Issues in Agriculture

The Newsletter about Integrated Pest Management for the El Paso Valley

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Texas AgriLife Extension El Paso County: http://elp.tamu.edu/ **Pecan IPM Pipe:** http://pecan.ipmpipe.org/ **TPMA** www.tpma.org/

ANNOUNCEMENTS

- **TODAY IS MY LAST DAY WITH AGRILIFE**. I accepted a position with APHIS-PPQ near this area. Working for almost a decade for the Texas A&M AgriLife Extension Service as an IPM Extension Agent in El Paso has been a privilege and an honor. I can honestly say that serving farmers, pest control operators, pesticide applicators, consultants, master gardeners, and El Paso residents has been both challenging and rewarding. Personally, working at AgriLife was a professionally-enriching experience that allowed me to grow in knowledge and skills, but most of all in professional collaborations within and outside the institution. I am leaving with mixed feelings because on one hand, I am looking forwards to continue my career as an entomologist in the direction that I want, but at the same time, I am going to miss interacting with so many good people. The recent outpouring of gratitude and appreciation that I have received from so many folks has humbled me and made me wish I could have done much more for each of you. I owe so many people a debt of gratitude for their encouragement or assistance, in a variety of forms, that made my job more effective and enjoyable. Too many to mention! Please contact me with your insect questions and I will do my best to provide you with an answer as my new responsibilities allow. I am keeping the same cell phone number, for those who have it, and you can always email me at: svitanza4@yahoo.com
  I am sure the IPM newsletter will continue once a new IPM Agent is in place. In the meantime, you can access other AgriLife IPM newsletters by visiting: http://www.tpma.org/ipm_units.htm# There, you can obtain recent or past newsletters. Dr. Ray Bader will be in charge of the cotton variety trials.
- The **"EL PASO BUGS"** websites contain a large amount of images of invertebrate species. I hope these sites can be a useful tool for insect identification and for documenting local species. All photos for these websites were taken in the last six and a half months. To visit "El Paso Bugs" go to: Thumbnails: http://elp.tamu.edu/integrated-pest-management/el-paso-bugs-thumbnails-2/
  Taxonomic List: http://elp.tamu.edu/integrated-pest-management/el-paso-bugs/
  Facebook: https://www.facebook.com/ElPasoBugs
- The **2016 El Paso Pesticide Applicator Training** will be held on Thursday, February 11 at the Ysleta Cultural Arts Center, 9600 Simms (Exit I-10 @ McRae), El Paso, Texas 79925 from 7:15 A.M. to 3:00 P.M. The cost will be the same as last year, $50.00 early registration (before February 4) and $60.00 on site registration including lunch, handouts, and other goodies. Five CEUs may be obtained. For general information, please call Texas A&M AgriLife Extension Service 915-860-2515. For licensing information, contact Steven Boston (TDA) 806-799-8555. Please see attached flyer and agenda at the end of this newsletter.

COTTON:

This summary presents the results of the cotton variety trials for both yield and fiber analysis. I have received calls from cotton growers asking for this information because they are currently in the process of selecting varieties for the upcoming growing season.

PIMA: The following table shows the results of the **2015 El Paso pima cotton variety trial** conducted with Mr. Ramon Tirres Jr. at his Farm on North Loop Drive near the intersection with Web Road. This test was planted on April 27, using a seeding rate of 17.3 lb/acre, and harvested on November 13, 2015. The plots consisted of 4 rows spaced at 40 inches and a length of 600 feet, replicated 3 times. The total row length per variety was 7,200 feet (600' x 4 rows x 3 reps) equivalent to 0.55 acres in 3 reps (7200/13069.3) or 0.18 acres per plot (0.55/3). A 4-row field margin was used to minimize border effect. Varieties sorted by pounds of lint/acre:

PIMA YIELD:

Variety	Average seed cotton per plot (lbs)	Average seed cotton per acre (lbs)	Average lint turnout percentage	Average lint per acre (lbs)
ALL-TEX P203	670	3,649	34%	1,253
DP340	677	3,686	34%	1,247
DP357	653	3,558	33%	1,184
DP358RF	620	3,377	35%	1,182
DP348RF	610	3,322	34%	1,121
PHY805RF	587	3,195	32%	1,032

Seed cotton yield average: 636 lbs per plot
Standard deviation: 36
Coefficient of Variance %: 6
Highest value: 677
Lowest value: 587
Sample number: 18

PIMA FIBER ANALYSIS:

