



Inside

- Facts for Fancy Fruit Subscription Form
 - Weather Overview
 - Tree Fruits
 - Small Fruits
 - Tree Fruits Diseases and Disorders
 - Coming Meetings and Events
 - Tax Deductible Gifts to Purdue's Fruit
Research and Extension Fund
 - Facts for Fancy Fruit Available Electronically
 - Insect and Mite Summary
 - News Release Regarding Grown in
Indiana Directory
-

FFF 97-14
November 5, 1997

HOLIDAY WISHES

*This will be the last issue of
Facts for Fancy Fruit for 1997.
The Facts for Fancy Fruit family
wishes you and yours a joyous holiday season!*



1997 Season Review

Weather Overview

(Bruce Bordelon and Peter Hirst)

The 1996-97 winter saw near normal temperatures and precipitation Indiana. Minimum winter temperatures were not too severe; about -5 to -14°F, which occurred in mid-January. A hard freeze with temperatures around 20 °F occurred in early April causing damage to some fruit crops. Peaches were at fruit set and Delicious were in full bloom in the southern and central parts of the state at this time. In more northern regions, apples were at pink or less therefore less damage was expected. Damage from the freeze was generally less severe than we predicted, and in many places the peach crop was 50% of a full crop or better. Damage to apples was extremely variable. Most damage was observed on Delicious and triploid varieties. May and June were cool and overcast in many areas. Early growth was delayed about 10 days to 2 weeks by the cool conditions. Temperatures reached the mid-90s across the state in late June and early July, but overall the summer was fairly cool with excellent weather for fruit ripening in September and October. Harvest started at least a week later than normal for most crops. The first killing frost of fall occurred on October 17 in northern and central areas, which is about a week later than normal. A hard freeze occurred on October 27 across most of the state, ending the growing season.



Tree Fruits
(Peter Hirst)

Apples: The freezing temperatures we experienced in late April caused a significant amount of damage, especially on triploid varieties. In many cases yields of Mutsu, Jonagold, etc were only 10-20% of a full crop. Damage to other varieties was mixed, with some Delicious crops virtually wiped out while others carried almost a full crop. King bloom were the most affected presumably due to their advanced stage of development therefore much of the crop was carried on side blooms. No doubt this hurt us in terms of fruit size for Delicious, but probably had little effect on other varieties.

Damage occurred not only in terms of reduced crops, but also in fruit quality. We saw a lot of russet damage, however it was not generally the classic frost ring of russet usually seen. It was usually stem end russet often spilling over onto the shoulder. The freeze also appeared to result in a number of fruit with very short stems. Temperatures during the cell division stage of fruit growth were very cool. This coupled with some cold damage to flowers resulted in a small fruit year.

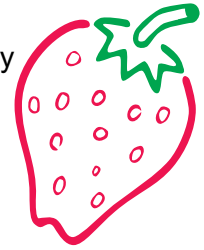
Peaches: Bud survival coming into spring appeared to be good and despite the extreme cold experienced during or just after fruit set, crops were pretty reasonable. This suggests that our critical temperatures for bud kill may need to be revised. Fruit size did not seem to be adversely affected by the freeze, and where growers had paid attention to their thinning, fruit size and quality were excellent.

Facts for Fancy Fruit Subscription Form

Attached to this issue is a Facts for Fancy Fruit 1998 Subscription Form. All of you will be also be receiving the Indiana Horticultural Congress Program. If you plan to attend IHC, you can pay for Facts for Fancy Fruit as part of the IHC registration.

Small Fruits
(Bruce Bordelon)

Strawberries: The strawberry crop in 1997 was somewhat below average in yield. The early April freeze caused considerable damage to flowers in the crown. The delayed spring caused harvest to be delayed and moved production into warmer June and July weather, reducing fruit quality in some cases.



Blueberries: The blueberry situation was much the same as for apples. The early April freeze caused damage to some varieties, but not others. Good pollination conditions occurred during bloom in most areas, increasing bee activity and fruit set. Fruit scarring from frost was common in some plantings. Harvest began about 10 days later than normal. Fresh and processing prices were very strong due to low stocks. Demand was high throughout the season. Conditions for fruit bud development have been very good throughout the fall, and a good crop is expected for 1998.

