

Biological Control

The Efficacy of Granulosis Virus (Virosoft CP4®) in Canadian Apple Orchards

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Abstract: Codling moth (*Cydia pomonella* L.) is a major pest of pome fruit in Canada. Organic apple growers in Canada have few products available for managing codling moth, and as a result many growers experience high levels of damage in their orchards. The objective of this Canada-wide project is to evaluate the efficacy of Virosoft CP4® against codling moth populations in the laboratory and the field. Laboratory studies were conducted in BC to evaluate the effects of oil adjuvants on the efficacy of Virosoft CP4®. Field trials were conducted in Quebec and Ontario to evaluate the effectiveness of Virosoft CP4® in the field. Laboratory studies from British Columbia revealed that the addition of oil adjuvants (Superior 70 oil, fish oil, and soybean oil) did not improve the efficacy of Virosoft CP4®. In Quebec Virosoft CP4® significantly reduced codling moth (CM) damage in organic apple orchards. There were no significant differences in the percentage of CM damaged fruit between the blocks that received sprays every week (total of 7 sprays) versus those that received sprays every second week (total of 4 sprays). The addition of Surround (2003) or soya oil (2004) to Virosoft did not improve the efficacy of the product. Field trials in Ontario showed that fruit treated with Virosoft CP4® had higher levels of codling moth damage than those that were treated with organophosphates.