

Issues in Agriculture

The Newsletter about Integrated Pest Management for the El Paso Valley

Volume: 36
Issue: 6
Date: August 22, 2011

Salvador Vitanza, Ph.D.
Extension Agent- IPM
svitanza@ag.tamu.edu



El Paso County Ysleta Annex ★ 9521 Socorro Rd ★ Suite A2-Box 2 ★ El Paso, TX 79927 ★ Phone: (915) 860-2515 ★ Fax: (915) 860-2536
Texas AgriLife Extension El Paso County: <http://elp.tamu.edu/> Pecan IPM Pipe: <http://pecan.ipmpipe.org/> TPMA www.tpma.org/

Announcements

- There will be an **IPM cotton turn-row meeting** on Thursday August 25, 9:00 to 10:00 AM at Mr. Ramon Tirres Farm on North Loop Dr., ½ mile west of intersection with Webb Road (next to the pima variety trial). We will discuss current pest and disease conditions and upcoming pest management issues. This meeting is free of charge. Participation certificates with one Continuing Education Unit will be provided.
- Mario Saavedra (Texas Department of Agriculture) will hold exams for people interested in obtaining **commercial or private pesticide applicator licenses**, at the Texas AgriLife Research Center on September 7 starting at 8:00 AM. Information: (915) 859-3942.
- **Arizona Pecan Growers Association Annual Meeting**, September 16. Palo Verde Holiday Inn, Tucson, AZ, Contact Mike Kilby (520) 403-4613 or mkilby@calsmail.arizona.edu.
- The Curry Chile and Seed Company will be hosting a **Chile Field Day** on September 21, at their farm in Pearce, Arizona. The event will be held from 9:00 AM to 3:00 PM. Researchers from New Mexico State Univ., the Univ. of Arizona, and Texas A&M Univ. will be presenting on a wide variety of topics critical to chile production. Field tours of research plots and chile breeding material will be conducted. The event is free of charge. Information: Dr. Stephanie J. Walker, NMSU, Phone: (575) 646-4398.

GENERAL SITUATION:

Maximum daily temperatures for this week will range from the low 100s to the medium 90s with 10-20% chances for rain. Currently, the U.S. Drought Monitor website shows most of El Paso County experiencing moderate drought, except for the area west of Franklin Mountains, which is depicted as in severe drought. West Hudspeth County is in moderate drought while the eastern portion is exceptionally dry.

COTTON:

Cotton fields are beginning their 8th week of blooming. Cotton bolls are most susceptible to **stink bug** damage during the 3rd, 4th, and 5th weeks of blooming; times when the threshold for percentage of internal boll damage is estimated in 10%. The current week should be the last time to scout for stink bugs and their damage. At this moment, the threshold is considered to be 50% of internal boll damage. Considering that I have not found a single stink bug in cotton fields during the past two months, I would recommend disregarding this pest for the rest of the season. However, we need to monitor for stink bug population levels and their associated boll damage in future years because in other regions stink bugs have become a key cotton pest as a result of less frequent insecticide applications. Potentially, we could confront a similar situation in our area.

A substantial cotton acreage received insecticide applications for control of **Lygus bugs** 4 to 3 weeks ago. Some applications were made last week. It is wise to monitor and control Lygus bugs because they have been reported to reduce up to 70% of lint yields without adequate control. Asana was the material of choice this year in our area, but there are other options that could prove as or more effective.

Orthene (acephate), Vydate (oxamyl), and Regent (fipronil) were the most effective insecticides in a study conducted by Peter Ellsworth in the year 2000 in Arizona. None of the insecticides that he tested proved effective against adult Lygus bugs, except after repeated use. They were highly effective against the nymphal stages. He mentioned that chloronicotinyls (e.g., Provado®, Actara®) were not effective against *Lygus hesperus*. In a 2007 report, Ellsworth stated that acephate, endosulfan, and oxamyl were the most commonly used active ingredients for Lygus control in Arizona cotton.

In 1999, Lorenz et al. found that Orthene, Regent, Vydate, Bidrin (dicrotophos), Actara (thiamethoxam), and Steward (indoxacarb) provided good Lygus control.

Scott D. Stewart et al., in Arkansas, Louisiana, Mississippi, and Tennessee found that Diamond or Acephate performed similarly immediately post treatment, but Diamond had longer residual activity, which translated to fewer applications in the season for Lygus control.

