In This Issue

- Crop Conditions
- Strawberry Renovation
- Indiana Pesticide Clean Sweep Program
- Japanese Beetles
- Spotted Wing Drosophila
- European Red Mite
- Upcoming Events

Crop Conditions



Peach, pit hardening



Peach, pit hardening



Grapes, berry touch



Grapes, berry touch



Red Summer Raspberry, at harvest



Red Summer Raspberry, at harvest



Blackberry, green fruit



Blackberry, green fruit



GoldRush Apple, 1 1/2-2inch fruit

Strawberry Renovation

First, my apologies for sending this out late. This was a relatively early year for strawberries and by now, most harvest is over. As soon as harvest is done, it's time to begin the renovation process. Matted row strawberry plantings must be renovated each year to establish new crowns for the following year's crop. For best results, renovation should be started immediately after the harvest is completed to promote early runner formation. The earlier a runner gets set, the higher its yield potential. Growers should begin renovation as soon as the last marketable berries are harvested. Delaying renovation is one of the most common mistakes growers make. Renovation should be completed by the end of July in normal years. The following steps describe renovation of commercial strawberry fields.

1. Weed control: Post emergent application:
Annual broadleaf weeds can be controlled with 2,4-D amine formulations. Check the label as only a few products are labeled for use on strawberries. e.g. Amine 4
[Dimethylamine salt of 2,4-D (3.74 lb./gal.)] at 2 to 3 pts/acre in 25-50 gallons of water applied immediately after final harvest. Be extremely careful to avoid drift when applying 2,4-D. Even though the amine formulation is not highly volatile, it can vaporize under hot, humid conditions and cause damage to sensitive plants a considerable distance from the site of application. Some damage to strawberries

- is also possible. Read and understand the label completely before applying 2,4-D amine. If grasses are a problem, sethoxydim (Poast 1.5 EC) or clethodim (Select 2 EC) will control annual and some perennial grasses. However, do not tank mix these materials and 2,4-D. See the Midwest Fruit Pest Management Guide and the product label for rates and especially for precautions.
- Mow the old leaves off just above the crowns 3-5 days after herbicide application.
 Do not mow so low as to damage the crowns.
- 3. Fertilize the planting. Generally, nitrogen should be applied at 25-60 lbs/acre, depending on vigor. It is more efficient to split nitrogen applications into two or three applications at regular intervals, rather than apply it all at once. A good plan is to apply about half at renovation and half again in late August when flower bud development is occurring. A soil test will help determine phosphorus and potassium needs, but foliar analysis is a more reliable measure of plant nutrition. For foliar analysis, sample the first fully expanded leaves following renovation.
- 4. <u>Subsoil:</u> Where picker traffic has been heavy on wet soils, compaction may be severe. Subsoiling between rows will help break up compacted layers and provide better infiltration of water. Subsoiling may be done later in the sequence if crop residue is a problem or if soils are too wet at this time.
- 5. Narrow rows: Reduce the width of rows to a manageable width based on your row spacing, the aisle width desired, and the earliness of renovation. A desirable final row width to attain at the end of the season is 12-18 inches. Wider rows lead to low productivity and increased disease

pressure. This means that rows can be narrowed to as little as 6 inches during renovation. Use a tiller or cultivator to achieve the reduction. Since more berries are produced at row edges than in the middle, narrow rows are superior to wide rows. Narrow rows will give better sunlight penetration, better disease control, and better fruit quality.

- 6. <u>Cultivate</u>: Incorporate the straw and other plant material between rows and throw a small amount of soil over the row by cultivation. Strawberry crowns continue development at the top, and new roots are initiated above old roots on the crown, so 1/2 1 inch of soil on the crowns will facilitate rooting. This also helps cover straw and old strawberry leaves in the row and provides a good rooting medium for the new runner plants.
- 7. Weed control: Pre-emergence weed control should begin immediately. There are more options today than in past years. Chateau, Dacthal, Devrinol, Prowl H₂O, Sinbar and Spartan are labeled materials. See the Midwest Fruit Pest Management Guide and check the product labels carefully. Devrinol must be incorporated by irrigation, rainfall, or cultivation to be effective. Rate and timing of Sinbar or Prowl H₂O application is critical. If regrowth has started at all, significant damage may result. Some varieties are more sensitive to Sinbar than others.
- 8. <u>Irrigate</u>: Water is needed for both activation of herbicides and for plant growth. Don't let the plants go into stress. Ideally the planting should receive 1 to 1-1/2 inches of water per week from either rain or irrigation.
- 9. <u>Cultivate</u> to sweep runners into the row until plant stand is sufficient. Thereafter, or

- in any case after early September, any runner plant not yet rooted is not likely to produce fruit next year and can be removed. Coulter wheels and/or cultivators will help remove these excess plants in the aisles.
- 10. Adequate moisture and fertility during
 August and September will increase fruit
 bud formation and improve fruit yield for
 the coming year. Continue irrigation
 through this time period and fertilize if
 necessary. An additional 20-30 pounds of N
 per acre is suggested, depending on the
 vigor.

