

# Agrichemical and Environmental News

A Monthly Report on Pesticides and Related Environmental Issues

April 2002 • Issue No. 192 • <http://aenews.wsu.edu>

## Royal Declaration: Clarity is Next to Godliness

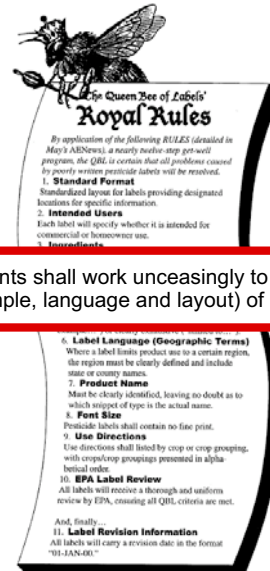
**Jane M. Thomas, Pesticide Notification Network Coordinator, WSU**

In a recent issue of this newsletter (February 2002, "QBL Is Now a Tabloid Queen," Issue No. 190) I introduced the twelfth step in the Queen Bee of Labels' (QBL's) Get Well Program for Pesticide Labels:

**Registrants shall work unceasingly to reduce confusion in all areas of pesticide labels.**

In short, while some maintain that cleanliness is next to Godliness, in the world of pesticide labels, clarity rules.

For those readers unfamiliar with the Get Well Program for Pesticide Labels (a.k.a. the Royal Rules), this is the QBL's plan for pesticide label improvement. Once I assume my rightful royal mantle (see "If I Were the Queen of Labels," *AENews* Issue No. 169, May 2000), I will insist that EPA and the registrants follow these Royal Rules. And, since the labels are in such a state, even twelve small steps will no doubt affect big changes. Under my leadership as QBL (EPA, are you paying attention?), I am certain that we will all enter a state of Label Grace. But I digress....



Label Clarity: Registrants shall work unceasingly to reduce confusion in all areas (for example, language and layout) of pesticide labels.



Cooperating agencies: Washington State University, U.S. Department of Agriculture, and Washington Counties.  
Cooperative Extension programs and employment are available to all without discrimination.  
Evidence of noncompliance may be reported through your local Cooperative Extension office.

**FOR FREE SUBSCRIPTION OR CONTACT INFORMATION, SEE END OF ARTICLE.**

## The Importance of Being CLEAR

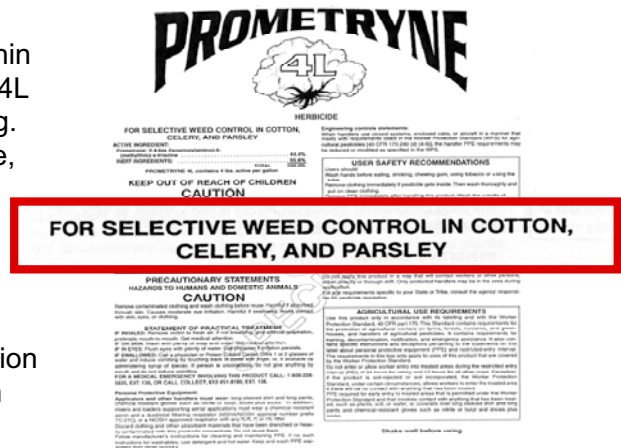
Before we discuss glaring examples of the absence of clarity—and yes, there will be pictures for you visual learners—let's take a moment to consider why clarity is important and hence next to Godliness in pesticide labeling. Poorly written labels can lead to the human health condition PLCD (Pesticide Label Confusion Disorder). People requiring treatment for this syndrome may exhibit the following symptoms:

- ◆ Walking around in circles clutching a pesticide container.
- ◆ Being unable to make a decision about anything for fear that it will be wrong.
- ◆ Continually muttering "off-label application." (This symptom may be accompanied by the first symptom.)
- ◆ Use of one of several sprayer types to apply pure water to anything that doesn't move (known in psych-circles as Spray Fulfillment Behavior).

