

**OCCURRENCE OF THE STRAWBERRY TORTRIX,
ACLERIS COMARIANA (ZELLER), A NEW PEST IN
BRITISH COLUMBIA (LEPIDOPTERA: TORTRICIDAE)**

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On June 29, 1972, several strawberry plantings in Richmond, British Columbia, were observed to be severely infested by a new leafroller later identified as the strawberry tortrix, *Acleris comariana* (Zell.). This field infestation is the first occurrence of this Northern European pest in Canada. By the time the pest was discovered first instar larvae had matured and had seriously reduced the yield by damaging blossom parts which produced malformed fruit or no fruit at all. Heavy feeding on developing leaves greatly reduced the area of the mature leaves which were extremely ragged with large holes. In one 10-acre field the crop was picked only once before the planting was turned under.

Since only the second generation stages were observed in 1972, a later paper will deal with the complete life history in British Columbia. In England, *A. comariana* is considered an important pest of strawberry (Vernon, 1971) dating back to 1883 (Petherbridge, 1920). Observations at Richmond agree closely with details of the life history reported from England (Petherbridge, 1920 and Turner, 1968).

In early instar larvae the head is black but in later instars the head is pale brown. Both types of larvae, which might easily be mistaken for different species, were found together throughout May and June and again from July until mid-September. Both larvae and pupae

were parasitized by several local parasitic hymenopterans. The adult moths occurred from late June to early August and again from early September until mid-November. They have a distinctive dark brown patch in the costal area of the forewings. The general wing coloration is variable; some eight polymorphic forms are known in England (Fryer, 1928), most of which have been collected at Richmond. The second generation moths lay the over-wintering eggs at the base of the leaf petioles. The pest can thus readily be spread by transporting runner plants containing over-wintering eggs. The moths are not strong fliers.

A survey revealed that this new pest occurred in 1972 only in Richmond and not further east in the Fraser Valley where most of the strawberries in the province are grown. It has a relatively wide host range in Northern Europe where it occurs on strawberry, apple, azalea, rose and especially potentilla. It occurs also in Northern Japan on apple and strawberry. The method of entry of this pest into Canada is not known.

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