Issues in Agriculture

The Newsletter about Integrated Pest Management for the El Paso Valley

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ANNOUNCEMENTS

- You can download this and other IPM newsletters, check updates, and view upcoming events at the El Paso Texas A&M AgriLife Extension IPM website: http://elp.tamu.edu/integrated-pest-management/
- **The 2015 El Paso Pesticide Applicator Training** will be held on Tuesday February 10 at the Ysleta Cultural Arts Center, 9600 Simms (Exit I-10 @ McRae), El Paso, Texas 79925 from 7:30 A.M. to 3:00 P.M. This event is sponsored by the Texas A&M AgriLife Extension Service, the Texas Department of Agriculture, El Paso Pest Management Association, and the Ysleta Independent School District. The cost will be the same as last year, $50.00 early registration (before February 3) and $60.00 on site registration including lunch, handouts, and other goodies. Five CEUs may be obtained for the Texas Department of Agriculture, the Structural Pest Control Service, and the New Mexico Department of Agriculture, for commercial, non-commercial, and private pesticide applicators. For general information, please call Texas A&M AgriLife Extension Service 915-860-2515. For licensing information, contact Mario Saavedra (TDA) 915-859-3942. Please see attached flyer and agenda.
- **Annual New Mexico Chile Conference:** Hosted by The Chile Pepper Institute will be held on Tuesday, February 3, in Las Cruces, NM at the Hotel Encanto de las Cruces. Registration starts at 7:30 AM and the event ends at 5:00 PM. Individual registration is $105.00
- **Texas Pest Management Association (TPMA) annual meeting** will be held in Austin from February 11 to February 13 at the Holiday Inn Express & Suites Austin Airport (7601 East Ben White Boulevard, Austin, TX 78741) The TPMA Workshop will begin at 1:15 PM on February 11. The Board Meeting will commence the next morning and the meeting will end about 1:00 PM.
- **The West Texas Pecan Association Annual Meeting** will be held on Thursday February 19 at 11:00 AM at the Cattleman's Steakhouse - Indian Cliffs Ranch. The Chairman of the American Pecan Board (APB) Mike Adams will give a presentation on the Federal Marketing Order on US grown pecans. RSVP by February 17 via email to Kevin@ranchonogal.com with WTPA in subject line. Please remind other pecan growers and fellow members of this important event.
- **The 63rd Southwestern Branch of the Entomological Society of America Annual Meeting** will be held jointly with the **Annual Meeting of the Society of Southwestern Entomologists** from February 23 to 26, 2015 at the Hard Rock Hotel and Casino, Tulsa, OK. More information at: http://www.entsoc.org/southwestern/southwestern-branch-2015-annual-meeting

COTTON:

2014 El Paso Pima and upland cotton variety trials:

I am presenting a summary 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 selection for the upcoming growing season.

PIMA: The following table shows results of the **2014 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 29, using a seeding rate of 17.3 lb/acre, and harvested on December 2, 2014. 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)
DP357	460	2,634	43%	1,077
DP340	470	2,693	42%	1,075
DP358	416	2,384	41%	929
DP348	370	2,120	42%	846
PHY805RF	297	1,700	44%	711

Although numerical differences seem to be dramatic, no statistically significant differences in seed cotton yield were observed among varieties.
ANOVA: F value (2, 12) = 0.1547, at a confidence level of p <.05 Critical value = 3.89
Seed cotton yield average: 402
Standard deviation: 75
Coefficient of Variance %: 19
Highest value: 495
Lowest value: 229

PIMA FIBER ANALYSIS:

Variety	Micronaire	Length	Uniformity	Strength	Elongation
DP357	3.56	1.33	84.43	39.07	6.50
DP340	4.11	1.34	84.63	40.27	5.70
DP358	3.65	1.38	86.13	39.20	6.17
DP348	3.61	1.37	86.03	39.33	6.07
PHY805RF	3.84	1.37	85.97	41.00	5.83
Average:	3.75	1.36	85.44	39.77	6.05
Std:	0.26	0.03	1.23	2.01	0.47
CV%	6.83	2.52	1.44	5.06	7.80
Highest:	4.22	1.41	87.00	42.50	7.20
Lowest:	3.27	1.30	82.90	35.50	5.40

