

**COTTON DISEASE LOSS ESTIMATE
COMMITTEE REPORT
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Table 1. Estimated Reduction in 1999 Cotton Yield Resulting from Diseases.*

DISEASES	AL	AZ	AR	CA	FL
Note: Table entries are % loss (top figure) and bales lost (lower figure)**					
Fusarium Wilt <i>F. oxysporium f. sp. vasinfectum</i>	Trace	-	33,023	796	Trace
Verticillium Wilt <i>V. dahliae</i>	Trace	13,793	16,512	23,873	-
Bacterial Blight <i>Xanthomonas malvacearum</i>	-	-	-	-	-
Phymatotrichum Root Rot <i>P. omnivorum</i>	-	13,793	-	-	-
Seedling Diseases <i>Rhizoctonia solani</i> , <i>Pythium</i> spp., <i>Fusarium</i> spp., etc.	34,700	20,690	49,535	47,745	2,775
Ascochyta Blight <i>A. gossypii</i>	3,856	-	-	-	-
Boll Rots	34,700	3,448	49,535	Trace	3,884
Nematode Spp.	65,545	34,483	82,558	19,098	8,102
Leaf Spots And Others***	2313	3,448	-	-	222
TOTAL PERCENT	18.30	13.00	14.00	5.75	13.50
BALES LOST	141,114	89,655	231,163	91,512	14,983
YIELDS IN BALES****	771,114	689,655	1,651,163	1,591,512	110,983

Table 1. (continued)

DISEASES	GA	LA	MS	MO	NM
Note: Table entries are % loss (top figure) and bales lost (lower figure)**					
Fusarium Wilt <i>F. oxysporium f. sp. vasinfectum</i>	19,277	20,233	Trace	-	-
Verticillium Wilt <i>V. dahliae</i>	Trace	Trace	4,958	Trace	5,056
Bacterial Blight <i>Xanthomonas malvacearum</i>	Trace	Trace	-	-	Trace
Phymatotrichum Root Rot <i>P. omnivorum</i>	-	Trace	-	-	Trace
Seedling Diseases <i>Rhizoctonia solani</i> , <i>Pythium</i> spp., <i>Fusarium</i> spp., etc.	77,108	20,233	59,493	11,757	562
Ascochyta Blight <i>A. gossypii</i>	Trace	Trace	Trace	-	-
Boll Rots	48,193	20,233	39,662	-	562
Nematode Spp.	163,855	80,930	118,986	3,527	5618
Leaf Spots And Others***	19,277	Trace	Trace	-	562
TOTAL PERCENT	17.00	14.00	11.25	3.25	11.00
BALES LOST	327,711	141,628	223,099	15,284	12,360
YIELDS IN BALES****	1,927,711	1,011,628	1,983,099	470,284	112,360

Table 1. (continued)

DISEASES	NC	OK	SC	TN
	Note: Table entries are % loss (top figure) and bales lost (lower figure)**			
Fusarium Wilt		0.50	0.50	0.01
<i>F. oxysporium f. sp. vasinfectum</i>	-	885	1,599	61
Verticillium Wilt	0.01	0.50		0.75
<i>V. dahliae</i>	94	885	-	4,606
Bacterial Blight		1.00		
<i>Xanthomonas malvacearum</i>	-	1,771	-	-
Phymatotrichum				
Root Rot				
<i>P. omnivorum</i>	-	-	-	-
Seedling Diseases				
<i>Rhizoctonia solani</i> ,				
<i>Pythium</i> spp.,	5.00	0.50	2.00	5.00
<i>Fusarium</i> spp., etc.	47,164	885	6,396	30,708
Ascochyta Blight		0.50		0.01
<i>A. gossypii</i>	0.50	885	Trace	61
	11.00		0.25	2.00
Boll Rots	103,761	-	799	12,283
	0.80	0.50	5.00	0.80
Nematode Spp.	7,546	885	15,989	4,913
Leaf Spots		0.50	Trace	0.25
And Others***	-	885		1,535
TOTAL PERCENT	17.31	4.00	7.75	8.82
BALES LOST	163,282	7,083	24,783	54,170
YIELDS IN BALES****	943,282	177,083	319,783	614,170

Table 1. (continued)

DISEASES	TX	VA	BALES LOST	AVG. % LOST
	Note: Table entries are % loss (top figure) and bales lost (lower figure)**			
Fusarium Wilt				0.41
<i>F. oxysporium f. sp. vasinfectum</i>	0.50		103,717	
	27,842	-		
Verticillium Wilt	1.50			0.75
<i>V. dahliae</i>	83,527	-	153,304	
Bacterial Blight				0.25
<i>Xanthomonas malvacearum</i>	3.00			
	167,053	-	168,824	
Phymatotrichum				0.31
Root Rot	3.00			
<i>P. omnivorum</i>	167,053	-	180,846	
Seedling Diseases				2.78
<i>Rhizoctonia solani</i> ,				
<i>Pythium</i> spp.,	2.50	1.50		
<i>Fusarium</i> spp., etc.	139,211	2,984	551,946	
Ascochyta Blight				0.09
<i>A. gossypii</i>	-	0	9,519	
	0.50	2.00		2.14
Boll Rots	27,842	3,979	348,882	
	2.50	3.00		4.24
Nematode Spp.	139,211	5,968	757,215	
Leaf Spots	0.30			0.22
And Others***	16,705	Trace	44,949	
TOTAL PERCENT	13.80	6.50		11.20
BALES LOST	768,445	12,930	2,319,202	
YIELDS IN BALES****	5,568,445	198,930	18,141,202	

* 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.

Comments:

- AL Nematode damage, particularly reniform, appear to be worse in 1999 due to a dry summer.
- MS The “bronze wilt” was wide spread in 1999. (Figure not included in disease loss estimate).
- NC Some cotton fields are unharvestable due to three hurricanes and stem canker (*Phoma exugua* - *Aschochyta*) was a problem in 1999.
- SC Drought conditions limited yields greatly. Seed rot was detected in all cotton-producing counties.
- VA Stem canker (*Phoma exugua* - *Aschochyta*) was a problem. Hurricanes Dennis, Floyd, and Irene had the greatest impact in limiting yield. Wind and heavy rainfall caused considerable lodging of plants with heavy boll loads. Wet soils delayed harvest of many fields in the region.

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