

Cotton Season in New Mexico

Cotton season in New Mexico has been very mixed this year. On one hand, there has been good amount of water for raising crops, but on the other hand, scattered incidences of hails and diseases have been reported. Earlier in the season, growers in the southeastern NM suffered scattered hail damage. Later, cotton growers in southwestern NM had to battle with both hail and southwestern cotton rust. However, many fields survived the both hail and disease. In unaffected fields, cotton is looking very good heading for a good yield. Meanwhile cotton prices remains a major issue facing cotton production in the United States, and this is affecting the total acreage planted across the cotton belt. According to USDA estimates, the total cotton acreage is going to be down by 13.5% in the United States. In New Mexico, acreage is supposed to be down by about 8%.

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>

NEWSLETTER HIGHLIGHTS

COTTON SEASON IN NM

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Cotton Production Issues in 2015

Hail damage was severe in some fields in southwestern New Mexico. Some farmers in Dona Ana and Luna Counties reported a total loss for some of their fields. An example of such a field is shown in Figure 1.

Weed infestation has also been a major problem faced by growers in New Mexico. Weeds were very aggressive this year possibly due to extra moisture that was available. Many growers had to spend extra to stay on top of their weed control. Growers are advised to pay attention to the late season weeds to prevent the soil weed seed bank from building up.

In the month of July, during the monsoon period, there was an outbreak of southwestern cotton rust in the southwestern Counties of NM. Many farmers had to start spraying for this disease to bring it under control. Southwestern cotton rust is a fungal disease that can affect leaves, stems and bolls. This fungal disease appears first as yellowish spot on the affected parts and the spots continue to expand and changes to brown/orange color as it spreads. It eventually kills the tissue affected and can lead up to 50% loss of cotton yield depending on the level of severity. A fact sheet was recently released on the management of southwestern cotton rust by Dr. Natalie Goldberg and Mr. Jason French. This fact sheet can be found online at:

<http://aces.nmsu.edu/ces/plantclinic/documents/southwester-cotton-rust-nycu.pdf>

A picture of an infected field is presented on Figure 2.



Figure 1. Hail damaged cotton field (Picture taken by Dr. Soum Sanogo in Deming, NM)



Figure 2 Cotton leaves infected by the southwestern cotton rust (Las Cruces, NM)

Insect Pest Report

Higher than usual rainfall has been welcome but has in many cases been associated with higher than normal insect pest populations in NM. Grasshopper populations are particularly high in eastern NM most notably in Curry, Quay, and Guadalupe Counties. Some grasshopper damage to cotton has been noted in Curry County. Fortunately bollworm and thrip damage has not been high.

Bollworm/Budworm traps in Eddy and Dona Ana Co have averaged approximately 1 moth per night/ Damage to squares at least in research plots has been low and averaged 2 - 3% damaged squares in NMSU Dona Ana and Eddy Co research plots. Predation in cotton research plots in Artesia has been as usual fairly high, with 61-82% predation last week and 51-74% predation this week.

A new insect pest of sorghum was recently identified in Curry and Roosevelt Counties. Sugarcane aphid is a serious insect pest of all sorghums including sorghum/sudan hybrids (Haygrazer). Sorghum growers in New Mexico particularly near the eastern border with Texas are encouraged to scout sorghum fields at least once a week initially then twice once sugarcane aphids are found. More information on this new pest can be found on

http://eps.nmsu.edu/2015-news-you-can-use.html#anchor_146911https://www.google.com/?gws_rd=ssl

Glandless Cotton Report

Research on production and utilization of glandless cotton has continued in New Mexico. Glandless cotton is a variety of cotton that has very little to no gossypol glands in all the part of the cotton plant. This makes the glandless cotton seed edible for all classes of animals including humans. This essentially makes cotton not just predominantly a fiber crop, but a food crop as well. Researchers at New Mexico State University and cotton growers in New Mexico have teamed up together to work on production and utilization of glandless cotton, as this may enhance the income of cotton growers in the State. It is expected that glandless cottonseeds will sell at higher price with its expanded utility. The glandless cotton research is funded by the Cotton Inc. Cary, NC.

New Mexico provides an ideal environment for field production of glandless cotton, due to lower pest pressure and hot dry summers that are ideal for cotton production. Due to absence of gossypol, glandless cotton are potentially more susceptible to insect pests. However, in the past five seasons of trials both at the NMSU Agricultural Science Centers and in farmers' fields, although we have at times seen higher damage to plants we have not seen any yield differences due to increased pest pressure on the glandless cotton varieties compared to the conventional (glanded) cotton. Dr. Jane Pierce (Entomologist at the Artesia Science Center) has been working on managing insect pests in glandless cotton and her research will continue to document the pest pressure in glandless cultivars.

Most of the agronomic evaluation of glandless cotton over the past 4-5 years have focused on older varieties of glandless cotton (Acala-GLS, JACO glandless and STV glandless), which produce lower lint yields compared to commercial varieties. However, new breeding lines have been developed by the NMSU cotton breeder (Dr. Jinfa Zhang). Three of these new breeding lines are currently being tested across New Mexico. These new lines are NM-13P1088 (an Acala variety), NM-13P1115 and NM-13P1117; and these are being compared to Acala-GLS and STV glandless. From preliminary results, NM-13P1088 has significantly higher number of squares than both STV and Acala-GLS.

Research is also on-going on food and feed utilization of glandless cotton. Dr. Tracey Carrillo and his group have been working on raising shrimp using the glandless cotton seed meal instead of conventional fishmeal. So far, results are promising showing that glandless cotton seed meal can serve as suitable replacement for fishmeal for inland shrimp culture. Dr. Nancy Flores (Extension Food Technology Specialist) has also been working on integrating glandless cotton seeds into different food products since the seeds can serve as high protein source for humans.

Cotton Prices: 2014/2015

	2014		2015	
	Upland Cotton "A" Index*	ELS (Pima) Spot Price*	Upland Cotton "A" Index*	ELS (Pima) Spot Price*
January	90.96	161.00	67.35	147.70
February	94.05	161.00	69.84	143.00
March	96.95	161.80	69.35	142.70
April	94.20	163.60	71.70	135.20
May	92.71	166.50	72.86	132.00
June	90.90	166.50	72.35	132.00
July	83.84	166.50		
August	74.00	166.50		
September	73.38	166.50		
October	70.34	166.50		
November	67.56	162.00		
December	68.30	158.00		
Average	83.09	163.80	70.58	138.77

*Source: National Cotton Council of America and prices in (cents/pound).

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