Variety	Micronaire	Length	Uniformity	Strength	Elongation
ALL-TEX P203	3.9	1.36	84.8	40.6	6.7
DP340	3.8	1.39	86.2	39.9	6.1
DP357	3.8	1.38	85.7	41.3	6.1
DP358RF	3.8	1.42	86.5	44.5	6.4
DP348RF	3.8	1.38	86.5	42.6	6.4
PHY805RF	3.7	1.40	86.1	44.8	6.3
Average:	3.8	1.39	86.0	42.3	6.3
Std:	0.1	0.02	0.7	2.0	0.2
CV%	2.0	1.44	0.8	4.8	3.7
Highest:	3.9	1.42	86.5	44.8	6.7
Lowest:	3.7	1.36	84.8	39.9	6.1

UPLAND: The following table shows the results of the **2015 El Paso upland cotton variety trial** conducted with Mr. Harvey Hilley Jr. at his Farm near Clint across Alameda Ave. from Clint High School. This test was planted on May 1st and harvested on December 20, 2015. The plots consisted of 4 rows spaced at 38 inches and a plot length of 760 feet, replicated 4 times. The total row length per variety was 12,160 feet (760' x 4 rows x 4 reps) equivalent to 0.88 acres in 4 reps (12,160/13,755.8) or 0.22 acres per plot (0.88/4). An 8-row field margin was used to minimize border effect. The following table contains varieties ranked by pounds of lint/acre:

UPLAND YIELD:

VARIETY	Average seed cotton per plot (lbs)	Average seed cotton per acre (lbs)	Average lint turnout percentage	Average lint per acre (lbs)
ST 4946 GLB2	1,631	7,379	41%	3,025
ST 4747 GLB2	1,550	7,014	41%	2,876
FM 2334 GLT	1,501	6,791	41%	2,784
DP 1212 B2RF	1,520	6,878	40%	2,751
DP 1321 B2RF	1,422	6,433	41%	2,638
DP 1522 B2RF	1,433	6,485	40%	2,594
FM 1830 GLT	1,343	6,077	41%	2,492
DP 1518 B2RF	1,387	6,277	39%	2,448

Seed cotton yield average: 1,473
Standard deviation: 94.3
Coefficient of Variance %: 6.4
Highest value: 1,631
Lowest value: 1,343
Samples: 32

UPLAND FIBER ANALYSIS:

Variety	Micronaire	Length	Uniformity	Strength	Elongation
ST 4946 GLB2	4.19	1.19	83.25	29.55	8.80
ST 4747 GLB2	4.23	1.23	82.73	30.05	6.73
FM 2334 GLT	4.09	1.25	83.20	30.93	7.90
DP 1212 B2RF	4.32	1.23	83.70	29.73	8.98
DP 1321 B2RF	4.47	1.20	82.90	29.43	8.98
DP 1522 B2RF	4.38	1.19	82.38	29.43	9.30
FM 1830 GLT	4.14	1.22	83.18	30.90	8.40
DP 1518 B2RF	3.97	1.21	82.23	27.98	7.58
Average:	4.22	1.21	82.94	29.75	8.33
Std:	0.32	0.04	1.20	1.40	1.24
CV%	7.68	3.32	1.45	4.72	14.88
Highest:	4.71	1.33	84.90	31.80	10.30
Lowest:	3.73	1.15	79.80	25.50	6.40

PECAN:

Pecan Bacterial Leaf Scorch (PBLS): On November 5, I collected a total of 15 one-gallon Ziploc bags containing pecan leaf samples from four commercial pecan orchards in El Paso Lower Valley along with proper identification/collection data. The samples contained several compound leaves taken from symptomatic vs. asymptomatic and young vs. old trees. The NMSU Plant Diagnostic Clinic kindly offered to process up to 30 samples, free of charge, in an attempt to better understand the magnitude and prevalence of PBLS in our region. The diagnostic report, for all samples, came back with the following description:

Diagnosis and Recommendations

Host: *Pecan Carya illinoinensis.*

Primary Diagnosis: *No pathogen found.*

Recommendation: *The sample submitted tested ELISA negative for Xylella fastidiosa (Xf). From our work with other woody species, where we used both ELISA and PCR, we found that ELISA can give a false negative. There are many factors that can impact the ELISA test results but in this particular case here are a few possibilities*

1) Time of year, the bacterium is much easier to detect in the summer months.

