

Recovery Plan
for
Potato Wart Disease
caused by
Synchytrium endobioticum
(*Schilberszky*) Percival



Working Group Process

- Selection of participants
 - APS members for commodity
 - USDA agency personnel
 - Others suggested by working group
- Invitation
- Working Group comprised of positive responses

Working Group Process

Working Group on Potato Wart

E. Heyward Baker, USDA RMA; Dave Bell, USDA RMA; Terry Bourgoin, USDA-APHIS-PPQ; Larry Brown, USDA-APHIS-PPQ; Russ Bulluck, USDA-APHIS-PPQ; Joel Floyd, USDA-APHIS-PPQ; Lynn Goldner, USDA-APHIS-PPQ; Ray Hammerschmidt, Michigan State University; Sharon Hesvick, USDA RMA; Lynnae Jess, Michigan State University; Steven B. Johnson, University of Maine; Willie Kirk, Michigan State University; Liz Lopez, USDA RMA; Sandy Perry, Michigan State University; Stephen Poe, USDA-APHIS-PPQ; Gary Secor, North Dakota State University; Jim Sheldon, USDA RMA; Kent Smith, USDA-ARS; Walt Stevenson, University of Wisconsin

Potato Wart Recovery Plan Executive Summary

Why Potato Wart?

- Most important world-wide quarantine plant pathogen infecting potato.
- Latent persistence of the resting spores.
- Lack of effective chemical control measures.
- Very few resistant varieties that are horticulturally accepted.

Potato Wart Recovery Plan Executive Summary

- Characterized by development of tumor-like galls or warts on tubers and underground portions of stems.
- Only a slight reduction in vigor may be noticed so disease may not be evident until potatoes are dug at harvest.

Potato Wart Recovery Plan Executive Summary

- Spread is through infected seed potatoes and movement of contaminated soil.
- Exclusion of the pathogen from non-infested areas is the most efficient method of disease control.

Potato Wart Recovery Plan Executive Summary

- >18 million metric tons of fresh and seed potatoes with a market value of \$2.9 billion.
- Economic impact of potato wart not from disease losses but from loss of international trade markets, long-term quarantines and regulatory restrictions.

Potato Wart Recovery Plan Priorities

Research Priorities

- Evaluation of US potato varieties for resistance/susceptibility.
- Breeding for resistance.
- Developing improved molecular diagnostic tools for detection in plants and soil.
- Delimiting surveys and the potato wart surveillance model.

Potato Wart Recovery Plan Priorities

Extension and Educational Priorities

- Continue to build awareness among professional and nonprofessional clientele.
- Continue participation in NPDN First Detector training.
- Promote awareness with Master Gardener curriculum.