

## POINSETTIAS: AVOIDING LATE-SEASON ROOT ROT (*PYTHIUM*)

*As environmental conditions change in fall and most of you are starting to ship mums and pansies, there's still a month or so to go on poinsettia crops and you can't let your guard down. If you do, problems can occur, such as ... Pythium.*



In the greenhouse, we generally group *Pythium* (and members of this genus that were recently reclassified as *Globisporangium*) based on their optimum temperatures for causing disease. Warm-season *Pythium* is an issue we've covered before in the newsletter, but when we head into colder weather there's also a risk. Here are a few tips for managing cool-season root rot diseases on your poinsettias.

Cooler days and nights mean your crops are at lower risk of getting heat delay but remember that your cultural practices need to adapt to changing environmental conditions.

**Reduced water movement.** Shortening daylength, cooler air temps and less-intense sunlight mean plants will be taking up water more slowly and transpiring less. Monitor soil moisture diligently and reduce irrigation volume as we get further into fall to avoid prolonged periods of saturated media or "wet feet." These are ideal conditions for root rot.

**Elevated soluble salts.** As temps drop and water uptake decreases, fertilizer salts can more easily accumulate in your growing media. Though poinsettias are generally considered "high feeders," be sure to check your substrate EC regularly, as high salt levels in your soil can damage roots and predispose your crop to attack from *Pythium*.

**Higher disease pressure.** The longer crops stay wet and the longer they've been in your greenhouse, the greater the chances that root rot will strike. *Pythium* preventatives, conventional chemistries and biological products alike, have a range of efficacy windows and prescribed reapplication times. Consider re-upping with your favorite root-zone protectant at closer intervals within the labeled range to keep ahead of disease pressure. For example, if the label says to reapply every 4 to 8 weeks, consider reapplying every 5 to 6 weeks under prolonged periods of cool temps if media is staying wet.

**Considerations for biologicals.** Trichoderma-based products like RootShield Plus or Obtego are powerful tools for controlling root rot on poinsettias. However, efficacy of these kinds of products hinges upon maintaining a higher population of beneficial microbes in the root zone than pathogens to outcompete them. As such, they may need to be reapplied more frequently than some conventional chemistries for maximum disease control. If you're giving these types of products a try for the first time this year, be sure to doublecheck the label and reapply within the proper timeframe to achieve the highest level of disease control.