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**FFF99-14
 November 22, 1999**

Last Issue of 1999: This is the last issue of Facts for Fancy Fruit for 1999. All paid subscribers will receive the first issue of 2000 in March. At that time you will have a final opportunity to renew your subscription. You may also renew using the form in this issue or 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.



Season review-Tree Fruits: The season started on an ominous note with peach crops frozen out in all but the lower parts of the state. For those that did have a crop, it was a good one in terms of both crop load and fruit quality. Flowering of apples was very patchy around the state, with many orchards displaying some biennial bearing as seen by light flowering. A few folks (including us at Purdue) made the mistake of under-estimating the level of flowering and not thinning or thinning too lightly resulting in heavy crops of small fruit. Favorable growing conditions helped us out this year, with the drought not setting in until after the critical period of cell division was over. The dry conditions probably cost us a little in terms of fruit

size and may hurt us in terms of return bloom. On the other hand, the dry weather reduced disease problems and allowed cover sprays to be stretched out a little. I think most folks have had a good marketing season, and the issue of cider safety doesn't seem to have hit the headlines as it has in the last few years. There was a case of food illness attributed to cider in Oklahoma in which five children became ill, but it attracted scant attention in the national press and I doubt it affected sales too much. Outbreaks such as this however, are likely to keep the issue of cider safety on the mind of the regulators. *-Hirst*



Season Review-Small Fruit and Grapes:

The winter of 1998-99 was a La Nina winter as predicted, with swings in temperature and precipitation. Fall through early December was very warm and dry, but sub-zero temperatures occurred by the end of the year, and a major winter storm hit in early January. The minimum low temperature for the winter occurred on January 5 and ranged from -5 °F in southern Indiana to about -20 °F in northern areas. The rapid changes in temperatures probably lead to the significant amount of delayed winter injury that was observed on brambles. Rainfall was near normal early in the season, but by the end of June, many areas were experiencing drought.

The growing season started early and

stayed about 1-2 weeks ahead of normal all the way through harvest for most small fruit crops. Grapes were the exception. The excessive heat of July slowed fruit development and by the time the heat finally broke, harvest was 10-14 days later than normal. Fruit quality of the mid and late season grape varieties was excellent, while the early season varieties had low sugars and high pH due to the excessive heat. Fruit diseases were rare with the exception of a major black rot outbreak at one commercial vineyard. The heat and drought caused potassium deficiency symptoms in many vineyards and some growers had to reduce the crop to avoid excessive stress on vines. Overall it was a real 'vintage' year for Indiana grapes.

Record high temperatures occurred during early June that severely damaged the strawberry crop in the northern half of the state, causing rapid ripening of the berries and a very quick end to the harvest season. Growers in southern areas had one of the earliest and best seasons ever. Eastern flower thrips were reported in fairly high numbers throughout the region. Strawberries in southern areas were mostly finished blooming before the thrips arrived so damage was minimal. The central and northern areas weren't so lucky. The thrips combined with excessive heat really hurt northern Indiana strawberry growers.

Statewide, blueberry yield was down due to an off year for the Jersey variety, but overall fruit quality and size were excellent and harvest was about one week early. Japanese beetle numbers seemed to be down compared to previous years.

Raspberries and blackberries saw mixed results. Some growers reported extensive winter injury while others saw little problems. Summer bearing reds fared okay, but fall bearing varieties suffered from the prolonged drought and heat. Blackberries in southern areas preformed best among the bramble crops.

The drought continued through July, August, and September. The effects of the heat and drought won't be known until next year. I suspect there will be reduced yield potential for next year because of the negative effects on flower bud development. -*Bordelon*

Season Review-Tree Fruit Diseases: Tree fruit diseases were at a low level throughout the year. Continued dry weather through much of early and late summer resulted in low disease pressure and

consequently low to moderate disease happenings. The one exception was fire blight... of course! While fire blight has been pretty much non-existent for the past five years, there were a number of isolated reports of severe fire blight in the middle and southern areas of the state. Again, this demonstrates that there is always a good supply of the bacteria around and all it takes is the proper environmental conditions to have a severe outbreak. This is why monitoring for fire blight conditions during the bloom period is required every year. In orchards where a good spray program for apple scab was **not** followed fruit scab was very evident. However, compared with the past five years, both primary and secondary scab infection periods were light to moderate resulting in significantly less foliar and fruit apple scab. An interesting observation at the Purdue Horticultural farm was severe fruit scab on certain blocks where Nova has been used as the primary scab fungicide for the past 7 to 8 years. We strongly suspect fungicide resistance to the apple scab pathogen. This points out the need for growers to reevaluate their fungicide program if they have been using sterol inhibitors on a regular basis (more than 4 applications per year) for six or more years. Sooty blotch and flyspeck as always were common fruit problems at harvest. However, the drought conditions that extended from mid-summer through harvest resulted in only light to moderate levels of sooty blotch and flyspeck. The extreme low temperatures of early January did result in a reduction of powdery mildew, with only mild mildew outbreaks occurring on the most susceptible varieties. Leaf curl was again the most prominent disease on peach and nectarine with perennial canker coming in a close second, no doubt because of the cold injured wood tissue and dead twigs. The lack of stone fruits resulted in a lack of peach brown rot and scab. -*Pecknold*

Season Review-Tree Fruit Insects: 1999 was a fairly normal season for most insect pests in Indiana. Potato leafhoppers arrived earlier than normal and became serious problems in some orchards. The above average temperatures pushed insect development along so that we had a third generation of codling moths in most areas of the state. We continue to have a few reports of codling moth problems even though the OP insecticides have been used regularly. The reports are not from

the same orchards each year, so there is no strong evidence for the development of resistance. One of the surprises of 1999, given the hot, dry conditions, was the lack of problems with European red mites. Even though conditions were favorable for mite populations to develop, we had very few orchards that had mite problems. I would guess that the lack of problems is the result of having good acaricides available and growers doing a good job conserving their predatory mites. -Foster

Cider Contest: Last year at Hort. Congress we held the first ever Indiana cider contest. This proved to be a popular event among cider makers. The winner was Steve Doud who received a framed plaque to hang in his market stating that he was judged to produce the best apple cider in the state. Customer feedback from this has been positive. The contest will be held again this year. It is open to all cider makers in Indiana, and the winner and place-getters will receive framed plaques.

