

## Changes of Richness and density of Macroinvertebrates Fauna in Polour Region, Haraz River (Northern Iran) Affected by Trout Farm Wastewater

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### Abstract

Effects of Trout farming wastewater on richness and number of macroinvertebrates were done in Haraz River. Identification and surveying of surface water resources, specially Rivers and streams where are among of strategic resources is so important for optimal management. This study was conducted in Haraz River, Polour region (Mazandaran, Northern Iran) during spring and summer. First (as control) and next stations were selected in nearest distance before farm and 75m after that where output water toward River, respectively. Samples were collected using Surber sampler dimensioned 1<sup>fsq</sup> (about 30.5 X 30.5 cm<sup>2</sup>) and 360µm net. Collected samples were fixed with 4% formalin, isolated, and then by sieving with a diameter of 500µ mesh and identified at a level of order and family using creditable keys. In present study 7 orders of Macroinvertebrates were identified. Most effects found on 3 orders of Ephemeroptera, Trichoptera and Plecoptera that known as EPT as sensitive group which decreased and unlike, Chironomidae family were increased, which are resistant to pollution.

**Keywords:** Aquaculture, Waste water, Macroinvertebrates, Pollution.