectives:

- Phytochemical profiling of medicinal plants under various abiotic-stresses, and understand the effects of stress on phytochemical composition & therapeutic value.
- Exploring phytochemical compositions of important Indian medicinal plants to identify key marker compounds, and develop lead molecules for natural product drug discovery.
- Creating a repository of extracts and pure compounds from indigenous and rare plants to support R&D in understanding disease pathophysiology & pharmacological mechanisms.
- Developing standardization protocols for herbal formulations to ensure their quality, efficacy, and safety, facilitating their integration into healthcare.

Teaching Courses:

- Plant Physiology
- Plant Biochemistry
- Medicinal Botany
- Phytochemistry and Pharmacognosy

START-UP INITIATION: Mentor and Director for "Biogenic Products Private Limited" First Start-up under Osmania Technology Business Incubator (OTBI) of Osmania University in 2021. The Start-up focusses on developing natural product based standardized formulations to meet global healthcare needs.

EDITORIAL POSITION: Chief-Editor, Journal of Next Frontier Sciences, A peer-reviewed Monthly journal focused on high-quality research dissemination across multiple scientific disciplines.

QUALIFICATIONS

ACADEMIC

- Ph.D. (Botany): 2001, Osmania University, Hyderabad. (Title: Effect of Brassinosteroids on growth and metabolism of radish (*Raphanus sativus* L.)
- M.Sc. Botany: 1997, Osmania University, Hyderabad
- M.Sc. Biotechnology: 2010, Kuvempu University, Karnataka
- B.Sc. BZC: 1994, Osmania University, Hyderabad
- Intermediate: 1991, Board of Intermediate Education, AP
- S.S.C.: 1989, Board of Secondary Education, AP

EXPERIENCE

- Professor, Department of Botany, Osmania University, from 1st March 2022 (Present Position)
- Professor, Department of Life Science, Central University of Karnataka, from 18th January 2024 to 22nd April, 2025 (On lien for 15 months)
- Associate Professor, Department of Botany, Osmania University, from 1st March 2019 to 28th February 2022
- Assistant Professor, Department of Botany, Osmania University, from 6th September 2013 to 28th February 2019
- Assistant Professor, Department of Botany, Telangana University, Nizamabad from 1st March 2007 to 6th September 2013
- Lecturer in Sri Chaitanya Junior College from June 2001 to February 2007
- Lecturer in Rishi UBR Degree College for Women from 1997 to 1999

TECHNICAL

- Two-year P G Diploma in Herbal Drug Technology, IGMPI, New Delhi-2023
- Three-year Diploma in Network Centered Computing (GNIIT), NIIT, Hyderabad

ACADEMIC DISTINCTIONS

- M.Sc. Botany -College Topper with Distinction of 73%
- M.Sc. Biotechnology University Topper with 71%
- B.Sc. -Class Topper with Distinction of 72%
- S.S.C. -Topped with Distinction of 74% in Bodhan Revenue Division

RESEARCH PROJECTS

1. Development and Standardization of Immunity Boosting Polyherbal Infusion Bags as Principal Investigator, sponsored by TSCOST, Govt of Telangana-2022 (10L)

- Development of a rapid and cost-effective advanced mass spectrometry approach for the evaluation of Vitamin-D deficiency, as Co-Principal Investigator, sponsored by TSCOST, Govt of Telangana-2022 (8L)
- Genome basis of the impact of brassionsteroids on nitrogen metabolism, yield and tolerance of *Arachis hypogeae* L. under drought stress sponsored by DST-PURSE-II 2018-2021 (8L)
- 4. Effect of Brassinosteroids on growth and metabolism of *Arachis hypogeae* L. under drought stress as Principal Investigator Sponsored by UGC 2014-17 (3L)

PUBLICATIONS

RESEARCH ARTICLES

- GC-MS profiling of essential oil of Indian lavender *Bursera penicillata* (Sesse & Moc. Ex DC.) Engl. Vishalakshi, R., Dokuparthi, S. K., & Edupuganti, S. (2025). International Journal of Biosciences (IJB), 26(3), 114–120. http://dx.doi.org/10.12692/ijb/26.3.114-120, Scopus, Impact factor: 1.0
- Antimicrobial potential of *Bursera penicillata* (Sessé & Moc. ex DC.) Engl. essential oil in combating bacterial and fungal pathogens. Vishalakshi, R., Narender, R., Venkatachary, N., Dokuparthi, S. K., & Edupuganti, S. (2025). International Journal of Botany Studies, 10(3), 11–15. https://www.botanyjournals.com/archives/2025/vol10issue3/PartA/10-3-2-244.pdf, Impact factor: 1.0
- Phytochemical and antioxidant potential of *Cestrum diurnum* L. leaves. Venkatachary, N., Narender, R., Vishalakshi, R., Dokuparthi, S. K., & Edupuganti, S. (2025). International Journal of Botany Studies, 10(4), 30–34. https://www.botanyjournals.com/archives/2025/vol10issue4/PartA/10-4-5-278.pdf, Impact factor: 1.0
- Phytochemical Profiling and Bioactive Compounds of *Cestrum diurnum* L.: Insights from GC-MS Analysis. Venkatachary, N., Narender, R., Vishalakshi, R., Dokuparthi, S. K., & Edupuganti, S. (2025). International Journal of Scientific Research and Engineering Development (IJSRED), 8(1), 1614–1617. https://www.ijsred.com/volume8/issue1/IJSRED-V8I1P171.pdf, Impact factor: 1.0
- Nutritional and immunological significance of *Adansonia digitata* L. fruit pulp. Narender, R., Venkatachary, N., Vishalakshi, R., Dokuparthi, S. K., & Edupuganti, S. (2025). Journal of Phytonanotechnology and Pharmaceutical Sciences (JPPS), 5(1), 1–6. https://jpps.ukaazpublications.com/articles/2025/jpps_2025_5_1_1.pdf, Impact factor: 1.0