To enter: Either fresh or frozen cider may be submitted (frozen cider should be thawed when it is submitted). We require 2 gallons per entry, which should be submitted at the desk at Hort. Congress on Tuesday January 25. Entry is free and is open to all cider makers in Indiana.



China assessed 55 percent duty on apple-juice concentrate imports: The U.S. Department of Commerce yesterday levied duties of 54.55 percent on most Chinese apple-juice concentrate imports, in response to a dumping complaint lodged by the U.S. apple industry. “Our nation’s apple growers and processors have been economically ravaged by dumped Chinese concentrate imports,” said U.S. Apple Association (USApple) President and CEO Craig R. Naasz. “Our industry can compete with anyone in a fair fight. Today’s ruling should level the playing field, and help restore our industry’s financial footing.” Imports of Chinese concentrate increased by more than 1,200 percent between 1995 and 1998, from 3,000 metric tons to 40,000 metric tons, according to the U.S. Census Bureau. During that same period, the average price of

Chinese concentrate imports declined by more than 53 percent, from \$7.65 per gallon in 1995 to \$3.57 per gallon in 1998. China’s share of the U.S. concentrate market has increased from 1 percent in 1995 to 18 percent in 1998. Meanwhile, the average price for U.S.-made apple-juice concentrate has fallen by 50 percent since 1995, while the average price U.S. growers receive for juice apples has declined by 64 percent—from \$153 per ton in 1995 to \$55 per ton in 1998—as a result of below-cost Chinese concentrate imports. Apple growers have lost more than \$135 million in revenue since 1995 from a decline in juice-apple prices, according to the U.S. Department of Agriculture. “Unfortunately, we’ve seen far too many otherwise competitive growers and processors drown in the sea of red ink caused by China’s unfair pricing practices,” said Naasz. “Today’s decision has buoyed our spirits and possibly preserved our survival.” (from the Fruit Growers News)

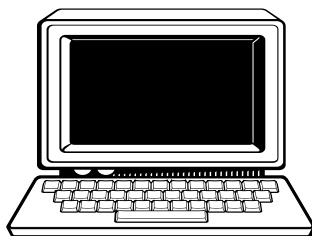


Tax Deductible Gifts to the 1998 Purdue Fruit Research and Extension Fund: The Department of Horticulture has a gift account to support Pomology Extension and Applied Research. Anyone who wishes to contribute to the account can receive a tax credit from the state. In addition, the Indiana Horticultural 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 partici-

pates 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.



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

January 3-4, 2000 – KSHS/KVGA Annual Meeting and Trade Show. Holiday Inn North, Lexington, KY

January 16-20, 2000 – 5th International Symposium on Cool Climate Viticulture and Enology. Melbourne, Australia. Contact the symposium secretary at ICMS Pty. Ltd., 84 Queensbridge St., Southbanc, VIC 3006 Australia. Phone: 61 3 9862 0244 or check out the website at www.icms.com.au/coolclimate

January 24-26, 2000 – Indiana Horticultural Congress. Adam’s Mark Hotel, Indianapolis. Contact Jim Simon at 765-494-1328.

February 10-12, 2000 – North American Farmers’ Direct Marketing Association meeting. Cincinnati, OH

February 13-15, 2000 – Ohio Grape-Wine Short Course. Columbus, OH

**FACTS FOR FANCY FRUIT
SUBSCRIPTION NOTICE FOR 2000**

Facts for Fancy Fruit is a newsletter for commercial and/or advanced amateur fruit growers. It provides timely information on pest control and production practices that should be of interest to all growers. The information is not geared for home fruit growers unless those growers wish to follow commercial practices. All growers or interested persons are welcome to subscribe, however.

At least 14 issues will be published during 2000, bi-weekly during the growing season and monthly otherwise. The subscription price of \$15.00 includes only the basic costs of printing and mailing at first class rates. The newsletter is also available electronically through the world wide web at <http://www.hort.purdue.edu/fff/fff.html> or by email. If you have e-mail and would like a copy sent electronically, send us your e-mail address and we will include you on the list, or subscribe through the web at <http://www.hort.purdue.edu/fff/fff.html>.

If you wish to receive the printed version of the newsletter in 2000, please fill out the form below and send it to the Department of Horticulture and Landscape Architecture, along with a check for \$15.00 (tax included) **made out to Purdue University.**

We hope that you will benefit from the information contained in the newsletter. We welcome your comments and suggestions.

Bruce Bordelon

Please send me "Facts for Fancy Fruit" for the 2000 season. Enclosed is my check for \$15.00 (tax included). Make checks payable to PURDUE UNIVERSITY.

Name _____	Please Check:
Address _____	_____ Grower
City _____	_____ Sales
State _____ Zip _____	_____ Other
Phone# _____ County _____	

I would like to see information on the following fruit crops:

_____ Apple	_____ Peaches	_____ Pears
_____ Blueberries	_____ Strawberries	_____ Grapes
_____ Raspberries	_____ Cider	_____ Other

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