

BOTRYTIS BLIGHT OF GERANIUMS

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Disease Cycle: Botrytis blight or gray mold is a fungal disease which infects a wide array of herbaceous annual and perennial plants. There are several species of the fungus Botrytis which can cause blights. Botrytis cinerea is the most common pathogen of greenhouse floral crops. On geranium this fungal pathogen can cause cankers, shoot blights, stem rots, leaf blights or spots (including 'ghost spot'), bud blast or flower blights.

Infection by B. cinerea on geranium (*Pelargonium x hortorum*) usually occurs first on blossom parts, characterized by premature fading and drying of petals. The florets may be matted together by the fungus. Infected petals may drop onto healthy leaves and initiate leaf lesions. If cuttings are taken from infected plants, spores may be present and a cutting rot may develop after the contaminated cuttings are put in the propagating bench. When the relative humidity remains high for several days and the greenhouse temperatures are cool (around 60 degrees F) masses of silvery-gray spores will appear on necrotic (dead) infected tissue. These spores are spread by air currents to flower blossoms, cutting stubs or lower leaves, where new infections start in the sheltered humid environment beneath the plant canopy.

Cultural Control: To prevent serious outbreaks of Botrytis blight, keep a clean greenhouse. Since organic debris is the home of B. cinerea, plant disease problems may lurk in plant debris in unsold potted plants or old stock plants. Debris should be kept off the floors and benches. Prompt removal and destruction of infected parts, and careful watering or syringing of plants are essential in checking this disease. Proper ventilation, and temperature control must be provided to prevent the leaves and flowers from remaining moist for long periods of time. Sufficient spacing of plants on the bench will allow adequate air circulation and sunlight penetration.

Fungicides: Several different fungicides are registered for control of Botrytis. These fungicides will help prevent the spread of Botrytis to healthy plants and plant parts when used according to the label directions. Standard fungicides for control of Botrytis on geranium include Benlate, Captan and Daconil 2787. It is advisable to tank mix Benlate with Captan to avoid the build up of resistance. Ornalin and Chipco 26019 are two relatively new fungicides that have shown excellent control of Botrytis in the greenhouse.

Remember, these fungicides are preventatives, and not curatives, thus, an ounce of prevention in the form of good sanitation practices and proper temperature and humidity regulation is worth a pound of cure!