- Phytochemical and antioxidant potential of *Adansonia digitata* L. fruit pulp. Narender, R., Venkatachary, N., Vishalakshi, R., Dokuparthi, S. K., & Edupuganti, S. (2025). International Journal of Scientific Research and Engineering Development (IJSRED), 8(1), 1450–1452. https://www.ijsred.com/volume8/issue1/IJSRED-V8I1P156.pdf, Impact factor: 1.0
- Molecular Docking Evaluation of Phytochemicals in Fruits of *Terminalia pallida* Brandis: Implication on Immunomodulation. Sanagala, V. M., Porika, R., Edupuganti, S., Dokuparthi, S. K., & Biman, K. K. (2024). Tropical Journal of Natural Product Research (TJNPR), 8(5), 7106–7113. https://doi.org/10.26538/tjnpr/v8i5.9, Scopus, Impact factor:1.0
- In-vivo Antiulcer activity of Ethanolic extract of *Mussaenda erythrophylla* Schumach. & Thonn. Leaves. P. Hari Krishna, E. Sujatha, and S. Karunakar. Advances in Bioresearch (ISSN 2277-1573), Vol 15 (3) May 2024: 220-226. Web of science, Impact Factor: 0.9
- Tarenna asiatica (L.) Kuntze ex K.Schum. Leaf Extract as a Promising Antiulcer Agent: An Experimental Study. P. Hari Krishna E. Sujatha, S. Karunakar. Bulletin of Environment, Pharmacology and Life Sciences. 12(10); 2023:47-52. ISSN 2277-1808. Web of science, Impact Factor: 0.9
- Investigating *Cocculus hirsutus* and *Calycopteris floribunda* for Antioxidant and Antiulcer Therapy: a Comparative Study. S. Abbagoni, S. Edupuganti, G. Jhansi Rani, S. Karunakar. Bull. Env.Pharmacol. Life Sci., Vol 12 [4] March 2023: 122 126, Web of science, Impact Factor: 0.9
- Comparative docking analysis of the phytochemicals isolated from *Landoltia punctata* (G. Mey.) Les & D.J. Crawford. Meraj Fatima, Sujatha Edupuganti. Eur. Chem. Bull. 2023,12(10), 5420-5434 Scopus, Impact Factor: 1.0
- Phytochemical profile, antioxidant and cytotoxic activities of aquatic weed *Landoltia punctata* (G. Mey.) Les & D.J. Crawford. E. Sujatha and Meraj Fatima (2023). Ann. Phytomed., 12(1):1-6. http://dx.doi.org/10.54085/ ap.2023.12.1.33. Web of science, Impact Factor: 0.8
- In-vivo Anti-Inflammatory Activity of Ethanolic Extract of *Indigofera* Species. S Karunakar, E Sujatha, N Vanitha, T Sowmyya. NeuroQuantology. September 2022;20 (10): 9995-10001. doi: 10.14704/nq.2022.20.10. NQ55973, Scopus, Impact factor: 0.9
- 14. Nuclear Factor-Y (NF-Y): Developmental and Stress-Responsive Roles in the Plant Lineage. Polavarapu B. Kavi Kishor, Showkat Ahmad Ganie, Shabir H. Wani, Rajasheker Guddimalli, Appa Rao Karumanchi, Sujatha Edupuganti, Jalaja Naravula, Vinay Kumar, Rathnagiri Polavarapu, Prashanth Suravajhala, Suprasanna Penna. Journal of Plant Growth Regulation. (2022) Scopus, Impact factor: 3.42

