

INVESTIGATIONS ON DISEASES OF SESAME SESAMUM INDICUM IN
SOUTHERN REGION OF SRI LANKA

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Investigations were carried out at Faculty of Agriculture, University of Ruhuna on the identification, isolation and control of diseases of Sesame (=gingelly) in Southern Region of Sri Lanka. Pathogenicity tests revealed the presence of Alternaria sesamicola, Cercospera sesami, Fusarium oxysporum and Phytophthora nicotianae var parasitica on Sesame. The high incidence of Alternaria sesamicola causing blight has caused concern in variety evaluation trials at Mapalana. We tested the sensitivity of Alternaria sesamicola to Ridomil (AI 84% Mancozeb and 16% Metalaxyl) in vitro and at field commencing from February 1987.

The method of Zentmyer (1955) was followed to test the sensitivity of fungicides in vitro. Different concentrations of the fungicide (0,1,10 100 µg ai/ml medium) were mixed with cornmeal agar prior to pouring plates. Fungus inoculated plates were incubated at 28 C and colony diameter was recorded every 24 hours.

Mycelial growth was completely inhibited at 10 and 100 µg ai/ml concentration compared to control where mycelial growth reached the maximum diameter (8.8 cm) on the 7th day after inoculation. The field application of Ridomil to control Alternaria spp in Sesame varieties gave effective control of Alternaria blight and disease incidence was assessed using a score.

References

Zentmyer, G.A. (1955) Phytopathology 45:398

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