

STEREUM PINI INCORRECTLY REPORTED AS CAUSE OF DECAY IN LODGEPOLE PINE¹

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The following is quoted from a personal communication from Dr. M. K. Nobles, in charge of research in Forest Mycology, Botany and Plant Pathology Division, Science Service, Canada Department of Agriculture.

"In the paper entitled 'Decay in white spruce at the Kananaski Forest Experiment Station' by Mr. W. G. B. Denyer and yourself in *The Forestry Chronicle*, 29:233-247. 1953, you list seven infections in *Pinus contorta* var. *latifolia* by *Stereum pini* Fr. where it caused a "brown ray rot". According to my records, seven cultures isolated in 1950 from decays in lodgepole pine on your plots at Kananaskis Forest Experiment Station were identified as *Stereum pini*, and I assume that these were the basis for your record. It is unfortunate that the results of my more recent studies on these isolates had not been conveyed to you prior to your publishing.

"Your isolates from *Pinus contorta* var. *latifolia* are similar to and probably identical with cultures from a similar decay in *Pinus banksiana* in Ontario. Comparison of the isolates from decay in these hosts with cultures of *Stereum pini* isolated from sporophores on *Pinus resinosa*, *P. strobus*, *P. sylvestris*, and *P. contorta* var. *latifolia* showed that they were similar but sufficiently different to permit separation. Three isolates from decay in *P. banksiana* produced sporophores and from these, monosporous cultures were isolated. Crossing of monosporous cultures from these fruit bodies resulted in the formation of mycelia bearing clamp connections, indicating that they belong to the same species. Similar interfertility resulted when pairings were made between monosporous mycelia from the four sporophores of *Stereum pini* from the hosts listed above. Pairings were then made between the monosporous mycelia from the cultures isolated from decay in *Pinus banksiana* and monosporous mycelia of *Stereum pini*. No mycelia bearing clamp connections were formed. This does not constitute positive proof, but it provides strong indication of specific differences. It has not been possible yet to induce isolates from *Pinus contorta* var. *latifolia* to produce sporophores and so interfertility tests with these cultures have not been made.

"Thus from comparative cultural studies and interfertility tests it appears that cultures isolated from a brown ray rot in *Pinus contorta* var. *latifolia* in Alberta and in *P. banksiana* in Ontario belong to the same species but are not *Stereum pini*. Up to the present no culture identical with these from decays has been obtained from a sporophore. Until such is available no identification of the cultures from decay is possible."

It is hoped that this note will serve to correct the statement by Denyer and Riley that *Stereum pini* was the cause of a brown ray rot in lodgepole pine. Dr. Nobles had expressed doubts regarding her earlier identification of the cultures (provisionally) as *S. pini*. Apologies are due to her for publishing this name without having her final verification.

It should be noted that reference to *Peniophora septentrionalis* Laurila, in the same paper, also is provisional.

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