

# ***Phytophthora ramorum* on *Calluna vulgaris*, *Photinia fraseri*, and *Pieris japonica* in Poland<sup>1</sup>**

**Leszek B. Orlikowski<sup>2</sup>, Aleksandra Trzewik<sup>2</sup>, and Grazyna Szkuta<sup>3</sup>**

## **Abstract**

After recovery of *Phytophthora ramorum* from rhododendron and cowberry (*Vaccinium vitis-idaea*) in 2000 to 2002, disease symptoms were observed on three other ornamentals from July to August 2003. Symptoms usually occurred after at least three drizzly days at 18 to 23° C. On heather (*Calluna vulgaris*), symptoms were observed only on cv. Peter Sparkes. Shoot apices turned brown to dark brown for two to five cm. Older invaded shoots formed shepherd's crooks. On Photinia (*Photinia fraseri*), symptoms were observed only on leaves. Petioles were dark brown and necrosis spread on blades. On some leaves, brown or dark brown spots were observed at the apex or middle of leaf blades. Spots usually enlarged and leaves fell quickly. On leaf spots transferred to moist chambers, one to two mm brown-black drops appeared within two to three days at 20 to 22° C. *Pieris* shoot symptoms were similar to *Rhododendron*. Morphological and molecular methods indicated *P. ramorum* was the A1 mating type. The pathogen grew best at 20 to 25° C (range 2 to 28° C). After pairing three test isolates with A2 mating type of *P. cryptogea*, generative structures formed. Three isolates from heather, *Photinia*, *Pieris* and three cultures from *Rhododendron* caused similar lesions. Most rhododendron and heather cultivars inoculated with *P. ramorum* isolates developed necrotic symptoms.

*Key words:* *Phytophthora ramorum*, *Calluna vulgaris*, *Photinia fraseri*, new hosts

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<sup>2</sup> Res. Institute of Pomology and Floriculture, Pomologiczna 18, 96-100 Skierniewice, Poland; lorlikow@insad.pl

<sup>3</sup> State Plant Health and Seed Inspection Service, Central Lab., Zwirki i Wigury 73, 87–100 Torun, Poland