

THE SATIN MOTH, *Stilpnotia salicis* (L.), IN THE INTERIOR OF BRITISH COLUMBIA

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The satin moth, *Stilpnotia salicis* (L.) was first reported in British Columbia at New Westminster in 1920. This pest was probably introduced from Europe about 1918. Condrashoff (1957) reported that by the summer of 1955 it had spread northeast to Kamloops and then south into Vernon. By 1958 it appeared to be well established east of Shuswap Lake and south at least as far as Penticton.

The Forest Biology Laboratory at Vernon recorded it in 1958 from the following Points in the interior: Celista, Adams River, Shuswap, Pritchard, Salmon Arm, Canoe, Sicamous, Falkland, Armstrong, Vernon, Woods Lake, Duck Lake, Kelowna, Okanagan Mission, Lower Trout Creek, and Penticton.

In the interior the larvae of the satin moth have caused light to severe defoliation of trembling aspen, *Populus tremuloides* Michx; White or Silver poplar, *Populus trichocarpa* Torrard Gray; Lombardy poplar, *Populus nigra* L. var *italica* Muench; Carolino poplar, *Populus Eugenei* Simon-Louis; and Willows, *Salix* spp.

Eggs of the satin moth are laid in masses on trunks, branches and leaves of the host or other trees or objects nearby. In 1958, in Vernon the moths began egg laying by about June 10. The larvae hatch in about two weeks and begin to skeletonize the leaves. After a few weeks they spin minute silken "huts" in bark crevices where they spend the winter. In Vernon, in 1958, these "huts" began to appear in late July. In the

spring, shortly after the leaves have unfolded, the larvae resume feeding and may denude the trees by mid-June.

The best times to spray are about two weeks after the first larvae emerge from their winter quarters or at the peak of egg hatch. At these times the population consists mainly of early instar larvae which are most easily killed.

In 1958, poplar groves and some willow shade trees in and near Vernon, Kelowna, and Penticton were severely damaged by the satin moth. In some cases the trees were completely defoliated. These three cities were forced to apply control methods. A few resort and home owners in the Okanagan, notably at Mission Flats, south of Kelowna, and Woods Lake between Vernon and Kelowna, and at Okanagan Landing were also forced to spray their shade trees.

The city of Vernon hired a machine with a "Bean" pump, which was capable of applying 20 gallons of liquid per minute. A turbo mist fan attachment was used to narrow the spray stream and assure coverage of the 60 foot trees in Polson Park. DDT at 6 lbs. 50% wettable powder per 100 gallons of water applied on July 7 gave excellent control of the newly hatched larvae.

The cities of Penticton and Kelowna obtained similar results at the recommended dosage of 2-3 lbs. of 50% DDT wettable powder in 100 gallons of water.

References

Condrashoff S. F. 1957. Advance of the Satin Moth, *Stilpnotia salicis* (L.) Into the interior of British Columbia.

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