

Test of Biological Control against Date Moth *Ectomyelois ceratoniae* zeller (Lepidoptera, Pyralidae) by Spinosad

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Abstract : Currently, chemical control is the only means used to control populations of the date moth (*Ectomyelois ceratoniae*) which is the most important and dangerous pest to palm groves in Algeria, conventional insecticides act faster, but their main drawback is it can't be destroyed or degraded. In this context we conducted our work to explore the insecticidal activity of Spinosad which is a bio-pesticide on the larval stages of *Ectomyelois ceratoniae*. The study of the effect of Spinosad on the mortality of different larval stages revealed that the doses used were significantly and positively correlated with mortality adjusted for different durations of exposure of larvae bio-pesticide. Lowest corrected mortality was observed in a short time and lethal in older larvae treated with the lowest concentration. While the higher mortality was observed in a longer duration of exposure in younger instars treated with the highest concentration.

Keywords : *Ectomyelois ceratoniae*, date palm, Spinosad, biological control, toxicology

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