No. 200300342

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Jack E. Jones

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE [illegible]GHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR [illegible]ORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE [illegible] PURPOSE , OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE [illegible], OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT [illegible] BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

'JAJO 8190'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this sixteenth day of March, in the year two thousand and five.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

[illegible]retary of Agriculture

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FORM APPROVED - OMB NO. 0581-0055

US DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.
Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 242 1). Information is held confidential until certificate is issued (7 U.S.C. 2426).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

1. NAME OF OWNER
JACK E. JONES, Ph. D.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME
JAJO 8190, CS_A0104

3. VARIETY NAME
'JAJO 8190'

4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code and Country
246 MAXINE DRIVE,
BATON ROUGE, LA 70808-6831, USA

5. TELEPHONE (include area code)
225/766-0403

6. FAX (include area code)
225/766-0403

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PVPO NUMBER
200300342

FILING DATE
09/15/2003

7. IF OWNER NAMED IS NOT A PERSON, GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.)

8. IF INCORPORATED, GIVE STATE OF INCORPORATION

9. DATE OF INCORPORATION

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE (S) TO SERVE IN THIS APPLICATION
(First person listed will receive all papers
JACK E. JONES
246 MAXINE DR.
BATON ROUGE, LA, 70808-6831

FILING & EXAMINATION FEES:
$ 3652.-
DATE: 09/18/2003
CERTIFICATE FEE:
$ 432.00
DATE: 10/12/04

11. TELEPHONE *(Include area code)*
225-766-0403

12. FAX *(Include area code)*
225-766-0403

13. E-MAIL
janhejo@cox.net

14. CROP KIND *Common Name)*
UPLAND COTTON

15. GENUS AND SPECIES OF CROP
Gossypium hirsutum L.

16. FAMILY NAME *(Botanical)*
MALVACEAE

17. IS THE VARIETY A FIRST GENERATION HYBRID?
[ ] YES [X] NO

18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)

a. [X] Exhibit A. (Breeding History)
b. [X] Exhibit B.(Statement of Distinctness)
c. [X] Exhibit C. (Objective Description)
d. [ ] Exhibit D. Additional Description of the Variety (Optional)
e. [X] Exhibit E. (Statement of Ownership)
f. [X] Voucher Sample (2.500 viable untreated seed or, for tuber propagated varieties, tissue culture will be deposited and maintained in an approved public repository)
g. [X] **Application** and Examination Fee ($3,652), made payable to "Treasurer of the United States" *Mail to the Plant Variety Protection Office)*

19. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the plant variety Protection Act)
[ ] YES *(If "yes", answer items 20 and 21 below* [X] NO *(if no go to item 22)*

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS
[ ] YES [ ] NO

21. IF YES TO 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDERS SEED?
[ ] FOUNDATION [ ] REGISTERED [ ] CERTIFIED

22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD DISPOSED OF TRANSFERRED, OR USED IN THE U.S. OR OTHER COUNTRIES?
[ ] YES [X] NO
If yes, you must provide the date of first sale, disposition, transfer, or use for each country and the circumstances. (please use space indicated on reverse.)

23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT *(Plant breeders right or patent)* ?
[ ] YES [X] NO
If yes, please give country, date of filing or issuance and assigned reference number. *(Please use space indicated on reverse.)*

24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is (are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER

NAME (Please print or type)
JACK E. JONES

CAPACITY OR TITLE : **COTTON BREEDER** DATE: 9/11/03

SIGNATURE OF OWNER

NAME (please print or type)

CAPACITY OR TITLE DATE:

STD-470(03-96) (Previous editions are to be destroyed)

(See reverse for instructions and information collection burden statement)

PLANT VARIETY PROTECTION APPLICATION

EXHIBIT A

BREEDING HISTORY

CULTIVAR: 'JAJO 8190'

'JAJO 8190' originated from a cross between 'LA 887' and 'SG 125' made in 1994. 'LA 887' (Crop Sci. 31:1701, Reg. No. CV-97, PVP #9100065) originated from a cross of two experimental strains, LA 434-RKR and DES 11-9. LA 887 possesses good fiber quality, broad adaptation and good to moderate resistance to the Fusarium wilt/rootknot nematode disease complex. LA 434-RKR (Crop Sci. 28:199-200) is high fiber quality, Fusarium wilt/rootknot nematode resistant strain that originated from a cross of Bayou 7769 X 'Deltapine 16'. Bayou 7769 (a high quality, root-knot resistant experimental strain) originated from a cross of 'Deltapine 15' X 'Clevewilt 6', the original source for root-knot resistance in LA 887. DES 11-9 originated from a cross of 'DES 24' X DES 2134-047 (a sib of 'DES 56'). A selection from DES 11-9 (DES 11913) was subsequently released by Mississippi Delta Branch Experiment Station as cultivar 'DES 119' (Crop Sci. 26:646-647, Reg. No. CV-88, PVP #8500176). DES 119 was a widely adapted, popular cultivar during the late 1980's and 1990's. 'SG 125' (PVP #9400063) originated from a cross of 'Deltapine 50' x 'DES 119', backcrossed twice to DES 119 (Dp50/3*DES 119). SG 125 is a smooth-leaf, early maturing, widely adapted cultivar. Deltapine 50 (PVP #8400154) is a smooth-leaf, widely adapteded cultivar that was developed from the cross of Deltapine 16 x DES 56. DES 56 was from a cross of Stoneville 213 x PD 2164.

The F1 population was advanced at the Cotton Winter Nursery in Tecoman, Mexico during the winter of 1994-95. The F_2 population was grown at St. Joseph in 1995, harvested in bulk, and the F_3 population advanced (bulk harvest) in Mexico during the winter of 1995-96. The F_4 generation was grown at St. Joseph in 1996 and selected for smooth-leaf during the growing season. Superior appearing individual smooth-leaf plants were harvested individually, ginned and then selected on the basis of lint % and fiber properties. F_5 progeny rows were grown at St. Joseph in 1997 and evaluated for smooth-leaf, lint percentage, earliness, stormproofness, and productivity. Individual plants were again selected from the more promising F_5 lines. F_6 progeny row of plant selection #970823 (which came from plant selection # 961144) was grown at St. Joseph in 1998. The progeny row was judged to be homozygous, uniform and worthy of yield testing. The selection was bulk harvested in 1998 as JAJO 8190 and entered in yield trials in 1999 (6 tests), 2000 (16 tests), 2001 (10 tests) and 2002 (19 tests). The tests were conducted as in-house tests by commercial seed companies (Phytogen, Syngenta), state experiment stations, and as an entry in the 2002 Regional Breeders Strain Tests. Small seed increases of JAJO 8190 were grown at St. Joseph in 1999, 2000, 2001, and 2002. Each year, and for generations F_6 through F_{10}, 100 to 300 plants of the seed increase plots were closely examined for purity and found to be uniform, stable and free of variants and off-types except for St Joseph, 2001 where 2 of 300 plants were hairy (plants removed). These hairy plants were considered off-types, probably resulted from out-crossing and/or contamination, and are not to be considered a normal feature of the variety though an occasional off-type plant due to outcrossing is to be expected, the frequency of such is dependent on proximity to other cottons and populations of pollinating bees. Thus, JAJO 8190 was found to be both uniform and stable during 4 years of yield testing and 5 generations of seed increases, and to have a very low level (2/900) of off-type plants in 5 generations of seed increases.

