



# Regulatory Decision Document

RDD2001-01

## **3M Sprayable Pheromone for Mating Disruption of Blackheaded Fireworm (Z-11-tetradecenyl acetate)**

Bedoukian *cis*-11-Tetradecenyl Acetate Technical Pheromone and the formulated end-use product, 3M Sprayable Pheromone for the Mating Disruption of Blackheaded Fireworm (*Pest Control Products Act* registration number PCP 25880), which contains Z-11-tetradecenyl acetate as the active ingredient, are eligible for full registration pursuant to Section 13 of the Pest Control Products (PCP) Regulations.

This decision document outlines the Pest Management Regulatory Agency's (PMRA) regulatory decision-making process concerning the use of 3M Sprayable Pheromone for Mating Disruption of Blackheaded Fireworm (Z-11-tetradecenyl acetate) on cranberries.

***(publié aussi en français)***

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## 1.0 Introduction

This decision document outlines the PMRA's regulatory decision-making process concerning the use of 3M Sprayable Pheromone for Mating Disruption of Blackheaded Fireworm (Z-11-tetradecenyl acetate) on cranberries.

## 2.0 Background

3M Sprayable Pheromone for Mating Disruption of Blackheaded Fireworm, containing Z-11-tetradecenyl acetate, is a pheromone product for management of blackheaded fireworm in cranberry fields through mating disruption.

The PMRA carried out an assessment of available information in accordance with Section 9 of the PCP Regulations. The assessment found that there was sufficient information, pursuant to Section 18*b*, to allow a determination of the safety, merit and value of Bedoukian *cis*-11-Tetradecenyl Acetate Technical Pheromone (manufactured by Bedoukian Research Inc.) and the formulated end-use product, 3M Sprayable Pheromone for Mating Disruption of Blackheaded Fireworm (manufactured by 3M Canada Co.). The PMRA concluded that the use of 3M Sprayable Pheromone for Mating Disruption of Blackheaded Fireworm in accordance with the label accompanying the product has merit and value consistent with Section 18*c* of the PCP Regulations and does not entail an unacceptable risk of harm pursuant to Section 18*d*.

Proposed Regulatory Decision Document PRDD99-04, *3M Sprayable Pheromone for Mating Disruption of Blackheaded Fireworm*, stated that a time-limited registration was granted to Bedoukian *cis*-11-Tetradecenyl Acetate Technical Pheromone and 3M Sprayable Pheromone for Mating Disruption of Blackheaded Fireworm to allow users access to this low-risk product, while giving concerned Canadians an opportunity to provide input into the final decision. Comments received by the PMRA concerning PRDD99-04 are presented in Appendix 1.

## 3.0 Regulatory Decision

Based on the considerations outlined above, Bedoukian *cis*-11-Tetradecenyl Acetate Technical Pheromone and 3M Sprayable Pheromone for Mating Disruption of Blackheaded Fireworm, for use on cranberries, are eligible for full registration, pursuant to Section 13 of the PCP Regulations.

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## Appendix I Comments and Responses

Comments were received by the PMRA concerning PRDD99-04 published on September 3, 1999. The comments were from the public and related to the efficacy assessment for this pheromone product. The PMRA has consolidated and summarized the comments received and provides responses to the comments as follows:

### **Comment:**

The efficacy trials presented in PRDD99-04 do not demonstrate mating disruption. Reduction of male catches in pheromone-baited traps did occur, but trap catches were not significantly correlated with reductions in larval populations. Reductions in trap catches may or may not be associated with reductions in mating and subsequent damage. It is unwise to recommend registration of a mating disruption product based on trap catch data showing only a disruption in communication.

### **Response:**

Results from the efficacy trials summarized in PRDD99-04 show that 3M Sprayable Pheromone for Mating Disruption of Blackheaded Fireworm was effective in reducing catches of male moths in pheromone baited traps. The PMRA agrees that, while these data demonstrate disruption in pheromone communication, the data as presented in PRDD99-04 do not demonstrate disruption of mating.

Data from studies have been provided to the PMRA but not presented in PRDD99-04, however, that assessed the effect of 3M Sprayable Pheromone for Mating Disruption of Blackheaded Fireworm on the mating success of the blackheaded fireworm. In these trials, caged virgin female moths were placed in plots previously treated with 3M Sprayable Pheromone for Mating Disruption of Blackheaded Fireworm and the number of mated females was assessed. The mating success of female moths in treated plots was compared with that for caged virgin female moths placed in untreated plots. In these trials, the mating success of female moths in treated plots was reduced by 73–100%, compared with female moths in untreated plots, for a period of 3–4 weeks following application. The results from these trials demonstrate disruption of mating of blackheaded fireworm by 3M Sprayable Pheromone for Mating Disruption of Blackheaded Fireworm.