

REPORT OF THE 1999 COTTON WEED LOSS COMMITTEE

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Cotton yield losses by weed genera, acres infested by weed genera, herbicide usage, and bales reduced for grass contamination are presented by states in tables 1, 2, 3, and 4, respectively. Data for tables 1, 2, and 3 are provided by committee members and/or co-workers in each state. Committee members are listed below.

Alabama - Mike Patterson
Arizona - Bill McCloskey
Arkansas - Ken Smith
California - Ron Vargas
Florida - Barry Brecke
Georgia - Stanley Culpepper
Louisiana - Dearl Sanders
Mississippi - John Byrd
Missouri - Andy Kendig
North Carolina - Alan York
New Mexico - Richard Lee
Oklahoma - J. C. Banks
South Carolina - Ed Murdock
Tennessee - Bob Hayes
Texas - Paul Baumann

Table 1. Estimated percent reduction in cotton yields by weed genera by state, 1999.
(Values based on individual states) Total % crop lost = 100%

	AL	AR	AZ	CA	FL	GA	LA	MO	MS	NC	NM	OK	SC	TN	TX	% LOST AVG
GRASS WEEDS																
Brachiaria	1	1	-	-	1	-	2	1	1	1	-	-	-	1	1	0.7
Cynodon	8	2	11	5	3	8	-	1	8	2	6	-	3	3	4	4.3
Cyperus	8	6	15	20	8	10	5	2	3	8	12	9	10	3	6	8.3
Digitaria	5	6	-	-	3	2	3	5	2	2	-	3	-	1	1	2.2
Echinochloa	1	2	4	15	2	-	1	1	1	-	2	3	-	1	4	2.5
Eleusine	3	1	-	-	3	-	3	4	1	1	-	-	4	5	-	1.7
Panicum	5	1	1	-	3	8	4	1	-	1	-	5	2	1	5	2.5
Sorghum	3	3	5	5	2	1	6	6	9	1	10	11	2	5	10	5.3
other	-	4 ^a	5 ^a	1 ^e	-	-	-	1 ^b	-	-	-	-	-	-	-	0.7
BROADLEAF WEEDS																
Abutilon	3	1	-	-	-	-	-	5	-	-	-	-	1	2	-	0.8
Acanthospermum	-	4	-	-	-	5	5	-	-	-	-	-	-	-	-	-0.9
Amaranthus	4	15	5	7	5	8	7	6	10	15	2	13	38	10	12	10.5
Ambrosia	1	-	-	-	-	-	-	1	-	-	-	-	-	-	3	0.3
Anoda	1	2	-	-	-	-	2	3	1	-	12	-	-	2	1	1.6
Chenopodium	-	-	-	-	-	-	-	1	-	2	-	-	-	-	-	0.2
Convolvulus	-	-	3	5	-	-	-	-	-	-	2	5	-	-	1	1.1
Croton	1	-	-	-	4	5	-	1	-	1	-	-	2	-	1	1.0
Euphorbia	4	8	1	-	5	5	4	5	4	-	2	1	2	1	1	2.8
Helianthus	-	-	-	-	-	-	-	-	-	-	2	-	-	-	5	0.5
Ipomoea	17	25	30	19	10	14	18	22	27	25	25	14	12	10	12	18.7
Melochia	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	0.3
Physalis	-	-	2	2	-	-	1	-	-	-	1	2	-	-	1	0.6
Polygonum	-	-	-	-	3	-	-	3	3	20	-	-	1	1	-	2.1
Portulaca	-	-	-	-	-	-	-	1	-	-	-	5	-	-	-	0.4
Proboscidea	-	-	-	-	-	-	-	-	-	-	-	3	-	-	4	0.5
Salsola	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.1
Salvia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0.1
Senna	11	-	-	-	10	14	-	1	1	15	-	-	15	8	-	5.0
Sesbania	-	1	1	-	-	-	5	-	2	-	-	-	-	-	-	0.6
Sida	13	12	-	-	5	2	7	8	3	4	-	-	1	5	-	4.0
Solanum	1	-	5	20	-	1	5	-	1	-	9	14	-	-	4	4.0
Xanthium	6	5	1	1	15	5	12	20	18	2	6	-	5	15	1	7.5
other	-	4	11	-	10 ^e	12 ^c	15 ^d	2 ^d	5 ^d	-	3 ^e	3	3 ^f	1	7	5.1
Total % Crop Lost	8	10	8	3	10	7	9	10	7	8	7	7	10	8	7	
Total Bales (x 1000)	705	1300	750	2600	80	1550	1500	571	1740	1000	82	380	245	590	5300	18671.0
Bales Lost (x 1000)	56	130	60	78	8	109	135	57	122	80	6	27	25	47	371	1369.0

