INTERNATIONAL JOURNAL OF PLANT PROTECTION VOLUME 7 | ISSUE 2 | OCTOBER, 2014 | 424-428

e ISSN-0976-6855 | Visit us : www.researchjournal.co.in



RESEARCH PAPER

DOI: 10.15740/HAS/IJPP/7.2/424-428

Study of different temperature levels on radial growth and dry mycelial weight of *Trichoderma* spp. isolated from red gram based conservation agriculture ecosystem

■ N.M. PRABHAVATHI*¹, Y.S. AMARESH¹, M.K. NAIK¹, S.B. MALLESH¹ AND P.H. KUCHANUR²

¹Department of Plant Pathology, University of Agricultural Sciences, RACHIPUR (KARNATAKA) INDIA ²Department of Genetics and Plant Breeding, College of Agriculture, Bheemarayanagudi, GULBARGA (KARNATAKA) INDIA

ARITCLE INFO

Received: 15.03.2014Revised: 25.08.2014Accepted: 06.09.2014

KEY WORDS:

Trichoderma spp., Radial growth, Dry mycelia, Temperature

*Corresponding author:

Email: prabhavati4644@gmail.com

ABSTRACT

Different temperatures and pH were taken to observe the radial growth and dry mycelial weight of *Trichoderma* spp. The radial growth of *Trichoderma* was maximum for all the four species *i.e.*, *T. harzianum*, *T. viride*, *T. hamatum* and *T. virens* (90, 82, 91.3 and 85mm) at 30°C, where it was minimum in four species at 40°C (30.70, 35, 22.53 and 20 mm), respectively and dry mycelium of *T. harzianum* (1.05 mg), *T. viride* (1.83 mg), *T. hamatum* (2.42 mg) and *T. virens* (0.82 mg) were maximum at 25°C whereas, the radial growth of four isolates were maximum at pH 6 (90, 88, 92 and 91mm) in *T. harzianum*, *T. viride*, *T. hamatum* and *T. virens*, respectively. At neutral pH, radial growth of *T. harzianum* (89 mm), *T. viride* (91 mm), *T. hamatum* (89 mm) and *T. virens* (87 mm) was minimum and dry mycelium weight of *T. harzianum* (729 mg), *T. viride* (1639.67 mg), *T. hamatum* (798 mg) and *T. virens* (583.67 mg) were maximum at pH 8. It was minimum at pH 4 for *T. harzianum* (120 mg), *T. viride* (257 mg), *T. hamatum* (154 mg) and *T. virens* (262.67 mg).

How to view point the article: Prabhavathi, N.M., Amaresh, Y.S., Naik, M.K., Mallesh, S.B. and Kuchanur, P.H. (2014). Study of different temperature levels on radial growth and dry mycelial weight of *Trichoderma* spp. isolated from red gram based conservation agriculture ecosystem. *J. Plant Protec.*, **7**(2): 424-428.