

**Title: Plant Disease Diagnostics**

**Project Leader: Nick Brazee**

**Project Overview**

The first step in effective disease management is an accurate diagnosis. The University of Massachusetts Amherst recognizes the importance of reliable and prompt identification of plant problems for the turf, floriculture, vegetable, nursery, urban forestry and landscape industries. We serve farmers, horticulturists, landscape contractors, turf managers, arborists, nurseries, and others in agriculture and the green industries.

**Activity Summary – 2015**

- Landscape, Nursery & Urban Forestry Facebook posts(50)
- The Landscape Message(24)
- USDA-APHIS-PPQ lab for pinewilt nematode free certification(10)
- Forest & Landscape Tree/Shrub disease workshops(2)
- New England Grows, Massachusetts Nursery and Landscape Association, and New England Vegetable and Berry Growers Association Conferences.(3)

<i><u>Educational Contacts</u></i>	<u>Adults</u>
Direct Contacts	423
Indirect Contacts	235,000

## **Impact Summary and Narrative**

In 2015, the UMass Extension Plant Diagnostic Lab continued to fulfill its primary mission of providing fast, reliable diagnosis of plant problems and detailed diagnostic reports outlining environmentally sustainable management techniques. Sample submitters receive education on the specific plant pathogen involved and management tactics tailored to the organisms or organisms found. Diagnostic lab staff participated in many educational outreach programs, which included: invited seminars for various trade groups, twilight walks to discuss disease and insect pests, printed and electronic publications, performing site visits for disease identification, editing technical manuals, and updating plant pathology fact sheets on many different CAFE websites. Applied research projects conducted through the Plant Diagnostic Lab focused on major pathogens of concern to landscape professionals and vegetable growers. Participants in educational outreach opportunities learn about the specific nature of plant problems and environmentally sustainable disease management. Numerous landscape professionals, vegetable growers and turf managers express their gratitude for the service we provide. Many of these individuals often tell us that they could not do their job without the diagnostic and management assistance we provide. Membership in the National Plant Diagnostic Network provides staff with updates on exotic and quarantine pests, presents educational opportunities for professional development, and allows lab staff to educate growers about exotic and/or newly emerging diseases. Diagnostic support to the Vegetable and Fruit IPM grant educates extension staff and growers about the nature of specific plants problems and their management as well as environmentally sustainable techniques for disease management.

## **Collaborators**

- National Plant Diagnostic Network
- (UNCLS) United States Department of Agriculture
- (AG) New England Grows
- (AG) Massachusetts Tree Wardens Association
- New England Vegetable and Berry Association