

NOTICE OF RELEASE OF TWELVE MULTI-ADVERSITY RESISTANT (MAR-6) GERmplasm LINES OF UPLAND COTTON
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The Texas Agricultural Experiment Station (TAES) announces the release of twelve multi-adversity resistant (MAR) advanced germplasm lines of upland cotton (*Gossypium hirsutum* L.) from the MAR-6 gene pool. These lines are designated as CAHUGLBBCS-1-88, LBCC4HUGS-1-89, CABD3SHP3S-1-90, BLCABPD86S-1-90, MAR5PD208S-4-90, CAHUGARPIH-1-88, CD3HHARCIH-1-88, CD3HCAHUGH-2-88, CD3HCHULBH-1-88, CABD3CABCH-1-89, CD3HCABCUH-1-89, and LBBCDBOAKH-1-90. These lines were developed by the TAES-MAR Cotton Genetic Improvement Program, Department of Soil and Crop Sciences, College Station by K.M. El-Zik and P.M. Thaxton. The MAR program utilizes specific seed, seedling, and plant selection procedures and techniques for the simultaneous genetic improvement of resistance to pests (insects and plant pathogens) and abiotic stresses in addition to improved agronomic characteristics, and increased yield potential, earliness, and fiber and seed quality (1,5).

Performance evaluations were conducted over 2 to 3 years in eight nurseries in Texas (Weslaco, Corpus Christi, College Station, Temple, McGregor, Munday, Chillicothe, and Halfway) to determine productivity, earliness, fiber quality, and levels of resistance to adversities (insects, plant pathogens, and drought). In addition, the lines were tested in the Coastal Bend Region of Texas (Nueces and San Patricio Counties). Levels of resistance to pests were determined in comparisons with cotton lines and varieties having known levels of resistance and susceptibility to insects and pathogens. The lines also were compared with 'Tamcot CAB-CS' (2), 'Tamcot HQ95' (6) and 'Tamcot Sphinx' (7) for lint yield, earliness, boll size, gin turnout, lint percentage, and fiber quality traits.

The MAR-6 Germplasm

The MAR-6 lines have significantly higher levels of broad-spectrum resistance than the earlier released MAR germplasm (8) to insects: thrips (*Thrips* spp. and *Frankliniella* spp.), fleahopper [*Pseudatomoscelis seriatus* (Reuter)], boll weevil (*Anthonomus grandis* Boheman), tobacco budworm [*Heliothis virescens* (F.)] and bollworm [*Helicoverpa zea* (Boddie)]; and to pathogens causing disease: seed-seedling (*Pythium ultimum* Trow and

Rhizoctonia solani Kuehn), bacterial blight [*Xanthomonas campestris* pv. *malvacearum* (Smith) Dye], verticillium wilt (*Verticillium dahliae* Kleb.), fusarium wilt/root-knot nematode complex [*Fusarium oxysporum* Schlechtend. f. sp. *vasinfectum* (Atk.) Snyder & Hans./*Meloidogyne incognita* (Kofoid & White) Chitwood], phymatotrichum root rot [*Phymatotrichum omnivorum* (Shear) Dug.]; and to leaf spots (spp. of *Alternaria*, *Aschochyta*, and *Phomopsis*) (Table 1). All 12 lines are highly resistant to the bacterial blight pathogen. Five of the lines are glabrous (CAHUGLBBCS-1-88, LBCC4HUGS-1-89, CABD3SHP3S-1-90, BLCABPD86S-1-90, and MAR5PD208S-4-90) which reduces fiber trash content, egg laying and subsequent damage from tobacco budworm and bollworm, and damage from sweetpotato whitefly [*Bemisia tabaci* (Genn.)]. The five glabrous lines have longer and stronger fiber than the glabrous Tamcot CAB-CS variety. Seven lines are pubescent (CAHUGARPIH-1-88, CD3HHARCIH-1-88, CD3HCAHUGH-2-88, CD3HCHULBH-1-88, CABD3CABCH-1-89, CD3HCABCUH-1-89, and LBBCDBOAKH-1-90). All lines are glanded and nectaried, and have normal bract and leaf types.

