

Ent . Phyt . Appliq .

Vol . 53 , No . 1 & 2, Fév . 1986

CHEMICAL CONTROL OF PHYTOPHTHORA CROWN ROT OF CUCUMBER IN ESFAHAN¹

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SUMMARY

Crown rot is a serious disease of cucumber , particularly in Isfahan area. About 100% of the infected plants die, which results in 60 - 70% yield reduction. Laboratory studies indicated that the major pathogen causing this disease is *Phytophthora drechsleri* Tucker. Propyl -3 - (dimethylaminopropyl) - carbamate monohydrochloride (Propamocarb) Methyl D, L - N - (2, 6 - dimethylphenyl) - N - (2 methoxyacetyl) - alaninate (Metalaxyl), 98% methyl bromide + 2% chloropicrin (Methyl bromide), and 20% methylisothiocyanate + 80% chlorinated C3 hydrocarbon (Di - Trapex) were tested against this disease in the field. Methyl bromide and Di - Trapex fumigation 45g/m² were used two weeks before planting and gave 100% and 60% control respectively. Among the non - fumigant chemicals Metalaxyl 25 W. P. and 5G, 1g/m² and 5g/m² and propamocarb 70 S. 20 ml/m² were applied as soil drench before the disease onset gave satisfactory control and increased the yield significantly.

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1 - Received for publication, January 9, 1984.

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