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Last Issue of 1998: This is the last issue of Facts for Fancy Fruit for 1998. All paid subscribers will receive the first issue of 1999 in March. At that time you will have an opportunity to renew your subscription. You may also renew through the Indiana Horticultural Congress registration in January. We hope you have enjoyed this year's issues and found them useful. If you have any suggestions on how we can make the newsletter more useful, please contact us.



Weather Notes - The long range forecast is for normal temperatures and above normal precipitation for November. The late fall/early winter forecast is for normal temperatures and normal precipitation but we can't look at the "normal/normal" forecast and expect to skate through this winter. Look for active weather patterns this winter with periods of above normal precipitation and below normal temperatures due in part to the short transition from a strong El Nino to La Nina. Look for periods of cold temperatures and above normal precipitation to begin in late November to early December. After an "active winter" expect for weather conditions to settle down to a milder, drier pattern in late February to early March.-*adapted from comments at the Purdue Crop and Weather Meeting, Oct. 30, 1998.*



Season Review: Tree Fruits - Generally, we had very good crops of apples and peaches around the state this year. A very mild winter resulted in hardly any cold damage to buds. Even peaches came through very well in most cases. The warm spring was the exact opposite of the previous year, and the warmth during the cell division stage of fruit

growth translated into large fruit size at harvest. The mild winter and warm spring combined to make this an early season for us — peaches and early apples were about 2 weeks ahead of normal, but by the end of apple harvest we were perhaps only a few days ahead of normal. The advanced season helped some folks out with getting a jump on the market.

Not everything was rosy this year however. Some hail damage was sustained early in the season but the damage seemed to be isolated and fairly minor. The early season meant fruit were ripening at a warmer time of the year and so coloring was a bit of a problem for some apples. Cider continued to be a challenge, with the public unsure whether pasteurized or unpasteurized was the best way to go. We now have about half a dozen folks in the state pasteurizing their cider, and the ones I have spoken to say that it has helped their sales considerably. Fortunately, apart from one minor incident recently, no outbreaks or problems with cider were reported this season (see elsewhere in this edition of FFF for more details).

So overall the picture for tree fruits was a heavy crop, good size, average to good market conditions and fairly happy growers! -Hirst



Season Review: Small Fruit and

Grapes-The mild winter of 1997-98 was very beneficial to small fruits and grapes. No

winter injury occurred so we had excellent crop potential. Growers got a big scare in mid-March when temperatures dipped into the single digits after a very warm January and February. Fortunately, only minor damage occurred, mostly to brambles (raspberries and blackberries) which had broken dormancy. Twice as much rain as normal fell on the southern third of the state during April, and June was also one of the wettest months on record for the central and southern Indiana. Despite the excessive rains, disease problems were not particularly bad. A frost occurred on June 6 across the northern third of the state that damaged blueberries, particularly on low-lying muck soils. July through October saw warm and dry conditions, leading to excellent fruit quality, especially in grapes. The 1998 growing season started early and stayed about 1-2 weeks ahead of normal all the way through harvest for most small fruit crops. -Bordelon

Season Review: Tree Fruit



Diseases - An unusually high incidence of white rot (Bot rot) was reported from a number of growers throughout the state, especially middle and southern Indiana. Numerous wet

periods from petal-fall through the early cover sprays, in addition to not having particularly effective fungicides for this disease were the likely causes for the high incidence of white rot. All summer rot diseases are most likely to be a problem in orchards lacking good orchard sanitation...but don't take that personal, in a 'bad' year for fruit rots, even 'clean' orchards can have problems with rot diseases. Sooty blotch and flyspeck, as always, were common fruit problems at harvest. However, drought conditions that extended from mid-summer through harvest resulted in only light to moderate levels of sooty blotch and flyspeck. Both diseases continue to be of major concern due to restrictions on the use of EBDC fungicides. Frequent scab infection periods during April and May resulted in another bad year for apple scab. Fruit infection was very high in those orchards lacking a good, early spray program for scab. The moderate winter temperatures did result in an above normal carry over of apple powdery mildew; however, the extensive use of the sterol inhibitor fungicides (Nova) kept mildew in check for the most part. Leaf curl was again the most prominent disease on peach and nectarine. Brown rot and scab were for the most part negligible. For the fifth consecutive year very little fireblight was seen or reported throughout the state. Amazing! Just don't forget to monitor for fireblight

conditions during bloom next year (warm and wet). You never know when the sleeping lion will awake! -Pecknold

