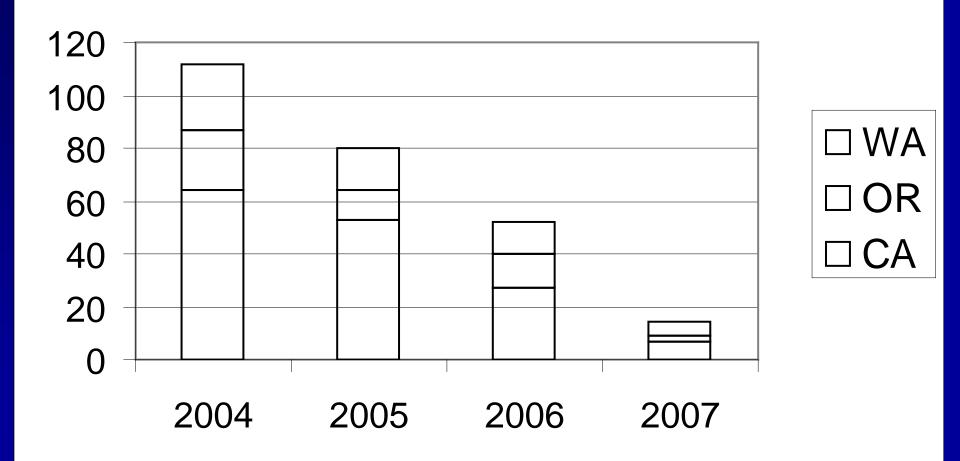
Continental Dialogue on non-native Forest insects and diseases

Phytophthora ramorum – A Nursery Perspective

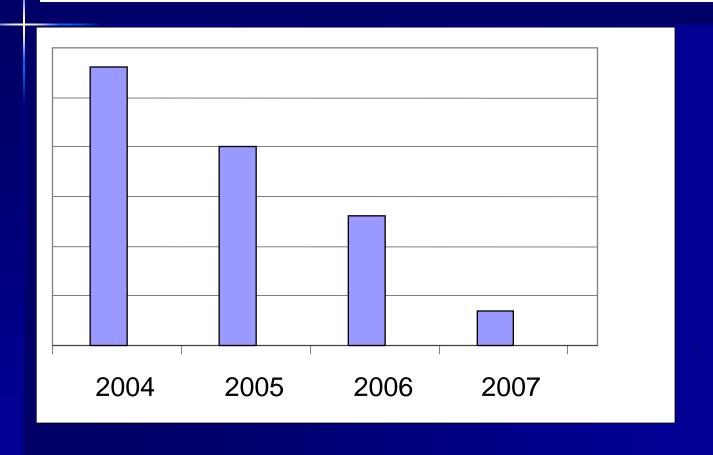
27 October 2009
San Francisco, CA
Karen Suslow
Hines Nurseries LLC



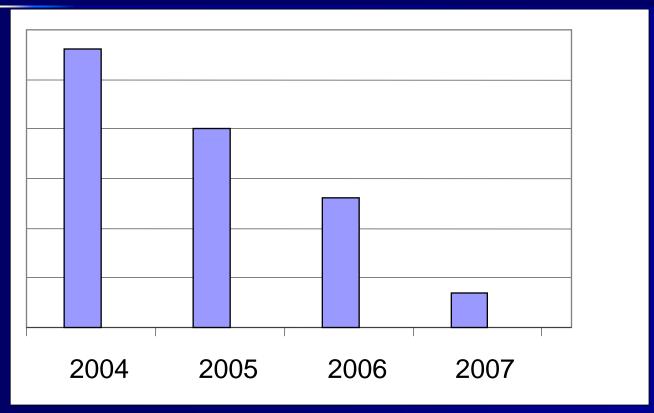
West coast nurseries found to be infected with *P. ramorum* via nursery inspection/survey



What factors influenced the decline?