The Glabrous (Smooth) MAR-6 Lines

CAHUGLBBCS-1-88

is a glabrous type derived from a cross between CAHUGS-1-84 (MAR-4 release) x LBBCABCHUS-1-87 [MAR-5 release (8)]. This line has the $B_2B_3B_7$ genes for bacterial blight resistance. It has higher levels of resistance to fusarium wilt/root-knot nematode complex with an average of 7.8% plants with wilt symptoms compared to 26.5% for Tamcot CAB-CS and a test mean of 42.7% (Table 1). CAHUGLBBCS-1-88 has yield potential similar to Tamcot HQ95, and is earlier in maturity than Tamcot CAB-CS and Tamcot Sphinx (Table 2). Fiber elongation is significantly higher than the Tamcot varieties.

LBCC4HUGS-1-89

is a glabrous strain from a cross between LBBCCHUS-2-85 x C4HUGBES-1-85. It has the $B_2B_3B_7$ genes for bacterial blight resistance, and a high level of resistance to verticillium wilt (Table 1). LBCC4HUGS-1-89 is significantly earlier than Tamcot CAB-CS and Tamcot Sphinx, and yield potential is similar to Tamcot HQ95 (Table 3). It has improved fiber quality with an average fiber length of 1.11 inches and strength of 26.9 g/tex.

CABD3SHP3S-1-90

originated from the cross between CABUCD3H-1-90 [later released as Tamcot HQ95 (6)] x Shepard 83-725, a line developed by R. L. Shepard, USDA-ARS, MS. It has the $B_2B_3B_6B_7$ genes for bacterial blight resistance. CABD3SHP3S-1-90 is a later maturing strain than Tamcot CAB-CS and Tamcot HQ95 and is similar in maturity to Tamcot Sphinx. It has 0.05 inches longer and 2.3 g/tex stronger fiber than Tamcot CAB-CS (Table 4).

BLCABPD86S-1-90

was developed from the cross of BLLCABS-3-86 [MAR-5 release (8)] and a selection from PD6186 (4). BLCABPD86S-1-90 has improved levels of resistance to phymatotrichum root rot and verticillium wilt (Table 1), and has the $B_2B_3B_6B_7$ genes for bacterial blight resistance. It has high yielding ability similar to Tamcot HQ95 and Tamcot Sphinx (Table 5). This line has similar fiber length, uniformity and strength to those of Tamcot CAB-CS and Tamcot HQ95. Fiber fineness (micronaire) is similar to that of Tamcot Sphinx.

MAR5PD208S-4-90

is a selection from PD6208 (4). This line has been screened and evaluated through the MAR procedures for two cycles. It is resistant to the US races of the bacterial blight pathogen. It has high yielding ability, and its maturity is similar to the other Tamcot varieties (Table 6). Fiber length is significantly longer (0.03 to 0.04 inches) than the comparison varieties.

The Pubescent (Hairy) MAR-6 Lines

CAHUGARPIH-1-88

originated from the cross between CAHUGS-1-84 and a line from Argentina, Pora Inta (ARPIH-2-84). This line is very pubescent, with the $B_2B_3B_6B_7$ genes for bacterial blight resistance, and a standability similar to Tamcot Sphinx (Table 1). CAHUGARPIH-1-88 is later maturing than the Tamcot varieties, and has excellent fiber quality. Fiber strength is 4.1 g/tex stronger than Tamcot CAB-CS and 2.9 g/tex stronger than Tamcot HQ95 (Table 7). Fiber uniformity and fineness (micronaire) are significantly greater than those of Tamcot CAB-CS and Tamcot HQ95.

CD3HHARCIH-1-88

was developed from the cross between CDP37HH-1-1-86 [a selection from 'Tamcot CD3H' (3)] and a line from Argentina, Chaco-Inta (ARCI-1-84). This line is pubescent has the $B_2B_3B_6B_7$ genes for bacterial blight resistance, and fiber strength averages 30.2 g/tex. It has improved levels for resistance to phymatotrichum root rot and the fusarium wilt/root-knot nematode complex, in addition to standability (Table 1). CD3HHARCIH-1-88 is a later maturing line than the Tamcot varieties, and is an excellent source for high fiber quality. Its fiber length is 0.2 inches longer than Tamcot CAB-CS and Tamcot HQ95, and is stronger: 4.9 g/tex than Tamcot CAB-CS, 3.6 g/tex than Tamcot HQ95, and 1.6 g/tex than Tamcot Sphinx (Table 8).

CD3HCAHUGH-2-88

was developed from the cross CDP37HH-1-1-86 x CAHUGS-2-84. It has the $B_2B_3B_6B_7$ genes for bacterial blight resistance. Lint yield of CD3HCAHUGH-2-88 is similar to that of Tamcot HQ95 and fiber quality traits are similar to those of Tamcot CAB-CS and Tamcot HQ95

(Table 9). It is a very early maturing line, 11.2% earlier than Tamcot CAB-CS and Tamcot Sphinx.

