



Cotton Newsletter, April 2013, Volume 4, Number 1

We are at the beginning of another growing season. Within the next two weeks, cotton will start getting planted in New Mexico. From USDA projections, we are likely to have a drop in the cotton acreage nationwide this year. In 2011, New Mexico planted 70,000 acres of upland cotton, but this fell to 46,000 acres in 2012. The projected acreage for 2013 is 30,000 acres. The acreage fluctuation is closely linked to the lint prices. For cotton production to remain profitable in NM, we need to exploit the value-added options of cotton. For example, NM is conducive for the production of glandless cotton which is cotton without gossypol. This can add tremendous value to cotton, since the seeds can sell for higher prices. Glandless cottonseeds are edible for humans and animals with simple stomach. This is unlike the conventional cottonseeds that can only be fed to ruminants. The New Mexico State University, through funding from Cotton Incorporated is currently leading research on breeding and agronomic evaluations of the glandless cotton lines. Another funded research at NMSU by Cotton Inc. is looking at the suitability of the glandless cottonseed meal for raising shrimps. It is hoped that all these research efforts will eventually benefit cotton producers in New Mexico, and help maintain the viability of cotton production in our State.

We want to use this opportunity to wish our cotton growers a good growing season.

Please, send your comments and contributions to John Idowu (email: jidowu@nmsu.edu; phone: 575-646-2571). Previous editions of the Cotton Newsletter are posted on <http://aces.nmsu.edu/ces/ifcpm/cotton-production.html>

GLANDLESS COTTON UPDATE

Research on glandless cotton funded by Cotton Inc. continued into the third year during the 2012 season. Three glandless cultivars (Acala-GLS, JACO-glandless and STV-Glandless) are currently being evaluated. From the last year's results, we did not see any significant differences in the lint and seed yields of these three glandless cultivars tested in Las Cruces. Lint yields for the three cultivars varied between 980 – 1190 pounds per acre, while the cottonseed yields varied between 0.7 -0.9 tons per acre. However, there were differences in fiber quality among the cultivars. The Acala-GLS had better fiber quality with micronaire in the premium range, while the two other glandless varieties had their micronaire in the base range. Uniformity index and fiber strength were also better in the Acala-GLS. Testing of these cultivars will continue in 2013 across the cotton growing areas of New Mexico. New glandless lines being developed by the NMSU cotton breeder will also be available for agronomic evaluations in 2014.

Shrimp production processes are also been worked out and procedures are being adjusted to optimize shrimp yield potential. Procedures are being developed to begin sales of shrimp. Hazard Analysis Critical Control Point Protocols are being developed as well as Standard Operating Procedures. Various

NEWSLETTER HIGHLIGHTS

GLANDLESS COTTON UPDATE

PINK BOLLWORM STATUS

COTTON VARIETY INFORMATION

COTTON PRICES

state and federal agencies have been informed of processes and acknowledgements from the agencies have been received. Just a 25% fish meal replacement with glandless cottonseed in Thailand would make NM the leading producer of glandless cotton and could make glandless cottonseed more valuable than the lint.

Meanwhile research and demonstrations have continued with the utilization of the waste cottonseed oil from campus food services to make biodiesel. Currently two UTV's are in operation using the cottonseed biodiesel. The cost to make the fuel is less than \$2.00 per gallon. The byproduct from this process is glycerin which can be sold for soap and leather products.

NMSU will also be receiving a dehulling equipment from Cotton Inc. to be located at the Leyendecker Plant Science Research Center in Las Cruces. The dehulling equipment will assist in research for developing meals and whole kernels for human and aquaculture uses and will also help with other research applications.

Report by Tracey Carrillo (Assistant Director, Campus Farm Operations) & John Idowu (Extension Agronomist), New Mexico State University, Las Cruces, NM.

PINK BOLLWORM STATUS - LIKELY ERADICATED FROM NEW MEXICO

Not surprisingly, there were no pink bollworm captures in South- Central New Mexico in 2012. There was more concern about southeastern New Mexico which last had a few captures in 2009. Fortunately, the third year of sampling pink bollworm in Southeastern New Mexico has once again resulted in zero pink bollworm captures, indicating that pink bollworm is likely eradicated in New Mexico. In 2010 and 2011 NMSU-ASC-Artesia trapped pink bollworm in southeastern New Mexico in a joint project with Texas A & M University and USDA /APHIS. Traps were placed on commercial farms and in trap lines that ran from Chaves County past the Texas border to the south and in Lea County to Gaines County, Texas. All traps had zero captures in 2011 and 2012. The closest pink bollworm captures were in Gaines County, Texas in 2010 and south of Midland, Texas in 2011. The boll weevil eradication program trapped pink bollworm in 2012, and again, did not capture any pink bollworm moths in southeastern New Mexico.

The hotspot of pink bollworms in the Midland Texas area was controlled with sterile moths and there have been no captures since August 2, 2012. The lack of subsequent captures in the fall, when moths are dispersing and more easily captured, suggests that localized population was eradicated as well.



Pink Bollworm (Adult)



Pink Bollworm Larvae

Report by Jane Pierce, Entomologist, NMSU Agricultural Science Center, Artesia, NM

COTTON VARIETY INFORMATION

Table 1 shows the results of the upland cotton variety trials performed in 2012 at the NMSU Leyendecker Plant Science Center in Las Cruces, NM. Table 2 shows the result for pima cotton variety during 2012 also in Las Cruces. Planting date was May 15, 2012 and all the varieties received four furrow irrigations. No insecticides or defoliants were applied and harvesting date was in November 2012. These variety trials were conducted by the NMSU Cotton Breeder, Dr. Jinfa Zhang.

