Cleanliness IS Next to Godliness

Roger McGaughey

Sometimes I wonder why my biological program works so well. Often visitors comment on how clean our nursery is and that you could eat your dinner off the floor. “Even bugs will have a hard time surviving!” has been the comment. Well, that is our objective, but it isn’t always easy.

At this time of year all poinsettia growers strive for “clean” root systems, i.e. white and disease free. My crop has started off extremely well, as can be seen in Figure 1. The drench of RootShield WP at planting got it off to a fabulous start. And as an extra precaution—even though I’m not sure it will be necessary—by the time this article goes to print, I will have applied a second recommended ½-rate drench.

Consistency is the name of the game and weekly nematode sprays have also helped keep the fungus gnat population in check, which in turn ensures a healthy root system. Nematodes help also in controlling the thrips population and “clean” foliage is the order of the day. Our young plant suppliers, by incorporating weekly nematode applications in their propagation, help the cause, and this year’s cuttings were considerably better—“cleaner”—than in the past.

As in the last few years, I plan to keep applying nematodes right through until almost the end of the crop. Shortly, at around first color, I will incorporate calcium chloride dehydrate with the nematode weekly spray. This will help ensure no bract-edge burn and will produce “cleaner,” harder bracts. These will be more resistant to botrytis and shipping damage. Last year, I had no botrytis issues when the crop was sold because I followed this procedure.

Scouting for insects, especially with a poinsettia crop, is vitally important and my young scout continues to do a super job. Strange as it may seem, I would call the yellow card shown in Figure 2 “clean.” On it there are no whiteflies, a few fungus gnats, no thrips, no shore flies, lots of hunter flies, and a few parasitic wasps. A high population of hunter flies (fungus gnat predators) tells me that the environment is clean and free of nasty pesticides.
The fact that there are no shore flies is the result of two regular procedures:
1. Between each floor-grown crop, the weed mat is treated with TerraCyte Pro, which kills any algae on the mat where shore flies breed.

2. Our Hanna chlorination system maintains a clean water supply, keeps algae growth to a minimum, and helps eliminate breeding areas. With this system, if the oxidation reduction potential (ORP) value of the water supply is kept around 700 to 750 units, a clean water supply is ensured.

Early in the crop, to help keep any of last year’s nasty Xanthomonas disease at bay, I sprayed weekly with Cease, BotaniGard WP and nematodes. BotaniGard improves nematode effectiveness and also works well with whitefly control.

As is normally the case, timing is vitally important and doing things at the right time pays off. Being neurotic about cleanliness certainly pays dividends. There is no substitute for adhering to a “clean” growing routine.

GT

Roger McGaughey, head grower at Michael’s Greenhouses in Cheshire, Connecticut, was educated in Northern Ireland and England and has 40 years experience as a grower.