PLANT VARIETY PROTECTION APPLICATION

EXHIBIT B

STATEMENT OF DISTINCTNESS

CULTIVAR: 'JAJO 8190'

Existing varieties most similar to 'JAJO 8190' are application variety 'JAJO 8185, which has the same parents as JAJO 8190, and their parent varieties: 'LA 887' and 'SG 125'.

JAJO 8190 differs from 'JAJO 8185' by having fewer nodes to 1st fruiting branch (5.6 *Vs* 6.3), a higher lint % (43.6 *Vs* 42.7), a heaver boll weight (6.11*Vs* 5.73), and a lower % fiber elongation1 (8.8 *Vs* 9.2) (Exhibit C).

JAJO 8190 is distinguished from 'LA 887' by its possession of the smooth-leaf (sm_3) trait, i.e. reduced leaf pubescence, while LA 887 has hairy leaves. Also, JAJO 8190 is earlier maturing, fruits closer to the ground at a lower node number, has smaller seed (seed index), higher lint %, higher E1 % fiber elongation and less resistance to root knot nematodes than LA 887 (Exhibit C, Appendix B).

JAJO 8190 is distinguished from 'SG 125' by having a higher lint index (7.82 *Vs* 6.73), higher lint % (43.6 *Vs* 39.8), heaver bolls (6.11 Vs 5.47), higher T1 fiber strength (33.0 *Vs* 30.8), higher % fiber elongation (8.8 *Vs* 8.6), and higher Micronaire (5.28 *Vs* 4.98) than SG 125 (Exhibit C).

JAJO 8190 is also similar to the new PVP Applicants, 'JAJO 8098' (current), '556' (Application No 9900060) and '569' (Application No 9900061) in as much as they share a common parent (LA 887). JAJO 8098 and '556' are nectariless while JAJO 8190 has nectar glands. Indirect comparisons of JAJO 8190 and '569' was made by comparing each to LA 887. These indirect comparisons show JAJO 8190 to be less erect, have a lighter green color, fruit closer to the ground and at a lower node number than '569'. Also, JAJO 8190 has a higher lint %, more seed per boll, lower T1 fiber strength, and higher % fiber elongation than '569' (Exhibit C, attached and Exhibit C for Application #9900061).

For certain other conventional smooth-leaf varieties, direct comparisons indicate that JAJO 8190 differs from 'FM 958' and 'FM 966' by having higher Micronaire, shorter fiber (UHM), weaker fiber (T1) and higher fiber elongation (E1) than the latter. Jajo 8190 differs from 'SG 747' by having higher lint %, larger bolls (3 of 6 tests), and stronger fiber (3 of 6 tests) than the latter; it differs from 'SG 105' by having higher lint %, larger bolls, and higher fiber elongation (E1) than the latter, and it differs from 'SG 821' by having higher lint %, larger bolls, higher Micronaire, and lower fiber elongation (4 of 6 tests) than the latter (Exhibit C Supplement).

Indirect comparisons indicate that JAJO 8190 differs from DP 491 by having higher Micronaire, shorter UHM fiber length, lower T1 fiber strength, and higher E1 fiber elongation than the latter. It differs from DP 493 by having larger bolls, higher Micronaire (4 of 6 tests), shorter UHM fiber length (4 of 6 tests), and higher E1 fiber elongation than the latter. JAJO 8190 differs from DP 565 by having higher lint %, larger bolls, higher Micronaire (6 of 12 tests), shorter UHM length (6 of 12 tests), and higher E1 fiber elongation than the latter. JAJO 8190 differs from DP DeltaPEARL by having higher lint %, larger bolls, higher Micronaire (7 of 12 tests), shorter UHM fiber length, and higher E1 fiber elongation than the latter. JAJO 8190 differs from FM 989 by having higher lint %, larger bolls (4 of 5 tests), higher Micronaire, shorter UHM fiber length, lower T1 fiber strength, and higher E1 fiber elongation than the latter. Additional indirect comparisons of JAJO 8190 with other varieties and strains in the LA 2001-2002 Medium Maturity CVT are possible in Exhibit C, Supplement-2.

PVP, SJ, 2002, JAJO APPLICANTS, Combined Analysis, "Micronaire"

200300342

		Micronaire Units							
Rep	**Test**	**Jajo 8098**	**Jajo 8185**	**Jajo 8190**	**LA 887**	**MD 51ne**	**SG 125**	**Avg**	
1	Test 1	5.10	5.30	5.30	5.20	5.10	5.10		
2		5.10	5.20	5.40	5.20	5.10	5.10		
3		5.10	5.20	5.20	5.30	5.20	5.00		
1	Test 2	5.00	5.10	5.40	5.20	5.10	4.90		
2		5.20	5.20	5.10	5.10	5.10	5.00		
3		5.10	5.10	5.30	5.30	5.10	4.80		
	Average	**5.10**	**5.18**	**5.28**	**5.22**	**5.12**	**4.98**	**5.15**	
	Anova: Two-Factor With Replication								
	SUMMARY	Jajo 8098	Jajo 8185	Jajo 8190	LA 887	MD 51ne	SG 125	Total	
	Test 1								
	Count	3	3	3	3	3	3	18	
	Sum	15.3	15.7	15.9	15.7	15.4	15.2	93.2	
	Average	5.10	5.23	5.30	5.23	5.13	5.07	**5.18**	b
	Variance	7.105E-15	0.0033333	0.01	0.0033333	0.0033333	0.0033333	0.0100654	
	Test 2								
	Count	3	3	3	3	3	3	18	
	Sum	15.3	15.4	15.8	15.6	15.3	14.7	92.1	
	Average	5.10	5.13	5.27	5.20	5.10	4.90	5.12	a
	Variance	0.01	0.0033333	0.0233333	0.01	7.105E-15	0.01	0.0202941	
	Total	**Jajo 8098**	**Jajo 8185**	**Jajo 8190**	**LA 887**	**MD 51ne**	**SG 125**	**Avg**	
	Count	6	6	6	6	6	6		
	Sum	30.6	31.1	31.7	31.3	30.7	29.9		
	Average	**5.10**	**5.18**	**5.28**	**5.22**	**5.12**	**4.98**	**5.147**	
	Variance	0.0040	0.0057	0.0137	0.0057	0.0017	0.0137		
	ANOVA								
	Source	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*		
	Test	0.0336111	1	0.0336	5.042	0.034225	4.260		
	Variety	0.3280556	5	0.0656	9.842	0.000033	2.621		
	Int. T x V	0.0280556	5	0.0056	0.842	0.533539	2.621		
	Error	0.160000	24	0.0067					
	Total	0.5497222	35						
	DMR=(sq root 0.0067/6)=.0334* 2.919 =0.098 for 2; *3.066=0.102 for 3; *3160=0.106 for 3.								
	Note: The interaction of test-variety was non-significant, thus separation of means using								
	combined error term is valid.								
	SG 125	4.98	a	CV(%)=(sq root0.0067)/5.15*100=1.6%					
	Jajo 8098	5.10	b						
	MD 51ne	5.12	bc						
	Jajo 8185	5.18	bcd						
	LA 887	5.22	cd						
	Jajo 8190	5.28	d						

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PVP, SJ, 2002, JAJO APPLICANTS, Combined ANOVA "Node at First Fruiting Branch"

