

## 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. The nematode cysts were detected during a routine survey of tare soil at an ISDA grader facility in eastern Idaho. In that survey, more than 3,500 samples were analyzed, and only one was positive. That survey, conducted as part of Cooperative Agricultural Pest Survey (CAPS), was designed to demonstrate that areas are free of exotic nematodes or, if they are present, to detect them as soon as possible after their introduction into domestic production systems. In response to the detection, Canada, Mexico and Korea shut off importation of potatoes from Idaho. Japan cut off importation of potatoes from the U.S.

On June 13, 2006, soil samples collected from a 45-acre field in northern Bingham County tested positive for PCN. On July 12, 2006, a soil sample from a second 60 acre field in Bingham County tested positive. Between September 27 and October 30, 2006, five additional fields within close proximity to the two initial fields were confirmed positive for PCN. These findings are not surprising because of the fields' proximity to already-identified positive fields. ISDA and APHIS officials continue to believe the PCN infestation in eastern Idaho is isolated because of the more than 38,000 samples taken in 2006, all have been negative for PCN except for those from seven fields in close proximity. The 2006 samples are from investigations involving 224 production fields, 459 seed potato fields, and 58 facilities. Additional surveillance will continue.

On August 28, 2006 APHIS issued a Federal Domestic Quarantine Order to prevent the spread of PCN through regulatory authority provided by Section 412(a) of the Plant Protection Act of June 20, 2000, as amended and the State of Idaho issued a parallel State Rule in support of the Federal Order. These regulations established restrictions on the interstate and intrastate movement of certain regulated articles from Idaho.

On May 9, 2007 ISDA and USDA initiated a program to treat fields which have tested positive for PCN. The program includes pre-treatment sampling, fumigation, and post treatment sampling for up to two treatments per year. The PCN program contracts with growers for activities related to eradication of PCN from infested fields including access, tilling, irrigation and maintaining a biofumigant planting at a fixed cost per acre. The first fumigation process was completed on May 24, 2007. A bio-fumigant oil radish has been planted on the fields to add an additional measure of control and prevent soil erosion over the summer months. The oil radish plants will be tilled into the fields to replenish organic matter and rejuvenate the soil after fumigation. The oil radish also releases a compound which is toxic to the nematodes. No crops are being grown for harvest in any of the infested fields. A total of 9,478 pretreatment samples were collected from the seven infested fields. PCN cysts have been extracted from those samples and maps are being prepared to illustrate the infestation levels and cyst density patterns in each field. Post treatment samples are currently being collected from the infested portions of the seven fields but no results are available yet. All post treatment samples from PCN positive fields will be collected and analyzed prior to the next fumigation preparation date. The analysis will demonstrate the rate at which the viability of the nematode cysts is declining after each eradication treatment.

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.

#### UPDATES AND RELATED INFORMATION:

- A trace of seed sources for the positive fields did not yield any evidence that seed was the source of infestation. Over 90% of the 2006 Idaho certified seed potato crop was surveyed and found negative for PCN.
- Other sources of introduction such as imported farm equipment, nursery stock, foreign flower bulbs, and other soil bearing items were investigated without providing any leads as to the origin of the infestation.
- Surveyors sampled other fields that are located near the positive detections or have common equipment, tenants or workers.
- Additional unassociated fields are being surveyed throughout Idaho.
- The positive fields are under federal restrictions (no more potatoes to be planted, no soil to leave and equipment to be cleaned). A surrounding regulated area is restricted for the movement of soil and other articles that could spread PCN.
- Canada removed its prohibition on the importation of nursery stock from Idaho on October 17, 2006 provided that the plants come from outside the regulated area. Canada and the U.S. also entered into an agreement for the import and export of seed potatoes based on a specific protocol for survey and certification. Idaho seed potatoes from outside the regulated area are eligible for export provided they meet the protocol requirements. Potatoes for consumption may be exported to Canada from both within and outside the regulated area.
- Japan has reopened its market after temporarily suspending importation of all varieties of chipping potatoes from the U.S. in April, 2006. The potatoes may only be shipped from Arizona, Wisconsin, Oregon, California, Colorado, Texas, New Mexico, North Dakota, Florida, Michigan, Minnesota, Maine and Washington, provided that potato fields are certified free of PCN prior to export and the potatoes are washed before exporting. Before Idaho is eligible to export chipping potatoes to Japan, the state must complete a comprehensive PCN survey. Currently, all U.S. chipping potatoes exported to Japan must be grown from seed potatoes produced outside of Idaho. APHIS will continue to work with Idaho and Japan to allow for the export of chipping potatoes from Idaho, and the use of Idaho seed in crops destined for Japan.
- On April 6, 2007 Mexico reinstated the importation of potatoes from Idaho in provided that they meet certain conditions and are grown outside the regulated area. Conditions include field sampling for PCN prior to potato planting.
- Korea still prohibits the importation of potatoes from Idaho due to PCN.
- Both seed and production sampling are underway in Idaho. National potato industry officials continue to work closely with ISDA and APHIS to encourage cooperation by growers, packers and processors to insure that surveys are conducted swiftly and efficiently.
- In addition to Idaho, there are 25 states with signed or pending agreements to participate in the 2007 national PCN survey including: AK, AZ, CA, CO, DE, FL, HI, IN, ME, MN, MT, ND, NE, NJ, NM, OR, PA, SD, TX, UT, VA, WA, WI, WV and WY. To date in 2007, 2594 samples have been collected from 203 fields in connection with the national survey.
- The PCN program in Idaho has already collected 5,226 samples from both seed and production fields in 2007 to demonstrate freedom from PCN outside the known infested fields.
- The Federal Order and current State Regulation are expected to be replaced by Interim Rules within the next few weeks. The Interim Rules may result in changes to the regulated area, changes in regulated articles and changes in the restrictions on regulated articles. The Interim Rules will

provide for a public comment period which will allow stakeholders in Idaho and across the U.S. to express opinions on how the ongoing regulatory program should be conducted.