

Scientific publications/Peer-reviewed publications:

1. **Mamata.**, Hooda, B.K. and Hooda, E. (2019). New index for evaluation of G x E interaction in Pearl Millet using AMMI and GGE Biplot analyses. *Indian Journal of Agricultural Research*. 53(5): 529-535. (NAAS:5.68)
2. Gupta, A.K., Patra, C., Kumar, R.R. and **Mamata.** (2019). Growth and Instability Analysis of Area, Production and Yield of Major Cereals in Chhattisgarh Plains Zone of Chhattisgarh. *Int. J. Curr. Microbiol. App. Sci.* 8 (12):128-133. (NAAS:5.38)
3. **Mamata.**, Mittal, A. and Bharati, D. (2020). Forecasting of Barly Production in India using ARIMA Model. *Journal of Pharmacognosy and Phytochemistry*. 9(1):1193-1196. (NAAS:5.21)
4. **Mamata.** and Hooda, B.K. (2020). Ammi and GGE Biplot Analyses for Evaluation of G x E Interaction in Pearl Millet. *Plant Archives*. 20: 206-212. (NAAS:5.59)
5. **Mamata.** and Bhattacharya.D.(2022). Use of Markov chain model for studying disparities among districts producing potato: a major crop of West Bengal, India. *Scientist*, 1(3):3702-3710. (NAAS:6.85)
6. **Mamata.** and Bhattacharya.D.(2023). Markov Chain Model for Studying Disparity in Chickpea Productivity among the Chickpea Producing Districts of West Bengal, India. *Environment and Ecology*, 41(1A):354-36. (NAAS:5.25)
7. **Mamata.** and Bhattacharya. D. (2023). Use of Markov chain model for studying disparity in rice yield in the major rice producing districts of West Bengal. *International Journal of Statistics and Applied Mathematics*, 8(4):78-83. (NAAS:5.12)
8. **Mamata.** and Hooda, B. K. (2024). Analysis of Pearl Millet's G x E Interaction with the Proposed New Index. *Journal of Scientific Research and Reports*, 30(5):288-298. (NAAS:5.17)
9. Darshini,T. K., Harini, S., Satish, K., Patel, M. and **Mamata.** (2025). Morphological Characterization of Groundnut (*Arachis hypogaea* L.) Accessions Using DUS Descriptors. *Journal of Advances in Biology and Biotechnology*, 28(10): 2394-1081. (NAAS:5.30)
10. Darshini,T. K., Harini, S., Satish, K., Patel, M. and **Mamata.**, Pujar. M.S., Sruthi, D. (2025). Genetic diversity and yield trait analysis in groundnut germplasm based on DUS and multivariate approaches. *Journal of Advances in Biology and Biotechnology*, 10(3): 18-25. (NAAS:5.30)
11. Rao, K. B., Sathish, K., Harin, A.S., Mahesh, G. and **Mamata.** (2026). Genetic Variability, trait associations and path analysis of yield and downy mildew resistance in pearl millet (*Pennisetum glaucum* (L.) R. Br.). *Plant Science Today*, 13(4):1-7. (NAAS:6.80)
12. Kumar, B.R., Kadam, K.L., Vaijanatha. and **Mamata.** (2026). Palm oil imports in India: A data-driven analysis of trade patterns and policy implications. *International Journal of Agriculture Extension and Social Development*, 9(4):537-542. (NAAS:5.04)

Books and book chapters:

1. **Mamata.**, and Deepankar. Testing of Hypothesis. (2018). New research trends (Qualitative and Quantative Research), House of Journals, Pune. ISBN:978-81-938863-2-8.
2. **Mamata.** and B.K.Hooda.(2019) Applications of Artificial Neural Networks (ANN) in Prediction. *Advances in Applied Statistics*. New Delhi Publishers, New Delhi. ISBN: 978-93-88879-28-6.
3. **Mamata.**, and C, Patra. (2020) Applications of Multivariate techniques in Agricultural Sciences. *Research Trends in Mathematics and Statistics*. AkiNik Publications, New Delhi. ISBN: 978-93-90322-73-2.

Awards/Fellowships/Scholarships:

1. **ICAR-jrf** fellowship awarded for M.Sc. (statistics).
2. **Best M.Sc. Thesis Award-2020** awarded in “New Trends in Agriculture, Environmental & Biological Sciences for Inclusive Development (NTAEBSID2020)” which is scheduled to be held on 21-22 June, 2020.
3. **Young Researcher Award-2022** Awarded by The Society of Academic Research for Rural Development during International Conference on Recent Advances and Innovations in Biological and Applied Sciences which is scheduled to be held on 14-1 June, 2022.
4. **Best Oral Presentation Certificate** presented in International Conference on Recent Advances and Innovations in Biological and Applied Sciences which is scheduled to be held on 14-1 June, 2022.

Scientific presentations/peer-reviewed presentations:

1. “Advance applications of artificial neural networks” abstract published in Souvenir, National seminar on Recent Trends in science and technology: A Computational Approach, Bhiwani.
2. “Evaluation of G x E interaction in Pearl Millet using AMMI and GGE biplot analyses” abstract published in Souvenir, National Conference on COSIFHA, Tirupati.
3. “An analysis of Disparity among the potato producing districts of West Bengal using markov chain model” abstract published in Souvenir, 73rd Annual conference of ISAS, SKUAST-K on ‘Statistics and Machine learning for Big data analytics’ 14-1 nov-2022.
4. “A statistical study on the Inter District Disparities in potato production and prices of West Bengal” International Conference on ‘Precision Agriculture’ 26th-27th September, 2022 organized by SVIAG, SVVV, Indore, Madhya Pradesh.
5. and Aromatic Plants for Profit Optimization and Resilience organized by Jain Irrigation Systems Limited (JISL), Jalgaon, Maharashtra, India during January 18-19, 2025.

Workshop/Trainings:

- Attended 10 days Training Program on statistical data analysis for research scholars organized by Students’ counseling and placement cell, CCSHAU, Hisar.
- Attended 41 days Training Program on advance computer organized by Students’ counseling and placement cell, CCSHAU, Hisar.
- Attended 10 days National workshop on data analysis using statistical tools, techniques and packages with special emphasis on SPSS and R organized by Department of Agricultural Statistics, Visva Bharati.