

Gremmeniella abietina in Newfoundland

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ABSTRACT

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In 1979, five ornamental Austrian pines with symptoms of Scleroderris canker were found near St. John's, Newfoundland. Cultural and serologic characteristics of the isolates characterized the pathogen as the European race of *Gremmeniella abietina*. The pathogen has not been found elsewhere on the island, but further surveys are planned.

Scleroderris canker, caused by *Gremmeniella abietina* (Lagerb.) Morelet, has been observed in the Lake States, the

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northeastern United States, and the Great Lakes-St. Lawrence and Boreal Forest Regions of Canada (1,2,4,5,7,10). The disease causes dieback, cankering, and death of young pines and, usually, minor damage to other softwood species. A more virulent form of the pathogen, the

European race, was recorded on red pine and Scots pine in New York, Vermont, and New Hampshire (3,6,9). This is the first report of *G. abietina* in Newfoundland and the first technical record of the European race in Canada, though it occurred earlier in Quebec and New Brunswick.

Symptoms were observed on four ornamental black or Austrian pines (*Pinus nigra* Arnold var. *austriaca* [Hoess] Aschers. and Graebn) near St. John's, Newfoundland (Lat. 47° 32'N, Long. 52° 47'W), in the summer of 1979 and later on a fifth tree nearby. These trees were introduced from the Netherlands in 1951-

1952. Only the asexual state, *Brunchorstia pinea* (Karst.) Hohn., was found and diagnosis was based on symptoms of the disease (8,11), signs of the pathogen, and comparisons of cultural characteristics (1,2). Serologic tests (3) confirmed our observations that the European race of *G. abietina* was the fungus present.

Investigations failed to disclose the origin of this infection, particularly since the trees were imported 25 yr ago, although information to date indicates that damage appeared at least 5 yr earlier on the same trees. Presence of the pathogen on the island has caused concern among foresters and producers of nursery plants as it was hoped that this pathogen was excluded from Newfoundland where the predominant forest trees are known to be susceptible to the European race of *G. abietina*. Surveys to date failed to identify either race of the

pathogen elsewhere on the island, but increased survey activity and vigilance is planned.

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