

Diversity of benthic macro invertebrate community to assess biological water quality along Oued chiffa, Chrea National Park, Blida province.

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This work focuses on the structure and diversity of benthic macroinvertebrates in the national parc of chréa. Benthic macroinvertebrates were sampled according to the Standard Global Biological Index (IBGN) protocol at three (03) stations (Oued el mardja , Oued el hamdania ,Oued chiffa). The structure of benthic communities has been studied using Shannon and Piélou indices. A Canonical Correspondence Analysis (CCA) was conducted to characterize the macroinvertebrate community. The results show that the macroinvertebrates harvested (1345 individuals) belong to 41 families and 14 order. This macrofauna consists insects, worms and molluscs. The families of Diptera and Ephéméroptera are the most frequent and the most abundant on all stations. The values of the Shannon and Piélou indices obtained were low. The distribution of macroinvertebrates was strongly influenced by altitude and depth. The preponderance of the three families of polluo-resistant macroinvertebrates (chironomidae, ceratopogonidae and lumbriculidae) reveals indicates the poor water quality of the water in the three stations. Similarly, the indices of diversity and equitability indicate that the macroinvertebrate community of our stations are very unbalanced. These results lay the foundation for any biomonitoring action of the ecological water quality of those valleys.

Keywords: Macroinvertebtaes, Biodiversity, National Park of Chréa.