

## **Pest Alert**

Florida Department of Agriculture and Consumer Services, Division of Plant Industry Adam H. Putnam, Commissioner of Agriculture

## Sudden Oak Death Update, Phytophthora ramorum

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**INTRODUCTION:** In March 2004, CDFA and USDA announced that Sudden Oak Death (SOD) had been detected in several large commercial nurseries in southern California (http://www.doacs.state.fl.us/pi/enpp/pathology/images/sodfindcali.pdf). These nurseries (to be identified as information becomes available) had shipped much potentially infected stock to many states around the country, including Florida. This update is designed to present additional images of symptoms induced by the SOD pathogen on various commercial nursery stock likely to enter Florida, and to present an updated SOD host list.

## Target these hosts for SOD Surveys:

Updated SOD host genera list - CA, OR and WA (\* = common in some parts of FL)

*Acer - maple	Lithocarpus	*Rhodendron - azalea
*Aesculus - buckeye, horse chestnut	*Lonicera - honeysuckle	Sequoia
Arbutus	*Piersis - fetterbush	Trientalis
Arctostaphylos	Pseudotsuga	Umbellularia
*Camellia - camellia	*Quercus - oak	*Vaccinium - blueberry
*Hamamelis - witch hazel	Rhamnus - buckthorn	*Viburnum - viurnum

Host genera identified in other countries (\* = common in some parts of Florida)

Abies	*Leucothoe - doghobble	*Taxus - yew
Corylus	*Pittosporum - pittosporum	*Toxicodendron - poison ivey, poison oak, poison sumac
*Fagus - beech	*Rubus - blackberry	
*Kalmia - mountain laurel	*Syringa - lilac	

Host list from this document ~ pdf. Consult for further information.

(http://www.aphis.usda.gov/plant health/plant pest info/pram/downloads/pdf files/usdaprlist.pdf)





Fig 1.
Photo credit: Department of Environment, Food and Rural Affairs, UK
Symptoms caused by *Phytophthora ramorum* on camellia leaves (Fig. 1) and whole plant (Fig. 2).

Margins of lesions are indistinct and diffuse, not sharply defined. Leaf lesions can progress down the petiole into the stems. Defoliation symptoms are also possible.



Fig 2.
Photo credit: Department of Environment, Food and Rural Affairs, UK



Fig 3.
Photo credit: Bruce Moltzan,
MO Department of Conservation



Fig 4. Photo credit: University of Georgia



Fig 5. Photo credit: University of Georgia

Symptoms caused by *Phytophthora ramorum* on rhododendron foliage (Figs.3-5). Look for lesions that have rather diffuse margins, in many cases with a lighter-colored central portion to the lesion.



Fig 6.
Photo credit: Department of Environment, Food and Rural Affairs, UK



Fig 7.
Photo credit: Department of Environment, Food and Rural Affairs, UK

More foliar symptoms of *P. ramorum* on rhododendron (Fig. 6) and camellia (Fig. 7).



Fig 8.
Photo credit: Department of Environment, Food and Rural Affairs, UK



Fig 9. Photo credit: Department of Environment, Food and Rural Affairs, UK

Symptoms of weeping *P. ramorum*-infection on trunk of southern red oak, (*Quercus falcata*) in the Netherlands (Fig. 8). Bark removed (Fig. 9). This common Florida native is not likely to be shipped as nursery stock to Florida from SOD-infested areas, but might be a first victim of local disease spread.