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Survey and Collection of Insect Species Associated with Water Hyacinth on Ogun River, Nigeria

O. A. Oke[1,*], A. M. Gbadebo[2]

[1]Department of Biological Sciences, University of Agriculture, Abeokuta, P. M. B. 2240 Nigeria
[2]Department of Environmental Management and Toxicology, University of Agriculture, AbeokutaP.M.B. 2240,Nigeria

Abstract The insect species found on water hyacinth plants were collected in each of the sampling station by using insect net on randomly selected ten water hyacinth per square meter of a floatable quadrant which was placed over the mat of water hyacinth on the water body. The collections were made on monthly basis for 18 months from October 2009 to March 2011. The insect species collected were grouped into five orders namely:Orthoptera; Coleoptera; Hemiptera; Odonata and Diptera. There were two families in the order Orthoptera: Pyrgomorphidridae, andAcrididae. For the Pyrgomorphidae were *Zonocerusvarigatus and Attractomorphaaurivilli*, while in the Acrididae there was *Oxyahyla.* The order Coleoptera also had two families: Chrsomelidae and Lagriidae. Family Chrysomelidae had two genera: namely*Lamprocopaoccidentalis* and *Leptaulacafissicollis*. The family Lagriidae had only one species *Lagriavilloxa*. The order Hemiptera was represented by only two families – *Pentatomidae* and *Cercopidae*. Only one genus was represented in the Pentatomidae – *Aspaviaarmigera* while the family Cercopidae had one species – *Locrismaculatus.* The order Odonata was represented by the family Libelludidae which has the genus*Acisomapanorpoides*. Lastly the order Diptera was represented by the family *MusidaeMuscadomestica*. The insect species performed different kinds of activities on the water hyacinth plants and these activities were performed to varying degrees or levels. These activities included tunnelling into the petioles of the water hyacinth, feeding on the leaf surfaces, mating on the water hyacinth, sucking the juice from the water hyacinth and resting or reposing on the water hyacinth. The result of this study has revealed that the insects present on water hyacinth on Ogunriver were not indigenous natural enemies of these water hyacinth plants because all the activities of these insects could not suppress the growth and proliferation of the water hyacinth, hence, the consequent rapid growth and propagation of the plant.

Keywords Survey, Collection, Insect, Identification and Natural Enemy