

# The Douglas-Fir Tussock Moth NPV Virus Information Sheet



Douglas-fir tussock moth mature larva (caterpillar)



Male Douglas-fir tussock moth

## ***What is the Douglas-fir tussock moth?***

The Douglas-fir tussock moth is a **native insect** in the low-lying dry belt Douglas-fir regions of southern British Columbia. **It is not an introduced species.** It feeds primarily on Douglas-fir, and occasionally on ponderosa pine and western larch. Ornamental spruce and pine may also be affected in urban areas. During epidemics, tree damage caused by tussock moth ranges from the loss of new needles on branch tips to complete defoliation and tree mortality. The effect is devastating. Outbreaks generally last between 2-4 years.

Tussock moth caterpillars are covered in thousands of tiny hairs. These hairs may cause an allergic reaction called **tussockosis**.

## ***Will the Douglas-fir tussock moth kill my trees?***

**Yes.** When infestations are severe, trees can be killed in one or two years. Most tree mortality will occur in the first two years of an outbreak cycle.

Your trees may be covered in thousands of voraciously feeding small caterpillars, **beginning in May and continuing through early July.** These caterpillars start feeding on new needles and move onto older needles, eventually stripping and killing the tree. Caterpillars are very tiny initially and grow to be upwards of 30 mm in length. They are very recognizable by the prominent tufts at either end of the body.

## ***What is NPV virus?***

**NPV** (nuclear polyhedrosis virus) is a **naturally occurring virus** specific to Douglas-fir tussock moth. **NPV** is extremely contagious within a tussock moth population. It spreads rapidly and will eventually stop the outbreak. It is now formulated and registered for controlling the Douglas-fir tussock moth. Within virus-treated areas, caterpillars **continue to feed for about 5 weeks** after treatment before insects cease feeding and die. If the insects are not sprayed when they are very little, there will be extensive defoliation and possible tree mortality. **NPV should be sprayed as soon as the larvae hatch,** and is best applied when insect populations are low or early in the outbreak cycle (Year 1 or Year 2).

## ***Can I apply NPV virus to my infested trees?***

**No.** NPV is registered for use by the federal and provincial governments only. The BC Ministry of Forests and Range has a website ([http://www.for.gov.bc.ca/rsi/ForestHealth/Tussock\\_Moth.htm](http://www.for.gov.bc.ca/rsi/ForestHealth/Tussock_Moth.htm)) outlining current areas of known defoliation and **potential areas to be sprayed in 2009.**

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**For more information on Douglas-fir tussock moth and its control, please contact:**

**British Columbia Ministry of Forests and Range  
Southern Interior Regional Office, Kamloops, BC**

**[http://www.for.gov.bc.ca/rsi/ForestHealth/Tussock\\_Moth.htm](http://www.for.gov.bc.ca/rsi/ForestHealth/Tussock_Moth.htm)**

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Photographs by Dion Manastyrski

