GROWTH RESPONSES OF *Mucuna bracteata* TO APPLICATION OF TEBUCONAZOLE

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Final year project report submitted in partial fulfillment of the requirements for the degree of Bachelor of Science (Hons.) Plantation Technology and Management

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This final year project is a partial fulfillment of the requirement for a degree of Bachelor of Science (Hons.) Plantation Technology and Management, Faculty of Plantation and Agrotechnology, Universiti Teknologi MARA.

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ABSTRACT

Growth Responses of *Mucuna bracteata* to Application of Tebuconazole

*Mucuna bracteata* was found in India. It has creeping behavior and can sustain drought condition. Besides, *M. bracteata* can also control soil erosion and improve soil condition. In Malaysia, it is normally grown in the oil palm or rubber estates as a cover crop but there are certain problems where the vigorous growth of this cover crop can affect the main crop. Hence, this study was aimed to control the growth of this cover crop using tebuconazole, a plant growth regulator. The growth performance of *M. bracteata* as responses to the application of tebuconazole was investigated and the optimum dosage of tebuconazole for controlling the vigorous growth of this cover crop was determined. This study was conducted in the field of Universiti Teknologi MARA, Jasin, Malacca based on a completely randomized design (CRD). The results indicated that tebuconazole was effective in inhibiting the growth of *M. bracteata*. The growth parameters studied were length of internodes, diameter of stem (vine), leaf area, relative chlorophyll content and number of shoots at first fully developed leaf. Among the different concentrations studied, the highest concentration of 300 mg/l was concluded the most effective in the inhibition of growth of *M. bracteata*. 