2) Type of sample. These samples were fresh but unfortunately lacked branch terminals for sap extraction. When we can extract sap from symptomatic branch terminals it almost doubles the efficiency of detection. PCR can detect much smaller amounts of bacteria and we believe the increased sensitivity using PCR allows for more accurate detection of Xf.

As such, I would consider the negative ELISA results for the trees to be presumptive (several of the samples had classic symptoms) and would recommend testing negative trees by PCR when a reliable PCR protocol is developed.

Rebecca A. Melanson, Louisiana State University Ag Center

Jason M. French, New Mexico State University

Mr. Jason French and I agreed to conduct a similar survey in the summer of 2016. Unfortunately, I will not be working for AgriLife after today and some other Extension Agent or grower(s) will have to pursue this line of work. Maybe the West Texas Pecan Association could name a person to collect samples, early in the morning, from El Paso County pecan orchards and deliver them to the Diagnostic Clinic as quickly as possible to increase the chances of detecting this pathogen. It would be important for that person to first obtain detailed instructions from the Diagnostic Clinic on how to collect, label, and deliver the samples coordinating arrival time.

INVASIVE SPECIES DETECTED IN EL PASO COUNTY BY THE IPM PROGRAM IN THE PAST SIX MONTHS:

RED IMPORTED FIRE ANT (RIFA, *Solenopsis invicta*): I regret to inform you that the ant samples I collected from eight public parks throughout the city were confirmed as red imported fire ants by Dr. Robert Puckett (Assistant Professor and Extension Entomologist, Texas A&M University). Initially, Dr. James Trager, the Missouri Ant Curator, confirmed via photographs the presence of RIFA in the city of El Paso. Immediately, I mailed specimens to Drs. Brad Vinson and Robert Puckett (Texas A&M Professors) for their diagnosis. For information on fire ant control go to:
http://fireant.tamu.edu/controlmethods/twostep/

BERMUDAGRASS STEM MAGGOT (BSM, *Atherigona reversura*): I first encountered this fly on July 7, 2015. AgriLife Specialists Dr. Allen Knutson and Dr. Vanessa Corriher-Olsen wrote an extension publication on this pest dated July 15, 2015. They state the following: "The bermudagrass stem maggot (BSM) is a new pest of bermudagrass hay fields and pasture. The larva or maggot feeds in the top shoots of the bermudagrass, causing the top 2-3 leaves to turn brown or white. This damage gives the field an appearance of being frosted. The BSM was first reported from Texas in 2013 in Van Zandt, Comanche and Lavaca counties and since then it has been reported from many areas in east and central Texas and the Upper Gulf Coast. The bermudagrass stem maggot is native to south Asia and was first reported in the United States in Georgia in 2010. This pest only infests bermudagrass and stargrass (Cynodon spp.). For more information go to: http://www.texasfarmbureau.org/Commodity/Bermudagrass%20Stem%20Maggot%202015.pdf

SUGARCANE APHID (SCA, *Melanaphis sacchari*): I found this pest for the first time on a patch of Sudan Grass near Clint on September 29, 2015. I do not expect this pest to become an important issue for El Paso County Agriculture because no sorghum is grown here and there are only few small patches of Sudan Grass. The SCA is a devastating pest in grain sorghum. It also attacks Johnson Grass, Sudan Grass, and Sugar Cane. I found very few SCA aphids with no apparent damage to the Sudan Grass. Dr. Pat Porter kindly allowed me to display some of his SCA photos on "El Paso Bugs" at: http://elp.tamu.edu/whiteflies-aphids-scales-mealybugs/
AgriLife has developed a rich resource on this pest that can be viewed at: http://txscan.blogspot.com/

AFRICAN FIG FLY (AFF, *Zaprionus indianus*). I first observed this fly feeding on cracked and rotten tomatoes on October 4, 2015. The AFF feeds on a wide range of plant species, both cultivated and wild. An article discusses this fly as a potential pest of grapes here:
http://articles.extension.org/pages/69911/african-fig-fly-in-grapes
I found the following fact sheet on the AFF to be interesting and informative:
http://www.virginiafruit.ento.vt.edu/FFF.html
Other images:
http://elp.tamu.edu/order-diptera-flies/diptera-drosophilidae-zaprionus-indianus-african-fig-fly-f/
http://elp.tamu.edu/order-diptera-flies/diptera-drosophilidae-zaprionus-indianus-african-fig-fly-e/
http://elp.tamu.edu/order-diptera-flies/diptera-drosophilidae-zaprionus-indianus-african-fig-fly-c/

PALM PLANTHOPPER, (*Asarcopus palmarum*): Found in my patio on December 5, 2015. To my knowledge, this is the only finding reported of this bug in the US outside California for the past 95 years. The palm planthopper arrived at California in 1920. Now we need to figure out how it got here, I suspect it was through the importation of Phoenix palms from California. In regards to its pest status, a University of California extension publication says that it is a serious and challenging pest to control on Phoenix palms:
http://ceventura.ucanr.edu/newsletters/Volume_22_No1_-_July_200929820.pdf
But other references present this insect as a minor pest of Phoenix palms.

