

BRIEF RESUME OF Dr. Shyamal Kheroar

Name: Dr. SHYAMAL KHEROAR

Present Designation: Assistant Professor

Educational Qualification: Ph.D. in Agronomy

Teaching Experience (in years): 12 years

Awards/ Recognitions (Best five):



Publication (Best five in Ref. style):

1. Basak, P., Sultana, S., Gupta, D.S., Paul, T., Debnath, M.K., Sarkar, P., Hembram, S. and **Kheroar, S.** (2025). Integrating weather variables and AI models for forecasting major pests in jute: applications in climate-smart crop management. *Frontiers in Agronomy*, **7**: 1687988. DOI: [10.3389/fagro.2025.1687988](https://doi.org/10.3389/fagro.2025.1687988)
2. Meena, H., Patra, P.S., Adhikary, P., Ahmed, A.S, **Kheroar, S.**, Deb, S., Rahman, F.H., Tamang, A., Das, B. and Somondal, P. (2025). Optimizing resources for sustainable maize production under different intercrop association in eastern sub-Himalayan region of India. *Frontiers in Sustainable Food System*, **9**: 1584085. DOI: [10.3389/fsufs.2025.1584085](https://doi.org/10.3389/fsufs.2025.1584085)
3. Lepcha, E., **Kheroar, S.**, Halder, D., Barman, S.K., Mandal, K. and Panda, P. (2022). Effect of Phosphorus on Yield, Nutrient Acquisition and Use Efficiency of Groundnut in West Bengal, India. *Legume Research*, **45(9)**: 1149-1154. DOI: [10.18805/LR-4355](https://doi.org/10.18805/LR-4355).
4. Halder, H., **Kheroar, S.**, Srivastava, R.K. and Panda, R.K. (2020). Assessment of future climate variability and potential adaptation strategies on yield of peanut and Kharif rice in eastern India. *Theoretical and Applied Climatology*, **140**: 823–838. DOI: [10.1007/s00704-020-03123-5](https://doi.org/10.1007/s00704-020-03123-5).
5. Halder, D., Panda, R.K., Srivastava, R.K. and **Kheroar, S.** (2017). Evaluation of the CROPGRO-Peanut model in simulating appropriate sowing date and phosphorus fertilizer application rate for peanut in a subtropical region of eastern India. *The Crop Journal*, **5(4)**: 317-325. DOI: [10.1016/j.cj.2017.02.005](https://doi.org/10.1016/j.cj.2017.02.005)
6. Halder, D., Panda, R.K., Srivastava, R.K. and **Kheroar, S.** and Singh, S. (2016). Stochastic analysis of rainfall and its application in appropriate planning and management for Eastern India Agriculture. *Water Policy*, **18(5)**: 1155-1173.

Seminar/Symposium/Workshop Organized: 2

Academic Supervising Experience (Completed/continuing):

- Major supervisor in M.Sc- **08**
- Major supervisor in Ph.D.- **02**

Projects exposure as PI/Co-PI (completed/On-going) (5 major Projects):

1. Act as PI of the Project “All India Network Project on Jute & Allied Fibres.” funded by ICAR-CRIJAF. Project duration: 2014 to till date.
2. Act as a PI of the project “Evaluation of herbicide ADM.06350.H.9.C against grassy weed complex in jute.” Funded by ADAMA India Pvt. Ltd. Project duration: 2026 to 2028.

3. Act as Co-PI of the project “Seed potato (mini tuber) production and commercialization in northern plains of West Bengal.” Funded by RKVY, Govt. of West Bengal. Project duration: 2017-2020.
4. Act as a Co-PI of the project “Large scale estimation of above-ground jute biomass and yield in major growing regions of North Bengal and adjoining areas.” Funded by Space Applications Centre, ISRO. Project duration: 2019-21.
5. Act as a Co-PI of the project “Development and validation of need-based technology delivery model through farmers’ producer organization to Eastern Region of India.” Funded by ICAR-NASF, Govt. of India. Project duration: 2019-2022.

Research and Extension Experience:

I have been serving as Principal Investigator of the All-India Network Project on Jute & Allied Fibres, funded by ICAR-CRIJAF, since 2014. My research activities have focused on improving crop productivity, nutrient-use efficiency, soil health, weed management, climate resilience and profitability of cropping systems. My research work has also involved the application of crop simulation models, climate variability analysis, weather-based approaches and modern decision-support tools for sustainable agricultural production. I have contributed to research on jute, rice, maize, groundnut and other important field crops through field experimentation and multidisciplinary approaches.

I have also been actively involved in agricultural extension and technology dissemination, particularly in transferring improved crop production technologies from research programmes to farmers and other stakeholders through Tribal Sub-plan (TSP) and Scheduled Caste Sub-plan (SCSP) programme under North Bengal condition. My involvement in the ICAR-NASF project on need-based technology delivery through FPOs provided an opportunity to work on strengthening the linkage between research, technology transfer and farming communities. I have participated in farmer-oriented programmes, field-level technology demonstrations, training and capacity-building activities related to sustainable crop production and improved agricultural practices.

Institutional Building Activities:

Actively contributed to institutional development through my involvement in research project implementation, academic mentoring, capacity building, organization of seminars, symposia and workshops, and development of linkages among research institutions, farmers and other stakeholders.

Areas of Interest:

crop productivity, nutrient-use efficiency, soil health, weed management, climate resilience and profitability of cropping systems