Season Review: Insects- As in most



seasons, the insect situation in 1998 consisted of some that were worse than normal, some not as bad as normal, and most about normal. Probably the worst of the fruit insect pests in 1998 was spotted tentiform leafminer. Very early in the season, I received reports from growers of swarms of leafminer adults in some orchards. Later on, we saw much higher than normal numbers in several locations. Populations in 1997 were not unusually high, so chances are that this was a one-year occurrence and not the start of a trend. However, we will watch things in 1999 to see what happens. If you had problems with leafminers, you might consider using pheromone traps to monitor adult activity and spray Thiodan when first generation adults are at peak flight, sometime between half inch green and pink. After petal fall, Provado will provide good control of the larvae.

Despite the warmer than usual summer resulting from El Nino, European red mites were relatively minor problems in most areas in 1998. We saw populations start to build in early June, but in late June they crashed and remained low for the rest of the season. We monitored mite populations throughout the season in one commercial orchard that received no miticide applications, and populations were virtually zero for the entire season. If you used Apollo or Savey in 1998, and didn't see any serious problems later in the season, you might consider not applying either of those materials in 1999. Many growers have been successful in skipping a year with these miticides, even on those varieties that traditionally have mite problems, such as Red Delicious. The key to making this strategy work is to conserve the predator mites by carefully selecting insecticides. We are fortunate to have some options to use as rescue treatments if a problem arises, such as Pyramite or the summer oils. Skipping a year will also delay the development of resistance to Apollo and Savey, which has been a problem in other countries. I would not recommend trying to skip two years. Growers who have attempted this have run into problems. Regardless of the situation, I still recommend the application of an early season oil spray, which will help with aphid and scale control, as well as killing mite eggs.

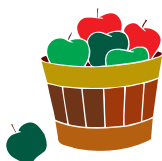
Most of the other fruit insect pests were fairly normal in numbers. Japanese beetle numbers were down in most areas. If you had unusually high densities of a fruit pest, I would appreciate it if you would let me know. As always, I should remind you that there is little correlation between insect densities in one year and densities the

following year. Therefore, just because you may not have many problems in 1998 doesn't mean that you will not see problems in 1999. Frequent monitoring is important for keeping track of insect activity. -Foster



Indiana Cider Contest - As part of the Indiana Horticultural Congress this year, we will be holding what we hope will become an annual cider contest. Hopefully all cider makers in the state have already received that announcement concerning this. The contest is open to all cider makers in Indiana, and the winner will receive a plaque stating that this was judged the best cider in Indiana. Either fresh or frozen cider may be submitted (frozen cider should be thawed when it is submitted). If you are interested in entering the contest but didn't receive the information, please call Karen Cooper in the Department of Horticulture and Landscape Architecture (765-494-1301) and she will send you a copy of the flyer. -Hirst

Cider Survey - I plan to conduct a survey to find out the status of the cider industry in Indiana, and also to assess what impact regulations have had on the industry. I will send out a short survey to all the cider makers in the state I know of in the next month or so. I would ask for your cooperation in completing the form and sending it back in - I'll compile the results and present them at Hort. Congress. -Hirst



Record Apple Crop Nationally - The national apple crop this year is large, in fact the second largest on record. Estimated to be 265 million bushels, it is 7% higher than last years' crop, which had a farm-gate value of \$1.58 billion (not bad for a 'minor' crop!). Sixty-one percent of the 1997 U.S. apple crop was eaten as fresh fruit, 39% was processed into apple products, and less than 1% was not marketed. Of the 39% of apples that were processed, 21% were used for juice and cider, 3% were dried, 2% were frozen and 12% were canned. Other uses included baby food, apple butter or jelly, and vinegar. -Hirst

USDA Apple Purchases - The USDA has recently carried out its first purchase of U.S. apples during the 1998 crop season. The agency estimated it would purchase more than 229,000 cartons of apples to be used for the Child Nutrition Program and other domestic feeding programs. The U.S. Apple Association has urged the USDA to make a second purchase of apples this season also, but no such decision has yet been announced. -Hirst

Bitter Pit - Now is a good time to take note of blocks, which suffered from bitter pit, or other post-harvest problems this year. As we all know, applying calcium directly to the fruit surface can reduce the incidence and severity of bitter pit. The earlier in the season this is done, the more calcium is able to enter penetrate the fruit skin and enter the fruit tissues. Therefore, take a note of problem blocks now so you'll be ready with your calcium applications next spring. -Hirst