If you or someone you know is exhibiting symptoms identified with PLCD, do not self medicate! Seek professional help at once. But take heart: treatment is available. It is expensive and it may be prolonged; however, I, the QBL, believe that certain Wayward Registrants and the EPA may be equally liable for treatment costs. You see, it has been determined that PLCD, a devastating condition, is brought on by overexposure to confusing pesticide labels. Yes, lousy labels have been the cause of the loss of many productive hours on farms, rights-of-ways, public parks, and in other work sites across America. With an outbreak of this magnitude, can PLCD in the home be far behind? This terrible waste will only be alleviated when EPA finally does the right thing and appoints me to my proper place as the QBL. Once the Royal Rules are instituted, PLCD will surely take its place among the vanquished or near-vanquished diseases of our time.

## Enemies of Clarity

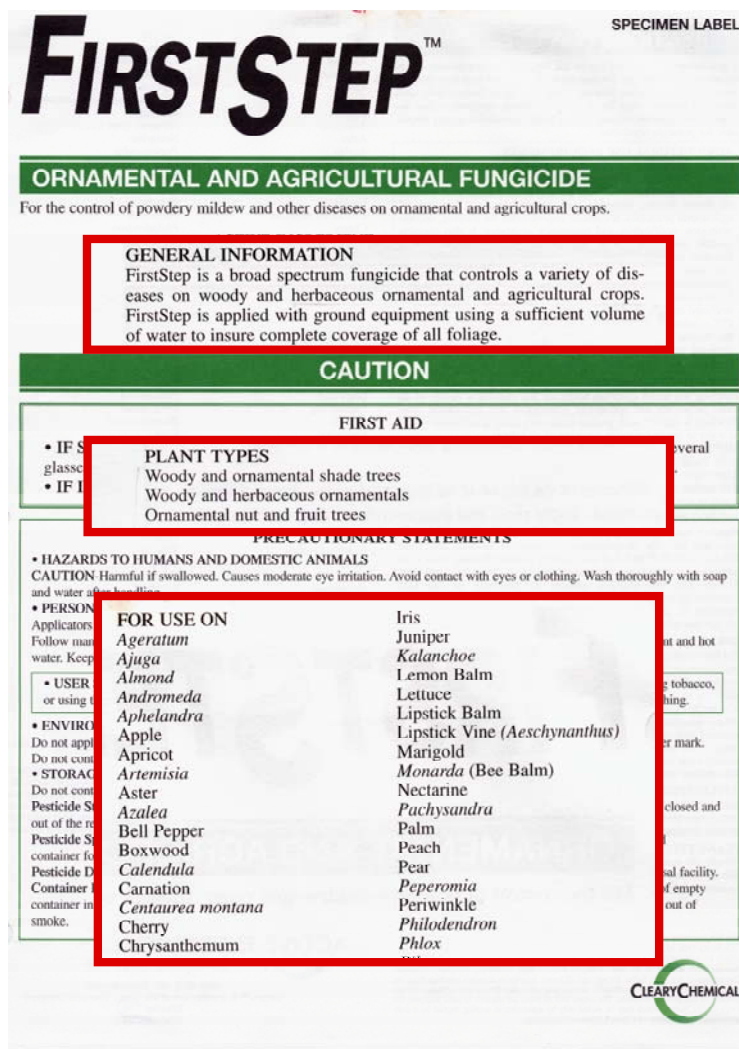
Many factors contribute to label confusion. In some cases one little word or phrase can create havoc within a pesticide label. Let's examine Platte's Prometryne 4L label, a tiny but telling example of a label gone wrong. On the front of the label, just under the product name, the label carries a statement saying that the product is for use in cotton, celery, and parsley. Inside the front cover the label carries use directions for cotton and celery but none for parsley. Indeed, the only other use directions on this label are for California dill. This caused some confusion until I stumbled upon a likely explanation. Perhaps in California, dill goes by the name "the dill formerly known as parsley." After all, this is the state that taught us alfalfa sprouts were the same as lettuce when constructing a sandwich. Although this is beneath Royal Standards as far as explanations go, it is better than thinking that Platte published a label with an error on it like this and **no one noticed**.



