Canadian *Phytophthora ramorum* 2006 Update

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Abstract

Annual national surveys for *Phytophthora ramorum* have been conducted in Canada since 2002. Over 37,361 samples were taken in 2006, which focused on 251 wholesale and retail nurseries across Canada that were either growers or importers of host plants. In 2006, the national survey detected *P. ramorum* at one wholesale and four retail nurseries in the province of British Columbia. To-date in Canada, there has only been regulatory incidents of *P. ramorum* at nursery businesses, restricted to areas of the Lower Mainland, Vancouver Island and Sunshine Coast of British Columbia. Trade in nursery plants with currently known infested states is thought to be the source of inoculum for these nurseries. The Confirmed Nursery Protocol or Enhanced Confirmed Nursery Protocol has been implemented to eradicate *P. ramorum* at these sites.

The Confirmed Nursery Protocol, employed at the four retail nurseries, involves: the quarantining of all *P. ramorum* hosts until the completion of a delimitation survey; destruction of infected block(s) of host plants; destruction of cull pile(s); sampling of water and soil; as well as a ninety day quarantine of host plants that are found within ten meters of destruction block(s).

An Enhanced Confirmed Nursery Protocol was developed for the repeat wholesale nursery. A number of factors unique to this wholesale nursery are thought to have contributed to the severity of the situation, such as crowding of plants, overhead watering in greenhouses and flooding. This protocol was developed to increase the success of eradication and required: restricted plant movement at the nursery; intensive survey and sampling of all plant genera; the quarantining of all plants within ten meters of the destruction block(s); and increased soil sampling and water baiting. A total of 8,772 plant samples, 185 soil samples, and 43 water samples, were taken at this wholesale nursery. Five soil positive areas and the following five new host genera were found as a result of this protocol: *Distylium myricoides* Hemsl., *Manglietia insignis* Blume, *Parakmeria lotungensis* (Chun & C.H.Tsoong), *Y.W.Law*, *Ilex purpurea* Hassk., and *Loropetalum chinense* Oliver. Plant destruction was accomplished by deep burial or burning, while soils were either fumigated or covered with concrete. To further ensure success, mandatory management practices were implemented such as: restrictions on the movement of plants, soil, staff,

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1 A version of this paper was presented at the Sudden Oak Death Science Third Symposium, March 5–9, 2007, Santa Rosa, California
2 Plant Health, Production and Biosafety, West, Government of Canada, Burnaby, B.C.
equipment; recording of all plant locations; training of staff; a visitor policy; plant
debris management and sanitation requirements.

Eradication efforts for *P. ramorum* in Canada however, come at a cost and
necessitate a constant assessment of the regulatory approach. Canadian regulators
will need to keep in mind questions the questions listed below.
  - What are we learning from science?
  - Is the risk to Canada lower than once feared?
  - Has uncertainty been reduced?
  - Do we need a more aggressive approach for repeat nurseries?
  - Would a certification program for high risk host plants help?
  - How are trading partners viewing the situation?
  - From a risk management perspective, where to draw the line?

Key words: *Phytophthora ramorum*, British Columbia, Confirmed Nursery Protocol,
Enhanced Confirmed Nursery Protocol, new host plants.