# GROWTH PERFORMANCE OF HARUMANIS (MA 128) IN RESPONSE TO PLANT BIO-STIMULANT (AMINOFOL®) AT UITM PERLIS

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**DECLARATION** 

This Final Year Project is a partial fulfilment of the requirements for a Degree of

Bachelor of Science in Agrotechnology (Hons.) Horticulture Technology in the Faculty

of Plantation and Agrotechnology, Universiti Teknologi MARA.

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#### **ABSTRACT**

## GROWTH PERFORMANCE OF HARUMANIS (MA 128) IN RESPONSE TO PLANT BIO-STIMULANT (AMINOFOL®) AT UITM PERLIS

Plant bio-stimulant is the application of any substances such as humic and fulvic acids, protein hydrolysates, compounds containing nitrogen, seaweed extracts, beneficial fungi or bacteria to the crops. There is limited research on the potential use of plant bio-stimulants for plant growth performance of Harumanis (MA 128) in Malaysia. Therefore, this research was conducted at the Plantation Unit, Universiti Teknologi MARA Perlis Branch to evaluate the growth performance and to determine the number of flowers and percentage of fruit sets as an effect of application plant biostimulant (Aminofol®) application. There are two treatments where T1 are untreated Harumanis (MA 128) plants and T2 are Harumanis (MA 128) plants treated with plant bio-stimulant (Aminofol®). The T2 is applied for two phases between day-81 and day-204 at flowering stage after pruning. The assessment was carried out on plant parameters such as leaf area index (LAI), SPAD value, number of panicles, number of flowers and number of fruit set. The result showed the application of plant bio-stimulant (Aminofol®) at a rate of 2 ml have a significant effect on leaf area index (LAI) and SPAD value while the number of panicles, the number of flowers and percentage of fruit set were not significant. However, the result revealed the positive production on number of flowers can affect the percentage of fruit sets.

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