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Crop Conditions

In Lafayette, fruit crops are progressing normally. Strawberry harvest is winding down and quite of bit of leaf spot is showing up. We have our first ripe fruit on summer red raspberries. All brambles are showing signs of freeze damage from the mid-March event. Weak and collapsing fruiting laterals are common. Grapes are from late bloom to buckshot berries, depending on variety. We have the normal amount of 2,4-D damage this year, but also weather related poor pollination on several varieties. In apples, June drop is complete and fruit are 1 to 2 inch diameter. Peaches are also sizing nicely. Sweet cherries are almost ready for harvest.



Sweet cherry, near harvest



GoldRush apples



Poor flowering in grape



Grape cluster at shatter



Peaches sizing up



Strawberry harvest winding down



First ripe summer red raspberry



Dead fruiting lateral on blackberry



Leafless fruiting laterals on blackberry

herbicides know for off-target damage due to volatility and sensitivity of many fruit crops such as grapes and raspberries, as well as vegetable crops such as tomatoes and melons. New herbicide tolerant soybeans are being grown this season and dicamba will be used over the top of those beans, post-emergent, to control broadleaf weeds. Newer dicamba herbicides registered for use on these beans are less volatile that the older formulations, but still have potential for off-target damage if used incorrectly. There is also concern that older, more volatile formulations will be used by some growers, despite Technical Use Agreements prohibiting that use.

OISC has opened the public comment period as of June 7, and plan to hold a public hearing on July 6 in Lafayette. See the OISC website at: http://www.oisc.purdue.edu/pesticide/index.ht ml for details. Click on the News Alerts link to see the list of rules and scroll down to the Proposed section to see the Notice of Intent to Adopt a New Rule (LSA#17-180). Growers with concerns should submit their comments on the proposed rule to David Scott at scottde@purdue.edu

Dicamba Public Comment Period and Hearing

The Office of the Indiana State Chemist has filed a Notice of Intent to Adopt a New Rule that will make most dicamba containing herbicides Restricted Use Products (RUP). This designation will allow the OISC to track sales of those herbicides. As many specialty crop growers know, dicamba is one of the growth regulator



Dicamba drift symptoms ongrape



Dicamba damage on grape, showing leaf and flower

distortion



Dicamba damage on grape

Canopy Management and Leaf Removal in Grapes

Canopy management is a critical production practice for improved sunlight exposure. Pulling shoots off the top of the rows improves sunlight exposure to the leaves at the base of the shoots. Those nodes will be the ones saved as spurs next year during pruning and sunlight improves bud fruitfulness and cane hardiness. Shoot positioning is normally started as shoots toughen enough to resist breakage and before tendrils attach tightly.

Immediate post-bloom through about 3 weeks post bloom is the most effective time for leaf removal on tight clustered varieties such as Vignoles, Seyval, and Chardonel. Removal of 3 to 5 basal leaves in the cluster zone can greatly reduce risk of bunch rots. Exposure to sun makes the berries less susceptible to disease and allows more rapid drying after rain or dew. Spray penetrate in the cluster zone is also improved. Leaf removal also improves fruit quality in aromatic varieties such as Traminette, and most red varieties, where sunlight exposure improved anthocyanin development. Delaying leaf removal increases the risk of sunburn, as does removal of too many leaves, especially on the west side of the canopy. Many growers remove leaves only on the east side (on north-south rows).



Post bloom leaf removal in the cluster zone on VSP trained vines.

Tipping blackberry and black raspberry primocanes

One of the most important management practices for production of blackberries and black raspberries is summer tipping of the primocanes. This practice removes the apical dominance of the shoot tip, resulting in several lateral branches below the tip, and a stronger primocane. Next year's crop will primarily be produced from buds on the lateral branches, not buds along the main primocane. Tipping can result in 3-5 fold increase in yield, thus it is a standard practice.

Tipping height is somewhat arbitrary, but usually depends on the relative vigor of the primocanes and the height, if applicable, of the trellis. With black raspberries that are somewhat low in vigor, I suggest tipping no higher than 3 ft. For thornless blackberries, a height of 4 ft of so is more appropriate.



Blackberry

primocane prior to tipping



Blackberry primocane tipped



Blackberry primocane about a week after tipping



Blackberry primocane about 3 weeks after tipping

primary scab lesions coupled with a long growth period, meaning more opportunity for scab infection. As a result growers that scouted earlier and found no scab may think their orchard is a lot 'cleaner' than it really is. Those hard-to-detect primary lesions can churn out 95,000 conidia per lesion! This makes it difficult to determine if the later lesions are late primary infections or actually secondary infections. Let's face it: No one cares except the plant pathologists. Upshot: Scab control is really, really important through third cover.

And while we're at it, let's remind ourselves that bitter rot control is equally important. Trying to squeeze in that last application of mancozeb before the 77-day PHI is never a bad idea. If you are past that point, applications of 7+11 (Pristine; Luna Sensation; Merivon) will also provide good protection. Look for early signs of infection (Fig. 1), or feeding injury by stink bugs, too. We are trying to get a handle on that relationship (stinkbug feeding serving as an infection court for the bitter rot pathogen) this year in our spray trials and hope to keep you posted.

Attention Apple Growers

It may seem like the worst is over, but apple growers should continue to be vigilant and apply fungicides even as we approach the end of the ascospore discharge period. Leaves are still highly susceptible to both primary and secondary apple scab infection until the terminal bud has set and the leaves have hardened off. Our cool, wet, crazy spring resulted in the late formation of



Figure 1 Trying to determine which, if any of these lesions, may be early infection of the bitter rot pathogen, Colletotrichum spp



Figure 1 Trying to determine which, if any of these lesions, may be early infection of the bitter rot pathogen, Colletotrichum spp

What is Killing the Bees?

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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