COTTON DISEASE LOSS ESTIMATE COMMITTEE REPORT, 2013

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Abstract

The National Cotton Council Disease Loss committee submitted estimates of the losses due to each disease during the 2013 growing season. Estimates are calculated by cotton specialists in each state discussing disease incidence observed across each state during the year. Yield losses are determined by using the USDA "Crop Production" published at www.usda.gov/nass/PUBS/TODAYRPT/crop1113.pdf which documents cotton acreage planted, harvested, and average yields for each state. Total average percent loss was estimated at 12.54% which is up 3.35% from 2012. Plant parasitic nematodes were the group of pathogens responsible for the largest average percent loss estimated at 4.98% up from the 4.28% in 2012. Georgia and Alabama suffered the greatest disease losses of over 20 %; although these states were followed closely by Tennessee, Mississippi, and Missouri which estimated losses near 15%. Oklahoma, New Mexico, and California appeared to have the best growing conditions with the least amount of disease losses.

	Table 1. Cotton disease loss estimates for the 2013 season.																		
	Percent disease loss estimates	AL	AZ	AR	CA	FL	GA	LA	MS	MO	NM	NC	OK	SC	TN	TX	VA	Bales lost	% Bales lost
2013	Fusarium Wilt (F.o. vasinfectum)	0.5	0.0	0.0	1.2	0.0	trace	1.0	trace	0.1	0.0	0.0	0.0	2.0	0.0	0.3	0.0		0.29
2013	*Bales lost to Fusarium (x 1,000)*	3.1	0.0	0.0	10.9	0.0	0.0	3.4	0.0	0.5	0.0	0.1	0.0	7.0	0.0	12.3	0.0	37.4	
2013	Verticillium Wilt (V. dahliae)	1.5	1.5	1.5	0.2	0.0	0.0	0.0	trace	0.1	1.0	0.0	0.4	0.0	0.0	1.5	0.0		0.71
2013	*Bales lost to Verticillium (x 1,000)*	9.3	7.1	10.5	1.4	0.0	0.0	0.0	0.0	0.5	0.9	0.1	0.7	0.0	0.0	61.7	0.0	92.2	
2013	Bacterial Blight (X. malvacearum)	0.0	0.0	0.5	0.0	0.0	trace	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	trace	0.0		0.04
2013	*Bales lost to Xanthomonas (x 1,000)*	0.0	0.0	3.5	0.0	0.0	0.0	0.0	1.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	
2013	Root Rot (P. omnivora)	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	4.0	0.0		1.32
2013	*Bales lost to Phymatotrichopsis (x 1,000)*	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	164.6	0.0	171.9	
2013	Seedling Diseases (Rhizoctonia & Etc.)	6.0	0.5	2.5	1.0	0.2	2.5	1.0	2.5	5.0	0.5	2.0	0.2	1.0	10.0	0.8	1.0		2.88
2013	*Bales lost to Seedling disease (x 1,000)*	37.2	2.4	17.5	9.1	0.5	62.5	3.4	16.8	26.3	0.5	15.2	0.3	3.5	43.0	32.9	1.6	272.5	
2013	Ascochyta Blight (A. gossypii)	0.6	0.0	0.0	0.0	2.0	trace	0.0	trace	0.0	0.0	0.0	0.0	0.3	0.5	0.0	0.0		0.09
2013	*Bales lost to Ascochyta (x 1,000)*	3.7	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.9	2.2	0.0	0.0	11.4	
2013	Boll Rots (Rhizopus, etc.)	4.0	0.1	1.0	trace	4.0	3.0	1.0	2.0	8.0	0.0	3.0	0.0	0.3	1.0	0.6	0.1		1.74
2013	*Bales lost to Rhizopus (x 1,000)*	24.8	0.5	7.0	0.0	9.0	75.0	3.4	13.4	42.0	0.0	22.8	0.0	0.9	4.3	24.7	0.2	227.9	
2013	Nematodes (All)	5.0	3.0	4.0	0.1	4.0	13.0	6.0	8.6	1.0	0.5	4.0	0.1	6.0	3.0	2.2	3.0		4.89
2013	*Bales lost to Nematodes (x 1,000)*	31.0	14.2	28.0	0.9	9.0	325.0	20.4	57.6	5.3	0.5	30.4	0.2	21.0	12.9	90.6	4.8	651.7	
2013	Nematodes (Meloidogyne spp.)	1.0	3.0	2.0	0.0	3.0	10.0	2.0	1.5	1.0	0.5	3.0	0.1	4.0	0.0	1.9	2.0		3.31
2013	*Bales lost to Meloidogyne (x 1,000)*	6.2	14.2	14.0	0.0	6.8	250.0	6.8	10.1	5.3	0.5	22.8	0.2	14.0	0.0	78.2	3.2	432.1	
2013	Nematodes (Reniform reniformis)	4.0	0.0	2.0	0.0	1.0	2.5	4.0	6.6	0.0	0.0	0.5	0.0	1.0	3.0	0.3	0.0		1.48
2013	*Bales lost to Reniform (x 1,000)*	24.8	0.0	14.0	0.0	2.3	62.5	13.6	44.2	0.0	0.0	3.8	0.0	3.5	12.9	12.3	0.0	193.9	
2013	Nematodes (Other spp.)	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.5	0.0	1.0	0.0	0.0	1.0		0.19
2013	*Bales lost to other Nematodes (x 1,000)*	0.0	0.0	0.0	0.0	0.0	12.5	0.0	3.4	0.0	0.0	3.8	0.0	3.5	0.0	0.0	1.6	24.8	
2013	Leaf Spots & Others	3.0	0.0	0.5	0.0	2.5	4.5	0.5	1.5	0.1	0.0	1.0	0.2	0.1	0.5	0.2	0.1		1.31
2013	*Bales lost to Leaf spots & Others (x 1,000)*	18.6	0.0	3.5	0.0	5.6	112.5	1.7	10.1	0.5	0.0	7.6	0.4	0.4	2.2	8.2	0.2	171.4	
2013	Total Percent Lost	20.6	6.6	10.0	2.5	12.7	23.0	9.5	14.8	14.3	2.0	10.0	0.9	9.6	15.0	9.6	4.2		12.56
2013	Total Bales Lost (x 1,000)	127.7	31.2	70.0	22.3	28.6	575.0	32.3	99.2	75.1	2.3	76.3	1.8	33.6	64.5	395.1	6.7	1641.8	
2013	Total Yield in Bales (x 1,000) (USDA Nov'13)	620.0	472.5	700.0	910.0	225.0	2500.0	340.0	670.0	525.0	92.0	760.0	200.0	350.0	430.0	4116.0	160.0	13070.5	

Comments:

AL Warm dry spring with rainfall in late June and July and a very dry late summer and fall. Nematode damage was greater especially on irrigated land. Fusarium wilt was lower while Verticillium wilt incidence increased. Corynespora leaf spot was found most often in the coastal areas.

GA Very warm spring and wet season with significant increase in damage to nematodes, boll rot and Target/Corynespora leaf spot.

NC Excessive rainfall in July with many field sitting in water.

OK Lack of water was their biggest problem.

SC A very wet June, July, and first half of August. Many fields sat in water for weeks on end. We had more seedling disease, but not as much as you might think. Fusarium and root-knot seem to be higher. Corynespora leaf spot was present, but not nearly as bad.