GROWERTALKS

Features

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4 Steps to Poinsettia Success

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With temperatures slowly rising and summer inching closer, planning for poinsettia production may be underway for many growers. Because poinsettias are susceptible to a variety of insects and diseases, early prevention is the key to reducing damage. Growers should take the time now to ensure they have the proper cultural practices in place to reduce the risk of pests entering the greenhouse. Follow these four steps to help ensure healthy, saleable poinsettia crops.

Pictured: Untreated Rhizoctonia stem rot on poinsettia.

1. Keep a clean greenhouse

Healthy crops begin with diligent greenhouse sanitation because many pathogens and insects can survive on plant debris, under benches and in areas outside the greenhouse. Follow these tips for thorough sanitation:

- As time allows, clean the production area after a crop leaves the greenhouse to remove overwintering sites for insects and diseases prior to introducing poinsettias.
- After production begins, establish a routine cleaning schedule that involves physically removing weeds, debris and soil from the production space and all equipment.
- Start at the top by sweeping walls and internal structures before working down to the floor. It may also be beneficial to install physical weed mat barriers if production area floors are bare dirt or gravel to prevent weeds from growing in the greenhouse.

When it comes to reducing the risk of diseases, make sure to disinfect greenhouse benches, worktables and containers, as pathogens can often survive undetected in these areas. Root rot pathogens can live on wooded benches, and Pythium and Rhizoctonia spp. pathogens can establish in root debris or soil particles on surfaces within the greenhouse.

2. Control temperature and moisture

The environment within the greenhouse contributes significantly to the likelihood of disease establishment in production areas. Disease pathogens thrive under specific conditions—such as stagnant, humid air—resulting from

poor circulation. By ensuring adequate air circulation within the greenhouse to eliminate air stagnation and pockets of humidity, growers can greatly reduce the establishment of certain foliar diseases, such as Botrytis.

Additionally, ensure plant material isn't wet for sustained periods of time because of overhead irrigation, which also provides an excellent environment for foliar diseases to establish. Infection by many root or stem fungal pathogens, such as *Pythium* spp., are a result of excessive soil moisture. To reduce soil moisture, provide adequate spacing and maintain well-drained floors.

3. Scout often for common threats



Scouting for common poinsettia insects and diseases should occur throughout production, starting with new plant material and continuing until crops leave the greenhouse. Implement a schedule for scouting procedures to happen as routinely as possible and ideally in the same pattern so that no areas of the greenhouse are missed. Additionally, keep the following scouting tips in mind:

- Pay close attention to plants placed near openings in the greenhouse, especially plants on the outside rows of benches.
- Choose individual plants to monitor at random instead of the same plants during every scouting procedure.
- Begin the inspection at the bottom of the plant and move upwards, looking closely at buds and blossoms.
- Always check the undersides of leaves to avoid missing certain insects

and diseases at first inspection.

■ Keep in mind that pests don't attack all plants evenly, so always conduct the same detailed scouting treatment throughout the greenhouse.

Pictured: Immature whiteflies on a poinsettia leaf. All photos are either the property of Syngenta or are used with permission.

Insect scouting: In production areas, growers often use bright yellow or blue sticky traps when scouting to attract common poinsettia insects, including whiteflies, fungus gnats, aphids and thrips. Place sticky traps throughout the greenhouse and in the same position every time to accurately determine the increase or decrease in levels of infestation throughout the season. Check the traps weekly and use a hand lens when necessary to identify smaller insects.

Before scouting, growers should be sure they know key differences between each insect and disease, so proper remedies can be implemented. For example, certain leaf spots such as Alternaria leaf spot and bacterial leaf spot caused by *Xanthomonas axonopodis* appear similar. At first glance, these two diseases could be mistaken for one another, until growers notice the slight differences in the shape and color of the spot.

4. Establish an agronomic plan

When cultural practices aren't enough to curb pest pressure, having an agronomic program in place will help prevent plant damage and stress. Agronomic programs provide a framework for rotating products and modes of action to address the most common insects and diseases, and help prevent the onset of resistance. A well-structured program will provide guidance for leveraging the strengths and modes of action of different products, so they provide maximum benefit when needed most.

Syngenta has developed a complete agronomic program to protect poinsettias from common insects and diseases. The program provides product recommendations, proper application timing and rates whether growers are starting from propagation or transplant from liners.

The program features Mainspring GNL insecticide, a powerful Group 28 insecticide that protects crops from key chewing and sucking pests, such as thrips, whiteflies and aphids. A neonicotinoid alternative, Mainspring GNL provides extended protection through its systemic and translaminar movement to prevent pest populations from building to damaging levels.

The program also features Postiva fungicide, the latest addition to the Syngenta fungicide portfolio. Powered by ADEPIDYN technology and difenoconazole, Postiva provides strong protection and reliable control of difficult diseases, including leaf spots, Botrytis, powdery mildew and Fusarium, as well as bacterial suppression.

An agronomic program can help reduce problems and flare-ups, save time on corrective actions and ensure the production of a high-quality crop. As you prepare for the upcoming poinsettia season, you should make sure you implement proper cultural practices and have an agronomic plan in place to stay ahead of unexpected challenges.

Common poinsettia diseases:

Botrytis

Powdery mildew

Rhizoctonia crown and root rot

Pythium

Phytophthora

Common poinsettia insects:

Whiteflies

Thrips

Fungus gnats

Mites

Visit GreenCastOnline.com/Solutions to download the Syngenta poinsettia agronomic program and others. Important: Always read and follow label instructions. Some products may not be registered for sale or use in all states or counties and/or may have state-specific use requirements. Please check with your local extension service to ensure registration and proper use.

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