Idaho Potato Cyst Nematode Cooperative Program Update

USDA/APHIS Plant Protection & Quarantine
Idaho State Department of Agriculture

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PCN Eradication Treatments Begin

Situation Summary
On April 19, 2006, officials of USDA’s Animal and Plant Health Inspection Service (APHIS) and the Idaho State Department of Agriculture (ISDA) announced the detection of potato cyst nematode (PCN), *Globodera pallida*, a major pest of potato crops. This was the first detection of the pest in the United States.

Agricultural Threat
Potatoes and tomatoes are the principal economically significant crops attacked by PCN. At high population levels, PCN will greatly reduce potato yields.

Control Measures
APHIS and ISDA have implemented a regulatory program designed to prevent the pest’s spread to other fields. The program defines restrictions on the movement of plants and soil, required sanitation procedures for equipment and limitations on planting.

APHIS and ISDA scientists have developed a PCN pest eradication program including soil sampling, soil treatments, planting and managed cultivation to ensure the continued vitality of agriculture in Idaho.

PCN Program Facts (Through 05/01/07)

<table>
<thead>
<tr>
<th>Category</th>
<th>2006</th>
<th>2007</th>
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</thead>
<tbody>
<tr>
<td>Date of Detection</td>
<td>4/19/06</td>
<td></td>
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<tr>
<td>Positive Fields (Total)</td>
<td>7</td>
<td></td>
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<tr>
<td>‘06 Production Fields Surveyed</td>
<td>282</td>
<td></td>
</tr>
<tr>
<td>‘07 Production Fields Surveyed</td>
<td>93</td>
<td></td>
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<tr>
<td>‘06 Seed Fields Surveyed</td>
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<tr>
<td>‘07 Seed Fields Surveyed</td>
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<tr>
<td>‘06 Facilities Surveyed</td>
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<td>‘07 Facilities Surveyed</td>
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<tr>
<td>‘06 Samples Collected</td>
<td>&gt;35,346</td>
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<tr>
<td>‘07 Samples Collected</td>
<td>2,623</td>
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<td>Compliance Agreements</td>
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</tbody>
</table>

Soil Treatment Process

Soil fumigation, an effective method of controlling PCN, will be conducted on PCN positive fields twice annually until the pest is successfully eradicated.

The Spring treatment will include fumigation with the chemical, methyl bromide.

- Soil to be treated is covered with a plastic tarp.
- The chemical is injected approximately 10-12 inches beneath the soil surface.
- The tarp remains on the soil for at least 24 hours.
- The tarp is removed and normal operations resume.

The Fall treatment will include fumigation with another commonly used soil fumigant, Telone II. The application method is the same as the Spring treatment except that the manufacturer does not recommend covering the soil with a tarp.

- Treatment is conducted by a licensed applicator under contract to USDA.
- Residents near fields to be treated will be notified in advance

Precautions

- Heed warning signs posted in or near treated fields.
- Keep children and pets away from treated fields as long as warning signs are posted.

If you have questions please call the PCN Program Office at 208-522-2431

CONTACT US:
PCN Program Office
2281 West Heyrend Way, Ste B
Idaho Falls, ID 83402-5805
Tel. (208) 522-2431
Fax: (208) 522-2434
Regulatory Office
Tel. (208) 535-7304

Hours of Operation:
Monday through Friday
8:00am-4:30pm
Questions and Answers about PCN treatments

Q. Why is treatment for PCN necessary?
A. Fortunately, PCN was detected before it spread throughout the state. It has only been detected in seven fields in the Shelley area. This means that the problem is small enough that eradication of the pest is possible.

Q. Are treatments other than soil fumigation possible?
A. Soil fumigation is the most effective treatment for PCN. There are other treatments, but they have less chance of success.

Q. Are the soil fumigants being used safe?
A. The chemicals used to fumigate soil in the infested fields are well understood and documented. They have been used safely in many areas of the United States for years. When applied under label directions, as they are in this case, there is an excellent margin of safety for human and environmental health.

Q. Should I keep children and pets away from treated fields?
A. Humans and animals should avoid exposure to any pesticide. Warning signs posted at fields where treatment occurs should be strictly obeyed. For additional piece of mind, you may wish to restrict children and pets from playing near treated fields until after the plastic and warning signs are removed.

Q. Should the chemicals be applied when it is windy?
A. The contractor will carefully monitor wind conditions to ensure that safety limits are not exceeded. Chemical application will be discontinued during adverse weather conditions.

Q. How many treatments will be conducted?
A. Treatments will continue at the rate of two per year until monitoring data indicates that the pest has been successfully eradicated.

Q. Does the material have an odor?
A. Soil fumigant chemicals are mixed with a special chemical to make them detectable. The contractor will monitor the work area to make sure that there is no risk to the public. It is important to note, however, that when the plastic is removed, the odor of decayed plant material may be detected. The contractor will not remove the plastic until it is safe to do so.

Q. Can the plastic be used for other purposes after the soil treatment is concluded?
A. Only the contractor is authorized to remove and dispose of the used plastic covering and it is not reused.

Q. How long do the chemicals persist in the environment?
A. The fumigation chemicals break down in the soil in a matter of a few days.

Q. Is it safe at any time to be in treated fields?
A. Only authorized personnel should be on these fields at any time, so as to prevent the spread of PCN.

Q. Are people who live near the treated fields at risk of injury from the chemicals used?
A. Obeying the posted warning signs and staying out of treated fields until signs and tarps are removed are sufficient to prevent injury from the chemicals.

Q. Are people with chemical sensitivity at risk?
A. Persons with special chemical sensitivities should contact their personal health care provider and follow his/her advice.