

Granular Feeding Baits Based on *Bacillus thuringiensis* Products for the Control of Lepidopterous Pests

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Bacillus thuringiensis (*Bt*) spray products are devoid of protection against undesirable environmental conditions (UV light, heat, dew, phylloplane materials), and are partially effective against bollworm larvae. To improve this situation, we embedded the spore-crystal product in a granular feeding bait formulation. The granules were made of wheat meal used as both a carrier and a feeding stimulant; yeast extract also was incorporated into the granules, to stimulate larval feeding. A combination of *Bt* subsp. *kurstaki* and *aizawai* products was used in the granular formulation, to widen the host-range of the microbe against lepidopteran insects. The most effective size of granules, as studied in a controlled experiment in a dispersion tower, ranged between 149 and 210 μ . The granular product dusted on cotton was more active than the *Bt* spray (Dipel) against *Earias insulana*. The present paper evaluates other *Bt* adjuvants and formulations.

KEY WORDS: *Bacillus thuringiensis* subsp. *kurstaki*; *B. thuringiensis* subsp. *aizawai*; granular feeding bait formulation; dusting; *Earias insulana*; Styropor[®] (polystyrene) feeding choice test; dispersion tower; granular size; feeding stimulants.

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