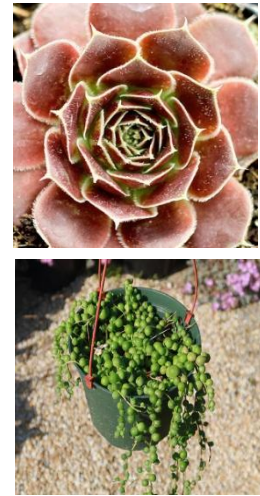


Greenhouse Pest Message, October 29, 2024
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Succulent plants and cacti are very popular, and many operations buy in these plants or produce cuttings on their own. This plant group represents many different species that have thick leaves with low transpiration and grow well in full sun. Common succulents include: Aloe vera, Agave, Crassula (aka Rochea), Cacti, Echeveria, Kalanchoe, Sansevieria (snake plant), Sempervivum (hen and chicks), Senecio, and Sedum. One of the reasons these plants are so popular is that they are easy to care for and can withstand dry indoor climates. A recent article from HortScience journal on benefits messaging and purchasing suggested that search attributes (shape, texture, size), experience attributes (fragrance or flavor), and credence attributes (sustainable production, organic) are important as consumers decide on a plant purchase. Succulents score well for most of these benefits. Additionally, the authors noted that Baby boomers are still the core consumers of plants, while Gen Z and millennials are more likely to buy plants online. The succulent category remains smaller than veggies, annual flowers, and herbs, yet is still a sizeable category. Home gardeners love them for their diverse and interesting shapes that fit with many landscape designs or balcony planters. They are also popular as an office or house plant. Despite the popularity, there is limited research on disease and insect control for these crops.



There are a number of pathogen and insect problems that affect these crops. Often leaf spots may appear atypical, may look like scab (powdery mildew, photos below), or general rot with no defined lesion (bacterial soft rot or *Phytophthora*).



Below is a short list of common diseases of succulents including the pathogen name. Not every succulent crop will get these and some are more common than others:

Anthraxnose *Colletotrichum*, leaf spot *Septoria* and *Stemphylium*, stem rot *Colletotrichum* and *Phytophthora*, Phytophthora root rot *Phytophthora*, Crown rot *Pellicularia*, Powdery mildew *Sphaerotheca* and *Erysiphe*, Viral diseases - Mosaic and others.

Common insects include: Mealy bug *Planococcus*, Cyclamen mite *Steneotarsonemus* Aphids - multiple species, scale *Hemiberlesia*.

Sanitation is one of the most important disease control methods, especially during propagation. Ensure that stock plants are free from disease. If seed is collected, make sure the mother plants are healthy. If plants are being bought in, ensure that they arrive free of diseases. When producing cuttings, disinfest knives and cutting tools as often as possible to avoid transferring viruses or bacteria. Viruses are easy to spread in plant sap that can be on tools or workers hands. Be sure the watering schedule is maintained as posted as it is easy to overwater these plants, leading to potential root rots. It is helpful to include an adjuvant when applying fungicides to these crops, as the leaves are difficult to wet. Test fungicide and insecticide sprays on a limited number of plants as not all succulent species have been included in tests by the pesticide registrant. Hort oil can burn these crops, so use as directed by the label recommendations.

Some additional examples of leaf symptoms (*note the atypical symptoms found on these crops): Cold injury on African violet, *Cercospora* leaf spot of peperomia, *Fusarium* on Christmas cactus, *Erwinia* rot of Aloe.

