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Discipline : Soil Science



Service Particulars

- Scientist (2013 - 2022, ICAR-CTRI, Rajahmundry)
- Senior Scientist (2022 - Till date, ICAR-CTRI, Rajahmundry)

Areas of Expertise for Consultancy Purpose

- Biochar production and characterization
- Fertilizers, Nutrient use efficiency, Nutrient Management and Soil Fertility
- Rhizomircobiome studies

Research Publications (Best Ten)

1. **Poorna Bindu J**, Sheshu MM, Damodar RD, Mahadevaswamy M, Chandrasekhara Rao C, Prasad LK, Kasturi KK, Hema B, Korada RR, Veda Vyas RD. 2025. Potassium schoenite: A sustainable potassium source for Flue-Cured Virginia (FCV) tobacco production. Plant Science Today, 12(2). <https://doi.org/10.14719/pst.8309> (NAAS Rating 6.7)
2. Premalatha RP, **Poorna Bindu J**, Nivetha E, Malarvizhi P, Manorama K, Parameswari E and Davamani V 2023, A review on biochar's effect on soil properties and crop growth. Frontiers in Energy Research 11:1092637. (NAAS Rating 9.86)
3. Premalatha RP, Prasad LK, **Poorna Bindu J**, Damodar Reddy D, Manorama K and Chandrasekhara Rao C. 2024. Land use and management influenced changes in soil quality parameters in coastal light soils of India. Communications in Soil Science and Plant Analysis. DOI: 10.1080/00103624.2024.2303128 (Online published) (NAAS Rating 7.80)
4. Meghana, K., **J. Poorna Bindu***, D. Damodar Reddy, M. Sheshu Madhav, I. Usha Rani, and K. N. Sreenivasulu. 2025. "Optimizing Flue-Cured Virginia (FCV) Tobacco Productivity Through Soil Inversion and Innovative Potassium Management Strategies". International Journal of Environment and Climate Change 15 (1):25-38. <https://doi.org/10.9734/ijecc/2025/v15i14671> (NAAS Rating 5.14)
5. **Poorna Bindu J**, Damodar Reddy D, Santhy P, C. Chandrasekhara Rao C., and Ghosh RK. 2023. Effect of Chemical Fertilizer and Tobacco Stalks-derived Biochar on FCV Tobacco Yield, Nutrient Use Efficiency and Carbon Management Index in a Light Textured Alfisol. International Journal of Plant and Soil Science 35(2), 88-107 (NAAS Rating 5.07)
6. **Poorna Bindu J**, Ramakrishna Parama V.R. and Srinivasamurthy C.A. 2014. Changes in nutrient and biochemical constituents on decomposition of leaf litter of selected tree species. The Mysore Journal of Agricultural Sciences 48(3): 364-373. (NAAS Rating 4.64)

7. **Poorna Bindu J**, Damodar Reddy D, Santhy P, Chandrasekhara Rao C. and Prasad L.K. 2016. Comparative study on tobacco stalks based organic soil amendments and inorganic soil amendment (zeolite) on soil reaction and nutrient (N, K) availability of an Alfisol. International Journal of Tropical Agriculture 34(6): 1783-88. (NAAS Rating 3.94)
8. **Poorna Bindu J**, Damodar Reddy D, Chandrasekhara Rao C, Sheshu Madhav M, Viswanath Reddy K, Manorama K, Prasad L.K, Kasturi Krishna S, Ramachandrudu K, Mathur, R. K. and Kiran Kumar T. 2022. Oil Palm Biomass Waste as Rooting Media for Tobacco Tray Seedlings and as a Fuel for Curing of FCV Tobacco. Tobacco Research.48 (1): 18-21(NAAS Rating 3.33)
9. **Poorna Bindu, J**, Damodar Reddy D, Chandrasekhara Rao C, Manorama K, Prasad L.K. and Mathur, R.K. 2020. Effect of Oil Palm Waste Biochars on FCV tobacco Productivity in Light Textured Alfisols. Tobacco Research 46(2): 47-52. (NAAS Rating 3.33)
10. Meghana K, **J. Poorna Bindu***, D. Damodar Reddy, I. Usha Rani, M. Sheshu Madhav and K. N. Sreenivasulu. 2023. Interventions to Improve Potassium Availability in Light Textured Alfisols Supporting FCV Tobacco. International Journal of Plant & Soil Science, 35(20), 801-808. (NAAS Rating 5.07)

Awards/ Honours/ Recognitions

- **1st Scientist Tobacco Institute of India (TII)** Award under Young Scientist Category during 24th Tobacco Institute of India (TI Tobacco Farmers Awards (Andhra Pradesh, Telangana) on 10 July, 2024 at Devarapally, Andhra Pradesh.
- **Distinguished Scientist Award** for outstanding contribution in the field of Soil Science, during 3 days International Conference on Global Research Initiatives for Agriculture, Science and Technology from 20-22 January, 2025 in hybrid mode organized by IGKV, Raipur.
- **Young Scientist Award-2016-17-Runner-up II** for outstanding achievement in chemistry
- **Best Paper Award-ICRAAHS-2016** during the 4th International conference on Recent Advances in Agriuculture and Horticulture
- **Editor-in chief**, Tobacco Research Journal From 2017 to 2022 •**Reviewer**, Environmental Progress and Sustainable Energy
- **Reviewer**, Tobacco Research
- Recognized as a Post Graduate Guide to M. Sc. Scholars in the Department of Soil Science and Agricultural Chemistry, Agriculture college Bapatla, ANGRAU Andhra Pradesh and YSRHU, Andhra Pradesh