

Physiological studies of *Colletotrichum musae* the causal agent of Anthracnose disease of banana

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ABSTRACT

Effect of different temperature, light intensity and pH were tested against the growth and sporulation of *Colletotrichum musae* under *in vitro* conditions. Results indicated that the growth of *Colletotrichum musae* was maximum at 30 °C (72.25 mm) followed by 25 °C (68.25 mm), 20 °C (53.00 mm), 15 °C (52.75 mm) and it was lowest growth (12.00 mm) at 35 °C. Exposure of *Colletotrichum musae* to alternate cycles of 12 hr light and 12 hr darkness, continuous light and under normal condition (room temperature) resulted in the maximum mycelial growth (90.00 mm) and heavy sporulation. The variation in growth of *Colletotrichum musae* at different pH were found to be significant. Result of the study revealed that at pH 7.0 fungus produced maximum growth of 977.0 mg followed by 960.0 mg at pH 8.0, 957.0 mg at pH 6.0, 948.0 mg at pH 5.0 and 922.0 mg at pH 4.0.

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