

COTTON DISEASE LOSS ESTIMATE COMMITTEE REPORT
Compiled by: Don Blasingame and Mukund V. Patel
Extension Plant Pathologists, Retired
Mississippi State, MS

Table 1. Estimated Reduction in 2003 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 f.</i>	0.50	-	2.50	0.20	Trace	0.50	2.50	Trace
<i>sp. vasinfectum</i>	5,359		53,293	4,137		13,190	27,557	
Verticillium Wilt	-	-	0.50	1.00	-	-	Trace	Trace
<i>V. dahliae</i>			10,659	20,686				
Bacterial Blight	-	-	-	-	-	-	Trace	-
<i>X. malvacearum</i>								
Phymatotrichum								
Root Rot	-	1.00	-	-	-	-	Trace	-
<i>P. omnivorum</i>		6,151						
Seedling Diseases	7.00	1.00	5.00	4.00	1.00	2.00	2.00	3.00
Several fungi	75,033	6,151	106,587	82,744	1,365	52,761	22,045	74,336
Ascochyta Blight	-	-	-	-	-	Trace	Trace	Trace
<i>A. gossypii</i>								
	7.00	0.50	2.00		2.00	6.00	1.00	1.50
Boll Rots	75,033	3,076	42,635	Trace	2,729	158,282	11,023	37,168
	9.00	5.00	6.50	1.50	5.40	9.00	6.50	10.00
Nematode (Total)	96,471	30,757	138,563	31,029	7,369	237,423	71,648	247,788
	1.00	5.00	4.50	1.50	4.10	7.00	2.50	1.50
<i>Root-knot</i>	10,719	30,757	95,928	31,029	5,595	184,663	27,557	37,168
	8.00	-	2.00	-	1.30	1.50	4.00	8.00
<i>Reniform</i>	85,752		42,635		1,774	39,571	44,091	198,230
	-	-	-	-	-	0.50	-	0.50
<i>Others</i>						13,190		12,389
Leaf Spots	Trace	-	-	Trace	Trace	1.00	Trace	0.75
and Others***						26,380		18,584
TOTAL PERCENT	23.50	7.50	16.50	6.70	8.40	18.50	12.00	15.25
BALES LOST	251,895	46,135	351,737	138,596	11,463	488,037	132,273	377,876
YIELDS IN								
BALES****	1,071,895	615,135	2,131,737	2,068,596	136,463	2,638,037	1,102,273	2,477,876

* 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

AL - Dr. William Gazaway, Auburn University
AR - Dr. Terry Kirkpatrick, University of Arkansas, Hope
AZ - Dr. Mary Olsen, University of Arizona
CA - Dr. Mike Davis, University of California
FL - Dr. Richard Sprenkel, University of Florida, Quincy
GA - Dr. Bob Kemerait, University of Georgia, Tifton
LA - Dr. Patrick Colyer, LSU, Bossier City
MS - Dr. Gabe Scuimbato, Mississippi State University, Stoneville

MO - Dr. Al Wrather, University of Missouri
NM - Dr. Natlie Goldburg, New Mexico State University
NC - Dr. Steve Koenning, NC State University
OK - Dr. J. C. Banks, University of Oklahoma, Attus
SC - Dr. John Muller, Clemson University, Blackville
TN - Dr. Melvin Newman, University of Tennessee, Jackson
TX - Dr. Harold Kaufman, Texas A & M, Lubbock
VA - Dr. Patrick Phipps, Virginia Tech, Tidewater

Table 1. (continued)

MO	NM	NC	OK	SC	TN	TX	VA	BALES LOST	AVG. % LOST
-	-	0.01	0.30	0.25	-	0.50	-		
		121	611	940		23,556		128,765	0.45
-	4.00	0.01	0.20	-	0.25	0.70	-		
	3,868	121	407		2,968	32,978		71,687	0.42
-	Trace	0.02	0.20	-	-	-	0.50		
		242	407				688	1,337	0.05
-	Trace	-	-	-	-	5.00	-		
						235,556		241,707	0.38
9.00	0.50	4.00	0.30	2.00	22.00	1.00	0.50		
67,753	484	48,442	611	7,521	261,146	47,111	688	854,777	4.02
0.50	-	0.03	0.20		0.20	-	-		
3,764		363	407	Trace	2,374			6,909	0.06
1.00	Trace	3.90	0.10	5.00	2.00	-	1.00		
7,528		47,231	204	18,803	23,741		1,376	428,828	2.06
0.50	4.50	1.20	0.20	5.00	2.10	2.70	3.50		
3,764	4,352	14,533	407	18,803	24,928	127,200	4,815	1,059,848	4.54
0.50	4.50	0.50	0.20	2.00	0.10	2.50	1.50		
3,764	4,352	6,055	407	7,521	1,187	117,778	2,063	566,543	2.43
-	-	0.40	-	1.00	2.00	0.20	Trace		
		4,844		3,761	23,741	9,422		453,820	1.78
-	-	0.30	-	2.00	-	-	2.00		
		3,633		7,521			2,751	39,485	0.33
-	Trace	-	0.30	Trace	1.00	0.10	Trace		
			611		11,870	4,711		62,157	0.20
11.00	9.00	9.17	1.80	12.25	27.55	10.00	5.50		12.16
82,809	8,703	111,054	3,666	46,068	327,026	471,111	7,566	2,856,015	
752,809	96,703	1,211,054	203,666	376,068	1,187,026	4,711,111	137,566	20,780,448	

Comments:

- AL Ascochyta Blight was a problem early in the growing season.
CA A long cool spring resulted in a higher than normal seedling disease level.
FL Drs. Jim Marois and Jimmy Rich assisted in making loss estimates.
GA Excellent growing conditions most of the season. Root-knot nematode was more of a problem.
MS A cool wet spring caused seedling disease problems in the north half of the delta.
VA Yield potential limited by late planting due to a cool-wet spring. Storm Isabel caused some lodging.

November 2003