Next let's examine Cleary Chemical's label for its fungicide FirstStep. On the front of the label and again in the General Information section, the label states that the product is for use on ornamental and agricultural crops. However, under the section entitled Plant Types, the label lists only ornamentals. Because some fruit trees are listed as permissible sites, we at Washington State University's Pesticide Information Center (PIC) were a bit confused. Could FirstStep be used on apple trees that produce edible fruit or not? I called Cleary and was told that this product was indeed only for use on ornamentals. This leads one to wonder what the agricultural crops are that are mentioned in a couple of places on the label. Cleary is clearly contributing to a lack of clarity (say THAT five times fast) with this label.

### Clarity Begins at Home

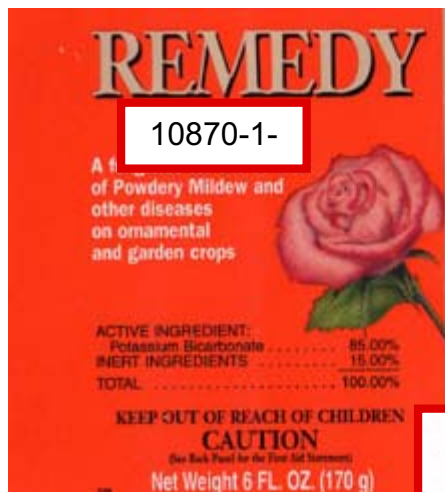
It's only a matter of time before homeowners show signs of PLCD. A pair of labels sure to contribute to the problem are EPA #s 10772-4-4 and 70870-1-4. Both of these are Bonide-Trusted-Since-1928 products, and both are called "Remedy." Both contain 85% potassium bicarbonate. The wording on the front of the label is very similar except for one small bullet. Remedy 70870-1-4 states that it is for use on ornamental nut and fruit trees. Remedy 10772-4-4 states that it is for use on ornamental nut and (new bullet) fruit trees. The implication of this wee bullet is that the latter is for ornamental nut trees and (any old) fruit trees, leading the poor homeowner (not to mention the Poor QBL and her long-suffering staff of worker bees) to wonder if Remedy could be used on bearing fruit trees. A look inside the label doesn't shed much light on the subject because both labels carry the same usage direction wording. The tree fruits are listed under the heading Garden Applications, along with many vegetables, all of which might buttress the assumption that Remedy can be used on bearing fruit trees. While I don't know if Remedy can be used on





# Agrichemical and Environmental News

bearing fruit trees, I do recognize a lack of clarity when I see it. I recommend that Bonide-Trusted-Since-1928 Remedy this situation soon or they will risk the Royal wRath!



**TRUSTED SINCE 1928**  
**BONIDE**  
**CONTROLS:**  
Blackspot, Downy Mildew, Powdery Mildew, Botrytis Blight and gray mold, Scab and other listed plant diseases.  
**Use On:**  
• Roses & Flowers  
• Vegetable Crops

**Use On:**

- Roses & Flowers
- Vegetable Crops
- Ornamental Nut and Fruit Trees as listed on label



**Garden Applications**  
**FOR USE ON:**  
Acorn squash      \*Blueberries      Septoria leaf spot  
Apples              \*Cabbage          Cucurbit  
\*Apricots            Cantaloupe        Grapes  
\*Bell pepper        \*Cherries          Honeydew  
\*NOT FOR THIS USE IN CALIFORNIA      \*Lettuce

**CONTROLS:**  
Blackspot, Downy Mildew, Powdery Mildew, Botrytis

**Use on:**

- Roses & Flowers
- Vegetable Crops
- Ornamental Nut and Fruit Trees as listed on label

Another example of confusing language can be found on JR Simplot's Polar Kote 10G. This is a distributor label for a product registered by Amvac. The label carries directions for use on a category of plants that the label describes as "Ornamental Vegetable Bedding Plants (Container Grown)." The label further specifies that use is "(l)imited to only container grown plants such as: Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Peppers, Tomatoes." When I took a scientific poll (i.e., asked around the office) as to what exactly this might mean, I garnered the following responses: "What is your problem?" "Aren't you familiar with ornamental vegetables?" and "You know : KALE." Well, I do know ornamental kale; in fact, I detest it. Because of this, I am somewhat sensitive to its every occurrence and I noticed right away that there was no mention of the these cruciferous carbuncles on the Polar Kote 10G label. Now I have seen ornamental peppers, but...ornamental Brussels sprouts?



