

Jayanti Ray-Mukherjee

Life Sciences (Ecology)



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I have a PhD from Utah State University (USA) on plant eco-physiological mechanisms for stress tolerance. My broad interest in ecology in on species interactions and mechanisms of species coexistence. Within this realm, I am also interested in understanding patterns of species diversity and distributions and environmental variables that determine such patterns. I am interested to understand such patterns and mechanisms in natural as well as urban ecosystems.

CURRENT RESEARCH

Methodology

Topic

Patterns of invertebrate species richness and diversity of South Africa Performing statistical analyses on large, long-term data sets of invertebrates from KwaZulu-Natal province of South Africa

Application

Identification of species and areas of immediate conservation relevance.

UKZN Publications

Ongoing...

Past Researches

Plant eco-physiology and mechanisms of stress tolerance, functional traits and stress-tolerance strategies, species richness and diversity patterns.

- Mukherjee, S., **Ray-Mukherjee, J.,** and Sarabia, R. Crows and roads: observations on the traffic behavior of crows. *Canadian Field Naturalist (in press)*.
- **Ray-Mukherjee, J.**, Jones, T.A., and T. A. Monaco. Biomass and defoliation tolerance of 12 populations of *Pseudoroegneria spicata* at two densities. *Rangeland Ecology and Management (in press)*.
- **Ray-Mukherjee, J.**, Jones, T. A., Adler, P. B., and Monaco, T. A. 2011. Drought tolerance in two perennial bunchgrasses for restoration in the Intermountain West, U.S.A. *Plant Ecology* 212: 461-470.
- **Ray-Mukherjee, J.**, Jones, T. A., Adler, P. B., and Monaco, T. A. 2011. Immature seedling growth of two North American native perennial bunchgrasses and the invasive grass *Bromus tectorum*. *Rangeland Ecology and Management*: 64: 358 365.
- Ray-Mukherjee, J., Chelladurai, V., Ronald, J., Rawat, G. S., Mani, P., and Huffman M. A. 2010. Do animals eat what we do?: ethnobotanical and ecological observations on humans and animals of Mundanthrai range, Tamil Nadu, India. In: C. P. Kala (ed.). *Medicinal plants and sustainable development*. Nova Science Publishers, NY, USA.

Future Interests

Research in interdisciplinary projects, Academia, Participation in Research Institutes, Collaborative research with Govt. organization.

Extra Interests

Travel, Gardening, Psychology, Badminton, and most importantly reading about human evolution and the paranormal.