	J8098	J8185	J8190	LA887	MD51ne	SG125		
Test1	5.7	6.2	4.6	6.7	6.1	5.8		
	5.8	6.2	5.2	6.6	6.1	5.4		
	5.5	6.0	5.1	6.5	6.1	5.6		
	5.5	6.1	5.3	6.6	6.4	5.7		
Test 2	8.2	7.1	6.7	7.4	8.3	6.7		
	6.4	6.8	7.0	8.5	8.1	6.6		
	5.9	6.4	5.3	7.0	7.5	6.7		
	6.2	5.6	5.7	6.9	6.1	5.7		
Anova: Two-Factor With Replication								
Anova: Two-Factor With Replication								
SUMMARY	J8098	J8185	J8190	LA887	MD51ne	SG125	Total	Average
Test1								
Count	4	4	4	4	4	4	24	
Sum	22.5	24.5	20.2	26.4	24.7	22.5	140.8	23.47
Average	5.625	6.125	5.05	6.6	6.175	5.625	35.2	
Variance	0.0225	0.00917	0.09667	0.00667	0.0225	0.02917	0.186667	
Test2								
Count	4	4	4	4	4	4	24	
Sum	26.7	25.9	24.7	29.8	30	25.7	162.8	27.13
Average	6.675	6.475	6.175	7.45	7.5	6.425	40.7	
Variance	1.07583	0.4225	0.64917	0.53667	0.98667	0.23583	3.906667	
Total								
Count	8	8	8	8	8	8		
Sum	49.2	50.4	44.9	56.2	54.7	48.2		
Average	12.3	12.6	11.225	14.05	13.675	12.05		
Variance	1.09833	0.43167	0.74583	0.54333	1.00917	0.265		
Average Dates 1 & 2								
Mean	6.15	6.30	5.61	7.03	6.84	6.03		
Variance	0.5492	0.2158	0.3729	0.2717	0.5046	0.1325		
ANOVA								
Source of Var	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*		
Tests	10.0833	1	10.0833	29.56	3.9E-06	4.11		
Genotype	11.0525	5	2.2105	6.48	0.00022	2.48		
Int T x G	1.1342	5	0.2268	0.66	0.65236	2.48		
Error	12.2800	36	0.3411					
Total	34.55	47						
Note: Use combine analysis in mean separation since Int Test x Genotype was non-significant								
Duncan's=sq r 0.34111/8=0.2065*2.875=**0.5937** for 2; **0.6238** for 3; **0.6436** for 4; **0.6577** for 5								
Variety	Mean							
Jajo 8190	5.61a							
SG 125	6.03ab							
Jajo 8098	6.15ab							
Jajo 8185	6.30 bc							
MD 51ne	6.84 cd							
LA 887	7.03 d							

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EXHIBIT C (COTTON)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

OBJECTIVE DESCRIPTION OF VARIETY
COTTON (*Gossypium* spp.)

NAME OF APPLICANT(S): **Jack E. Jones, Ph.D.** |TEMPORARY DESIGNATION: **Jajo 8190** **CS 2303** |VARIETY NAME: **JAJO 8190**|

ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code) **246 Maxine Dr., Baton Rouge, LA 70808-6831**

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PVPO NUMBER
200300342

Place the appropriate data that describes the varietal characteristic of this variety in the space provided. Characteristics described, including numerical measurements, should represent those that are typical for the variety. Royal Horticultural Society or any recognized color fan may be used to determine plant colors. Characters marked with an asterisk * indicate necessary characters to be measured.

SPECIFIC VARIETIES USED FOR COMPARISON AS CHECK VARIETIES IN THIS APPLICATION: Use standard regional check varieties which are adapted to your area. One of the comparison varieties must be the most similar variety used in Exhibit B.

Variety 1. **JAJO 8185** Variety 2. **JAJO 8098** Variety 3. **LA 887** Variety 4. **SG 125**

*1. SPECIES:

__X__ *G. hirsutum* L. _____ *G. barbadense* L.

*2. AREA(S) OF ADAPTATION: (A = Adapted, NA = Not Adapted, NT = Not Tested)

_A_ Eastern	__A__ Delta	__A__ Central	_NT_ Blacklands
_A_ Plains	_NT_ Western	_NT_ Arizona	_NT_ San Joaquin
____ Other (Specify): _____			

3. GENERAL: Characteristics which are known to be variable but are still useful for a meaningful description of the variety.

	Application Variety	Comparison Variety 1	Comparison Variety 2	Comparison Variety 3	Comparison Variety 4
Plant Habit: Spreading, Intermediate, Compact:	Intermediate	Intermediate	Intermediate	Spreading	Intermediate
Foliage: Sparse, Intermediate, Dense	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate
Stem Lodging: Lodging, Intermediate, Erect	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate
Fruiting Branch: Clustered, Short, Normal	Normal	Normal	Normal	Normal	Normal

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3. GENERAL: (continued)

200300342

Growth: **Determinate, Intermediate, Indeterminate**	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate
Leaf Color: Greenish yellow, Light green, Medium green, Dark green	Light green	Light green	Light green	Light green	Light green
Boll Shape: Length less than width, Length equal to width, Length more than width	Length>width	Length>width	Length>width	Length>width	Length>width
Boll Breadth: Broadest at base, Broadest at middle	Broadest at base	Broadest at base	Broadest at base	Broadest at base	Broadest at base

*4. MATURITY: (50 % Open bolls; Preferred method; Describe method if different method was used.)

Percent open bolls	63.6 a	71.2 a	64.0 a	51.1 b	74.0 a

5. PLANT:

Cm to 1st Fruiting Branch: (from cotyledonary node)	20.3 a	22.1 ab	20.9 ab	24.9 c	22.9 bc
No. of Nodes to 1st Fruiting Branch: (excluding cotyledonary node)	5.6 a	6.3 b	6.2 ab	7.0 c	6.0 ab
Mature Plant Height cm: (from cotyledonary node to terminal)	70.3 a	67.0 a	69.9 a	76.4 a	67.6 a

*6. LEAF: Upper most, fully expanded leaf.

Type: Normal, Sub Okra, Okra, Super Okra	Normal	Normal	Normal	Normal	Normal
Pubescence: Absent, Sparse, Medium, Dense **OR** Trichomes/cm^2 (Bottom surface excluding veins)	Absent	Absent	Absent	Medium	Absent
Nectaries: Present or Absent	Present	Present	Absent	Present	Present

*7. STEM PUBESCENCE:

Glabrous, Intermediate, Hairy	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate

*8. GLANDS: (Gossypol) Absent, Sparse, Normal, More Than Normal

Leaf:	Normal	Normal	Normal	Normal	Normal
Stem:	Normal	Normal	Normal	Normal	Normal
Calyx Lobe: (normal is absent)	Normal	Normal	Normal	Normal	Normal

*9. FLOWER:

Petals: Cream, Yellow	Cream	Cream	Cream	Cream	Cream
Pollen: Cream, Yellow	Cream	Cream	Cream	Cream	Cream
Petal Spot: Present, Absent	Absent	Absent	Absent	Absent	Absent

*10. SEED:

200300342

Seed Index: (g/100 seed, fuzzy basis)	10.1 b	9.8 bc	9.6 c	11.4 a	10.0 b
Lint Index: (g lint/100 seeds)	7.82 a	7.30 a	7.45 a	7.52 a	6.73 b

*11. BOLL:

Lint Percent: __x__ Picked _____ Pulled	43.6 a	42.7 b	43.8 a	39.8 c	39.8 c
OR					
Gin Turnout: _____ Picked _____ Stripped	_____	_____	_____	_____	_____
Number of Seeds per Boll	34.1 a	33.4 a	34.6 a	32.9 a	33.1 a
Grams Seed Cotton per Boll	6.11 ab	5.73 cd	5.89 bc	6.21 a	5.4 7 d
Number of Locules per Boll	NT	NT	NT	NT	NT
Boll Type: (Stormproof, Storm Resistant,Open)	Open	Open	Storm Resistant	Open	Open