^aIncludes *Brachiaria*, *Digitaria*, *Echinochloa*, *Eleusine*, and *Leptochloa* spp. ^b*Setaria* ^c*Desmodium*, *Jacquemontia*, and *Richardia* spp. ^dIncludes *Ampelamus*, *Brunnichia*, and *Campsis* spp. ^e*Datura* spp. ^fIncludes *Acanthospermum*, *Ambrosia*, *Anoda*, and *Polygonum* spp.

Table 2. Estimated cotton acreage (x1000) infested by weed genera by state, 1999.

	AL	AR	AZ	CA	FL	GA	LA	MO	MS	NC	NM	OK	SC	TN	TX	Total
Total cotton acres	470	950	427	860	80	1480	810	340	1180	850	84	170	320	565	5300	12266.0
GRASS WEEDS																
Brachiaria	-	40	-	-	-	20	250	10	76	300	-	-	10	40	-	746.0
Cynodon	65	20	50	50	8	100	-	2	325	24	4	5	2	60	5	720.0
Cyperus	150	50	140	150	25	800	250	10	295	180	25	12	45	50	100	2282.0
Digitaria	200	350	-	-	25	1000	250	300	600	600	-	6	275	100	400	4106.0
Echinochloa	18	20	30	150	-	2	300	10	118	-	11	6	-	10	400	1075.0
Eleusine	60	300	-	-	12	400	270	100	280	200	-	-	120	50	-	1792.0
Panicum	70	10	19	-	20	1200	20	8	9	75	-	15	18	40	850	2354.0
Sorghum	60	200	40	60	-	50	250	50	560	50	21	50	9	250	1000	2650.0
other	-	10 ^a	10	-	10 ^b	-	-	2 ^c	20	-	4 ^a	-	-	-	-	56.0
BROADLEAF WEEDS																
Abutilon	30	10	-	-	-	3	-	150	12	5	-	-	2	50	2	264.0
Acanthospermum	60	-	-	-	12	450	-	-	-	-	-	-	-	-	-	522.0
Amaranthus	250	400	150	100	65	1400	50	300	410	650	25	80	300	300	5000	9480.0
Ambrosia	4	-	-	-	1	35	-	1	10	120	-	4	-	25	300	500.0
Anoda	10	10	-	-	-	2	5	50	45	4	17	-	1	50	100	294.0
Campsis	-	-	-	-	-	1	-	-	28	5	-	-	-	50	-	84.0
Chenopodium	4	-	7	-	-	130	-	1	2	335	-	-	7	15	2	505.0
Convolvulus	-	-	25	30	-	1	-	-	-	-	1	8	-	-	25	90.0
Croton	15	-	-	-	4	400	-	-	35	145	-	-	28	45	50	722.0
Eclipta	-	-	-	-	4	40	-	5	1	180	5	-	-	10	5	250.0
Euphorbia	150	300	50	-	15	100	90	75	675	24	4	7	10	100	40	1640.0
Helianthus	-	-	-	-	-	-	-	-	3	-	2	-	-	-	800	805.0
Ipomoea	350	750	100	250	45	1000	400	300	910	750	20	10	75	225	700	5885.0
Melochia	3	-	-	-	20	150	-	-	-	-	-	-	-	-	5	178.0
Physalis	-	-	80	40	-	50	20	-	8	-	8	10	-	10	100	326.0
Polygonum	6	25	-	-	4	65	-	5	120	200	-	-	7	100	5	537.0
Portulaca	-	-	150	-	-	10	-	3	160	-	-	12	-	-	5	340.0
Proboscidea	-	-	-	-	-	-	-	-	-	-	-	6	-	-	1500	1506.0
Salsola	-	-	14	-	-	-	-	-	-	-	2	6	-	-	2000	2022.0
Salvia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	700	700.0
Senna	300	25	-	-	60	1300	-	-	85	500	-	-	190	110	-	2570.0
Sesbania	12	10	30	-	-	20	80	5	225	-	-	-	-	1	-	383.0
Sida	230	600	-	-	30	450	300	200	650	400	-	-	40	200	10	3110.0
Solanum	10	-	70	500	-	40	5	1	100	-	16	60	-	45	2000	2847.0
Xanthium	225	250	10	20	35	1000	200	250	730	200	1	7	140	400	1000	4468.0
other	5 ^d	-	5	5	12 ^e	1400 ^e	150 ^f	100 ^d	300 ^d	-	1	60	10 ^g	135	1000	3183.0

