

CELLULASE ENZYMES PRODUCTION FROM PISTACHIO HULL BY DIFFERENT STRAINS OF *TRICHODERMA* FUNGI

Adelehsadat Mohamadi¹, Samira Shahbazi^{2*}, Mehdi Behgar², Hamed Askari², Sirous Mansouri fard¹
1. Biotechnology Department, Faculty of Agriculture, Pyam e Noor University, P. O. Box 3149968143, Alborz, Iran.

*2. Agricultural, Medical and Industrial Research School, P.O. Box 31485498, Karaj, Iran
sshahbazi@nrcam.org; haskari@nrcam.org; mbehgar@nrcam.org*

Abstract

Six strain of *Trichoderma* (*T. viride*, *T. harzianum*, *T. reesei*, *T. longibrachiatum*, *Trichoderma spp.135* and *Trichoderma spp.64*) were isolated and used for extracellular enzyme production. By product of Pistachio was used to enzyme production and extracellular protein production and endo-glucanase, exoglucanase, β -glucosidase and FPase activity was investigated. *T. harzianum* produces high levels of endo-glucanase, exoglucanase and total cellulase, which can be further improved by controlled culture conditions. This strain can be a good candidate for obtaining cellulases from lignocellulosic by products of pistachio hull.

Keywords: *Trichoderma spp.*, *Pistachio hull*, *cellulase*, *enzyme activity*.