CD3HCHULBH-1-88

was developed from the cross Tamcot CD3H x CHUL2BS-1-85. It has the $B_2B_3B_6B_7$ genes for bacterial blight resistance, and improved levels for resistance to root pathogens causing phymatotrichum root rot, verticillium wilt, and fusarium wilt/root-knot nematode complex (Table 1). Fiber strength averages 27.2 g/tex. Lint yield and earliness of CD3HCHULBH-1-88 are similar to those of Tamcot HQ95 (Table 10).

CABD3CABCH-1-89

was developed from a cross between CABUCD3H-1-86 [later released as Tamcot HQ95 (6)] and Tamcot CAB-CS (2). It has the $B_2B_3B_6B_7$ genes for bacterial blight resistance and an average fiber strength of 28 g/tex. This line produced lint yield similar to the other Tamcot varieties, is early, and has a stronger fiber than Tamcot CAB-CS and Tamcot HQ95 (Table 11).

CD3HCABCUH-1-89

was developed from a cross between CDP37HH-1-1-86 x CABCUH-1-86. It has the $B_2B_3B_6B_7$ genes for bacterial blight resistance, and improved levels of resistance to phymatotrichum root rot and verticillium wilt (Table 1). Lint yield is similar to Tamcot HQ95 but is later in maturity (Table 12). It has a longer fiber than the other Tamcot varieties.

LBBCDBOAKH-1-90

is a very pubescent type from a cross between LBBCD3H-1-87 [MAR-5 release (8)] and a selection from a line from Central Africa, BOUAKE 86-87 EH2G. It has the $B_2B_3B_6B_7$ genes for bacterial blight resistance. LBBCDBOAKH-1-90 has a high yield potential and fiber quality (Table 13). Fiber length averages 1.15 inches and fiber strength 27.9 g/tex. It is later in maturity than Tamcot CAB-CS and Tamcot HQ95.

These germplasm lines should be useful to commercial cotton breeders in the development of varieties that are glabrous or pubescent and with broad and higher levels of resistance to pests and improved yield and fiber quality. Small quantities of seed of these germplasm lines are available for distribution upon written request to K. M. El-Zik, Department of Soil & Crop Sciences, Heep Center, Texas A&M University, College Station, Texas 77843-2474.

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Table 1. Percent stand and disease symptoms for the MAR-6 cotton varieties.

MAR-6 Strain and Tamcot Variety	Field Stand		Phymatotrichum Root Rot				Verticillium Wilt		Fusarium Wilt	
	1991	1992	1991	1992	1993	1994	1991	1992	1991	1992
CAHUG LBBCS-1-88	79.2		32.2	12.1			9.1		8	8
LBBC4 HUGS-1-89	51.4		17.4	19.7			0.0		44	
CABD3S HP3S-1-90	74		6.8	22.7	45.4		6.7	6.1	33	
BLCABP D86S-1-90	77		5.7	22.0	30.7		4.4	7.8		
MAR5P D208S-4-90	70		9.5	33.1	30.3		10.2	5.5	29	
CAHUG ARPIH-1-88	83.1	76	44.5	23.7	48.2		7.1		50	
CD3HH ARCIH-1-88	82.7		21.6	27.5			7.0		38	
CD3HC AHUGH-2-88	80.9		24.6	18.1			15.7		61	
CD3HC HULBH-1-88	80.6	80	19.6	15.0	15.5	37.9	4.6	8.2	45	
CABD3C ABCH-1-89	72.1	86	41.4	20.7	25.1	56.5	6.9	8.3	55	
CD3HC ABCUH-1-90	79.2		33.9	26.7			3.4		49	
LBBCDB OAKH-1-90	86		38.7	18.6	49.8		4.0	8.4	38	
TAMCO T CAB-CS	80.7	75	37.5	16.3	14.7	44.1	4.6	6.4	27	

Strain and Variety	Stand	Phy. Root Rot	Vert. Wilt	Fus. Wilt	Resistant check	Susceptible check	Mean	LSD (P=0.05)
TAMCO T HQ95	78.83	43.4	24.1	11.4	55.2	6.9	8.7	44
TAMCO T SPHINX	83.84	36.8	35.2	23.1	52.9	8.5	10.3	34 9
Resistant check	85.87	15.4	9.3	5.5	17.3	0.0	5.5	11 13
Susceptible check	51.56	66.2	50.8	43.9	89.7	31.8	34.6	87 60
Mean	77.67	35.9	36.8	29.2	74.7	16.5	21.6	53 46
LSD (P=0.05)	4.5 14	18.4	15.2	10.8	21.3	4.3	5.2	19 20

† Least significant difference between two means within a column.