Beginning Commercial Apple Production - The program is almost complete for our Beginning Commercial Apple Production workshop. This one-day intensive session is primarily intended for those contemplating entering the apple industry, or those that have just bought an orchard, although anyone interested is welcome to register. The workshop will be held in conjunction with the Indiana Horticultural Congress on the day prior to the congress, Monday, January 25, 1999. The congress runs from January 26-27. Look for a separate sign up sheet in the Hort. Congress registration materials. -Hirst



Winegrape Production in the Midwest II, Advanced Topics in Production of Premium

Winegrapes: Throughout the United States consumption of premium wines is increasing. The wine producing states of the Midwest are experiencing increased sales of premium wines produced from regionally grown grapes, creating a strong demand for locally produced, premium winegrapes. To help growers meet this demand, specialists with the Heartland Grape and Wine Coalition (Michigan State University, Ohio State University, and Purdue University) are offering an advanced course in winegrape production, emphasizing production practices for optimum winegrape quality.

This conference will be the third in a series of conferences developed by the Heartland Grape and Wine Coalition. The 2-day conference will be held in Indianapolis January 25-26, 1999 at the Adam's Mark Hotel.

The conference will bring together a wealth of technical knowledge and practical experience for those who are either experienced or beginner viticulturist in the Midwest. The conference will not only expose participants to a series of presentations covering important topics in viticulture, but also provide an opportunity for informal discussion and exchange of ideas with others involved in premium winegrape production in the Midwest. Participants will also have the opportunity to sample Midwest commercial and experimental wines. The conference will be

held in conjunction with the Indiana Horticultural Congress, so participants will have the opportunity to attend educational programs in other areas of horticulture and take advantage of a large trade show immediately following the grape conference.

We hope this conference will be even more successful than our previous programs and invite all those interested to join us for this event. For more information contact: Dr. Bruce Bordelon, 1165 Horticulture, Purdue University, West Lafayette, IN 47907-1165 Phone: 765-494-8212 Fax: 765-494-0391 email: bordelon@hort.purdue.edu



Tax Deductible Gifts to the 1998 Purdue Fruit Research and Extension Fund - The Department of

Horticulture has a gift account to support Pomology Extension and Applied Research. Anyone who wishes to contribute to the account can receive a tax credit from the state. In addition, the Indiana Horticultural Society voted to support a voluntary checkoff for apples in the amount of one (1) cent per bushel to be used to help support the tree fruit research and extension program. This is a very nominal amount and should present little problem for Indiana growers. For each 1,000 bushels a grower produces that translates to \$10. For each 10,000 bushels that becomes \$100. Growers in other states are contributing much larger amounts to their industry research and promotion programs.

Indiana citizens can receive a 50% tax credit for direct contribution to an in-state university up to a maximum gift of \$400 if filing a joint return or \$200 if filing an individual return. The tax credit directly reduces the bottom line of your state income tax, either reducing the amount you owe in taxes or increasing the refund you will receive. If you work for a company that participates in the Matching Gift Program, you may double (or more) the value of your gift. Look for form CC 40 or check with your accountant.

Contributions can be made payable to Purdue University and sent to: Tree Fruit Research/Extension Fund, Dept. of Horticulture and Landscape Architecture, Purdue University, 1165 Horticulture, W. Lafayette, IN 47907-1165. On your check memo line, please indicate for fund 704-1165-0012. Please note that this fund will not be limited to horticultural work, but will include the other programs related to tree fruit production. For more information on gift giving contact the Purdue Research Foundation, Purdue University, West Lafayette, IN 47907 for information on the Annual Giving and Matching Gift Program. PRF will send a brochure that explains all the options and provides forms needed for contribution and tax credit.

Silent Auction: - The silent auction to support the Tree Fruit Research and Extension Fund will be held again at the Indiana Horticultural Congress. If you have items you would like to donate in support of tree fruit research and extension at Purdue, contact Dick Hayden at 765-463-6587.



