

Ecological study on Dez dam lake

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Abstract

Monthly sampling of five stations in Dez dam lake was carried out for physico chemical , plankton, benthos and fish analysis from Jan. 2002 to Dec.2002 and also physico – chemical investigation was done in one station in Dez river (after dam). Station five in entrance of the river to lake showed riverine or lake condition according to water supply. In spite of significant difference between monthly sampling no significance were observed in depth and stations and the physico – chemical results showed that all of the studied factors were in optimal range for fish culture and growth .The most dominant phytoplanktons were observed in Mar. and Aug. respectively. The most dominant zooplankton was in Feb .Cyclotella was the most abundance genus from sixteen identified phytoplanktons genera.Dinophyceae and Bacillariophyceae were the most abundant classes from five main classes of phytoplanktons. Dinophyceae showed same abundance in different depth but Bacillariophyceae was dominant in surface.From nine genera of zooplankton groups include Protozoa , Rotifera , Cladocera and Copepoda , Brachinus was the most abundant genus.Benthic fauna include Oligochaeta , Corbicula and Chironomids larvae were more abundant in stations one & two in late spring and summer. Station three and four due to higher depth and station five due to comprise special condition and unstable bottom , showed low diversity and abundance.In this study 12 fish species , belong to 3 family , were identified and Cyprinid fishes with nine species were the most dominant family. Capoeta trutta , Barbus grypus and Barbus esocinus were the most species respectively . The most abundant fishes were observed in summer. Indices: diversity, richness, evenness and dominance 1.11, 1.05, 0.45 and 0.46 were determined respectively. Most of fishes were omnivor and also planktivor , carnivor fishes were observed. Spawning of the most species is occurred the late winter and spring and some species was spawning in different seasonal time.According to the result, Dez lake can be classified as oligotroph – mesotroph lake.