

Benthic biodiversity in the Dutch canal of the  
Muthurajawela swamp

• G.A.R.K. Gamlath and M.J.S. Wijeyaratne

*Department of Zoology, University of Kelaniya,  
Kelaniya*

The benthic invertebrate fauna and some environmental parameters including dissolved oxygen level, BOD, COD, pH, temperature, salinity and turbidity of the Dutch canal in the Muthurajawela swamp were monitored from December 1994 to June 1995. The variation of the abundance of benthic invertebrates with physico-chemical parameters was studied and the species diversity was enumerated using Shannon-Wiener index. Dissolved oxygen level ranged from 0.2 ppm to 9.9 ppm. The pH, salinity and turbidity ranges were 6.0 - 7.4, 0 - 1.6 ppt and 2 - 35 ppm respectively. Of the 18 species of benthic invertebrates recorded oligochaetes, chironomides and gastropods were the most abundant.

Significant positive correlations were recorded for the abundance of *Melanoides tuberculata*, *Nais raviensis*, *Dero zeylanica* and *D. dorsalis* with dissolved oxygen level and abundance of *Neritina perottetiana* with salinity. Significant negative correlations were recorded for the abundance of *N. raviensis*, *D. zeylanica* and *D. dorsalis* with pH and abundance of chironomid species with turbidity.