SPHAEROPSIS SAPERIEA

(= DIPLODIA PINEA ON PINES AT GNANGARA NURSERY

The pine pathogen Sphaeropsis sapinea (Fr.) Dyko & Sutton (=Diplodia pinea Desm.) Kickx, Petrak & Sydow) has been recently isolated from P. radiata and P. pinaster cuttings and P. radiata seedlings grown at Gnangara nursery. The pathogen was associated with shoot blight and death of rooted cuttings and seedlings; the frequency of these symptoms is shown on Table 1.

As far as I have been able to ascertain, S. sapinea has not been previously recorded in W.A. Cultures and fresh material from W.A. were identified by Dr. B. Brown, Queensland Department of Primary Industry. A culture and herbarium material from W.A. will be deposited in the cuulture collection of the N.S.W. Department of Agriculture, Rydalmere.

S. sapinea is very common on pines in Africa, South America, U.S.A., N.Z. and the Eastern States. Although it is known as a nursery pathogen causing shoot blight and collar rot, it is more important in plantations where it causes shoot blight, canker, dead topping, death and blue stain of trees. It can infect many species of pines, P. radiata is very susceptible.

During the past few weeks S. sapinea has been found in plantations at Gleneagle and Grimwade, in the Manjimup seed orchard and in the Nannup nursery. It is not known whether it is associated with symptoms in plantation trees which are usually attributed to drought.

Elaine Davison

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Senior Research Scientist
14 March 1988

Distribution:

Ian McKinlay
Joanna Tippett
Bryan Shearer
Mike Stukely
John McGrath
Per Christensen
Frank Batini
Frank McKinnell
Eric Hopkins
John Kaye
Ray Fremlin
Trevor Butcher
Dave Ward
Roger Hearn
Lindsay Bunn
Bob Hagan
Jack Bradshaw

TABLE 1

Survey of tip-dieback of pines at Gnangara nursery

A random survey of the pine cuttings and pine seedlings was carried out on 5.2.88. Sample sizes were selected so that the standard error was 2.5%.

Pine cuttings

Plant material	Total sample size	Unrooted cuttings (%)	Rooted cuttings with tip-dieback or dead (%)
P.radiata semi-lignified cuttings	90	5.6	3.5
P.radiata oldest woody cuttings	59	1.7	1.7
P.radiata youngest woody cuttings	312	11.2	22.7
P.pinaster semi-lignified cuttings	209	11.0	6.5

Pine seedlings

Plant material	Total sample size	Seedlings with tip-dieback or dead (%)
P.radiata seedlings,bed 1	78	1.3
P.radiata seedlings,bed 2	76	2.6
P.radiata seedlings,bed 3	100	3.0
P.pinaster seedlings,bed 3	86	1.2

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EXECUTIVE DIRECTOR

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14 March 1988
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5.2.1988.