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**IN VITRO STUDIES OF VARIOUS CULTURE MEDIA, pH, CARBON AND NITROGEN SOURCES ON GROWTH OF *MAGNAPORTHE ORYZAE* CAUSING RICE BLAST**

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**ABSTRACT:** This research examines the effect of various culture media and physical factors including, pH, carbon and nitrogen sources on mycelial growth of rice blast fungus *Magnaporthe oryzae*. *In vitro* study suggests that maximum mycelial growth of *M. oryzae* was recorded on carrot agar media (CAM) and potato dextrose agar (PDA), whereas Czapek-Dox agar media completely suppressed the growth. pH level 6-7 was found most favourable for mycelial growth of *M. oryzae*, whereas pH level below 4 do not supported the mycelial growth. The fungus was found to vary in their ability to use the supplied sources of carbon and nitrogen. Maximum mycelial growth was supported by Sodium nitrate and Ammonium nitrate as nitrogen sources; and among carbon sources maltose followed by sucrose and fructose favors maximum mycelial growth of the fungus.

**Key words:** *Rice blast, mycelial growth, culture media, pH, carbon, nitrogen*

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