

RESEARCH NOTE

Efficacy of plants leaf extracts on mycelia growth and sclerotial production of *Rhizoctonia solani* causing web blight of groundnut

■ BHUMIKA KOMA*, PRASHANT DEWANGAN, SANGHMITRA BAGHEL, R.K. DANTRE AND K.P. VERMA

Department of Plant Pathology, Indira Gandhi Agriculture University, RAIPUR (C.G.) INDIA

ARTICLE INFO

Received : 08.01.2014
Accepted : 30.03.2014

Key Words :

Groundnut, *Rhizoctonia solani*, Web blight, Phytoextract

*Corresponding author:

Email: koma.bhumi@gmail.com

ABSTRACT

Soilborne phytopathogens affect groundnut production. The present study was conducted to find out the bioresource to control *Rhizoctonia solani* causing web blight of groundnut, thirteen plants leaf extracts were tested *in vitro* for their potential to control *Rhizoctonia solani*. Garlic, eucalyptus, lemongrass, *Gokhru* and *Van tulsii* significantly inhibited the mycelial growth and sclerotial production except *Tulsi*, onion, *Aak*, jatropha, *Beshram* failed to inhibit the mycelial growth of *Rhizoctonia solani*.

How to view point the article : Koma, Bhumika, Dewangan, Prashant, Baghel, Songhmitra, Dantre, R.K. and Verma, K.P. (2014). Efficacy of plants leaf extracts on mycelia growth and sclerotial production of *Rhizoctonia solani* causing web blight of groundnut. *Internat. J. Plant Protec.*, 7(1) : 272-274.

pathogens.

***In-vitro* evaluation of plants leaf extracts against mycelial growth and sclerotial production of *Rhizoctonia solani* :**

Antifungal activity of thirteen plants leaf extracts were studied under *in vitro* condition by using respective Plant leaf dextrose agar medium. The medicinal plants included were neem (*Azadirachta indica*), tulsi (*Ocimum basilicum*), garlic (*Allium sativum*), onion (*Allium cepa*), Eucalyptus (*Eucalyptus* sp.), Aak (*Calotropis gigantea*), Satyanasi (*Argemon mexicana*), lantana (*Lantana camara*), lemongrass (*Cymbopogon citrates*), jatropha (*Jatropha* sp.), Gokhru (*Xanthium strumarium*), Beshram (*Ipomea carnea*) and Van tulsii (*Ocimum camum*) which were used and evaluated by poisoned food technique method. Medium without extract was used as control.

The preparation of leaf extract medium was same as PDA medium. 20g leaves of each medicinal plant were taken in 100 ml water and boiled till it became softened. Softened medicinal plant leaves were crushed with pestle and mortar, and then