

ABSTRACT

Effects of Abamectin (Avermectin B₁) on the Diamondback Moth, *Plutella xylostella* (L.)

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Studies were conducted in laboratory. Abamectin (avermectin B₁) produced both acute (within 48 h) and chronic mortalities of diamondback moth larva. Acute LD₅₀ (ng/larva) and LC₅₀ (ppm) were reported by topical application and leaf dip test, respectively. Lower dosages (doses that caused less than LC₁₀ value) produced chronic larval mortality which stabilized 4-7 days after treatment. Third instar larvae exposed to lower dosages, 0.02 and 0.01 ppm, matured into adults although the durations of larval - pupal and pupal - adult were prolonged. The fecundity and fertility of survivors of abamectin applications as third instar were not significantly different from the control. These results suggest that abamectin could be an alternative to conventional chemicals used for diamondback moth management.