Taxonomic notes on the Genus Aphis (Sterrnorhyncha: Aphididae) in Korea

Kim, Hyojoong and Seunghwan Lee

School of Agricultural Biotechnology, Seoul National University

About 4,700 aphid species belonging to the Family Aphididae have been recorded worldwide. Among Aphididae, the Genus *Aphis* is one of the largest aphid groups with about 500 species in the world and 36 species in Korea by Lee *et. al.* (2003). Most aphids belonging to *Aphis* are well known as the agricultural crop pests like *Aphis gossypii* and *Aphis spiraecola*.

A total of 25 Aphis species are recognized with about 5,000 specimens stored in the insect collection of SNU (Seoul National University) and NIAST (National Institute of Agricutural Science and Technology), including 4 species new to Korea and 2 species new to science. As the species new to Korea, Aphis fabae was collected on Solanum nigrum, Hemistepata lyrata, Rumex crispus, Anthriscus sylvestris, Physalis alkekengi, Aphis hederae on Hedera rhombea, Aphis oenotherae on Oenothera odorata, Aphis sanguisorbae on Sanguisorba officinalis. Especially, many samples of Aphis fabae were collected nation-widely in Seoul, Gangwon, Chungnam, Jeonbuk, Jeonnam, Gyeongbuk, Gyeongnam, and Jeju provinces since 1999. Two new species are Aphis sp.1 nov. on Vitex sp. and Aphis sp.2 nov. on Veronica nakaiana. In addition, distribution of Aphis newtoni, Aphis sedi and Aphis sanguisorbicola, which have been recorded only in North Korea is confirmed in South Korea.

We would present the check list of the Genus *Aphis* in Korea, with the morphology, ecology and host ranges of each species and suggest further study to revise the reality of some species whether they distribute in Korea or not.