12. FIBER PROPERTIES:

Specify Method (HVI or other): HVI

* **Length:** (inches, 2.5% SL)	1.15 b	1.14 b	1.11 c	1.17 a	1.17 a
* **Uniformity:** (%)	85.1 a	84.9 a	84.5 a	85.2 a	85.3 a
* **Strength**, T1 (g/tex)	33.0 ab	32.8 ab	31.4 bc	34.5 a	30.8 c
* **Elongation**, E1 (%)	8.8 b	9.2 a	7.8 d	7.8 d	8.6 c
* **Micronaire:**	5.28 c	5.18 bc	5.10 b	5.22c	4.98 a
Fineness (Source_____)	NT	NT	NT	NT	NT
Yarn Tenacity: (cN/tex, 27 tex)	NT	NT	NT	NT	NT
Yarn Strength: (lbs. 22's)	NT	NT	NT	NT	NT

13. DISEASES: (NT = Not Tested, S = Susceptible, MS = Moderately Susceptible, MR = Moderately Resistant, R = Resistant)

__NT__ *Alternaria macrospora*

__NT__ Anthracnose

__NT__ Ascochyta Blight

__NT__ Bacterial Blight (Race 1)

__NT__ Bacterial Blight (Race 2)

_MS Bacterial Blight (natural infestation at St. Joseph)

_MR__ Fusarium Wilt

__NT__ Phymatotrichum Root Rot

__NT__ *Pythium* (specify species)

__NT__ *Rhizoctonia solani*

__NT__ Southwestern Cotton Rust

__NT__ Thielayiopsis basicola

13. DISEASES : (continued)

8

__NT__Diplodia Boll Rot

___NT_Verticillium Wilt

_____Other (specify)_____

14. NEMATODES, INSECTS AND PESTS: (NT = Not Tested, S = Susceptible, MS = Moderately Susceptible, MR = Moderately Resistant, R = Resistant)

S Root-Knot Nematode

_ S____Reniform Nematode

_NT___Boll Weevil

_NT_Grasshopper (specify species):_____

_NT___Bollworm

_NT_Lygus (specify species):_____

_NT___Cotton Aphid

__NT__Pink Bollworm

_NT__Cotton Fleahopper

__NT_Spider Mite (specify species):_____

_NT__Cotton Leafworm

__NT_Stink Bug (specify species):_____

_NT__Cutworm (specify species):_____

NT Thrips (specify species):_____

_NT__Fall Armyworm

__NT__Tobacco Bud Worm

_____Other (specify):_____

15. COMMENTS: Present any additional information that cannot adequately be described in 1 through 13 which significantly distinguishes your variety.

PLANT VARIETY PROTECTION APPLICATION – JAJO 8190

EXHIBIT C (SUPPLEMENT)

'JAJO 8190'

These data are a sub-set extracted from the Louisiana Experiment Station (LAES) Research Summary Publication No. 140 "2001 Cotton Variety Trials in Louisiana", 2002 and the Louisiana Experiment Station (LAES) Research Summary Publication No. 149 "2002 Cotton Variety Trials in Louisiana", 2003 . The data are also published at the following site on the web:
http://www.agctr.lsu.edu/inst/research/stations/redriver/wdc/wdccvar.htm

The 2001 and 2002 LA Early-Maturing Variety Test data set includes JAJO 8190 (Application Varieties) and JAJO 8185 (Comparison Variety) and other varieties and strains, including four check varieties common with the 2001 and 2002 LA Medium-Maturing Variety Tests. Differences between JAJO 8190 and JAJO 8185 in lint %, boll weight, and fiber elongation were confirmed (Exhibit C Supplement).

The common check varieties used in the 2001 tests were SG 747, PSC 355, SG 821 and DP NuCotn 33B. The common check varieties used in the 2002 tests were PSC 355, Stv 4892 BG/RR, Dp NuCot 33B, and Dp 458 BG/RR. These common checks permit indirect comparisons of JAJO 8190 and JAJO 8185 in the Early Maturing Test (EMT) with LA 887 and Jajo 8098 (Comparison Varieties) plus other varieties and strains of interest in the Medium Maturing Test (MMT) (Exhibit C, Supplement-2). At each location the two tests were planted adjacent to each other at the same date and received near similar cultural and harvesting practices. At each location, the two tests had near similar LSD and CV values. However, test effects were obvious in some cases. These effects were mitigated by calculating comparative means for JAJO 8190 and JAJO 8185. This was done by dividing the mean of the four checks varieties in each MMT by the mean of the same four check varieties in the EMT to obtain a conversion factor. This conversion factor was then used to multiply respective values of JAJO 8190 and JAJO 8185 in each EMT to calculate comparative means for MMT (adjusted for test effects). The higher Micronaire and elongation (E1) means of JAJO 8190 compared with JAJO 8098 were confirmed (Exhibit C, Supplement-2) Likewise, the higher lint %, higher Micronaire, shorter fiber length (UHM), lower fiber strength (T1), and higher fiber elongation (E1) means of JAJO 8190 compared with LA 887 were also confirmed. Indirect comparisons of JAJO 8190 with other varieties and strains of interest in the MMT can be made with a fair degree of confidence if these differences are consistent over tests (Exhibit C, Supplement-2).

PVP, JAJO 8190, Exhibit C, Supplement (LA 2001-02 Early-Maturity CVT) Percent Harvested @ 1st Pick

2001-02CVT-EM-LA Statewide, % 1st Pick								
	2001 Tests				2002 Tests			
Name	Alex.	SJ, CSL	SJ, Clay	Win, Irr	SJ,CSL	Win,Irr	Win,N-Irr	Avg
Acala 1517-99					91.7*			
All-Tex Atlas		64.6#			82.5#			
DES 810	85.3#	79.1	77.4	93.8	93.0*	95.1*	94.4	88.3
DES 816	93.2*	73.9	75.6	92.0	90.7*	93.2	93.1	87.4
DP 436 RR	93.2*	79.7	78.1	90.0	90.7*	84.7#	89.7	86.6
DP 444 BG/RR3/					92.9*	92.2	95.1*	
DP 451 BG/RR	93.8*	72.0	70.0#	92.1	90.1*	81.8#	90.1	84.3
DP 458 BG/RR (check,02)					83.5#	78.7#	88.3#	
DP NuCotn 33B (check,01-02)	88.1#	68.7#	70.4#	86.0	84.6#	89.0	87.7#	82.1
DPLX 99X35	92.6	83.2*	80.4	94.3*	94.9*	91.6	94.4	90.2
FM 819	92.3	81.7*	79.5	90.9	93.2*	94.5	93.5	89.4
FM 832		79.1			93.4*			
FM 958	91.6	73.4	70.0#	91.3	89.0	92.1	91.7	85.6
FM 966					93.7*	89.9	92.6	
Jajo 8185 (Comparison var.)	88.2#	72.9	76.4	89.6	90.7*	91.9	92.0	86.0
Jajo 8190 (Application var.)	**90.5**	**75.0**	**77.8**	**87.1**	**87.5**	**90.5**	**91.7**	**87.2**
Jajo 8200					91.5*	88.7	92.6	
OA 87					90.4*	84.3#	89.6	
OA 90					92.6*	95.9*	94.4	
PM 1218 BG/RR	93.9*	84.2*	81.5	93.1	94.0*	90.5	94.5	90.2
PSC 355 (check,01-02)	94.5*	82.6*	84.3*	92.3	93.3*	93.9	93.3	90.6
PSC PH98M-2983					91.6*	96.2*	92.6	
SG 105	91.3	82.4*	76.7	91.5	90.4*	86.2	89.2	86.8
SG 215 BG/RR	89.8	79.2	75.8	91.7	89.6	89.5	93.4	87.0
SG 521 RR	87.5#	67.7#	66.9#	78.1#	89.5	86.0	87.5#	80.5
SG 747 (check,01)	90.4	79.1	77.9	90.0				
SG 821 (check,01)	90.8	70.8	75.2	86.6				
STV 457	90.9	76.5	76.2	92.0	92.5*	88.3	90.5	86.7
STV 4793 RR	89.0	63.0#	66.8#	87.1	90.0*	87.9	87.7#	81.6
STV 4892 BG/RR (check,02)	90.3	71.8	75.4	89.8	90.1*	91.2	89.5	85.4
STV BXN 47	93.0*	81.5*	76.1	87.9	88.9			
STV BXN 49B	91.1	65.4#	73.1	88.5	90.1*	86.2	92.7	83.9
TX 28R					91.9*	92.7	93.5	
TX 295					91.8*	93.5	93.6	
Mean	91.4	74.8	74.9	90.1	90.6	89.9	91.7	86.2
LSD @ 0.05	2.2	5.3	4.9	6.9	2.2	4.6	2.9	
C.V. (%)	1.7	5.0	4.6	5.5	1.7	3.7	2.3	
3/ Tested as DPLX 00S13 BR.								
*, # = Significantly higher and lower than Application Variety, respectively, based on LSD for each test.								

