

Controlling Foliar Diseases on Watermelon with Fungicides



Gummy Stem Blight is the most important watermelon disease in South Carolina and other southeastern states. Although this disease is found in most watermelon fields each year, it is most common and

destructive when rainfall is normal or above average. Crop rotation and fungicides are the main ways to control this disease.



Powdery Mildew has become the second most common watermelon disease in the southern United States. It is most destructive when conditions are dry and

cooler than normal. Once powdery mildew spores blow into a field, it spreads rapidly. Powdery mildew usually is a late-season disease on watermelon.

When should I start spraying?

Start spraying at vine run or when the first male blooms appear. Start spraying before you see gummy stem blight or powdery mildew in your field.

How often should I spray?

The answer depends on the weather. In the spring, spray every 7 days or follow Melcast (if provided in your area) to get the best disease control. In a dry year, you will get good control of gummy stem blight, make just as many melons, and save money if you spray only every 14 days.

Does Melcast work?

Melcast used with a cover spray at vine run and a threshold of 30 to 35 EFI works as well as spraying every 7 days. Melcast saves an average of two sprays over spraying weekly. See www.clemson.edu/scmelon.

How long should I keep spraying?

Spray as long as you plan to harvest the field. In the spring, spraying until the last pick increases late-season yields and overall income.

What can I do about sunburn?

Spraying watermelon regularly prevents loss of foliage and increases vine growth, decreasing sunburn. Mancozeb, chlorothalonil, and Quadris prevent sunburn compared with not spraying.

Which fungicide should I use?

To control both gummy stem blight and powdery mildew, start the season with a protectant fungicide, such as chlorothalonil. By June 1, when the summer rains usually start and watermelons become more susceptible, use Quadris in rotation with mancozeb. Quadris is a systemic fungicide that controls both diseases. Remember that Quadris must be rotated 1:1 with another fungicide. Benlate is no longer recommended for watermelon, as both the gummy stem blight fungus and powdery mildew are resistant to this fungicide. See Volume 1 of the Clemson Pest Management Handbook or cufan.clemson.edu/pestmgmtguide.

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