

Neofusicoccum ribis associated with leaf blight on rubber (*Hevea brasiliensis*) in Peninsular Malaysia

ABSTRACT

Hevea brasiliensis is a natural source of rubber and an important plantation tree species in Malaysia. Leaf blight disease caused by *Fusicoccum* substantially reduces the growth and performance of *H. brasiliensis*. The aim of this study was to use a combination of both morphological characteristics and molecular data to clarify the taxonomic position of the fungus associated with leaf blight disease. *Fusicoccum* species were isolated from infected leaves collected from plantations at 3 widely separated locations - Selangor, Perak, and Johor states - in Peninsular Malaysia in 2010. All the isolates were identified according to their conidial patterns and DNA sequences generated from internal transcribed spacers (ITS1 and ITS2), the 5.8S rRNA, and an unknown locus (BotF15) containing microsatellite repeats. Based on taxonomic and sequence data, *Neofusicoccum ribis* was identified as the main cause of leaf blight disease in *H. brasiliensis* in commercial plantations in Malaysia. A pathogenicity trial on detached leaves further confirmed that *N. ribis* causes leaf blight disease. *N. ribis* is an important leaf pathogen, and its detection in Malaysia has important implications for future planting of *H. brasiliensis*.

Keyword: *Fusicoccum*; *Hevea brasiliensis*; Leaf blight; *Neofusicoccum ribis*