Invasive Alien Plants and the Associated Insect Assemblages in Some Selected Habitats in Matara District, Sri Lanka

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Invasive alian plants cause major threats to the biodiversity of Sri Lanka. Abundance and distribution of these plants within the country has increased significantly within past two decades. Present study aims to identify invasive alien plant species in five selected natural habitats in Matara District. insect fauna associated with two species of invasive plants were studied. Selected five natural habitats were Kiralakele wetland, Kekandura forest, University of Ruhuna premises(UOR), Godagama and Akuressa. Within each habitat, sampling sites were selected randomly and using a line transect (100 m), invasive plants found in the site were counted. Observations were made on insect fauna associated with Anona glabra and Lantana camara plants in Kiralakele. Data was collected by visiting each habitat once a monthfrom June 2016 to February in 2017. All studied habitats are affected by alien invasive plants and ferns. Among the identified 20 invasive plants during the study, the most common invasive plants found in all sites were Acasia sp, Typha sp, L. camara, pennisteum sp, Panicum maxicum and Alstonia macrophylla. Anona glabra is the most dominant plant associated with waterbodies of study habitats. Acasia plants were also associated with water bodies in the kiralakele wetland. Other plants such as A. glabra and Hydrilla species are associated with aquatic habitats and, in Kiralakele wetland. A. glabra plants have high distribution in all sites indicating that one of the important natural environments in Matara District is seriously affected by invasive plant species. In UOR premises, all species of invasive plants were recorded but their abundance is not high due to the continuous maintenance of landscape. Faunal association in two invasive plant species namely A. glabra and L. camara, in Kiralakele indicated insects belong to 25 families and to 23 families were associated with A. Glabra and L. Camara plants respectively. Further, most of the fauna associated with both plant species were insects and large vertebrates such as birds or reptiles are not associated and they were only occasional visitors of the plants. Finding of the study indicates most of the natural as well as human modified landscapes in Matara district are affected by invasive plants, but they are not important sources of food or nesting sites for larger animals such as birds.

Keywords: Invasive alien plants, Insect fauna, Matara District