

US EPA ARCHIVE DOCUMENT

EFFICACY REVIEW

PRODUCT: Pointer Insecticide

REG. NUMBER: 69117-1

DATE: September 5, 2008

DP BARCODE: D355995

DECISION: 399036

GLP: No

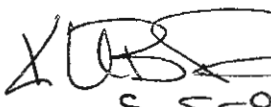
CHEMICAL: Imidacloprid (5%)

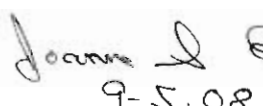
CHEMICAL NUMBER: 129099

PURPOSE: Review data to determine if it supports the retention of control claims for the emerald ash borer.

MRID: 47514201. Roberts, D. (2008) The Emerald Ash Borer: Plymouth Homestead Estates Field Management Study. Unpublished study prepared by Michigan State University. 12 p.

TEAM REVIEWER: Kable Bo Davis

EFFICACY REVIEWER: Kable Bo Davis, M.S., Entomologist 
9-5-08

SECONDARY EFFICACY REVIEWER: Joanne Edwards, M.S., Entomologist 
9-5-08

BACKGROUND:

Pointer Insecticide is intended for the systemic control of a variety of pests (including emerald ash borers and Asian longhorn beetles) infesting ornamental trees. The proposed label is divided into three sections: commercial, U.S.D.A., and residential. The directions for use for the commercial sub-label states that the product must be applied using the ArborSystems Direct-Inject (no drilling) Tree Injection System. The application rate for the commercial sub-label is 1 ml of product per 4" to 6" of trunk circumference measured within 12" of the ground. Additionally, the label states that the dosage may be increased to 2 ml per injection site for trees infested with emerald ash borers or Asian longhorned beetles or for trees with diameters over 12". To determine the number of injection sites, the label states to "*follow the directions in this booklet.*" (Note: it is unclear at to what booklet the label is referring to)

The directions for use for the U.S.D.A. sub-label states that the product can be applied using any U.S.D.A. approved injection device. The application rate for this section of the label is 4 ml per diameter inch for trees 2 to 23 inches DBH and 8 ml per diameter inch for trees having 24 and greater inches DBH. To determine the number of injection sites, the tree must be measured (circumference or diameter) at breast height. The measurement reference above must be divided by 6 if measuring the circumference or by 2 if measuring the diameter. Directly above the application rates is the statement “U.S.D.A. Rate Specifications for Asian and Citrus Longhorned Beetle Programs.”

The directions for use for the residential sub-label provide directions on how to apply the product via drilling. The application rate for this section of the label is 1 ml of product for every 4 inches of circumference. In addition, the label provides a table detailing the number of injection sites (based on tree circumference).

The proposed label contains the following label claims:

Commercial Sub-Label- *“One application provides control for two years [two seasons]”, “For use by professional arborists/applicators, foresters, grounds maintenance professionals and landscapers”, “Easy” and “No Drilling.”*

U.S.D.A. Sub-Label- *“For use only under U.S.D.A. supervision with U.S.D.A. approved injection devices” and “Do not apply more than once per calendar year.”*

Residential Sub-Label- *“Easy-to-Use”, “Do-it-Yourself”, “Convenient” and “Kill Tree Insects.”*

The proposed label contains the website www.ArborSystems.com. The referenced website contains the following claims: *“Now labeled for 2-year control”, “Proven curative control of HWA, EAB, and many other pests.”* and *“Research shows Pointer controls pests more effectively.”*

DATA REVIEW:

The following data review is comprised of explanations of materials and methods, and a summation of experimental results containing tables with reformatted data.

The objective of this study was to determine whether a treatment with Pointer Insecticide could provide more than one year control of emerald ash borers. The experimental design consisted of dividing ash trees located in an area (Michigan) that had previously contained high populations of pests into three treatment groups (see Table 1). There were ten trees per group. No control trees were used due to death of trees from emerald ash borer attack. All trees were initially treated with Merit (imidacloprid) soil drench and imidacloprid trunk injections using Pointer and the ArborSystems Direct Inject delivery system in 2001. The monitoring of trees began in 2002. All trees were injected every 3-4 inches of circumference at base of trunks with Pointer (5% imidacloprid) at the rate of 1 ml per injection site. Trees were treated in late May or early

June in the given year. In addition to residue analysis, observations on canopy dieback, number of emergence holes and number of new bark splits were taken early.