UPLAND: The following table shows partial results of the **2014 upland cotton variety trial** conducted with Mr. Harvey Hilley Jr. at his Farm on Bovee Road near the intersection with Alameda Ave. This test was planted on May 5 and harvested on December 1, 2014. The plots consisted of 4 rows spaced at 38 inches and a plot length of 1,218 feet, replicated 4 times. The total row length per variety was 19,488 feet (1218' x 4 rows x 4 reps) equivalent to 1.42 acres in 4 reps (19,488/13,755.8) or 0.35 acres per plot (1.42/4). 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)
DP1321B2RF	1,695	4,785	46%	2,201
ST4946GLB2	1,689	4,768	46%	2,173
FM2484B2F	1,491	4,210	47%	1,972
PHY375WRF	1,473	4,159	47%	1,958
FM2334GLT	1,374	3,878	49%	1,895
PHY499WRF	1,379	3,893	46%	1,785
PHY367WRF	1,360	3,839	46%	1,765
DP1212B2RF	1,327	3,746	46%	1,724

No statistically significant differences in seed cotton yield were observed among varieties.
ANOVA: F value (3, 28) = 1.6734 at a confidence level of p <.05 Critical value = 2.95.
Seed cotton yield average: 1,473
Standard deviation: 180
Coefficient of Variance %: 12
Highest value: 1,865
Lowest value: 1,215
Samples: 32

UPLAND FIBER ANALYSIS:

Variety	Micronaire	Length	Uniformity	Strength	Elongation
DP 1212 B2RF	4.15	1.20	83.70	29.68	8.48
FM 2334 GLT	4.28	1.20	83.23	28.58	8.75
DP 1321 B2RF	4.31	1.19	84.45	28.75	9.33
PHY367 WRF	4.37	1.15	83.58	27.75	9.53
FM 2484 B2F	3.96	1.20	83.00	28.30	7.53
PHY 499 WRF	4.63	1.15	83.93	29.55	9.65
ST 4946 GLB2	4.27	1.16	83.10	28.28	8.75
PHY 375 WRF	4.11	1.11	82.28	26.18	8.85
Average:	4.26	1.17	83.41	28.38	8.86
Std:	0.33	0.04	1.01	1.41	1.17
CV%	7.83	3.78	1.21	4.96	13.19
Highest:	4.84	1.28	85.20	31.40	10.60
Lowest:	3.70	1.08	81.10	25.30	6.20

PIMA COTTON PLANT STAND DENSITY TEST:

The following table shows partial results of the **2014 pima cotton plant stand density 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 29, using the variety DP357 at the following 3 seeding rates: High (17.3 lbs/acre), Medium (15.3 lbs/acre), and Low (13.1 lbs/acre). This trial was harvested on December 2, 2014. The plots consisted of 8 rows spaced at 40 inches and a length of 600 feet, replicated 3 times. The total row length per variety was 14,400 feet (600' x 8 rows x 3 reps) equivalent to 1.1 acres in 3 reps (14,400/13069.3) or 0.37 acres per plot (1.1/3).

Lbs of seed per acre (variety DP357)	Plant stand density (30 DAP)	Average seed cotton per plot (lbs)	Average seed cotton per acre (lbs)	Average lint per acre (lbs)
High (17.3 lbs)	86,249	863	2,350	1,011
Med. (15.3 lbs)	54,886	938	2,554	1,098
Low (13.1 lbs)	45,738	950	2,587	1,112

Note: The average lint turnout percentage for the pima variety DP357 was 43%. It is interesting to see that seed cotton and lint yield values were inversely proportional to the amount of seed used at planting. In other words, the smaller amounts of seed used at planting, the greater the yield. These results may not apply to other locations or to a different year, but it is encouraging to know that it is possible that savings could be obtained by planting less cotton seed while obtaining greater yields.

Planting the upland variety trial at Dr. Harvey Hilley Jr. Farm on Bovee Rd on May 5, 2014:

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