Brambles: Summer bearing brambles suffered moderate late winter/early spring cold injury in Indiana due to the early April freeze and fluctuating temperatures. Fall bearing types produced well and had good and excellent fruit quality due to the cool, sunny conditions during September and October. Droughty conditions of August and September reduced fruit size and quality where irrigation was not used.

Grapes: The moderate winter was not bad for grapes. Minimum temperatures were about normal so winter injury was minimal. Despite temperature fluctuations in February and March, and a hard freeze in April, grapes remained dormant and hardy enough so that no cold injury occurred. Yields were below average in 1997 in some vineyards, but fruit quality was excellent because of the cool, dry conditions in August, September, and October.

Tree Fruits Diseases and Disorders
(Paul Pecknold)

Numerous scab infection periods occurred during late April and May; however, the infection periods were interspersed with good spraying weather, allowing growers to respray at appropriate intervals. As a result scab was not a significant problem in 1997 except where poor management practices allowed the build up of primary scab. Rust infection, both cedar quince and cedar apple, was again very prevalent due to frequent wet periods in May when cedar rust galls were most active. The practice of switching from sterol inhibitor fungicides to a captan based program before rust galls become inactive has no doubt aggravated the rust problem. Sooty blotch and flyspeck as always were the most common fruit problems at harvest. However, drought conditions in 1997 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. *Phytophthora* crown rot was quite noticeable in late summer and early fall. The above normal rainfall in 1996 apparently resulted in infections from crown rot while the drought conditions of this year may have further favored the development of the disease by keeping trees under stress and reducing the ability of trees to "wall-off" *Phytophthora* infections. Again, fire blight was at a low level, with few growers reporting more than light infection. The most common problem on stone fruits was peach scab. Periods of cool and wet weather after bloom apparently provided excellent infection and post-infection weather for peach scab. The most severe peach scab problems developed where growers failed to provide adequate fungicide protection during and shortly after shuck split.

Coming Meetings and Events

December 9 — Illinois-Iowa Fruit and Vegetable School, Moline. Contact Bill Whiteside, 815-748-5200.

January 6-7 — Annual KSHS/KVGA Meeting, Holiday Inn North, Lexington, KY.

January 8-10 — Illinois Specialty Growers Convention, St. Charles. Contact Lowell Lenschow, 309-557-2107.

January 26-28 — Indiana Horticultural Congress. Adam's Mark Hotel, Indianapolis. Watch for registration materials in December or call us for a copy.

February 4-6 — Ohio Grape-Wine Shortcourse. Contact Maurus Brown. 330-263-3681.

February 17-19 1998 Missouri Small Fruit Conference. Clarion Hotel, Springfield, MO. Contact Patrick Byers. 417-926-4105

March 3-4 — Illinois Small Fruit and Strawberry School. Mt. Vernon, IL Contact Jeff Kindhart at 618-695-2444.

March 13-15 — Indiana Winegrower's Guild Grape / Wine Symposium. Bloomington Convention Center, Bloomington, IN. Contact Steve Thomas at 800-948-8466.

Tax Deductible Gifts to Purdue's Fruit Research and Extension Fund

The Department of Horticulture has set up 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.

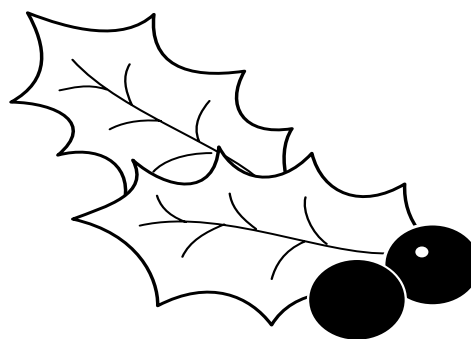
Contributions can be made payable to Purdue University and sent to: Tree Fruit Research/Extension Fund, Dept. of Horticulture, Purdue University, 1165 Horticulture, W. Lafayette, IN 47907-1165. On your check memo line, please indicate for fund 704-1165-0012. Please note that this fund will not be limited 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.

