

EFFECT OF INOCULATION ON DIFFERENT PART OF *Acacia mangium* AND *Acacia auriculiformis* SEEDLINGS USING THE FUNGUS *Lasiodiplodia theobromae* AND *Lasiodiplodia pseudotheobromae*

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ABSTRACT

*Experimental inoculation on different parts of the phyllode and stem of *Acacia mangium* and *Acacia auriculiformis* seedlings using fungus *Lasiodiplodia theobromae* and *Lasiodiplodia pseudotheobromae* was conducted at the Pathology Laboratory and Greenhouse Forestry Complex. The objective of this study was to investigate the morphological and growth rates of Fungus *L. theobromae* and *L. pseudotheobromae*, test the effect of inoculation on different parts of *A. mangium* and *A. auriculiformis* using fungi *L. theobromae* and *L. pseudotheobromae*. The Koch's postulates procedure, was carried out to prove the ability of the fungus to infect phyllode and stem of seedlings aged seven months. *L. pseudotheobromae* fungus showed very active growth against *L. theobromae* on media PDA to completely cover the surface of the petri dish. For the phyllode, there has two parts of inoculation at the base and middle of the pyllode. While there have three parts of inoculation at the base, 10 cm from the base and at the shoot. Based on the analysis of variance the average length of lesions produced by the fungus *L. theobromae* and *L. pseudotheobromae* in the middle and the base phyllode was significant at ($P < 0.05$). This shows that there was different in length of the lesion at the base and middle phyllode. The average length of lesions produced by the fungus *L. theobromae* and *L. pseudotheobromae* at the base, 10cm from the base and the top of the seedlings is significant ($P < 0.05$). This shows that there is a different in length of the lesion at the base, 10cm from the base and shoot seedlings *A. mangium* and *A. auriculiformis*. *Lasiodiplodia theobromae* fungi It showed an average difference in the length of the lesion for different parts of the seedlings *A. mangium* and *A. auriculiformis* was insignificant ($P > 0.05$), showed no differences in the average length of lesions of both host species when inoculated with the fungus *L. theobromae*.*