DOI: 10.15740/HAS/AU/12.TECHSEAR(3)2017/610-616
Agriculture Update
Volume **12** | TECHSEAR-3 | 2017 | 610-616
Visit us : *www.researchjournal.co.in*
e ISSN-0976-6847

RESEARCH ARTICLE :

Variability studies among *Phytophthora nicotianae* (=*P. parasitica*) (Dastur) waterhouse; isolates collected from seedling blight affected castor (*Ricinus communis* L.) fields of Telangana state, India

ARTICLE CHRONICLE :
Received :
10.07.2017;
Accepted :
25.07.2017

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SUMMARY : The present investigation was conducted on seedling blight of castor caused by *Phytophthora nicotianae* (=*P. parasitica*) at Department of Plant Pathology, College of Agriculture, Professor JayashankarTelangana State Agriculture University, Rajendranagar, Hyderabad and Indian Institute of Oil Seed Research, Rajendranagar, Hyderabad. Nine pathogen isolates were collected from diseased castor seedlings, from different castor growing region of Telangana State, India and were designated as P_1 to P_9.Pathogenicity of all the nine isolates was proved by Koch's postulate of which isolate P_3 was significantly virulent compared to all other isolates. Among the three media *viz*., carrot agar medium, corn meal agar medium and potato carrot agar medium, carrot agar medium showed greyish, white colour and fluffy to slight fluffy mycelium with good colony growth rate and mycelium abundance. Studies on morphological characteristics among nine isolates showed two types of sporangia and they differed as pear shape, papillate and globose, semipapillate sporangia. Results of molecular polymorphism using RAPD markers indicated that there was no polymorphism among isolates. Based on cultural, morphological and molecular characters some variation among the isolates of *Phytophthoranicotianae* was observed.

KEY WORDS :
Phytopthora, Cultural, Morphological, Molecular

How to cite this article : Meena, Suman Raj, Sagar, B. Vidya, Prasad, R.D. and Triveni, S. (2017). Variability studies among *Phytophthora nicotianae* (=*P. parasitica*) (Dastur) waterhouse; isolates collected from seedling blight affected castor (*Ricinus communis*L.) fields of Telangana state, India. *Agric. Update*, **12**(TECHSEAR-3) : 610-616; **DOI: 10.15740/HAS/AU/12.TECHSEAR(3)2017/610-616.**

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