



PENNSYLVANIA VEGETABLE MARKETING & RESEARCH PROGRAM

2301 NORTH CAMERON STREET, HARRISBURG, PENNSYLVANIA 17110-9405

717.694.3596

Pennsylvania Vegetable IPM Special Update

August 2, 2019

The information supplied in these Updates is from Penn State Extension Specialists and Educators. These Updates are a service of the Pennsylvania Vegetable Marketing and Research Program which, in cooperation with the Pennsylvania Vegetable Growers Association, supports vegetable research at Penn State University and other institutions.

VEGETABLE DISEASE ALERT

Dr. Beth Gugino, Extension Vegetable Pathologist, Penn State University

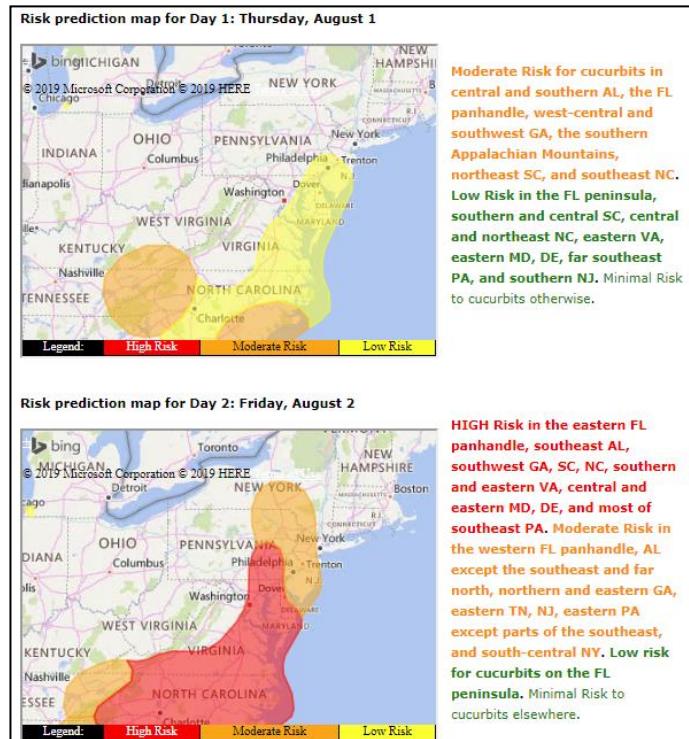
DOWNTY MILDEW CONFIRMED ON PUMPKIN IN LANCASTER CO., PA TODAY

Downy mildew was confirmed in a pumpkin (*Cucurbita moschata*) field today in northern Lancaster Co. PA. It is also suspected in several pumpkin fields in Clinton Co, PA. Symptoms were severe and consisted of small angular chlorotic/yellow lesions on the upper surface of the leaf and then purplish-gray sporulation was observed on the corresponding surface on the underside of the leaf. This will be the first time in over 10 years that downy mildew was confirmed on pumpkin before cucumber. It is highly likely that there are unreported outbreaks of downy mildew on cucumber and possibly other cucurbit crops across the eastern third of Pennsylvania. This portion of the state has been at moderate to high risk of downy mildew infection several times this season from inoculum sources moving upward along the east coast. This includes today with portions on Adams, Cumberland, Dauphin, Lebanon, Schuylkill, Berks, Chester, Lehigh and Montgomery being at highest risk and counties north and east being a moderate risk.

It is recommended that all cucurbit fields be scouting regularly. Due to slight differences in pathogen populations, the downy mildew on pumpkin will most likely spread to other pumpkin, squash and watermelon crops while downy mildew on cucumber will spread to other cucumber and cantaloupe crops. Inclusion of



Symptoms of downy mildew on pumpkin. Photo: Beth K. Gugino.



Cucurbit downy mildew risk map for August 1 and 2, 2019 (www.cdm.ipmpipe.org).

downy mildew specific fungicides is highly recommended, and effort should be made to manage for resistance by tank mixing with a protectant fungicide and rotating FRAC groups. Several fungicides including Ranman (FRAC 21), Orondis Opti (FRAC 49 + M5) and Zampro (FRAC 45 + 40) have a 0-day pre-harvest interval. See the [2019 Mid-Atlantic Commercial Vegetable Production Recommendations](#) and [2018 Cucurbit Downy and Powdery Mildew Efficacy Table](#) for additional recommendations.

When done harvesting earlier maturing crops such as cucumber, cantaloupe and summer squash, disk under or apply a herbicide to the crop to kill the plant tissue as a measure to reduce potential spread of the disease on and between farms and especially successive plantings. The pathogen does not survive in soil so once the plant tissue is dead so is the pathogen.

We are actively monitoring for this disease so please either contact me via email at bkgugino@psu.edu, by phone at 814-865-7328 or contact your local Extension office for confirmation. All reports aid in our ability to successfully forecast disease risk. Check the [CDM ipmPIPE website](#) for the latest reports and forecasts that are updated three times per week.

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