Indiana Pesticide Clean Sweep Program

Indiana Pesticide Clean Sweep Project is designed to collect and dispose of suspended, canceled, banned, unusable, opened, unopened or just unwanted pesticides (herbicides, insecticides, fungicides, rodenticides, miticides, etc.). It is sponsored by the Office of the Indiana State Chemist, with support from the U.S. EPA. The disposal service is free of charge up to 250 pounds per participant. Over 250 pounds there will be a \$2 per pound charge. This is a great opportunity for you to legally dispose of unwanted products at little or no cost.

Time: 9 am to 3 pm Local time

Locations:

August 15, 2017: LaPorte County Fairgrounds in LaPorte, IN

August 16, 2017: Tippecanoe County Fairgrounds in Lafayette, IN

August 17, 2017: Grant County Fairgrounds in Marion, IN

August 22, 2017: Franklin County Fairgrounds in

Brookville, IN

August 23, 2017: Grant County Fairgrounds in Bloomfield, IN

August 24, 2017: Hendricks County Fairgrounds in Danville, IN

How:

Complete the Pesticide Clean Sweep Planning Form to the best of your ability. Mail, fax or email the completed form to Kevin Neal at 765-494-4331 or nealk@purdue.edu no later than Monday July 31, 2017. Then bring your labeled, leak free and safe to transport containers to the collection site. Do not mix materials. In case of emergency you should bring a list of the products you are carrying and a contact phone number. The form can be found on the OISC web site at: http://www.oisc.purdue.edu/

Note: OISC reserves the right to cancel this Pesticide Clean Sweep Project if there is not adequate demand. Participants submitting the planning form by July 1, 2017 will be contacted immediately if cancellation is necessary.

Japanese Beetles

Japanese beetles are out and feeding. I saw a large population on the raspberries at the Meigs Farm on Monday. Although this pest isn't as severe as it was a number of years ago, it can still cause plenty of problems. Small fruit growers should monitor their crops and control the beetles if necessary. Japanese beetle feeding can stunt young fruit trees that are not yet in production (and not receiving regular insecticide treatments). Fortunately, Japanese beetles are fairly easy to manage. Sevin or any of the pyrethroid insecticides will provide good control. Organic growers can spray neem, which acts as a repellent. Several applications may be required.

Spotted Wing Drosophila

We have not yet heard any reports of damage from spotted wing drosophila. Our short history with this pest is that damage will commence in early July. Growers should have their SWD traps in place now. Spraying should begin when the first SWD is caught in a trap or the first damage is observed. Because of the short life cycle of this pest, many growers have found that a 5-day spray schedule is required for good control. Be sure to rotate among the various modes of action for the insecticides available for use on your crop to avoid resistance. Check the Midwest Fruit Pest Management Guide for the insecticides recommended for each of your crops.

European Red Mite

Although I have not received any reports of problems with European red mites in apples, now is the time when growers should be scouting for infestations. Most growers know where mite problems show up first, either a particular variety (i.e, Red Delicious) or along a gravel road. Check those spots first and expand your scouting if you find them. The spray thresholds change through the season, so check my publication at https://extension.entm.purdue.edu/publications/E -258/E-258.html to determine if you need to spray. These thresholds are based both on the susceptibility of the trees to losses and on the need to stop increasing populations of mites early so that they don't get out of hand. As you are choosing miticides to apply, consider rotating between several modes of action, even between years. We currently have a number of effective miticides and if we use them properly, we should have good control materials for many years to

come.

Upcoming Events

Indiana Horticultural Society Field Day
June 28, 2017
Tuttle Orchard
Greenfield, IN
More details to come but mark the date on your
calendar and plan to attend
Indiana Winery and Vineyard Association

Summer Meeting and Vineyard Tour
July 18-19, 2017
Brown County Inn, Nashville IN
More details to come, but mark the date on your
calendar and plan to attend
Indiana Horticultural Congress
February 13-15, 2018
Indianapolis Marriott East
Indianapolis, IN
For further information contact Lori Jolly-Brown
@ljollybr@purdue.edu or visit
www.inhortcongress.org for more details.

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