

**SENSITIVITY EVALUATION DIAMOND BACK MOTH *PLUTELLA XYLUSTELLA* L.
(LEPIDOPTERA; PLUTELLIDAE) TO EXTRACT THE BITTER OLIVE *MELIA
AZEDARACH* L. (MELIACEAE)**

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ABSTRACT

The application of plant extracts for control of diamond back moth *Plutella xylostella* (Lineaus) (Lep: Plutellidae) is one of the important factors in integrated management programs against this pest is considered. In this regard, the effect of plant extracts of bitter olive *Melia azedarach* (Lineaus)(Meliaceae) on diamond back moth larvae mortality on white cabbage *Brassica oleracea* var *capitata* grown in standard fixed (25 ± 2 ° C temperature conditions 70 ± 5 percent relative humidity and light periods of 8: 16 h dark: light) was studied. For this purpose, 10 larvae instar 3th in the leaf Petridish disposable disk (6 cm diameter) with moist filter paper was placed. Bioassay method and larvae were sprayed daily with fresh leaves of cabbage plant were to feed for five days. In this experiment, each treatment consisted of five replicates and each replicate containing 10 larvae were instar 3th pairs. Results showed a significant difference exists between the different extracts. Highest and lowest mortality rates in order to extract 10 g and the extract was three grams. Average percent mortality of larvae instar 3th diamond back moth affected by extracts of three, five and 10 grams of syringe tree leaf, respectively, from left to right ($19/97 \pm 4/46$, $41/14 \pm 8/94$, $55/13 \pm 5/74$) obtained Lc50 extract three, five and 10 grams respectively ($0/095$, $0/085$, $3/49 \times 10^{-3}$) is estimated. The results show that 10 grams of extract of bitter olive leaves greater impact on mortality than larvae diamond back moth had two other extracts from this study can be widely used pesticides in plant applications integrated management diamond back moth emphasized.

Key words: Bioassay, Bitter olive, Diamond back moth, Plant extracts, White cabbage



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