

tree did reduce the numbers significantly below that of the checks. In Block II there was no significant difference between the three levels of application but all significantly reduced the numbers below that on the untreated trees.

Adult aphids on ten leaves per tree in Blocks I and II in 1960, are shown graphically in figure 1. In late July, two months after the insecticide was applied, the populations rose sharply, but the increase in the untreated trees was much more rapid than in the treated trees.

Although the tree trunks ranged from 25 to 41 inches in circumference, the degree of aphid control was not influenced by tree size. However, trees over 40 inches in circumference should probably receive not less than 24 oz. of 5 per cent Di-Syston.

Two trees in Block I, the aphid counts from which were excluded from the experiment, had been treated for three consecutive years with 24 ounces of Di-Syston. They were virtually free from aphids. Indeed

they were the only trees under which cars could be parked with impunity.

Summary

Myzocallis walshii Monell is a major nuisance on the red oak, *Quercus borealis* Michx. f. (*Q. rubra* auth.), a boulevard tree of many streets in Vancouver, British Columbia.

The aphid has no alternate host. The males are winged. Mating takes place on the leaves, after which the apterous oviparae move to the vicinity of the main crotch to lay their eggs in crevices of the rough bark. In 1961, the eggs hatched in the middle of May.

A five per cent granular formulation of Di-Syston appreciably reduced the numbers of aphids when applied in the soil around the trees at the rate of 15 oz. per tree.

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Heliothis phloxiphaga G. & R. (Lepidoptera: Phalaenidae) on Vancouver Island

In the past twelve years I have met with this species only once, in 1957, when it was frequently to be seen on the open grassy slopes of the hillsides near Victoria and Goldstream.

It was observed in two periods, May 4 to 7, and again from July 5 to August 4. In the first period it was fairly common, feeding on the flowers either of sea blush, *Valerianella congesta*, or of several species of *Trifolium*. More commonly, it was aroused to flight on my close approach, and remaining just out of reach of the net, would fly swiftly and erratically for a short distance and then dive suddenly into the herbage, repeating the process if again disturbed.

In the second period it was not so often seen but several were taken at light. Most of the individuals were obviously second brood, judging from the fresh condition of their wings.

Jones records the species from Victoria, Mill Bay, and Duncan on Vancouver Island so there is evidently a resident nucleus which gives rise to noticeable numbers in an exceptionally favourable season.

H. phloxiphaga is closely related to *H. cbsoleta*, a pest associated with the cotton crop of the southern states. I have no information concerning its economic status in British Columbia.

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