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FFF05-07

August 24, 2005

Crop Conditions:

Harvest of early apple varieties has started with some reporting that we are running as much as 10 days behind normal. I think we're about normal here in Lafayette, but I'm not quite sure what "normal" is anymore. Quality and size look good. Harvest of early grape varieties should begin in the next week or so in southern Indiana. Fruit quality appears to be excellent. Despite the warm summer, harvest is about a week later than normal.

Marketing Survey: The North American Farmers' Direct Marketing Association (NAFDMA) is conducting an extensive survey of farm direct marketers and agritourism operations. Dr. Ed Mahoney from Michigan State University is conducting this survey in partnership with NAFDMA. The organization would like any grower/retailer that does Pick Your Own, has a farm stand, travels to Farmers' Markets, has an on-site operation, or engages in any related direct marketing activity. This is a web survey that has gone through extensive review to make sure all respondents are protected from having their names sold. Results entered into the survey are confidential. This is very important information to Indiana. The results of the survey will: provide a realistic impact of the industry, make broad based benchmarks that have never been captured before making information available to the industry for expansion, make it easier to give information to financial institutions about the industry, help growers and farmers with pertinent information for zoning and insurance, document facts that help represent your interests and issues relevant to the industry and give communities a realistic analysis of the importance of direct marketing and agritourism. The first 777 responses received will be entered into a drawing for \$1900 towards attending the NAFDMA convention in San Antonio, TX or \$1000 cash. We encourage you to participate even if you are not a member of NAFDMA. To complete the survey, go to (<http://www.farm-marketresearch.com>)

You will need to register first by providing email, zip/postal code and name of your operation. If you have any questions, you may contact Dr. Jennifer Dennis at Purdue University at (jhdennis@purdue.edu) or (765-494-1352) or contact Dr. Ed Mahoney at Michigan State University (survey coordinator) by email (rirc@msu.edu) or phone (517-432-0285). If you have any questions or concerns about your rights as a study participant or you are dissatisfied at any time with any aspect of this study, you may contact - anonymously, if you wish - Peter Vasilenko, Ph.D., Chair of the University Committee on Research Involving Human Subjects by phone (517-355-2180), fax (517-432-4503), or email (uchris@msu.edu). (Dennis)

New Publication Available: (From Finger Lakes Vineyard Updates 8-08-05) **Cost of Establishment and production of V. vinifera grapes in the Finger Lakes- 2004.** This publication, by Jerry White, provides detailed estimates of the cost of establishing and growing V. vinifera grapes. It was developed based on input from several Finger Lakes growers. This new version updates the previous version published in 2001. Printed copies are available for \$10. It is also available online as a downloadable PDF file at: <http://hortmgt.aem.cornell.edu/pdf/resources/eb2005-06.pdf>

The following are other bulletins on production costs and winery establishment costs available from Applied Economics and Management group at Cornell University.

Lake Erie Grape Farm Cost Survey 1995-2000, by Barry Shaffer and Gerald White.

This publication details costs and returns for Concord Production in the Lake Erie Region. It summarizes costs and returns from over 30 farms.

<http://aem.cornell.edu/outreach/extensionpdf/eb0305.pdf>

Writing a Business Plan: An Example for a Small Premium Winery, Mark Pisoni and Gerald White, 2002:

<http://aem.cornell.edu/outreach/extensionpdf/eb0207.pdf>

Writing a Business Plan: A Guide for Small Premium Wineries, Mark Pisoni and Gerald White, 2002:

<http://aem.cornell.edu/outreach/extensionpdf/eb0206.pdf>

These two publications provide guidance for those interested in establishing a new winery business. One provides an example of a business plan for a small winery focused on premium varietal wines. The other provides a road map for developing a business plan for a startup winery.

Handling Your Food Safety Risk: By now, most growers have heard of GAPs (Good Agricultural Practices), and some, even of GMPs (Good Manufacturing Practices), yet, after a couple of years of speaking and consulting about GAPs and all of its related topics, I still get some blank stares when I mention GHPs (Good Handling Practices). What that tells me, of course, is that I haven't done a good enough job of providing useful information about GHPs and I hope to rectify that now.

GHPs are all of those precautions you take from storage through transportation through warehousing to minimize the risk of food borne illness. Our emphasis on preventing contamination in the GAPs program doesn't stop at the packing house. GHPs include chilling, storing and transporting produce (and storage again if you are warehousing). GHPs also overlap with GAPs in the areas of worker health and hygiene and water quality. Training and education in food safety is just as important for workers who are handling produce in storage and in the loading of trucks as it is for those in the fields and in the packing house. Water used post-packing (especially that used for ice) should meet potable standards.

Cleaning, sanitation, and temperature control are the focus for GHPs. In storage facilities, this means developing and implementing cleaning and sanitizing procedures prior to turning on the refrigeration units and filling your storage with produce. I want to emphasize cleaning and sanitizing as two separate activities and two separate procedures. Cleaning is done first to remove debris and organic materials by using a cleanser designed for the job. After rinsing, a sanitizer is then used to inactivate any remaining microorganisms. If you are developing a food safety plan, you would describe in writing your Standard Operating Procedure (SOP) for cleaning including the type of cleanser, the amount to use and how to rinse. An SOP would also then be written separately for the sanitation procedure.

Cleaning and sanitizing is compromised if there are any cracks or crevices in which organic material and therefore microorganisms can hide. Inspect, replace, repair and/or meticulously clean as appropriate the following: cracked hoses, damp insulation, hollow framework, rubber seals around doors, poorly-maintained filters, light switches, standing water, cleaning tools, open bearings, trash cans, porous surfaces (e.g. wood), icemakers, condensate; and especially walls and pipes over packing lines.

