Early Outbreak of Powdery Mildew on Watermelon in South Carolina

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Cucurbit powdery mildew was found on nonsprayed watermelon in research plots at the Clemson University Coastal Research and Education Center, Charleston, SC. The May 7 finding is the earliest that cucurbit powdery mildew has been seen on watermelon in South Carolina in 16 years.

All watermelon cultivars are susceptible to powdery mildew. Certain cultivars of cantaloupe, squash, pumpkin, and cucumber have resistance. Cucurbit powdery mildew attacks all other cucurbit types or cultivars that do not carry resistance.

On watermelon, look for pale yellow, oval spots on the leaves. (Four spots are marked in the photo). The spots are indistinct at first. The typical, white powdery mildew fungus growth often is seen only on the leaf underside, directly under the spots. This may be difficult to find in bright sunlight.

The weather is probably the reason for this unusually early outbreak of powdery mildew on watermelon. The unusually warm weather this spring, coupled with the relatively dry weather the past few weeks, is favorable for powdery mildew.

To prevent powdery mildew from getting started on watermelon, spray one of the following fungicides: Fontelis—newly registered in 2012, Quintec, or Procure. Switch and tebuconazole (many generic formulations of Folicur) also control powdery mildew on cucurbits. For more information, see the 2012 Watermelon Spray Guide: http://www.clemson.edu/psapublishing/PAGES/PLNTPATH/IL86.pdf. Other cucurbits should be scouted for powdery mildew and sprayed if any spots are found.

The protectant fungicides chlorothalonil and mancozeb offer little control of powdery mildew. These fungicides cannot reach powdery mildew on the leaf undersides.

Several organic-approved fungicides work well against powdery mildew. Sulfur, horticultural oil, Organocide (fish oil + sesame oil), and potassium bicarbonate are recommended. Home gardeners should spray one of these products or chlorothalonil. All of these products should be used weekly.

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