



VOLUME 2, ISSUE 4

Idaho Potato Cyst Nematode Cooperative Program Update



AUGUST, 2007

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

PCN Eradication Treatments Begin

PCN Program Facts

(Through 07/27/07)

Date of Detection	4/19/06
Positive Fields (Total)	7
'06 Production Fields Surveyed	282
'07 Production Fields Surveyed	156
'06 Seed Fields Surveyed	491
'07 Seed Fields Surveyed	34
'06 Facilities Surveyed	56
'07 Facilities Surveyed	1
'06 Samples Collected	>35,346
'07 Samples Collected	4,881
Compliance Agreements	107

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.



Potato Cyst Nematode

The goals of APHIS and ISDA in the Potato Cyst Nematode Response and Recovery Program are to:

- Prevent the spread of PCN
- Delimit the current infestation
- Eradicate the infestation
- Restore lost foreign markets
- Preserve current markets.

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.

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

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 first treatment included fumigation with the chemical, methyl bromide.

- Soil was covered with a plastic tarp.
- The chemical was injected approximately 10-12 inches beneath the soil surface.
- The tarp remained on the soil for at least 24 hours.
- The tarp was removed and normal operations resumed.

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

Safety

- Safety is the primary concern of the PCN project staff.
- All chemicals used by the PCN program are applied according to label directions and in compliance with all state and federal regulations.
- Each treated field is marked with warning signs.

- 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 for five days or as long as warning signs are posted, whichever is greater.

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

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 for five days or until warning signs are removed, whichever is greater.
- 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. 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. What should I do if I become ill.
- A. Consult your local health care provider and follow his/her instructions.
- 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 for five days or until signs are removed (whichever is greater) 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.
- 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. 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.