^a*Leptochloa* ^b*Dactyloctenium* ^c*Setaria* ^dPerennial vines: *Ampelamus*, *Brunnichia*, *Campsis*, *Cynanchum*, *Ipomoea*

^e*Desmodium*, *Jacquemontia*, and *Richardia* spp. ^f*Hibiscus* ^gIncludes *Acanthospermum*, *Ambrosia*, *Polygonum* spp., *Datura* spp., and *Kochia*.

Table 3. Estimated herbicide usage (% acres treated) in cotton by states, 1999.

HERBICIDE	AL	AR	AZ	CA	FL	GA	LA	MO	MS	NC	NM	OK	SC	TN	TX-I	TX-II
FALLOW/STALE SEEDBED																
Cyanazine	-	2	-	2	-	-	-	-	2	-	-	-	-	10	1	5
Goal	-	0.5	-	6	-	-	-	-	2	-	-	-	-	-	-	-
Gramoxone Extra	1	15	-	3	2	8	15	5	12	10	-	-	15	25	10	-
Harmony Extra	-	0.5	-	-	-	-	5	-	2	-	-	-	-	-	-	-
MSMA	-	-	-	-	-	0	6	1	-	-	-	-	-	-	15	-
Prometryn	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-
Prowl	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roundup	6	5	-	4	2	10	25	15	35	25	-	<1	20	30	10	2
Trifluralin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70
other	-	-	-	-	-	3 ^k	-	-	4	-	-	-	-	-	-	-
PREPLANT INCORPORATED																
Prowl	38	45	30	45	50	25	30	26	30	25	20	30	38	20	20	20
Trifluralin	71	30	30	45	40	55	40	57	35	20	57	65	35	25	70	70
Trifluralin + fluometuron	-	1	-	-	-	-	3	3	-	-	-	-	-	-	-	-
Zorlax	25	5	-	-	5	5	20	20	-	5	-	-	-	-	-	5
other	-	-	35 ^b	10 ^b	-	-	-	-	-	-	23 ^b	-	5 ^e	-	-	-
PREEMERGENCE																
Cyanazine	3	2	-	-	3	-	6	3	1	-	-	-	-	-	-	-
Command	30	2	-	-	3	-	85	50	2	5	-	1	6	1	-	-
Diuron	7	1	-	-	-	3	15	-	2	-	-	-	-	1	10	15
Dual	-	4	-	-	-	-	-	4	10	1	4	-	-	8	4	<1
Fluometuron	84	70	-	-	60	45	66	90	76	65	-	1	30	75	-	-
Prometryn	5	5	-	-	-	-	-	-	-	-	-	8	-	2	10	40
Prowl	2	10	-	-	-	30	-	8	1	20	-	5	20	25	5	<1 ^g
Staple	-	-	-	-	-	10	-	20	33	3	-	-	-	-	2	-
Zorlax	40	10	-	-	20	5	30	20	4	5	-	-	<1	1	2	4
other	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
POSTEMERGENCE OVERTOP																
Assure II/Bugle/Fusilade/ PoastPlus/Select	5	10	1	20	15	10	35	20	8	10	5	5	5	20	10	20
Buctril	1	25	-	1	-	3	-	30	22	10	-	2	<1	10	12	-
Roundup	-	5	-	10	25	60	-	30	34	55	-	15	42	60	50	-
Staple	50	40	-	35	30	10	-	50	55	20	-	-	15	10	5	-
POSTEMERGENCE DIRECTED																
Cyanazine	10	25	10	5	-	1	5	2	3	-	-	-	7	0	1	20
+MSMA	30	33	2	3	30	45	10	30	58	20	-	-	20	15	-	-
Cobra	1	-	-	-	-	2	-	-	-	-	-	-	-	-	-	1
+MSMA	2	10	-	-	2	3	10	15	10	1	-	-	-	3	-	-
Diuron	10	1	2	-	-	5	-	3	-	5	-	-	-	-	1	-
+MSMA	5	10	2	-	-	15	10	1	8	-	-	-	-	1	-	-
Fluometuron	20	25	-	-	-	1	20	15	10	-	-	-	-	-	-	10
+MSMA	40	40	-	-	5	20	35	20	10	1	-	-	2	1	-	-
Goal	<1	3	5	3	5	1	20	10	1	1	-	-	-	-	-	-
Gramoxone Extra	-	-	-	-	-	6	-	-	3	10	-	-	-	1	-	-
MSMA or DSMA	64	85	3	15	65	10	40	20	60	10	1	10	30	5	2	5
Prometryn	10	15	10	-	-	4	2	3	-	5	-	10	-	<1	<1	
+MSMA	15	20	10	3	10	10	10	8	14	50	1	0	20	10	-	<1
Roundup	10	5	-	10	25	35	-	25	25	20	-	-	-	30	3	-
SPOT TREATMENT																
MSMA	12	12	2	-	-	5	2	10	3	-	3	-	<1	1	1	-
Assure II/Bugle/Fusilade/ PoastPlus/Select	15	20	15	5	-	5	50	20	18	5	30	2	2	2	15	15
Roundup ⁱ	4	4	15	5	-	2	6	10	2	-	2	10	1	1	30	30
LAYBY																
Bladex	25	30	30	35	25	30	10	20	60	5	-	-	15	1	2	10
Diuron	5	10	-	-	20	20	-	10	10	0	-	5	-	2	5	-
other	-	-	50 ^f	10 ^f	-	-	-	-	1 ^j	10	17 ^f	-	40	-	<1 ^f	5 ^f