Unable to let sleeping vegetables lie, I called the registrant of Polar Kote 10G and was immediately referred to Amvac. After a certain amount of discussion, I was told that "Ornamental Vegetable Bedding Plants (Container Grown)" referred to vegetable plants grown in small containers and marketed to places like Home Depot.

QBL (in a haughty royal tone): You mean vegetables that people take home and plant in their gardens and eat?

Amvac: Well, yes.

QBL (haughtier still): So, there's really nothing ornamental about this, is there?

Amvac: Well, no.

At the conclusion of this enlightening exchange, Amvac said they had "made a note" of my concern and would place the resultant note in the file for the next time that the label was up for revision. The QBL will just warm the Royal Throne and see.

Don't you wonder what EPA thought ornamental Brussels sprouts were when they reviewed the label? Do you suppose that lots of EPAers grow ornamental Brussels sprouts (a cult following perhaps) and that the rest of us are just a little behind the times? And while we're on the topic (the mere thought of ornamental kale really has the Royal Blood boiling), which do you suppose the compliance people would take more seriously: what the label actually says or what the registrant says that the label is *supposed* to say?

## Lame Layouts Lack Lucidity

While many factors contribute to a lack of label clarity, let us turn our attention toward layout. We (the Royal "We") touched on this subject back in December 2000 with "The QBL Gets Graphic" (*AENews* Issue No. 176), but nothing is quite so satisfying as continuing a Royal Rant.

My first example for this round is Griffin's Atrapa 5E. Inside the label, under Use Directions, you will find the heading: **GRAIN CROPS**. The listed use sites start out just fine with barley, corn, and wheat. However, as you move down the list you come to garlic, mushroom, okra, rutabaga, avocado.... I wondered when I saw this listing if Atrapa 5E could only be used on rutabagas if they were harvested, dried, then ground up to use as grain. Not to belabor the point but what was EPA thinking when they reviewed and approved this label? If EPA didn't actually receive this label for review, then what is wrong with the review process? And (so as to not show any favoritism) what was Griffin doing when it should have been reviewing the draft label prior to printing it for final distribution? It goes back to my hypothesis that no one (except, we hope, the end users) is looking at these labels.

