

Effect of different inoculum levels of *Rhizoctonia solani* kuhn. on disease development and growth of chilli (*C. annuum*) cv. G-4

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ARTICLE INFO

Received : 10.04.2017

Revised : 28.08.2017

Accepted : 10.09.2017

KEY WORDS :

Rhizoctonia solani, Chilli, Inoculum density, Growth, Disease development

ABSTRACT

Chilli (*Capsicum annuum*) is one of the most important spice crop in the world having nutritive value especially rich in Vitamin C. It suffers excess yield loss by the infection of root rot caused by *Rhizoctonia solani* worldwide. The present study was conducted to determine the effect of different inoculum levels of *R. solani* on growth and disease development of chilli cv. G-4 under pot conditions. The observations of this study revealed that *R. solani* is a potential pathogen, significantly reduced the length, fresh and dry weight of shoot and root of chilli cv. G-4 and increase root infection upto 5-65.7 per cent. The highest reduction in shoot length (27.5%), root length (10.3%), shoot fresh weight (15.5%), root fresh weight (4.3%), shoot dry weight (6.7%) and root dry weight (1.3%) were observed at highest inoculum level of 4 g culture/kg soil. However, highest root infection (65.7%) was observed at highest inoculum level *i.e.* 4g culture/kg soil, while root infection was least (5.0 %) at lowest inoculum level *i.e.* 0.5 g culture/kg soil.

How to view point the article : Sharma, Rahul Kumar, Pathak, Devesh and Singh, Vaibhav Pratap (2017). Effect of different inoculum levels of *Rhizoctonia solani* kuhn. on disease development and growth of chilli (*C. annuum*) cv. G-4. *Internat. J. Plant Protec.*, **10(2)** : 375-377, DOI : 10.15740/HAS/IJPP/10.2/375-377.

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