

New Mexico State University Extension Plant Sciences

Cotton Newsletter: Volume 7, Number 1 (April 2016)

Cotton Season - 2016

Cotton season has started in New Mexico, with some cotton fields already planted and others in the process of being planted. Cotton production remains challenging in New Mexico with acreage projected to reduce from 35,000 acres in 2015 to 29,000 acres in 2016. The major driver for the reduction in acreage is the low lint price. Current lint price is about 60 cents per pound which is 10 cents lower than it was last year around the same time period. However, water situation is better this year because of the relatively good precipitation over the past winter. New Mexico cotton growers continue to be innovative by adopting practices that will reduce input costs and optimize productivity. We wish our cotton growers another successful 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 archived on http://aces.nmsu.edu/ces/ifcpm/cotton-production.html

2016 NM Cotton Growers Conference

The New Mexico Cotton Conference took place on January 13th, 2016 at the Ruidoso Convention Center, Ruidoso, NM. About 60 participants attended the conference. Presentations during the conference included cotton economic prospects for 2016, update on glandless cottonseed utilization and value, weed management, variety test results, soil salinity management, pest management, breeding developments at NMSU, cotton gin research and NMSU agronomic cotton research updates. Several industrial representatives gave short presentations on products available for cotton production.

We thank our speakers/moderators and sponsors who supported 2016 NM Cotton Conference. Our donors for 2016 included Bayer CropScience, Calcot, Crop Production Services, Dow AgriScience, Farm Credit of New Mexico, Gowan USA, Helena Chemical Company, Jess Smith & Sons, Mesa Farmers Cooperative, NMDA Organic Program, Pecos Valley Equipment, Performance Agriculture, PhytoGen Cottonseed, South Plains Implement.

We also thank the staff of NM Cotton Boll Weevil Control Committee and Laurie Novak (NMSU Fabia Garcia Agricultural Science Center) for helping with the logistics of the 2016 NM Cotton Conference.

Getting Ahead of Weeds

Weeds can compete with emerging cotton seedlings for water, nutrients, space and light during the early stages of cotton development (first 8 to 10 weeks after planting). As a result, cotton growers should concentrate efforts on weed management early in the growing season for a greater success.

One of the most effective ways to get ahead of weed germination and weed control is to prevent their introduction/germination within the field. Prevention is critical to a successful integrated weed

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2016 NM COTTON
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GETTING AHEAD OF WEEDS

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GLANDLESS COTTON
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management program, simply because you don't have to take time, money, and energy to control weeds if they aren't there in the first place.

One way growers can effectively prevent the spread of weeds into their cotton fields is by paying close attention to any surrounding weedy areas. By effectively controlling weeds in surrounding fields, bar ditches, along fencerows, etc. the likelihood of viable seed being introduced by wind, water, animal and human movement decreases. Increasing the areas of row-ends, turn-rows, and skip-rows can serve as a buffer to intercept arriving weed seed before they get to the cotton field. Cotton growers should also pay close attention to the seed that they purchase to make sure that it is classified as 'certified' because certified seeds have been inspected for absence of weed seeds.

Cotton growers should also be diligent about scouting for germinating weed seeds in cotton fields. Regardless of management practice, weeds are always going to be easier to control when they are young; thus, early detection and rapid response is key for getting ahead of a developing weed population. Young seedlings have not yet developed viable seed and can't contribute to an increasing population of seed in the soil for future germination. Knowing the biology (lifecycles) of troublesome weeds in the cotton field can help the grower plan for effective weed control. Growers can even manipulate the conditions of the field, such as irrigating prior to planting cotton to encourage weed seeds to germinate early, after which the weeds are controlled by shallow tillage. Cleaning of mechanical equipment between uses can also help to limit the movement of weed seed and spreading plant parts (i.e. johnsongrass – rhizomes) from one field to another.

