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2005 Season Review

Weather:
The 2004-05 winter was pretty hard on some crops. There were two cold events, both preceded by unseasonably warm temperatures. On December 23-27, the coldest sub zero event occurred with temps in the -15 to -20 range in the coldest spots (SE IN). In addition to the cold, a huge snowfall occurred in the Ohio River Valley with up to 30 inches in some areas. The week that preceded that event saw temperatures up to the mid 60s. The second cold event occurred January 18-20 when temps dropped to -12 to 10 above across Indiana. Again, temps in the upper 60s preceded that event. Widespread injury occurred on grapes, peaches, brambles, etc. In the case of grapes, many vineyards suffered extensive cane and trunk damage. Chambourcin and Vidal were the worst affected.

Frosts occurred May 2-5 across most of state. Strawberries and grapes worst hurt, but peaches also were damaged in some areas. The central part of Indiana was the worst affected.

2005 was one of the hottest and driest summers on record. Record drought occurred in some areas through June. The drought broke with rain from Hurricane Dennis in mid-July, and then more scattered heavy rains though the rest of the month. August and September were mostly dry and hot, though some areas of southern Indiana received significant rainfall in August. Growing Degree Day accumulation was approximately 25-40% higher than normal. As of November 8 we had not had a killing frost (28˚F) in the Lafayette area. That is about 4 weeks later than normal. This long dry fall should help grapes fully recover from the drought conditions of summer. (Bordelon)

Small Fruit and Grapes:
Blueberries
Large crop! 3.5 to 4.0 million pounds. Fruit size was small due to lack of rain. Hot during early harvest…. Fruit quality?

Brambles
•Winter kill was the main issue, especially on blackberries.
•Japanese beetles, especially on flowers of Arkansas Primocane Fruiters.
•Potato leafhoppers, very severe damage this year.
•Heat during ripening – soft fruit, especially red raspberries.
•Raspberry Leaf spot – severe defoliation by mid-July. Still very severe.
•Late leaf rust- first time I've noticed it in Indiana

Strawberries
•Potato leafhoppers as on brambles, very bad
•Leaf spot, probably *Mycosphaerella fragariae* was very bad this year on Darselect
•Black root rot complex after only one year
•Hot and dry during 2-3rd week of harvest

Grapes
Frost was the big issue, causing partial kill of primaries and delayed push of secondary shoots that led to a very mixed crop of clusters of different ages and sizes. Complicated harvest except that ripening was delayed and for the most part, fruit was able to hang a long time and fully ripen.

Only minor disease problems due to dry conditions. Still some Phomopsis and severe black rot where growers missed sprays. There is more

powdery mildew than normal, but its' still not a big problem. Lady bugs were present but only a factor on late ripening varieties in the Lafayette area. Not reported to be a major problem for the industry. (Bordelon)

Tree Fruit:
Not much to report for tree fruits - an average year (well for some anyway!).

Apples and most peaches came through the winter in pretty good shape, except for peaches in the central part of the state where freeze damage was experienced. Spring started with a fury, with very warm conditions and daytime temperatures in the 60-70 range. Apples progressed from silver tip through green tip and into pink within a few days. Once apple flowers started to open, the weather turned cooler resulting in a protracted flowering. Nonetheless, fruit set was reasonable, and apart from a few peach crops that were lost in the winter, tree fruit crops across the state were pretty good. Temperatures during August and most of September were very warm and many growers struggled to achieve good color on early season varieties. It seems every year there is someone in the state who has a disaster. This year, folks just south of Indianapolis were hit with hail, and I mean really HIT with hail. Soon after Gala harvest the hail hit and the fruit still on the trees was totally destroyed. (Hirst)

Plant Pathology:
Paul Pecknold, extension plant pathologist at Purdue, retired after 32 years of service and moved to California with his wife and poodle. The new plant pathologist, Janna Beckerman, arrived soon after with her daughter, her husky, and her poodle.

Remember the disease triangle? Existing at each end of the triangle is the 'host,' the 'pathogen,' and the 'environment.' In 2005, I would have to place the environment at the top of the triangle. Severe winter weather that followed unusually warm, 60 degree snaps stressed crops, particularly peaches, and early May frosts resulted in further damage to peach blossoms in central Indiana. As this was my first summer in Indiana, having moved from the peachless tundra of Minnesota, I was very disappointed.

Looking at the host side of things, fire blight continues to be a problem, particularly on the high-yielding fire blight- susceptible rootstocks like M9, or M26. Again, environment plays a role as the most severe outbreaks of fire blight on apples occurred in the southern part of the state. Several good infection events of warm temperatures, followed by torrential rains (like the rains delivered by Hurricane Dennis) may have set the stage for a higher incidence of fire blight this year. Forewarned is forearmed!

Finally, there are the pathogens. Although a light year for scab, those without a good program had problems. And a few who thought they had a good program may be seeing the development of resistance in their orchards—we are currently looking into this. Frog-eye leaf spot, bitter rot, and white rot (also called bot rot) seemed to be slightly higher than "normal" years. (Beckerman)

Entomology:
Generally speaking, it was a pretty uneventful year. Even with the hot weather, mites weren't too bad. Japanese beetles were spotty, as always. Asian lady beetles on grapes were higher than 2004 but not as high as 2003. (Foster)

Indiana Horticultural Congress:
The 2006 Indiana Horticultural Congress is almost upon us. The Congress will be held January 23-25 at the Adam's Mark Hotel in Indianapolis. The following are likely to be of particular interest to fruit growers:

- Dr. John Hartman, University of Kentucky, who will speak about disease control in tree fruits, and in particular apple scab control.
- Andy Miller, Director of the Indiana State Department of Agriculture. Mr. Miller will discuss specialty crop production in Indiana.
- Jane Eckert will speak on agritourism and farm marketing
- Private Applicators Recertification Program – earn credits to maintain your private applicator's license.
- Hort. Congress Social Hour – this new event is designed to facilitate social networking among Congress attendees. Door prizes, and the first drink is free.
- Apple cider contest – the award for the best cider in Indiana will be presented

Many of you will have already received a program with a registration form. If you did not receive a program and would like one, it is available on our website:
http://www.hort.purdue.edu/fruitveg/

Horticultural Therapy:
Time spent around plants can reduce stress, according to a recent study conducted by the New York University School of Medicine. One hundred cardiac rehab patients were split into two groups – both attended lectures, but one group also spent time in a garden. The garden group had lower heart rates and their moods improved. Think of this next time you're conducting wagon rides at your farm. Not only are you offering a fun, educational day in the country, but you're probably also providing your customers therapy! (Hirst)

FACTS FOR FANCY FRUIT
SUBSCRIPTION NOTICE FOR 2006

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 intended for home fruit growers unless those growers wish to follow commercial practices. All growers or interested persons are welcome to subscribe, however.

At least 10 issues will be published during 2006, 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 free of charge electronically through the World Wide Web at http://www.hort.purdue.edu/fff/fff.html or by e-mail. If you have e-mail and would like a copy sent electronically, send your e-mail address to hirst@hort.purdue.edu 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 2006, please fill out the form below and send it to the Department of Horticulture, 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.

Peter M. Hirst

Please send me "Facts for Fancy Fruit" for the 2006 season. Enclosed is my check for $15.00 (tax included). Make checks payable to PURDUE UNIVERSITY.

Name _____ Please Check:

Address _____ _____Grower

City _____ _____Sales

State _____ Phone#_____ _____Other _____

Zip _____ County_____

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

_____Apple	_____Blueberries	_____Grapes
_____Peaches	_____Strawberries	_____Cider
_____Pears	_____Raspberries	_____Other _____

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