CANADA

Timber Talks

Department of Fisheries and Forestry

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ANOTHER LARCH DISEASE IN BRITISH COLUMBIA No. 52

Disease resulting from numerous and varied fungal infections are common within the coniferous forests of British Columbia and pose a constant threat to the forest economy. To safeguard the forest resources, protection must be provided against fungi known to be damaging and constant vigilance maintained to detect new sources of infection. Diseased trees can usually be detected by abnormalities in the crown or foliage and in some instances the causal agent identified from such signs as conks, cankers, rots and mistletoes. Discoloration of the foliage is another symptom of disease and when severe browning occurred on alpine larch in Manning Park, B. C. the reason for the discoloration was investigated.

Examination of the stand revealed that the foliage of young trees was severely infected with a needle blight and that some had died, indicating the presence of a disease for several years. Discoloration was not evident on the mature trees, although much of the foliage had been shed prematurely. Shed needles under mature trees and blighted twigs from young trees were collected to identify the causal agents.

Immature and mature fruiting bodies of two known parasites of larch were found on the needles. One appeared to cause the needle blight on seedlings and young trees and the other caused premature needle cast on the mature trees. The latter has been found previously in Europe and in Eastern and Western Canada. The fruiting bodies of the fungus infecting the young trees were mainly on the reddish-brown attached needles and those of the other fungus on the straw-colored fallen needles. The latter is known to infect larch in Europe and in Western and Eastern Canada but the fungus which infected the young trees has previously been known to occur only in Europe. This is the first record of its occurrence in North America and, to aid in its recognition, has been described in detail. Its detection was confined to trees growing at high elevations (7,000' a.s.l.) where the climate is cool and humid. Symptoms were not observed that would indicate that Western larch, which grows at lower elevations, was subject to infection.

REPORT: Sarcotrochila alpina and Lophodermium laricinum causing needle blight in North America. W. G. Ziller, Forest Research Laboratory, Victoria, B.C