### CHEMICAL EVALUATION AGAINST APHIDS ON LONG BEAN

(Vigna sesquipedalis)

## FIRDHAUS BIN JAMALULLAIL

Final Year Project Report Submitted in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science (Hons.) Technology and Plantation Management in the Faculty of Plantation and Agrotechnology Universiti Teknologi MARA

**JULY 2015** 

### DECLARATION

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

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Name: FIRDHAUS BIN JAMALULLAIL

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

Mummer Signature: .....

Name of Supervisor: DR. MOHD RASDI BIN ZAINI Position: TIMBALAN OCKAN (HEP) Date: 14 /9 /2015

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#### ABSTRACT

Long bean is a minor crop and it is vigorous climbing plant that can reach 9 to 12 feets. Proper stake was prepared for them to climb and hold. This plant is susceptible to many pests for example black bean aphids, spider mites, nematodes, and mosaic viruses. One of the popular pests for this plant is aphids. This research was conducted to find out a control strategy of aphids attack. Experiments were undertaken in the farm of UiTM Jasin. There were several treatments used namely water, Imidacloprid (Confidor) and Dinotefuran (Oshin). Water were used as control (treatment 1), Imidacloprid ( treatment 2) and Dinotefuran (treatment 3). All the treatments were replicated four times. Results indicated that both treatments gave significant difference in mean number of aphids compared to control, however, Imidacloprid (Confidor 200 SL) was found as the most effective in controlling aphids with low number of aphids started to increase because all the treatments have lost their efficacy. As conclusion, the result showed that Imidacloprid was the most effective in controlling number population of aphid compared with other treatments.