## COTTON DISEASE LOSS ESTIMATE COMMITTEE REPORT

**Don Blasingame** 

**Extension Plant Pathologists, Retired** 

Mississippi State, MS

J. C. Banks

**Oklahoma Cooperative Extension** 

Altus, OK

P. D. Colyer

LSU AgCenter

**Bossier City, LA** 

R. Michael Davis

University of California

Davis, CA

W. S. Gazaway

Natalie Goldburg6

**Auburn University** 

Auburn University, AL

R. C. Kemerait

Department of Plant Pathology, University of Georgia

Tifton, GA

T. L. Kirkpatrick

**University of Arkansas** 

Hope, AR

S.R. Koenning

Raleigh, NC

John Muller

**Clemson University** 

Blackville, SC

M. a. Newman

Ento. & Plant Pathology Dept.

Jackson,, TN

**Mary Olsen** 

University of Arizona

Tucson,, AR

P. M. Phipps

Tidewater Ag Res & Ext Ctr, Virginia Tech

Suffolk, VA

G. L. Sciumbato

Delta Research and Extension Center, Mississippi State University

Stoneville, MS

**Richard Sprenkel** 

University of Florida

Quincy, FL

J. E. Woodward

**Texas Cooperative Extension** 

Lubbock, TX

Al Wrather

University of Missouri-Columbia

Portageville,, MO

Mukund V. Patel

Extension Plant Pathologists, Retired

Mississippi State, MS

Table 1. Estimated Reduction in 2007 Cotton Yield Resulting from Diseases.\*

	1. Estimated											
DISEASES	AL	AZ	AR	CA	FL	GA	LA	MS				
Note: Table entries are % loss (top figure) and bales lost (lower figure)**												
Fusarium Wilt F. oxysporium f. sp. vasinfectum	0.50 2,439		0.50 10,565	0.50 3,151	Trace	Trace	1.00 8,140	Trace				
Verticillium Wilt  V. dahliae	0.50 2,439	0.50 2,819	0.50 10,565	0.30 1,891	-	-	Trace	Trace				
Bacterial Blight X. malvacearum	Trace	-	-	-	-	-	Trace	Trace				
Phymatrotrichum Root Rot <i>P. omnivorum</i>	-	1.00 5,638	-	-	-	-	Trace	-				
Seedling Diseases Several fungi	4.50 21,951	0.50 2,819	2.50 52,825	3.50 22,059	-	2.00 37,931	2.00 16,279	3.00 47,500				
Ascochyta Blight <i>A. gossypii</i>	0.40 1,951	-	-	-	-	Trace	Trace	Trace				
Boll Rots	3.00 14,634	-	2.00 42,260	Trace	3.00 3,333	1.00 18,966	4.00 32,558	1.50 23,750				
Nematode (Total)	9.00 43,902	4.00 22,553	5.50 116,215	0.50 3,151	6.00 6,667	8.00 151,724	7.00 56,977	11.00 174,167				
Root-knot	0.50 2,439	4.00 22,553	3.00 63,390	0.50 3,151	3.30 3,667	6.00 113,793	3.00 24,419	2.00 31,667				
Reniform	8.50 41,463	-	2.50 52,825	-	2.70 3,000	1.50 28,448	4.00 32,558	9.00 142,500				
Others	-	-	-	-	-	0.50 9,486	Trace	Trace				
Leaf Spots And Others***	0.10 488		0.50 10,565		1.00 1,111	2.00 37,931	Trace	0.50 7,917				
TOTAL PERCENT	18.00	6.00	11.50	4.80	10.00	13.00	14.00	16.00				
BALES LOST	87,805	33,830	242,994	30,252	11,111	246,552	113,953	253,333				
YIELDS IN BALES****	487,805	563,830	2,112,99 4	630,252	111,111	1,896,55 2	813,953	1,583,33 3				

<sup>\*</sup> 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 REPORT**

Table 1. (continued)

Table 1. (continued)									
МО	NM	NC	ОК	SC	TN	TX	VA	BALES LOST	AVG. % LOST
-	-	-	0.20 590	0.50 749	-	0.70 63,851	Trace	80,535	0.24
Trace	2.00 2,239	-	0.30 885	-	0.01 66	0.90 82,095	-	42,935	0.31
-	Trace	-	0.20 590	-	-	Trace	0.10 98	3,769	0.02
-	Trace	-	-	-	-	7.00 638,514	-	100,495	0.50
1.50 11,969	1.00 1,120	0.70 5,318	0.20 590	0.50 749	3.00 19,897	0.80 72,973	1.00 983	335,402	1.67
Trace	-	-	-		0.50 3,316	-	Trace	11,306	0.06
Trace	-	1.00 7,597	0.10 295	0.25 374	0.50 3,316	0.10 9,122	0.20 197	209,155 326,456	1.04
2.00 15,959	5.00 5,598	5.00 37,985	0.30 885	4.50 6,738	2.00 13,265	1.60 145,946	500 4,915	959,854 1,223,995	4.78
2.00 15,959	5.00 5,598	3.00 22,791	0.30 885	2.00 2,995	-0.01 66	1.30 118,581	3.00 2,949	488,783	2.43
-	-	1.00 7,597	-	1.00 1,497	2.00 13,265	0.30 27,365	0.10 98	409,518	2.04
-	-	1.00 7,597	-	1.50 2,246	-	-	1.90 1,868	61,553	0.31
Trace	Trace	0.50 3,798	0.40 1,180	0.75 1,123	0.50 3,316	0.10 9,122	0.10 98	81,024	0.40
3.50	8.00	7.20	1.700	6.50	6.52	11.20	6.40		9.02
27,927	8,957	54,698	5,015	9,73311	43,243	1,021,62	6,291	1,812,932	
797,927	111,957	759,698	295,015	149,733	663,234	9,121,62 2	98,297	20,099,02	

## Comments:

- AL This season was the dries in 100 years, with less than 6 inches in some areas. Dale Monks, cotton agronomist reported 'hardlock" problems in some areas of the state. Drs. C. Burmester, K. Lawrence, and C. Monks assisted in disease loss estimates.
- GA There was a slight increase in seedling disease even in dry areas. Nematodes continue to be a problem and laf sports were widespread along the coastal plains.
- MS Seedling disease was a problem during an extremely dry year. D. Blasingame and G. Lawrence reported

that nematodes were still our number one problem.

NM Disease loss returned to normal with a return of normal environmental conditions.

SC Leaf sports caused some defoliation. Nematode losses are down due to a cotton/peanut rotation program.

Boll rots were down due to the last season drought.

TX An unusually cool- wet spring resulted in higher seedling disease losses.

VA Timely rains resulted in higher yields during on of our driest years.

December 2007