



Vegetables

Aphids

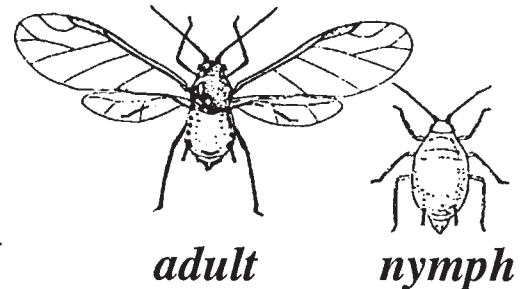
Pest **19**
Fact
Sheet

Introduction

Aphids or plant lice, are found on most vegetable crops grown in N.H. With their great ability to reproduce, aphids can build up in large numbers in a very short period of time. They are of economic importance in three ways: 1) They remove sap from their host and inject a toxin causing the plant to wilt, yellow, and often die; 2) Some aphids transmit viruses that cause plant diseases; 3) They excrete a sticky substance called "honeydew" upon which a black sooty mold can grow and decrease the value of the crop.

Description of Aphids

Several species of aphids live in N.H. They are usually green but can be almost any color. Aphids are soft-bodied, about 1/16" to 1/8" in length. They have piercing-sucking mouthparts that are used to pierce plant tissue and remove the sap. Aphids can easily be distinguished from other insects by the two tube-like appendages (cornicles) that can be found on the posterior end of the abdomen. Adults can be winged or wingless. When wings are present, there are two pairs that are transparent.



During the season, females give birth to live young, so eggs are not present. Eggs are tiny, oval, black, and found attached to undersides of leaves, 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 develop to adults quickly. These adults are wingless females called "stem-mothers" and 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 will then develop wings and fly to an alternate host called the summer host. These winged females are called "spring migrants." A new generation is started on a new host. 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

Effective non-chemical aphid control techniques include spun-bonded row covers and reflective aluminum mulch. For some crops, aphid predators and parasites are numerous enough to provide control.

Consult your county Extension Educator (see county office telephone listing below) for specific pesticide recommendations.

Summary

Damaging stage	Nymph and adult
Part of plant attacked	Leaf and stem tissue, flower parts
Overwintering stage	Outdoors in NH as eggs; some adults
Time of year when damage is done	Entire growing season
Number of spray applications per year	Variable, depends upon infestation and crop

UNH Cooperative Extension County Office Telephone Numbers

Belknap (603) 527-5475	Carroll (603) 539-3331	Cheshire (603) 352-4550	Coos (603) 788-4961	Grafton (603) 787-6944
Hillsborough Goffstown (603) 641-6060	Merrimack (603) 796-2151	Rockingham Brentwood, NH 03833 (603) 679-5616	Strafford (603) 749-4445	Sullivan (603) 863-9200

Stop! It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. If unsure of registration status of a particular pesticide product, contact the NH Division of Pesticide Control at (603) 271-3550. Store pesticides in their original containers in a locked cabinet or shed away from food. Dispose of unused pesticides or empty containers safely, according to NH regulations. If you suspect pesticide poisoning, call the New Hampshire Poison Control Center at 1-800-562-8236.



Alan T. Eaton
Extension Specialist, Entomology

Visit our website: ceinfo.unh.edu

UNH Cooperative Extension is an equal opportunity educator and employer.
UNH, U.S. Dept. of Agriculture and NH counties cooperating.

Revised 4/03