Chrysanthemum Aphid

From: Insect and Related Pests of Flowers and Foliage Plants. Baker, J.R. ed. 1994 (revised). NC Coop. Ext. Service publication AG-136. <u>https://content.ces.ncsu.edu/insect-and-related-pests-of-flowers-and-foliage-plants</u>

SCIENTIFIC NAME: Macrosiphoniella sanborni (Gillette) CLASS: Insecta ORDER: Hemiptera FAMILY: Aphididae



Chrysanthemum aphid adult and nymphs (Jim Baker, Bugwood.org)



Young nymph, older nymph, and adult chrysanthemum aphids (NC State Extension)

Description

Adults

The winged adults are about 2 to 2.5 millimeters long; soft bodied; and dark, shining mahogany brown. Due to their dark color, they were once called "blackflies." Wingless adults are only 1.5 millimeters long. Small, black, sturdy cornicles are found on the end of the body.

Nymphs

Nymphs resemble smaller versions of the adult aphids (0.6 to 1 millimeters). Nymphs have dull, brick-red bodies with relatively long legs and antennae. The cornicles are short and dark. The outer two-thirds of the legs and antennae are gray (young nymphs) to dark gray. Older nymphs have proportionally longer cornicles. Those destined to be winged adults have wing buds in the later instars.

Biology

Host Plants

Chrysanthemum is the only known host for this aphid in North America, but it has been reported on a few related plants in Asia.

Damage

The chrysanthemum aphid feeds by piercing the plant surface with its threadlike mouthparts to suck out plant juices. They gather about the terminal buds and feed on the new growth. This feeding causes distorted growth, and the leaves may be covered by the feeding aphids' honeydew and cast skins. Sooty mold may grow on the honeydew giving the leaves and stems a black appearance. Chrysanthemum aphids can transmit chrysanthemum vein mottle virus and chrysanthemum virus B.

Life Cycle

Only female chrysanthemum aphids are known. They reproduce by giving live birth to more females, without mating.



Chrysanthemum aphids on chrysanthemum (Jim Baker, Bugwood.org)

Chrysanthemum aphids overwinter in greenhouses where the feed throughout the winter. During the warmer months the leave the greenhouses in search of new plants. The also may be moved about as plants are shipped or sold. When the winged female stage infests new plants, it usually starts feeding and producing live nymphs. Each female can produce four to eight young aphids per day. Within about a week the new nymphs mature into wingless females which begin to bear young of their own. One aphid on a plant in a short time may build the population up to hundreds of individuals. As the plant becomes crowded, more and more of the offspring develop into winged females which in turn migrate to other plants to begin new infestations.

Management Strategies

Infested plants in the greenhouse should be sprayed thoroughly when aphids are first noticed. On outdoor plantings, natural enemies may control minor infestations.



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