

Growers Talk Production: Bearing the Burden

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California is not only a great place to grow plants but also a great place to live. Our weather allows us to enjoy year-round activities and even allows us to garden almost 12 months out of the year. Unfortunately, this great weather is also an attracter for pests that want to take up residency and call sunny California home.

Most growers are used to dealing with a standard group of pathogens each year and can plan accordingly with preventative rotations. With California's massive agricultural industry, new pathogens are highly scrutinized and generally handed over to the local agriculture agencies for management. When I worked in retail, the glassy-winged sharpshooter was the insect on everyone's radar, and strict inspection and shipping protocols were instituted. Shortly after, sudden oak death (SOD) became a pathogen whose host list unfortunately included many ornamental shrubs grown in large volumes in the state.

Now California, and Santa Cruz County in particular, is dealing with a new pest called the light brown apple moth, better known as LBAM. This pest is native to Australia and has occupied areas of New Zealand and Hawaii for some time. The moth can cause crop damage on numerous plant types and especially on fruit trees. However, no significant crop damage has been documented by the state at this point. LBAM is one of the few pathogens to make it into the awareness of the general public. This is mainly due to controversial aerial spraying of a pheromone that caused many residents to complain of adverse health effects due to the spraying. The state has since halted aerial spraying and focused control back on nursery growers.

Our operation is in the epicenter of the infected area. So far, we've been fortunate in having very few positive identifications. Others have not been so lucky, and many small growers and retailers are being severely financially impacted by the quarantine and treatment protocols implemented by the state. We receive biweekly inspections by state officials in search of larvae on our plants. The moth seems to prefer woody crops, but its host list is continually growing. Fortunately, the moth flies at night; so our greenhouses, which are closed at night and screened for other insects, have been uninfected.

Growers are finding that more screening and partitioning helps, especially when you're quarantined and cannot ship anything from common areas. A grower with individual Quonsets with insect screening would be in an ideal situation to avoid the moth. Crops grown outside in adjoining fields can all be quarantined even if the moth is found on one plant.

If you have a positive identification, you're required to treat the entire quarantined area. This is one reason the protocols are so costly for growers and retailers to implement, especially small businesses with little to no chemical application budget. It's even more difficult for growers and retailers attempting to grow sustainable or implement organic standards. The state is fortunately starting to respond to pressure and is accepting IPM programs to help manage the moth and loosening quarantine protocols.

As a greenhouse, you can be better prepared to handle new insect pressures by having established preventative rotations for a general range of insects and fungal pathogens. We've been operating for three-plus years in a SOD-infected county with no positive identifications or problems while still growing many host plants for the disease. This can be directly attributed to our sanitation protocols. Our protocols weren't built around avoiding SOD, but they were built to avoid *Ralstonia* and other pathogens like TMV.

You'll find, if you're better prepared with best practices and sanitation protocols, new pathogens won't be as daunting of a challenge to overcome. We're often placed under an unfair burden to combat pathogens that cannot differentiate between a food or flower crops. We should be prepared, not surprised, when our government officials roll out a management plan that's a general overreaction with outdated protocols. You can be the innovator and implement preventative rotations, crop partitioning and good sanitation. As well, work with state and local agencies to help influence a better management plan that addresses the problem in a realistic and business friendly way.

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