If you are using ice, recognize that you are using a material that is a potential hazard if not handled properly. One microorganism that is well known for causing food borne illness and is particularly tolerant of cooler temperatures is *Listeria monocytogenes*. This microorganism and others can be present in ice, ready to multiply and grow rapidly when the ice melts and temperatures increase. For this reason, the water and everything used in the manufacture, conveyance and storage of ice must be clean and sanitized. Using potable water is a must. After that, recognize that the ice house itself, and all conveyors and chutes, must be cleaned and sanitized on a regular basis. Porous surfaces such as wood should be replaced with cleanable surfaces wherever the surface comes in contact with the ice.

Maintain your storage temperatures. Keep storage facilities within the recommended temperature range for the produce you are storing. Monitor and document your storage temperatures on a regular schedule, so you can demonstrate that produce is handled safely while under your control. If produce is kept cool up front, microbial growth is minimized and your risk is minimized. Temperature abuse after produce has left your control is less likely to result in cases of food borne illness if growth is prevented early in on in handling.

Finally, inspect trucks prior to loading to insure cleanliness and proper refrigeration. This is often the last thing a grower can control in their operation. Identify prior loads hauled in the truck. Trucks that have hauled raw animal products should be avoided due to the risk of cross contamination, so specify up front that you don't want trucks that are hauling raw animal products. From my own experience, it is often possible to tell if a truck has been properly cleaned by both appearance and the smell. Know where the closest truck cleaning station is to your operation, so you can direct drivers to it if they come to you with a dirty load. As a part of your food safety program, document truck temperature, cleanliness, state of the product, and required shipping temperature range at time of shipment. Including your recommended temperature range on the bill of lading is a good way to communicate and easily document your expectations for the handling of your produce after its left your control.

A complete food safety program includes GAPs, GMPs (if you have a packing house), and finally, GHPs. Be thorough, be prepared, and you will significantly reduce your risk for microbial contamination of fresh produce. The Ohio and Indiana Specialty Crop Food Safety Initiative offers growers a variety of tools to address pests and other food safety issues. The Initiative is presented in partnership with the United States Department of Agriculture's Risk Management Agency.

Ohio and Indiana fruit and vegetable growers can get help with the development of a food safety program by contacting Mid American Ag and Hort. Services by phone at 614-246-8286, fax at 614-246-8686, or email at maahs@ofbf.org. More information about the Ohio and Indiana Specialty Crop Food Safety Initiative may be found at www.midamserVICES.org by clicking on "Projects." (By Shari L. Plimpton, Ph.D., Food Safety Educator - Ohio and Indiana Specialty Crop Food Safety Initiative)

Fruit and Vegetable Twilight Meeting: Fruit and vegetable farmers and market gardeners are invited to tour the Meigs Horticultural Facility at the Throckmorton Purdue Ag Center on Sept. 7, 2005, from 5:00 to 8:00 p.m. The tour will include pumpkin and sweet corn variety plots, as well as apple and grape research plots. Specialists will be present to discuss harvest practices for food safety; insect, disease, and weed management; and highlights of melon trials in SW Indiana. Dinner will be served following the tour at a cost of \$5/person. To register please call

219-785-5674 and leave a message with your name and the number of people attending. The program is sponsored by Purdue Extension, Purdue Ag Centers, and the Depts. of Horticulture and Landscape Architecture, Botany and Plant Pathology, and Entomology. For more info, see: <http://www.hort.purdue.edu/fruitveg/events/events.shtml>

Zestar!TM apple: In the last week I have harvested Zestar!TM apples from a test plot at the Meigs farm. This is a new cultivar from the University of Minnesota that has very good size and quality for an early season apple. It's about 2-3 weeks earlier than Gala. It's a bi-colored apple, attractive with a mild sub-acid flavor. Texture is very good for an apple in this ripening season. Productivity from the 5 trees I have has been very good. If you are looking to plant a few apples in this ripening season, Zestar!TM could be one to consider. (Hirst)

Coming Meetings:

Sept. 7: Fruit and Vegetable Plot Tours, Meigs Farm, Throckmorton Ag. Center, Lafayette, IN. Topics to be covered include: harvest practices for produce safety, grape varieties and training systems, apple varieties, dwarf apple pruning and training, organic apple production, organic vegetable research, pumpkin and sweet corn varieties, Southwest Purdue Ag Program research update, pumpkin disease management, pumpkin insect management, update on Sandea herbicide trials, and sweet corn insect management. 5.00-8.00 pm. Directions to Meigs Farm: From Lafayette take US 231 S to CR 800 S intersection (flashing lights), turn left on CR 800 go 1 mile and turn right on CR 100 E. Farm is 1 mile on left. From Crawfordsville take US 231 N to CR 800 S (approx. 3 miles north of Romney) and follow above directions. From Indy take I 65 north to SR 28 exit and turn left and stay on SR 28 until you reach US 231 (Romney). Turn right onto US 231 and go 3 miles to CR 800 S intersection. Turn right on CR 800 and then right again onto CR 100E, go 1 mile and farm is on left. Watch for signs.

Sept 12: Purdue Grape and Wine Harvest and Processing Workshop. West Lafayette Campus and Meigs Farm. Contact <http://www.indianawines.org> and click on Events or call Jill Blume at 765-494-1749. Registration is required and space is limited.

January 23-25, 2006: Indiana Horticultural Congress, Adams' Mark Hotel, Indianapolis.

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