

VIRULENCE TESTING OF FUNGAL ISOLATE *Lasiodiplodia theobromae* AND *Lasiodiplodia pseudotheobromae* TOWARD *Acacia auriculiformis*

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ABSTRACT

Two experiments of *L. theobromae* and *L. pseudotheobromae* fungi inoculation on phyllode and seedlings of *A. auriculiformis* were conducted in pathology laboratory and greenhouse of the Forestry Complex in order to test the virulence of both fungi. The objectives of this research were to test the virulence of fungal isolate *L. theobromae* and *L. pseudotheobromae* towards *A. auriculiformis*; to study the growth and morphological characteristics of *L. theobromae* and *L. pseudotheobromae* fungi; and to prove the ability of *L. theobromae* and *L. pseudotheobromae* to infect *A. auriculiformis* through Koch postulate. The growth of colony *L. theobromae* was the fastest to occupy the petri dish at 30°C. The growth of colony *L. pseudotheobromae* was the fastest to occupy the petri dish at 30°C and 35°C. Two inoculation experiments were conducted on the phyllode and stem of *A. auriculiformis* seedlings. Based on the ANOVA for the inoculation experiments on phyllode, the difference of the length of lesion at each treatments was significant ($p=0.00$) at the significant level of $p<0.05$. Based on the ANOVA for the inoculation experiments on the stem, the difference in lesion length at each treatment was significant ($p=0.00$) at the significant level of $p<0.05$. Both fungi *L. theobromae* and *L. pseudotheobromae* are pathogenic and virulence towards *A. auriculiformis* but *L. pseudotheobromae* is more virulence towards *A. auriculiformis*.