

## Proposed FIFRA 2(ee) Recommendation

Researcher and Title: Abby Seaman, MS  
Vegetable IPM Coordinator  
NYS IPM Program  
Cornell University  
630 W. North St.  
Geneva, NY 14456  
315-787-2422  
ajs32@cornell.edu

ACCEPTED

Jan 13, 2012

New York State Department  
of Environmental Conservation  
Division of Materials Management  
Pesticide Product Registration

Doc id: 529791

### Pesticide Name and EPA Registration No.:

1. Agree WG (EPA Reg. No. 70051-47)
2. Entrust (EPA Reg. No. 62719-282)

**Target Pest:** Squash vine borer (*Melittia cucurbitae*)

### Target Crops:

Squash (summer and winter), pumpkins, cucumber, melons

### Nature of 2(ee) Variation from Product Label:

Squash vine borer (SVB) can be a serious problem in small acreage mixed vegetable production. The 2011 Cornell Guidelines for Commercial Vegetable Production lists seven insecticides for use against SVB, to be applied 2-3 times during the 3-week adult flight period, which occurs around 1000 base 50 DD. None are allowed for certified organic production, where SVB can cause serious crop loss. Both Agree WG and Entrust are registered on many crops and allowed for certified organic production in New York and are considered to provide good control. The Cucurbit vegetable group appears on both the Agree and Entrust labels, but squash vine borer is listed on neither. Therefore, we would like to request label expansion for both products.

A trial was conducted in 2011 to test the efficacy of five insecticides allowed for organic production against SVB. Of the five, Agree WG and Entrust reduced SVB damage significantly compared with the untreated control (Table 1). Expanding the label of both products will allow control of SVB on organic farms and provide growers with two different modes of action for resistance management.

Table 1. Control of squash vine borer in NY with organic insecticides.

| Treatment/<br>formulation | Rate amt<br>product/acre | Mean percent<br>infested plants |
|---------------------------|--------------------------|---------------------------------|
| Untreated control         |                          | 60.0 a                          |
| Mycotrol O                | 1 qt                     | 46.7 ab                         |
| Javelin WG                | 1.5 lb.                  | 33.3 abc                        |
| Neemix 4.5                | 16 oz                    | 31.3 abc                        |
| Entrust                   | 2.5 oz                   | 18.0 c                          |
| Agree WG                  | 2 lb.                    | 12.3 c                          |

Means not connected by the same letter are significantly different (Fisher's LSD, 0.05)

**Complete Recommendation as it will appear in Cornell Guidelines:**

Two to three insecticide treatments, 5-7 days apart during the three week egg-laying period around 1000 DD<sub>50</sub> will control most of the larval borers before they become protected by the vines.

**1) Agree WG (EPA Reg. No. 70051-47)**

Active Ingredient: *Bacillus thuringiensis aizawi*

Target Crops: Squash (summer and winter), pumpkin, gourd, cucumber, melon

Application Rate: 0.5-2.0 lb./A

**2) Entrust (EPA Reg. No. 62719-282)**

Active Ingredient: Spinosad

Target Crops: Squash (summer and winter), pumpkin, gourd, cucumber, melon

Application Rate: 1.5-2.5 oz/A