

RESEARCH PAPER

In vitro evaluation of bioagents against *Alternaria tenuissima* - An incitant of pigeonpea [*Cajanus cajan* (L.) Millsp.] leaf blight

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Article Info : Received : 08.07.2019; Revised : 05.09.2019; Accepted : 20.09.2019

Pigeonpea leaf blight caused by *Alternaria tenuissima* is one of the most important foliar disease causing heavy losses under South Gujarat region. The present investigation was carried out to evaluate the inhibitory activity of different bioagents against *A. tenuissima* and to find out the efficient bioagent at preliminary level. The experiment conducted in the P. G. Research Laboratory, Department of Plant Pathology, N.M.C.A., Navsari Agricultural University, Navsari. Different bioagents viz., *Trichoderma viride* Pers, ex. Grey, NAU isolate, *T. harzianum* Rifai, NAU isolate, *T. fasciculatum*, *Pseudomonas fluorescens* NAU isolate and *Bacillus subtilis* EII NAU isolate were evaluated against the growth of *A. tenuissima* by using standard dual culture technique. The investigation revealed that, maximum per cent growth inhibition (PGI) of *A. tenuissima* found against *T. viride* which was followed by *T. harzianum* and *T. fasciculatum*. *B. subtilis* was found least effective against *A. tenuissima*. The results indicated that among all bioagents, *T. viride* found most efficient bioagent against *A. tenuissima* as it gave highest PGI because it may contain viridin like antibiotics or may be the presence of some secondary metabolites or enzymes. Therefore, the *T. viride* can be explored for the management of pigeonpea leaf blight disease under field condition.

Key words : Pigeonpea leaf blight, *Alternaria tenuissima*, *Trichoderma* spp., *Pseudomonas fluorescens*, *Bacillus subtilis*

How to cite this paper : Parmar, K.A. and Pathak, D.M. (2019). *In vitro* evaluation of bioagents against *Alternaria tenuissima* -An incitant of pigeonpea [*Cajanus cajan* (L.) Millsp.] leaf blight. *Asian J. Bio. Sci.*, **14** (1&2) : 5-7. DOI : 10.15740/HAS/AJBS/14.1&2/5-7. Copyright@ 2019: Hind Agri-Horticultural Society.