

Plant Disease Notes

Anthracnose of Cucurbits

Anthracnose, caused by the fungus *Colletotrichum lagenarium*, can be a destructive disease of cucurbits during warm, wet growing seasons. At least three races of *Colletotrichum* have been reported. The disease attacks watermelon, cantaloupe, cucumber, and gourds. Squash and pumpkin are almost immune.

Symptoms. All aboveground plant parts are susceptible to infection, and plants can become infected at any stage in their development. Older leaves first show small, water-soaked or yellowish areas that enlarge rapidly and turn tan to reddish brown (most cucurbits) or black (watermelon). Spots are often circular to angular. Later, spots may merge, blighting large sections of the leaf. These areas become dry and tear away, typically giving the foliage a ragged appearance. Often the leaves at the center of a plant are attacked first, leaving the stem and runners bare. Tan to black, elongated, slightly sunken streaks called cankers form on petioles (leafstalks) and stems. These cankers can girdle the vine, causing death of the tissue beyond the lesion.

Fruit, if infected early, may turn black, shrivel, and die. Round, water-soaked spots, ¼ to 2½ inches

in diameter, develop on the older fruit. Spots turn dark green to brown with age and may become sunken. Under wet conditions, pinkish-colored spore masses can be seen oozing out of the sunken spots.

Persistence and Transmission.

The fungus overwinters in old cucurbit vines, in seed, or in weeds in the cucurbit family. Anthracnose can appear anytime during the season, but most damage occurs late in the season after the fruit is set. Warm, wet conditions (temperature 75 degrees F or above, frequent rains, poor drainage) favor rapid development and spread of the disease.

Control. Anthracnose of cucurbits can be controlled by the following strategies:

- Plant only certified disease-free seed of a variety resistant to the races of *Colletotrichum* reported in your area.
- Plant in well-drained soil free from surface runoff water.
- Follow a weekly spray program with a recommended fungicide, beginning at the first true leaf stage. Continue spraying at recommended intervals throughout the season, timing sprays just prior to rainy periods.

- Practice clean plowdown after harvest or discard all plant debris.
- Plant cucurbits only once every 4 years, and control both cucurbit weeds and volunteer cucurbit plants during this period.

Recommended Fungicides.

Fungicides are listed here by active ingredient with examples of brand names in parentheses. (These

brands are usually available to commercial growers.) On fungicide labels, the active ingredient is usually listed below the brand name.

Chlorothalonil (Bravo, Evade, Echo); Mancozeb (Manzate 200 DF, Dithane DF, F- 45, Manex II); Maneb (Maneb 80, Manex); Thiophanate-methyl (Topsin M).



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Use chemicals **only** according to the directions on the label. Follow all directions, precautions, and restrictions that are listed.

Trade names are used only to give specific information. The Alabama Cooperative Extension Service does not endorse or guarantee any product and does not recommend one product instead of another that might be similar.

For more information, call your county Extension office. Look in your telephone directory under your county's name to find the number.

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