



PEST REPORT

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FIDS Pest Report 93-13

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FOLIAR DISEASES OF PINE AND LARCH IN THE WEST KOOTENAY

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Increased infections and foliar discoloration of both pine and larch are a prominent early feature of the 1993 field season:

PINE

For the second consecutive year, pine needle cast disease caused by *Lophodermella concolor* killed year-old lodgepole pine foliage at moderate to high intensity through most of the host range in the southern half of the West Kootenay. Most infections were again on the foliage of sapling-aged regeneration and understory branches of older trees. However, in some mature stands the year-old foliage was diseased through the entire crown. Full-crown infections occurred extensively in the Blueberry-Paulson area and were also scattered elsewhere in smaller patches of up to a few hectares.

Many young stands of regeneration have little foliage left after two years of severe needle cast, and there is the possibility of scattered mortality in addition to the usual impact of 50 to 70 percent annual growth loss. Wet June weather and the spore release by current infections should continue the high incidence of infection into the 1993 foliage with discoloration occurring into the 1994 field season. A secondary fungus, *Hendersonia pinicola*, was present in most collections of *L. concolor* and could cause partial control by limiting sporulation.

discoloration of western white pine foliage by other needle cast fungi, mostly *Lophodermium nitens*, is also common in 1993, though only at trace to light intensity.

LARCH

Patches of moderate to severe discoloration caused by the larch needle blight fungus, *Hypodermella laricis*, are occurring throughout the host range in the West Kootenay. These infections follow trace to light levels in 1992 and moderate to severe levels in 1991. Annual fluctuations are related to spring moisture conditions, with wet weather favouring successful infection. The impact of this disease is usually limited to growth loss, although successive severe disease incidence can result in shoot and occasional branch dieback. A second flush of foliage should occur during the summer.
