

**THE EFFECTIVENESS OF FLUBENDIAMIDE APPLICATION VIA  
GROUND SPRAYING IN CONTROLLING POPULATION OF *METISA  
PLANA* IN FELDA BESOUT 5, PERAK**

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## ABSTRACT

### EFFECTIVENESS OF FLUBENDIAMIDE APPLICATION VIA GROUND SPRAYING IN CONTROLLING POPULATION OF *METISA PLANA* IN FELDA BESOUT 5, PERAK

*Metisa plana* (Lepidoptera: Psychidae) is the most destructive pest that can produce defoliation damage up to skeletonized stage of the oil palm fronds. This destructive were cost 33 to 40% of yield declining which will become more severe if there is no proper management control taken to overcome the problem. Chemical control that always been used were basically depend on the higher class of chemicals like Monocrotophos and Cypermethrin but the application need to be aware in contact with environment and also non-target organism. This study was conducted in FELDA Besout 5, Sungkai, Perak to determine the effectiveness of Flubendiamide application via ground spraying in controlling population of *Metisa plana*.. Objective of this study is to determine the population of bagworms before and after application of flubendiamide via ground spraying. The experiment were done in two plot consist of high infestation of bagworm population (Plot A) and low infestation of bagworm population (Plot B). Data was taken by doing census and census activity was done before application of flubendiamide, 7 days, 14 days and 21 days after treatment (DAT) that start in the middle of February until early March 2019. Result that obtain from the experiment showed that Plot A which is high infestation of bagworm was significant with P value obtain was  $P=0.036$ , less than the standard while Plot B show not significant result with P value obtain was  $P=0.140$  which higher than the standard  $P=0.05$ . Flubendiamide application via ground spraying is a suitable control for *Metisa plana* infestation aiding with proper management and right timing will provide low population of bagworm in long term result.

Keywords : *Metisa plana*, flubendiamide, ground spraying, effectiveness, DAT