Disease Notes

First Report of *Phytophthora ramorum* on Ornamental Plants in France

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In April 2002, *Phytophthora ramorum* was associated with twig blight and brown spots on *Rhododendron* spp. leaves from a nursery in France. The isolate was identified by its morphological characters on V8 agar: slow growth, deciduous and semipapillate sporangia, and abundant production of large chlamydospores (3). The identification was confirmed by ITS rDNA sequencing. During 2002, *P. ramorum* was also isolated from diseased *Viburnum tinus* and *V. × bodnantense* plants exhibiting symptoms of wilting and stem base discoloration. Subsequently, repeated surveys for *P. ramorum* were carried out in nurseries and areas surrounding nurseries throughout France. Since 2004, a large range of known hosts were investigated in approximately 2,000 nurseries and 200 other sites each year. *P. ramorum* was detected exclusively in nurseries at 29 locations in 2002, 9 in 2003, 23 in 2004, 17 in 2005, and 19 in 2006. *Rhododendron* spp. and occasionally *V. tinus* were the major hosts. In addition, the pathogen was detected for the first time on *Pieris japonica* in two nurseries in 2005 and on *Camellia* sp. in one nursery in 2006 from plants exhibiting leaf and twig blight. In both cases, *P. ramorum* had already been detected on *Rhododendron* spp. in the same nurseries. Most of the infected plants were found in northwestern France (Bretagne and Pays-de-la-Loire), or came from this region, which is the main rhododendron-growing area in France. In some cases, plants were imported from Belgium or the Netherlands. *P. ramorum* was also detected in a nursery in soil close to diseased *Rhododendron* spp. plants and pond water used for irrigation by using a combination of baiting with *Rhododendron* spp. leaves and PCR assay with species-specific primers (1). Overall, approximately 1% of the investigated nurseries were found positive each year, and this ratio was quite stable from 2004 to 2006. To date, *P. ramorum* has not been detected outside of nurseries, although many surveys were conducted on the west coast of France where the risk is considered to be high because of a favorable mild and humid climate and the presence of suitable hosts. In addition, 78 isolates of *P. ramorum* collected between 2002 and 2004 on *Rhododendron* spp. and *V. tinus* were found to be of A1 mating type based on pairings with *P. cryptogea* A1 and A2 mating types (2).