Table 1. Treatment Specifics

Treatment Group	# Trees	Treatment Frequency
Treatment Group 1	10	Trees treated annually.
Treatment Group 2	10	Trees treated every 2 years.
Treatment Group 3	10	Trees treated every 3 years.

Results-

Visual Observations

Table 2. Visual Observations; August, 2007

	Canopy Dieback ¹	Emergence Holes ²	Bark Splits ³
Treatment Group 1	100%	0	0
Treatment Group 2	100%	0	0
Treatment Group 3	100%	0	0

¹ 100% = no dieback; 0% = completely dead

² 2 min. examination of trunk and lower branches

³ Resulting from EAB tunneling of cambial tissues

All 30 trees suffered no attacks from emerald ash borers for the duration of the study. A tree highly infested with emerald ash borers was discovered unknown feet from the treatment trees (indicating some level of pest pressure).

Residue Analysis

Imidacloprid residue analysis showed variable results, however trees that received annual treatments tended to have higher residue levels than those that received treatment every 2 or 3 years.

RECOMMENDATIONS:

The submitted data do not support the retention of control of emerald ash borer claims on the Pointer Insecticide (EPA Reg. No. 69117-1) label. The following recommendations apply:

1. All references to “emerald ash borer” must be deleted from the label. To have this pest added back on in the future, additional laboratory and field data (two additional geographic locations using trees of varying sizes) must be submitted or cited. The submitted data should include the following parameters:
 - a. Larval Density (e.g., counts of larvae exit holes in the bark)
 - b. Adult Mortality (e.g., assess the survival of emerald ash borer adults caged with treated leaves)
 - c. Canopy Dieback Ratings

- d. The submitted labeling allows for trees to be treated with product via drilling and non-drilling methods. The additional submitted or cited field data must use both applications methods (two additional test sites per application method). Alternatively one method may be deleted from the label.
2. All references to Asian longhorn beetle must be deleted from the label. This is a quarantine pest and requires supporting efficacy data.
3. The commercial sub-label does not specify how to determine the number of injection sites. The statement "*Follow the label directions in this booklet to determine the amount of chemical and number of injection sites.*" is not adequate. Further, the first page of the label states "*Affixed Booklet*". The referenced booklet has not been reviewed by the Agency and is not part of the labeling. Revise the directions for use to clearly explain how to determine the number of injection sites. In addition, delete all references to the booklet.
4. The commercial sub-label includes the statement "*Depending on type of bark, the dosage per injection site may have to be reduced to 0.5 to 1 ml per site and the number of injection sites doubled.*" This statement must be expanded upon to explain more clearly when it is appropriate to reduce the rate per site and increase the number of sites.
5. All references to two year control must be deleted from the label. To have this claim added back on in the future, additional data must be submitted (see recommendation #1).
6. As acknowledged in your cover letter dated August 8, 2008, the use of the term "*curative*" is not allowed. The suggested alternate terms "*restorative*", "*therapeutic*", "*recuperative*" and "*corrective*" are not acceptable. The suggested term "*remedial*" will be allowed.
7. Within the commercial sub-label section, revise the claim "*For use by professional arborists/applicators, foresters, grounds maintenance professionals and landscapers*" to read "*Intended for use by professional arborists/applicators, foresters, grounds maintenance professionals and landscapers.*"
8. Within the **ArborSystems Direct-Inject Tree Injection System** part of the label, delete the sentence "*Because the chemical is placed right where the tree can use it....control of most problems is reached in as little as three to five days.*" This claim must be supported by data.
9. Within the U.S.D.A. sub-label, revise the claim "*For use only under U.S.D.A. supervision with U.S.D.A. approved injection devices*" to read "*Intended for use only under U.S.D.A. supervision with U.S.D.A. approved injection devices.*"

10. It is assumed that the application rates outlined within the directions for use section of the U.S.D.A. sub-label portion of the label are intended only for Asian and citrus longhorned beetles (due to the statement "*U.S.D.A. Rate Specifications for Asian and Citrus Longhorned Beetle Programs*"). This sub-label must be revised to clearly state exactly which pests these directions for use are intended for.
11. The following claims must be deleted from the website www.ArborSystems.com:
 - "*Now labeled for 2-year control*"
 - "*Proven curative control of HWA, EAB, and many other pests.*"
 - "*Research shows Pointer controls pests more effectively.*"