

Contents

1. The Parakrama Samudra Project – scope and objectives, by F. Schiemer	1
2. Energy and water budget of a tropical man-made lake, by H. Dobesch	19
3. Thermal stratification, mixis and advective currents in the Parakrama Samudra Reservoir, Sri Lanka, by K. Bauer	27
4. Phosphorus and phosphatase dynamics in Parakrama Samudra based on diurnal observations, by A. Gunatilaka	35
5. An assessment of the phytoplankton biomass and primary productivity of Parakrama Samudra, a shallow man-made lake in Sri Lanka, by M. Dokulil, K. Bauer & I. Silva	49
6. Some remarks on long-term and seasonal changes in the zooplankton of Parakrama Samudra, by C. H. Fernando & R. Rajapaksa	77
7. The composition, density and distribution of the zooplankton in Parakrama Samudra, by A. Duncan	85
8. A diurnal study of the planktonic rotifer populations in Parakrama Samudra Reservoir, Sri Lanka, by A. Duncan & R. D. Gulati	95
9. The influence of temperature upon the duration of embryonic development of tropical <i>Brachionus</i> species (Rotifera), by A. Duncan	107
10. Feeding studies with natural food particles on tropical species of planktonic rotifers, by A. Duncan & R. D. Gulati	117
11. Sediment characteristics and benthic community oxygen uptake rates in Parakrama Samudra, an ancient man-made lake in Sri Lanka, by P. Newrkla	127
12. A contribution to the ecology of the fish fauna of the Parakrama Samudra Reservoir by F. Schiemer & R. Hofer	135
13. Feeding ecology, assimilation efficiencies and energetics of two herbivorous fish: <i>Sarotherodon</i> (<i>Tilapia</i>) <i>mossambicus</i> (Peters) and <i>Puntius filamentosus</i> (Cuv. et Val.), by R. Hofer & F. Schiemer	155
14. Aspects of gut passage of algal cells in <i>Sarotherodon mossambicus</i> (Peters), (Pisces, Cichlidae), by M. Dokulil	165
15. Contributions to the functional anatomy of the feeding apparatus of five cyprinids of Parakrama Samudra (Sri Lanka), by P. Adamicka	171

16. Changes in body condition and proximate composition with maturation in <i>Puntius sarana</i> and <i>Sarotherodon mossambicus</i> , by S. S. De Silva, C. D. De Silva & W. M. K. Perera	177
17. Reproductive strategies of some major fish species in Parakrama Samudra Reservoir and their possible impact on the ecosystem – a theoretical consideration, by S. S. De Silva	185
18. The ecology of cormorants (genus <i>Phalacrocorax</i>), by H. Winkler	193
19. Parakrama Samudra Project – a summary of main results, by F. Schiemer & A. Duncan	201

Floristic and faunistic surveys

20. A contribution to the phytoplankton species composition of Parakrama Samudra, an ancient man-made lake in Sri Lanka, by E. Rott	209
21. Caddisflies (Trichoptera) from Parakrama Samudra, an ancient man-made lake in Sri Lanka, by H. Malicky	227
Subject index	229
Species index	233