

# Taxonomic Notes on the Subtribe Rhopalosiphina (Stemorrhyncha: Aphididae) in Korea

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About 4,700 species of the Family Aphididae have been recorded. Among Aphididae, the tribe Aphidini is one of the notorious aphid group including the major insect pests which heavily occur on the agricultural crops and bring economic losses considerably, with about 730 species worldwide and 58 species in the Korean Peninsula. Aphidini is divided into two subtribes, Aphidina and Rhopalosiphina with 41 species and 17 species known in the Korean Peninsula, respectively. Most aphids among Aphidina belong to the genus *Aphis* of which most species and Rhopalosiphina is relatively small group comparing with Aphidina, but most aphids included in this subtribe are economically important, such as *Rhopalosiphum maidis* (Fitch, 1856) on barley and maize and *Schizaphis graminum* (Rondani, 1852) on rice.

A total of 18 species in Rhopalosiphina are recognized from about 2,000 microscopic slide specimens stored in the National Institute of Agricultural Science & Technology (NIAST) and Seoul National University. Seventeen species of 4 genera known by previous workers are confirmed and *Melanaphis pyraria* (Passerini, 1861) collected on *Pyrus communis* are firstly recorded in Korea. On the other discussion, it is possibly suggested to revise *Melanaphis koreana* (Sorin, 1972) to the synonym of *Melanaphis japonica* (Takahashi, 1919). There were no morphological differences between two species from the result of observation with many specimens including Prof. Paik's collection used on the original description by Sorin.

We would present the check list of the subtribe Rhopalosiphina in Korea, with the morphology, ecology and host ranges of each species.