



Timber Talks



Department of Fisheries and Forestry

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DISEASE IN WESTERN LARCH

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Shoot-blight diseases of western larch growing in the eastern extremity of its geographic range in British Columbia has been considered a problem of minor importance. There is now evidence in the Kootenay Region, where distribution of the species is limited, that a shoot-blight disease is extensive and in some areas 75 per cent of the trees are infected. The disease is caused by a fungus, which has been reported as causing shoot-blight of larch only in Switzerland.

The small, dark-brown discs found on infected shoots in which spores are contained, mature and are ready to discharge the spores by mid-summer. Empty spore receptacles persist on the tree for another year and new ones develop in dead tissues and on shoots that still bear empty ones from the previous year. The spores, land on new shoots and needles, causing infection.

Initial evidence of an infection is wilting or browning of needles on new shoots and the retention of some beyond the normal time of needle cast. Infected shoots may not have visible abnormalities at this time. In the second year of infection, the shoot has a shrunken appearance, disc-like fruiting bodies between bark scales and conspicuous dead, leafless shoots on branch tips. Frequently a small canker develops at the base of side shoots and fruiting bodies occur on this shoot and on the canker. Tissues of the canker dry and crack and eventually areas of bark are sloughed off and the lesion calloused over. In some instances, the disease may spread to thicker portions of the branches or to the mainstem, resulting in a dieback condition. Repeated killing of new shoots often results in multiple leaders and in brooming of branch tips.

The disease occurred mainly on vigorous young trees, 3 to 10 feet in height, the number of killed shoots on individual trees ranging from a few to almost 100 per cent. On areas where the disease was extensive, its occurrence was usually patchy and varied from a very high to a very low incidence. Continued expansion of this disease could have a serious effect on the future development of this species in the eastern extremity of its range.