

# Walnut Husk Fly, Peachtree Borer, Cane Borers

June 23, 2021



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- **All tree and small fruits**: watch foliage for spider mite feeding injury
- **Berries**: prune off wilted cane tops and watch for dying canes infested with rose stem girdler

## APPLE, PEAR

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### Codling Moth

*most areas are between generations*

View a pdf of the updated spray timing table. Be sure to read the instructions at the top of the page, for how to read the table.

Egg hatch of the first generation is ending for most sites, which means that nothing needs to be sprayed now. Check the start date of the second generation egg hatch, and wait to apply your next spray at that time. And then from that point forward, there will be no “gap” after the second generation, so keep the fruit protected up until September 15.

### Treatment

- Residential options (scroll down to table)
- Commercial growers

## PEACH/NECTARINE, APRICOT

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### Peach Twig Borer

*most areas are between generations*

View a pdf of the updated spray timing table. Be sure to read the instructions at the top of the page,

for how to read the table.

Second generation egg hatch will begin in a few weeks at most locations. In high-population areas, two cover sprays may be required. In low population areas, only one application is needed.

Pay attention to apricots, which ripen earlier. At this time of year, peach twig borer larvae will be entering fruit as they ripen.

### **Treatment**

- Residential options are the same as codling moth (after clicking on link, scroll down to the table)
- Commercial growers

### **Walnut Husk Fly**

*adult flies will be laying eggs soon in northern Utah*



Walnut husk fly adults have a distinctive pattern on their wings.



Walnut husk fly larvae in walnut husks.



Walnut husk fly larva inside a peach.

According to the walnut husk fly model, protection of walnuts (plus apricots and peaches near walnut plantings) should begin at these times. The peak egg-laying period will occur in early August, so additional applications will be needed then.

- Most areas of Wasatch Front: **July 1 - 3**
- Cooler areas (Benches, Cache, Carbon, etc.): **July 8 - 12**

Walnut husk fly is typically a pest of walnuts, but this year, many walnut trees were injured by the cold snap in late October, so the walnut crop will be reduced. Therefore, the husk fly will look to alternate food sources, and can attack soft apricots or peaches growing near walnuts. Where you have had damage from husk fly in the past on these crops, the fruit will need to be kept protected with an insecticide starting at the above date, up until harvest.

On walnuts, when maggots feed on young, developing walnuts, the walnut shrivels, turns moldy, and drops prematurely. Later feeding (late Aug. - Sept.) will not affect the kernel, but will result in a husk that is stained black and a hull that is difficult to separate from the nut. If necessary, keep nuts protected up until one month before harvest. Eggs laid at that time will not be able to develop and cause damage.

Alternatively, do not treat walnuts because the late husk fly feeding does not damage the nuts, but the husk is difficult to remove. To make husk removal of infested nuts easier, store them in a damp burlap bag for 2 to 3 days.

Populations of walnut husk fly can be reduced by removing all walnuts that fall to the ground.

## Treatment

- Residential: If you are making an application for peach twig borer, it will also target walnut husk fly on peach and apricot. Spinosad (many brands) is an excellent organic option. Spinosad can also be used on walnuts, up until one month before harvest.
- Commercial growers (peach)

# Greater Peachtree Borer

*start protecting the trunks of peach/nectarine now*



Greater peachtree borers feed on wood at the crown and in the upper roots.

Protect the lower 12-18 inches of trunk for peach/nectarine, apricot, and plum. Start sprays now (if you have not already started) and keep protection on through September. Make sure the spray covers the entire surface area, particularly close to ground level, and any exposed roots.

Greater peachtree borer is a moth with a metallic, blue-black body that has narrow yellow bands and clear wings. Adult emergence and egg-laying will peak in mid-July to early August, and may extend into September, so that is the most important time to keep the bark protected. The female moth lays eggs in bark crevices and the creamy white larvae burrow into the bark and begin to feed on inner bark. There it will stay for the winter until the following spring, where it will begin feeding again until it pupates and emerges as an adult.

