CONTROL OF BOTRYTIS BLIGHT ON ORNAMENTALS

By A. R. Chase

One of the most common diseases of ornamental crops is Botrytis blight or gray mold. This disease occurs on nearly all ornamentals. Table 1 lists some of those most commonly affected. The fungus, Botrytis cinerea, has the capacity to grow as a saprophyte on dead and dying plant tissues as well as a pathogen attacking flowers, leaves, stems, bulbs and seedlings (damping-off diseases). Botrytis rapidly produces spores in the damaged tissue giving it a fuzzy gray appearance. Thus the common name gray mold used in many places. The spores of the fungus spread via air movement from the wind or fans and can easily be moved with rain or irrigation water.

Botrytis blight on ornamentals usually occurs during the cool wet times of the year. If you live along the West Coast you can expect to see this disease year round. In the southern US you might only see Botrytis blight on a few very susceptible plants in the middle of the winter. This fungus does not like hot or dry conditions. In the Mid West and East Coast Botrytis is usually a problem during the winter and early spring.

Cultural control of Botrytis

Disease control should never be based on use of fungicides alone and the following guidelines are listed for general use in preventing and controlling Botrytis blight in ornamental crops.

1. Clean the growing area (pots, benches, crop debris before each new crop as well as during the production of that crop. All non-essential plants should be removed since they act as food for Botrytis.

- 2. Always use disease-free planting materials. If they are not certified at least be sure they appear healthy.
- 3. Avoid rough handling of plants, especially when starting the crop and finishing it, since damaged plants are most easily infected with Botrytis. It is not unusual for Botrytis blight to affect plants during storage or shipping.
- 4. Do not irrigate from above or expose to rainfall if at all possible. If you must irrigate from overhead do so early in the day to facilitate rapid drying.
- 5. If you grow in a greenhouse keep humidity below 93%. Vent and heat the greenhouse at dusk to lower the relative humidity.
- 6. Use fans to dry leaves as rapidly as possible.
- 7. Table 2 lists a few of the fungicides available to homeowners that should work on Botrytis diseases on ornamentals. Their inclusion here is not meant as a recommendation over other products that are not listed. Contact the manufacturer or a local nursery or garden center for availability of these products in your state.
- 8. Use fungicides when necessary on a 7-10 day interval according to label directions. It can be especially important to apply them immediately following sanitation procedures such as removing infected flowers and leaves to keep spores from infecting damaged areas of the plant.

Always follow the label!

TABLE 1. Flowers often attacked by Botrytis

African Violet
Cyclamen
Exacum
Geranium
Gerber daisy
Lisianthus
Marigold
Oriental Lily
Pansy
Petunia
Poinsettia
Primrose
Rose

TABLE 2. Fungicides for homeowners

Active ingredient	Brand name	Manufacturer
Chlorothalonil	Daconil	Cooke, Ortho
	Bravo Flowable Fungicide	Monterey
	Ready-to-use Fungicide	Garden Tech
Copper	Copper Soap Fungicide	Necessary Organics
	Bordeaux powder	Black Leaf
	Master Cop	Lilly/Miller
	Tri-basic Copper Fungicide	GreenAll
	Micro-Cop & Sta-Stuck	Lilly/Miller
	Liqui-Cop	Monterey
	Kop-R-Spray	Cooke
Captan (good on bulb rots) Captan		Lilly/Miller