BY MIKE ZEMKE AND A.R. CHASE

Safety … Plain and Simple!

Safety is a two-part program. First you must provide a safe environment for the people, and second you must provide safe conditions for the crop.

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Safety for people is **everyone's** job … plain and simple. It doesn't matter your role in the company; if you see something that needs fixing because of a safety issue, let someone know. As most of us know (and for those who don't), it only takes one accident and then you have OSHA investigating and then face possible fines and legal action. All your safety posters should be clean and posted in a visible area for all to see. They also need to be in the correct language(s) for your employees.

CASE IN POINT

Take this simple case. You're out in a greenhouse doing your daily maintenance when your boss comes up and asks you to change one of those big LED light bulbs. You look around and don't see the big tall ladder or scissor jack you should use. You're at a crossroad.

Do you just make due with a shorter ladder, and climb up and over things and make it look like you know what you're doing? Or do you go find the correct ladder? All extension ladders have a diagram on one of the sides to let you know when you have the ladder in the correct position (angle). Otherwise you may end up falling.

How about electric panels or junction boxes? I don't know how many of both I've seen over the years in different greenhouses that have no cover, just a bunch of dirt and dust. They can't work well when they are dirty, and cleaning them can pose a safety issue too.

In addition, if they don't close properly due to dirt, moisture builds up and they may not function at all which is another safety issue. It is even more important to protect your employees from high voltage lines. Don't assume that a junction box out of everyone's reach is not still a significant safety issue.

FIRST AID

Next is first aid kits. Since every greenhouse is different in size and layout, you should find out how many kits you should have and where they should be placed. Figure out the size of the first aid kit you need, then maybe designate a person to "manage" it. They should do this on a monthly basis. Checking them routinely can ensure they are always fully stocked.

PLANT SAFETY

Safety for humans is only one part of the whole safety story. Plant safety is every bit as important. This includes safety from pests and safety from the treatments we use to control those pests.

So your first goal is to protect your plants from pests. Prevention includes using only healthy appearing seeds, unrooted cuttings or liners. You also can provide some prevention by using the right growing structures for your crop in your area.

Greenhouses can be ideal ways to limit pests in the crop but can also make a better environment for that pest. The key is knowing how the pest or disease operates.

It is always better to prevent an infection or infestation. Treating after something starts to damage the crop costs more, and exposes both people and plants to more pesticides. Safety is all about avoiding a problem, not trying to figure out what to do after it happens.

When you hear about a new fungicide or insecticide, get used to the idea that you must test it for crop safety under your conditions. Although the manufacturer has done extensive safety testing for years before products are labeled, you cannot expect them to test it under your exact conditions on your exact crops.

Some scientists recommend using a jar test for testing compatibility of mixtures of products, but this will tell you nothing about safety for the crops. Here are some quick guidelines for a phytotoxicity/safety test:

- Select healthy, typical plants of each cultivar or type.
- Read the pesticide label and make sure you understand the use pattern.
  - Is it for roots or leaves?
  - What is the rate/water volume? Use the highest labeled rate for a safety trial.
  - What is the interval between applications?
- Make sure your spray equipment is clean.
- Perform the trial at the time of day you normally apply pesticides and record the date, time and temperature.
- Make sure you keep a set (usually four to six is enough) of the exact same crop(s) that is treated only with water as a comparison.
- Wait two to three weeks to make sure the treatment is safe. Immediate pesticide burns might appear within a day but stunting could take a couple of weeks.

Photograph any symptoms that develop, and make sure to keep a record of the trial and the results. That way you won't have to repeat it when you forget the first phytotoxicity test.

Remember safety is everyone's job and you should report all safety concerns/issues immediately. An ounce of prevention is worth a pound of cure. gpn