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Crop Conditions: Central and northern Indiana are dry while the southern third of the state has received adequate rainfall over the past couple of weeks. The high temperatures have compressed the ripening season for berry crops. Blueberry harvest is underway and growers are having trouble keeping the fruit picked. Overripe fruit tends to attract Japanese beetles and often develops Aternaria or anthracnose fruit rot so it is important to keep all ripe fruit harvested. Peach harvest is underway and fruit quality and size have been excellent. Some summer apples are being harvested. Apples are sizing well although the dry weather will be holding them back somewhat. If you have the ability to irrigate, it would pay to make use of it. Where rainfall has been frequent diseases are prevalent.. Grape black rot and downy mildew are fairly common in the southern part of the state.

Special Note: This will be the last newsletter issued on a bi-weekly basis. The rest of the issues for 1999 will be published on a monthly basis August through November.

IHS Summer Tour: The Indiana Hort. Society had a wonderful summer tour last week. I have been flooded with many very positive responses. Of course it makes it easy with such great hosts. As we saw, Dave and Bonnie McAfee are doing a lot of creative and interesting things, and we appreciate their willingness to show these to us. Son Mike Yoder did a great job demonstrating the County Line Orchard internet web site to us, and I think many were impressed at the impact they had had through this site, and how uncomplicated it was to become a participant in this technology. The setting was wonderful, and the weather couldn't have been better. Although the turnout of around 60 was somewhat less than what we have come to expect in recent years, this did not diminish the quality of the meeting. Dave, Bonnie and Mike, we thank you for your hospitality and your

efforts in making this year's summer meeting one to remember. *-Hirst*

Cider Warning Labels: A number of cider makers are currently in the process of ordering labels for the coming cider season and have been asking what the deal is with warning labels for this season. Remember that last season, if you weren't pasteurizing your cider (or processing it to achieve a 5-log kill of E. coli), then either a warning label on the jug, or a warning sign on a placard near the cider cabinet, was mandatory. The Indiana State Department of Health have taken a very practical point of view and have said that as long as the producer is making a good attempt to educate the consumer of the risks involved in cider consumption with the warning statement (either warning label or placards), then they would be fairly happy. The federal regulations however state that placards are no longer acceptable as of September 6 this year. After this date, the warning statement must appear on the container. Other points to note:

- The word "WARNING" must be capitalized

and must appear in bold type

- The warning statement must be in a type size no less than one-sixteenth of an inch
- The warning statement on containers must be set off in a box by the use of hairlines
- Processors may use a separate sticker to display the warning statement or incorporate into their main label
- If separate stickers are to be used for the warning label, then it must be typically visible – federal inspectors are likely to take a dim view of warning stickers placed right at the bottom of the jug or in a position where it is not easily seen.

The wording of the warning statement must be as follows:

WARNING: This product has not been pasteurized and, therefore, may contain harmful bacteria that can cause serious illness in children, the elderly, and persons with weakened immune systems.

Note that this is not the suggested wording of the warning statement, this is it folks – no room for improvisation here. As of right now, we don't know what's coming in terms of HACCP or mandatory pasteurization, but no new rules on this will be in place for the coming cider season. -Hirst

Export Promotion of Apples: The apple industry's export promotion efforts will receive \$3 million from the market access program of USDA to assist in promoting US apples overseas. The apple industry operates two export promotion programs, one managed by the US Apple Association and the other by the Washington Apple Commission. The market access program (MAP) has given the apple industry \$45 million in the 13 year history of the program, and US apple exports have increased by 56% over this period. According to Kraig Naasz, president of the US Apple Association "Every member of our industry, from Maine to California, benefits from MAP and the export sales its funding promotes. It remains one of the most successful public-private partnerships ever created, returning far more to the federal treasury in job growth and tax revenue than it spends." Although the MAP has been successful in promoting increased agricultural

exports, the program still has some detractors in congress. During the last fiscal year there was an amendment to eliminate the program, however this was defeated. Positive feedback to our lawmakers is important, so if you support this program, let your senators and representatives in the house know. A sample letter can be found in the government affairs section of the US Apple Association website at www.usapple.com -Hirst

Brown Rot Of Stone Fruits: As peach harvest continues, be aware of the need for sprays to control brown rot. Warm, wet, humid weather is particularly favorable for brown rot. Pre-harvest sprays for brown rot should be started no later than 3 weeks before harvest or when fruit begins to color. Elite, Indar and Orbit are relatively new sterol inhibitor fungicides that give excellent control of brown rot. For further information on fungicides and timing of spray applications see ID-168, "1999 Indiana Commercial Tree Fruit Spray Guide". In addition to maintaining sprays for brown rot, also maintain sprays for insect pests that may injure fruit and allow brown rot to gain a foothold. Use care in the picking and handling of fruit to avoid punctures and skin abrasions. Any break in the skin of the fruit enables brown rot to more easily cause infection. -Pecknold

