

Name: Larisha M. Lyndem

Designation: Professor

**Affiliation: Department of Zoology,
Visva-Bharati (A Central University),
Santiniketan-731235
West Bengal, India**



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Academic Qualifications:

B.Sc (1992) North Eastern Hill University, Shillong Meghalaya

M.Sc (1994) North Eastern Hill University, Shillong Meghalaya

Ph.D (2002) North Eastern Hill University, Shillong Meghalaya

Teaching Experience: 25 years; Research Experience: 30 years

Position	Institutions	Duration
Lecturer	Don Bosco College, Tura Meghalaya	2002-2006
Lecturer	RDAP, NEHU, Tura Campus, Meghalaya	2006-2007
Lecturer	Visva-Bharati, Santiniketan	2007-2012
Associate Professor	Visva-Bharati, Santiniketan	2012-2015
Professor	Visva-Bharati, Santiniketan	2015 till date

Area of Research interest/Specialization:

Anti -parasite drug development from plant extracts and phytochemicals and toxicity assessment; Fish parasites; Probiotics isolation and antiparasite evaluation

Dr. Larisha M. Lyndem is working on prevalence and treatment of helminth infection of zoonotic and social importance for several years. I am continuing on screening different medicinal plants, phytochemical compounds, their mode and mechanism of action and toxicity studies. Further, I am also working on isolation and characterizing of probiotics of indigenous source of helminth infection and evaluate their mode of action on helminth parasites. Identification of helminth parasites from fish and ruminants is also a research of interest that is being focused.

Besides, my lab is also focusing on some inflammatory disease to find out how excretory/secretory molecules from helminth parasite modulate the disease.

Research Projects:

1. An in Vitro treatment of medicinal plants of West Bengal on tapeworm (UGC, Govt. Of India (UGC/SR/40-385/2011)Rs. 11,35000/-

Publications 31

Total Citations:475; h index: 12; i10 index:12

1. Mou Singha Ray, Chandrani Mondal, Samiparna Saha, Sudeshna Mandal and **Larisha M. Lyndem** (2025) Quercetin: An anthelmintic potential against zoonotic tapeworm *Hymenolepis diminuta* (Rudolphi, 1819) Journal of Helminthology, 99, e9, 1–11 <https://doi.org/10.1017/S0022149X24000877>.
2. Samiparna Saha, Chandrani Mondal, Sudeshna Mandal, Mou Singha Ray and **Larisha M. Lyndem** (2024) In vitro anthelmintic efficacy of Ferulic and Sinapic acid against zoonotic cestode *Hymenolepis diminuta* (Rudolphi, 1819)Journal of Parasitic Diseases <https://doi.org/10.1007/s12639-024-01689-9>
3. Sudeshna Mandal, Chandrani Mondal and Larisha M. Lyndem (2024) Probiotics: an alternative anti-parasite therapy Journal of Parasitic Diseases <https://doi.org/10.1007/s12639-024-01680-4>
4. Sudeshna Mandal, Chandrani Mondal, Sinchan Ghosh, Samiparna Saha Mou Singha Ray and Larisha M. Lyndem (2024) Efficacy of *Lactobacillus taiwanensis* S29 and *Lactiplantibacillus plantarum* S27 against tapeworm infection in Swiss Albino rats Experimental Parasitology /doi.org/10.1016/j.exppara.2024.108715
5. Chandrani Mondal Sudeshna Mandal Samiparna Saha Mou Singha Ray **Larisha M. Lyndem** (2023) Gallic acid and Catechin induce morphological alterations on the zoonotic parasite *Hymenolepis diminuta* (2023) Parasitology Research 122:2287–2299 doi.org/10.1007/s00436-023-07929-
6. Sudeshna Mandal, Chandrani Mondal, Tanmoy Mukherjee, Samiparna Saha, Anirban Kundu, Sinchan Ghosh and **Larisha M. Lyndem** (2022). *Hymenolepis diminuta* Reduce Lactic Acid Bacterial Load and Induce Dysbiosis in the Early Infection of the Probiotic Colonization of Swiss Albino Rat. Microorganisms 10,2328. <https://doi.org/10.3390/microorganisms10122328>.
7. Suman Kundu, Sudeshna Mandal, Chandrani Mondal and **Larisha M Lyndem** (2021). Alteration in the Tegumental Enzymes of *Hymenolepis diminuta* by *Senna spp* *Acta Scientific MICROBIOLOGY (ISSN: 2581-3226)*4 (11)
8. Bidisha Ukil, Nikhilesh Joardar, Santi P Sinha Babu and **Larisha M Lyndem** (2021). Effect of Senna plant on the mitochondrial activity of *Hymenolepis diminuta*. *Journal of Parasitic diseases*doi.org/10.1007/s12639-021-01415-9
9. Saptarshi Roy, Nikhilesh Joardar, Santi P Sinha Babu and **Larisha M Lyndem** (2020). Senna plant generates reactive oxygen species (ROS) and induces apoptosis in *Hymenolepis diminuta*. *Molecular & Biochemical Parasitology* doi: 10.1016/j.molbiopara.2020.111297.
10. Saptarshi Roy and **Larisha M. Lyndem** (2019). An in vitro confirmation of the ethonopharmacological use of Senna plants as anthelmintic against rumen fluke