The time and cost of weed control only increases as the population is allowed to successfully germinate and spread. Cotton growers should utilize practices early in the growing season to effectively avoid the development of troublesome weed populations. It's always better to manage a small population than fight a large infestation!

Dr. Leslie Beck (Extension Weed Specialist)

Cotton Breeding Research

The NM Agricultural Experiment Station has approved the release of a glandless 'NuMex COT 15 GLS' cotton. As compared to glandless 'Acala GLS', NuMex COT 15 GLS yielded 50% more lint, and it produced 90% of that of glanded 'Acala 1517-08'. Its fiber quality is classified as a medium to long staple with strong fiber strength and high uniformity, similar to other commercial medium staple cultivars, but it was inferior to both Acala cultivars. It had higher fiber elongation than most commercial cultivars tested in New Mexico.

Another cultivar approved for release was an insect-resistant and glyphosate herbicide-tolerant Acala cotton cultivar 'Acala 1517-16 B2RF' possessing Bollguard II (B2) and Roundup-ready Flex (RF) traits. Acala 1517-16 B2RF has an excellent season-long in-plant protection against pink bollworm, tobacco budworm, American bollworm and glyphosate herbicide and an improved resistance to beet armyworm, soybean looper, and bollworm.

Dr. Jinfa Zhang (Professor, Cotton Genetics and Breeding)

Boll Weevil Eradication Program

At the recent Pecos Valley Boll Weevil Eradication meeting, Lindy Patton, CEO of the Texas program, reported there were no captures of boll weevil or pink bollworm in 2015 in Pecos Valley. The Texas Boll Weevil Program is working with the Mexico and the eradication program in Tamaulipas to help them better understand how to effectively operate the program and find ways to improve results. The Texas program is also working with USDA/APHIS and the North American Plant

Protection Organization (NAPPO) to help Mexico secure the resources necessary for eradication, after setbacks in eradication along the border in 2015.

The Lower Rio Grande Valley (LRGV) zone around McAllen and Harlingen had consistent reductions in weevil numbers and only captured 44,000 weevils in 2014. However, in 2015 heavy precipitation and related problems caused difficulties in getting good control in Mexico. Weevil movement to the US side resulted in an increase in weevils in Texas in 2015, with 148,000 weevils captured in the LRGV zone. Weevils also migrated as far north as the Winter Garden area, with 72 weevils captured in 2015. This new plan with NAPPO and the Tamaulipas Program will allow the Texas Boll Weevil Eradication Program to provide technical support and ensure Mexico has the resources necessary to control weevils on the Mexican side of the border in 2016, hopefully reducing weevil migration into Texas.

Dr. Jane Pierce (Associate Professor, Entomology)

Glandless Cotton Update

Research for glandless and ultralow gossypol free cotton continues. Three new varieties are being evaluated this season for yield and fiber quality. Seed increases are planned for this season as well. New equipment has been set up at the Leyendecker Plant Science Center, to dehull fuzzy seed and process into meal and oil. Production is estimated at one ton of process seed per day.

There is a very large interest to use the cotton seed protein as a fishmeal replacement. Collaboration among fish feed companies such as Cargill and Ziegler are in place to produce and test the cotton seed fish feed. Production will be ramped up to several hundred acres next year with the improved varieties.

Dr. Tracey Carrillo (Assistant Director of Campus Farm Operations)

Cotton Prices: 2015/2016

	2015		2016	
	Upland Cotton "A" Index*	ELS (Pima) Spot Price*	Upland Cotton "A" Index*	ELS (Pima) Spot Price*
January	67.35	147.70	68.75	115.80
February	69.84	143.00	66.57	109.70
March	69.35	142.70		
April	71.7	135.20		
May	72.86	132.00		
June	72.35	132.00		
July	72.35	132.00		
August	71.82	130.10		
September	68.74	126.00		
October	69.03	125.50		
November	69.22	121.70		
December	70.39	120.50		
Average	70.42	132.37	67.66	112.75

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

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