

## **Elimination of *Phytophthora ramorum* in the Tunnel-Composting Process**

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The use of tunnel composting for the elimination of *P. ramorum* in infected plant material was investigated.

To test the effect of this composting method, infected *Rhododendron* leaves and shoots were collected and divided in separate leaf- and shoot samples. Each sample was cut into half to obtain two sets of 'identical' subsamples. One set of subsamples was tested on the presence of *P. ramorum* using a leaf-baiting test. The baiting is followed by a real-time ITS-PCR assay for the detection of the pathogen. In most samples, positive results were obtained.

The remaining subsamples were placed in small nylon nets, which were hidden in large coarse woven plastic nets among *Rhododendron* plant debris. The nets containing the plant debris and the test material were placed randomly in a filled composting chamber. In the tunnel-composting process, the plant material is heated up to a minimum of 60°C for at least 10 hours under controlled conditions. Hot air flows through the plant debris during this process. After the composting process, the recovered material was tested in a baiting test.

The results of the real-time PCR, which was conducted on the bait, showed that *P. ramorum* was eliminated from all the plant material.