Greenhouse Pest Message, October 29, 2025
Charles Krasnow, UConn Extension

Autumn is in full swing and fall crops are here. Chrysanthemums grew very well this season, with very few disease issues. There were some reports of bacterial stem rot and Pythium root rot early in the season. Poinsettia have been growing on extremely well, with relatively few issues. Some are turning color a little earlier than desired. Very limited disease pressure, other than bacterial stem rot (*Erwinia*) and scab (*Sphaceloma* spp.) on young plants occurring. A number of nutritional issues have appeared on poinsettia, and lateral stem breakage (shown here). Some greenhouses are being cleaned out and sanitized with products such as Lysol All purpose cleaner, Physan 20, KleenGrow, and Simple Green d Pro 3 Plus. These are quaternary ammonium compounds that are highly effective in killing pathogenic spores left behind in the greenhouse.

Below are some of the pathogen and abiotic issues that have been observed recently.

Botrytis stem rot of rosemary (*Botrytis cinerea*)

Botrytis stem rot and blight of rosemary is a common problem on this crop. Usually young plants can be affected when the potting media stays moist for extended periods and there is cloudy weather. Mature plants are also affected and a single branch can be observed wilting and then turning brown from the soil line upwards. The pathogen can be seen sporulating on the stems when there is high humidity. This disease can easily be confused with Phytophthora root rot, as the plant can wilt.

Management: Limit overhead watering to the morning. Reduce relative humidity and improve airflow around the plants. Apply fungicides or biocontrols if spreading among plants.

Botrytis leaf blight of veronica (*Botrytis cinerea*)

Botrytis leaf blight of veronica is a common problem on this crop. Leaves develop small lesions the continue to expand causing large brown lesions on the leaves. Stems can also be infected, killing the entire plant. The photo below shows lesions developing at the point of infection where a flower petal landed on a leaf and provided a nutrient source for the pathogen.

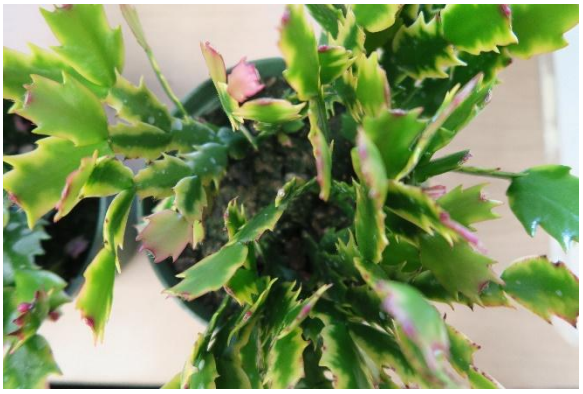
Management: Limit overhead watering to the morning. Reduce relative humidity and improve airflow around the plants. Move heavily flowering plants with shattering petals. Apply fungicides or biocontrols when necessary.

Fusarium stem rot of Aglaonema (*Fusarium solani*)
Aglaonema with severe crown rot and wilt was observed in a greenhouse. The roots were white and healthy, and the foliage was green, and then the plants wilted immediately when soil moisture and greenhouse temperatures were high. *Fusarium* was isolated repeatedly from the plant stem. This pathogen has been reported as a significant problem of this crop in Florida and Hawaii, and was likely transported here on cuttings.
Management: Reduce irrigation frequency. Check incoming cuttings and discard any that look diseased, or have them checked at a clinic. Apply drench or heavy sprench application of fungicide shown to be effective on *Fusarium*.

Phytophthora rot of *Hedera helix*
Phytophthora rot is a very common pathogen affecting ivy. The primary species is *P. nicotianae*, that is commonly found infecting many ornamentals including vinca and petunia. This pathogen spreads on cuttings, in irrigation water as swimming zoospores, or on infested tools. Splashing water can transfer the spores of the pathogen to neighboring plants.
Management: as Phytophthora is an oomycete (watermold) it spreads rapidly under high moisture and irrigation. Prevention is important. If saving cuttings, ensure that tools are sanitized when moving between stock plants.

Digitalis (foxglove) Alternaria leafspot (*Alternaria alternata*)
Alternaria leafspot is a common disease of this popular annual/perennial seeded crop. The pathogen is known to travel on seed, and infect seedlings. Alternaria leaf spot is favored by warm temperature and long periods of leaf wetness. *Alternaria* can survive in debris. The pathogen is a saprophyte and can live on decaying leaves and stems.
Management: Use clean and treated seed. Hot water treat seed if from an unknown source. Keep foliage as dry as possible. Rogue diseased plants. Apply fungicides if necessary.

Christmas Cactus (*Schlumbergera*) Iron Toxicity
Iron toxicity and deficiency are issues to worry about on Christmas cactus. Christmas cactus has a very low iron requirement and can even grow well without supplemental iron. The long crop period and constant iron fertilizer can lead to the accumulation in the plant and development of toxicity. There are clear varietal differences in sensitivity. **Management**: Maintain the pH of the media to 6-6.3. Iron toxicity can increase at lower pH levels. Avoid high iron fertilizers.



Poinsettia leaf burn, high soluble salts

High salts and high sodium from water and fertilizer can cause a marginal leaf burn on poinsettia and other crops. Sodium is not an essential nutrient, and can be high in some water sources in the state. Marginal leaf burn can occur from high sodium alone, or a combination of high EC in the media and excess fertilizer. If the plants are low in fertility overall, the symptoms may be more pronounced.

Chrysanthemum, Unknow leaf disorder
An unknown leaf blotch was observed on mums grown in the greenhouse. It appeared to look like blotch leaf miner, which can cause separation of the epidermis from the leaf. However, no eggs were observed. Only a small percentage of leaves and plants were affected.

Fungicide control of rust (*Puccinia pelargonii-zonalis*).

Rust is an important pathogen of numerous ornamentals, especially outdoor shrubs, roses, and grasses. Below are results from a greenhouse trial looking at fungicides to control geranium rust. The graph shows rust pustules counted per plant. The dark blue bar is 2 weeks and light blue bar 3 weeks after inoculation, respectively. There was breakthrough with the Procure and 3336F treatments at the conclusion of the trial. Torque, Eagle, and Terragaurd showed high efficacy with 66-88% control.