

RESEARCH NOTES

**LABORATORY EVALUATION OF FUNGICIDES AGAINST
PESTALOTIA PALMARUM COOKE**

Leaf spot caused by *Pestalotia palmarum* is widely prevalent on coconut palms in South India. In the present study, the effect of certain proprietary fungicides on the growth of *P. palmarum* was tested *in vitro* and the results are presented in this paper.

Table I

Average colony diameter of *P. palmarum* on Czapek's agar medium containing different fungicides

Fungicide	Active ingredient	Concentration in ppm	Colony diameter in mm
Duter	Triphenyl tinhydroxide	1000	31.3
		2000	29.6
		3000	29.6
Fytolan	Copper oxychloride	1000	75.3
		2000	47.6
		3000	36.6
Cuman	Zinc dimethyl dithiocarbamate	1000	5.0
		2000	5.0
		3000	5.0
Captan	N-trichloromethyl mercapto 4-cyclohexane-1,2- dicarboximide	1000	30.3
		2000	12.3
		3000	10.6
Difoltan	Cis-N [(1, 1, 2, 2-tetrachloro ethyl) thio] -4 cyclohexane- 1,2 dicarboximide	1000	49.3
		2000	47.0
		3000	48.3
DithaneZ-78	Zinc ethylene bis dithio- carbamate	1000	29.0
		2000	13.3
		3000	10.3
Control	84.0

C. D. at 5% level 13.7 F test significant

Cuman Dithane Z-78 Captan Duter Difoltan Fytolan

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The poisoned food technique (Zentmyer 1955), using Czapek's agar as basal medium was followed for testing the comparative efficacy of the fungicides. Three different concentrations (1000, 2000 and 3000 ppm) of the fungicides were tested. The required quantity of fungicide was mixed thoroughly in melted basal medium and poured into petri plates. Three replications were kept for each concentration of the fungicide. The plates were inoculated in the centre with 5 mm mycelial discs of the fungus grown on Czapek's medium. Suitable controls with Czapek's agar medium inoculated as above were also kept. The plates were then incubated at room temperature (26-28° C). The colony diameter of the fungus was measured after ten days and the data based on the average of three replications are presented in Table 1.

The results indicate that among the six fungicides tested, Cuman was the most effective one in checking the growth of *P. palmarum* (Fig. 1). This fungicide could inhibit the fungus growth even at 1000 ppm concentration. Considerable inhibition of the fungus growth was obtained with Captan and Dithane Z-78. Statistical analysis of the data also revealed the superiority of Cuman over the other fungicides tested.

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References

- Zentmyer, G. A. 1955, A laboratory method for testing soil fungicides with *Phytophthora cinnamomi* as test organism. *Phytopathology*. 45 : 398-404

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