After all these years it’s not often that I come across a disease I’ve never heard of before, but that’s what happened to me this poinsettia season. I certainly have never experienced it before and quite frankly I don’t want to go through the recovery process again.

I had arranged this year to have Leanne Pundt, extension educator at the University of Connecticut, come and help me inspect our first delivery of poinsettia cuttings for potential whitefly problems before we did any planting. “Eagle-eye” Leanne saw a few spots on some leaves that rang alarm bells, so she offered to take the leaves to the Connecticut Agricultural Experiment Station in New Haven to get them checked out.

Later that afternoon Leanne phoned and gave me the bad news that Xanthomonas had been found on my poinsettia cuttings. I was leaving to drive to Ohio for the Short Course that day, so the initial response to the disease confirmation was difficult to execute. However, being at Short Course proved very beneficial, as I was able to have a good face-to-face conversation with Rick Yates, technical manager for Griffin Greenhouse & Nursery Supplies, about how to tackle the problem. Rick assured me that, although Xanthomonas is potentially a very serious disease, if I was diligent and followed a specific set of procedures, I could control the problem.

The next concern, of course, was whether successive batches of cuttings were going to be affected by this very contagious disease. What procedures, if any, were in place at our young plant propagator’s greenhouse to prevent further spread of the disease on future shipments? Even though our propagators were spraying against the disease, the next shipment a few weeks later—our 10-in. cuttings—had some suspicious leaves and created a lot of in-house anxious moments wondering if we were even going to have a crop for Christmas. At this time, there were also the beginnings of an industry buzz about the disease and cutting suppliers were reacting more aggressively to the severity of this outbreak by dumping infected cuttings. This meant that replacement cuttings would be very difficult to obtain. With Leanne’s warning ringing in my ears, “This is a very difficult disease to eradicate—but it is manageable,” I set about trying to turn our crop around.
Keeping the crop dry between essential waterings was a must. Weekly copper sprays using Phyton-27 were critical and spraying CEASE, a protectant fungicide, was also advisable, so I knew there was going to be a lot of extra work involved. General good hygiene and attention to detail, as with any crop, was even more of a priority with this difficult poinsettia situation.

At planting, I had incorporated RootShield wettable powder, which is our usual protocol. I also used nematodes for thrips and extra fungus gnat control. Every time I hand-fed the 10-in. and 12-in. crops, nematodes were added to the fertilizer solution. A strong plant with a healthy root system should be better able to fight a bacterial leaf disease!

Throughout the crop I was also lucky to have the support of Wade Elmer, plant pathologist from the Connecticut Agricultural Experiment Station. Wade regularly helped check my crop onsite and took leaf samples to the lab to check on my disease control progress. As a grower, having all these industry specialists—Leanne, Rick and Wade—for support is an invaluable asset and I can’t thank them enough.

My 4.5-, 6-, 6.5- and 8-in. crops were also somewhat affected by the disease, and that meant that I couldn’t use as much “mist” water in getting the crop established after planting as I had done in previous years. We had a very warm fall and inadvertently this meant that the breaks after pinching were not as soft and tended to be shorter than usual. Once I was able to get the crops on individual drip watering, the risk of disease spread would be minimized. Close to the final spacing of my 10- and 12-in. plants, I stopped Phyton-27 sprays as I thought I was getting on top of the disease and also because I was seeing what I thought was a bit of copper phytoxicity on some of the leaf tissue. A few days later, the disease reared its head again and I re-applied more Phyton-27.

The disease was showing up on leaves that may have been tucked into adjacent plants in the early, tighter production stage and possibly not coated effectively with early chemical applications. I changed my spray technique slightly and made sure all leaf surfaces were well coated with the fungicide. The sunny, drier conditions at this stage of the crop development also helped reduce general humidity.

Graphical tracking of the crop, however, confirmed that the crops were on the short side, so this necessitated another course of action. I had sprayed some Fascination in early October on some previous crops, but this year I did a whole lot more. I was really pleased with the results; height improved and overall bract size on the whole crop was superb. After first color, weekly sprays of calcium chloride dehydrate and nematodes helped produce clean, strong bracts. I had no botrytis issues at all this year.

In early November, with an excellent root system supporting my “clean” crop and plants coloring up fast by the day, I was almost able to finally relax. At shipping time I received a number of compliments on the excellent quality of the crop I had grown. After all the challenges that I’d faced in the exercise, I felt more confident about
the growing journey that took place. Perseverance pays off and maybe ... just maybe ... I could get to like poinsettias after all. 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.