



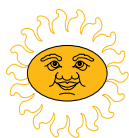
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FFF 98-06
May 19, 1998

Crop Conditions

Fruit crops continue to develop rapidly due to the warm temperatures over the past two weeks. Strawberry harvest is just underway in the southern part of the state and will begin soon in central regions. This is about one week earlier than normal. Blueberries are in bloom in northern areas, brambles are blooming in central and northern areas, and grapes are blooming in southern areas. Phomopsis cane and leaf spot is prevalent on grapes again this year due to rain during early shoot growth.



Weather Update: The 6-10 day outlook for the period May 19 - 23 calls for above normal temperatures and slightly above normal precipitation. Humidity levels will stay high during this period. The 30 day forecast for June is for normal temperatures and slightly above normal precipitation and the 90 day for the period June - August calls for above normal precipitation and temperatures. *-from the Purdue Crop & Weather Notes, May 15.*



Stopping Spread of Apple Scab: About 9 to 17 days are required from the time of infection by apple scab until the appearance of the olive-green, velvety scab lesions. Within the lesions secondary spores (conidia) are produced throughout the summer months. It's not a pretty picture!

Growers should start checking their orchards NOW for the first symptoms of scab.

The preferred course of action where scab lesions are present would be to apply an SI fungicide such as Rubigan or Nova (to minimize additional leaf infections) in combination with a FULL rate of captan or the allowable rate of mancozeb or Polyram to provide optimum fruit scab control. Remember that fruit are at their maximum stage of susceptibility from pink until about 3-4 weeks after petal fall. A recent article from the Scaffolds newsletter states: "Captan alone works well against a running scab epidemic in years when rainfall stays at or below average. If the spring turns unusually wet, then the SI-plus-captan combination will probably prove superior." The bottom line is that good old Captan is the fungicide of choice for prevention of fruit scab. *-Pecknold*

Fire Blight: Even though streptomycin is registered for use until 30 days before harvest on pears and 50 days on apples we do not recommend the use of streptomycin after petal fall due to the potential for resistance to develop. The one exception for the use of streptomycin after

petal fall is following a hail storm or heavy wind damage. This “hail spray” should be made within 18 to 24 hours after the start of the storm, even if the foliage is not completely dry. -
Pecknold



Strawberry Diseases: Strawberry gray mold and leather rot are most apt to occur under cool, wet, cloudy conditions. Keep an eye on your prevailing weather conditions and act (spray) accordingly. The extreme wet conditions of the past month may result in extreme disease during the coming month. See ID-169, “1998 Indiana Commercial Small Fruit & Grape Spray Guide”, for further information on suggested fungicides. -
Pecknold



Important Grape Sprays: Grapes are nearing bloom in the southern part of the state so growers should be aware that the next few fungicide applications are very important for controlling the major fruit pathogens. The pre-bloom, bloom, and post bloom applications are the most important sprays for controlling black rot, powdery mildew, and Phomopsis cane and leaf spot. Care should be taken to get thorough coverage of all foliage. Slow the tractor speed, spray every row middle, increase volume, and use full labeled rates. -*Bordelon*

Cluster Thinning and Shoot Removal in Grapes: Annual pruning of grapes is necessary to balance the amount of fruit production with the amount of vegetative growth to insure high yields of high quality fruit. Pruning severity is based on the strategy of ‘balanced pruning’ or crop load which dictates the correct number of buds or amount of fruit to retain based on the vine’s pruning weight. Most growers prune vines lightly during the early spring in case there is a late frost or freeze that damages some of the buds. This ‘safe’ pruning, leaving extra buds during the initial pruning, will hedge against late spring frosts or winter injury. Now that the danger of frost and freeze is behind us and grape shoots are growing rapidly, growers can go back through the vineyard and adjust the crop

load by shortening spurs, removing shoots, or cluster thinning. New shoots are easily broken off by hand without the need for pruners. Growers should pay close attention to the fruitfulness of shoots. Shoots from primary buds have full fruiting potential, whereas secondary buds produce shoots with little or no fruiting potential, depending on cultivar. Typically, all secondary shoots are removed during final pruning adjustment or later at cluster thinning. Shoots should be spaced evenly along the trellis if possible and at a density of about six shoots per foot of row. Cluster thinning before bloom results in the least yield reduction because the remaining cluster(s) generally set more berries. However, on tight clustered cultivars, cluster thinning after bloom can result in looser, less rot susceptible clusters.

