

Cultural and physiological characterization of *Alternaria helianthi* causing Sunflower blight

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Effect of different media, carbon and nitrogen sources, pH levels, temperature and light intensity were tested against the growth of *Alternaria helianthi* under *in vitro* conditions. The results of experiment indicated that the growth of *A. Helianthi* was maximum in pH range of 6.00- 7.00 and temperature range of 25 - 30°C. Among synthetic media tested, Richard's agar medium and among non-synthetic media PDA supported maximum radial growth of the fungus which was on par with the host leaf extract media. Maltose and potassium nitrate were the best carbon and nitrogen sources respectively that showed maximum radial growth. The exposure of the fungus to alternate cycles of 12 hour light and 12 hour darkness resulted in the maximum mycelial growth of the pathogen compared to continuous light and dark. Further, the cultural characters viz., colony diameter, margin, surface topography, luster, colony texture and sporulation varied among the different media tested.

Key words: *Alternaria helianthi*, sunflower, blight, cultural characters