Paramphistomum gracile. *BMC Veterinary Research* doi: 10.1186/s12917-019-2094-3.

11. Bidisha Ukil, Suman Kundu and **Larisha M. Lyndem** (2018). Functional Imaging of Neurotransmitters in *Hymenolepis diminuta* treated with Senna plant through light and confocal microscopy. *Microscopy and Microanalysis* doi:10.1017/S143192761801526X
12. Bidisha Ukil, Saptarshi Roy, Surmjana Nandi and **Larisha M. Lyndem**. (2018). Senna plant induces disruption on the mitochondria of *Hymenolepis diminuta*. ***International Journal of Pharmacy and Pharmaceutical Sciences* 10(5):136-138.**
13. S. Nandi, B. Ukil & **L. M. Lyndem**. (2017). Acute and sub-acute toxicological evaluation of the alcoholic leaf and root extracts of *Clerodendrum infortunatum* L. *Natural Product Research*, DOI: 10.1080/14786419.2017.1360879
14. Saptarshi Roy, Bidisha Ukil and **Larisha M. Lyndem**. (2016). "Acute and sub-acute toxicity studies on the effect of Senna alata on Swiss albino mice". *Cogent Biology* Volume 2: 1272166.
15. Suranjana Nandi, Bidisha Ukil, Saptarshi Roy, Suman Kundu and **Larisha M. Lyndem** (2016). Anthelmintic efficacy of *Clerodendrum viscosum* on fowl tapeworm *Raillietina tetragona*. *Pharmaceutical Biology* 55 (1): 1401-1406.
16. Saptarshi Roy, Suman Kundu and **Larisha M. Lyndem** (2016). Senna leaf extracts induced Ca²⁺ homeostasis in a zoonotic tapeworm *Hymenolepis diminuta* *Pharmaceutical Biology* 54 (10):2353-7.
17. Suman Kundu, Saptarshi Roy and **Larisha M. Lyndem** (2016). Synergistic effect of two combinations of Senna plant on the tegument of a rat tapeworm *Hymenolepis diminuta*. *International Journal of Pharmacy and Pharmaceutical Sciences* 8:1 457-458.
18. Suman Kundu, Saptarshi Roy, Suranjana Nandi, Bidisha Ukil, **Larisha M. Lyndem**. (2016). *Senna alexandrina* Mill. Induced ultrastructural changes on *Hymenolepis diminuta* *Journal of Parasitic Diseases* 41 (1)147-154.
19. Suman Kundu, Saptarshi Roy, Suranjana Nandi, Bidisha Ukil, **Larisha M. Lyndem**. (2015). In vitro anthelmintic effects of *Senna occidentalis* (L.) link (Leguminosae) on rat tapeworm *Hymenolepis diminuta*. *International Journal of Pharmacy and Pharmaceutical Sciences* 7(6) 268-271.
20. Suranjana Nandi and **Larisha M Lyndem** (2015). *Clerodendrum viscosum*: traditional uses, pharmacological activities and phytochemical constituents. *Natural Product Research*, 30(5):497-506.IF-1.82
21. Suman Kundu, Saptarshi Roy, **Larisha Mawkhleing Lyndem** (2014). Broad spectrum anthelmintic potential of *Cassia* plants. *Asian Pacific Journal of Tropical Biomedicine* 4 (Suppl 1): S436-S441.
22. Kundu, S and **Lyndem, LM** (2013). An in vitro screening for cestocidal activity of three species of *Cassia* plants against the tapeworm *Raillietina tetragona*. *Journal of Helminthology*:87,154-159..
23. S. Kundu, S Roy and **LM Lyndem** (2012). *Cassia alata* L: Potential role as anthelmintic agent against *Hymenolepis diminuta*. *Parasitology Research* 111, 1187-1192.
24. Kundu S and **Lyndem LM** (2011). Anticestodal effect of medicinal plants from West Bengal. *Proceedings of 22nd National Congress of Parasitology* pp 72-75.

