crossroads

BY MIKE ZEMKE AND A.R. CHASE

Emergency First Response — People vs. Plant Care

When we witness an accident or someone in trouble, our instincts tell us to see if we can help in some way. Back in my machining days, the manufacturing plant was so big that we



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had our own trained EMTs that worked in different departments right alongside the other employees. There's nothing more helpless than looking at someone in distress and knowing that you cannot help without having the proper training.

Back in the mid 1990s, Ann and I moved to California. We opened the plant pathology business. Shortly thereafter I joined our local volunteer fire department where we received training in a number of areas including CPR. I repeated the pattern slightly when we moved back to northern Arizona about seven years ago. I am currently with the Yavapai County Sheriff department as a volunteer sheriff. One of my goals is to get all of the volunteers certified in CPR. It is a critical way of being prepared to help in an emergency.

WHAT ABOUT PLANT EMERGENCIES?

As a society we prepare for emergencies to take care of people, but what about our plants? If you are a grower or own a business producing plants, are you trained to know what to do in an emergency? We know plants need constant care including the basic necessities, but then comes the higher level of care. We wouldn't walk through the greenhouse and look at plants in distress without doing something. It is always better to react quickly to a signal of a problem rather than wait until a full-blown emergency develops.

The first step is to stop emergencies from developing at all. Scouts are often the first responders in our plant production businesses. They should not only be trained to notice early signs of specific problems, like certain insects, but also notice anything that is out of the ordinary.

Do you have a good IPM program in place? Do you have a spray program set up and look at things in a preventative way? Do you have at least a couple of spray people in case something happens and one of them can't make it to work? A lot of people can water or get the booms going, but not just anybody can spray. It is a special skill with advanced training, and in some cases special licensing is required — just like the people certified to deliver CPR and other immediate care.

Applying the right amount of fungicides/herbicides/ insecticides takes time and knowledge; do it wrong now and you may have stressed out plants to the point of no recovery. Just like all the first responders/EMTs, pest applicators must be trained as well and keep up with annual training.

EARLY DETECTION IS CRUCIAL

Learn how to recognize early signs of problems. These include symptoms of pests and diseases. You can be alert to a problem but not be able to respond unless you can narrow down the possible causes. How many times are we guilty of seeing a wilting plant and applying water? If you take the time to check the plants' roots, you will be able to determine if the plant needs more water or less. Make sure you recognize common insect and mite pests. Spraying plants for whiteflies when they actually have fungus gnats is unlikely to be effective if it works at all.

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Learn what the best remedy may be. Treating a person who is having a heart attack for sunburn won't do much good. Applying a biological control for a root disease after symptoms appear won't be a fast cure. In fact, it likely not going to work at all. Do you know how long it takes a plant to recover from an infection caused by Botrytis or powdery mildew? Do you know how long a disease might take to appear? Do you know that most of our fungicides do not "cure" a problem but stop it from spreading or causing more damage? Unless you can answer many of these technical questions, it will be better for you to ask an expert for help.

When a human is critically ill, nobody asks how much a treatment will be that might save their life. But this is one of the first questions when a crop develops a problem. Sometimes the best thing to do is dump the crop. Luckily we don't take this approach to human health emergencies. But don't forget — these are not people, they are plants.

We are starting to believe in preventative measures for human problems, from cancer to diabetes to morbid obesity. It is all the more practical to take this approach with plants as they don't have to be consulted about changing bad habits before they have irreversible damage. Be preventative, watch for the first signs of issues and employ the best controls that are available to you. It's the only way to keep disasters from happening. QPD