

Powdery Mildew Found on Watermelon in South Carolina

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Summary. Powdery mildew was found on watermelon at the Coastal REC this week. All watermelon crops in South Carolina should be sprayed immediately with a fungicide effective against powdery mildew. Uncontrolled powdery mildew can reduce weight and number of seedless watermelon by 40%.

Scouting. On watermelon, powdery mildew usually shows up as round, yellow spots on leaves (Fig. 1). White powdery growth is not as common on watermelon as on squash. Use a 10× hand lens to check for powdery mildew on the underside of leaves.



Fig. 1. Circles (4) show early symptoms of powdery mildew on watermelon.

Verbena bonariensis can be used as a sentinel plant for cucurbit powdery mildew (Fig. 2). Note that young plants are less susceptible than older plants, so check flowering plants if possible.



Fig. 2. Cucurbit powdery mildew on young *V. bonariensis* plants.

Fungicide Resistance Problems. In the past several years, cucurbit powdery mildew in the northeastern United States has become resistant to several fungicides. Fortunately, the only new case of resistance found so far in South Carolina is to Endura (active ingredient boscalid, FRAC Code 7). This resistance may reduce the effectiveness of Fontelis, a closely related fungicide.

The efficacy of Torino against powdery mildew is decreasing in South Carolina. It is no longer among the recommended fungicides. If it is sprayed to use existing product, crops should be checked carefully 48 hours later to see if Torino reduced powdery mildew.

Cautions. Strictly speaking, this information and these recommendations hold only for watermelon affected with the strain of powdery mildew that is present in Charleston, SC.

Spring 2018 Cucurbit Powdery Mildew Fungicide Recommendations

When/Where	Powdery Mildew Fungicides
Before symptoms	Procure, Quintec, Vivando, Switch, or Luna Experience**
After symptoms	Vivando rotated with Quintec

**Use Luna Experience on watermelon only; it is not labeled on other cucurbits.

Note that Switch and Luna Experience also protect cucurbit crops against gummy stem blight.

For more information, see the Extension fact sheets “Powdery Mildew on Watermelon” and “2018 Watermelon Fungicide Guide” at <http://www.clemson.edu/extension/publications/index.html> under Horticulture.

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