- The antioxidant and antihypertensive potential of *Ledebouria hyderabadensis*. Sujatha,
 E., Veena, B. S., & Sowmyya, T. (2022). International Journal of Health Sciences, 6(S2),
 12617–12628. Doi: 10.53730/ijhs.v6nS2.8907. Scopus, Impact factor: 0.6
- Evaluation of In vitro Antiacne Activity of *Pupalia lappacea* (L.) Juss. T. V. Mahalakshmi, E. Sujatha and S. Padmini. Journal of Pharmaceutical Research International. 34(15A): 29-34, 2022. Doi:10.9734/jpri/2022/v34i15A35694
- Phytochemical and antioxidant screening of *Cocculus hirsutus* and *Calycopteris floribunda*. (2021). Abbagoni, S., Edupuganti, S., & Rani, G. J. International Journal of Health Sciences, 5(S1), 576–584. https://doi.org/10.53730/ijhs.v5nS1.13642
- Phytochemical investigation, antioxidant and cytotoxic potential of *Dracaena reflexa* Lam., Pravalika Kuchana, Sujatha E. IJBPAS. 2021, 10(9): 698-708. Web of science, Impact Factor: 1.0, date; 25-09-2021 Doi:10.31032/IJBPAS/2021/10.9.1054
- Phytochemical and in vitro anti-inflammatory screening of *Indigofera species*. S Karunakar, E Sujatha, S Anuradha, N Vanitha. IJBPAS. 2021, 10(9): 672-681. Web of science, Impact Factor: 1.0, date; 25-09-2021 Doi:10.31032/IJBPAS/2021/10.9.1052
- 20. Gas exchange and photochemical efficiency of transplanted seedlings of *Jatropha curcas*. L: accessions under salinity. Sujatha Edupuganti, Sudhir Ejnavarzala, Suhas P Wani, Gajanan Sawargaonkar. International Journal of Botany Studies. 6(6), 2021, 418-426. Web of science, Impact Factor: <1.0, date: 19-11-2021. Doi: https://www.botanyjournals.com/archives/2021/vol6/issue6/6-6-38
- Total Phenolic Content, Flavonoid Content, And Antioxidant Activity of Alternanthera ficoidea (L.) P. Beauv. T.V. Mahalakshmi, E. Sujatha, B. Ramadevi. IJBPAS, September, Special Issue, 2021, 10(9): 453-460. Web of science, Impact Factor: 1.0, date: 25-09-2021. Doi: 10.31032/IJBPAS/2021/10.9.1034
- 22. Root Morphology, Shoot Growth, Antioxidative Response and Gas Exchange of Stem Cuttings of *Jatropha Curcas* L. Accessions at Different NaCl Salinity Levels. Sujatha Edupuganti, Sudhir Ejnavarzala, Nirmala Babu Rao, P. Kamalakar. IJBPAS, September, Special Issue, 2021, 10(9): 428-452. Web of science, Impact Factor: 1.0, date: 25-09-2021 Doi:10.31032/IJBPAS/2021/10.9.1033
- 23. Human AChE selective inhibition of phytochemicals of *Sonchus wightianus* of Nepal origin: an in-silico approach. Veena BS, Khadka S, Sujatha E and Basnet R. Int J Pharm Sci & Res. 2021; 12(2): 1033-38. doi: 10.13040/IJPSR.0975-8232.12(2).1033-38. Impact Factor: 0.8
- 24. Genetic diversity analysis of Linseed (*Linum usitatissimum* L.) accessions using RAPD Markers; Beema Nagabhushanam, Mohammad Imran Mir, M. Nagaraju, E. Sujatha, B.

Rama Devi, B. Kiran Kumar (2021). Emirates Journal of Food and Agriculture. 2021. 33(7): 589-599, doi: 10.9755/ejfa.2021.v33.i7.2736, Impact Factor: 1.06

- 25. Improvement of small seed for big nutritional feed; P. B. Kavi Kishor, S. Anil Kumar1, Jalaja Naravula, P. Hima Kumari, Divya Kummari, Rajasheker Guddimalli, Sujatha Edupuganti, Appa Rao Karumanchi, Perumal Venkatachalam, Prashanth Suravajhala, Rathnagiri Polavarap (2021). Physiol Mol Biol Plants, https://doi.org/10.1007/s12298-021-01071-6, Impact Factor: 2.0
- 26. Overexpression of RNA-binding bacterial chaperones in rice lead to stay-green phenotype, improved yield and tolerance to salt and drought stresses; Rajasheker G, Anil Kumar S, Surender Reddy P, Sujatha E, Divya K, Reddy PS, Jalaja N, Jawahar G, Insaf QM, Nagaraju M, Rathnagiri P, Kavi Kishor PB (2021). Physiologia Plantarum, Doi. 10.1111/ppl.13369. Impact Factor: 4.148
- 27. Evaluation of In-vitro antimicrobial activity of leaf extracts of *Maerua oblongifolia* (Forssk.) A. Rich; Nagaraju Mukkamula, B Naga Bhushanam, B Rama Devi, E Sujatha, B Kiran Kumar (2021). International Journal of Botany Studies; vol 6, Issue 1, pp. 653-656, ISSN: 2455-541X, Impact Factor: RJIF-5.12, Web of Science
- 28. Lysine, Lysine-Rich, Serine, and Serine-Rich Proteins: Link Between Metabolism Development, and Abiotic Stress Tolerance and the Role of ncRNAs in Their Regulation; P. B. Kavi Kisho, Renuka Suravajhala, Guddimalli Rajasheker, Nagaraju Marka, Kondle Kavya Shridhar, Divya Dhulala, Korubothula Prakash Scinthia, Kummari Divya, Madhavi Doma, Sujatha Edupuganti, Prashanth Suravajhala and Rathnagiri Polavarapu (2020); Frontiers in Plant Science; 03 December 2020, https://doi.org/10.3389/fpls.2020.546213, Impact Factor : 4.40
- 29. A review on Isolation of Endophytes from Indian Medicinal Plants; Sujatha Edupuganti,
 P. Harikrishna, Rajesh Goud Gajula (2019); International Journal of Pharmaceutical Research; Vol 4, Issue 4, pp: 301-307, ISSN-0975-2366, Impact Factor: 0.13
- 30. Brassinosteroids Promote Photosynthetic Parameters of Pigeon Pea Plants Under Water Deficit Conditions; Sujatha Edupuganti, Shahana Tahinyath, Anusha (2019); International Journal of Recent Technology and Engineering; Vol 8, Number 3S, pp: 312-321, ISSN Number: 2278-3878, Impact Factor: 0.8
- 31. Brassinosteroids Stimulate Nitrogen Metabolism of Pigeon Pea Plants Under Water Deficit Conditions; Sujatha Edupuganti, Shahana Tahinyath, Anusha (2019); International Journal of Recent Technology and Engineering; Vol 8, Number 3S, pp: 300-307, ISSN Number: 2278-3878, Impact Factor: 0.8
- 32. In-Silico molecular docking analysis of isolated Homo-Isoflavanones from bulbs of *Ledabouria revoluta* as GABAA receptor inhibitors; Soni Veena B and Sujatha E (2019);