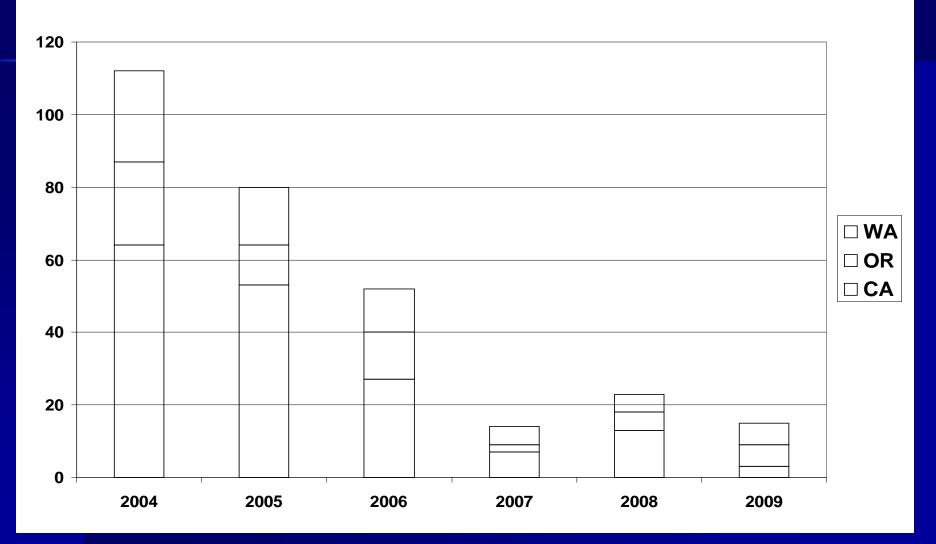


What factors influenced the decline?

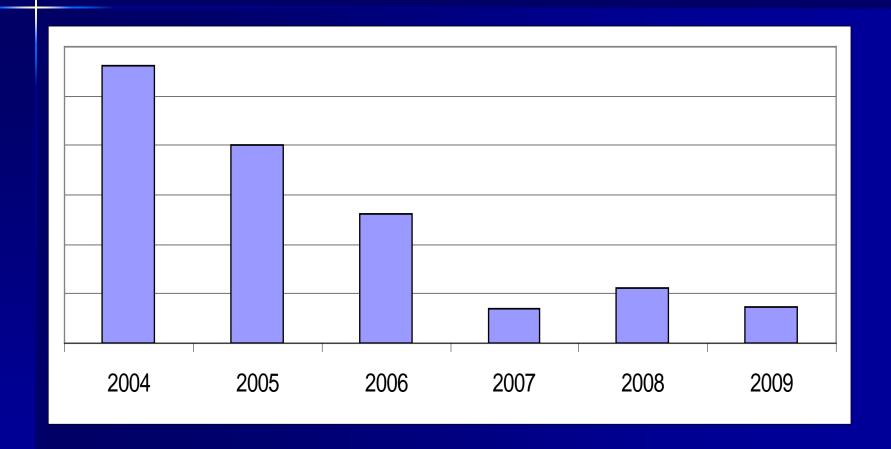


- Interim Rule
- Grower Trainings/Awareness
- Research

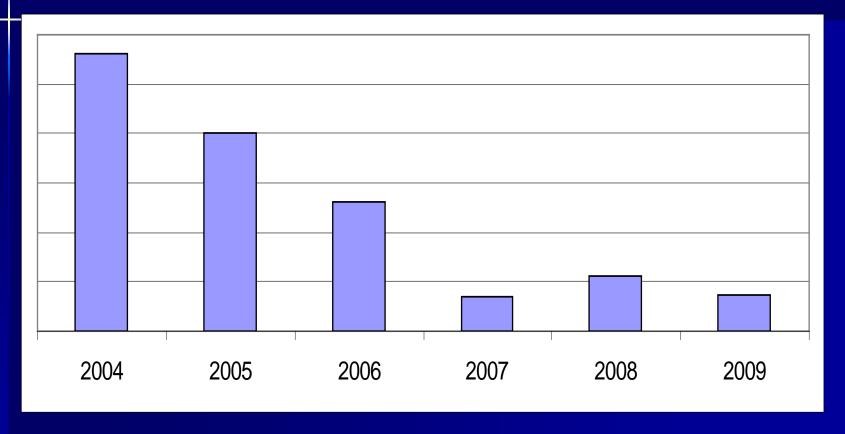
West coast Nurseries found to be Infected with *P. ramorum* via nursery inspections/surveys



What factors continue to influence the decline?

