

Tjosvold, S.; Chastagner, G.; and Elliott, M. Effect of fungicides and biocontrol agents on inoculum production and persistence of *Phytophthora ramorum* on nursery hosts.

Phytophthora ramorum is the causal agent of Sudden Oak Death (SOD) and can infect many commonly grown nursery crops. Once *P. ramorum* is introduced into a nursery on a host, its local spread and establishment is primarily dependent on sporangia and zoospores production and spread, and pathogen persistence. Nursery operators commonly use fungicides to prevent the establishment of *Phytophthora* diseases, although current research only supports the use of fungicides for preventing infection. It is still unknown, however, what effect fungicide treatments have on sporulation, spread, and persistence of the pathogen on established infections. With this knowledge, fungicide treatments could more effectively be used to prevent the spread and establishment of the pathogen in nursery operations. This research will evaluate activity of foliar applied fungicides and biocontrol agents to inhibit sporulation and reduce pathogen viability in ornamental hosts.