

# **THE SUSCEPTIBILITY OF *Acacia mangium* AGAINST FUNGI *Lasiodiplodia pseudotheobromae***

**Name: JESSICA DIANA ANAK LINUS**

**Supervisor: MDM MANDY MAID**

**PROGRAM: FOREST PLANTATION AND AGROFORESTRY**

## **ABSTRACT**

Fungi *Lasiodiplodia pseudotheobromae* was inoculated on *Acacia mangium* seedlings from Forest Research Institute Malaysia (FRIM) and the Sabah Forestry Development Authority (SAFODA) to assess their susceptibility of *L. pseudotheobromae*. This research was conducted at the green house of Faculty Sciences and Natural Resources, Forestry Complex. The objectives of this research were firstly to test the susceptibility of *A. mangium* from FRIM and SAFODA against fungi *L. pseudotheobromae*, secondly to study the growth and characteristics of macroscopic and microscopic of fungi *L. pseudotheobromae* and lastly, to test the ability of fungi *L. pseudotheobromae* to cause disease through the Koch's postulates procedure. Four treatments conducted in this research were two control treatments, treatment of *L. pseudotheobromae* with *A. mangium* seedlings from FRIM and treatment of *L. pseudotheobromae* with *A. mangium* seedlings from SAFODA. ANOVA test showed that there were significant differences among ( $p < 0.05$ ) all treatments for the size of lesions but not for the number of stems and phyllodes. In this research, it was found that the *A. mangium* FRIM and SAFODA seedlings were susceptible to *L. pseudotheobromae*. It can be concluded that *L. pseudotheobromae* was identified as the cause of tree disease.