

Biodiversity of aquatic *Trichoptera* fauna in the eastern Aures massif, North-Est Algeria.

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The present study treats the biological and ecological aspects of aquatic Trichoptera of the wadis in the Aures Region that are known as good indicators of the health of aquatic ecosystems due to their varying tolerance to pollution and habitat. It highlights the important qualitative and quantitative taxonomic richness of the latter. And establish a checklist of the main taxonomic Species of this group from lotic environments and their distribution in the Eastern Aures massif. In order to know the state of health in the rivers of the Eastern Aures massif with an efficient and less expensive way. The sampling has been initiated in June 2019 to June 2020. We have carried out monthly sampling at 16 localities using a dipnet. In addition, a number of environmental factors have also been measured. The collected Trichoptera samples have been preserved in 100% Ethanol. Overall, a total of 1888 individuals were recorded and were identified into 13 taxa belonging to 7 families. The generic composition of the population was relatively rich and varied as it was constituted of 14 genera. The Hydropsychidae (seven species) presented the highest specific richness while other families were poorly represented. The Hydropsychidae was the most dominant family with a population of 373 individuals (78.9%), followed by Glossosomatidae with 265 individuals and 2 species, and the Limnephilidae with 223 individuals, the Philopotamidae with 195 individuals; the least abundant were the Goeridae, Polycentropidae, Hydroptilidae, Sericostomatidae and Rhyacophilidae, which represented less than 1 % for each family. The study conducted on aquatic Trichoptera Fauna of the Aures wadis highlighted a great qualitative taxonomic wealth and important quantitative, but different from station to another since the stations studied also differ in their parameters mesological, vegetation and type of substrate.

Keywords: wadis, Aquatic *Trichoptera* Fauna, ecological and biological study, Eastern Aures massif, Algeria.