**Abstract**

The aquatic insects are an important component of biodiversity and are very important indicators of water quality parameters. The distribution and composition of insect communities are considered to be determined by the environmental factors and interactive relationship within the ecosystem. The present investigation was to determine the effects of environmental factors on the aquatic insect assembly in Singanullur Lake, Coimbatore .Three different sampling stations were selected and were examined for the water quality and aquatic insect assemblages. A total of aquatic insects were collected from the lake with the highest number of aquatic insects from the order Hemiptera. The water analysis results revealed that Station I- had the best water quality when compared to the other sites. Thus environmental variables were found to influence the aquatic insect distribution in the lake.

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