**Griffin**

**Atrapa 5E**

**GRAIN CROPS**

Barley, Corn, Wheat: Cereal Leaf Beetle - 1½ pints.  
 Barley, Rye, Wheat, Oat: English Grain Aphid, Greenbug, Grasshopper\* - 1½ pints. \*Make full coverage to hatching areas when nymphs are young. Armyworm - 2 pints.  
**GRAIN (Corn, Barley, Oat, Rye, and Wheat) - RESIDUAL SPRAY BEFORE STORING:** For walls, floors, and machinery in grain elevators, in treating truck beds, box cars, and ship holds before loading grain, use 1 gallon per 25 gallons of water. Make thorough application. Before applying spray, clean elevators, boxcars, truck beds, etc. thoroughly. Remove and burn all sweepings and debris.  
**GARLIC, LEEK, SHALLOT: Aphid, Thrip** - 1½ to 2 pints. Apply uniformly over soil around base of plant. Do not apply within 3 days of harvest.  
**LENTIL: Cowpea Aphid, Pea Aphid** - 1½ pints. Do not apply within 3 days of harvest. **Note:** Do not graze or feed treated crop foliage to livestock.  
**MUSHROOM: Mite** - 2½ pints per 130 gallons OR 1 tablespoon per 100 square feet of bed. **Phorid and Sclerotid Fly** - 2½ pints per 130 gallons or 1 tablespoon per 100 square feet of bed. Make thorough application as soon as possible after picking. Repeat applications as necessary, usually twice a week. Do not apply within 1 day of harvest.  
**ONION: Thrip** - 1½ pints. **Onion Maggot** - 2½ pints. Do not apply on green onions within 3 days of harvest.  
**PEA: Alfalfa Looper, Celery Looper** - For control of loopers, Atrapa 5E should be used in combination with other recommended insecticides. Do not apply within 3 days of harvest. **Note:** Do not graze or feed treated crop foliage to livestock.  
**OKRA: APHID** - 1½ pints. **Japanese Beetle** - 2 pints. Do not apply within 1 day of harvest.  
**PEPPER: Aphid** - 1 pint. **Pepper Maggot** - 2½ pints. Do not apply within 3 days of harvest.  
**POTATO: Aphid, Mealybug, Leafhopper** - 2 pints. **False Chinch Bug** - 1½ pints. **Mealybug** - 2 to 2½ pints. May be applied on the day of harvest.  
**BEEF (Table & Garden): Aphid** - 1½ pints to 2 pints. If tops are to be used as feed, do not apply within 7 days of harvest.  
**HORSERADISH, PARSNIP: Aphid** - 1½ to 2 pints. Apply uniformly over soil around base of plants.  
**RADISH, SALSIFY: Aphid** - 1½ to 2 pints. Do not apply within 7 days of harvest.  
**RUTABAGA: Aphid** - 1½ pints. Do not apply within 3 days of harvest.  
**SWEET POTATO: Leafhopper** - 1½ to 2 pints. **Morningglory Leafminer** - 2½ to 3 pints. Do not apply within 3 days of harvest.  
**APRICOT: Codlin Moth, Orange Tortrix, Terrapin Scale, Soft Brown Scale, Aphid** - 1½ to 2 pints. Do not apply within 7 days of harvest.  
**AVOCADO Latania Scale, Greenhouse Thrip, Omnivorous Looper, Orange Tortrix, Soft Brown Scale** - 1½ pints. Do not apply within 7 days of harvest.

ACTIVE INGREDIENT  
 Malathion: O,O-dimethyl phosphorodithioate of diethyl mercaptosuccinate  
 INERT INGREDIENTS  
 TOTAL

One Gallon of Atrapa 5E Contains 5 Pounds of Malathion

KEEP OUT OF REACH OF CHILDREN  
**CAUTION**  
 STATEMENT OF PRACTICAL TOLERANCE  
 Organophosphate

IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water. Induce vomiting or give anything by mouth to an unconscious or comatose person.  
 IF ON SKIN: Wash with soap and water.  
 IF INHALED: Remove victim to fresh air. Apply artificial respiration if indicated.  
 IF IN EYES: Flush eyes for at least 15 minutes with water. Call physician immediately. For medical emergencies involving this product, call toll free 1-800-237-1854. See Label for Additional Precautions and Directions for Use.

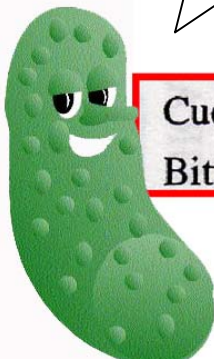
MANUFACTURED FOR:  
**GRIFFIN L.L.C.**  
 VALDOSTA, GA 31601

