

Potato Cyst Nematode (PCN)  
Stakeholder Update  
(5/15/06)

## 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 is the first detection of the pest in the United States. The microscopic nematodes pose no threat to human health and never actually enter the tuber, but can reduce the yield of potatoes through root damage. There is no evidence that the quality or yield of potatoes grown in Idaho has been affected. APHIS and ISDA are implementing actions to determine if the pest is distributed in fields in Idaho and, if so, prevent movement of PCN to uninfested areas. Officials are working cooperatively with Extension Service and the potato industry to provide Best Management Practices to deal with potato pest issues.

### Updates:

- A mechanical wheel sampler has arrived in Idaho. This will allow ISDA and AHPIS scientists to continue to collect soil samples from fields more efficiently, and use fewer surveyors. The sampler is used as a tractor implement run across a field filling soil sample bags mounted on the implement. The sampler is based on designs used for the Golden Cyst Nematode in New York. The sampler and tractor must be thoroughly cleaned with a high pressure washer before it can be moved from field to field. This procedure is in place to prevent inadvertent movement of any soil-borne pests. The first run of Idaho's new mechanical wheel sampler took place on a seed potato field in southern Idaho last week. Pictures of the sampler are available from ISDA Public Information Officer Wayne Hoffman. Email [whoffman@idahoag.us](mailto:whoffman@idahoag.us).
- To date, soil samples collected total more than 2,500 in the survey that began as a result of the PCN detection. This is in addition to the 3,000 soil samples collected since last August as part of the original detection survey. Samples sent to labs have yielded no additional potato cyst nematodes. Only the original sample of tare dirt taken at an Idaho potato grading station has produced potato cyst nematodes. Other types of cysts, commonly associated with cereal crops, have been detected, but these are ordinary detections of non-quarantine pests.
- ISDA and APHIS investigators continue to trace back possible sources of the potato cyst nematode, under an assumption that the PCN may have come from a potato field in Idaho. However, so far we have no conclusive evidence that this is the case. We are also exploring the possibility that the cysts may have been conveyed via machinery, clothing, wind, wildlife, or other means. All of these possibilities are under review by ISDA and APHIS scientists. Because of the possibility that the PCN did originate with an Idaho potato field, ISDA and APHIS continues to explore seed sources, but so far, that search has only yielded negative results.
- A team of scientists recently discussed the potato cyst nematode situation in Idaho, and generally agreed with the steps being taken by ISDA and APHIS. The group also agreed that USDA's potato cyst nematode identification data should be independently reviewed by a third party, as many nematodes have similar physical characteristics.

## REGULATION

APHIS emergency action notifications (EANS) and ISDA restrictions have been imposed at suspect sites. These state and federal actions restrict the movement of soil, plants, plant material and farm equipment which may have been exposed to the potato cyst nematode and they are intended to prevent the introduction and dissemination of the pest. To date, these restrictions have been imposed in Bingham, Bonneville, and Jefferson counties, but they are limited to only seven sites which include fields, cellars and potato handling

facilities. Previously restricted fresh packed product has been released to move in commerce. Potatoes and potato product are moving normally in domestic commerce.

#### PERSONNEL

Approximately 30 APHIS and ISDA personnel are currently working on the cooperative control program.

#### TRADE

- Trading partners have reacted in various ways to the detection of PCN.
- Japan has suspended all potato imports from the U.S.
- Canada, Korea, and Mexico suspended potato shipments from the State of Idaho.
- Taiwan, Malaysia, and Singapore have asked for information, but have taken no action to suspend potato imports from the United States.