


Issues in Agriculture

The Newsletter about Integrated Pest Management for the El Paso Valley

Volume: 36
Issue: 7
Date: August 30, 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

- 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:

Texas, Oklahoma, and parts of New Mexico continue experiencing drought conditions while the eastern seaboard has received excessive precipitation. Meteorologists are blaming “La Niña” and local atmospheric patterns for a year marked by natural disasters. Here in El Paso, maximum temperatures have remained about 10 degrees above average, setting records, but by the end of the week we may get moderate relief from the heat.

COTTON:

The **IPM cotton turn-row meeting** on Thursday August 25, at Mr. Ramon Tirres Farm was a success. We discussed pest and disease problems in cotton such as boll rot, verticillium wilt, Texas cotton root rot, Lygus, bollworms, and whiteflies. Pecan topics included aphid levels, termites, and a mysterious damage to nuts (just two trees affected). A total of 18 people attended this meeting and certificates with one CEU were provided. Participants also toured the pima variety trial and made their own observations.

Boll rot: On August 24, dried cotton bolls with dark, sooty spots were detected in several fields near Clint and Socorro. Initially, I was baffled by these symptoms and immediately emailed close-up photographs to a group of plant pathologist and other cotton experts. I also submitted samples to the Plant Disease Diagnostic Laboratory in College Station. Kevin Giraud and Howie Koenig (Helena Chemicals) sent samples to NMSU and Arizona. At first, plant diseases were suspected to be the cause, but later general consensus built around Charles Stichler’s technical opinion pointing at environmental factors. He thinks that stressed out plants, due to lack of adequate soil moisture coupled with high temperatures, suffered damage to soft developing tissues in the bolls. Dr. Thomas Isakeit found weak strains of *Aspergillus niger*, *Alternaria* sp., and *Fusarium* sp., but considered that they developed after the death of plant tissue. Dr. Natalie Goldberg and Jason French (NMSU Plant Diagnostic Clinic) isolated *Alternaria* sp./spp. and *Aspergillus* sp./spp. from the samples. They are of the opinion that “these fungi are weakly pathogenic or opportunistic and are feeding on weakened or dead tissue.” Their diagnosis stated: “the damage to the cotton bolls is the result of a cultural or environmental problem and these organisms are secondary saprophytes. No control measures are recommended.” Drs. Kevin Ong, Charles Allen, and Jaime Iglesias concurred with that diagnosis. Warren Multer, AgriLife IPM Agent, says that similar symptoms have occurred this season near Midland and Odessa. It looks like this is not a banner year for cotton production.



Verticillium wilt incidence has been severe in a few pima cotton fields near Fabens which are in close proximity to the Rio Grande. Plants have wilted following irrigations. This is a non-defoliating verticillium

strain that resembles Texas cotton root rot, but in this case the roots are not rotted and their tissues exhibit a light color. At this point, no chemical control measures exist to battle this soil-borne disease. Rotation to alfalfa



Cotton field affected by verticillium wilt

and grains is recommended, but this is a preventive method with variable results. Chili pepper is susceptible to this disease and should not be part of a rotation program. Although both pima and upland varieties are susceptible to verticillium wilt, some varieties are more affected than others. For a partial list of recommended varieties see: <http://tinyurl.com/3ffvebq> Studies conducted by Dr. Jason Woodward (AgriLife) in Lubbock suggests that greater losses to verticillium wilt may be associated with plant stand densities lower than 4 plants per foot of row.

Texas cotton root rot has appeared in Esperanza. The field with the most severe case has approximately 40% wilted plants due to root rot. Our field test to evaluate the efficacy of flutriafol to control root rot has a

few wilted plants, but at this moment it is too early to obtain ratings.

PECAN:

Bill Ree tested winged aphids (alates) and nymphs for **imidacloprid resistance**. I obtained these aphids from a pecan orchard located near Clint that was treated with Admire earlier in the season. Test results indicated that Sulfoxaflor at 1.5 and 2.5 oz/a and Fulfill at 4 oz/a produced greater mortality than imidacloprid at 3.5 and 7 oz/a. Fulfill was the most effective insecticide and Movento was slightly less effective than imidacloprid.

			Alates			Nymphs		
			Alive	Dead	mortality	Alive	Dead	Mortality
18- Aug	24 hr	Check	18	7	0.28	32	0	0.00
		3.5 oz imidacloprid	17	8	0.32	14	4	0.22
		7.0 oz imidacloprid	15	10	0.40	11	12	0.52
19- Aug	48 hr	Check	16	7	0.30	77	2	0.03
		3.5 oz imidacloprid	12	13	0.52	28	10	0.26
		7.0 oz imidacloprid	14	11	0.44	30	20	0.40
20- Aug	72 hr	Check	18	7	0.28	117	1	0.01
		3.5 oz imidacloprid	9	16	0.64	49	10	0.17
		7.0 oz imidacloprid	12	13	0.52	70	18	0.20
Aphids held overnight in refrigerator								
19- Aug	24 hr	Check	23	2	0.08	12	1	0.08
		1.5 oz Sulfoxaflor	16	9	0.36	3	5	0.63
		2.5 oz Sulfoxaflor	12	13	0.52	0	1	1.00
		4.0 oz Fulfill	1	24	0.96	0	4	1.00
		9.0 oz Movento	18	7	0.28	15	4	0.21
20- Aug	48 hr	Check	23	2	0.08	54	2	0.04
		1.5 oz Sulfoxaflor	3	22	0.88	1	8	0.89
		2.5 oz Sulfoxaflor	3	22	0.88	0	2	1.00
		4.0 oz Fulfill	0	25	1.00	0	4	1.00
		9.0 oz Movento	17	8	0.32	12	10	0.45
21- Aug	72 hr	Check	23	2	0.08	120	3	0.02
		1.5 oz Sulfoxaflor	0	25	1.00	1	10	0.91
		2.5 oz Sulfoxaflor	0	25	1.00	0	2	1.00
		4.0 oz Fulfill	0	25	1.00	0	4	1.00
		9.0 oz Movento	15	10	0.40	6	17	0.74

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**