International Journal of Pharmaceutical Science and Research; Vol 10, Number 9, pp: 4315-4321, ISSN Number: 0975-8232, Impact Factor: 0.8 Doi: 10.13040/IJPSR.0975-8232

- 33. Morphological and physio- biochemical changes in response to exogenous application of 24- epibrassinolide and salicylic acid under water stress in chickpea; Sujatha Edupuganti, Lalitha R and Anuradha, S (2019) Journal of Pharmacognosy and Phytochemistry; Vol 8, Number 4, pp: 2443-2452, ISSN Number: 23498234, Impact Factor:0.454, NAAS Score: 5.21
- 34. Impact of 24-Epibrassinolide and Salicylic Acid on Nitrogen Metabolism in Chickpea Subjected to Water Stress; Sujatha Edupuganti and Lalitha R (2019); Journal of Emerging Technologies and Innovative Research; Vol 6, Issue 6 pp: 519-540, ISSN-Number: 2349-5162, Impact Factor: 0.435, Google Scholar h-index: 5.87
- 35. Air Pollution Tolerance Index (APTI) of Certain Plants in Hyderabad City; R. Annie Manju Latha1, Prof. Nirmala Babu Rao, Dr E. Sujatha, Dr. B. Kiran Kumar, B. Vanitha (2019); Journal of Emerging Technologies and Innovative Research; Vol 6, Issue 3 pp: 966-971, ISSN- Number: 2349-5162, Impact Factor: 0.435, Google Scholar h-index: 5.87
- 36. Effect of air pollutants on enzyme activity of certain plants in Hyderabad; Prof. Nirmala Babu Rao, Dr E. Sujatha, Dr. B. Kiran Kumar, R. Annie Manju Latha (2019); Journal of Emerging Technologies and Innovative Research; Vol 6, Issue 3 pp: 411-417, ISSN-Number: 2349-5162, Impact Factor: 0.435, Google Scholar h-index: 5.87
- 37. Effect of 28- Homobrassinolide on photosynthesis and carbohydrate content of Maize under salt and cadmium stress; Sujatha E, Anusha, Taheniyat Shahana, Lalitha R (2019); Annals of Plant Sciences; Vol 8, Issue 3, PP: 3517-3533, ISSN Number: 2287-688X, Impact Factor: 0. 471
- 38. Maize Micro RNA associated abiotic stresses: Mini Review; Sujatha E. and Saidulu Abbagoni (2019); Journal of Experimental Biology and Agricultural Sciences; Vol 7, Issue 2, PP: 103-107, ISSN Number: 2320-8694, Impact Factor: 0.675, NAAS Score: 5.07. Doi: 10.18006/2019.7(2).103.107
- 39. 28-homobrassinolide induced proteomic responses of maize leaves under salt and cadmium stress; Sujatha E, Anusha, Taheniyat Shahana, Lalitha R (2019); Journal of Pharmacognosy and Phytochemistry; Vol 8, Number 2, pp: 70-75, ISSN Number: 23498234, Impact Factor: 0.454, NAAS Score: 5.21
- 40. Phytochemical screening and antimicrobial activity studies of underground bulbs of *Ledeboria hyderabadensis*; Veena B.S and Sujatha E. (2019); The Journal of

Phytopharmacology; Vol 8, Number 1, pp: 08-11, ISSN Number: 2320-480X, Impact Factor:0.620, NAAS Score: 5.21

- Physiological and Molecular mechanism in improving drought tolerance in rice cultivars; Sujatha E, Pravallika, Anusha, Taheniyat Shahana, Lalitha R, and Veena B. S. (2019); Journal of Emerging Technologies and Innovative Research; Vol 4, Number 6, pp: 25-29, ISSN Number: 23495162, Impact Factor:0.435, Google Scholar h-index: 5.87
- 42. Molecular docking and ADME studies of natural compounds of *Centella asiatica* for antiepileptic activity; Sujatha E. and Veena B.S. (2019); Journal of Pharmacognosy and Phytochemistry; Vol 8, Number 1, pp: 494-499, ISSN Number: 23498234, Impact Factor: 0.454, NAAS Score: 5.21
- 43. Micro RNA: A myraid roles in plant tolerance to various abiotic stresses; Abbagoni Saidulu, and Sujatha E. (2018); Asian Journal of Research in Chemistry and Pharmaceutical Sciences; Vol 6, Number 4, pp: 194-201, ISSN Number: 2349 7106, Impact Factor: 3.0
- 44. Synthesis and Antimicrobial Activity of Novel 1,4,5-Triphenyl-1HImidazol-[1,2,3]-Triazole Derivatives; Kumar B.S, Lakshmi P.V.A, Veena B.S, Kamala N, and Sujatha E. (2017); Russian Journal of General Chemistry-Springer; Vol 43, Number 5, pp: 589-594, ISSN Number: 1070-3632, Impact Factor: 0.658.Doi: 10.1134/S1068162017050120
- 45. Synthesis and Antibacterial Activity of Novel Pyrano [2,3-d] pyrimidine-4-one-3-Phenylisoxazole Hybrids; Kumar B.S, Lakshmi P.V.A, Veena B.S, and Sujatha E. (2017); Russian Journal of General Chemistry-Springer; Vol 87, Number 4, pp: 829-836, ISSN Number: 1070-3632, Impact Factor: 0.658. Doi: 10.1134/S1070363217040260
- 46. Synthesis and Antimicrobial Activity of Novel 5-[(1H-indol-3-yl) methylene] thiazolidine-2,4-dione-[1,2,3] triazole Hybrids; Kamala L, Veena B.V, Anantha Lakshmi P.V, Vasantha P, and Sujatha E. (2017); Russian Journal of General Chemistry-Springer; Vol 87, Number 2, pp: 316-321, ISSN Number: 1070-3632, Impact factor: 0.658
- 47. Phytochemical Analysis and Anti-Microbial Activity of *Costus igneus* (INSULIN PLANT) Leaf Extract; Nirmala Babu Rao, Rajesh Goud Gajula, Dr. Sujatha E, Sita Kumari O. (2016); International Journal of Biology, Pharmacy and Allied Sciences; Vol 5(6), pp 1207-1214, ISSN Number: 2277-4998, Impact Factor: 0.8
- 48. Mitigation of Drought Stress by 24- Epibrassinolide and 28- Homobrassinolide in Pigeon Pea Seedlings; Taheniyat Shahana, Anusha Rao P, Seeta Ram S and Sujatha E. (2015); International Journal of Multidisciplinary and Current Research; Vol 3, pp: 904 - 911, ISSN Number: 2321-3124, Impact Factor: 2.1
- 49. Germination, Growth and Oxidative Responses of Maize Seedlings to Salt and/or Cadmium Stress: Mechanism of Toxicity Amelioration by 28- Homobrassinolide;

