Arkansas Fruit and Nut News

Volume 2, Issue 3, 4 June 2012

In this Issue:

Events Listed in:

The Midwest Winegrower 2012 Summer Edition

click **here**

June 5th

Viticulture Field Day, University of Missouri, Columbia, MO

June 12th - 14th

Missouri Wine School, University of Missouri

July 31st - August 2nd

Governor's Cup, Missouri Wine Competition

June 12

The Northern Grapes Project Webinar Series
Winery Sanitation Basics
12:00 Noon Eastern (11:00 AM Central)
7:00 PM Eastern (6:00 PM Central)

Randy Worobo, an Associate Professor in the Department of Food Science at Cornell University, is a well-known food safety expert. He has presented many winery sanitation workshops for the wine industry in California, and will cover the basics of winery sanitation in this webinar. **To Register:** Registration is free, but required. To register, fill out the online form posted, click here. **Registration will be open from today (Friday, May 25th) through Friday, June 8th.**

June 14 & 15

2012 Tri-State Pecan Convention & Trade Show - for further information and registration form click here

Insect of the Week? Warty Leaf Casebearer Beetles

(Family: Chrysomelidae; Subfamily Cryptocephalinae; *Neochlamisus* sp.)

Donn Johnson, University of Arkansas

Warty leaf beetles (larvae or adults) can be found on leaves of alder or blackberry (Fig. 1). For the last couple years we have seen 10 or 20 casebearer larvae per acre feeding on blackberry leaves in the organically managed plantings. The adults drop to the ground when frightened and look like caterpillar fecal pellets. In Arkansas, these beetles caused negligible foliar damage to blackberry so probably no need to spray. You can go online to see the adult leaf beetle, click here, or other pictures of larvae in cases, click here.

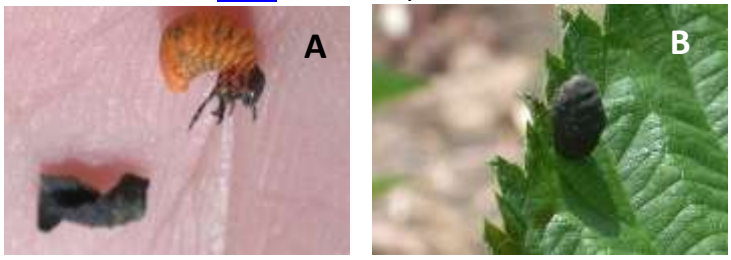

Figure 1. (A) Orange, warty leaf casebearer beetle larva (case below) and (B) larva inside case on blackberry leaf (Photos: D. Johnson)

Pecan Insects

Dr. Donn T. Johnson - Fruit Research/Extension

Pecan Nut Casebearer Decision Windows

- There is an excellent fact sheet on pecan nut casebearer (click here).
- The Arkansas pecan sites are past the 5 day spray decision window as of June 1. See the Pecan Nut Casebearer Decision Window Risk Map, click here.

During that 5 day decision window, growers examine 10 nut clusters on each of 31 trees (310 clusters). A cluster is considered infested if it has a casebearer egg or nut entry. If, on this date, you found two or more infested clusters before 310 nut clusters were sampled, the casebearer population was large enough to damage more than 5 percent of the harvest and it was recommended to apply an insecticide within the next few days.

Backyard trees - Be careful when applying insecticide sprays in backyard and urban areas, because spray may drift onto nearby gardens, pets and living areas. In home landscapes, use only products labeled for pecans such as: spinosad (Green Light Lawn and Garden Spray with Spinosad®); carbaryl; malathion; or a formulation with *Bacillus thuringiensis*.

Commercial - Many insecticides are labeled for controlling pecan nut casebearer on pecan. Insecticide labels can change from year to year so it is the user's responsibility to follow current label directions for worker safety, grazing restrictions and application rates for target pests.

Commercial growers should refer to E-125, "*Managing Insect and Mite Pests of Commercial Pecan in Texas*," click here; or MP144 2012 Insecticides Recommended for Arkansas

Note: The use of pyrethroid (e.g., Asana®, Ammo®, Warrior ®) or carbaryl (e.g., Sevin®) insecticides has sometimes been followed by outbreaks of aphids or spider mites in pecans.

