

## **Cucurbit Powdery Mildew is Here!**

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Powdery mildew was observed the week of July 10 in northcentral Ohio on zucchini plants initially produced under row covers. These plants had not been sprayed with fungicides. Powdery mildew usually appears in Ohio in the second half of July, so it is a little early this year. Signs of powdery mildew can be observed on both the upper and lower leaf surfaces as white powdery patches (Figure 1). The patches are whiter and denser than those of downy mildew, which only occur on the undersides of leaves. Powdery mildew may also be seen on petioles and stems. Although powdery mildew starts as small discrete patches, the patches may coalesce to cover the entire leaf surface (Figure 2).



Figure 1. Cucurbit powdery mildew.



Figure 2. Advanced cucurbit powdery mildew.

It is time to start scouting cucurbit fields for powdery mildew, followed up by fungicide applications. There are a number of products that are effective in powdery mildew management programs, including the strobilurins (Fungicide Resistance Group 11), Nova and Pristine (Group 3). Powdery mildew strains can develop resistance to Group 3 and 11 fungicides rather quickly, so fungicide resistance management strategies must be

used. For example, a strobilurin fungicide such as Pristine should be tank mixed with a protectant fungicide such as Bravo and alternated with a fungicide with a different mode of action. Read and follow fungicide label instructions carefully. The Ohio Department of Agriculture has submitted a Section 18 Emergency Exemption request to the U.S. Environmental Protection Agency for the use of Quintec for powdery mildew management on cucurbits. Should the request be approved, it will be announced in VegNet – check for updates.

Powdery mildew problems (and fungicide application costs) can be reduced by choosing disease resistant cucurbit varieties. Organic producers have several OMRI (Organic Materials Review Institute)-approved materials available to them, including sulfur, copper and various biological control products. See the OMRI website (<http://www.omri.org/>) to check the status of products for use on certified organic crops.