

IN VITRO EFFICACY OF FUNGICIDES AGAINST MAJOR SOIL BORNE PATHOGENS OF GROUNDNUT

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Received-14.03.2016, Revised-12.04.2016

Abstract: Efficacy of two non systemic (thiram and mancozeb) and three systemic fungicides (carbendazim, tebuconazole and carboxin+thiram) each at five different concentrations were tested against *Aspergillus niger*, *Sclerotium rolfsii* and *Rhizoctonia bataticola* under *in vitro* conditions. Among the five fungicides tested mancozeb, tebuconazole and carboxin+thiram gave 100% inhibition against all the three test pathogens. Carbendazim was ineffective against *Sclerotium rolfsii* at 1000 ppm. Thiram showed 100% inhibition against *Rhizoctonia bataticola* at 5000 ppm.

Keywords: *Aspergillus niger*, *Sclerotium rolfsii*, *Rhizoctonia bataticola*, systemic and non systemic

REFERENCES

- Charitha Devi, M and Prasad, R.D.** (2009). Bio-intensive management of collar rot of groundnut caused by *Aspergillus niger*. *Journal of Biological Control*. 23(1): 21-24.
- Deepthi, K.C.** (2014). *In vitro* Evaluation of Fungicides Against *Sclerotium rolfsii* Sacc Causing Stem Rot of Groundnut. *Agricultural Science*. 3(12): 1-2.
- Gour, H.N and Sharma, P.** (2010). Evaluation of fungicides *in vitro* and *in vivo* against *Sclerotium rolfsii* Sacc. caused root rot of groundnut. *Indian phytopathology*. 63(3): 352-353.
- Khan, M.A and Gangopadhyay** (2008). *In vitro* efficacy of fungicides in controlling root rot of chickpea caused by *Rhizoctonia bataticola*. *Journal of Mycology and Plant Pathology*. 38 (3): 580-587.
- Nene, Y.L and Thapliyal, P.N.** (1993). *Fungicides in plant disease control*. 3rd ed. Oxford and IBH Publishing Company Private Limited. Calcutta. 531-550.
- Patibanda, A.K., Upadhyay, J.P. Mukhopadhyay, A.N.** (2002). Efficacy of *Trichoderma harzianum* Rifai alone or in combination with fungicides against *Sclerotium wilt* of groundnut. *Journal of Biological Control*. 16(1): 57-63
- Rakholiya, K.B and Jadeja, K.B.** (2010). Effect of seed treatment of biocontrol agents and chemicals for management of stem and pod rot of groundnut. *International Journal of Plant Protection*. 3(2) : 276-278.

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