

EVALUATION OF FUNGICIDES AND BIO-CONTROL AGENTS AGAINST COLLETOTRICHUM BLIGHT OF CHICKPEA AND DEVELOPMENT OF SUITABLE INTEGRATED DISEASE MANAGEMENT (IDM) STRATEGY IN ANDHRA PRADESH

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ABSTRACT

Sensitivity of *C. capsici*to different fungicides *viz.*, mancozeb (0.25%), carbendazim (0.05% and 0.1%), SAAF (carbendazim + mancozeb) (0.2%), chlorothalonil (0.2% and 0.3%), hexaconazole (0.2%), thiophanate methyl (0.1%), copper oxy chloride (0.3%) and tebuconazole (0.1%) was assessed by poisoned food technique. Mancozeb, hexaconazole, tebuconazolewere found to be effective which inhibited the growth of the pathogen completely (100%) whereas chlorothalonil (0.2%) and copper oxy chloride showed the least efficacy with inhibition of 69.7 and 67.1 per cent, respectively. The bio-control agent, *T. koningii*showed the highest rate of inhibition (85.7%) compared to *T. viride*(74.8%) in dual culture technique. In integrated disease management, seed treatment with carbendazim @ 2g/kg + foliar spray with SAAF (12% carbendazim+ 63% mancozeb) @ 0.2% immediately after onset of disease + foliar spray with SAAF (12% carbendazim + 63% mancozeb) @ 0.2% 15 days after the first spray was found to be effective as it recorded the least PDI of 15.5 per cent, maximum plant height (20.7 cm), maximum shoot dry weight (7.1 g) and maximum root dry weight (0.24 g), while Seed treatment with *Trichodermaviride*@ 4g/kgwas found to be the least effective with PDI of 38.8 per cent in pot culture studies.

KEYWORDS: Chickpea, Colletotrichum, Fungicides, Integrated Disease Management