25. B. Das, V.Tandon **L.M.Lyndem**, A.I. Gray, and V.A.Ferro (2009) –Phytochemicals from *Flemingia vestita* (Fabaceae) and *Stephania glabra* (Menispermaceae) alter cGMP concentration in the cestode *Raillietina echinobothrida*. Comparative Biochemistry and Physiology, Part C vol. 149(3) 397-408.
26. **L.M.Lyndem**, V.Tandon and B. Das (2008)- Anthelmintic efficacy of medicinal plants from Northeast India against Hookworms: an In vitro Study on *Ancylostoma ceylanicum*. Pharmacologyonline 3:697-707.
27. V.Tandon, **L.M.Lyndem**, P.K.Kar, P.Pal and B.Das (2004) - Anthelmintic efficacy of extract of *Stephania glabra* and root extract of *Trichosanthus multiloba* in vitro: two indigenous plants in Shillong, India. Journal of Parasitic diseases 28 (1) 37-44.
28. **L.M.Lyndem** and V.Tandon (2003). Hookworm Infection: Prevalence among the tribal populations of Meghalaya (North East India) and development of the infective stage larvae under varied environmental conditions. Science letter vol. 26 No 3&4 93-100.
29. **L.M.Lyndem** and V.Tandon (2002). Hookworm Infection among the rural tribal populations of Meghalaya (North East India). Journal of Parasitic diseases 26(2) 60-68.
30. V.Tandon and **L.M.Lyndem** (1998). Hookworm Infection: Influence of ambient climatic factors on the development and hatching of eggs and development and survival of infective larvae. Proceedings of the 9th International Congress Of Parasitology, ICOPA 1X, 791-794.
31. **LMLyndem** V.Tandon and AK Yadav (1998). A cross-sectional study of a rural community in a subtropical, High Rainfall Area of Meghalaya, India. Journal of Parasitic Diseases Vol. 22. 44-47.

Awards/Achievement:

Swarna Jayanti Puraskar for the best research paper in the Section of Biological Sciences organized by “The National Academy of Sciences, India” 25th-27th October, 2002.

Best Poster Presentation at the 3rd Global Meet on Parasitic Diseases organized by the “Indian Society Of Parasitology” in Bangalore University, Bangalore.12th -16th January, 2004.

Thesis Supervised:

Number of Ph.D awarded:5; Number of Ph.D submitted:1; Ongoing: 5; Post graduate dissertation guided:74

Ph.D Thesis Awarded

Name of student	Year of award	Title of the thesis
Dr. Sudeshna Mandal	2024	Role of probiotic gut bacteria in <i>Hymenolepis diminuta</i> (Rudolphi, 1819) infected Swiss albino rat

Dr. Bidisha Ukil Banerjee	2019	Expression of neurotransmitter and mitochondrial activity in <i>Hymenolepis diminuta</i> (Rudolphi, 1819) treated with <i>Senna</i> spp.
Dr. Suranjana Nandi	2018	Identification of the most common <i>Paramphistomum</i> sp. Infecting goat in and around Bolpur and Anthelmintic evaluation of <i>Clerodendrum viscosum</i> on flatworms
Dr. Saptarshi Roy	2017	Anthelmintic efficacy of leaf extracts of three species of Cassia plants on <i>Hymenolepis diminuta</i> (Rudolphi, 1819)
Dr. Suman Kundu	2014	Anthelmintic Efficacy of <i>Cassia</i> Plants on Helminth Parasites

Academic affiliations:

Life Member of Indian Society of Parasitology

Life member of The Zoological Society, Kolkata

Administrative responsibilities Undertaken

Sl. No	Post	Organization/University	Duration
1	Member of Meghalaya Board Biodiversity	Forest & Environment Government of Meghalaya	2021 till date
2	Liason Officer, SC,ST &PWD	Visva-Bharati	2021 till date
3	Member of Academic Council	Visva-Bharati	15.05.2015 till date
4	Member of the Board of Studies	Zoology, Visva Bharati	
5	Member Secretary, IAEC	Visva-Bharati	2018 till date
6.	Member of Women Cell	Visva-Bharati	2023 till date
7.	Deputy Proctor	Visva-Bharati	2013-2019
8	Member of ICC	Visva-Bharati	2013-2018

Any other

Reviewer of National and International Journals