Catalog of Nabidae (Hemiptera: Heteroptera) for the Neotropical Region

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Abstract

The Nabidae (Hemiptera) of the Neotropical Region are cataloged. A total of 12 genera and 83 species are listed together with their synonyms. References are given to the original descriptions and the subsequent taxonomic position, the location of types, and the geographic distribution. A comprehensive bibliography is provided.

Key words: Nabidae, catalog, Neotropical, taxonomy, distribution

Introduction

The Nabidae have been placed within the superfamily Cimicoidea in the infraorder Cimicomorpha (Leston et al. 1954, Schuh & Stys 1991). Most species are of moderate size, only occasionally exceeding 10 mm in length. Many are elongate and of drab coloration, whereas others are more stout and may possess distinctive red and black color patterns. The first pair of legs is slightly enlarged and have a fossula spongiosa used to capture their prey. They are commonly known as “damsel bugs” because of the movement made when their front legs are raised. Lattin (1989) gave an exhaustive review of the biology of nabids. They are active predators found in leaf litter and upon plants. Nabinae appear to be predators on a wide variety of small arthropods including aphids, larvae and adults of the Hemiptera, thrips, caterpillars, and acari; whereas Prostemmatinae appear to prey exclusively on other Heteroptera, especially Lygaeidae.

Nabids insert their eggs into plant tissue with only the operculum remaining visible (Braman 2000). Many species are numerically important in agricultural systems such as soybean, cotton, alfalfa, and tobacco. Heteropteran predators in soybean, including Nabis spp., may comprise 40–89% of the total predatory insects (Irwing and Shepard, 1980).

There is no clear consensus concerning organization of the major subdivisions of the family. Stål (1873) provided the first useful classification, recognizing three subfamilies: Nabina, Coriscina, and Pachynomina. Carayon (1970), Kerzhner (1981), and Péricart (1987) recognized four subfamilies: Medocostinae, Velocipedinae, Nabinae, and Prostemmatinae. We follow the subfamily classification of Schuh & Stys (1991) in defining the Nabidae as including only the Nabinae and Prostemmatinae. They defined the nabids on the basis of 4-segmented labium, membrane venation, and the presence of Ekblom’s organ. Kerzhner’s (1981) classification is followed for the tribes.

The subfamily Nabinae is classified into four tribes: Arachnocorini, Carthasini, Gorpini, and Nabini, which are united by the presence of moderately long labial segments, the lack of scutellar trichobothria, and opening of pygophore oriented dorsad. The subfamily Prostemmatinae is divided into the Phorticini and Prostemmatini, each with only two genera, both of which possess scutellar trichobothria and have the posterior foramen of the pygophore in a caudal or ventral position. Prostemmatini is considered to be more primitive (Kerzhner 1981, 1996).

The family includes 20 genera and about 500 species distributed worldwide (Schuh & Slater, 1995). For the Palearctic Region, 9 genera and 123 species are known (Kerzhner, 1996). For Canada and the continental...