

**EFFICACY OF SELECTED INSECTICIDE TO AGAINST WHITEFLY  
(*Bemisia tabaci*) ON CHILLI PLANT (*Capsicum annum*)**

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


The Final Year Project is a partial fulfilment of the requirement for a Degree of Bachelor of Science (Hons.) Plantation Technology and Management, Faculty of Plantation and Agrotechnology, University 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 of scope and quality for the ward of the degree of Bachelor of Science (Hons.) Plantation Technology and Management, Faculty of Plantation and Agro Technology, University Technology MARA.

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**ABSTRACT**

Whitefly, *Bemisia tabaci* (Genn), is one of the most damaging pests for several vegetables in Malaysia which affects plant vigour, transmits geminiviruses and reduces crop quality. These studies focus on efficacy of selected insecticide Confidor 200SL (imidacloprid) and Mospilan 20SP (acetamiprid) against whitefly *B. tabaci* on chilli crops. This experiment use *Capsicum annum* MC 11 and chilli crop planted near with brinjal, tomato, long bean. MC 11 planted with a combination of all the other crops on the open field. nymph samples were obtain on pre-treatment and after treatment day 1, 3, 7 and 14 and consist of second application to look the accuracy and compare efficacy of the insecticide. The mean number for first applied is ( $\chi^2=6.999$ ;  $df=2.00$ ;  $P < 0.05$ ) and second applied was ( $\chi^2=9.154$ ;  $df=2.00$ ;  $P < 0.05$ ). Data was collected from the leaf middle strata of the plant. The total mean numbers of WF nymphs were significantly lowers ( $p < 0.05$ ) when chilli planted with multiple crops. Results also showed that the population of nymph on the middle strata interestingly, the number of nymphs was higher in the middle stratum than in the other strata in all treatments. This phenomenon indicated that mixed crops can lower pest populations and indirectly reduce virus disease incidence. Result shows the Confidor was most effective against of nymph of whitefly after 7 to 14 days and Mospilan least effective on nymph. Result of this study could be used to controlling *B. tabaci* in adults, nymph and eggs.

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