Facts for Fancy Fruit Available Electronically

All 1996-97 issues of Facts for Fancy Fruit issues are available through the Horticulture worldwide web home page at <http://www.hort.purdue.edu>. Weave your way through the Department page or go directly to the Facts for Fancy Fruit Index at <http://www.hort.purdue.edu/fff/fff.html>. In addition, you can subscribe and unsubscribe to the email version. To subscribe send a message to almanac@ecn.purdue.edu. Your message should consist of this single one-line message in the body: `subscribe FFF_L <your name>`. To unsubscribe follow the same procedure: `"unsubscribe FFF_L <your name>"`. Do not include anything else in the message or in the subject line.

Insect and Mite Summary (Rick Foster)

The cool temperatures in 1997 slowed the development of many insect and mite pests. Codling moth, for example, did not appear in pheromone traps near Lafayette until May 27, more than 3 weeks later than normal. The most serious problems reported on apples were aphids and leafhoppers. Most other insects were present in normal or below normal numbers. European red mite problems were spotty, with occasional serious infestations. Japanese beetle numbers seem to be moderating in many areas of the state, although they are still serious concerns. Now that growers are looking for eastern flower thrips on strawberries, it appears that they are present every year, but not always in damaging numbers.



NEWS RELEASE
STATE OF INDIANA
Office of the Commissioner of Agriculture

For Immediate Release:
October 17, 1997

Contact:
Julia A. Wickard
317-232-8778

APPLICATIONS NOW BEING ACCEPTED FOR 1998-99
GROWN IN INDIANA DIRECTORY

(INDIANAPOLIS) - The Indiana Office of the Commissioner of Agriculture (OCA) is currently accepting applications from businesses for the 1998-99 edition of the **Grown in Indiana Directory to Roadside Markets and U-Pick Farms**.

“We are pleased to once again publish this very popular guide to fresh fruits, vegetables, herbs and other specialty produce items,” said Lieutenant Governor Joe Kernan, who also serves as Indiana’s Commissioner of Agriculture. “Previously featured businesses, as well as new businesses, are invited to submit an application describing their establishments.”

The **Grown in Indiana** directory will serve as a resource guide to both Hoosiers and visitors alike who are searching for tasty strawberries, juicy melons and other favorite fruits and vegetables throughout Indiana.

For an application, contact OCA at 317-232-8770. The deadline for all completed applications is November 17, 1997. The directory will be published during the spring of 1998.

**FACTS FOR FANCY FRUIT
SUBSCRIPTION NOTICE FOR 1998**

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 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 1998, bi-weekly during the growing season and monthly otherwise. The subscription price of \$12.00 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. You may subscribe by sending a message to "almanac@ecn.purdue.edu". Your message should consist of this single one-line message in the body: "subscribe FFF_L <your name>" without the quote marks.

If you wish to receive this newsletter in 1998, please fill out the form below and send it to the Department of Horticulture, along with a check for \$12.00 (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 1998 season. Enclosed is my check for \$12.00 (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

Please Return to: Facts for Fancy Fruit
Purdue University
Department of Horticulture
1165 Horticulture Department
West Lafayette, IN 47907-1165

Department of Horticulture
Purdue University
1165 Horticulture Bldg.
West Lafayette, IN 47907-1165

First Class
Presort Mail
U.S. Postage
PAID
Lafayette, IN
Permit No. 221

Bruce Bordelon
1165 Dept. of Horticulture
Purdue University
West Lafayette, IN 47907-1165
765/494-1301
e-mail: bordelon@hort.purdue.edu

Paul Pecknold
1155 Dept. of Botany & Plant Path.
Purdue University
West Lafayette, IN 47907-1155
765/494-4628
e-mail: Pecknold@btpny.purdue.edu

Peter Hirst
1165 Dept. of Horticulture
Purdue University
West Lafayette, IN 47907-1165
765/494-1323
e-mail: hirst@hort.purdue.edu

Rick Foster
1158 Dept. of Entomology
Purdue University
West Lafayette, IN 47907-1158
765/494-9572
e-mail: Rick_Foster@entm.purdue.edu

Disclaimer: Reference to products in this publication is not an endorsement to the exclusion of others which may be similar. Any person using products listed in this newsletter assumes full responsibility for their use in accordance with current label directions of the manufacturer.