

Poinsettia Scab

Poinsettias are our most popular plant for the winter holiday season and one of the most sold potted flowering plants in the United States. While some people can get rashes from excessive handling of the plant and eating it can cause upset stomachs, it is not deadly to babies or pets. They are most famously represented as small plants with bright red bracts, but they can range from 2 to 13 feet tall and the bracts can naturally come in a variety of other warm colors, including white, yellow, pink, orange, and maroon hues. These colors can be variegated in various interesting color patterns too.

Whether you like the traditional look or its many variations, there is no question that it is on many people's minds when December rolls around. Less on people's minds is the several months of growing the plants require to get the literal millions of plants available to customers each year. Within this growing period, several diseases can pop up. One disease that can stand out in the greenhouse is poinsettia scab.

1. A pink poinsettia and a variegated white and pink poinsettia. (Left image)
2. One poinsettia stem significantly taller due to poinsettia scab. (Right image)

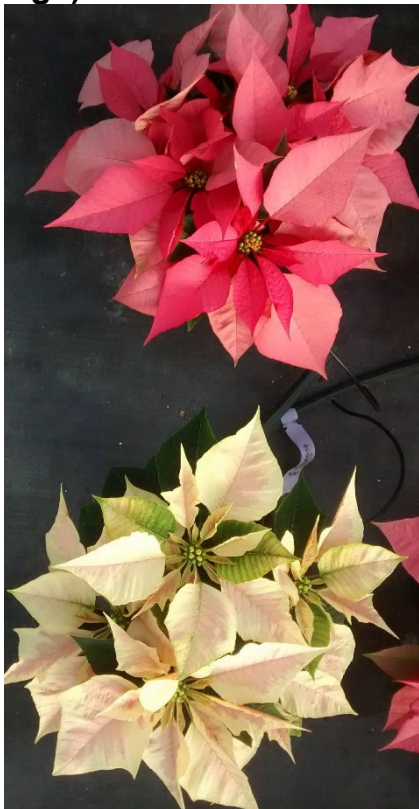


Photo by Jason Pavel, University of Arkansas Division of Ag



Photo by Sherrie Smith, University of Arkansas Division of Ag

Poinsettia scab, also known as spot anthracnose, is caused by the fungal pathogen *Elsinoe poinsettiae* (formerly *Sphaceloma poinsettiae*). The fungus produces lesions on both the leaves and the stems. The fungus releases a plant growth-regulating chemical that will cause infected stems to super elongate. The lone stem will be 6-inches or more above the rest of the plant. This can make a diseased stem easy to spot in a greenhouse. On the leaves, the released grow-regulator can cause the area around the lesion to grow faster, making the leaf look puckered. The lesioned area on the leaf, when between major leaf veins, often dips downward on the top of the leaf, making a hump on the underside. Lesions on the stem and leaf petioles are raised and range from 1/8 to 3/8 inches (3 mm to 10 cm) in length. They are whitish to brown spots, sometimes surrounded by a red border. On the leaves, the spots start white with dark red to purple border, sometimes with a yellow halo. These spots will turn brown over time. The leaf lesions most often appear on or near major leaf veins. When the air is moist, the lesions on both the leaves and stems will be covered in velvety brown reproductive structures.

- 1. Poinsettia leaves with poinsettia scab lesions. Note the paler lesions centers and yellow halos around the lesions. (Left image)**
- 2. One poinsettia stem with several poinsettia scab lesions. (Right image)**



Photo by Sherrie Smith, University of Arkansas Division of Ag

Photo by Heidi Wollaeger, MSU Extension

The disease is easily spread by splashing water, so overhead irrigation is to be avoided. High humidity and wet growing conditions encourage disease establishment and spread. Increased spacing and air flow between plants as they grow is important to speed up leaf drying and reduce ambient humidity in the lower canopy. Diseased plants should be removed and destroyed, and surrounding plants should be sprayed to protect them. If

there is a history or concern of poinsettia scab, Heritage, mancozeb, chlorothalonil, or chlorothalonil-thiophanate mixes have been found to be effective as protectants.