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## ***Crop Conditions***

FFF 98-03  
April 6, 1998

Fruit crops have broken dormancy across most of the state due to the very warm temperatures during the last days of March. In the central part of the state, most apples are at tight cluster with peaches just starting to show some pink. In southern areas peaches are at full bloom or a bit beyond and apples are at pink. Grapes are at bud break to full swell in southern areas and full to early swell in central areas. The cooler weather during the first week in April has kept development on hold. So far it appears we will have a good amount of bloom on both peaches and apples, but it's still too early to feel overly confident.

### ***Significance of the Food Quality Protection Act***

Most growers are aware that changes are going on at EPA in regard to pesticide regulations. Pesticide regulations change each year, but the most recent changes are being brought about by the Food Quality Protection Act (FQPA) which was passed in 1996. Congress intended to modernize the regulation of pesticides with the passing of this act. This new regulation has dramatically changed the way pesticides are evaluated for health effects by grouping pesticides that have a of common mode of action into a single category and estimating risk from all sources (food, household, environment, water, etc.).

The EPA is under time constraints and must reevaluate all 9,000 pesticides registered

for use on food crops by the year 2006. They must have evaluation of 1/3 of those materials done by August, 1999. The first groups that EPA has decided to evaluate are organophosphates and carbamates. These materials are the backbone of pest management programs on fruits and vegetables.

Most growers may not realize the significant that these new regulations could have on the fruit and vegetable industry. Many articles have been written in trade magazines and newsletters about the FQPA, it's major components, and it's potential impact. The main issue is not the law itself, but the way EPA is evaluating pesticide use. Instead of making an effort to document 'actual use data' on crops in each state, EPA is apparently intending to use 'default use data'. Default data would assume that EVERY pesticide labeled for a crop was

used at maximum rates, at closest allowable intervals throughout the growing season up until the pre-harvest interval for each material.

Growers realize that these assumptions will grossly overestimate the amount of pesticide used on food crops. For example, the Indiana Commercial Tree Fruit Spray Guide lists six insecticides labeled for control of codling moth on apples. The guide says to use Guthion OR Imidan OR Lorsban OR Ambush OR Asana OR Pounce, and gives the range of labeled rates for each which range from 2-3 lb./acre for Guthion and Lorsban, to 6.4-25.6 oz./acre of Ambush. The guide also clearly states that the use of pyrethroids (Ambush, Pounce, Asana) is likely to cause mite outbreaks because they kill predator mites and persist a long time. It also states that 'Although Asana is registered for applications at intervals throughout the growing season, we do not recommend use after first cover, except for special problem pests.' Growers realize that they do not need to apply all six of these insecticides, but that they only need one to control codling moth and other insects. They also realize that some can cause problems if applied at inappropriate times. Researchers have done a good job of determining the effects of various pesticides and when and how they should be used. We pass that information along to growers at meetings and in publications. EPA, however, assumes that growers can and do use all six insecticides at the highest labeled rates, and at intervals recommended on the label which may be from petal fall through harvest at 7-10 day intervals, or the label may restrict some insecticides to a maximum number of pounds per acre per season, or a time restriction such as 'not after petal fall'. These default assumptions could result in estimations that could be almost 100-fold higher than the amount of material that is actually used. For example, our recent survey of pesticide use on fruit crops indicated that, on average, slightly more than five applications of insecticides were made to the typical Indiana

apple orchard each year.

The following is adapted from an article recently run in the Great Lakes Fruit Grower News titled 'Agricultural organizations start FQPA letter-writing campaign'. It states that a trio of agricultural organizations has kicked off a national letter writing campaign to head off possible loss of pesticides due to the Food Quality Protection Act. The American Crop Protection Association, American Farm Bureau Federation and Responsible Industry for a Sound Environment (RISE) have urged their members to communicate directly to congressional representatives, the Environmental Protection Agency and to the White House about the issue. EPA's strict adherence to tight time frames for pesticide tolerance reviews is pushing aside fairness and accuracy in favor of expediency and political agendas, said Jay Vroom, ACPA president. If this continues, farmers will lose valuable protection from pests on a large number of crops. Leonard Gianessi, senior economist for the National Center for Food and Agriculture Policy, said the EPA's guidelines are unrealistic. "EPA must reassess all US pesticide tolerances - more than 9,000 - in 10 years, but some 3,000 must be done by August of 1999. That's less than 18 months from now - a virtual impossibility." The methods which EPA uses in the reassessment process is critical, said Vroom, because they can result in restriction or cancellation of the use of a specific pesticide on certain crops. The first group of pesticides to be reviewed by EPA are the organophosphates. This widely used class includes materials such as Dursban, Guthion, Disyston, malathion, parathion, diazinon and Orthene. They are used on 64 million acres of farmland and have been the main line of defense against insects for 40 years. Carbamates will be next on EPA's list. This group, also very widely used, includes such products as Temik, Sevin, Furadan, Carzol, Lannate, Vydate and Larvin. Vroom noted that agriculture accepted FQPA when it was passed in late

1996. “We supported many of its provisions because the act’s fundamentals are ones to which my industry has long subscribed - human health and safety, and extra margins of safety for children. Its requirements are as strict, but achievable, if EPA - rather than a rush to judgment on many of the essential pesticides growers need for profitable farming - takes time to allow development of needed scientific data and methods to meet FQPA requirements. “Then regulatory decisions can be based on well-conceived, uniform and practical policies rather than highly exaggerated estimates. Right now, that is not being done,” said Vroom. Instead, the agency appears to be setting pesticide tolerances based on theoretical estimates, or defaults, in cases where data based on actual use is not yet available. EPA’s rationale is that it must meet the short deadlines imposed by FQPA, Vroom says. But congressional mandates under FQPA can be met without undue risk to farm and consumer use, he added. “When the law is carried out the way Congress has intended, the consumer wins, the farmer wins and America’s agricultural productivity is not placed in Jeopardy,” said Vroom. For more information on the campaign, contact ACPA at 1156 Fifteenth Street NW, Suite 400, Washington, D.C. 20005; telephone (202) 463-0474.



