

BLACK LIGHT MEDIATED GROWTH AND SPORULATION OF *MAGNAPORTHE ORYZAE*

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ABSTRACT

Blast fungus *Magnaporthe oryzae* (T.T. Hebert) M.E. Barr (Ana: *Pyricularia grisea*) is one of the important fungal pathogen which affects rice cultivation by causing rice blast disease. Rice blast is one of the major diseases causing recurring yield losses in all the rice growing regions of the world. An attempt is made to identify optimum nutrient medium and the nature and duration of light requirements for growth and sporulation. Monosporic culture of the fungal pathogen was grown on different media like Corn Meal Agar (CMA), Oat Meal Agar (OMA), Rice Straw Agar (RSA), Potato Dextrose Agar (PDA), V8 juice Agar (V8A) and growth rate of the culture was recorded up to 11 days, amount of sporulation was compared in different media where cultures were allowed to grow and sporulate under the fluorescent, dark, black light and alternate black light and dark (16:8) conditions. The cultures grown on V8 juice agar and oat meal agar showed significant sporulation of $5.5 \times 10^4/\text{ml}$ and $4.7 \times 10^4/\text{ml}$ and radial growth of 85 mm and 90 mm respectively under the continuous exposure to black light.

KEYWORDS: *Magnaporthe oryzae*, Blacklight, Conidia, Sporulation, Blast Fungus, Rice