

IN VITRO EFFICACY OF PLANT EXTRACTS AND FUNGICIDES TO CONTROL FRUIT ROT OF CHILLI IN INDIA

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Abstract: Fruit rot caused by *Colletotrichum capsici* (Sydow) Butler and Bisby is one of the most destructive diseases of chilli in India. The study on used of fungicides and different plant extracts as control measure for the fruit rot disease. The fungal inhibition capacity of six leaf extracts from different plants and six systemic and non systemic fungicides was used under laboratory condition. Among six plant extracts, NSKE was found most effective in inhibiting mycelial growth at 5 and 10 per cent (49.80 and 62.40 %, resp.) of *C. Capsici* followed by garlic (41.40 and 57.60%). Among six fungicides, propiconazole was found cent per cent inhibitory at 250 as well as at 500 ppm. This was followed by hexaconazole (84.80, 94.40, 98.00 and 100 % at 50,100, 250 and 500 ppm, respectively). Most of work on management of fruit rot of chilli has been done through fungicide alone. In view of the increasing disease incidence in chilli and prolonged and repeated use of fungicides may also result in environmental pollution and non-acceptability of the produce and also development of resistance in pathogen.

Keywords: Fruit rot, Chilli, *In vitro*, Plant extracts, Fungicides

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