Table 2. Lint yield, earliness, and fiber quality traits for CAHUGLBBCS-1-88 and Tamcot varieties.

Strain and Variety	Lint Yield lb/ac	Earliness %	Fiber Traits				
			Length Inch	Uniformity Ratio	Strength g/tex	Elongation %	Micronaire Units
CAHUG LBBCS-1-88	734	72.5	1.08	82.9	25.1	8.6	4.1
TAMCO T CAB-CS	787	62.9	1.10	83.9	25.3	8.3	4.6
TAMCO T HQ95	698	69.4	1.10	83.6	26.6	7.1	4.3
TAMCO T SPHINX	829	56.9	1.08	85.2	28.7	7.6	5.1
MEAN	762	65.4	1.09	83.9	26.4	7.9	4.5
LSD (P=0.05)	39	3.9	0.01	0.6	1.1	0.2	0.1
†							
C.V. %	9	9.4	1.87	1.2	7.5	4.6	4.5

† Least significant difference between two means within a column.

Table 3. Lint yield, earliness, and fiber quality traits for LBBC4HUGS-1-88 and Tamcot varieties.

Strain and Variety	Lint Yield lb/ac	Earliness %	Fiber traits				
			Length inch	Uniformity ratio	Strength g/tex	Elongation %	Micronaire units
LBBC4 HUGS-1-88	514	17.4	1.08	82.9	25.1	8.6	4.1
TAMCO T HQ95	698	69.4	1.10	83.6	26.6	7.1	4.3
TAMCO T SPHINX	829	56.9	1.08	85.2	28.7	7.6	5.1
MEAN	762	65.4	1.09	83.9	26.4	7.9	4.5
LSD (P=0.05)	39	3.9	0.01	0.6	1.1	0.2	0.1
†							
C.V. %	9	9.4	1.87	1.2	7.5	4.6	4.5

LBBCC 4HUGS- 1-88	620	70.9	1.11	83.8	26.9	7.8	4.7
TAMCO T CAB- CS	741	62.4	1.10	83.7	25.3	8.3	4.6
TAMCO T HQ95	646	69.4	1.10	83.4	26.6	7.1	4.3
TAMCO T SPHINX	762	56.8	1.08	85.0	28.6	7.7	5.1
MEAN	692	64.9	1.10	84	26.8	7.7	4.7
LSD (<i>P</i> =0.05) †	59	4.7	0.01	0.5	1.0	0.2	0.1
C.V. %	17	12.7	1.93	1.2	6.8	4.8	5.2

† Least significant difference between two means within a column.

Table 4. Lint yield, earliness, and fiber quality traits for CABD3SHP3S-1-90 and A54 Tamcot varieties.

Strain and Variety	Lint Yield	Ear line ss	Fiber traits					Micr onair e
			Leng th	Unifo rmity	Stren gth	Elon gatio n	units	
	lb/acr e	%	inch es	ratio	g/tex	%	units	
CABD3 SHP3S- 1-90	626	49.2	1.14	84.9	28.4	7.2	4.1	
TAMC OT CAB- CS	666	58.7	1.09	83.7	26.1	8.4	4.2	
TAMC OT HQ95	714	61.7	1.10	83.2	27.2	7.2	4.0	
TAMC OT SPHIN X	675	50.3	1.09	85.8	30.0	7.9	4.8	
MEAN	671	55.0	1.10	84.4	27.9	7.7	4.3	
LSD (<i>P</i> =0.05)) †	83	4.6	0.02	1.1	1.4	0.3	0.2	
C.V. %	25	15.9	2.53	1.7	6.6	5.2	6.3	

† Least significant difference between two means within a column.

Table 5. Lint yield, earliness, and fiber quality traits for BLCABPD86S-1-90 and Tamcot varieties.