### ***Subscribing Electronically***

We have made a few changes in the electronic version of Facts for Fancy Fruit. To subscribe (or unsubscribe), send a message to [fff@lists.hort.purdue.edu](mailto: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

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**April 8** — East Indiana Fruitgrowers twilight meeting. 6.00 pm, Minnetrista Cultural Center, Muncie. Commercial roundtable discussion at 3.00 pm. Contact Harold Brown, phone 765-747-7732

**April 16** — LaPorte County fruitgrowers meeting. 6:30 pm. Garwood Orchard. Contact Walt Sell, phone 219-326-6808 ext. 271.

**April 28** — Wabash Valley fruitgrowers meeting. Engelbrecht Orchard. Contact Peter Hirst, phone 765-494-1323.

**May 18** — LaPorte County fruitgrowers twilight meeting. 6.30 pm. Location to be announced. Contact Walt Sell, phone 219-326-6808 ext. 271

**June 15** — Southeast Indiana Fruitgrowers twilight meeting. Location and time to be announced. Contact Karen Witt at 765-647-3511.

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## ***Weather Update***

(From the Purdue Crop & Weather Meeting April 3)

For March the northern 2/3 of Indiana was wet with rainfall amounts of 4-5 inches in the north and central regions while NW Indiana reported as much as 6 inches of precipitation. The southern 1/3 of the state, however, was slightly below normal with rainfall amounts of 1-4 inches (70-80% of normal). Temperatures statewide averaged near normal. Over the last two weeks (March 21 - April 3) the northern 1/2 and west central Indiana received 2 or more inches of rainfall (1 1/2 x normal) while central and east central received near normal amounts of 1 1/2 to 1 3/4 inches and the southern 1/3 received 1 1/2 inches of rain (or approximately 1/3 the normal amount). Temperatures over this same period averaged much above normal for the entire state. Soil temperatures in bare soil have reached highs in the mid-50's north to low 60's south with minimums near 45 degrees statewide.

## **CONGRATULATIONS**

### ***Tom Roney Honored by Purdue School of Agriculture***

The Purdue University School of Agriculture is to honor Tom Roney by presenting him with a Distinguished Agricultural Alumni Award. Of the eight recipients of this award this year, Tom is the only Indiana resident. As many of us are aware, Tom has been very active in both the Indiana Horticultural Society (fruit growers) and Indiana Vegetable Growers Association, serving as president of both of these organizations during the past few years. He has also been

involved in many other agricultural and community groups. Tom currently serves on the Dean's Advisory Council for the Purdue School of Agriculture. The award will be presented at a ceremony to be held at Purdue on April 24. Congratulations Tom!



### ***Apple Diseases***

Tight cluster to pink is a time for maximum disease control efforts. During this period primary scab spores often reach their peak; powdery mildew infection is occurring on new growth; cedar apple rust is discharging spores with each rain; and fire blight is building, ready to be carried to opening apple and pear blossoms. It's an ugly picture!

- 1. Apple scab:* The potential for severe scab infection is high. The severity of scab is directly dependent on the frequency of spring rainfall. If we have a wet April, scab pressure will be high, if it turns dry, scab pressure will be low, spray accordingly.
- 2. Rust:* The pink stage of apple growth generally coincides with the time rust spores begin to infect apple foliage and fruit. If rust is a chronic problem consider the use of a sterol-inhibiting fungicide such as Nova, Procure, Bayleton or Rubigan.
- 3. Powdery mildew:* If mildew has been a chronic problem in certain blocks (Jonathan, Rome, Ida Red) the above mentioned sterol-inhibiting fungicides are excellent in helping to control mildew.
- 4. Fire Blight:* Cool spring temperatures help prevent a rapid increase in the fire blight population; warm spring temperatures can cause very sudden, dramatic increases in the fire blight population. Here's hoping for a cool spring.

## *Apple Scab*

Apple scab infection was above normal last year, you should therefore expect an above normal amount of primary scab spores this spring. The most important time of year for scab control is from green tip to petal fall. If you don't control scab during this period it's an uphill struggle the remainder of the season. Be sure sprayers are properly calibrated; thoroughly read the label of all pesticides you will be applying; use sufficient water to provide good coverage; choose calm, good drying conditions for spraying (good luck on this suggestion); prune trees so they have an open canopy allowing for good spray penetration; and maintain a tight schedule if wet weather persists during the primary scab period.

### *Planting to Avoid Fire Blight*

When establishing new orchard blocks, consider varietal susceptibility to fire blight. Blight control is easier if plantings of susceptible trees can be isolated. Avoid interplanting susceptible apple varieties

(Gala, Braeburn, Fuji, Ida red, Jonathan, Lodi, Rome, etc.) with pears or in fields adjacent to pear plantings. In mixed variety plantings, set varieties susceptible to blight in solid rows for ease of spraying with blight control chemicals. Also, most of the more severe fire blight problems have occurred in orchards planted on poor sites. These sites can be characterized as having heavy, poorly drained, and/or highly acid soils. Planting trees on poor soil invites fire blight damage and poor fruit production.

### *Brown Rot Of Stone Fruits*

Management of brown rot began last year after harvest...with the removal of all fruit, mummies and blighted twigs. It continues this year at pink with early season fungicide sprays. We fortunately have an abundance of fungicides for use in control of brown rot. See ID-168, "1998 Indiana Commercial Tree Fruit Spray Guide", for a complete listing of suggested brown rot fungicides.



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