Anusha P, Taheniyat Shahana and Sujatha E. (2015); International Journal of Current Microbiology and Applied Sciences; Vol 4, Number 9, pp: 442-453, ISSN Number: 2319-7706, Impact Factor: 0.654, NAAS Score: 5.38

- 50. Antimicrobial Activity of Abutilon indicum; Dr. Sujatha Edupuganti, Rajesh Goud Gajula, Chandra Shekhar Kagitha, Nagma Kazmi. (2015); World Journal Of Pharmacy and Pharmaceutical Sciences; Vol 4, Issue 09, pp: 946 949, ISSN Number: 2278 4357; Impact Factor: 0.9
- Brassinosteroids Enhance the Shoot Growth, Foliar Growth and Chlorophyll Pigments of Radish; Vidhya Vardhini B, Sujatha E and Seeta Ram Rao S. (2015); Journal of Global Biosciences; Vol 4, Number 7, pp: 2947-2951, ISSN Number: 2320-1355, Impact Factor: 1.1
- 52. Antimicrobial Activity of Seven Endangering Medicinal Plants; Rajesh Goud Gajula, Shravya Goud Kola, Dr. Nirmala Babu Rao, Dr. Sujatha Edupuganti. (2015); World Journal of Pharmaceutical Research; Vol 4, Issue 01, pp: 833-839, ISSN Number: 2277-7105, Impact Factor: 0.9
- 53. Brassinolide improves nutrient value in storage roots of *Raphanus sativus* L. var Pusa chetki long; Vidhya Vardhini B., Sujatha E., and Seeta Ram Rao S. (2014); Recent Research in Science and Technology; Vol 6(2): pp: 12-15, ISSN Number: 2076-5061, Impact Factor: 0.2
- 54. Molecular Identification Of Penicillin Resistance Bacteria In Soil Sample Collected From Hospital Area; Dr. Sujatha Edupuganti, Rajesh Goud Gajula, Shravya Kola, Dr.Shailima RD Vardhini. (2014). PHARMANEST - An International Journal of Advances in Pharmaceutical Sciences; Vol 5 Issue 6, pp: 2559-2567, ISSN Number: 2231 - 0541, Impact Factor: 0.7
- 55. Assessment of Genetic Diversity in Watermelon *Citrullus lanatus* (Thunb.) by Using SDS-PAGE through Genetic Analysis Software; Rajesh Goud Gajula, Dr. Shailima RD Vardhini, Dr. Sujatha Edupuganti and Raghavendar G. (2014). World Journal of Pharmaceutical Chemistry; Vol 3, Issue 6, pp: 1830-1834, ISSN Number: 2277 7105, Impact Factor: 0.9
- 56. Brassinosteroids on the Oxidizing and Hydrolyzing Enzymes of Radish Plants A Study; Vidya Vardhini B., Sujatha E and Seeta Ram Rao S. (2012). Journal of Phytology; Vol 4(5), pp: 01-04, ISSN Number: 2075 6240, Impact Factor: 0.2
- 57. Studies on the Effect of Brassinosteroids on the Qualitative Changes in the Storage Roots of Radish; Vidya Vardhini B, Sujatha E and Seeta Ram Rao S. (2012). Bulgarian Journal of Agricultural Sciences; Vol 18, No 1, pp: 63-69, ISSN Number: 1310 0351, Impact Factor: 0.2