Specimen Label

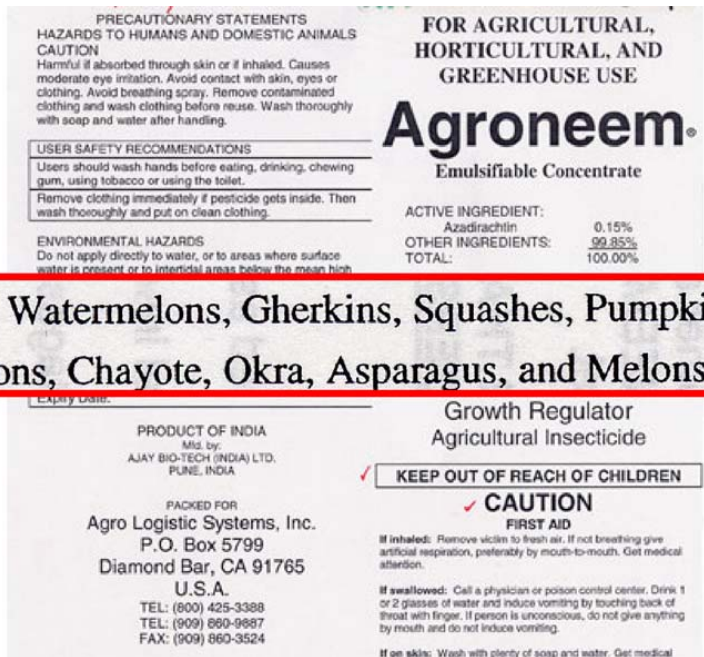
I was also caught off-guard by Agro Logistic Systems' Agroneem label. I had been told by Charlee Parker, the tireless coordinator of the Pesticide Information Center On-Line (PICOL) Label Database (<http://picol.cahe.wsu.edu>) that asparagus use had been added to this label. I had decided to return the label to her with a note because I simply could not find asparagus on the label. (I thought fleetingly that "it" had finally happened: Charlee had read too many labels



and gone around the bend.) I eventually spied asparagus. It was grouped, along with okra, in with the cucurbits. Imagine the indignity when these two upstanding, refined vegetables found themselves amongst a coterie of coarse cucurbits; the poor dears.



Hey, bay-bee!  
What's a nice veggie  
like you doin' in a  
patch like this?



**Cucurbits, Watermelons, Gherkins, Squashes, Pumpkins, Gourds,  
Bitter melons, Chayote, Okra, Asparagus, and Melons.**

I would like to close this missive with a last example of lousy layout: FMC's Brigade WSB. FMC has recently added caneberry use directions to this label--good news for those of us fond of berries. Prior to this addition, the label had ended with directions for use on strawberries. The final information in the right-hand column was headed **CALIFORNIA SUPPLEMENTAL LABEL**, a section providing "California-specific requirements for strawberry harvesters." Now when FMC added the caneberry use directions to the Brigade WSB label (a change that took place in September 2001, lest anyone think that the problems with this label are ancient history), they simply added the block of caneberry information to the end of the label. As you can see, it appears that the caneberry use directions fall under the California Supplemental Label heading. This is particularly PLCD-inducing because the caneberry use directions includes a "not for use in California" note. This was, in fact, the very thing that tipped off the sharp PIC staff that the header California Supplemental Label had nothing to do with caneberries. I ask you, how hard would it have been for FMC to have inserted the caneberry use directions in between Hops and Strawberries rather than lazily sticking it at the end of the label. Please note in this example the placement, **size**, and **boldness** of the offending header. All three lead the trusting label reader to believe that everything that falls after the header is information connected with the header. Registrants take note: headers are an invaluable tool in helping to organize and clarify information but their misuse and abuse will henceforth be cause for immediate inclusion onto the QBL's Wildly Wayward Registrants list.

EPA, I am pleading with you, please appoint me to be the Queen Bee so that I can correct some of these problems and avert others. While it is too late for those who have already succumbed, millions of potential PLCD sufferers could be spared.

*Jane M. Thomas, a.k.a. Her Royal Highness the Queen Bee of Labels, presides over the Pesticide Notification Network at Washington State University's Pesticide Information Center. She can be reached at (509) 372-7493 or [jmthomas@tricity.wsu.edu](mailto:jmthomas@tricity.wsu.edu).*

**Code 1197**      **RESTRICTED USE PESTICIDE**      **Net Contents**

Toxic to fish and aquatic organisms  
For retail sale to and use only by certified applicators, or persons under their direct supervision and only for those uses covered by the certified applicator's certification.

