Regulatory working group technical questions and preliminary answers

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Why? What? Who?

- P. ramorum Program asked CPHST to extract scientific questions from working group report
- A virtual technical working group was established via email
- Phytophthora researchers (~100) from a large group accumulated over time

Living document

- 1 week turnaround
- Still taking input
- Preliminary answers
- Initial consensus provided
- Based on science only

The questions

- Based on each committee report
- Developed by CPHST, program and directly from the reports
- High risk plants
  - What are they?
  - Can they be better defined?
- Q-37
  - Genera with greatest introduction risk?
  - Is field deployable technology available?
- Regulatory Survey
  - Should water testing become standard practice?
  - What should be done with water positives when found?
  - How is P ramorum surviving/reporducing in water?
  - When detected outside the US, should Pram be added to host list?
- Triggers
  - Are there additional scientifically valid triggers that should be used?
- CCP/BMP
  - Most important BMP's?
  - Most cost-effective BMP's
- Protocols
  - Should soil and media baiting be used?
  - Should water baiting be used?
  - Should positive water/soil trigger nursery ccp evaluation?
  - Can P ramorum go underected in soil/media?

High Risk Plants

- What constitutes a “high risk” plant? Volume of trade? Susceptibility? Sporulation potential? Are there a combination of factors that needs to be considered?
- Sporulation potential and susceptibility are critical
- Volume of trade important as well

Q-37

- Plant genera with greatest risk
  - *Rhododendron, Viburnum, Pieris, Kalmia and Camellia,* pose the greatest risk for introduction of new isolates
- Currently deployable technologies for Plant Inspection stations?
  - ELISA –based flow through and dipsticks
  - Sensitivity less than lab-based or PCR
  - Phytophthora spp only.

Regulatory Survey

- Should nursery water testing become the standard for nursery survey and / or certification?
  - Along with visual survey, yes
- What should be done when water positives ware found?
  - should trigger immediate, intense survey of nursery
  - May mean an active infestation at nursery
- Is P ramorum reproducing or surviving in water?
  - Could be on roots or leaf debris
  - Could be from chlamydospore germination
  - If Pram is being detected, reproduction is likely occurring

Triggers

- Are there any additional triggers that should cause a nursery to be placed under regulatory control that are scientifically relevant and should be examined?
  - Positive soil, potting mix or water

CCP / BMP

- What are the most important best management practices to control *Phytophthora ramorum* from a scientific perspective?
  - Scouting and inspection;
  - water management (drainage, quality, irrigation and capture);
  - isolation of material from direct contact with the ground;
  - isolation of newly acquired material;
  - clean and sanitize all equipment;
  - wash and sterilize any recycled containers.
- what BMPs would be the most cost effective?
  - no clear answer is apparent
  - Nursery by nursery

Protocols

- Should soil and media baiting be used as a detection method for *Phytophthora ramorum*?
  - Imprecise, prone to false negatives
  - Use only after other positives detected
- Should water baiting be used as a detection method for *Phytophthora ramorum*?
  - Yes
  - practical, cost-effective and samples large areas efficiently
- Should positive water and/or soil trigger evaluation of critical control points (CCPs) and application of Best Management Practices (BMPs) within the nursery?
  - Yes
- Can *P. ramorum* go undetected in soil and potting mix? If so, what is the best method to mitigate any risk associated with soil and potting mix?
  - Yes
  - Mitigate with steam sterilization of potting mix
  - Water control, BMP's