Necrotic Leaf Blotch On Goldens: Generally we first start noticing necrotic leaf blotch (NLB) on Golden Delicious in late June or July, when the weather becomes hot and sticky. Symptoms of NLB are leaf yellowing and drop; often patches of brown blotches develop along with leaf yellowing. Symptoms develop suddenly, almost overnight, and in waves, generally from June through August. The cause of NLB is not known; however, the disorder is thought to be related to air temperature, light intensity and soil moisture. It is most severe when a cool, rainy period of 4 - 5 days precedes several hot, sunny days. Although it appears NLB is not fungal caused, the disease is reduced when ziram is included in the cover sprays. -Pecknold

Apple Fruit Rots: Wet weather is ideal for most fungal diseases. If summer rains are a

frequent event in your area of the state expect an increase in sooty blotch and flyspeck, black rot, bot rot, bitter rot and any other rots that might have made their way into your orchard. Maintain a tight spray schedule if wet weather persists; see ID-168, "1999 Indiana Commercial Tree Fruit Spray Guide", for suggested fungicides. As always, **good orchard sanitation** is a must for control of summer rot disease problems. Remove and destroy all dead and/or dying wood from your orchard...NOW; this means brush piles, old prunings on the orchard floor, dead trees, dead limbs in trees, etc. -*Pecknold*

Botrytis Bunch Rot: Grapes are at bunch closing, a stage when berries within the cluster begin to touch. This is an important time to apply a fungicide to protect against Botrytis bunch rot since it is the last opportunity to protect the interior of the berry cluster. Botrytis is particularly bad on tight-clustered French hybrids, such as Vignoles and Seyval, and most vinifera varieties, especially Pinot noir, Riesling, and Chardonnay. Rovral has been the standard fungicide for Botrytis control over the past few years, but a new product, Vanguard, was registered this year. Recommendations from New York call for alternating Vanguard with Rovral or tank mixing the two together. The labeled rate for Vanguard is 10 oz per acre alone or 5 to 10 oz/acre when used in a tank mix with 1 lb. Rovral. Sprays should be directed toward the cluster zone and applied in enough water to get thorough coverage. Vanguard is a system fungicide that resists wash-off and has shown limited (48 hr) post infection activity against other disease on other crops. It is classified as a 'reduced risk' fungicide by EPA due to its favorable environmental and toxicological properties. It is important to realize that both of these fungicides are effective ONLY against Botrytis. They provide no protection against black rot, ripe rot, the mildews, etc. It is also important to remember that both of these fungicides are prone to resistance development in the pathogen popu-

lation, so they should be used carefully. -
Bordelon

Japanese Beetles: We continue to get reports of Japanese beetle damage to fruit and ornamental plants. It is important to scout your plantings often and apply an insecticide registered for your particular crop if damage is bad enough to warrant an insecticide application (the economic threshold is reached). Recent research by John Wise at Michigan State University and Dave Trinka at Michigan Blueberry Growers Marketing have produced some interesting results. A summary of the 1997/98 bioassays and field studies indicated several important things. First, Sevin clearly provided the quickest kill of all the products tested. Even as Sevin's immediate lethal affects decline, the sub-lethal effects maintained significant knock-down for at least 7 days. Because Sevin presently has a 7 day PHI it may not be the best fit for berry picking schedules. Beetle mortality from Aqua Malathion (1 day PHI) declines rapidly after three days, but would be effective in providing immediate lethal effects the day before harvest. Lannate (3 day PHI) provides a very quick knock-down of beetles, but its efficacy also declines rapidly once you get out about 4 days. Imidan (3 day PHI) maintained the best overall residual control, providing significant beetle mortality for as long as 14 days. However, it's lethal affects are not apparent until 3 to 4 days after application. Check the small fruit spray guide (<http://www.hort.purdue.edu/hort/ext/sfg/>) for a complete list of registered insecticides, their PHIs and relative effectiveness. -
Bordelon

Tissue Analysis Grapes and Small Fruits: Plant nutritional status is important for all phases of plant growth and has a direct effect on vigor, fruitfulness, cold hardiness, and other factors. Tissue analysis is the most reliable means of determining plant nutritional status. Combined with soil testing, tissue analysis can help pinpoint the source of problems and

determine what measures may be needed to ensure proper nutrition of the crop. Tissue analysis samples should be collected at the appropriate time to give the most meaningful results. For strawberry, sample the first fully expanded leaves after renovation, usually in mid to late July. For brambles, sample leaves on non-fruiting (primocanes) between August 1 and 20. For blueberries sample leaves during the first week of harvest. For grapes, samples should be taken about 70 days after full bloom, usually early to mid August. Samples should be adequate in size. Collect 30-60 leaves for strawberries, brambles, and blueberries, and 100 leaf petioles for grapes (for grapes submit only the leaf petiole, or stem, for analysis, discard the leaf). Collect samples to represent the entire field, not just from a few plants. Sample different cultivars separately. If specific problems exist, collect separate samples from both normal and problematic areas of the planting.

