

PLANT GROWTH PROMOTING ACTIVITIES OF INDIGENOUS STRAINS OF *TRICHODERMA VIRIDE* AND *TRICHODERMA HARZIANUM* USED AS SEED TREATMENT IN GROUNDNUT

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Abstract: Experiment was conducted *in vivo* to study the plant growth promoting activities of strains of *Trichoderma harzianum* and *Trichoderma viride* used as seed treatment@ 10 g /kg seed in groundnut. Various observations of growth parameters and yield components i.e. plant height (cm), no. of branches, no. of pods / plant, unfilled pods/ plant, filled pods/plant and pod yield/ plant (g) were recorded maximum in *Trichoderma strains* T2 respectively, followed by T3, T4 and minimum unfilled pod was recorded in strain T4(18) superior over control.

Keywords: Groundnut, *Trichoderma harzianum*, *Trichoderma viride* growth parameters, Yield components, Seed

REFERENCES

Benitez, T. (2004). Biocontrol mechanisms of *Trichoderma* strains. International microbiology. 7: 249-260.

Bagwan, N.B. (April, 2011). Evaluation of biocontrol potential of *Trichoderma species* against *Sclerotium rolfsii*, *Aspergillus niger* and *Aspergillus flavus*, International Journal of Plant Protection, Vol. 4 No. 1 :pp 107-111

Cook, R.T. and Baker, K.F. (1983). The nature and practices of biological control of plant pathogens. In: APS Books, St. Paul. Minn.539 pp

Deepthi, K.C. and Reddy Eswara, N.P. (2013). Stem rot of groundnut(*ARACHIS HYPOGAEA L.*) induced by *Sclerotium Rolfsii* and its management,

International Journal of Life Science Biotechnology and Pharma Research ,Vol.2,No.3.

Elad, Y. Chet, I. and Katan, Y. (1980). *Trichoderma harzianum* a biocontrol agent effective against *Sclerotium rolfsii* and *Rhizoctonia solani*. Phyto path.70: 119-121.

Saralamrna, S. and Vithal Reddy, T. (2003). "Integrated Management of Sclerotial Root Rot in Groundnut", National Seminar on Stress Management in Oilseeds For Attaining Self Reliance in Vegetable Oil Indian Society of Oilseeds Research, Directorate of Oilseeds Research, Hyderabad January 28 - 30, pp. 20 - 21. 71.

Windham, M. T., Elad, Y. and Baker, R. (1986). A mechanism for increased plant growth induced by *Trichoderma spp.* Phytopathology 26: 518-521.

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