PVP, JAJO 8190, Exhibit C Supplement (LA 2001-02 Early-Maturity CVT), Lint %.

2001 & 2002 CVT-EM-LA Statewide, Lint %													
	2001						2002						
Name	Alex.2/	BC2/	SJ,CSL2/	SJ,Clay2/	Win,Irr2/	Win,N-Irr2/	Alex.1/	BC2/	SJ,CSL2/	SJ,Clay2/	Win,Irr2/	Win,N-Irr2/	Avg
Acala 1517-99									36.7#				
All-Tex Atlas									35.1#				
DES 810	34.7#	37.8#	37.1#	36.7#	39.2#	36.9#	37.9#	37.7#	36.4#	37.4#	37.6#	38.9#	37.4
DES 816							37.2#	38.9#	37.8#	39.6#	39.7#	38.7#	
DP 436 RR	34.5#	38.7#	35.4#	36.8#	37.7#	36.4#	35.3#	36.2#	34.4#	36.8#	36.0#	36.0#	36.2
DP 444 BG/RR3/							40.8	40.7#	39.7#	42.1#	41.4#	41.9#	
DP 451 BG/RR	35.4#	39.3#	36.4#	36.6#	39.2#	36.8#	36.1#	36.4#	35.7#	37.3#	35.8#	36.8#	36.8
DP 458 BG/RR (check,02)							40.4#	39.8#	39.6#	41.2#	39.2#	40.3#	
DP NuCotn 33B(check,01-02)	35.4#	39.9#	37.6#	38.2#	40.4#	39.2#	40.0#	38.1#	37.2#	39.9#	39.2#	38.3#	38.6
DPLX 99X35							43.3	42.7#	42.1	43.6	43.9	45.0	
FM 819	36.6#	41.3#	39.7#	40.5#	42.2#	39.9#	40.1#	40.7#	38.8#	41.0#	41.7#	41.2#	40.3
FM 832									37.2#				
FM 958	39.6#	41.5#	40.0#	40.7#	43.6#	41.6#	40.0#	41.1#	40.3#	40.0#	41.3#	41.7#	41.0
FM 966							38.8#	40.9#	38.4#	40.6#	39.8#	41.1#	
Jajo 8185(Comparison var.)	40.2#	42.9#	40.7	40.9#	43.6#	41.3#	40.4#	42.5#	41.7	43.5	43.4	42.5#	42.0
Jajo 8190(Application var.)	**42.4**	**45.3**	**42.0**	**43.9**	**46.6**	**44.0**	**42.0**	**44.7**	**42.4**	**44.2**	**43.7**	**45.1**	**43.9**
Jajo 8200							38.6#	41.4#	40.1#	42.4#	41.5#	41.9#	
OA 87							40.7	41.7#	40.2#	42.2#	41.0#	41.7#	
OA 90							43.4	43.9#	41.7	44.2	44.1	44.5	
PM 1218 BG/RR	38.2#	41.0#	41.0	41.3#	43.2#	40.9#	40.2#	40.3#	39.0#	40.2#	39.1#	42.2#	40.6
PSC 355 (check,01-02)	37.5#	40.4#	37.2#	39.3#	42.6#	39.6#	40.1#	40.7#	38.4#	40.6#	41.0#	42.0#	40.0
PSC PH98M-2983							41.1	42.6#	41.0#	43.0#	43.2	43.0#	
SG 105	37.6#	41.1#	38.5#	39.8#	41.3#	38.6#	38.2#	39.8#	38.4#	40.1#	39.6#	40.6#	39.5
SG 215 BG/RR	38.2#	42.6#	39.2#	40.1#	42.8#	40.2#	40.1#	40.6#	39.1#	40.8#	40.1#	41.0#	40.4
SG 521 RR	37.3#	41.8#	41.0	38.5#	40.9#	40.1#	37.1#	40.4#	38.6#	39.7#	39.8#	40.1#	39.6
SG 747 (check,01)	39.6#	44.3	40.0#	40.7#	43.8#	41.3#							
SG 821 (check,01)	37.0#	41.0#	38.2#	39.3#	40.9#	38.5#							
STV 457	37.2#	41.3#	38.8#	39.4#	42.9#	38.8#	39.6#	40.5#	38.8#	40.7#	41.3#	40.9#	40.0
STV 4793 RR	39.2#	43.8#	39.8#	41.2#	42.4#	40.1#	39.3#	42.0#	40.2#	42.0#	41.2#	42.0	41.1
STV 4892 BG/RR (check,02)	38.3#	43.1#	39.9#	40.8#	43.0#	40.9#	40.5#	40.8#	39.9#	42.0#	41.2#	42.0	41.0
STV BXN 47	39.0#	43.3#	40.3#	40.9#	43.3#	38.9#			40.0#				
STV BXN 49B	37.0#	41.7#	38.8#	39.3#	41.3#	39.7#	40.3#	40.6#	38.6#	40.8#	39.8#	40.5#	39.9
TX 28R							42.4	40.4#	40.6#	42.6#	41.6#	41.1#	
TX 295							37.3#	38.1#	37.7#	39.0#	38.8#	38.8#	
Mean	37.7	41.4	38.7	39.7	42.1	39.6	39.7	40.5	38.9	41.0	40.6	41.1	
LSD @ 0.10/0.05	1.6	1.2	1.7	1.4	1.4	1.3	1.5	0.8	0.9	1.2	1.3	1.3	
C.V. (%)	1.0	0.6	1.1	0.7	0.8	0.6	3.1	0.3	0.3	0.5	6.0	7.0	

1/ Determined from grab samples taken from 4 replication; LSD @ .10 level of probability.

2/ Determined from 50-boll samples taken from 3 replications; LSD @ .05 level of probability

3/ Tested as DPLX 00S13 BR

*, # = Significantly higher and lower than Application Variety, respectively, based on LSD for each test.

PVP, JAJO 8190, Exhibit C, Supplement (LA 2001-02 Early-Maturity CVT), Boll Weight.