Nitrogen Fertilization on Grapes: Active root growth is required for uptake of nitrogen and other nutrients from the soil. Root growth does not begin until a few weeks after bud break. Since nitrogen fertilizers are quickly available and prone to leaching, application prior to bud break is inefficient and may lead to ground water contamination. Mid- to late-May applications are the most efficient. Try to apply nitrogen when rain is expected in the day or two following application. This is especially important with urea, as it volatilizes into the air, especially under warm conditions. Ammonium nitrate is usually preferred for this reason. Avoid applications close to bloom as fruit set may be reduced. Split applications are generally better than a single application. Applying half to two thirds of the expected total in mid-May, followed by the remainder after fruit set (about 4 weeks later) allows more efficient nitrogen use and better assessment of the need for fertilizer. Often the second application can be skipped, depending on the crop load and vine vigor. Nitrogen can be banded or broadcast in mature vineyards, but should be banded on young vines. Banded applications are probably better on deep, well drained soils where root growth does not extend laterally into the row middles. Rates of up to 100 pounds of actual N are commonly used and there seems to be little justification for exceeding that rate. On deep, fertile soils typical of Indiana vineyards, 50 pounds may be ad-

equate. Foliar analysis does not provide a good measure of nitrogen status unless samples are taken at full bloom (rather than 70 days after full bloom as is recommended for other nutrients). The best indicators of nitrogen status are shoot growth, vigor, leaf color, etc. Experience is the best guide. Excessive nitrogen fertilization leads to excess vigor, poor fruit set, poor fruit quality, and inadequate hardening off in fall. By splitting applications growers have more chances to adjust for various conditions and avoid over fertilization. - *Bordelon*



June is Indiana Wine and Grape Month: Wineries from the shores of Lake Michigan down to the banks of the Ohio River will be offering visitors a chance to get away and help celebrate this special month! Proclaimed by Governor Frank O'Bannon as Indiana Wine and Grape Month, many of the state's 18 wineries will be celebrating by hosting special activities. For more information and a free newly revised and updated Indiana Wineries brochure, contact the Indiana Wine Grape Council at 800-832-WINE or 317-481-0222. -*Bordelon*



Questions and Answers: Growers often have questions about articles that appear in this newsletter, or topics we don't cover. If you have a question or a topic you would like to see discussed, send it to one of us by mail or email and we'll be happy to do an article for the next issue of the newsletter.



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.



New Interim Head of the Department of Horticulture and Landscape Architecture at Purdue University: Our former department head, Dr. Randy Woodson, has accepted the position of Director of the Purdue Agricultural Experiment Station and Associate Dean for Research within the School of Agriculture. Although we are sad to see Randy leave as department head, we are also convinced he will have a positive effect on activities within the department in his new role. A national search is underway for a replacement. In the meantime, Dr. Ed Ashworth has agreed to serve as interim department head.

Fruit Thinning: Who would believe the incredible thinning weather we have had this spring? Normally in Indiana we have to choose the time for applying thinners carefully to ensure weather conditions at the time of application and for a few days afterwards are warm enough. This year however, almost every day has been warm enough. Temperatures in the 70's are ideal for thinning. For most of us, we are right at the end of the thinning window in terms of fruit size, but there still may time for another application of Sevin if you need more thinning. The amount of thinning we can expect to get reduces when fruit size gets above 15 mm diameter.

The temperatures at this time of the year help us out in more ways than just the level of thinning response. As most of you know, fruit growth for the first month or so after flowering is mainly due to cell division, whereas after that cell expansion takes over. The critical stage in determining fruit size at harvest is the early cell division phase of growth. This is controlled to a large extent by temperature. So the bottom line is that with the warm spring temperatures, cell division will have been moving along at a pretty good pace which will really help us out with fruit size at harvest time. Does this mean we can afford not to thin as much? The simple answer is no, we still have to pay attention to get good fruit thinning. Remember that thinning is not just about fruit size this year, but return bloom next year, so a lack of thinning will cost you 2 years crops. *Hirst*



Young Tree Care: Now that many of you will have almost completed your thinning, it's time to turn your attention back to any young trees that you planted this spring. As I mentioned a couple of issues ago, the care and attention you give to young trees now will pay big dividends, in terms of increased tree growth and bringing the tree into cropping earlier. Keep on top of the weed control - competition with weeds can really hold young trees back. Also, look at where the new shoots are developing, and eliminate undesirable shoots now, while they are only a few inches long, rather than let them grow and remove them in winter. Removing these shoots now can be done by hand without the need for pruners, and should take less than a minute per tree. A small investment of time, but well worthwhile. *Hirst*

Codling Moth: At the Hort Farm near Lafayette, we caught the third codling moth adult in one of our pheromone traps last week. At that point we started to accumulate degree days to determine the optimum timing for our insecticide applications. With the hot weather we have been having, we are racking up degree days very rapidly. It won't be long before we reach 250 degree days and will need to spray.

Our pheromone trap catches at the Hort Farm also make a good point about trapping. We placed two traps in different locations. In one we have now caught a number of moths, but we haven't caught any in the other. Placement has a big effect on trap catch. That is why it is advisable to put out more than one trap. *Foster*

European Red Mites: The hot weather has also brought out the European red mites in some areas of the state. While I haven't received any reports of serious infestation yet, now is the time that growers should be monitoring their problem blocks. The hot weather will allow the mites to complete their generations more quickly, helping them to build to large populations in a shorter period of time. In our plots at the Hort Farm, we are also seeing active predator mites. As always, consider the impact of your pesticide applications on predator mites as you make spray decisions. *Foster*

Eastern Flower Thrips: Now is the time that strawberry growers should begin looking for eastern flower thrips. These very tiny insects can cause fruit to be small, seedy, rubbery, and have poor color. Although we don't have an exact threshold, it is generally accepted that you should spray if you have populations exceeding 2 to 10 thrips per blossom. Thiodan and Lorsban should provide good control. Neem based insecticides (Neemix or Align) can provide control without harming the bees. *Foster*

Coming Meetings

June 2 — Eastern Indiana Hort. Society Orchard Tour. Memory Lane Farm, 12,200 W. Randolph Co. Rd. 400 S., Parker City. This is almost right on the Delaware/Randolph County Line. 6.00 pm. Contact: Harold Brown, Delaware County Extension Office, 317-747-7732.

