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Habitat Types and its impact on Macrobenthos Assemblies Structure in Gharana Wetland

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Abstract: The Gharana, a dying wetland, is a semi-arid wetland adjacent to agricultural areas merely 500m from the international Indo-Pakistani border. The main goal of the current research was to inspect the types of habitat and its impacts on macrobenthos assemblies. Four stations were identified based on different types of habitat i.e. kind of substrate and quality of water. Species richness, abundance, and three diversity indices (Shannon- Weiner, Simpson and evenness index) for macrobenthos were evaluated. Total 29 genera were observed during the current research. Ephemeroptera (8 genera) were the dominant followed by Diptera in comparison to all other orders. The outcomes of the current research clearly specified the populace of macrobenthos species in diverse habitats was pointedly dissimilar. Also, the results obtained by the CCA showed the maximum number of species, their richness, and abundance in zone 1. The diversity indices showed a higher overtone with the types of the habitat of silt-gravel bed substrate followed by sand, and open lotic and seasonal lotic habitat types.

Key words: Macrobenthos, habitat type, water quality, Gharana wetland, Jammu.