Permethrin Use in Hawaii

Date: March 21, 2006

To: Jacqueline Guerry

Cc: Rick Melnicoe; Wilfred Burr; Rebecca Sicso; Keith Dorschner; Mike Kawate, Chris Davis

From: Cathy Tarutani

Subject: Re: Permethrin proposed crop label changes

Attachment

Jackie,

It seems I misunderstood your deadline. I believed that sending you our information on March 21 would be acceptable. While I admit our information would not have arrived by the close of business for you, the message (below the closing of what was supposed to be our cover message) did not indicate that a DECISION would be made on March 21. Wouldn't you agree?

In any event, right before I was about to send our information, I was checking my inbox for last minute contributions to our reply in this matter when I found your message. Imagine my surprise when I read it.

I feel obligated to send our contribution, anyway. I owe that to the people who went out of their way to provide this information. You will see that that a several areas (highlighted in yellow) where are growers will have problems with the mitigation measures for permethrin.

Following is the cover message for our response.

Dear Jackie,

I have attached a table of suggested permethrin use reductions for vegetables and melons in Hawaii. In summary, all retreatment days are set at seven (7) days (labels currently say as frequently as needed). There are also reductions in the total amount of a.i. per season. These are numbers that many growers can live with.

However, we must also report that a large grower of cucurbits (large by Hawaii standards) has expressed concerns about our suggested maximum application rates. Our proposed rates would result in a maximum of six (6) applications per year at the highest suggested applications rate. This would be the BARE MINIMUM that they can live with. Even though they do not apply eight (8) applications to their cucurbit crops every year, they would prefer to be able to apply eight applications per year, if necessary. As mentioned in our previous response, the use of permethrin on cucurbits has become more critical since the introduction of the pickleworm a few years ago. The pickleworm can be very damaging to all cucurbit crops and starts by attacking fruit at the flowering stage. Also, I would like to repeat that farmers of these crops in Hawaii are concerned about limiting the pest management tools necessary to control year-round pest pressure.
Permethrin has proven to be quite effective against the pickleworm, and, therefore, is the choice of many growers. Additionally, the ability to treat up to the time of harvest is important because growers harvest curcubit and other crops frequently for farmers' markets and other local venues.

In addition to the pickleworm, some of the insect pests managed by permethrin in Hawaii are corn thrips, corn earworm/tomato fruitworm, various caterpillar and leafhopper/planthopper insect pests. The reduction in allowable permethrin use would affect approximately 6,000 acres of vegetables and melons grown in Hawaii and 3,500 acres of seed corn (an industry valued at over $60M annually).

Questions have also arisen about the efficacy of lower application rates. In particular, some growers apply permethrin at the current maximum rate for an initial knockdown. Maintenance applications are done at lower rates. Without any research or information, many growers are, understandably, reluctant to agree to reduced rates. Is there information available about the efficacy of the reduced rates?

In the short time frame provided, we hope we have been able to address some of your questions. We would also like to acknowledge the assistance of the county agents, extension specialists, the Environmental Stewardship Committee of the Hawaii Farm Bureau Federation and the growers who provided the information.

We appreciate the opportunity to provide input on this issue, which is important to many in our grower community. Please contact us if you have further questions. We would also appreciate being informed about any developments with the permethrin reregistration.

Thank you,
Cathy

Cathy Tarutani
Department of Plant and Environmental Protection Sciences
3190 Maile Way | voice: 808-956-2004
St John Plant Science Lab., Room 017 | fax: 808-956-9675
University of Hawaii |
Honolulu, HI 96822

Following is the notification of the date by which the above and attached information were requested:

Keith, I was just asked by EPA to get all possible comments back to them by next Tuesday March 21. I really appreciate all of the comments you have been able to provide for us by the grower groups.
May I ask that you let any persons you expect to hear from that they have until then?

Many thanks,
Chris*

If more info can be provided, it would need to be by March 21.

Thanks, Keith
On 21 Mar 2006 at 18:09, Guerry.Jacqueline@epamail.epa.gov wrote:

Cathy,

We met today with the registrants to finalize (or get one step closer anyway) the permethrin mitigation for agricultural uses. We were able to incorporate most of the requests from various growers regarding application rate, seasonal rate, and/or retreatment interval.

Since we did not have specific information from HI, we were not able to address your concerns. I am hoping that some of the changes we made (increased rates or seasonal rates, and extended retreatment intervals) addresses some of HI's concerns.

Please review the attached sheet and let me know if there is additional areas of concern.