2001-02 CVT-EM-LA Statewide, Boll Weight (g)											
	2001						2002				
Name	Alex2/	BC2/	SJ,CSL2/	SJ,Clay2/	Win,Irr2/	Win,N-Irr2/	BC2/	SJ,CSL2/	SJ,Clay2/	Win,Irr2/	Win,N-Irr2/
Acala 1517-99								5.0#			
All-Tex Atlas								5.7			
DES 810	4.9	4.2#	4.1#	4.4#	4.3#	4.1#	4.9#	4.9#	5.2#	5.0#	4.6#
DES 816	5.2	5.0	4.3#	4.8#	5.0	4.7#	5.4#	5.3#	5.4#	5.6#	5.3#
DP 436 RR	6.0	4.9	4.3#	4.6#	4.8	5.2	5.2#	5.1#	5.4#	5.4#	5.1#
DP 444 BG/RR3/							5.2#	4.9#	5.2#	5.2#	5.1#
DP 451 BG/RR	5.0	5.4	4.2#	4.6#	4.9	4.6#	5.2#	5.1#	5.3#	5.4#	5.4
DP 458 BG/RR(check, 02)							4.7#	4.6#	4.8#	4.8#	4.9#
DP NuCotn 33B(ck,01-02)	5.0	4.8	3.9#	4.5#	4.6#	4.6#	5.0#	4.8#	5.0#	5.0#	4.8#
DPLX 99X35	4.8	4.4#	4.1#	4.5#	4.7	4.6#	5.2#	5.0#	5.3#	5.0#	5.0#
FM 819	4.6	4.1#	3.9#	4.1#	4.2#	4.1#	4.7#	4.6#	4.6#	5.0#	4.8#
FM 832								6.3*			
FM 958	5.8	4.6#	4.6	4.7#	4.8	5.3	6.1	5.9*	5.8	5.5#	5.5
FM 966							6.1	6.0*	6.3	6.2	5.9*
Jajo 8185(Comparison var)	6.0	5.0	4.4#	4.9#	4.9	5.0	5.4#	5.4	5.6#	5.8#	5.7
Jajo 8190(Application var)	**6.0**	**5.3**	**4.9**	**5.9**	**5.1**	**5.4**	**5.8**	**5.6**	**6.1**	**6.2**	**5.6**
Jajo 8200							5.5	5.1#	5.7#	5.7#	5.3#
OA 87							5.5	5.2#	5.3#	5.2#	5.4
OA 90							5.2#	5.0#	5.1#	5.2#	4.7#
PM 1218 BG/RR	5.4	5.2	5.0	5.5#	5.3	5.2	5.6	5.8	5.8	6.4	5.8
PSC 355 (check,01-02)	5.2	4.1#	4.1#	4.5#	4.5#	4.1#	5.0#	5.0#	5.1#	5.0#	4.9#
PSC PH98M-2983							5.5	5.1#	5.6#	5.2#	5.0#
SG 105	5.5	4.4#	4.2#	4.3#	4.4#	4.3#	5.1#	5.3#	5.5#	5.3#	5.1#
SG 215 BG/RR	5.4	4.8	4.5#	5.0#	4.7	4.3#	5.1#	5.2#	5.7#	5.5#	5.2#
SG 521 RR	4.9	5.3	3.9#	4.3#	4.7	4.7#	5.2#	4.9#	5.5#	5.0#	5.2#
SG 747 (check,01)	5.0	5.0	4.4#	4.8#	4.8	4.9#					
SG 821 (check,01)	5.4	4.7#	4.1#	5.1#	4.6#	4.5#					
STV 457	5.4	4.2#	4.3#	5.0#	4.8	4.9#	5.3#	5.5	5.6#	5.3#	5.3#
STV 4793 RR	5.2	4.6#	4.0#	4.5#	4.9	4.7#	5.2#	5.1#	5.3#	5.2#	5.1#
STV 4892 BG/RR(check,02)	4.9	4.6#	4.3#	4.8#	5.1	4.6#	5.2#	5.3#	5.7#	5.2#	5.2#
STV BXN 47	4.6	4.3#	4.0#	4.4#	4.4#	4.3#		4.8#			
STV BXN 49B	5.7	4.7#	4.1#	4.9#	4.7	5.3	5.5	5.2#	5.8	5.7#	5.3#
TX 28R							5.0#	4.9#	5.1#	5.2#	5.1#
TX 295							5.9	5.8	6.1	5.9#	5.5
Mean	5.2	4.7	4.3	4.7	4.8	4.7	5.3	5.2	5.5	5.4	5.2
LSD @ 0.05	NS	0.6	0.4	0.4	0.5	0.5	0.4	0.3	0.4	0.3	0.3
C.V. (%)	9.9	8.2	5.4	5.4	5.9	6.5	4.2	3.9	4.0	3.9	3.6

2/ Determined from 50-boll samples taken from 3 replications; LSD @ .05 level of probability

3/ Tested as DPLX 00S13 BR

*, # = Significantly higher and lower than application variety, respectively, based on the LSD for each test.

PVP, JAJO 8190

Exhibit C, Supplement (LA 2001-02 Early-Maturity CVT) - Micronaire.