Young trees can be killed when trunks are girdled by feeding; older trees are weakened and become susceptible to attack by pathogens and bark beetles.

## Treatment

Materials for Residential growers include:

- Hi Yield permethrin products such as Garden & Farm Insect Control Spray, or Indoor/Outdoor Broad Use Insecticide (apply once/month)
- Spectracide Triazicide (apply every 3 weeks)
- organic options are products containing spinosad or pyrethrin (apply every 7 to 10 days)

Options for commercial growers.

Other ways to prevent attack are:

- Remove all weeds, grass, and excess soil from around the base of the tree. Heat and dryness reduce the survival of eggs and larvae.
- Avoid mechanical and rodent-caused injuries to trunks.
- Keep trees healthy with optimal nutrition and irrigation



# ALL FRUIT PLANTS

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## Spider Mites

*watch for foliage that appears bronzed or “dirty”*



Two-spotted spider mites.



Spider mite feeding just beginning on peach, as mites move from the branch to the tip of the leaf.



Heavy spider mite feeding on apples causes the leaves to turn bronze.



Progression of spider mite damage to raspberry from lower leaves to top.

Spider mite activity is increasing on raspberries, apples, peaches, and cherries. Check for mites by examining the lowest leaves on the canes and branches first. (Mites overwinter in groundcover and migrate up the plant in hot, dry weather.)

Look for leaves that are stippled (see image examples), and turn them over. Using a hand lens, look for the slow-moving mites. The mites also create webbing which traps dust and dirt, and this can be seen with the naked eye.

Before making a decision on whether to treat, use the magnifying lens to also look for predatory mites within the pest mite population. These are faster moving mites, about the same size, that can prevent spider mite densities from exceeding economic thresholds. If predators are present, then a treatment may not be necessary.

### **Treatment**

- Do not let plants get drought-stressed and keep the dust down. For smaller farms, wash dust off foliage periodically.
- For residential application, a 0.5-1% application of horticultural oil is very effective on mites, especially when populations are low, and when the spray coverage is good enough to cover the undersides of the leaves.

- Spider mite options for commercial growers. (Select crop, and then select “fruit present” stage.)

## SMALL FRUITS

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### Raspberry Horntail



Raspberry horntail larvae feed in the tops of canes, causing wilting.



When pruning out the tops of symptomatic raspberry canes, be sure to cut far enough down to get the larva inside.

#### ***prune out wilted tops of canes***

Raspberry fruits are in various stages of maturity in northern Utah. Damage from the raspberry horntail has been visible for a few weeks now.

Now is the time to prune out the wilted portions of the canes and destroy the prunings. This will help to reduce the horntail population in your area. When pruning, be sure that you get the white larva inside the stem. It may be farther down the stem than you think. To get a feel for where the larvae are feeding, slice a few cut stems vertically to locate the larva.

Where there is no borer, the pith will be creamy-white. A pith with loose brown material will indicate borer activity.

### Rose Stem Girdler





Rose stem girdler causes single canes to die back.



Rose stem girdler larva inside a cane.

***in previously infested areas, spray lower canes with insecticide***

Another serious pest of raspberries is the rose stem girdler. The adult is a shiny, bronze-colored beetle. Adults are flying and laying eggs now. Females lay eggs near the base of the canes, and the larvae hatch and tunnel into the cane tissue.

Canes may have swellings at the feeding sites, and infested canes may break at weak areas later in the season. The best treatment option is to remove and destroy infested canes late in the season. For fall-bearing raspberries, be sure to cut all canes to the ground this fall to remove any borers inside the canes.

#### **Treatment**

- pyrethrin (Pyrellin EC\*, Bonide Liquid Pyrethrin Spray)
- Treat cane stems every 7 days for the next 3 weeks, avoiding flowers