

MANAGEMENT OF ALTERNARIA LEAF BLIGHT OF CARROT (*DAUCUS CAROTA* L.) BY USING PLANT EXTRACTS AND BIO CONTROL AGENTS

Pooja Yadav*, J.R. Verma¹ and Dama Ram¹

Department of Plant Pathology, CoA, Jodhpur (Agriculture University, Jodhpur, Rajasthan - 342304

¹ Department of Plant Pathology, ARS, Mandor (AU, Jodhpur), Rajasthan - 342304

Email: py139501@gmail.com

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Abstract: Alternaria leaf blight (*Alternaria alternata*) is considerable damage to carrot crop on aerial part of the plant. The efficacy of six plant extracts and four bio- agents were evaluated against the *A. alternata* incite carrot leaf blight under *in vitro* condition. Extract of garlic (*Allium sativum*) (clover), and neem (*Azadirachta indica*) (leaf) were effectively inhibit the growth of pathogen, at two different concentrations viz. 5% and 10% along with control. Among the botanicals, the garlic cloves extract was observed to be all most effective resulting in 68.33% & 80% inhibiting the mycelial growth followed by Neem leaf extract resulting in 60.44% & 73.98% inhibiting the mycelial growth, at 5% and 10% concentration, respectively. Bio control agent i.e. *Trichoderma viride* and *Trichoderma harzianum* which *in vitro* evaluated could suppress the growth of pathogen. Among the all bio- inoculants *Trichoderma viride* was recorded superior in 77.13% mycelial growth inhibition followed by *Trichoderma harzianum* was recorded in 70.41% mycelial growth inhibition.

Keywords: Plant extracts, Bio-inoculants, Carrot, *In vitro*

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*Corresponding Author