Thank you,

Jackie (See attached file: Rate Reductions (AG).doc)

Jacqueline Guerry
Chemical Review Manager
Special Review and Reregistration Division, RB3
(703) 305-0024
Rm. 604W34
Hawai‘i Permethrin Use Reduction Suggestions

<table>
<thead>
<tr>
<th>Crop</th>
<th>Pest(s)</th>
<th>Acceptable application rate (lb. a.i.)</th>
<th>Acceptable Re-treatment Interval (days)</th>
<th>Acceptable total allowed per season (lb. a.i.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asparagus</td>
<td>Onion thrips, beet armyworm, cutworm</td>
<td>0.05 – 0.10</td>
<td>7</td>
<td>0.3</td>
</tr>
<tr>
<td>Broccoli</td>
<td>Diamondback moth, imported cabbage worm, cabbage looper, thrips</td>
<td>0.05 – 0.10</td>
<td>7</td>
<td>0.6</td>
</tr>
<tr>
<td>Cabbage</td>
<td>Diamondback moth, imported cabbage worm, cabbage looper, thrips</td>
<td>0.05 – 0.20</td>
<td>7</td>
<td>0.8</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>Diamondback moth, imported cabbage worm, cabbage looper, thrips</td>
<td>0.05 – 0.10</td>
<td>7</td>
<td>0.6</td>
</tr>
<tr>
<td>Cantaloupe*</td>
<td>Pickleworm, melon thrips, rindworm, leafhoppers</td>
<td>0.10 – 0.20</td>
<td>7</td>
<td>1.2</td>
</tr>
<tr>
<td>Cucumbers*</td>
<td>Pickleworm, melon thrips, rindworm, leafhoppers</td>
<td>0.10 – 0.20</td>
<td>7</td>
<td>1.2</td>
</tr>
<tr>
<td>Pumpkins*</td>
<td>Pickleworm, melon thrips, rindworm, leafhoppers</td>
<td>0.10 – 0.20</td>
<td>7</td>
<td>1.2</td>
</tr>
<tr>
<td>Squash*, general</td>
<td>Pickleworm, melon thrips, rindworm, leafhoppers</td>
<td>0.10 – 0.20</td>
<td>7</td>
<td>1.2</td>
</tr>
<tr>
<td>Watermelons*</td>
<td>Pickleworm, melon thrips, rindworm, leafhoppers</td>
<td>0.10 – 0.20</td>
<td>7</td>
<td>1.2</td>
</tr>
<tr>
<td>Eggplant</td>
<td>Flea beetles, leafminers</td>
<td>0.10 – 0.20</td>
<td>7</td>
<td>1.0</td>
</tr>
<tr>
<td>Peppers</td>
<td>Corn earworm, flea beetles, leafminers, pepper weevil</td>
<td>0.10 – 0.20</td>
<td>7</td>
<td>1.2</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>Tomato fruitworm, beet armyworms, tomato pinworm, leafminers</td>
<td>0.05 – 0.20</td>
<td>7</td>
<td>0.8</td>
</tr>
<tr>
<td>Celery</td>
<td>Aphids, leafminers</td>
<td>0.05 – 0.20</td>
<td>7</td>
<td>1.2</td>
</tr>
<tr>
<td>Lettuce</td>
<td>Beet armyworm, aphids, leafminers, leafhoppers, cutworms</td>
<td>0.05 – 0.20</td>
<td>7</td>
<td>1.2</td>
</tr>
<tr>
<td>Corn</td>
<td>Corn thrips, corn planthopper, corn earworm, beet armyworm, lesser cornstalk borer</td>
<td>0.10 – 0.20</td>
<td>7</td>
<td>0.4</td>
</tr>
<tr>
<td>Sweet Corn</td>
<td>Corn thrips, corn planthopper, corn earworm, beet armyworm, lesser cornstalk borer</td>
<td>0.10 – 0.20</td>
<td>7</td>
<td>0.4</td>
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<tr>
<td>Onions</td>
<td>Thrips, beet armyworm</td>
<td>0.15 – 0.30</td>
<td>7</td>
<td>1.0</td>
</tr>
</tbody>
</table>

* Large (by Hawaii standards) cucurbit growers have concerns about the maximum annual rates. The numbers in this table represent the bare minimum that they can live with. The use of permethrin on cucurbits has become more critical since the introduction of the pickleworm a few years ago. The pickleworm can be very damaging to all cucurbit crops and starts by attacking fruit at the flowering stage.