New York Grape and Wine

Workshop - A workshop titled Locating, Financing, and Establishing New Vineyards and Wineries will be held March 22-24 at the Ramada Inn, Geneva, NY. This workshop, featuring

university and industry speakers, will cover all aspects of starting or expanding new vineyards and wineries. Day 1 is intended for beginning growers and will cover initial planning for vineyard/winery operations, including overview of vineyard enterprises, developing a business plan, costs of vineyard establishment, economics of startup wineries, and financing new operations. Day 2 is intended for both new and established growers, and will cover vineyard establishment, including site selection, variety options, pre-plant preparation, vineyard layout and planting, and vine training. Day 3, will be the 28th Annual New York Wine Industry Workshop which will cover starting and expanding wineries, including legal requirements, siting a winery, winery design, equipment needs, and waste handling. Participants may register for each day separately. For registration please contact Ms Nancy Long, Dept. of Food Science & Technology, New York State Agricultural Experiment Station, Cornell University, Geneva, NY 14456 phone: 315-787-2288; fax: 315-787-2284; e-mail: npl1@cornell.edu. For more information please contact: <http://www.nysaes.cornell.edu/fst/faculty/henick/wiw/index.html> or Dr Robert Pool, Professor of Viticulture, Cornell - Geneva. phone: 315-787-2238 fax: 315-787-2216 e-mail: rmp2@cornell.edu or Dr Tim Martinson, Extension Specialist, Finger Lakes Grape Program. phone: 315-536-5134 fax: 315-536-5117 e-mail: tem2@cce.cornell.edu or Dr. Thomas Henick-Kling, Assoc. Prof. Enology, Cornell - Geneva phone: 315-787-2277 fax: 315-787-2284, e-mail: th12@cornell.edu or Phil Throupe, Extension Viticulturist, Lake Erie Grape Program, phone: 716-672-6464, fax: 716-679-3122. e-mail: pthroop@cce.cornell.edu

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

Dec. 1 - Illinois-Iowa Fruit and Vegetable Growers Conference, Holiday Inn - Moline Airport. For more information, contact Bill Whiteside 630/584-6166 or whitesidew@mail.aces.uiuc.edu.

Dec. 8-10 - Michigan State Horticultural Society Annual Meeting, Grand Rapids, Michigan. For more information and registration call (616) 794-0467.

Jan. 4-5 — 143rd Annual Meeting of the Kentucky State Horticultural Society and the 28th Annual Meeting of the Kentucky Vegetable Growers Association and the Kentucky Grape and Wine Short Course. Holiday Inn North, 1950 Newtown Pike, Lexington, KY. Contact John Strang at 606-257-5685.

Jan. 15-17 - 8th Annual Southern Sustainable Agriculture Working Group (SSAWG) Conference and Trade Show, Clarion Resort Buccaneer Hotel, Jekyll Island, GA. Registration before Dec. 21 is \$65 and after Dec. 21 is \$75. Contact Jean Mills, Conference Coordinator, phone 205/333-8504 or e-mail jeanmills@aol.com

Jan. 20-22 - North American Farmers Direct Marketing Conference. The Grand Center, Grand Rapids, MI. Pre registration \$85 (before Dec. 14 th). Contact Bob Tritten 810/234-4126.

Jan. 25-26 — Heartland Grape and Wine Coalition, Premium Winegrape Production Short Course. Adam's Mark Hotel, Indianapolis. Contact Bruce Bordelon (765) 494-8212.

Jan. 25-27 — Indiana Horticultural Congress. Adam's Mark Hotel, Indianapolis. Contact Jim Simon (765)494-1328

Feb. 3-5 - Ohio Fruit & Vegetable Growers Congress and Ohio Grape-Wine Short Course , SeaGate Center, Toledo.

Feb. 8-10 - MSU Tree Fruit Integrated Pest Management (IPM) School. Contact MSU's NW Horticultural Research Station at (616) 946-1510. This popular, annual school is held at the Kellogg Biological Station on Gull Lake in Southwest Michigan. The program is designed for growers, consultants, scouts, chemical company field reps, and others who need in-depth information about tree fruit pest management.

Feb. 26-28 — Indiana Winegrower's Guild Wine/Grape Symposium. Bloomington Convention Center. Contact Steve Thomas, President, IWG: 800-948-8466.

March 22-24 - Locating, Financing, and Establishing New Vineyards and Wineries. Ramada Inn, Geneva, NY. For registration please contact: Ms Nancy Long, Dept. of Food Science & Technology, New York State Agricultural Experiment Station, Cornell University, Geneva, NY 14456 phone: 315-787-2288; fax: 315-787-2284; e-mail: npl1@cornell.edu.

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