

# Notes on Two Little Known *Aphis* spp. (Sterrnorhyncha: Aphididae) in Korea

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About 4,700 aphid species (Sterrnorhyncha: Aphididae) have been recorded through the world. Among them, the genus *Aphis*, belonging to the subfamily Aphidinae, is one of the most important pest groups on various agricultural crops, with 36 species known from the Korean Peninsula. Recently, we have recognized two additional species, *Aphis forbesi* Weed, 1889 and *Aphis oenotherae* Oestlund, 1887.

The former might be the same species of the previous records of *Aphis* sp. on the roots of strawberry (*Fragaria ananassa*) in Korea, which has been referred as '딸기뿌리진딧물' in Korea. We have found many colonies nation-widely on the roots and the lower parts of *Potentilla* spp, protected by ant soil mound. Among the genus *Aphis*, it is characterized by the relatively long processus terminalis, about 3.0-3.5×basal part of antennal segment VI, antenna about 0.7×body length, marginal tubercles present on abdominal segment I and VII, and the abdominal tergite reticulated. Body is 1.0-1.9mm long in length, and dark green or yellowish green in life. It has been recorded from the North America, Europe and Japan.

The second species, *Aphis oenotherae*, is native to North America, introduced to Europe in 1960's. It feeds preferably on the evening primroses (*Oenothera* spp.) and other related plants, genera of family Onagraceae (*Chamaenerium*, *Clarkia*, *Epilobium*, *Fuchsia*, *Gaura* and *Godetia*) in Europe. In North America, it migrate from the primary hosts, gooseberry and *Ribes* spp. to *Oenothera* as the secondary hosts. In Korea, there are 3 species of *Oenothera* (*laciniata*, *lamarckiana*, *odorata*), all introduced more than 50 years ago. We could confirm numerous colonies of *A. oenotherae* and the deformation of the host plants throughout the Korean Peninsula, including Jeju Island. This species is distinguished by the short antennae, shorter than 0.5×body length, processus terminalis about 2.0×basal part of antennal segment VI, apices of tibia, tarsus, cauda dark or dusky pale, siphunculi pale to slightly dusky distally. It is dark green, green, or yellowish green in life.

We present the morphological and biological observations of two species.