

## Heteroptera from Rice Fields and Surrounding Grasslands of Northern Iran (Insecta), with Special Emphasis on Predator Species

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### ABSTRACT

The predator bugs (Heteroptera) have an important role in the biological control of several pests in different agroecosystems. The fauna of these beneficial insects was studied in rice fields and around the grasslands of Northern Iran, Mazandaran province. A total of 55 Heteroptera species, including 26 predator, were identified from rice fields and around weed plants. Among the collected materials, six species are new records for Iranian fauna.

*Key words:* Heteroptera, predator bugs, fauna, host plant, rice field, Mazandaran, Iran.

### INTRODUCTION

Rice fields, together with their contiguous aquatic habitats and dry land, comprise a rich mosaic of rapidly changing ecotones, harbouring a rich biological diversity, maintained by rapid colonisation as well as by rapid reproduction and growth of organisms (Fernando, 1995). The variety of organisms inhabiting rice field ecosystems includes a rich composition of fauna and flora. These organisms colonise rice fields by resting stages in soil, by air and via irrigation water (Fernando, 1993). The fauna are dominated by micro, meso and macro invertebrates (especially arthropods) inhabiting the vegetation, water and soil sub-habitats of the rice fields, while vertebrates are also associated with rice fields. The aquatic phase of rice fields generally harbours a varied group of aquatic animals. Those that inhabit the vegetation are mainly the arthropod insects and spiders (Bambaradeniya *et al.*, 1998). The rice ecosystem consists of two