Table 1. Results of the 2012 upland cotton variety trial conducted in Las Cruces, NM

Cultivar	Lint yield (lb/acre)	Boll weight (g/boll)	Lint percent (%)	Length (inch)	Strength (g/tex)	Micronaire (unit)	Uniformity (%)	Elongation (%)	Short fiber (%)
PHX 3122 WRF	2106	6.19	47.89	1.22	31.40	4.96	86.27	6.37	6.93
BX 1347GLB2	2075	6.14	45.63	1.24	32.33	4.90	83.67	4.70	7.53
AM 1511 B2RF	1943	5.96	48.64	1.16	31.80	5.24	84.93	7.83	6.97
PHY 375 WRF	1899	5.80	46.68	1.13	30.10	5.03	83.93	6.30	7.20
PHX 4339-CB WRF	1886	5.52	45.29	1.19	30.10	5.16	84.90	6.83	6.87
DP 1219 B2RF	1863	5.31	46.29	1.20	35.00	5.15	85.70	6.53	7.03
PHY 367 WRF	1860	5.33	46.33	1.16	31.60	4.98	84.07	7.40	7.53
PHY 499 WRF	1854	5.75	48.06	1.14	32.43	5.44	85.30	7.83	6.77
9CR 253 B2RF	1849	5.74	46.90	1.15	32.27	5.28	84.33	6.40	7.37
PHX 4339-06 WRF	1811	5.72	45.85	1.20	31.40	4.83	85.37	6.80	6.80
PHX 3074 WRF	1804	5.67	45.56	1.20	32.97	5.03	84.73	7.30	7.47
ST 5445LLB2	1793	6.34	46.02	1.16	32.50	5.40	84.23	6.03	7.77
PHY 565 WRF	1783	5.87	45.77	1.17	32.23	4.99	84.50	6.20	7.13
BX 1346GLB2	1770	6.70	45.97	1.16	32.77	5.06	84.37	6.80	6.80
DP 1044 B2RF	1719	5.14	45.67	1.14	31.37	5.33	84.13	7.70	7.00
PHX 5322-11 WRF	1717	5.52	44.99	1.20	31.27	4.95	85.00	6.70	7.00
NG 4012 B2RF	1704	5.63	46.07	1.19	33.70	4.99	83.37	5.37	7.47
DP 1032 B2RF	1656	5.38	48.55	1.19	32.57	5.09	84.53	6.10	7.10
Dinero B2RF	1639	5.57	44.22	1.15	31.30	5.06	83.73	5.90	7.07
PHX 5403 WRF	1629	5.40	44.06	1.22	32.97	5.02	85.23	6.37	6.90
BX 1348GLB2	1610	5.45	44.11	1.22	32.07	5.01	84.20	5.23	7.60
ST 5458B2RF	1593	6.17	44.53	1.15	31.93	5.36	83.03	6.20	8.03
Nitro 44 B2RF	1554	5.76	44.60	1.23	33.47	4.58	84.40	5.90	7.10
PHX 4339-15 WRF	1497	5.28	45.65	1.18	30.53	5.03	85.00	7.03	7.27
FM 9170B2F	1474	5.53	46.23	1.21	33.63	4.64	83.93	5.33	7.40
ST 4145LLB2	1457	5.51	42.23	1.16	32.40	5.13	83.47	5.43	7.20
CR 103233 B2RF	1427	5.44	46.65	1.19	30.80	4.81	84.13	7.33	7.23
NG 4111 RF	1405	5.53	43.89	1.17	33.40	4.89	84.47	6.43	7.07
NG 4010 B2RF	1162	5.32	42.85	1.16	33.63	5.04	83.90	6.47	7.57
LSD	406	0.35	1.25	0.04	1.70	0.26	1.04	0.56	0.55
CV (%)	18	4.59	2.02	2.44	3.85	3.78	0.91	6.47	5.54
Mean	1696	5.66	45.39	1.18	32.33	5.04	84.39	6.38	7.22

Table 2. Results of the 2012 pima cotton variety trial conducted in Las Cruces, NM

Cultivar	Lint yield (lb/ac)	Lint yield (CK%)	Lint (%)	Boll weight (g/boll)
Pima S-7 (CK)	1137	100	41.65	3.49
DP 340	1223	108	43.26	4.01
DP 357	1201	106	41.35	3.78
DP 360	1170	103	40.43	3.25
PHY 800	1008	89	42.48	3.44
PHY 802RF	835	73	42.00	3.30
PHY 805 RF	761	67	43.29	3.34
PHX 8262 RF	1152	101	40.76	3.25
PHY 830	1418	125	44.21	3.44
Cobalt	680	60	41.07	3.53
Pima P 203 conv.	1108	97	43.33	3.61

COTTON PRICES

	Prices Received by Farmers (Upland cotton)* cents/pound	Cotton "A" index* cents/pound
September	70.70	84.15
October	72.60	81.95
November	68.40	80.87
December	71.30	83.37
January	72.20	85.51
February	72.70	89.71

*Source: National Cotton Council of America

Publication Team: John Idowu (jidowu@nmsu.edu); Tracey Carrillo (tcarrill@nmsu.edu); Jinfa Zhang (jinzhang@nmsu.edu); Robert Flynn (rflynn@nmsu.edu); and Jane Pierce (japierce@nmsu.edu).



_____, John Idowu, Extension Agronomist, New Mexico State University is an equal opportunity employer. All programs are available to everyone regardless of race, color, religion, sex, age, handicap or national origin. New Mexico State University and U.S. Department of Agriculture cooperating.