



Tree Fruit

Apple Maggot

Pest Fact Sheet **4**

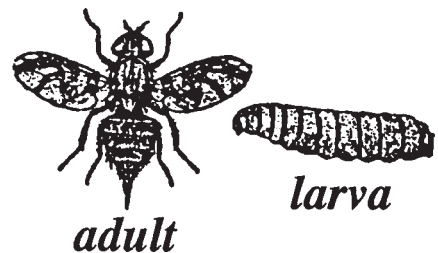
Introduction

The apple maggot is one of the most important economic insect pests of apples in New Hampshire. This native insect is also known as the "railroad worm." It is a northern pest of apples, ranging from the Dakotas southeast to Arkansas and northeast to southern Canada. If left unchecked, the Apple Maggot can infest 100% of a season's apple crop. In recent years, it has invaded parts of California, Oregon, Washington and Utah. In addition to apple, it commonly infests hawthorn. In Utah and parts of Wisconsin and Michigan it attacks cherries.

Description

The adult Apple Maggot is slightly smaller than a house fly, black, and has white bands on the abdomen. There are four abdominal bands on the female and three on the male. Females have a pointed abdomen, while males have a blunt abdomen.

The wings have a pattern of zigzag black bands as seen in the drawing to the left. There is a white dot on the middle of the back, close to the base of the wings. Positive identification of this species is assured by seeing this prominent spot and the characteristic pattern of wing bands. Other closely related flies have the white spot, but different patterns of black wing bands.



The immature stage is a white, legless maggot which does the damage to the fruit.

Females lay their eggs singly in tiny punctures that are difficult to see on the apple skin.

Life cycle

There is only one generation of Apple Maggot per year in New Hampshire. The Apple Maggot overwinters as a pupa 1-6" deep in the soil. The adults start emerging early in July, but emergence is greatly stretched out over time. Time of first emergence varies greatly from one spot to the next, and is affected by soil type, soil moisture, shading and other factors. Adults feed on honeydew lapped from leaves. Egg laying does not occur until 8-10 days after the fly has emerged. The eggs are deposited in tiny punctures on the skin of the developing apple. The eggs hatch 5-10 days later and the maggot immediately begins to bore throughout the apple. The maggot feeding resembles a complex system of railroads. That is how the name "railroad worm" has been applied to the Apple Maggot. When the apples drop to the ground, the maggots develop rapidly and enter the soil where they pupate.

Control

Apple maggots are very easy to control with insecticides. Recent research on their behavior and survival has indicated that most commercial growers need not apply more than two well-timed sprays. Some growers will need only one. Apple maggot traps are useful to time sprays. Early varieties suffer injury in July or August. Later varieties are damaged in August and September.

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

Summary

Damaging stage	Maggot (larva)
Plant part attacked	Fruit
Overwintering stage:	Pupa in the ground
Number of generations per year	One
Time of year when damage is done	Primarily August and September
Number of pesticide applications used	Usually one or two

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.



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