

**Occurrence of *Ralstonia solanacearum* race 2 biovar 1 associated with Moko disease of banana (*Musa paradisiaca* cv. Nipah) in Malaysia**

**ABSTRACT**

During June 2011 to March 2012, Moko disease symptoms were observed in banana cv. Nipah in two Malaysian states. The primer pairs ISRso19F/ISRso19R were used for defined identification of *Ralstonia solanacearum* race 2 strain. PCR amplification of all isolates produced a 1900 amplicon and exhibited 93% phylogenetic similarity with reference strain (AF450275). Based on symptoms, biochemical tests, pathogenicity assay, molecular and phylogenetic studies, we concluded that the isolated bacterium was *R. solanacearum* race 2 biovar 1.

**Keyword:** ISRso19; Malaysia; Moko disease; *Musa paradisiaca* cv. Nipah; *Ralstonia solanacearum* race 2 biovar 1