

Environmental Effects of Shahid Rajai's Dam on Aquatic Fauna

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Abstract

The Tajan River is one of the important rivers in the southern Caspian Sea and it is too important for migration of some fish species, feeding and spawning of estuary fishes and resident fish population. Main purposes of this study were Environmental Effects of Shahid Rajai's Dam on species diversity of fishes in Tajan River from March 2008 to July 2009. Two stations have been selected in up and down of Shahid Rajai Dam and fishes captured by electroshocker. Results showed that 9 species and subspecies fish belonging to 4 families: Cyprinidae, Nemacheilidae, Cobitidae and Gobiidae exist in the river so that Cyprinidae with 6 species and maximum abundance (95%) is prevalent. On the identified fish species, *Alburnoides bipunctatus* and *Capoeta capoeta gracilis* were the most abundant, respectively. In this study, *Luciobarbus capito* only one specimen was caught in May 2009. The Shannon Diversity Index and Richness Index were significantly different between sites ($P < 0.05$), but Evenness Index and Dominance index were no significantly different between sites ($P > 0.05$). Results show that construction of this dam has had great impact on physical and chemical properties and on also biological effects of the river.

Keywords: Tajan River, Environmental effects, Species diversity