A. Balachandran et al., in 2007, concluded that Ammo and the high rate of Vydate offered the longest Lygus residual mortality of 80% at 7 days after treatment (DAT). Brigade was inconsistent, but resulted in 80 – 95% mortality at 3 DAT. Carbine, at the high rate, resulted in 80% mortality at 7 DAT. The high rate of Orthene offered at least 3 days of good mortality levels. Endosulfan produced acceptable initial mortality too, but its effect was very short lived. Lygus resistance development to pyrethroids, organophosphates, and carbamates has been documented. Thus, it is always advisable to rotate chemistries. Insecticide applications may be recommended for Lygus control as early as the second week of June and as late as the third week of

August. Most likely, no yield benefit could be gained by attempting to control Lygus in El Paso and Hudspeth Counties from today until the remainder of this season.

Scouting for **bollworms and beet armyworms** is still recommended, especially in pima fields. AgriLife IPM Extension Agents in other Texas regions have reported very light presence of these pests, but in our area many fields had high bollworm population levels a little over a month ago and insecticide applications were required at that time.

I have not detected plants affected by **Texas cotton root rot** yet. Most wilted plants have been affected by **Verticillium wilt**. This situation may change in the near future depending mostly on weather conditions. Last year, Texas cotton root rot symptoms began to appear in September. See last issue of this newsletter for suggestions on how to distinguish between these diseases.

Whitefly populations are beginning to build up in cotton. Whiteflies are very abundant in El Paso City home gardens; especially in tomato, pepper, squash, and many ornamental plants. In cotton, we may need to monitor whitefly population levels closely to reduce the possibility of sticky cotton.

It is advisable to re-enter and scout the fields as soon as the insecticide label allows it to find out whether or not insecticides are doing their intended job. A generally good practice is to inspect the fields 4-7 days after treatment, but being careful not to go against the label recommendations for re-entry.

PECAN:

I have found **black aphids** and **black margined aphids** approaching and even surpassing threshold in several pecan orchards. Pecan leaves and those of the plant species on the orchard floor are covered with honeydew or “gum”. Alates or “winged aphids” are occurring at increasing proportions of the total aphid load. Black aphid damage is evident and relatively abundant in some orchards. Make sure that the black aphids are alive before deciding to apply pesticides. Close observation often shows dead black aphids, still attached to the leaves, probably due to the effect of insecticides or the incidence of entomopathogens (insect diseases).

Last Monday, I mailed live aphid samples to Bill Ree for the imidacloprid resistance study that he is conducting. Results will be announced in the next newsletter issue. If you have applied imidacloprid and suspect having resistant aphids please contact me or Bill Ree.

From time to time, I find a few pecan trees, in commercial orchards or in urban environments, affected



by **termites**. Usually, these termites consume dead branches resulting in trunk cavities, but not affecting the live wood of healthy trees. Recently, I found termites in a couple of pecan trees in a commercial orchard near Tornillo and submitted specimens of soldier termites for identification to Dr. Robert Pucket with the goal to make certain that we are not seeing the first Formosan subterranean termites in El Paso County. Formosan termites are an important pest of pecan trees in Louisiana and are present along the Texas gulf coast. Fortunately, a preliminary identification suggests that the termite species in question may be a native termite that belongs to the family Termopsidae called “dampwood termites”, probably *Zootermopsis laticeps*. The official

identification is pending. A very interesting journal article by H. Howell et al., on swarming dates and distribution of this species in El Paso County says that this is the largest and most primitive termite in North America and the least understood. This publication can be found at: <http://scentsoc.org/Volumes/JAUE/26/261011.pdf>. These trunk hollows also contained rat-tailed maggots (<http://tinyurl.com/3ybpqur>).

Pecan bacterial leaf scorch (PBLs) in El Paso County? Since June, I have been noticing that many pecan trees have leaflets with scorched tips and edges. Among possible causes: extreme heat, hot wind, salt



damage, deposition of chemical residues after sprays, vascular tissue damage from extremely low temperatures, and PBLs. Pecans in both rural and urban landscapes exhibit similar symptoms. The attached photo shows a dramatic example. Symptoms resemble those in a 2007 publication by Sanderlin and Melanson (<http://tinyurl.com/3cewwmg>). I just submitted samples to the Plant Disease Diagnostic Clinic in College Station for DNA analysis and will let you know of test results. Dr. Nancy Goldberg reported this bacterium (*Xylella fastidiosa*) in Las Cruces, NM (2006) in grapes and chitalpa (<http://tinyurl.com/3o572mu>). Later, she also found it in peach and catalpa. This pathogen has not been detected in

pecan in south New Mexico or far west Texas. However, several insects (mostly sharpshooters and spittlebugs) vector this disease. It might be a matter of time for this pathogen to jump to pecan. PBLs affects over 150 plant species and is a chronic disease in pecans with the potential to reduce yields in 15-20%.

The Texas AgriLife El Paso IPM Program is partially supported by the following organizations:

El Paso Pest Management Association
Texas Pest Management Association
Valley Gin Company, Tornillo
West Texas Pecan Association

Please show your appreciation by supporting these great organizations.