

Cultural and morphological characterisations of *Fusicoccum* sp., the causal agent of rubber (*Hevea brasiliensis*) leaf blight in Malaysia

ABSTRACT

Leaf blight caused by *Fusicoccum* sp. is becoming a serious canopy disease of rubber trees in Malaysia. Despite its increasing significance, information regarding the biology of the causal fungus is scarce. This study provides morphological data useful for its characterisation. Fungal isolates obtained from leaf samples collected from several rubber plantations in Selangor, Johor and Perak were compared in terms of their behaviour in various cultural media potato dextrose agar (PDA), Czapek-dox agar (CDA), corn meal agar (CMA) and malt extract agar (MEA). Furthermore, their incidence on rubber leaves was assessed. In all media and different pH tested, significant differences were observed in spore production, dimension of conidiomata and growth rates among isolates. On PDA, pH 6 supported the best growth compared to other media used. The growth rate was 16.8 mm/day on PDA and MEA, against 14.4 mm /day on CDA and 11.4 mm/day on CMA. The highest spore production (161.33×10^6 spores /mh) was obtained on PDA. The optimum temperature for spore germination in water agar was 24 °C 28 °C within a period of eight hours. AU fungal isolates tested were pathogenic to *H. brasiliensis* but showed variation in symptoms.

Keyword: Leaf blight; *Hevea brasiliensis*; *Fusicoccum* sp.; Sporulation; Disease incidence