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PEST REPORT

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FIDS Pest Report 94-4

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SAWFLY DEFOLIATION OF COTTONWOOD

IN THE FRASER VALLEY

R. Turnquist Forest Insect and Disease Survey

Light, moderate, and severe defoliation of black cottonwood by a cottonwood sawfly, *Nematus currani*, occurred for the fourth consecutive year on islands in the Fraser River and some foreshore areas near Chilliwack.

Defoliation declined in area and intensity from 730 ha in 1993 to 600 ha. Defoliation was mostly light over 300 ha, moderate on 200 ha, and severe over the remainder. This compares with 105 ha, 365 ha, and 260 ha of light moderate and severe respectively in 1993.

The decline occurred mostly in the Herrling Island group east of Agassiz, where the infestation began in 1991.

Two diseases, Beauvaria sp., and Entomophthora sp. isolated from dead larvae collected at Herrling Island in 1993, contributed to the decline.

Detection and Damage

Defoliation occurred from the Herrling Island group east of Agassiz to Matsqui Island near Mission. Most defoliated cottonwood was on islands within TFL 43, managed by Scott Paper. Most of the defoliation was on native black cottonwood, however, hybrid poplars at Harrison Mills and on Carey Island were very lightly to lightly defoliated.

Defoliated trees will re-flush later this year. Radial growth loss may occur, particularly to those trees repeatedly defoliated.

This is the first known outbreak of this pest in British Columbia. Previous records and collections were from single or small groups of defoliated trees. The sawfly pupates in the duff following the larval stage and emerges early in the year to begin feeding soon after the foliage flushes. Larvae had completed feeding and began pupating by about the third week of May this year.

The status and potential of this pest will be monitored and reported by the Canadian Forest Service, Forest Insect and Disease Survey.
