



Lowbush Blueberry Fact Sheet

The Red Striped Fireworm

Introduction

The redstriped fireworm, *Aroga trialbamaculella* (Cham.) is an occasional pest in blueberry fields. While it is not a major insect pest, it can occur in high numbers in both crop and sprout fields. The following fact sheet provides a description of this insect its biology and pest management.



Redstriped Fireworm

Description

The adults are small slender moths and are about 14 mm long. The wings are dark brown or black with a few white spots. There are white marks on the front of the head, as well as on the legs.

The newly hatched caterpillars are pale greenish-yellow, with a brown head and thoracic shield. Older caterpillars are reddish brown with a yellowish coloured head, and several reddish coloured stripes on the back and sides of the body. They reach a length of about 8 mm (Fig. 1).

The pupa is reddish brown in colour.

Biology

The moths emerge in late June to early July and are present until mid-August. They lay their eggs on the blueberry plant, placing them either under loose bark, or between the stem and leaf petiole. The eggs hatch in 9 - 16 days depending on temperature. Most of the eggs hatch in late July and early August.

The caterpillars web leaves tightly together. They feed from silken tunnels within the leaf shelter (Fig. 2), and skeletonize the leaf surface. Initially the terminal leaves are tied together. As the caterpillars grow they add more leaves to their leaf shelter. Older caterpillars exhibit a rapid wriggling motion when disturbed. The fully grown larvae spend the winter in the leaf litter, inside the webbed leaves. Pupation occurs in late April or early May. There is usually one generation per year, although some early hatched larvae may emerge as moths later in the summer.

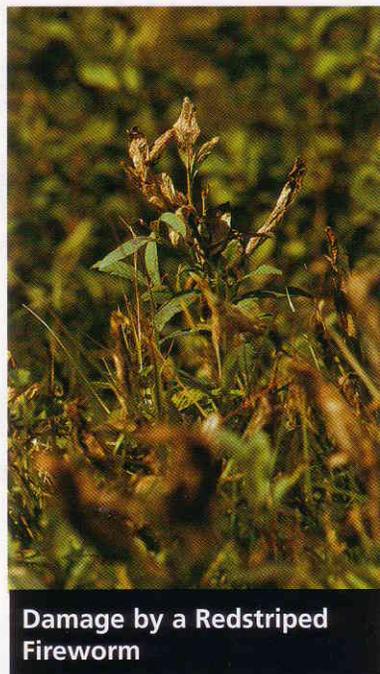




Damage

The caterpillars skeletonise the leaves that they feed on. This can result in severe defoliation, with over 50% of stems webbed together, especially in sprout fields. Fortunately this occurs quite late in the growing season (early to late fall). The overall effect on crop yields is not substantial, although the webbing of fruit clusters can cause difficulty in harvesting, and reduce berry size.

In crop fields, caterpillars become dislodged during the harvesting operation. They can be blown into trash piles during winnowing, which can be an important source of infestation the following year. Also, they can end up among the picked fruit, causing problems in sorting and packing sheds.



Damage by a Redstriped Fireworm

Monitoring Technique

There are no monitoring methods developed for this insect. If infestations are noted in the sprout year, then it may be advisable to watch for adult activity in the crop year.

Action Threshold

An action threshold has not been established for redstriped fireworms.

Control

Redstriped fireworms are usually kept in check by parasites. There are no chemicals registered for their control. They are most susceptible to control by an insecticide during the early part of August, when the larvae are hatching. Chemicals, that are applied to control the blueberry fruit fly, may give some control of the redstriped fireworms. In addition, sanitation of winnow piles, by burying or burning, may help reduce the infestation source for the next season.

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