**Black Band Disease of Mango (*Mangifera indica*): Identification of Causative Pathogen and *In Vitro* Screening of Fungicides**

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The black band disease of the mango tree (Mangifera indica) has been getting worse in the last few years. In Sri Lanka, neither causal agents nor control measures have been studied. Therefore, essential to the identification of pathogen associated with black band disease and to develop effective management methods. The objectives of the study were to identify the causative pathogen and to screen the efficiency of different types of fungicides against isolated pathogen. Samples were collected from the Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka, and the associated fungi were isolated by using PDA media under aseptic conditions. Macroscopic and microscopic morphological characters were studied to identify the pathogen. Pathogenicity test was conducted to confirm the causal organism. Growth inhibition of isolated fungus was tested in vitro conditions. Four different selected fungicides such Homai, Carbendazim, Mancozeb, and Chlorothalonil were used at recommended concentrations (1000ppm, 700ppm, 2000ppm, 3000ppm). Initial screen tests were conducted using the disc diffusion method to determine the most effective fungicide. A fungicidal test was conducted to evaluate the fungicidal potential of each fungicide. Fungistat test was done by food poison method to screen the inhibition of the colony growth of fungi. According to the morphological characteristics, the causal organism was identified as Peziotrichum corticolum. Carbendazim and Homai were effective in the initial screening test. Therefore, those fungicides were used for the fungicidal and fungistat test. Homai (92.85%) and Carbendazim (92.85%) fungicides showed higher inhibition in the fungicidal test. also in the Fungistat test, Homai (92.85%) and Carbendazim (92.85%) fungicides exhibited higher inhibition rate. Therefore it can be concluded Homai and Carbendazim fungicides were effective to inhibit growth of black band disease of mango in *in vitro* conditions. Further study is required to evaluate the most effective fungicide and their concentration against pathogen in field conditions.

Keywords: *fungicidal test, fungicides, fungistat test, Mangifera indica*