

EFFECT OF DIFFERENT TEMPERATURE AND GROWTH STAGES OF BLUE OYSTER MUSHROOM ON THE ACTIVITY OF ENZYMES*

R. S. Jatav¹, A. K. Gupta, Anila Doshi, M.K. Meena and V.R. Meena

Department of Plant Pathology, Rajasthan College of Agriculture, Udaipur (Rajasthan)

(Maharana Pratap University of Agriculture and Technology, Udaipur)

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¹Agricultural Research Station, Ummedganj, PB # 7, G.P.O.-Nayapura, Kaithun Road, Kota (Rajasthan) 324001. Email : rsjatav1@gmail.com.

Abstract : The experiment on effect of different temperature and growth stages of blue oyster mushroom on the activity of enzymes was conducted under laboratory conditions at Department of Plant Pathology, Rajasthan College of Agriculture, Udaipur (Rajasthan) during 2007-08. The activities of different enzymes such as cellulolytic and pectinolytic were determined in terms of loss in viscosity. The cellulase (Cx) and polygalacturonase transeliminase (PGTE) were detected in high quantity at 10 days (substrate colonization stage) after inoculation while polygalacturonase (PG) was maximum at 20 days (primordia initiation stage) and polymethyl galacturonase (PMG) and pectin transeliminase (PTE) were maximum at 30 days (young stage) after inoculation. Effect of temperature on the production of different enzymes such as cellulase, polygalacturonase, polymethyl galacturonase, pectin transeliminase and polygalacturonase transeliminase at different growth stages, temperature of 25°C was found better as compared to 20, 30 and 35°C temperature.

Keywords: Blue oyster mushroom, Enzymes, Growth stages, Temperature.

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