Publication Report

Dr. Parijat Bhattacharya

Assistant Professor,

Department of Agriculture

Research Articles:

Research Article:	
01.	**Bhattacharya, P.**, Sengupta, S., & Halder, S. (2020). Characterization and delineation of micronutrient pools in some selected Inceptisols and Alfisols of West Bengal. *International Journal of Chemical Studies, 8*(2), 732-746. **(NAAS: 5.31)**
02.	Sengupta, S., Mukherjee, S., Halder, S. & **Bhattacharya, P.** (2020). Enrichment of vermicompost for improving soil quality and ensuring Zn and Fe bioavailability through rice grain. *Journal of Pharmacognosy and Phytochemistry*; *9*(1): 246-254 **(NAAS: 5.21)**
03.	Sengupta, S., Bhattacharyya, K., Mandal, J., **Bhattacharya, P.**, Halder, S., & Pari, A. (2021). Deficit irrigation and organic amendments can reduce dietary arsenic risk from rice: Introducing machine learning-based prediction models from field data. *Agriculture, Ecosystems & Environment*, 319, 107516 **(Impact Factor: 5.567; NAAS: 10.24)**
04.	Bhattacharyya, K., Sengupta, S., Pari, A., Halder, S., **Bhattacharya, P.**, Pandian, B.J. & Chinchmalatpure, A.R. (2021). Characterization and risk assessment of arsenic contamination in soil–plant (vegetable) system and its mitigation through water harvesting and organic amendment. *Environmental Geochemistry and Health*, 43, 2819–2834 (DOI: 10.1007/s10653-020-00796-9) **(Impact Factor: 4.609; NAAS: 9.47)**
05.	Bhattacharyya, K., Sengupta, S., Pari, A., Halder, S., **Bhattacharya, P.,** Pandian, B. J., & Chinchmalatpure, A. R. (2021). Assessing the human risk to arsenic through dietary exposure-a case study from West Bengal, India. *Journal of Environmental Biology*, 42, 353-365 **(NAAS: 6.78)**
06.	Saha, C., **Bhattacharya, P.,** Sengupta, S., Dasgupta, S., Patra, S. K., Bhattacharyya, K., & Dey, P. (2021). Response of cabbage to soil test-based fertilization coupled with different levels of drip irrigation in an inceptisol. *Irrigation Science*, 1-15. **(Impact Factor: 3.519; NAAS: 9.52)**
07.	Sengupta, S., Bhattacharyya, K., Mandal, J., **Bhattacharya, P.,** & Chattopadhyay, A. P. (2023). Zinc and iron enrichment of vermicompost can reduce the arsenic load in rice grain: an investigation through pot and field experiments. *Journal of Cleaner Production*, 419, 138267. **(Impact Factor: 11.072; NAAS: 17.07)**
08.	Phonglosa, A., Bhattacharyya, K., Pari, A., Ray, K., Banerjee, H., Haldar, S., Sengupta, S., **Bhattacharya, P.** & Mandal, J. (2023). Assessment of the suitability of selected extractants for boron in some inceptisols of Eastern India under sunflower (Helianthus annuus L.). *Journal of Plant Nutrition, 46*(17), pp.4340-4355. **(Impact Factor: 2.277; NAAS: 8.28)**
09.	Banerjee, P., **Bhattacharya, P.,** Kumari, V. V., Bera, A., & Nath, R. (2023). Modification in bio-physical properties of spring-summer black gram [Vigna mungo (L.) Hepper] through optimization of sowing dates and nutrient management towards production sustainability. *Field Crops Research*, 291, 108767. **(Impact Factor: 6.145; NAAS: 12.15)**
10.	**Bhattacharya, P.,** Sengupta, S., & Bhattacharyya, K. (2024). Cationic micronutrient fractions in some tropical Alfisols and Inceptisols as affected by organic amendments and simulated moisture regimes: an incubation study. *Journal of Plant Nutrition*, 47(10), 1527–1545. https://doi.org/10.1080/01904167.2024.2315971 **(Imapct Factor: 2.1)**

