

The Composition, Abundance and Distribution of Zooplankton of Ugbogui River, Ugbogui, Edo State, Nigeria

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Abstract : Zooplankton communities of Ugbogui River at Ugbogui, Southwest Nigeria were investigated from August 2015 to April 2016. Four stations were studied from upstream to downstream with a distance of about 2 kilometres between each station. A total 10 species were identified; 5 copepods and 5 cladocerans in the following order of dominance: copepod > cladocera. A total zooplankton population of 272 individuals was recorded during the study period. Copepods and cladocera represented the predominant species (76.73% and 23.89% of the total zooplankton community respectively). Copepods and cladocera were dominated by both cycloid (77%) and bosmids (12.13%), respectively. The dominant copepod and Cladocera species were *Tropocyclops prasinus* and *Bosmina longirostris* representing 28.68% and 12.13% of the total zooplankton, respectively. The calculated diversity indices indicated that station 1 (1.992) was more diverse followed by station 4 (1.893), while zooplankton species in station 2 (1.4) were least diverse. Species richness was highest and lowest in stations 4 (2.015) and 2 (1.165) respectively. Community composition was similar at both stations 1 and 4, but varies seasonally across the four stations. Higher number and density was found during the wet season with a trend of declining proportion towards the dry months.

Keywords : abundance, diversity, population, species, Ugbogui river, zooplankton

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