

above noteworthy, these parasites should also be regarded as potential sources of interesting and profitable investigation.—S. M. Sager and M. J. Bassett.

Heavy Damage to Chinese Junipers, *Juniperus chinensis* L., associated with *Pestalotia funerea* Desm.—

During the summer of 1957 most of 200 Chinese junipers in a Victoria nursery, consisting of prostrate forms 2 feet or more wide and erect forms 2 to 3 feet tall, were severely damaged. Lesions, many of them girdling, were observed on twigs, on main stems at ground level, and on main branches of prostrate forms where they touched the ground. Examination by Mr. G. S. Brown, Plant Protection Division, Victoria, failed to reveal any evidence of entomological association.

Attempts were made to isolate and identify fungi from the lesions. Twelve sections, 10 to 20 mm. in diameter by approximately 150 mm. long, were taken from diseased tops of different plants and incubated in a humid atmosphere under bell-jars. After a week of incubation, spore tendrils extruded from places on all sections. The spores coming from 11 sections were characteristic of *Pestalotia funerea* Desm., although tendrils of *Macrophoma*-like spores were also found on one of the eleven. The spores extruding from the twelfth section belonged to *Monochaetia* sp.

From two root systems similarly incubated, only *Mucoraceae* developed. Cultures obtained from excised bits of dead inner bark taken from above—and below—ground parts of ten junipers were of several kinds, including *Pestalotia funerea* from three of the ten trees. Rots that developed in ten apples inoculated with soil taken from near the juniper roots were associated with *Pythium* sp. in eight apples and *Pestalotia* sp. in two apples.

It is believed that *P. funerea* caused the symptoms observed. At the affected nursery, *P. funerea* is associated with commonly occurring tip-blight of junipers and other Cupressineae, so that inoculum is frequently abundant. The attack reported here is noteworthy because the fungus, a weak pathogen that is rarely evident on stems or branches 7 mm. or more thick at point of infection, was associated with large lesions on main branches or stems of Chinese juniper. Predisposition to infection by weakness or injury is suspected. In 1956 severe damage, consisting of girdling

at ground-level, had been noted on less than 20 erect junipers. Although *P. funerea* was among the fungi that had been isolated from those trees, the damage had been attributed, in part, to the November 11th, 1955, frost.—P. J. Salisbury.

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EDMOND CLOUTIER, C.M.G., O.A., D.S.P., Queen's Printer and Controller of Stationery, Ottawa, 1957.

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