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Ohio State University Extension Vegetable Crops On
the WEB at: <http://vegnet.osu.edu>

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1. Downy Mildew Update!

Another Outbreak of Cucumber Downy Mildew in Northern Ohio

June 25, 2007 by Sally Miller

Downy mildew was confirmed today in cucumber leaves collected on Friday, June 22 from a field near the exit of State Rte 250 southbound from Interstate 80/90 in Erie County, Ohio. Samples were held in a plastic bag with wet paper towels in a refrigerator until Monday, when they were brought to the OSU Vegetable Pathology lab where downy mildew was confirmed. Less than 5% of the plants showed symptoms. The field was approximately 1 acre and had not been sprayed with any fungicides. Plants were established from seedlings produced in a greenhouse on the grower's farm, used only for transplant production and closed up during the summer and fall. The field received about 1 inch of rain on about June 4 and 1.4 inches on June 20. Both rainstorms came from the north.

This is the second report of downy mildew on cucumbers in northern Ohio in the last week. The first report came from a farm in southern Medina County. In both cases, downy mildew was found on cucumbers that had not been fungicide-treated. This follows a report on June 8 of downy mildew in greenhouse production cucumbers in southwestern Ontario. The appearance of downy mildew on any given farm depends on the weather (moist, cool), the presence of pathogen spores, and the degree of susceptibility of the crop (cucumbers are the most susceptible of the cucurbits to downy mildew). Hot, dry conditions will delay the onset of the disease, but keep in mind that cool nights and heavy dew can allow spores to germinate and cause disease. We don't know the source of the downy mildew spores in this outbreak, but given the reports so far and the prevailing winds, growers with cucumber fields south and east of southwestern Ontario, as well as those near confirmed outbreaks in Ohio (Medina, Wayne, Erie and Huron counties) should be particularly vigilant.

We are recommending that all cucumber growers in the northern part of Ohio protect the cucumber crop with protectant fungicides. A table with recommended

fungicides and their pre-harvest intervals (PHI), published previously in VegNet, is shown again below. Ranman, Previcur Flex, Tanos and Gavel must be tank-mixed with Bravo or Dithane (or other formulations of chlorothalanil or mancozeb) and used in alternation.

Product	PHI (days)
Bravo Weather Stik	0
Ranman	0
Previcur Flex	2
Tanos	3
Dithane	5
Gavel	5

The downy mildew forecast from the North Carolina State University Cucurbit Downy Mildew website (<http://www.ces.ncsu.edu/depts/pp/cucurbit/forecasts/c070621.php>), published on Thursday June 21, is shown below. The forecast will be updated tomorrow (Tuesday, June 26).