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107. Searching for *Phytophthora ramorum*: three years of surveying New York State and northeastern nurseries for the sudden oak death pathogen. Snover-Clift, K. L., Clement, P., and Jensen-Tracy, S. *Phytopathology* 97(7)Suppl:S109. 2007.

curves avoid the need for calibration of timing parameters, confirms the utility of this model as a research and educational tool, and demonstrates its applicability as a tool in the analysis and diagnosis of observed epidemics.

Phylogenetic analysis of *Corynespora* isolates from diverse hosts and locations

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Species of *Corynespora* have been distinguished by host substrate and morphological variation. However, morphological variability within single spore isolates has been observed depending on host, substrate and environment. Nineteen isolates of *C. cassiicola* from diverse hosts and 2 geographic locations were used to screen for variable sequence data useful for phylogenetic analysis. *C. viticis* was used as an outgroup for relative genetic distance. The nuclear ITS1, 5.8S and ITS2 locus were sequenced revealing only 2 informative polymorphic sites among the 20 isolates. Likewise, the glyceraldehyde-3-phosphate dehydrogenase gene was highly conserved with only 1 informative site. *C. viticis* had identical sequences to five of the *C. cassiicola* isolates, suggesting that *C. viticis* may not be a distinct species. To investigate whether genetic diversity within the species is associated with host or geographic location, additional isolates were collected and sequence data were obtained from three hypervariable nuclear loci, including one microsatellite region. These data provide evidence for distinct phylogenetic lineages and clonal reproduction based on gene tree congruence across loci. We suggest that species distinctions within *Corynespora* should be based on morphological distinctions on standardized substrates that correlate with molecular data.

PCR-based detection of *Sclerotinia minor*

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In North Carolina, *Sclerotinia minor* causes a major disease of peanut. The closely related species *S. sclerotiorum* and *Botrytis cinerea* are common in peanut fields but rarely damage the crop. Regions within the intergenic spacer

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inhibits anatoxin production.

Searching for *Phytophthora ramorum*: Three years of surveying New York State and Northeastern nurseries for the sudden oak death pathogen

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The discovery of *Phytophthora ramorum* on Camellia in a large production nursery in California in March 2004 prompted trace forward and national survey sampling of containerized ornamental plants shipped across the country. The Plant Disease Diagnostic Clinic (PDDC) at Cornell University tested plant material from three major surveys over a three year period. From 2004 through 2006, the PDDC processed 2681 samples comprised of 284 NPDP trace forward, 2035 NYS National Survey, and 362 US Forestry nursery perimeter samples. Additionally, the Tiffany Creek Preserve has been monitored due to a questionable positive test result on a mature Red Oak (*Quercus rubra*) in June 2004. This result caused additional testing of trees, soil and water from the Preserve until the results were consistently negative twice a year for two years. Testing methods included the use of a commercial Enzyme-Linked Immunosorbent Assay (ELISA) test kit and double nested Polymerase Chain Reaction (PCR). Over the three year period, 327 of 2319 samples tested positive for a *Phytophthora* species with ELISA. PCR testing was conducted on these samples to determine if the *Phytophthora* species present was *P. ramorum*. All forestry samples were processed using PCR. No *P. ramorum* was found in any of our testing and the Tiffany Creek Preserve was deemed free of *P. ramorum*.

The discovery of *Plum pox virus* in New York State

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Plum pox, also known as Sharka, is a viral disease of stone fruit trees such as plum, peach, and apricot. It has been a devastating disease in Europe since the early 1900s. In recent years the disease has spread to the Americas, first being found in Chile in 1992, in Pennsylvania in 1999, in Ontario and Nova Scotia in 2000, and in Argentina in 2004. Surveys have been conducted in New York