^aGoal, Bladex or Prometryn ^bTrifluralin or Prowl + Prometryn ^cTrifluralin plus norflurazon ^eGoal ^fPrometryn

^gSurflan ^hfluometuron + norflurazon ⁱincludes wick application ^jFluometuron ^kDiuron

State	1999			2000		
	Bales classed (no.)	Grassybales (%)	Revenue lost ^a (\$x1000)	Bales classed (no.)	Grassybales (%)	Revenue lost ^a (\$x1000)
Alabama	537,976	1.2	92	620,444	0.5	45
Arizona	556,674	0.7	56	669,507	0.4	39
Arkansas	1,164,610	1.0	167	1,383,130	0.5	100
California	1,092,790	1.3	204	1,546,385	0.6	134
Florida	64,804	0.3	2	104,980	0.4	6
Georgia	1,502,123	2.0	432	1,516,216	0.7	153
Louisiana	652,580	2.9	272	918,891	1.1	146
Mississippi	1,400,807	1.0	201	1,679,814	0.4	97
Missouri	337,768	1.1	53	450,122	0.5	32
New Mexico	61,587	0.7	6	52,736	0.4	3
North Carolina	1,005,932	4.1	593	801,298	2.1	242
Oklahoma	136,425	0.1	1	136,630	0.1	2
South Carolina	333,324	3.4	163	264,602	0.7	27
Tennessee	529,671	1.1	83	574,034	0.2	17
Texas	3,458,609	0.4	199	4,880,281	1.0	703
Virginia	133,660	2.7	51	133,823	1.7	33
Total	12,975,449	1.4	2615	18,405,965	0.7	1855
		(adjusted)			(adjusted)	

^aAssumed price was reduced by \$0.03 per pound of lint. Information summarized from the United States Department of Agriculture, Agricultural Marketing Service, Cotton Division, Cotton Quality Reports Vol. 70, No. 6 and Vol. 72, No. 5.