

**GROWTH INHIBITION OF *Mucuna bracteata* BY  
PACLOBUTRAZOL**

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Degree of Bachelor of Science (Hons.) Plantation Technology and Management  
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## DECLARATION

This Final Year Project is a partial fulfillment of the requirements for a degree of Bachelor of Science (Hons.) Plantation Technology and Management, Faculty of Plantation and Agrotechnology, Universiti Teknologi MARA.

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I hereby declare that I have checked this project and in my opinion, this project is adequate in term of scope and quality for the award of the degree of Bachelor of Science (Hons.) Plantation Technology and Management, Faculty of Plantation and Agrotechnology, Universiti Teknologi MARA.



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## ABSTRACT

### GROWTH INHIBITION OF *Mucuna bracteata* BY PACLOBUTRAZOL

This study was carried out to determine the growth inhibition response of fast growing creeping leguminous cover crop of *Mucuna bracteata* towards application of Kaltaar<sup>®</sup> having paclobutrazol (PBZ) as the active ingredient at 250 g/l. This cover crop was sprayed with different concentrations of Kaltaar<sup>®</sup>, i.e. 0 (control), 0.25, 0.50, 0.75 and 1 ml/l. There were five parameters measured in this experiment, i.e. internode length, leaf area, diameter of internode and relative chlorophyll content at first fully developed leaf and number of leaves within sampling quadrat of 1x1 m. The data were collected fortnightly for eight weeks after application of PBZ. All data were subjected to analysis of variance (ANOVA) and treatment means were compared using Tukey's HSD (Honestly Significant Difference) test when the treatment effect in ANOVA was significant. The study found that there was significant difference between treated and untreated plant in terms of growth inhibition. Application rate at as low as 0.25 ml/l Kaltaar<sup>®</sup> seemed to have potential for growth inhibition of this cover crop.