Strain and Variety	Lint Yield	Ear line ss	Fiber traits					Micr onair e
			Leng th	Unifo rmity	Stren gth	Elon gatio n	units	
	lb/acr e	%	inch es	ratio	g/tex	%	units	
BLCAB PD86S- 1-90	763	59.7	1.09	83.7	26.4	7.9	4.5	
TAMC OT CAB- CS	688	58.6	1.10	84.0	26.4	8.4	3.9	
TAMC OT HQ95	789	60.3	1.10	83.6	27.5	7.2	3.8	
TAMC OT SPHIN X	713	49.5	1.11	86.6	30.8	7.7	4.6	
MEAN	738	57.0	1.09	84.5	27.8	7.8	4.2	
LSD (<i>P</i> =0.05)) †	90	5.2	0.02	1.3	1.7	0.4	0.3	
C.V. %	21	15.6	2.51	1.8	7.0	5.5	6.9	

† Least significant difference between two means within a column.

Table 6. Lint yield, earliness, and fiber quality traits for MAR5PD208S-4-90 and Tamcot varieties.

Strain and Variety	Lint Yield	Ear line ss	Fiber traits					Micr onair e
			Leng th	Unifo rmity	Stren gth	Elon gatio n	units	
	lb/acr e	%	inch es	ratio	g/tex	%	units	
MAR5P D208S- 2-90	688	54.0	1.13	84.6	26.4	7.3	4.3	
TAMC OT CAB- CS	667	58.7	1.09	83.7	26.1	8.4	4.2	
TAMC OT HQ95	714	61.7	1.10	83.2	27.2	7.2	4.0	
TAMC OT SPHIN X	675	50.5	1.09	85.8	30.0	7.9	4.8	

MEAN	686	14.6	1.10	84.3	27.4	7.7	4.3
LSD (<i>P</i> =0.05)) †	94	4.4	0.02	1.08	1.4	0.3	0.2
C.V. %	28	56.2	2.35	1.7	7.0	4.8	5.6

† Least significant difference between two means within a column.

Table 7. Lint yield, earliness, and fiber quality traits for CAHUGARPIH-1-88 and Tamcot varieties.

Strain and Variety	Fiber traits						
	Lint Yield	Earliness	Length	Uniformity	Strengh	Elongation	Microaire
	lb/acre	%	inches	ratio	g/tex	%	units
CAHUGARPIH-1-88	684	56.5	1.11	86.5	29.7	8.1	4.8
TAMCOT CAB-CS	718	60.5	1.10	83.8	25.6	8.3	4.4
TAMCOT HQ95	707	64.8	1.10	83.4	26.8	7.1	4.2
TAMCOT SPHINX	741	53.2	1.09	85.5	29.2	7.7	5.0
MEAN	712	58.8	1.10	84.8	27.8	7.8	4.6
LSD (<i>P</i> =0.05)) †	49	3.2	0.01	0.6	0.9	0.2	0.1
C.V. %	19	13.6	2.00	1.5	7.5	4.5	5.0

† Least significant difference between two means within a column.

Table 8. Lint yield, earliness, and fiber quality traits for CD3HHARCIH-1-88 and Tamcot varieties.

Strain and Variety	Fiber traits						
	Lint Yield	Earliness	Length	Uniformity	Strengh	Elongation	Microaire
	lb/acre	%	inches	ratio	g/tex	%	units
CD3HHARCIH-1-88	610	53.5	1.12	84.6	30.2	7.6	4.0
TAMCOT CAB-CS	741	62.4	1.10	83.7	25.3	8.3	4.6

TAMCOT HQ95	646	69.4	1.10	83.4	26.6	7.1	4.3
TAMCOT SPHINX	762	56.8	1.08	85	28.6	7.7	5.1

MEAN	690	60.5	1.09	84.2	27.7	7.7	4.5
LSD (<i>P</i> =0.05)) †	56	4.8	0.01	0.5	1.0	0.2	0.1
C.V. %	16	13.9	2.20	1.2	6.7	6.7	5.3

† Least significant difference between two means within a column.

Table 9. Lint yield, earliness, and fiber quality traits for CD3HCAHUGH-2-88 and Tamcot varieties.

Strain and Variety	Fiber traits						
	Lint Yield	Earliness	Length	Uniformity	Strengh	Elongation	Microaire
	lb/acre	%	inches	ratio	g/tex	%	units
CD3HCAHUGH-2-88	682	74.1	1.06	83.0	25.4	7.6	4.2
TAMCOT CAB-CS	787	62.9	1.10	83.9	25.3	8.3	4.6
TAMCOT HQ95	698	69.4	1.10	83.6	26.6	7.1	4.3
TAMCOT SPHINX	787	62.9	1.08	85.2	28.7	7.6	5.1
MEAN	749	65.8	1.08	83.9	26.5	7.6	4.5
LSD (<i>P</i> =0.05)) †	44	4.1	0.01	0.6	1.1	0.2	0.1
C.V. %	10	9.8	2.02	1.3	7.1	4.9	4.9

† Least significant difference between two means within a column.