There are several private companies and a few universities that provide tissue analysis. Your county extension office has a list of the ACP Certified plant and soil analysis labs in Indiana. The Midwest Small Fruit Pest Management Handbook has a chapter on tissue analysis and fertilizer recommendations. It is available for \$6.00 from the Purdue Media Distribution Center at 1-888-EXT-INFO (1-888-398-4636) or on line at <http://www.ag.ohio-state.edu/~sfgnet/> -Bordelon

Taste of Indiana Agriculture: “A Taste of Indiana Agriculture” wine tasting party will be held at the Farm Bureau Building on the Indiana State Fairgrounds from 6:00 to 9:00 p.m. August 5. Tickets are \$15 and are available at any TicketMasters Outlet, and at the Indiana State Fair Box Office (317/927-1482). This program culminates the Indiana International Wine Competition, which is managed by Purdue’s Dr. Richard Vine and Ms. Ellen Harkness. This wine competition is one of the largest in the country and has brought consid-

erable recognition to the Indiana wine industry. “A Taste of Indiana” showcases the award winning Indiana wineries as well as other Indiana produced food products. Indiana Pork Producers, Indiana Beef Council, Indiana Veal Association, Indiana Sheep Breeders Association, Milk Promotion Services of Indiana, Illiana Watermelon Association, Indiana Ostrich Association, and Hoosiers United in Growing Emu will be among the groups presenting their products. All of the state’s 19 wineries will be there pouring their best wines. This program is being sponsored by the Restaurant & Hospitality Association of Indiana, the Indiana Association of Beverage Retailers, and WTPI radio 107.9 fm.

Farm crisis meetings planned across state:

Four brainstorming sessions will be held across the state later this month to allow farmers to present ideas on how to cope with an expanding farm crisis that has the potential to devastate the nation’s farm economy.

Called the Farm Crisis Forum, the series is sponsored by Indiana Farm Bureau. Anyone involved in production agriculture is invited to attend. “While most of the nation’s economy is booming, our industry is facing a crisis,” said IFB President Harry Pearson, who farms in the Blackford County area. “Analysts are expecting hog prices to remain well below the cost of production for the rest of this year, soybean prices are the lowest they’ve been in at least 25 years, and corn prices are also plummeting.

“If some things don’t change, and change pretty quickly, the face of farming will change drastically in the next few years. We need input from Indiana farmers in order to find ways to help them cope with this crisis.” The focus at the forums will be on finding solutions for some of the problems facing agriculture. Each forum will last from 2 to 2 1/2 hours and will be held at the following dates and locations. For more information on a particular meeting, call the field representative who is

listed.

- July 21, 7 p.m., Rensselaer High School lecture hall, Rensselaer (located on Highway 14 on the east side of Rensselaer). Field representative: Tim Stoner, (219) 766-2435.

- July 22, 7 p.m., Eagle Nest Event Center, Eagle Glen Golf Club, 28 South Hancock Farm Road, Columbia City. Field representative: Susan Lawrence, (219) 349-0402.

- July 23, 1:30 p.m., Executive Inn, 1 Executive Blvd., Vincennes. Field representative: E.B. Rawles, (812) 694-8478.

- July 29, 7 p.m., Community Building, Bartholomew County Fairgrounds, Columbus (located 3-4 miles south of State Road 46 on State Road 11). Field representative: Amy Hutson, cell phone number (317) 635-3699. For more information about the Farm Crisis Forums, call Bob Kraft toll-free, (800) FARM-BUR, extension 7810.

Something for your calendar: You've heard the most innovative marketers in the state sing it's praises – the North American Farmers' Direct Marketing Association. Next year they will be holding their annual conference in Cincinnati, Ohio, from February 10-12. It may seem like a long way off yet, but write it on your calendar now and plan to attend. Remember, no-one ever made a dime from growing a crop, they only made money when they sold it!

Pesticide Container Recycling: The Office of the Indiana State Chemist is offering pesticide container recycling at several locations across the state August 3 through September 9. Contact the OISC at 765-494-1594 for the date of a location near you.



Subscribing electronically: To subscribe (or unsubscribe) to Facts for Fancy Fruit, send a message to fff@lists.hort.purdue.edu with the subject or body “subscribe” (or “unsubscribe”). You can also use the form at the web site <http://www.hort.purdue.edu/fff/maillinglist.html> to submit your subscription. Electronic access is free of charge.

Coming Meetings:

July 14-17 - American Society for Enology and Viticulture/Eastern Section 24th Annual Conference and International Oak Symposium, St. Louis, MO. Contact: Ellen Harkness, Dept. of Food Science, Smith Hall, Purdue Univ. W. Lafayette, IN 47907-1160, Phone 317-494-6704, FAX 317-494-7953 Email: harkness@foodsci.purdue.edu.

July 28 — 10th Annual Viticulture Field Day & Steak Cookout, Michigan State University Southwest Michigan Research and Extension Center in Benton Harbor. Pre-registration is necessary for this event. For more information contact Dr. Tom Zabadal, SWMREC, 616-944-1477.



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