

Sticking together on big pest issues

Nursery and greenhouse operators face an ever-increasing set of opportunities and challenges.

Few are more daunting, or more of a game changer, than pest and disease issues.

Oregon has a stellar reputation of producing quality plant material, which is shipped throughout the Pacific Northwest, the nation and internationally.

Faced with uncertainty regarding the spread of *Phytophthora ramorum*, which causes sudden oak death, the OAN brought together thought leaders to chart a new path to improve the detection of pests and pathogens. To that end in 2012, the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS), Oregon Department of Agriculture's (ODA) nursery program experts and researchers from all over the country worked and developed the *Safe Procurement and Production Manual: A Systems Approach for the Production of Healthy Nursery Stock*.

The book, which was published by OAN, included a first: best management practices that emphasize prevention and can be applied to operations of any size. By adopting these methods, growers could detect pest and disease problems as they arise, then respond rapidly to resolve them. This worked so well that USDA changed its focus to helping operations get clean, rather than adopting a blanket assumption that the industry is shipping bad plant material.

Although the systems approach was built in response to sudden oak death, the model can be applied to ANY threat that emerges — including boxwood blight.

A major producer of boxwood

More than 140 Oregon growers are growing boxwood. They ship 2.5 million plants worth more than \$23 million annually to every corner of the U.S. and abroad (Canada being our largest export market).

Plant health is paramount to trade and market access. The ODA has a boxwood blight cleanliness program which offers voluntary practices to prevent spread of the pathogen. The program results in certification for shipping to other states, particularly those with quarantines.

However, even with adoption of this

forward-thinking model, issues can rise simply due to the way boxwood blight spreads, and the difficulty of initial detection.

The disease spreads through movement of infected plant material. The first North American discovery of boxwood blight was in 2011 in North Carolina and Connecticut. The first Oregon detection was made in November of 2011. Each year since then, a limited number of Oregon nurseries and landscape operations have been found infected with boxwood blight. In concert with ODA, eradication procedures were enacted at each nursery.

Since its first discovery, boxwood blight has been detected in 27 states and the District of Columbia. While we don't know for sure, it's doubtful that boxwood blight has latent infections. It's much more likely that early and very subtle symptoms of the disease go unnoticed. Traditional scouting can be difficult due to dense canopy.

Development of a protocol that enhances visual inspections and resolves confusion over symptoms. Early research has shown that different boxwood varieties respond differently to the disease.

The Oregon Summit in 2020

OAN and the Horticultural Research Institute (HRI) have hit boxwood blight head on. In October 2018, the OAN hosted an informational meeting on boxwood blight at its office in Wilsonville, Oregon. The presenters included representatives from OAN, AmericanHort/HRI, the USDA Agricultural Research Service (ARS) and ODA.

Last month, the OAN teamed up with AmericanHort/HRI to bring an all-day boxwood health workshop to the Willamette Valley. The workshop gave attendees a rare opportunity to hear from a panel of nationwide experts without leaving Oregon.

The panel included Dr. Fulya Baysal-Gurel of Tennessee State University, Dr. Jim LaMondia of Connecticut Agricultural Experiment Station, Judy Macias of the USDA Animal and Plant Health Inspection Service, Dr. Jerry Weiland of USDA ARS Corvallis, and boxwood grower Bennett Saunders of Saunders Brothers Nursery in Piney River, Virginia.

These experts presented information on boxwood blight symptoms, best manage-



Jeff Stone
OAN EXECUTIVE DIRECTOR

ment practices to prevent the spread of the disease, blight resistant boxwood varieties, current research, other pest and disease threats, and Oregon's voluntary Boxwood Blight Cleanliness Program.

Isolation, detection and reporting

The systems approach requires that incoming plant material be isolated for a set time and inspected, so sick plants don't have any opportunity to infect the healthy. This is critical with boxwood. Growers must educate personnel on how to recognize the disease symptoms and react quickly.

If a plant is suspected, contact your state agricultural department or local/regional National Plant Diagnostic Network laboratory (www.npdn.org) to submit a sample.

Unless stock and site are known to be disease-free, growers should avoid treating incoming plants with fungicides that may suppress symptoms and prevent the detection of disease. Place a physical barrier between containerized boxwood and the ground, such as a weed barrier cloth or gravel to facilitate leaf debris cleanup. If the plants are in doubt, continue to keep them separated.

For the full list and extended recommendations, go to tinyurl.com/wnhdf46.

We are in this together

Oregon is walking its talk and investing in research, outreach and collaboration to ensure that our system of pest and disease management is effective and inclusive. We all share an interest in resolving emerging pest and disease issues. As it has before, Oregon will continue to lead the way. ☺