

Dr. ZERALD TIRU

ASSISTANT PROFESSOR



CONTACT ADDRESSES

Department of Botany, Raiganj University, Raiganj

Uttar Dinajpur, West Bengal India, Pin – 733134

Contact No. : +91-9564023689

E-Mail: tiruzerald@gmail.com

ACADEMIC QUALIFICATION

1. Ph.D. (Botany) from Raiganj University, Raiganj
2. M.Sc. from University of North Bengal, Darjeeling
3. B.Sc. (Hons.) from Darjeeling Govt. college, Darjeeling

RESEARCH INTEREST

Stress Physiology especially in the area of abiotic and biotic stresses with reference to physiochemical changes in plants, plant pathology and ecology.

TEACHING EXPERIENCE

1. Assistant Professor (24-12-2016 to 27-03-2017) Shibpur Dinobundhoo Institution. (College)
2. Assistant Professor (28-03-2017 to Till Date) Raiganj University.

ADMINISTRATIVE EXPERIENCE

1. Member, UG Board of Studies in Botany, Raiganj University.
2. Member, PG Board of Studies in Botany, Raiganj University.
3. Observer, The B.Ed 1st Semester Examination-2017, venue: North Bengal teachers' Training College, bikour, Dimohana, Uttar Dinajpur
4. Acted as Treasurer on one day seminar on “**Current Trends in Plant and Microbial Research for Crop and Crop Health Management**” jointly organized by Department of Botany, Raiganj University and Indian Phytopathological Society, Division of Plant Pathology, ICAR-IARI, New Delhi, India at Raiganj University on September 06, 2024.

MEMBERSHIP OF LEARNED SOCIETIES

1. Life member- The Indian Science Congress Association, Kolkata (India)

WORKSHOP

1. Attended three days workshop from 18th- 20th March 2019, entitled “*Hands on training on DNA Barcoding and sequences analysis using Bioinformatics tools*” organized by the Bioinformatics Centre, Gauhati University sponsored by department of Biotechnology, Govt. of India.
2. Attended two day seminar cum workshop on “*Vitas in Biological Sciences*” organized by Biswa Bangla Genome Centre and Bioinformatics Facility Centre at University of North Bengal 7th-8th December 2023

PUBLICATIONS IN PEER REVIEWED JOURNAL

- Sarkar M., **Tiru Z.**, Pal A., & Mandal P. (2022). Screening of plant growth promoting fungi (PGPF) for sustainable cultivation of Tulaipanji, an endemic aromatic rice variety of Uttar Dinajpur, West Bengal, India. *Agricultural Science Digest-A Research Journal* 42(6), 741-746.
- Swarnakar S., Chowhan P., **Tiru Z.**, Mandal P., & Chakraborty AP. (2022). New Report on *Fusarium equiseti* Causing Yellow Leaf Disease of *Brassica juncea* (L.) Czern from Karandighi, Uttar Dinajpur, West Bengal, India. *NBU Journal of Plant Sciences*, 14, 21–24. <https://ir.nbu.ac.in/handle/123456789/5037>
- Sarkar M, **Tiru Z**, Pal A, Chakraborty AP, Mandal P (2022) Screening of heavy metal stress tolerant fungal isolates for bioremediation and restoration of soil health. *Vegetos* 1-10. <https://doi.org/10.1007/s42535-022-00417-z>

- **Tiru Z**, Sarkar M, Chakraborty AP, Pal A, Mandal P (2021) In vitro antagonistic study of maize root colonizing fungal isolates against *Fusarium moniliforme* causing ear rot disease of Maize. **Journal of Tropical Life Science** 11(2): 133-139
- **Tiru Z**, Sarkar M, Chakraborty AP, Pal A, Mandal P (2021) Effect Of Different Vegetable-Grains Media On Variability In Mycelial Growth Pattern And Sclerotia Formation Of *Rhizoctonia solani*. **Journal of Advanced Scientific Research** 12(01 Suppl 1), 295-300. <https://doi.org/36>
- **Tiru Z**, Sarkar M, Pal A, Chakraborty AP, Mandal P (2021) Three dimensional plant growth promoting activity of *Trichoderma asperellum* in maize (*Zea mays* L.) against *Fusarium moniliforme*. **Archives of Phytopathology and Plant Protection** 54(13-14): 764-781

BOOK

1. Mandal P, **Tiru Z**, Sarkar M, Chakraborty AP, Pal A, Sadhukhan, S, (2020) Mushroom Culture Technology. HSRA Publications. ISBN 9789390415038.

BOOK CHAPTERS

- **Tiru Z**, Mandal P, Chakraborty AP, Pal A, Sadhukhan S (2021). *Fusarium* Disease of Maize and Its Management through Sustainable Approach. In: Mirmajlessi SM (ed) *Fusarium-An Overview of the Genus*. IntechOpen, pp 61-76
- Mandal P, **Tiru Z** (2022) Soil Application of Plant Growth Promoting Fungi for Sustainable Agriculture in the New Decade. In: Roy S, Mathur P, Chakraborty AP, Saha SP (eds) *Plant Stress: Challenges and Management in the New Decade*. Advances in Science, Technology & Innovation. Springer, Cham, pp 321-330
- K Ball, **Z Tiru**, AP Chakraborty, P Mandal, S Sadhukhan (2022) Heavy Metal Toxicity and Phytoremediation by the Plants of Brassicaceae Family: A Sustainable Management. In: Aftab, T. (eds) *Sustainable Management of Environmental Contaminants*. Environmental

Contamination Remediation and Management. Springer, Cham. https://doi.org/10.1007/978-3-031-08446-1_8

PAPER PRESENTED/ATTENDED IN SEMINAR/WEBINAR

- **Tiru Z**, Sarkar M, Mandal P. ‘**Y-Directional activity of *Trichoderma asperellum* against *Fusarium moniliforme* causing stalk and ear rot in maize**’ presented in two days National Seminar on New Horizon in Botanical Research, organized by Department of Botany, University of North Bengal.
- **Tiru Z**, Sarkar M, Mandal P. ‘**A sustainable approach for the management of rot disease of maize caused by *Fusarium moniliforme***’ presented in two days National Seminar (online mode) on Advancement of Plant Science for food diversity and nutritional security, organized by DST (FIST) & UGC-SAP assisted DRS, University of North Bengal in collaboration with UGC-Human Resource Development Centre, University of North Bengal.
- Attended one day national seminar on “**Recent innovations in Science and Technology for a Sustainable Environment**” organized by Department of Botany, Gangarampur college in collaboration with IQAC, Gangarampur college.