11.	Ali, M. M., Sarkar, B., Sarkar, B., **Bhattacharya, P.,** Chatterjee, N., Rana, S., ... & Bhakta, J. N. (2024). Screening and characterization of novel biosorbent for the removal of Cadmium from contaminated water. *Energy Nexus*, 100278.
12.	Choudhury, R. K., **Bhattacharya, P.,** Parveen, S., Bhattacharyya, K., & Sengupta, S. (2023). Modeling The Uptake Of Cationic Micronutrients And Rice Grain Yield At Different Graded Dose Of Nitrogen Fertilization. *Journal of Survey in Fisheries Sciences*, *10*(1S), 7017-7021.
13.	Sarkar, S., Sengupta, S., Bhattacharyya, K., Parveen, S., & **Bhattacharya, P.** (2023). Influence Of Varietal Duration And Nitrogen Fertilization In Augmenting Micronutrient Uptake And Yield Of Rice. *Journal of Survey in Fisheries Sciences*, *10*(1S), 6973-6978.
14.	**Bhattacharya, P.,** Sengupta, S., & Bhattacharyya, K. (2023). Relating Soil Available Zinc With Physicochemical Properties In New Alluvial Zone Of West Bengal, India. *Journal of Survey in Fisheries Sciences*, *10*(1S), 7037-740.
Review Article:	
01.	Banerjee, P., **Bhattacharya, P.** (2021). Investigating Cobalt in Soil-plant-animal-human system: Dynamics, Impact and Management. *Journal of Soil Science and Plant Nutrition* **21(3),** 2339-2354. https://doi.org/10.1007/s42729-021-00525-w **(Impact Factor: 3.9).**
02.	Sengupta, S., **Bhattacharya, P.** and Hazra, S. (2019). Ensuring nutritional security through zinc biofortification of rice grain in Indian scenario: A review. *International Journal of Chemical Studies.* **7(6):** 2129-2144. **(NAAS: 5.31)**
03.	Patra, S.K., Poddar, R., Brestic, M., Acharjee, P.U., **Bhattacharya, P.,** Sengupta, S., Pal, P., Bam, N., Biswas, B., Barek, V. & Ondrisik, P. (2022). Prospects of hydrogels in agriculture for enhancing crop and water productivity under water deficit condition. *International Journal of Polymer Science*, 2022. **(Impact Factor: 3.3)**
04.	Moulik, A., Bhowmik, A., & **Bhattacharya, P.** (2024). Soil-health: Concepts, implications and management. *International Journal of Advanced Biochemistry Research*, *SP-8*(4), 204–211. https://doi.org/10.33545/26174693.2024.v8.i4Sc.965
05.	Dandasena, N. K., Pal, P., Mollah, N., Das, S., & **Bhattacharya, P.** (2024). Soil fertility evaluation and mapping. *International Journal of Advanced Biochemistry Research*, *8*(4), 363–367. https://doi.org/10.33545/26174693.2024.v8.i4e.967
06.	Sarkar, S., Dutta, T., Hoda, Md. N., & Roy, T. & **Bhattacharya, P.** (2024). Sodic soil in India: Concept, status and management. *International Journal of Agriculture Extension and Social Development*, *7*(SP-4), 54–57. https://doi.org/10.33545/26180723.2024.v7.i4Sa.531
07.	Ghosh, R., Bakshi, S., **Bhattacharya, P.** & Kanthal, S. (2024). Use of nanotechnology in modern agriculture. *International Journal of Agriculture Extension and Social Development*, *7*(SP-4), 85–87. https://doi.org/10.33545/26180723.2024.v7.i4Sb.532
08.	Khatun, A., Mukherjee, S., Bullah, M. M., & **Bhattacharya, P.** (2024). Effects of micronutrients on crop quality. *International Journal of Research in Agronomy*, *7*(4), 114-117. https://doi.org/10.33545/2618060X.2024.v7.i4b.537
Book Chapter:	
01.	**Bhattacharya, P.**, Sengupta, S. & Halder, S. (2019). Customized, Fortified and Nano Enabled Fertilizers-Prioritizing and Profiteering Sustainability in Agriculture. In: Advances in Agriculture Sciences; Vol-19 (R.K. Naresh, Eds.), Akinik Publications, New Delhi, pp. 69-97. (ISBN- 978-93-5335-728-3).0
02.	**Bhattacharya, P.**, Banerjee, P. & Nath, R. (2022). Information and Communication Technology in Climate Smart Agriculture: An Advancement Towards Agricultural Sustainability In: Climate Change Dimensions and Mitigation Strategies for Agricultural Sustainability (Vol II), New Delhi Publishers, New Delhi, 2022.(pp. 251-267) (ISBN-978-93-93878-05-2Z0). https://doi.org/10.30954/NDP-climatev2.16