- 58. Influence of brassinosteroids on metabolites of *Raphanus sativus* L; Vidya Vardhini B., Sujatha E and Seeta Ram Rao S. (2012). Journal of Phytology; Vol 4(2), pp: 45-47, ISSN Number: 2075 6240, Impact Factor: 0.2
- 59. Influence of brassinolide on Enzymes in *Raphanus sativus* L; Vidya Vardhini B., Sujatha E and Seeta Ram Rao S. (2012). Bioinfolet; Vol 9(2), pp: 142-146, ISSN Number: 0973 1431, Impact Factor: 0.6
- 60. Effect of brassinolide on biochemical composition of radish (*Raphanus sativus*); Vidya Vardhini B., Sujatha E and Seeta Ram Rao S. (2011). Bioinfolet; Vol 8(4), pp: 404-406, ISSN Number: 0973 1431, Impact Factor: 0.6
- 61. Brassinosteroids: Alleviation of Water Stress in Certain Enzymes of Sorghum seedlings;
 Vidya Vardhini B.V., Sujatha E and Seeta Ram Rao. S (2011). Journal of Phytology; Vol 3(10), pp: 38-43, ISSN Number: 2075 6240, Impact Factor: 0.2
- 62. Role of Brassinosteroids in alleviating various abiotic and biotic stresses A review; Vidya Vardhini B.V., Anuradha, S, Sujatha, E and Seeta Ram Rao S. (2010). Plant Stress, Global Science Books; Vol 4, Special Issue 1, pp: 56-61, ISBN Number. 978-4-903313-59-7, Impact Factor: 0.9
- 63. Brassinosteroids A new class of phytohormones; Seeta Ram Rao S., Vidya Vardhini B., Sujatha E and Anuradha S. (2002). Current Science; Vol 82, Number 10, pp: 1239-1245, ISSN Number: 011 3891, Impact Factor: 0.9

BOOKS

- Transgenic Tomatoes for Abiotic Stress Tolerance and Fruit Traits: A Review of Progress and a Preview of Potential; P. B. K. Kishor et al. (eds.), Genetically Modified Crops, Springer Nature Singapore Pte Ltd. (2021), PP:1-30 <u>https://doi.org/10.1007/978-981-15-5932-7_1</u> - Co-Author of a chapter
- Degree Second Year Botany Text Book, Dr. B.R. Ambedkar Open University (2019), Govt. of Telangana, Hyderabad - Authored 3 Units both in English & Telugu versions
- Degree Second Year Botany Practical Manual, Dr. B.R. Ambedkar Open University (2019), Govt. of Telangana, Hyderabad - Authored 3 Units both in English & Telugu versions
- Degree Final Year Botany Text Book, Telugu Akademi (2018), Govt. of Telangana, Hyderabad - Authored 4 chapters both in English & Telugu versions
- Intermediate Second Year Botany Text Book, Telugu Akademi (2008), Govt. of Andhra Pradesh, Hyderabad - Authored 7 chapters both in English & Telugu versions

PATENTS

- Sujatha Edupuganti, Sudheer Kumar Dokuparthi, Suresh Kandagatla, "Polyherbal Infusion Bags" Indian patent application number (IN202341033055), Patent No. TEMP/E-1/37402/2023-CHE; 10-05-2023
- Sujatha Edupuganti, Sudheer Kumar Dokuparthi, Bhaskar Danaboina, "An herbal extract-infused chocolate formulation for natural menstrual relief" Indian patent application number (IN202341052725), Patent No. TEMP/E1/61299/2023-CHE; 05-08-2023
- Sujatha Edupuganti, Mahalakshmi T, Sudheer Kumar Dokuparthi, "Phytosomal gel formulation for enhanced acne relief using plant extracts" Indian patent application number (IN202341052726), Patent No. TEMP/E1/61305/2023-CHE; 05-08-2023

RESEARCH SCHOLARS

Awarded

- Ms. Anusha Paruchuri, Telangana University- 2018 Inspire Fellow Research Title: Effect of Brassinosteroids on the performances of maize (*Zea mays* L.) plants under salinity and cadmium stress
- Ms. Taheniyat Shahana, Telangana University-2019 -Inspire Fellow Research Title: Induction of drought tolerance in pigeon pea (*Cajanus cajan* (L.) Millsp.) by brassinosteroids
- Ms. R. Lalitha, Telangana University 2019
 Research Title: Study of mitigative and physiological effects by brassinosteroids and salicylic acid in chikpea plants under water stress
- Mr. S. Karunakar, Osmania University-2022 Research Title: Phytochemical and molecular level exploration of anti-inflammatory activity of *Indigofera* species
- Ms. T.V. Maha Lakshmi, Osmania University -2022
 Research Title: Phytochemical Investigation, Antimicrobial Screening and Herbal Formulation of Amaranthaceae Plants
- Mr. E. Sudheer, Osmania University -2022
 Research Title: Studies on physiological and biochemical parameters of transplanted
 seedlings and stem cutting accessions of *Jatropha curcas* L. under salinity.
- Ms. K. Pravalika,Osmania University 2023
 Research Title: Phytochemical Investigation and Biological Studies of *Dracaena reflexa* and *Furcraea foetida*
- Ms. B. Soni Veena, Osmania University 2023
 Research Title: Phytochemical and Pharmacological profiling of *Ledebouria hyderabadensis*- A new species from Telangana

- Ms. Meraz Fathima, Osmania University -2023
 Research Title: Phytochemical and Pharmacological Screening of *Landoltia punctata* with a Special Emphasis on Anticancer Activity
- 10. A. Saidulu- Osmania University -2024

Research Title: Phytochemical investigation and Pharmacological screening of *Cocculus hirsutus* and *Calycopteris floribunda*.

 Harikrishna- Osmania University -2024
 Research Title: Phytochemical Investigation and Biological Exploration of Selected Indian Medicinal Plants of Rubiaceae Family.