2001-02CVT-EM-LA Statewide, Micronaire												
	2001						2002					
Name	Alex.2/	BC2/	SJ,CSL2/	SJ,Clay2/	Win,Irr2/	Win,N-Irr2/	Alex.1/	BC2/	SJ,CSL2/	SJ,Clay2/	Win,Irr2/	Win,N-Irr2/
Acala 1517-99									4.17#			
All-Tex Atlas									4.50#			
DES 810							4.60#	5.00#	4.67#	4.57#	4.50#	4.70#
DES 816	4.7#	4.5#	4.0#	4.4#	4.7#	5.3#	4.70#	5.00#	4.73#	4.77#	4.80#	4.90#
DP 436 RR	4.8#	4.6#	4.4	4.6#	4.8#	5.2#	4.90	5.10#	4.83#	4.90#	4.60#	4.90#
DP 444 BG/RR3/							4.20#	4.40#	4.57#	4.43#	4.10#	4.40#
DP 451 BG/RR	4.7#	4.7	4.5	4.6#	5.0	5.3#	4.50#	5.10#	4.87#	5.03	4.60#	5.10#
DP 458 BG/RR(check,02)							4.70#	5.40	5.03#	5.13	4.60#	5.10#
DP NuCotn 33B(ck,01-02)	4.8#	4.8	4.1#	4.4#	4.7#	5.3#	4.70#	5.20	4.83#	4.87#	4.70#	4.80#
DPLX 99X35	4.9	4.9	4.5	4.8#	5.1	5.4#	4.90	5.10#	5.03#	4.90#	4.80#	5.20
FM 819	4.7#	4.3#	4.2	4.4#	4.7#	5.3#	4.50#	4.60#	4.67#	4.43#	4.50#	4.60#
FM 832									4.57#			
FM 958	4.9	4.8	4.4	4.3#	4.9	5.5	4.80	5.10#	4.63#	4.60#	4.60#	4.80#
FM 966							4.70#	4.90#	4.53#	4.57#	4.30#	4.60#
Jajo 8185(comparison var)	4.9	4.6#	4.1#	4.6#	4.9	5.4#	5.00	5.20	5.10	5.03	4.90	5.00#
Jajo 8190(application var.)	**5.0**	**4.9**	**4.4**	**5.2**	**5.2**	**5.6**	**4.90**	**5.30**	**5.27**	**5.07**	**5.00**	**5.30**
Jajo 8200							4.50#	5.00#	4.77#	4.90#	4.60#	5.00#
OA 87							4.80	5.10#	4.93#	5.20	4.70#	5.10#
OA 90							4.90	5.10#	4.90#	4.93	4.90	5.00#
PM 1218 BG/RR	5.0	4.7	4.7*	5.0	5.4	5.6	5.00	5.10#	5.03#	4.87#	4.80#	5.30
PSC 355 (check,01-02)	5.1	4.8	4.4	4.6#	4.9	5.5	4.90	5.20	4.97#	4.87#	5.00	5.10#
PSC PH98M-2983							4.80	5.10#	4.87#	4.97	4.70#	5.00#
SG 105	5.0	4.9	4.5	4.6#	5.0	5.5	4.90	5.40	5.10	5.17	5.00	5.20
SG 215 BG/RR	5.0	4.6#	4.4	4.7#	5.1	5.6	4.60#	5.30	5.30	5.20	5.00	5.10#
SG 521 RR							4.70#	5.00#	5.03#	4.87#	4.60#	5.10#
SG 747 (check,01)	5.0	4.8	4.3	4.7#	5.1	5.6						
SG 821 (check,01)	4.7#	4.7	4.1#	4.8#	4.5#	5.4#						
STV 457	4.7#	4.3#	4.1#	4.6#	4.8#	5.3#	4.90	5.20	5.07#	4.87#	4.90	5.00#
STV 4793 RR	4.9	4.9	4.3	4.6#	5.2	5.7	5.00	5.30	5.23	5.23	4.80#	5.30
STV 4892 BG/RR (check,02)	5.0	4.9	4.3	5.0	5.2	5.6	4.90	5.30	5.37	5.27*	5.00	5.50*
STV BXN 47	4.8#	4.6#	4.3	4.6#	4.6#	5.6			5.00#			
STV BXN 49B	4.6#	4.4#	3.6#	4.4#	4.6#	5.6	4.70#	5.10#	4.70#	4.90#	4.70#	4.80#
TX 28R							4.90	5.20	5.13	4.97	5.00	5.00#
TX 295							4.40#	5.00#	4.80#	4.57#	4.50#	4.50#
Mean	4.8	4.6	4.2	4.6	4.8	5.4	4.75	5.10	4.88	4.90	4.72	4.98
LSD @ 0.10/0.05	0.2	0.3	0.3	0.3	0.4	0.2	0.20	0.20	0.20	0.17	0.20	0.20
C.V. (%)	3.0	4.4	4.2	4.2	5.2	2.3	4.10	2.30	2.50	2.10	3.10	2.80
1/ Determined from grab samples taken from 4 replication; LSD @ .10 level of probability.												
2/ Determined from 50-boll samples taken from 3 replications; LSD @ .05 level of probability												
3/ Tested as DPLX 00S13 BR												
*, # = Significantly higher and lower than Application Variety, respectively, based on the LSD for each test.												

PVP, JAJO 8190, Exhibit C Supplement (LA 2001-02 Early-Maturity CVT) - UHM Length.

2001-02CVT-EM-LA Statewide, UHM Length												
	2001						2002					
Name	Alex.2/	BC2/	SJ,CSL2/	SJ,Clay2/	Win,Irr2/	Win,N-Irr2/	Alex.1/	BC2/	SJ,CSL2/	SJ,Clay2/	Win,Irr2/	Win,N-Irr2/
Acala 1517-99									1.23*			
All-Tex Atlas									1.12#			
DES 810	1.13#	1.05	1.15	1.14*	1.06	1.06#	1.11#	1.12	1.15	1.14#	1.12	1.10*
DES 816	1.16	1.07*	1.15	1.16*	1.09	1.10	1.14	1.10	1.16	1.15	1.13	1.12*
DP 436 RR	1.17	1.09*	1.16	1.14*	1.11*	1.12*	1.15*	1.14	1.18	1.18	1.14	1.09
DP 444 BG/RR3/							1.12	1.12	1.17	1.16	1.12	1.09
DP 451 BG/RR	1.17	1.11*	1.14#	1.16*	1.09	1.11	1.14	1.12	1.16	1.17	1.15	1.13*
DP 458 BG/RR (check,02)							1.11#	1.11	1.15	1.15	1.13	1.11*
DP NuCotn 33B (ck,01-02)	1.17	1.07*	1.14#	1.15*	1.10	1.12*	1.13	1.14	1.16	1.17	1.14	1.12*
DPLX 99X35	1.17	1.05	1.14#	1.14*	1.07	1.09	1.12	1.14	1.18	1.15	1.12	1.09
FM 819	1.21*	1.09*	1.20*	1.18*	1.07	1.14*	1.17*	1.19*	1.21*	1.21*	1.18*	1.16*
FM 832									1.26*			
FM 958	1.20*	1.10*	1.20*	1.19*	1.07	1.14*	1.18*	1.17*	1.19	1.19	1.18*	1.15*
FM 966							1.15*	1.15*	1.23*	1.22*	1.20*	1.15*
Jajo 8185 (comparison var.)	1.17	1.06	1.13#	1.13	1.05	1.10	1.09#	1.12	1.15	1.14#	1.10#	1.09
Jajo 8190 (application var.)	**1.17**	**1.04**	**1.17**	**1.12**	**1.07**	**1.09**	**1.13**	**1.12**	**1.17**	**1.17**	**1.13**	**1.08**
Jajo 8200							1.10#	1.11	1.15	1.15	1.11	1.08
OA 87							1.06#	1.06#	1.08#	1.09#	1.08#	1.04#
OA 90							1.11#	1.13	1.15	1.16	1.12	1.09
PM 1218 BG/RR	1.12#	1.04	1.09#	1.10#	1.06	1.10	1.08#	1.09#	1.13#	1.13#	1.13	1.07
PSC 355 (check,01-02)	1.15	1.05	1.14#	1.14*	1.10	1.07	1.13	1.14	1.16	1.16	1.13	1.11*
PSC PH98M-2983							1.11#	1.10	1.15	1.17	1.10#	1.10*
SG 105	1.18	1.08*	1.15	1.15*	1.09	1.11	1.12	1.12	1.15	1.15	1.14	1.10*
SG 215 BG/RR	1.13#	1.03	1.09#	1.11	1.03#	1.09	1.09#	1.10	1.10#	1.09#	1.09#	1.06#
SG 521 RR							1.10#	1.09#	1.14#	1.15	1.10#	1.06#
SG 747 (check,01)	1.17	1.08*	1.17	1.14*	1.10	1.11						
SG 821 (check,01)	1.16	1.07*	1.13#	1.14*	1.10	1.10						
STV 457	1.19	1.05	1.16	1.15*	1.07	1.12*	1.12	1.11	1.15	1.16	1.11	1.10*
STV 4793 RR	1.13#	1.04	1.15	1.14*	1.07	1.08	1.11#	1.09#	1.15	1.12#	1.11	1.09
STV 4892 BG/RR (check,02)	1.16	1.06	1.14#	1.14*	1.07	1.10	1.10#	1.12	1.16	1.14#	1.11	1.09
STV BXN 47	1.14#	1.05	1.15	1.14*	1.09	1.11			1.18			
STV BXN 49B	1.18	1.10*	1.19	1.17*	1.10	1.11	1.13	1.15*	1.17	1.18	1.17*	1.13*
TX 28R							1.13	1.15*	1.18	1.17	1.16*	1.12*
TX 295							1.18*	1.17*	1.22*	1.23*	1.21*	1.16*
Mean	1.17	1.07	1.16	1.15	1.08	1.10	1.12	1.12	1.17	1.16	1.13	1.10
LSD @ 0.10\0.05	0.03	0.03	0.03	0.02	0.04	0.03	0.02	0.03	0.03	0.03	0.03	0.02
C.V. (%)	1.4	1.5	1.7	1.2	2.1	1.7	1.6	1.4	1.30	1.6	1.6	1.4

1/ Determined from grab samples taken from 4 replication; LSD @ .10 level of probability.

