

CHAPTER 16

ENVIRONMENTAL STUDIES

Doctoral Theses

190. KAMEI (Rachunliu G.)
Systematics, Reproductive Ecology and Conservation of Caecilians (Amphibia : Gymnophiona) of Northeast India.
Supervisor : Dr. Sathyabhama Das Biju
Th 19837

Contents

1. Discovery of a new family of amphibians from northeast India with ancient links of Africa. 2. Systematics of the caecilian family Chikilidae (Amphibia : Gymnophiona), with description of three new species of Chikila from northeast India. 3. A taxonomic review of the Asian Caecilian genus Ichthyophis Fitzinger 1826 (Ichthyophiidae, Gymnophiona) from northeast India. 4. Rediscovery and redescription of the poorly known darjeeling caecilian (Ichthyophis sikkimensis) with notes on phallus morphology and developmental abnormality. 5. Reproductive ecology of females of caecilian Chikila gaiduwani (Chikilidae, Gymnophiona, Amphibia) from Meghalaya, India with notes on embryonic development. 6. Brief notes on breeding biology and embryonic development of Ichthyophis sendenyu (Ichthyophiidae, Gymnophiona, Amphibia) from Nagaland, India. 7. Conservation biology of caecilian amphibians of northeast India. Future perspectives and appendices.

191. PHANINDRA MULLAPUDI (L.V.)
Variation in T-DNA Processing Among Agrobacterium Strains.
Supervisor : Prof. P. Pardha Saradhi
Th 20248

Contents

1. Introduction. 2. Review of literature. 3. Material and methods. 4. Results. 5. Discussion. 6. Summary and conclusions. References.

192. RAJWANT KAUR
Ecological Impacts and Drivers of prosopis Juliflora (SW.) DC. Invasion.
 Supervisors : Prof. Inderjit Singh and Prof. R. M. Callaway
Th 20247

Contents

1. Introduction. 2. Impact of P. Juliflora on Plant Diversity. 3. Plant-Soil Biota Feedbacks. 4. Impact on Soil Properties. 5. Allelopathic Potential of P. Juliflora. 6. Other Projects. Summary and references

193. SAXENA (Pallavi)
Effects of Photochemical Pollutants on Plant Species.
 Supervisor : Dr. Chirashree Ghosh
Th 19838

Contents

1. General Introduction. 2. Overview of air pollutant concentrations and their variation in study area, Delhi. 3. Monitoring seasonal variation of photochemical pollutants (NO_x, VOCs and O₃) in Delhi based upon land use pattern. 4. Analyzing seasonal isoprene emission rate by selected plant species. 5. Assessment of physiological responses of plant species for tolerance and sensitivity mapping (Using APTI as a tool). 6. Exposure based plant response study - action of photochemical pollutants individually and in combination. 7. To quantify benzene uptake ability of tolerant plant species. 8. Conclusions. References and appendices.

194. SEN (Monalisa)
Avifauna and Community Dynamics in Aravallis.
 Supervisors : Prof. C. R. Babu and Dr. A. J. Urfi
Th 19835

Contents

1. Introduction. 2. Review of literature. 3. Materials and methods. 4. Observations. 5. Discussion. 6. Summary. 7. Conclusions.

195. SINGH (Govind)
**Surface and Sub-Surface Water Quality in the NCT of Delhi
and Its Implications on The Urban Environments.**
Supervisors : Dr. Chirashree Ghosh and Prof. Mihir Deb
Th 19836

Contents

1. Introduction. 2. Literature review. 3. The study area. 4. Materials and methods. 5. Results. 6. Discussion. 7. Conclusions and recommendations. References and appendix.