Submitted

12. R. Vishalakshi, Osmania University -2025

Research Title: Exploring the volatile components of *Bursera penicillata* (Sesse & Moc. Ex DC.) Engl. for commercial applications

- 13. R. Narender, Osmania University -2025Research Title: Development of novel nutraceutical gummies from *Adansonia digitata* L.
- 14. N. Venkatachary, Osmania University -2025Research Title: Anti-Osteoporotic Activity of *Cestrum diurnum* L.: Development of a

Herbal Formulation

Currently working

- 15. E. Revathi, OU
- 16. O. Rani (CSIR-JRF), OU

ORIENTATION / REFRESHER / SHORT TERM / WORK SHOPS ATTENDED

- Orientation Course of four-week duration organized by UGC Academic Staff College, University of Hyderabad from 17th February 2010 to 16th March 2010
- Refresher Course of three-week duration in Life Sciences organized by UGC Academic Staff College, University of Hyderabad from 9th December 2010 to 29th December 2010
- Refresher Course of three-week duration in Research Methodology in Basic Sciences organized by UGC – Academic Staff College, Osmania University from 18th November 2013 to 7th December 2013
- DST-ISLARE National workshop of ten-day duration on Genome Analysis from 11th November 2010 to 20th November 2010 organized by Center for Plant Molecular Biology, Osmania University, Hyderabad
- UGC Sponsored Short Term Course of one-week duration on Gender Sensitisation organized by UGC-HRDC, Osmania University from 13th March to 20th March 2018

- UGC Sponsored Short Term Course of one-week duration on Yoga and Spiritual Science organized by UGC-HRDC, Osmania University from 2nd July to 7th March 2018
- UGC Sponsored Two-day workshop for Academic Administrators organized by UGC-MHRDC, Osmania University on 29th June and 30th June 2018
- Molecular Biotechnology and Bioinformatics, University College for Women, Koti-Osmania University, 26th June to 27th June 2014
- Orientation Program for Faculty on Massive Open Online Courses (MOOCs), EMRC-OU, 11th November 2021
- Orientation Program for Faculty on Massive Open Online Courses (MOOCs), EMRC-OU, 16th November 2021

RESOURCE PERSON

- Delivered an extension lecture on New Phytohormones Brassinosteroids: Its importance on 24th January 2015 at DR. B.R.R. Government Degree college, Jadcherla, Mahabubnagar
- Delivered an invited lecture for One Day Seminar on Biotechnology & Environment Present Scenario organized by District Development Board, Government Degree College, Kamareddy, Nizamabad on 19th January, 2012
- Delivered a lecture for the Orientation Programme to the Junior Lecturers in Botany working in Govt. Junior Colleges of Zone–V from 29.11.2010 to 04.12.2010 organized by Government of Andhra Pradesh in Karimnagar District

Workshops Organized

- Ten-day hands-on training titled "Qualitative and quantitative analysis for the raw herbs and herbal extracts of commercial importance" from 15th to 24th July 2022, sponsored by DST-SERB under Karyashala Programme
- Seven-day workshop on of hands-on training titled "Workshop on Application of Analytical Techniques in The Medicinal Botany: A Drug Discovery Approach" from 1st to 7th May 2023, sponsored by DST-SERB under Karyashala Programme

Conferences Organized

 One-day National Seminar on "Medicinal botany in drug discovery-A modern perspective" on 22nd February 2022, Sponsored by TSCOST, Govt of Telangana

Attended

International

- Attended 5th "International level Virtual conference on "Emerging Infectious Disease and Novel Drug Development (EID-NDD 2021)" held on 3rd & 4th of December 2021.
- Attended National Workshop on "How to develop Quality Monographs for herbs for IP". held on 26th July 2021
- Participated in a National Webinar on "Current scenario of Pharmacovigilance and CPCSEA" held on 29th July 2021
- 4. Participated and presented a paper in International Conference on Biotechnology: A Global Scenario. Kakatiya University, Warangal, 2nd to 4th November 2010. Sujatha E, Vardhini, B.V. and Rao, S.S.R. (2010). Role of Brassinosteroids on the Qualitative Changes in the Storage Roots of Radish.

National

- Attended a National FDP organised by IQAC, AISSMS College of Pharmacy in Academic Collaboration with APTI on "Assessment strategy for OBE: Mapping and attainment", 12th September 2022.
- Presented a scientific paper in the One Day National Seminar on *Current Issues and Challenges in Plant Sciences*, organized by the Department of Botany, UGC-CAS-I (SAP-II), University College of Science, Osmania University, Hyderabad, 30th May 2018
- Presented a scientific paper in the Two-Day National Conference on *Plant Science Research: Current Status and Future Challenges*, organized by the Department of Botany, University College for Women, Koti, Hyderabad, 7th and 8th December 2017
- Participated in National Workshop on *Concepts of Plant Taxonomy* Organized by Dept of Botany, Nagarjuna Government College, Nalgonda, 5th February 2016,
- 5. Participated and presented a paper on *Molecular Identification of Penicillin Resistance Bacteria in Soil Sample Collected from Hospital Area* in National Symposium on *Conservation of Nature and Natural Resources* on 21st & 22nd January 2015, Organized by Telangana Students Forum and Biological Resource Persons Association, Wanaparthy, Mahbubnagar, Telangana
- Participated in the National Conference on New Frontiers in Medicinal Plants Research organized by the Department of Botany, Osmania University College for Women, Koti, Hyderabad on 26th & 27th February 2015

