

Distribution and abundance of Oligochaeta (Annelida) species and environmental variables of Porsuk Stream (Sakarya River, Turkey)

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ABSTRACT

1. Species composition and abundance of aquatic Oligochaeta along with some physical, chemical and microbiological parameters in Porsuk Stream, a part of upper Sakarya River, were investigated between September 1998 and August 1999.
2. Oligochaete potamofauna in Porsuk Stream was represented by 15 species of Naididae, 8 species of Tubificidae, one species of Haplotaxidae and 2 species of Lumbriculidae.
3. The density varied between 72 and 34,800 ind. m⁻². Number of species varied between 6 and 13, and the diversity ranged from 0.95 to 2.16.
4. Correlations between environmental parameters and abundance of Oligochaeta species were determined by Pearson's correlation coefficients.
5. The abundance of Oligochaeta species correlated directly with pH, dissolved oxygen, biochemical oxygen demand, nitrate and nitrite levels of the water.

KEY WORDS: Oligochaeta, Porsuk Stream, Turkey.