GLOBAL Extension and Outreach

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GLOBAL Extension and Outreach

Together with our stakeholders:

• **Increase the understanding of impacts of** *Globodera* - presentations, workshops, field days;

• Extension and outreach materials;

• **Minimize adverse economic impacts to** U.S. agriculture and food security;
Objectives
Enhance stakeholder engagement and action in a Globodera place and time

• **Agricultural practices** for potato production.
• Examine **economic implications**
• Determine **changes** due to potato cyst nematodes
• Determine **regulatory goals** for *Globodera* spp. and **benefit** of containment and quarantine policies
Objectives (cont.)

• Engage minority groups in management of invasive agricultural pests.

• Use the Extension, Outreach, and Education efforts for this proposed work to serve as a model for other present and future invasive agricultural pests.
Specific Objectives from the Advisory Board

• How is resistance developed and deployed for use in an eradication program?
• How and why does the regulatory policy in Europe differ from that of the U.S.?
• What is the current situation with *Globodera* presence in ID, OR, and NY?
Specific Objectives from the Advisory Board

• What are the differences among states which allows policy to differ for regulation of similar quarantine pests…

…why are resistant potatoes allowed to be planted in *G. rostochiensis* infested fields in New York, but not in *G. pallida* infested fields in Idaho.
Objectives (cont.)

• Develop coupled models of nematode population dynamics x potato cropping system x pest economic impacts, to predict effects of susceptible vs. resistant potato cultivars on crop loss.
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<th>Year</th>
<th>Workshops</th>
<th>Scientific meetings</th>
<th>Stakeholder meetings</th>
<th>Presentations</th>
<th>Publications</th>
<th>Industry newsletter and popular press articles</th>
<th>Field days</th>
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GLOBAL Symposia

- Potato Cyst Nematode Symposium. PAA annual meeting July 24, 2018, Boise, ID
Other Symposium Participation


• 32nd Symposium of the European Society of Nematologists (ESN) in Braga, Portugal. August 29 – September 1, 2016

• Risk assessment and eradication of Globodera spp. in U.S. production of potato. Poster presented at the 33rd Symposium of the European Society of Nematologists.
Results disseminated at multiple International, National, Regional, and PNW scientific conferences:

- Western Society of Weed Science
- Potato Association of America
- SON, ONTA, European
- Society of Nematologists (ESN)
- American Phytopathological Society Caribbean Division
- World Potato Congress, Cusco, Peru
- Phytopathological Society (APS) Pacific Division Meeting
- Idaho Association of Plant Protection annual meetings
- Idaho Weed Control Association annual meetings
Interaction and Results to Stakeholder Advisory Board

- GLOBAL Stakeholder Advisory Board annual meetings.
- Periodic conference calls with Stakeholder Advisory Board
- Meetings with Idaho growers of PCN infested fields
- Joint Golden Nematode Workgroup Meeting and GLOBAL Project Annual Meeting
Results disseminated to the Potato Industry:

- University of Idaho Extension Annual Potato Conference including Spanish language workshop presentations (Contina)
- **Potato Expo**
- 2019 Potato-Grower Processor Meeting, Western NY Potato Growers
- **Northwest Potato Research Consortium** research review and proposal meetings
Results disseminated to the Potato Industry (cont.):

- Meeting with individual growers and other stakeholders such as County Weed Superintendents.
- **SpudMan, Potato Grower, Potato Country, distribution and online**
- **University of Idaho Graduate Student Tour of Potato Industry in 2017 and 2019:** interactions with potato production and seed growers, IPC, USDA-APHIS, UI Researchers and Extension Specialists. Potato Processors. Retail outlet potato sales
Field Days and Open Houses:

• University of Idaho Snake River
• Weed Management Annual Tour. UI Aberdeen R&E Center.

• University of Idaho Twilight Tours. UI Aberdeen R&E Center.
• Steuben County Twilight Potato Meeting, Cornell Cooperative Extension
This quarterly newsletter serves to bring information to our stakeholders and the public.

Distributed at stakeholder conferences and field days and is made available online.

Seven issues have been published to date in both English, Spanish, and more recently a French edition was added.

Online newsletter subscribers function attracts a following, including subscribers in Australia, Canada, Egypt, France, India, Kenya, Morocco, the Netherlands, and Mexico.
GLOBAL Website
www.globodera.org

• Targeted to both English, Spanish, and French speaking audiences
• Designed to keep stakeholder audience informed throughout the year.
• The website allows viewers to see videotapes of international scientist presentations and/or posters as well as link to journal articles, detailing the Project's published research findings.
Survey respondents by year

Total of 360 respondents (94% at Idaho Potato Conference)
Survey respondents by state

Includes 9 states across US

- Idaho: 350 respondents
- Other State: 10 respondents
Survey respondents by occupation

67% of industry were producers/farmers
Effectiveness of education
(To what extent has your knowledge increased as a result of participation?)
Effectiveness of education

(What is the most important way to prevent the spread of a quarantined pest?)

- English
- Spanish
Perception of threat
(Extent to which PCN’s are a threat to international markets?)
Perception of threat
(Extent to which PCN’s are a threat to potato industry in their state?)
Effectiveness of education
(What makes PCN difficult to control?)