- Participated in the seminar *Recent trends in Plant Sciences* organized by the Department of Botany, Osmania University on 30th October 2014
- Participated in Two Day Workshop on *Molecular Biotechnology and Bioinformatics* Organized by Department of genetics and Biotechnology, University College for Women, Koti, Hyderabad in Collaboration with Indigenous Biotechnologies, Secunderabad. on 26th & 27th June 2014
- Participated and Presented poster in National Symposium on *Current Trends in Biotechnology* organized by the Department of Botany, Osmania University, Hyderabad, Andhra Pradesh, India on 7th and 8th December 2013
- 10. Participated and presented a poster in the National Seminar of Plant Physiology on Physiological and Molecular Approaches for development of Climate resilient crops, Organized by Department of Crop Physiology, ANGRAU and Indian Society of Plant Physiology, New Delhi, 12th to 14th December 2012
- 11. Participated in the seminar on Biotechnology and Environment Present Scenario Organized by Dept of Botany, Govt. Degree College, Kamareddy, Nizamabad, 19th January 2012
- 12. Participated and Presented paper titled Enhancement of growth and Yield of two varieties of Sorghum grown in saline soils of Karaikal treated by Brassinolide at the flowering and grain filling stage in National Seminar on *Modern Trends in Plant Sciences* organized by the Department of Botany and sponsored by Andhra Pradesh Council of Higher Education, Telangana University, Nizamabad, 25th and 26th March 2010 Andhra Pradesh, India
- 13. Attended 2nd Asian Congress of Mycology & Plant Pathology on Microbial Diversity for Asian Prosperity organized by Indian Society of Mycology & Plant Pathology in Osmania University, Hyderabad, India, 19th to 22nd December 2007

AWARDS

• Fellow of Bose Science Society, Tamilnadu, 2019

MEMBERSHIP IN SOCIETIES

- Indian Society of Plant Physiology (ISPP- 2007 LM), New Delhi
- Biotechnology Society of India (Lm 320), New Delhi
- Indian Science Congress Association (LSO LM -52), Kolkata
- Indian Botanical Society (LB 993) Jaipur, Rajasthan

- Member, Bose Science Society, Tamilnadu
- Editorial Board Member of European Journal of Biomedical and Pharmaceutical Sciences

POSITIONS AT CENTRAL UNIVERSITY OF KARNATAKA

- Director, Botanical Garden from 2019 to 2024
- Member, Sixth Academic Council, CUK, from 2025 to 2028
- Member, Product Development, Monitoring, And Commercialization Committee, The Governance Research and Development Cell, CUK
- Nominated Faculty Member, Yuva Sangam, Phase-IV of Ek Bharat Shresht Bharat-2024
- Nominated Faculty Member, Women Leaders: Shaping Academic Excellence for VIKASIT Bharat-2047, Organized by UGC, New Delhi
- Member, Human Resource Enablers, Institutional Development Plan (IDP) committee, CUK, 2024
- Member, Sustainable Campus Development Committee, CUK, 2024
- Chairperson, Reception and Campus Beautification, NAAC Peer Team Visit Coordination Committee, CUK, 2024
- Member, Guest House Operations Committee, CUK, 2024
- Member, Games and Sports Committee, ANKUR Fest, 2024-2025

ADMINISTRATIVE POSITIONS AT OSMANIA UNIVERSITY

• Joint Director, Centre for Biodiversity and Conservation, RUSA from 2019 to 2024

OTHER POSITIONS AT OSMANIA UNIVERSITY

- Special Officer, Telangana Mahila Viswa Vidyalayam, Koti, Hyderabad from March 2023 to May 2023
- Chairperson, Board of Studies, Department of Botany from June, 2022 to March, 2023
- Coordinator, Civil Services Academy from 2021 to 2023
- Public Relations Officer from 2015-21
- Member, Centre for Biodiversity and Conservation Committee, 2019
- Member, Internal Complaints Committee, 2019-20
- Member, Dairy & Calendar Committee, 2018-19
- Member, Tender Committee, 2018-19
- Member, NAAC Coordination Committee, 2017-18
- Member, Gender Audit Committee, OU 2017-18
- Member, Annual Report Committee, 2015, 16, 17, 18, 19, 20, and 21
- Convener, Invitation Committee, Centenary Celebrations, OU, 2017-18
- Member, Cultural Committee, Centenary Celebrations, OU, 2017-18

- Member, Felicitation Committee, Centenary Celebrations, OU, 2017-18
- Member, Media Committee, Centenary Celebrations, OU, 2017-18

POSITIONS AT TELANGANA UNIVERSITY

ACADEMIC

- Chairperson, Board of Studies, Department of Biotechnology from 2010 to 2013
- Member, Board of Studies, Department of Botany from 2011 to 2013
- Member, Faculty Research Committee (FRC) for sciences from 2011 to 2013
- Coordinator to
 - o M.Sc. Pharmaceutical Chemistry
 - M.A. Applied Economics (5 years Integrated Course) 2008-09
- Chairperson, Board of Studies, Department of Botany from 2007 to 2008

ADMINISTRATIVE

- Joint Director, Directorate of Academic Audit from 2010 to 2013
- Additional Controller of Examinations (Confidential) from 2007 to 2011
- Public Relations Officer from 2007 to 2008
- Member, Fee Regulating Committee 2012
- Observer, A.P. State Eligibility Test 2012
- Member, University Peace Committee 2012
- Member, UGC XII Plan Proposal Committee 2012
- Member, University Works Committee 2011
- Member, Coordinating Committee to assist the UGC Inspection Committee for 12(B) Status 2011
- Member, Selection Committee, 21st Century Gurukulam 2007
- Member, Coordination Committee, 21st Century Gurukulam 2007
- Member, Advisory Committee, 21st Century Gurukulam 2007

(Prof. E. Sujatha)