

A LEAF-SPOT DISEASE OF GREVILLEA TREES
CAUSED BY CRYPTOSTICTIS GREVILLEAE (LOOS)
SUBRAMANIAN AND RAMAKRISHNAN

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A leaf disease of *Grevillea robusta* A. Cunn., caused by the fungus earlier named as *Amphichaeta grevilleae* Loos, was first reported from a nursery on an estate in the Kandapola district (elevation 6,500 ft) in September 1947 (Loos 1950) and was subsequently found causing defoliation of young *Grevillea* plants in a number of nurseries. This fungus was later transferred to the species *Cryptostictis grevilleae* (Loos) Subr. and Ramkr. 1956.

This leaf disease was for the first time observed on mature *Grevillea* in October 1961, and is causing considerable defoliation in the Nanu Oya district (elevation 5,500 ft). Six-year old *Grevillea* trees, as well as the older trees, were severely defoliated at an elevation of 5,325–5,535 ft. The leaves that remained attached were in many instances severely blotched. This irregular pattern of necrotic areas, which ranged in size from small specks to patches involving almost the whole leaf, bore black spore-producing bodies (Acervuli) on both surfaces. The symptom expression, as well as the microscopic examination of the spore-producing bodies, the microsclerotia, and the spores, showed that the fungus is identical with the species (*Cryptostictis grevilleae*) recorded by Loos in 1947 on young *Grevillea* seedlings.

An extensive survey of the affected districts revealed that prolonged mist is most likely to be the decisive weather condition that causes this leaf disease to develop to such an extent, particularly near Nanu Oya. Misty areas above 5,000 ft. can evidently be temporarily less suitable for *Grevillea* due to the presence of this disease.

Control.—On *Grevillea* seedlings in the nursery, a fortnightly round of copper spraying at a concentration of 3 oz. in 5 gallons of water has been found to be effective against this leaf-spot disease fungus (Webster, 1954). For mature trees we would not recommend any general spraying treatment for the time being, since this operation may have to be repeated at regular intervals, and the cost becomes appreciable. Small-scale experiments to determine the efficiency of such treatment afford valuable information concerning the practicability and economics of such measures.

It may be more practicable to "thin out" *Grevillea* shade by pollarding or ring-barking trees at elevations above 5,000 ft where prolonged mist is encountered.

References

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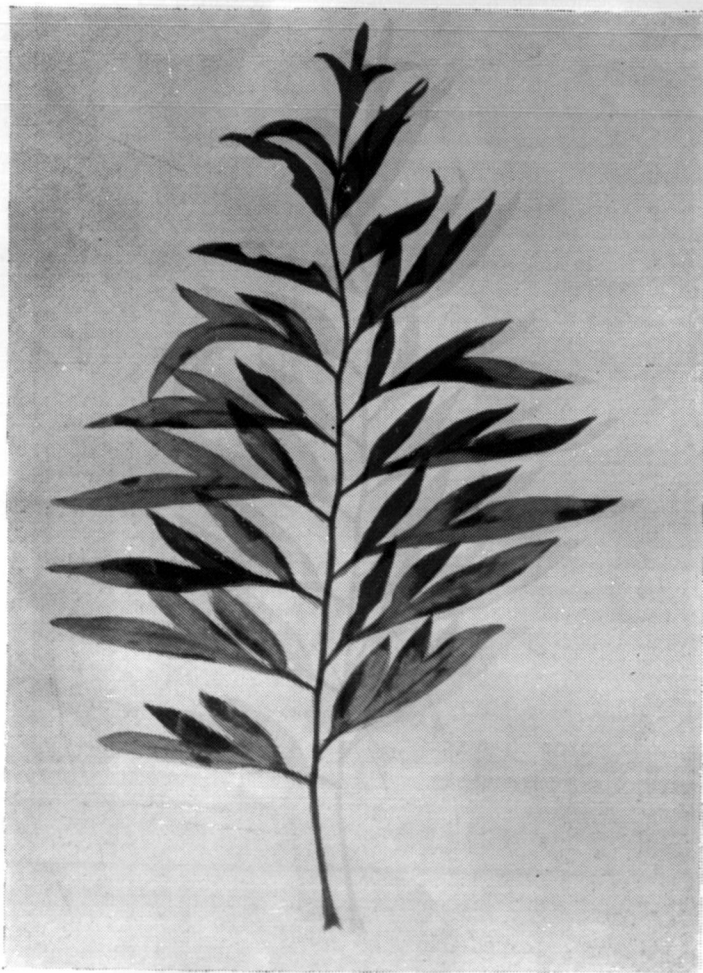


Fig. 1. *Grevillea* leaf-spot disease showing irregular pattern of necrotic areas: small specks to patches involving almost the whole leaf.



Fig. 2. Spore-producing bodies (acervuli) of *Cryptostictis grevilleae* (Loos) Subr. & Ramakr. found on both surfaces of *Grevillea* leaves. (12 X)