03.	Banerjee, P., **Bhattacharya, P.**, Bera, A., & Hossain, A. (2023). Plant Growth-Promoting Rhizobacteria (PGPR): An Indispensable Tool for Climate-Resilient Crop Production. In Microbial Symbionts and Plant Health: Trends and Applications for Changing Climate (pp. 209-231). Singapore: Springer Nature Singapore. https://doi.org/10.1007/978-981-99-0030-5_9
04.	Contributed book chapter entitled "Role of Organic Matter in Soil Fertility Management" in the edited book "Emerging Trends in Sustainable Agriculture" (ISBN- 978-93-340-0372-7).
05.	Contributed book chapter entitled "A Comprehensive Overview on Contemporary Approaches in Soil Fertility Management" in the edited book "Modern Facets of Agriculture in India" (ISBN- 978-93-596-7754-5).
Edited Book:	
01.	Edited the book "Emerging Trends in Sustainable Agriculture" (ISBN- 978-93-340-0372-7) by Swami Vivekananda University, Barrackpore, Kolkata.
Popular Article:	
01	**Bhattacharya, P.** and **Banerjee, P.,** (2020). Solar-Powered Automatic Irrigation System: a Giant Leap towards Sustainable Agriculture. *Agriculture Letters (ISSN: 2582-6522)*: **1(8):** 14.
02.	**Bhattacharya, P.** and **Sengupta, S.** (2019). Nano-remediation: creating an asset out of wastewater. *Agrobios Newsletter (ISSN: 0972-7027):* **18(5):** 123-124.
03.	**Bhattacharya, P.** and Sengupta, S. (2020). Agronomic Biofortification: Proceeding, Implication and Evaluation. *Agrobios Newsletter (ISSN: 0972-7027):* **18(8):** 12-13.
04.	**Bhattacharya, P.** and Sengupta, S. (2020). Evaluating Fertility status of soils: the adoptable techniques. *Agrobios Newsletter (ISSN: 0972-7027):* **18(9):** 57-58.
05.	**Bhattacharya, P.** and Sengupta, S. (2020). Nanoremediation of Radiotoxicity: tiny Particles solving Imperceptible Holocaust. *Agrobios Newsletter (ISSN: 0972-7027):* **18(12):** 143-144.
06.	**Banerjee, P.,** and **Bhattacharya, P.** (2021). Smart farming: A global approach towards sustainability. *Agriculture Letters (ISSN: 2582-6522)*: **2(1):** 40.
07.	Sengupta, S., and **Bhattacharya, P.** (2019). Precision Farming: An emissary of future Indian Agriculture. *Agrobios Newsletter (ISSN: 0972-7027):* **18(4):** 31-32.
08.	Sengupta, S., and **Bhattacharya, P.** (2019). Nano-remediation: carving solution to pesticide pollution. *Agrobios Newsletter (ISSN: 0972-7027):* **18(7):** 134-135.
09.	Sengupta, S. and **Bhattacharya, P.** (2020). Soil Health Card: A Nuclear Mission Towards Sustainability in Agriculture. *Agrobios Newsletter (ISSN: 0972-7027):* **19(1):** 52-53.
10.	Sengupta, S. and **Bhattacharya, P.** (2020). Acid Sulphate Soil: A Neglected Threat to Sustainable Crop Production. *Agrobios Newsletter (ISSN: 0972-7027):* **19(2):** 32-33.
Paper abstracted in Seminar, Symposium, Conventions etc.:	
01.	**Sengupta, S.,** Bhattacharya, P. and Bhattacharyya, K. (2019). Arsenic mitigation in soil-plant (rice) system through irrigation management and organic amendments. Presented in **84th Annual Convention of Indian Society of Soil Science** and **National Seminar on Developments in Soil Science 2019** held at the Institute of Agricultural Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh on Nov. 15-18, 2019.