Table 10. Lint yield, earliness, and fiber quality traits for CD3HCHULBH-1-88 and Tamcot varieties.

Strain and Variety	Fiber traits						
	Lint Yield	Earliness	Length	Uniformity	Strengh	Elongation	Microaire
	lb/acre	%	inches	ratio	g/tex	%	units

CD3HC HULBH- 1-88	678	63.0	1.02	83.6	27.2	7.9	4.7
TAMCO T CAB- CS	701	60.0	1.10	83.7	25.5	8.3	4.4
TAMCO T HQ95	674	64.0	1.10	83.5	26.8	7.7	4.1
TAMCO T SPHINX	715	53.0	1.09	85.3	29.1	7.7	4.9
MEAN	692	59.9	1.07	84	27.1	7.7	4.5
LSD (<i>P</i> =0.05)	NS	3.2	0.03	0.5	0.9	0.2	0.1
†							
C.V. %	19	13.0	6.80	1.4	7.0	4.9	5.0

† Least significant difference between two means within a column.

Table 11. Lint yield, earliness, and fiber quality traits for CABD3CABCH-1-89 and Tamcot varieties.

Strain and Variety	Fiber traits						
	Lint Yield	Ear line ss	Leng th inch es	Unifo r ratio	Stren gth g/tex	Elon gatio n %	Micr onair e units
CABD3 CABC H-1-89	698	65.3	1.09	84.3	28.0	7.7	4.5
TAMCO T CAB- CS	701	59.7	1.10	83.7	25.5	8.3	4.4
TAMCO T HQ95	674	64.1	1.10	83.5	26.8	7.1	4.1
TAMCO T SPHINX	715	52.6	1.09	85.3	29.1	7.7	5.0
MEAN	697	60.4	1.09	84.2	27.4	7.7	4.5
LSD (<i>P</i> =0.05)	53	3.3	0.01	0.54	0.9	0.16	0.1
†							
C.V. %	19.8	13.1	2.2	1.4	7.0	4.5	5.4

† Least significant difference between two means within a column.

Table 12. Lint yield, earliness, and fiber quality traits for CD3HCABCUH-1-89 and Tamcot varieties.

Fiber traits							
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Strain and Variety	Lint Yield	Earl ines s	Leng th inche s	Unifo r ratio	Stren gth g/tex	Elon gatio n %	Micro naire units
		lb/ac re	%	inche s	ratio	g/tex	%
CD3HC ABCU H-1-89	646	62.0	1.12	83.7	26.0	7.4	4.5
TAMCO T CAB- CS	741	62.4	1.10	83.7	25.3	8.3	4.6
TAMCO T HQ95	646	69.4	1.10	83.4	26.6	7.1	4.3
TAMCO T SPHINX	762	56.8	1.08	85.0	28.6	7.7	5.1
MEAN	699	62.7	1.09	84	26.6	7.6	4.6
LSD (<i>P</i> =0.05)	57	4.8	0.01	0.5	1.0	0.2	0.1
†							
C.V. %	17	13.4	2.00	1.2	6.9	4.9	5.4

† Least significant difference between two means within a column.

Table 13. Lint yield, earliness, and fiber quality traits for LBBCD BOAKH-1-90 and Tamcot varieties.

Strain and Variety	Fiber traits						
	Lint Yield	Ear line ss	Leng th inch es	Unifo r ratio	Stren gth g/tex	Elon gatio n %	Micr onair e units
	lb/ac re	%	inch es	ratio	g/tex	%	units
LBBCD BOAK H-1-90	700	52.1	1.15	85.1	27.9	7.1	4.2
TAMCO T CAB- CS	667	58.7	1.09	83.7	26.1	8.4	4.2
TAMCO T HQ95	714	61.7	1.10	83.2	27.2	7.2	4.0
TAMCO T SPHINX	675	50.5	1.09	85.8	30.0	7.9	4.8
MEAN	689	55.7	1.10	84.5	27.8	7.6	4.3
LSD (<i>P</i> =0.05)	84	4.6	0.02	1.2	1.5	0.3	0.2
†							
C.V. %	25	15.6	2.08	1.9	7.0	5.1	5.3

† Least significant difference between two means within a column.

