



In This Issue

1. Powdery Mildew of Vine Crops

Powdery Mildew of Vine Crops,

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Powdery mildew has been found on squash and other vine crops on an unsprayed field in Wayne County, first noticed on June 23. Although this is earlier than usual to see powdery mildew, all vine crops should be scouted at this time for powdery mildew and should be protected against infection once the disease appears. Varieties that are resistant to powdery mildew usually need fewer, if any, fungicide applications. There are a number of fungicides that can be used for powdery mildew management, including sulfurs (e.g. Microthiol), chlorothalanil (e.g. Bravo), myclobutanyl (Nova) and triflumizole (Procure). Quintec (quinoxifen) is a very effective powdery mildew fungicide but is not labeled for edible peel cucurbits due to phytotoxicity issues. Since Nova and Procure are the same type of fungicide, only one of them should be used and alternated with products with a different mode of action. Tank-mixing products such as Quintec, Nova or Procure with a sulfur fungicide will provide broad-spectrum protection, although it should be noted that sulfur can be phytotoxic when applied under hot (>90 F) conditions. Insensitivity of the powdery mildew fungus to strobilurin fungicides such as Quadris and Pristine have been reported, so if one of these fungicides is included in the program, particularly to manage other diseases, it must be alternated with a fungicide with a different mode of action and tank mixed with a contact fungicide such as sulfur. Please see the results of fungicide efficacy tests for powdery mildew on pumpkin (Jasinski, Precheur, Miller) conducted in Ohio last year:

Fungicide	Rate	Relative Control Rating- Howden (non-PMT) ^a	Relative Control – Magician (PMT) ^a
Quintec	4-6 fl oz/A	+++	+++
Procure 480SC	8 oz/A	+++	+++
Rally 40W ^b	5 oz/A	+++	+++
Microthiol Dispers (Sulfur)	7.5 lb/A	+++	+++
Pristine	18.5 oz/A	++	+
Quadris	15.5 oz/A	+/-	-
Topsin M 70WP	8 oz/A	+/-	+/-
Flint	2 oz/A	+	+/-
Cabrio EG	16 oz/A	-	-
Bravo	2-3 pt/A	+/-	-

+++ = very effective (>90% control), ++ = moderately effective (75-89% control), + = somewhat effective (60-74% control), +/- = weak (50-59% control), - = ineffective (<50 % control).

Bacterial Diseases.

Some Angular leaf spot was observed yesterday on pumpkins in South Charleston, OH. There are no effective chemical controls for these two diseases (Bacterial Spot). Use of clean seeds and crop rotations (2-3 years out of vine crops) can help limit damage.