**Brigade**<sup>®</sup>

**WSB Insecticide/Miticide**

EPA Reg. No. 279-3108  
EPA Est. 279-NY-1

**Active ingredient:**  
Bifenthrin, (2-methyl [1,1'-biphenyl]-3-yl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate

**Inert ingredients:** .....

\* Cis isomers 97% minimum, trans isomers 3% max  
U.S. Patent No. 4,238,505

**KEEP OUT OF REACH OF  
WARNING  
AVISO**

This label must be in the possession of the user at all times. If used no entiende la etiqueta, busque a alguien para que se la explique en detalle. (If you do not understand the label, get it explained to you in detail.)

**STATEMENT OF PRACTICAL TIPS**  
If swallowed: Get medical attention. Call a physician promptly for advice. Describe Precautionary Statements on the label. Do not be advised by a physician or qualified medical advisor until you have consulted the product label.  
If inhaled: Remove victim to fresh air. If discomfort continues, call a physician.  
If on skin: Wash with plenty of soap and water.  
If in eyes: Flush with plenty of water. Call a physician promptly for advice. Describe Precautionary Statements on the label. Do not be advised by a physician or qualified medical advisor until you have consulted the product label.  
**Note to Physicians:** Pesticide Hotline (800) 858-9898. If large amounts have been ingested, should be evacuated. Treatment is symptomatic and supportive. Fat, oil, or alcohol may increase absorption and may irritate the stomach.  
For Emergency Assistance Call (800) 331-3144  
See other panels for additional precautionary information.

**FMC**

FMC Corporation  
Agricultural Products Group  
Philadelphia PA 19103

Contact: 372001  
File Name: BrigadeWSB(SAL).pdf

**CALIFORNIA SUPPLEMENTAL LABEL**

**CALIFORNIA SPECIFIC REQUIREMENTS FOR STRAWBERRY HARVESTERS:**

Harvesters and other personnel performing tasks with all-day foliage contact in treated fields within five (5) days of application must wear a long-sleeved shirt, long pants, and shoes plus socks.

Following treatment of strawberry fields at rates of Brigade<sup>®</sup> WSB greater than 0.1 lb ai/acre, harvesters must wear gloves for five (5) days following application.

**PLEASE REFER TO CONTAINER LABEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS, FOLLOW ALL APPLICABLE DIRECTIONS, RESTRICTIONS, AND PRECAUTIONS ON THE CONTAINER LABEL.**

**THIS SUPPLEMENTAL LABELING MUST BE IN POSSESSION OF ALL USERS OF THE PRODUCT IN CALIFORNIA.**

**Caneberries\***

Crop	Pest	Rate		Comments
		lb. ai/Acre	oz./Acre	
Caneberries Including: Blackberries Bingleberries Dewberries Lowberries Marionberries Olallieberries Youngberries Loganberries Raspberries	Leafrollers	.05 - 0.1	8 - 16	Apply by air or ground equipment using sufficient water to obtain full coverage of foliage. (minimum of 10 gallons per acre by air and 50 gallons per acre by ground).  One application may be made pre-bloom and a second application may be made post bloom.  Do not apply within 3 days of harvest.
	Orange Tortrix			
	Root Weevils			
	Spider Mites	0.1	16	

\* Not for use in California

## FREE SUBSCRIPTION

If you would like to receive monthly e-mail notification when each month's new issue goes on-line, please send an e-mail to [majordomo@tricity.wsu.edu](mailto:majordomo@tricity.wsu.edu). The body of message should read **subscribe aenews\_dist**, and nothing (not even a signature line) should follow the subscribe message.

**AENews** welcomes your comments. Please direct any comments on newsletter content to Catherine Daniels, Managing Editor, (509) 372-7495, fax (509) 372-7491, or [cdaniels@tricity.wsu.edu](mailto:cdaniels@tricity.wsu.edu). Comments regarding newsletter format, Web usability, or other general concerns may be addressed to Sally O'Neal Coates, Editor, (509) 372-7378, fax (509) 372-7491, or [scoates@tricity.wsu.edu](mailto:scoates@tricity.wsu.edu).