

IN VITRO EVALUATION OF DIFFERENT PHYSICAL FACTORS FOR OPTIMUM GROWTH AND SPORULATION AND TOXIN PRODUCTION BY *ALTERNARIA CYAMOPSISIDIS* CAUSING LEAF BLIGHT OF GUAR [*CYAMOPSIS TETRAGONOLOBA* (L.) TAUB.]

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Abstract : Studies were conducted *in vitro* to evaluation of different media, temperatures, lights and pH on growth and sporulation and production of toxic metabolites by *Alternaria cyamopsisidis* causing leaf blight of cluster bean during 2003 at Department of Plant Pathology, Rajasthan College of Agriculture, Udaipur. Guar blight is more common disease in guar growing regions of Rajasthan and cause considerable losses (Singh, 1970). The optimum growth and sporulation of the pathogen were highly favored in potato dextrose agar medium (88 mm) and potato dextrose broth medium (384.46 mg) and the temperature 30±2°C (78.67 mm) and pH 6.5 (830 mg) were more suitable for maximum growth and sporulation of the fungus. Good growth and sporulation were obtained in red and green light treatment. Crude toxin of the pathogen derived from 15 days old culture filtrate of *A. cyamopsisidis* by which typical symptoms of blight were produced on guar leaves in bioassay test.

Keywords : *A. cyamopsisidis*, Cluster bean, Cultural media, Light, pH, Temperature, Toxin

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