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

**Indiana Horticultural Society -
Serving Indiana's Fruit Growers
Summer meeting June 26-27, 1998.
Beasley's Orchard
Danville, Indiana**

Arrangements are almost complete, John and Debbie are waiting for us to come. The set-up is a little different this year, as we try to find the best way to better serve the most growers.

There will be a round-table discussion on Friday evening, June 26th -Location to be announced. Growers can bring their concerns and their interests to be discussed by the group.

On Saturday we will meet at Beasley's

Orchard for a full day of touring the market, checking out the packing facilities and cider room, touring the orchards and vegetable operations. We will have the usual short business meeting and equipment demonstration. We hope that you can join us for a great time and make this a short holiday before the harvest season starts. There will be a complete agenda in the next FFF and in the IHS newsletter.

Beasley's is a second generation orchard, having been started back in the mid 1940's when John's parents, Milton and Irene Beasley purchased the farm. John and Debbie now operate the farm. They have three children, Lyra, Seth and Calvin.

The Beasley's grow apples and a good line of vegetables to serve the retail market. They no longer have u-pick on the vegetables, but gauge their plantings to serve the retail market and trade.

The apples range from old Jonathan and Starkrimson trees on seedling, through plantings of several varieties on M.7a and interstems made in the late 1970's and early 1980's. A major planting of Gala and Fuji on M.7a was made in 1992. The latest planting includes Mutsu and Braeburn on M.7a made in 1994. John is removing some of the oldest blocks to make way for new plantings in the near future.

Vegetables grown include multiple plantings of sweet corn, tomatoes (they are trying some of the old varieties of tomatoes), green beans, melons, pumpkins, etc. to supply the retail trade.

Marketing is very important at Beasley's. They try to maintain a rustic flavor in their operation. The barn now used for a sales room and packing house was reportedly built just after the Civil War by a returning war veteran. It is of the classic peg and beam construction and is reminiscent of the wide, low farm structures seen throughout the south. It is picturesque and is stocked with antique farm equipment and household items. John and Debbie have installed a huge fireplace in the corner and keep the fire going during the late fall sales season. A newsletter helps to publicize the availability of produce and the events occurring during the season.

John and Debbie sponsor the Heartland Apple Festival in early October. This features a flea market and great apple dumplings along with the sales of apples, pumpkins and fall vegetables

and decorative materials. They also produce customized fruit baskets for the holidays. The market is open from July through January.

Directions to Beasley's Orchard: Beasley's is about 2 1/2 miles east of Danville on old US 36. Coming east from Danville on Rt. 36, turn left at the traffic light at the Kroger store and follow old 36 to the orchard. From the east, come west on US 36 from Avon, about 2 miles from the jct. of 267 and 36. After you pass the McDonalds, look (on the north side) for the Storage Express building, painted blue; and Ritter's Frozen Custard stand. Turn right onto Main Street (Old 36) and proceed about 3 1/2 miles to the orchard on the north side of the road.

Motel Information for the 1998 summer meeting of IHS: There are no motels in the immediate Danville area. However there are several at the intersection of I 70 and SR 267 in Plainfield, the intersection of I 74 and SR 267 in Brownsburg, and along I 465 on the west side of Indianapolis. Here are several examples of motels in these areas. There are others as well, some offering more luxurious accommodations. However, be advised that there is a huge Baptist Convention in Indianapolis that ends on Saturday, June 27, so many accommodations are full for the night of the 26th. So....Get your reservations early.

I 70 & SR 267 location, Plainfield.

Super 8 Motel (2P, 2B - \$55.+Tax) 317-837-8888. (Special rate auth. by Aleicha.)

Day's Inn (2P, 2B - \$59. + Tax including disc) 317-839-5000.

Amerihost (2P, 2B - \$65. + Tax) 317-838-9300.

Lee's Inn and Suites (2P, 2B - \$89. + Tax) (only have a few rooms) 317-837-9000.

Holiday Inn Express (2P, 2B - \$115. + Tax.) 317-839-9000.

I 70 & SR 267 location, Brownsburg

Dollar Inn (2P, 2B - \$34.05 tax incl. 317-852-5211.

Holiday Inn Express (2P, 2B - \$107. + Tax.) (only have a few rooms) 317-852-5353

I-465 locations

Motel 6 Jct. of I 465 and I 74 in Speedway. 2P, 2B - \$37.99 + Tax. 317-293-3220

Motel 6. Lyndhurst exit east of Executive Drive off the Airport Expressway (used to be a Regal 8 motel.) (2P, 2B - \$42.99 + Tax.) 317-248-1231.

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