CYCAD AULACASPIS SCALE, (*Aulacaspis yasumatsui*) detected on January 13, 2016: Samples were collected and submitted to APHIS-PPQ Entomologist Identifiers for confirmation. The diagnosis report came back positive. This is an important pest of Sago palms. Uncontrolled and severe outbreaks of this pest may result in plant death. This AgriLife publication does a good job discussing this pest in Texas:
http://extentopubs.tamu.edu/eee_00038.html

THIS IS NOT A GOODBYE! LET'S KEEP IN TOUCH.

The Texas AgriLife El Paso IPM Program is partially supported by the following organizations:
West Texas Pecan Association
Ag Market Resources
El Paso Pest Management Association
Texas Pest Management Association
Valley Gin Company, Tornillo

PESTICIDE APPLICATOR TRAINING 2016

DATE: February 11, 2016

LOCATION: YISD (Ysleta Independent School District)
9600 Simms (Exit I-10 @ McRae)
El Paso, Texas 79925

TIME: 7:15 A.M. - 3:00 P.M.

REGISTRATION: Includes lunch, refreshments and handouts (same cost as last year)
$50.00 early registration (***before February 4, 2016***)
$60.00 on site registration

License holders must present a valid pesticide applicator's license or a driver's licenses to receive credit for the training.

Make checks payable to: ***Greater El Paso Pest Control Association (or GEPPCA)***
Texas A&M AgriLife Extension Service
Ascarate Annex
301 Manny Martinez Sr. Drive, 2nd Floor
El Paso, TX 79927

Sponsored By:
* Texas AgriLife Extension Service
* Texas Department of Agriculture
* El Paso Pest Management Association
* YISD (Ysleta Independent School District)

Five CEUs may be obtained for TDA, SPCS, NMDA, commercial, non-commercial, and Private Pesticide Applicators. For general information, please call Texas AgriLife Extension Service at (915) 771-2354. For licensing information, contact **Steven Boston** (TDA) at (806) 799-8555.

Salvador Vitanza, Ph.D.
Extension Agent – IPM
Texas AgriLife Extension Service

Steven Boston
Lead Inspector
Texas Department of Agriculture/Lubbock

AGENDA
PESTICIDE APPLICATOR TRAINING 2016

February 11, 2016.

JOINT SESSION

7:45 AM – 8:15 AM Pest report for urban and Ag in 2015. Dr. Salvador Vitanza
Extension Agent – IPM, El Paso
Texas A&M AgriLife Extension Service

8:15 AM – 9:15 AM Becoming a Better Pest Identifier Dr. Michael Merchant
Professor & Extension Urban Entomologist Texas A&M AgriLife
Extension Service, Texas A&M University System

9:15 AM - 10:15 AM Plant Disease Identification Harald Grieb
Area Disease Identifier / Botanist
Animal and Plant Health Inspection Service (APHIS-PPQ)

10:15 AM - 10:45 AM **Break**

SPLIT SESSION

GENERAL GROUP

10:45 AM - 11:45 AM IPM in Urban Landscapes Dr. Carol Sutherland
Extension Entomologist at NMSU
State Entomologist for the New Mexico Department of Agriculture

AG GROUP

10:45 AM - 11:45 AM WPS-RTK Perry Cervantes
Director of Certification
Texas Department of Agriculture

LUNCH 11:45 AM - 1:00 PM

SPLIT SESSION

AG GROUP:

1:00 PM-2:00 PM IPM in Pecans Dr. Rafael Corral
Botanist and Pest Management Coordinator
Fort Bliss Military Base

GENERAL GROUP:

1:00 PM-2:00 PM Urban Forestry John White
Curator Centennial Museum
University of Texas at El Paso (UTEP)

JOINT SESSION

2:00 PM - 3:00 PM Laws and Regulations. Perry Cervantes
Director of Certification
Texas Department of Agriculture

Note: Remember that you are responsible for your CEU certificates and Texas AgriLife Extension Service does not retain copies.