Fruit Insects

Donn Johnson, University of Arkansas

Japanese Beetles

Figure 3. Japanese beetle adult (Photo: S. Kim)

Last week in Fayetteville and Clarksville, we observed the first adult Japanese beetles causing slight foliar feeding on raspberry (Fig. 3). To date in Fayetteville, we captured 8 and 90 Japanese beetles in baited yellow funnel traps on 25 and 30 May, respectively. This is over a week earlier than first trap catches recorded for the past 10 years. Rains this week are expected to allow more adult beetles to emerge from the moistened soil. Be watchful for significant foliar feeding by adult Japanese beetles during June and July.

Control: Once you see significant damage, apply weekly insecticide sprays to keep defoliation to a minimum. Foliar damage can also be minimized by white-washing plants with Surround WP (kaolin clay) and reapplying Surround after rains to maintain the white-washed appearance.

Oriental fruit moth (OFM)

The second generation of Oriental fruit moth has been flying since 25 May (> 1300 degree-days or DD since first trap catch = biofix). See the online DD calculator (here).

Plum Curculio (PC)

After 24 May, the second generation of plum curculio adults should begin emerging and laying eggs. This occurs after 1200 DD accumulated since biofix date of Mar. 16 (2 days above 70F). See the online DD calculator (here).

Codling Moth (CM)

The second generation of codling moth will begin flying after 9 June (Clarksville area) or by 15 June in NW Arkansas (> 1250 DD after first trap catch on 6 April = biofix date). See the online DD calculator (here).

Monitoring for Worms of OFM, CM and PC:

The second generation adults of these pests are starting to emerge and lay eggs. Start weekly inspections of the surface of 300 fruit for **new** feeding scars by PC (Fig. 4 A) or entry stings and frass by OFM or CM (Fig. 4 B). Cut open damaged fruit to check for presence of a legged worm (CM or OFM) or legless worm (PC). You may need to spray when you start to see new, tiny larva inside fruit.

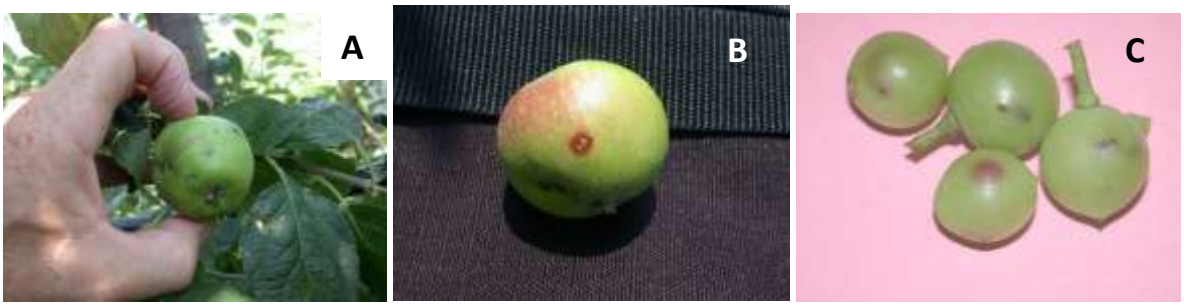

Figure 4. (A) Plum curculio damage, (B) codling moth sting and frass and (C) grape berry moth larval entry damage (Photos: D. Johnson)

Figure 5. Green stink bug nymph (A), damage on blackberry B), new stink bug feeding puncture scar on apple (C) and ooze from stink bug puncture of peach after pit hardening (D) (Photos: D. Johnson)

Grape Berry Moth

In Clarksville, March 26 (biofix date) was the first date that grape berry moths were captured in traps. You should be starting to see new larval damage in berries (Fig. 4 C) and possible tiny larvae inside = time to spray. Weekly hereafter, check 300 grape clusters in perimeter vines for larval tunneling. Record weekly estimates of % GBM-damaged clusters. Recommend application of insecticide to grapes if new damage exceeds 1% larval-damaged clusters.

Stink bug

Stink bugs (Fig. 5 A) are present and causing damage (Fig. 5 B). Fruit have had numerous feeding punctures that cause damage to bramble fruit or have a bad taste like the odor of a squeezed stink bug. Stink bug feeding on apples or peach fruit (before pit hardening) will develop a circular catfacing scar around the stink bug puncture site (Fig. 5 C), whereas after peach pit hardening the feeding puncture hole oozes a thread of gel (Fig. 5 D).

Greater Peachtree Borer

We have had moth flight of greater peachtree borer since mid-May at Clarksville. Eggs are laid and larvae hatch and tunnel into the cambium just below the soil line for most of the summer. It is time to apply a trunk drench of insecticide to *Prunus* trees (cherry, nectarine, peach and plum). A trunk drench spray of Lorsban has a residual that kills new larvae for most of the summer.

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