

UNIVERSITI TEKNOLOGI MARA

**GROWTH RESPONSES OF
Mucuna bracteata
TO APPLICATION OF ABSCISIC ACID**

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Final year project report submitted in partial fulfillment of the
requirements for the degree of
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DECLARATION

This Final Year Project Report entitled “Growth Responses of *Mucuna bracteata* to Application of Absciscic Acid”, which is a partial fulfilment 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 ABSCISIC ACID

The experiment on growth inhibition of *Mucuna bracteata* was conducted at the back of greenhouse at Universiti Teknologi MARA (UiTM) Jasin, Malacca. Leguminous cover crops such as *M. bracteata* are important plants, especially in oil palm plantations. The fast and vigorous growth of *M. bracteata* may compete with the main crop for nutrient, water, space and air. The objective of this study was to inhibit the vigorous growth of *M. bracteata* by using abscisic acid (ABA). This study was also aimed to determine the best rate of ABA that should be applied on *M. bracteata* to suppress its growth. The parameters measured to indicate the inhibition of *Mucuna* were length of internode, diameter of stem, number of shoot, leaf area and relative chlorophyll content. There were five treatments in this experiment and each treatment was replicated four times. Data analyses were carried out by using SPSS. The result showed that treatment with 20 mg/l ABA was sufficient to inhibit the growth of *M. bracteata* in terms of internode length, relative chlorophyll content but encouraged more branching from the main vines.