
Aphids

Introduction

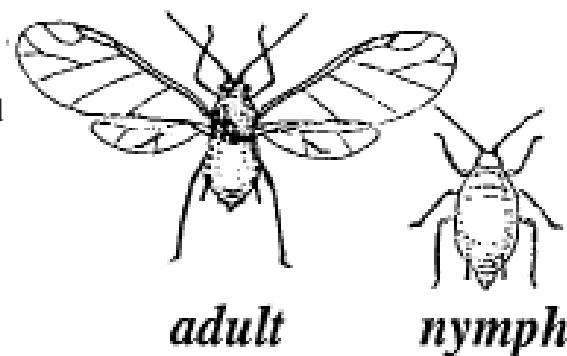
Aphids, or plant lice, feed on most vegetable crops, many houseplants and many ornamentals grown in New Hampshire, as well as numerous weeds and wild plants. With their awesome reproductive abilities, aphids can build up in large numbers in a very short period of time. Depending on species, aphids feed on host plant leaves, stems, flowers and roots. They damage plants in three ways: they suck sap from their host and inject a toxin, causing the plant to wilt, yellow, and often die; they excrete a sticky substance called “honeydew,” upon which a black sooty mold can grow, diminishing the aesthetic value of the plant; some species of aphids transmit virus diseases to plants.

Description

There are many species of aphids in NH, some of which are green, but can be almost any color. Adults aphids are soft-bodied insects about 1/16 to 1/8 inch long. They have piercing-sucking mouthparts that are used to pierce plant tissue and remove the sap. Aphids can easily be distinguished by the two tube like appendages (cornicles) on the posterior end of the abdomen. Adults can be winged or wingless. When wings are present, there are two transparent pairs. Eggs are tiny, oval, black and found attached to undersides of leaves, on stems and in crevices of most host plants.

Life cycle

Most aphids overwinter as eggs on perennial plants or in plant debris. Some will overwinter as adult females. In the spring the nymphs emerge from the eggs and quickly develop to adults. These adults are wingless females, called *stem-mothers*, which have the ability to give birth to living young without mating. Within a two-week period one female can produce 50-100 active nymphs. Some of these females, called *spring migrants*, will develop wings and fly to an alternate host, called the summer host, where they begin a new generation.



As the cold weather approaches both males and females develop wings and return to the perennial plants. The females once again produce live nymphs, but these female nymphs, once reaching maturity, cannot reproduce unless mating occurs. Once mating occurs the female deposits her eggs in the overwintering sites.

Control

Prevention and non-chemical control

Encourage ladybugs! Both adult beetles and larvae have enormous appetites for aphids. Also, control aphid-loving weeds, such as lamb's quarters, in and around gardens.

If only a few plant leaves are affected, either remove the leaves or crush the aphids by rubbing infested leaves between thumb and forefinger. Directing a hard stream or spray of water at plants early in the day may remove many aphids from infested plants.

Chemical control

Insecticidal soap is a safe, effective control for aphids on ornamentals and vegetable crops. Horticultural oil sprays can help to control some aphids on fruit trees and ornamentals. For timing and details refer to Extension Fact Sheet "Timing of Refined Fruit Oil Sprays."

Some other aphicides registered for use on vegetable crops include pyrethrum, pyrethrins and malathion. Before using any pesticide, check to make sure that both the target pest and the crop you intend to spray are listed on the label of the product. Spray or dust according to package directions. Use caution. Some aphid problems are created by spraying (kills the aphid predators and parasites.)

Stop! Read the label on every pesticide container each time before using the material. Pesticides must be applied only as directed on the label to be in compliance with the law. All pesticides listed in this publication are contingent upon continued registration. Contact the Division of Pesticide Control at (603) 271-3550 to check registration status. Dispose of empty containers safely, according to NH regulations.

*Reviewed and amended by Dr. Alan Eaton, UNH Cooperative Extension Entomology Specialist.
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