

COTTON DISEASE LOSS ESTIMATE COMMITTEE REPORT

Compiled by: Don Blasingame and Mukund V. Patel, Extension Plant Pathologists, Retired, Mississippi State,
MS 39762

Table 1. Estimated Reduction in 2011 Cotton Yield Resulting from Diseases.*

DISEASES	AL	AZ	AR	CA	FL	GA	LA	MS
Note: Table entries are % loss (top figure) and bales lost (lower figure)**								
Fusarium Wilt <i>F. oxysporium</i> f. sp. <i>vasinfectum</i>	0.50 4,012	-	0.50 7,740	0.50 2,792	-	Trace	1.00 5,824	Trace
Verticillium Wilt <i>V. dahliae</i>	0.50 4,012	1.00 8,091	-	0.10 558	-	-	Trace	Trace
Bacterial Blight <i>X. malvacearum</i>	Trace	-	2.50 38,701	-	-	Trace	Trace	1.00 13,714
Phymatotrichum Root Rot <i>P. omnivorum</i>	-	0.20 1,618	-	-	-	-	Trace	-
Seedling Diseases Several fungi	4.50 36,108	0.30 2,427	2.50 38,701	2.50 13,961	0.20 385	0.50 15,318	1.00 5,824	2.00 27,429
Ascochyta Blight <i>A. gossypii</i>	0.50 4,012	-	-	-	1.00 1,927	Trace	Trace	Trace
Boll Rots	4.00 32,096	0.10 809	2.00 30,960	-	3.00 5,782	1.00 30,636	-	2.00 27,429
Nematode (Total)	4.50 36,108	2.00 16,183	4.00 61,921	0.20 1,117	5.00 9,637	11.50 352,312	7.00 40,769	7.00 96,000
<i>Root-knot</i>	0.50 4,012	2.00 16,183	3.00 46,441	0.20 1,117	3.00 5,782	8.50 260,405	3.00 17,473	1.00 13,714
<i>Reniform</i>	4.00 32,096	-	1.00 15,480	-	2.00 3,855	2.50 76,590	4.00 23,297	6.00 82,286
<i>Others</i>	-	-	-	-	-	0.50 15,318	Trace	-
Leaf Spots And Others***	2.00 16,048	-	-	Trace	-	0.50 15,318	Trace	0.50 6,857
TOTAL PERCENT	16.50	3.60	11.50	3.30	9.20	13.50	9.00	12.50
BALES LOST	132,395	29,129	178,023	18,428	17,731	413,584	52,418	171,429
YIELDS IN BALES****	802,395	809,129	1,548,023	558,428	192,731	3,063,584	582,418	1,371,429

* Cotton disease loss estimates were made by extension and research plant pathologists and agronomists with cotton responsibilities in their respective states. ** Rounding errors present ***Leaf spots (*Alternaria*, *Cercospora*, *Phomopsis*, etc.) and various root rots. **** Yield potential had not disease been present.

Cotton Disease Loss Estimate Committee

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Table 1. (continued) 2011

BALES									AVG. % LOST
MO	NM	NC	OK	SC	TN	TX	VA	LOST	
-	-	0.01 118	-	1.00 5,314	-	0.40 16,979	-	42,780	0.24
-	1.00 1,276	0.01 118	0.25 265	-	1.00 9,439	0.90 38,203	-	61,962	0.30
0.01 92	Trace	-	-	-	-	Trace	Trace	52,506	0.22
-	Trace	-	-	-	-	4.80 203,749	-	205,367	0.31
4.00 36,604	0.50 638	2.00 23,661	0.20 212	0.25 1,329	6.00 56,636	0.60 25,469	2.00 4,047	288,746	1.82
-	Trace	-	-	0.10 531	0.50 4,720	-	-	11,190	0.13
0.01 92	Trace	2.00 23,661	-	0.25 1,329	-	0.70 29,713	0.10 202	182,708	0.95
2.00 18,302	0.50 638	3.00 35,492	0.20 212	5.00 26,570	3.01 28,412	1.90 80,650	4.00 8,094	812,415	3.80
2.00 18,302	0.50 638	2.50 29,576	0.20 212	3.00 15,942	0.01 94	1.70 72,161	2.50 5,059	507,109	2.10
-	-	0.25 2,958	-	1.00 5,314	3.00 28,318	0.20 8,490	Trace	278,682	1.50
-	-	0.25 2,958	-	1.00 5,314	-	Trace	1.50 3,035	26,625	0.20
-	Trace	-	0.20 212	0.25 1,329	0.50 4,720	-	Trace	44,483	0.25
6.02 55,088 915,088	2.00 2,551 127,551	7.02 83,050 1,183,050	0.85 900 105,900	6.85 36,401 531,401	11.01 103,926 943,926	9.30 394,763 4,244,763	6.10 12,343 202,343	1,361,038 16,979,816	8.02

Comments:

- AL Dry weather in May, June, and August reduced yields and reduced certain diseases.
- GA Hot and very dry weather reduced severity of seedling diseases, foliar diseases and boll rots. The loss of Temik contributed to a slight increase in losses to nematodes.
- MS Dry weather in mid to late season reduced boll rots, but may have increased nematode damage.
- NM Year-long dry conditions limited both disease and nematode losses.
- OK Disease and insect pressure was low due to extreme heat and dry conditions. Yields were greatly affected. 2011 was a disastrous year for Oklahoma producers.
- SC Dry weather resulted in low disease pressure and lower yields.

- TX Severe drought conditions and above average temperatures adversely affected yields in 2011. These conditions led to below average losses to both Fusarium and Verticillium wilts.
- VA High temperatures and drought affected production in 2011. Seedling disease and nematodes continued to be responsible for the greatest losses in the state.

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