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Downy Mildew Alert, June 12, 2007 by Sally Miller

On Friday, June 8, a low level of downy mildew was reported in greenhouse production cucumbers in Essex County, Ontario. Essex County is located in the southwestern tip of Ontario, bordering the north shore of Lake Erie on the western side. No details are available as to the extent of the outbreak (number of greenhouses, location within the county, how long the plants have shown symptoms, etc.). There have been no reports of downy mildew in field cucumbers or other cucurbits in Ontario, Michigan or Ohio at this time.

Although the weather in Ohio has been largely warm and dry this growing season, a relatively recent bout of cooler weather with thunderstorms may have provided favorable conditions for movement of downy mildew spores and crop infection. While the probability of infection events is still relatively low, Ohio growers, particularly in the northwestern and north central parts of the state, are cautioned to take measures to prevent an outbreak of the disease in cucumbers. This includes stepped-up scouting

and application of protectant fungicides on a 10–14 day schedule under current weather conditions. If conditions change, with long periods of cool weather and overcast skies/high relative humidity/rainfall, the spray interval may be shortened. One of the following fungicides, tank mixed with Bravo (0 days PHI) or Dithane (5 days PHI), will provide protectant activity: Gavel (5 days PHI), Previcur Flex (2 days PHI), Tanos (3 days PHI), or Ranman (0 days PHI). Products must be alternated to avoid development of fungicide resistance.

Note on VegNet #13–07.

There was a typographical error in the update published on June 12, 2007. The following sentence should have read: On July 6, 2006, we confirmed downy mildew on cucumbers from a small, unsprayed field in Wayne County, OH.

To reiterate, there have been NO REPORTS of downy mildew on field cucumbers in Ohio so far in 2007.

Produce Safety: Whats happening in Ohio?

By Doug Doohan, John Wargowski, Shari Plimpton and Jeff LeJeune*

Recent national headlines linking illnesses and deaths to consumption of fresh vegetables should be on the mind of

every produce grower in the state. Though Ohio produce was not implicated in the recent spinach outbreak, there is no reason to think Ohio farms are immune from this problem. As all too many growers experienced in September 2006, outbreaks originating thousands of miles away may stigmatize the entire industry. Ohio spinach acreage was plowed under because of the California meltdown. In our state the customer-farmer relationship is based on trust and is often personal in nature. One local produce-related outbreak could devastate industry state-wide.

Why worry? Produce-related outbreaks (two or more illnesses from a common food) have gone from 500-700 during the 1990s to 1200-1400 for the period 2000-2006. During the 1970s produce-related illnesses were 0.7% of total outbreaks; whereas, from 1998-2004 they were 7%. Can science explain these trends, and provide concrete recommendations on practices that will eliminate or reduce risk? What can Ohio growers do to protect their customers, their business and their industry? What is Ohio doing, as a community of growers, allied industries, government and academia?

First of all it is important to recognize that the increase in incidents related to produce is real; it is not just better detection and more thorough reporting. This phenomenon is poorly understood; many explanations have been proposed, few have been substantiated. Proven methods

to absolutely prevent contamination or de-contaminate product (kill step) are not available. However, risks can be reduced. As growers, your best strategy for now is to be engaged in discussions about food safety and make sure you understand and follow Good Agricultural Practices (GAPS).

You should also know that the Ohio industry has led development of Food Safety educational programs from the grass roots level. Farmers were behind the initial educational programs, starting in 2001 by the formation of Mid American Ag & Hort Services Inc (MAAHS), a non-profit membership consortium organized to provide training and leadership in regulatory compliance and labor issues for the industry (<http://www.midamservices.org/maahs/maahswebengine.nsf/homepage>). MAAHS in cooperation the USDA Risk Management Agency, Ohio Vegetable & Potato Growers Association, the Ohio Fruit Growers Association (together now the Ohio Produce Growers & Marketers Association), Ohio State University Extension (OSUE), Ohio Farm Bureau and the Center for Innovative Food Technology (<http://www.eisc.org/>) have provided training to hundreds of producers as well as guidance on implementing GAPS and preparing for food safety audits (third-party audits). A recent grant from the OSUE Excellence in Engagement program will greatly augment and strengthen these existing programs. Under the auspices of the award Engaging Fruit and Vegetable

Growers in Enhanced Food Safety Practices through Audience Tailored Risk Communication \$60,000 have been provided to enable local delivery of food safety educational programs to Ohio growers, close to their homes and business. The goal of the program is to reach at least 75% of farmers involved in growing fruits and vegetables over the next two years.

The Ohio Agricultural Research and Development Center (OARDC) is providing leadership in both understanding why produce-borne illnesses are on the increase and what preventive practices actually work under Ohio conditions. Several multidisciplinary research projects are underway or about to begin with funding from the OARDC Research Enhancement and Competitive Grants Program, OSUE Excellence in Engagement Program and from the USDA National Integrated Food Safety Initiative.

Growers need to consider that the United States Food and Drug Agency (FDA) or other government agencies might begin in the not too distant future to regulate growing of produce. The FDA currently is conducting a public review of their regulatory programs, seeking input from stakeholder groups and individuals that may result in farm specific regulations (**Error! Hyperlink reference not valid.**). Go to Section III Issues and Questions for Discussion of the FDA notice to focus on issues for which input is requested. One requirement that may come from this process is mandatory testing of water used for

irrigation, pesticide applications and washing of fruits and vegetables. The FDA will continue to consider responses to this public hearing through June 13th. Ohio Farm Bureau along with the recently established Ohio Produce Safety Roundtable plan to present positions to the FDA.

What can produce farmers do now? Learn about, understand and implement Good Agricultural Practices on your farm. The Cornell University based GAPS program provides a good overview, and a number of tools that farmers can use to increase their understanding, assess practices and identify specific risks on the farm (<http://www.gaps.cornell.edu/>). Research planned by our team at Ohio State will enhance the future reliability of GAPS and enable development of tailored educational programs down the road that will more closely meet the needs of individual growers and communities.

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