Nursery cultural practices and physiological state of nursery stock on susceptibility to *Phytophthora* species, including *P. ramorum*

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The physiological state of nursery stock can be altered with nursery cultural practices, particularly fertilization. Fertilization practices influence plant growth rate and tissue nutrient concentrations throughout the growing season, which in turn influences the susceptibility of plants to infection by pathogens. Experiments using rhododendron and lilac are underway to relate infection by Phytophthora spp., including P. ramorum, to increasing concentrations of soil-applied and foliar Nitrogen, Iron, and Silica. Other experiments are planned to assess how leaf age and tissue nutrient concentration affects the susceptibility to infection by P. ramorum by performing detached leaf assays on material collected from commercial nurseries over the growing season. In addition, compost-amended potting medium and compost teas will be tested for the biological control of root and foliar infection caused by Phytophthora spp., including P. ramorum.