

# VEGETABLE CROPS HOTLINE

A newsletter for commercial vegetable growers prepared by the  
Purdue University Cooperative Extension Service

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**DOWNY MILDEW OF CUCURBITS** - (*Dan Egel*) - This disease was observed in Morton County in Central Illinois and Platte County in Western Missouri. Cucurbit growers should scout fields carefully for symptoms of this disease. Growers in all parts of the state should seriously consider applying specialized fungicides such as Previcur Flex, Ranman, Tanos, or Curzate (See VCH issue #480). Remember that these specialized fungicides have no or little activity against most other cucurbit diseases such as black rot or powder mildew. Growers who do not want to apply specialized fungicides should consider applying contact fungicides (which includes, chlorothalonil and mancozeb) on at least a 7-day interval. It is recommended that any grower who applies fungicides in FRAC group 11 (including Amistar, Quadris, Flint, Cabrio and Pristine) tank mix these fungicides with a contact fungicide since the downy mildew fungus may have resistance to these fungicides.

It is not known whether this outbreak is a result of spread from a northern source such as Michigan or from a southern source. However, since most weather comes to us from Illinois, growers should take this outbreak seriously. Downy mildew affects all cucurbits including cucumbers, muskmelon, watermelon, squash, pumpkins and zucchinis. Growers with further questions can contact the office.



**POWDERY MILDEW ON PUMPKIN** - (*Dan Egel*) - Powdery mildew has begun to show up on pumpkins. This article reviews management of this disease.

Growers who fight powdery mildew every year should be aware that there is partial resistance to powdery mildew in a few varieties. Most growers will find it necessary to apply systemic fungicides to both susceptible and partially resistant varieties. However, varieties with partial resistance will perform much better in the presence of powdery mildew.

The strategy behind powdery mildew control on Midwestern pumpkins is based on protecting vines from infection through mid-September. Fungicides are much more effective when applied before powdery mildew is observed. Amistar, Cabrio, Flint, Pristine, and Quadris (strobilurins) have the same mode of action and must never be applied in back to back sequence. Similarly, Nova and Procure have the same mode of action. Topsin has yet a different mode of action.

Pristine contains two different active ingredients, pyraclostrobin and boscalid. Pyraclostrobin has the same mode of action as the rest of the strobilurin group. This is why Pristine must never be used in back to back sequence with any other fungicide in the strobilurin group. Boscalid has a new mode of action not found in any other fungicide registered on cucurbits.

Initial applications of one of the systemic fungicides above should be made when the pumpkins are in the 'bush' stage. That is, right before the plants begin to vine out. This usually occurs in mid to late July. Repeat applications at about 2-week intervals through early September. Consult the label for information on application intervals. Please note that powdery mildew, unlike many diseases, does not need leaf wetness to infect. Much of this information can be found in the Midwest Vegetable Production Guide for Commercial Growers 2007 <[www.btny.purdue.edu/Pubs/ID/ID-56/](http://www.btny.purdue.edu/Pubs/ID/ID-56/)>. Please read the label carefully for rate, safety and other important information.



**FERTILIZER USE AND ABUSE** - (*Dan Egel*) - It has come to my attention that some "straight" fertilizer products are being touted as effective fungicides in Indiana. This practice may be illegal. Any product that claims to be a fungicide must be registered with the Environmental Protection Agency and the Office of the Indiana State Chemist (OISC). Even if the product in question is exempt from federal registration, any product sold as a pesticide must be registered with OISC. In addition, depending on what is being sold, growers applying such unregistered materials may fail to control the very crop diseases they are targeting.

It is true that some fungicides that have as their active ingredients phosphoric acid or phosphite. The trade names of these products include Agri-Fos, Phostrol and Prophyte. These products are labeled as fungicides, have

been evaluated by the companies for efficacy, and have been through the rigorous federal registration process. Examples of their labeled use include downy mildew and Phytophthora blight on pumpkin. In the event the product does not meet your expectations, you have the manufacturer that you can turn to for further information. Fly-by night companies, when shove comes to push, will not be there to support their products.

To tell if a product legally is labeled as a fungicide, check the label associated with the product. One key piece of evidence is that you will find an EPA Reg. (registration) number on the container. Without this number, the product is not legally intended to be used as a fungicide. Another way of telling, is to read the label. If the label provides no instructions outside of fertilizer recommendations, then it's not a fungicide as defined by state and federal statutes. Still confused, call the OISC at 800-893-6637 and ask them if what is being sold as a fungicide is a registered product. As is always the case, it is buyer beware. With as much difficulty that we have controlling disease outbreaks in our crops, don't compound your problem by buying an inferior product from someone working outside of the law.



**IDENTIFY INVASIVE SPECIES - (Jennifer Stewart)** - A new Purdue University Web site allows people to help identify and report these invasive species. The Indiana Cooperative Agricultural Pest Survey (CAPS) program, which is a collaborative effort between Purdue, the U.S. Department of Agriculture's Animal and Plant Health Inspection Service division of Plant Protection and Quarantine, the Indiana Department of Natural Resources, and the Indiana chapter of The Nature Conservancy, recently launched a new Web site highlighting Indiana's "most unwanted" invasive plant pests, <<http://extension.entm.purdue.edu/CAPS>>.

The Web site also gives instructions on reporting suspicious finds, either by calling the Indiana DNR at 1-866-NO EXOTIC or submitting samples to the Purdue Plant and Pest Diagnostic Laboratory.



**PESTICIDE WASTE PROGRAM - (Fred Whitford)** - Office of Indiana State Chemist will hold pesticide waste pickups in August around the state. Please contact Kevin Neal at (800) 893-6637. He will get their names, what they have, and in what quantities to help him plan. **NO ONE HAS EVER GOTTEN IN TROUBLE BY BRINGING IN THEIR UNWANTED PESTICIDES.** The state will pick up the pesticides and pay the cost. Please check the following list for the date and location close to you.

- August 7<sup>th</sup> - Daviess County Fairgrounds
- August 9<sup>th</sup> - Tippecanoe County Fairgrounds
- August 14<sup>th</sup> - Whitley County Fairgrounds
- August 16<sup>th</sup> - Decatur County Fairgrounds

If you have questions, please contact Fred Whitford, Coordinator, Purdue Pesticide Programs, 915 W. State Street, West Lafayette, IN 47907-2054; Phone: (765) 494-1284; Fax: (765) 496-1556; Email: [fwhitford@pru.due.edu](mailto:fwhitford@pru.due.edu); Web: <[www.btny.purdue.edu/PPP/](http://www.btny.purdue.edu/PPP/)>.



**FIELD DAY - (Announcement)** - The Daviess County SWCD invites you to get the latest information on tillage, cover crops and nitrogen loss on sandy soils, Thursday, August 9, 2007, 4-7 PM, at the Marvin and Amy Holstine Farm, 2801 E. 825 N., Plainville, IN. Topics include: Tillage, Nitrogen Loss, Cover Crops/Wind Erosion, and Bio-Diesel. A Bio-Diesel demonstration will follow the meal.

Please call the office at (812) 254-4780 Ext. 3, if you plan to attend and/or need directions.

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