

Efficacy of different fungicides against *Fusarium solani* causing root rot of papaya (*Carica papaya* L.) — A new threat in agroecological conditions of Bihar

Rahul Kumar and S.K. Singh

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ABSTRACT : Papaya root rot was observed as a new disease at Pusa and other parts of Bihar during 2011-14. The disease posed as a serious threat to papaya cultivation throughout the plant growth stage showing incidence up to 90% and resulted in gradual collapse of entire papaya plants in a stand. Seven fungicides viz. Carbendazim, Thiophanate methyl, Copper oxychloride, Carbendazim + Mancozeb, Metalaxyl + Mancozeb, Strobilurin and Mancozeb were tested *in vitro* by food poisoning technique against the *Fusarium solani*, causal agent of root rot of papaya. Carbendazim was identified as most effective fungicide, inhibited 93.5% mycelia growth followed by Thiophanate-methyl (89.7%) at 150 ppm.

Key Words: Papaya (*Carica papaya* L.), *Fusarium solani*, fungicides, root rot and *in vitro*.