

Tests for Evaluating the Side Effects of Chlorothalonil (TPN) and Spinosad on the Parasitic Wasp (*Aphidius colemani*)

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Abstract:

To better understand the side-effects of pesticides on nontarget insects, exposure and mortality assessment tests were performed with the parasitic wasp, *Aphidius colemani*. Quantities of chlorothalonil (TPN) and spinosad in individual wasps were determined using commercially available ELISA kits. TPN showed no side-effect on contact with dry film or oral administration. The lethal dosage of spinosad on plant leaves was estimated at ca. 0.2 μ g/cm² for individual wasps, and was supported by the results of residual activity tests. Furthermore, a minimum of around 0.1 ng of spinosad was observed in dead individuals exposed to plant leaves treated with a lethal dosage of the posticide. © Pesticide Science Society of Japan

Keywords:

Aphidius colemani, contact exposures, mortality, ELISA, spinosad, chlorothalonil (TPN)

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