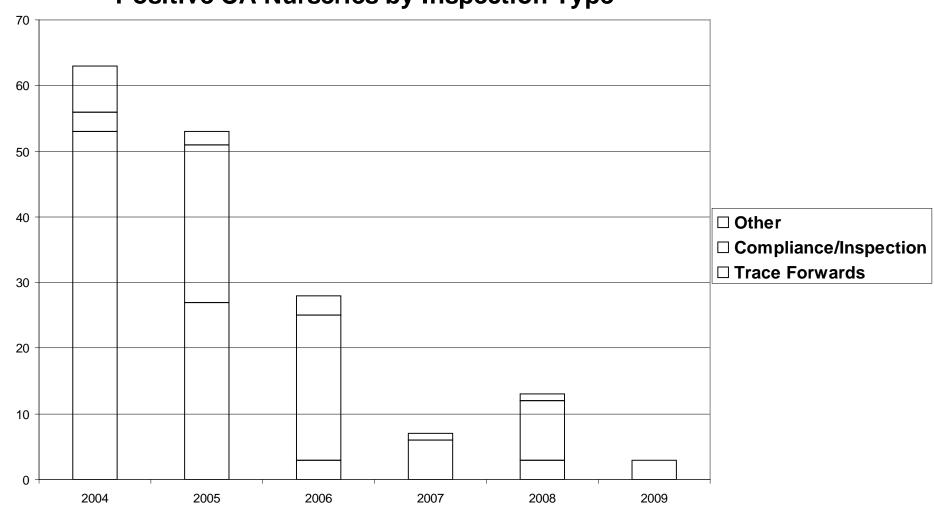


What factors continue to influence the decline?



- Identification of the High Risk Plants
- Inspecting host plants when pathogen is most prevalent
- 2-3x/yr inspection of HR plants

Positive CA Nurseries by Inspection Type



Breakthroughs

- Increased awareness
- Better trained, experienced inspectors
- Detections made during surveys/inspections versus after the product shipped via trace forwards
- More comprehensive grower trainings
- Development of HRI/ANLA BMPs
- Development of GAIP

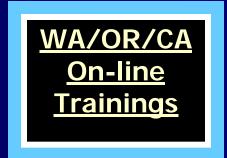
Breakdowns

- Recurrent nurseries in the west
- Positive nurseries elsewhere in the country
- Recurrent nurseries in the east and southeast
- Positive waterways outside the west coast
- Aerial Phytophthora also inhabit rhizosphere





Mapping the Future











Mapping the Future

All states with *P. ramorum*-infected nurseries need to ...

WA/OR/CA
On-line
Trainings





BMP Pilot Program

- Voluntary
- Identifies Critical Control Points in a nursery operation
- Risk Mitigation Measures
 - = HRI/ ANLA BMPs to prevent the introduction of Phytophthora ramorum into nursery operations
- Systems Approach
- Based on sound science
- 3rd party auditor is CDFA

Grower Assisted Inspection Program

- Follows HACCP Systems Approach
- Identify Critical Control Points (CCP)
 - focus on four: Media, Used Containers, Water and Buy-ins
- Develops BMPs in support of CCP
- Creation of Mitigation Manual
- Focuses on reducing *Phytophthora* populations in a nursery
- 3rd Party auditor is ODA

WA/OR/CA On-line Trainings

 Phytophthora on-line training course for nursery growers - OSU

http://ecampus.oregonstate.edu/workforce/phytophthora/

- Training module on *P. ramorum* from WA state http://www.puyallup.wsu.edu/ppo/resources.html
- COMTF trainingswww.suddenoakdeath.org

National Ornamental Research Site – Dominican University CA

- First research site to study invasive pests and diseases in a simulated nursery setting
- Farm Bill 2008 funding, administered through CPHST ... largest grant CPHST has ever awarded to a single organization in a one-year period
- Further validation of *P. ramorum* BMPs
- National and International support
- Future opportunities to study other quarantined pest in CA
- Regional applicability

US Nursery Certification Program

- Harmonized with Canadian Nursery Certification Program
- Phytosanitary certification program for US nurseries to ship product into Canada
- Offers an alternative to standard phytosanitary certification
- Implements IPPC Standards
- Meets NAPPO Guidelines
- Comprised of:
 - Four site inspections
 - Creation of Production Manual
 - Documentation review