2/ Determined from 50-boll samples taken from 3 replications; LSD @ .05 level of probability

3/ Tested as DPLX 00S13 BR

*, # = Significantly higher and lower, respectively, than application variety based on LSD for respective test.

PVP. JAJO 8190, Exhibit C, Supplement (LA 2001-02 Early-Maturity CVT) - T1 Fiber Strength.

2001-02CVT-EM-LA Statewide, Fiber Strength (T1)												
	2001						2002					
Name	Alex.2/	BC2/	SJ,CSL2/	SJ,Clay2/	Win,Irr2/	Win,N-Irr2/	Alex.1/	BC2/	SJ,CSL2/	SJ,Clay2/	Win,Irr2/	Win,N-Irr2/
Acala 1517-99									34.0*			
All-Tex Atlas									32.9			
DES 810	32.8	28.5	31.5*		31.3*	31.2	31.2	32.9*	33.5*	33.4	31.2	32.3
DES 816	33.7*	30.2*	31.7*	33.8*	30.9	33.4	33.7*	32.3	32.6	33.7	30.7	33.4*
DP 436 RR	29.6#	27.8	28.1#	30.6#	27.2#	31.0#	30.2#	30.4	30.2#	30.0#	29.3#	29.8#
DP 444 BG/RR3/							30.0#	29.8#	32.0	32.3	30.0#	31.2
DP 451 BG/RR	29.5#	27.5	28.1#	30.4#	27.6#	30.8#	30.0#	29.6#	29.8#	29.9#	30.0#	30.0#
DP 458 BG/RR (check,02)							31.5	30.8	31.8	33.0	30.1	31.2
DP NuCotn 33B(check,01-02)	31.8	27.4#	28.6#	31.1	28.4#	31.5	31.2	30.8	32.3	31.8	31.2	32.0
DPLX 99X35	32.3	28.5	28.9#	30.7#	27.1#	30.6#	30.5#	31.1	30.7#	31.4	28.8#	29.8#
FM 819	36.3*	29.1	32.7*	33.9*	31.9*	34.7*	34.0*	34.1*	34.7*	33.7	33.1*	34.2*
FM 832									35.2*			
FM 958	34.9*	28.6	31.9*	34.5*	32.1*	35.4*	34.2*	34.2*	34.3*	32.5	32.8*	34.6*
FM 966							35.5*	36.2*	35.9*	35.8*	35.5*	35.2*
Jajo 8185 (comparison var.)	32.9	29.5	30.5	32.4	31.0	32.4	30.5#	32.4	32.8	32.1	29.9#	32.7
Jajo 8190 (application var.)	**32.0**	**28.7**	**30.4**	**32.0**	**29.9**	**32.5**	**31.6**	**31.4**	**31.9**	**32.9**	**31.2**	**32.1**
Jajo 8200							30.3#	31.0	31.5	30.5#	30.1	31.0
OA 87							28.4#	29.4#	29.1#	30.1#	27.4#	30.2#
OA 90							29.9#	30.4	30.7#	31.3	29.0#	29.9#
PM 1218 BG/RR	29.4#	26.7#	29.1#	30.9	27.5#	31.6	29.2#	28.8#	30.3#	29.9#	29.7#	29.2#
PSC 355 (check,01-02)	33.7*	31.3*	31.5*	33.1	30.6	32.5	31.3	33.6*	32.6	34.4	31.5	33.2
PSC PH98M-2983							30.7	31.3	32.4	32.1	30.6	33.3*
SG 105	32.0	28.5	30.0	31.9	31.0	33.2	31.9	32.3	32.6	33.2	31.3	32.3
SG 215 BG/RR	29.2#	26.4#	27.4#	29.2#	27.1#	30.3#	28.1#	28.9#	28.9#	30.6#	28.2#	29.6#
SG 521 RR							28.7#	30.1#	30.3#	32.4	29.5#	31.0
SG 747 (check,01)	30.8	28.8	28.9#	30.2#	28.6	30.6#						
SG 821 (check,01)	31.8	30.1*	30.0	31.6	30.2	33.0						
STV 457	33.0	29.1	31.3	33.6*	31.8*	35.0*	32.3	33.2*	33.4*	32.4	32.2	33.7*
STV 4793 RR	32.3	28.0	30.3	32.4	29.9	33.2	30.6	31.9	32.1	32.4	30.0#	32.5
STV 4892 BG/RR (check,02)	33.1	28.5	29.6	32.7	30.2	33.0	31.3	31.2	32.2	33.3	30.9	32.2
STV BXN 47	31.1	28.0	30.1	31.0	28.1#	32.8			31.6			
STV BXN 49B	31.5	27.0#	29.8	30.3#	29.3	32.1	30.2#	29.6#	30.9	31.8	30.2	31.0
TX 28R							31.1	29.6#	31.0	32.0	29.7#	30.8#
TX 295							31.3	32.6*	32.3	33.3	31.8	33.0
Mean	32.4	28.7	30.6	32.0	29.8	32.6	31.1	31.4	32.1	32.2	30.6	31.8
LSD @ 0.10/0.05	1.3	1.3	1.1	1.3	1.4	1.4	1.1	1.1	1.1	1.7	1.2	1.2
C.V. (%)	2.5	2.8	2.2	2.5	3.0	2.7	3.1	2.2	2.1	3.2	2.5	2.3

1/ Determined from grab samples taken from 4 replication.

2/ Determined from 50-boll samples taken from 3 replications.

3/ Tested as DPLX 00S13 BR

*, # = Significantly higher and lower than application variety, respectively, based on LSD for respective test.

PVP, JAJO 8190, Exhibit C, Supplement (LA 2001-02 Early-Maturity CVT) - E1 Fiber Elongation

2001-02CVT-EM-LA Statewide, Fiber Elongation (E1)											
	2001						2002				
Name	Alex1/	BC1/	SJ,CSL1/	SJ,Clay1/	Win,Irr1/	Win,N-Irr1/	BC1/	SJ,CSL1/	SJ,Clay1/	Win,Irr1/	Win,N-Irr1/
Acala 1517-99								7.9#			
All-Tex Atlas								8.8#			
DES 810	6.8#	7.2	7.6#	7.4#	6.3#	5.4#	8.4#	8.9#	8.4#	8.8#	8.0#
DES 816	6.8#	6.9#	7.5#	7.1#	6.4#	5.4#	8.0#	9.1#	8.4#	8.5#	7.9#
DP 436 RR	7.7	7.4	7.7#	8.1	6.9	6.2	8.2#	9.2#	8.8#	8.8#	8.1#
DP 444 BG/RR2/							7.9#	8.9#	8.4#	8.1#	7.8#
DP 451 BG/RR	6.5#	6.7#	6.9#	6.9#	5.8#	4.9#	7.7#	8.6#	8.1#	8.1#	7.6#
DP 458 BG/RR (check,02)							7.8#	9.0#	8.5#	8.6#	8.1#
DP NuCotn 33B (check,01-02)	6.4#	6.7#	7.1#	7.3#	6.0#	5.6#	7.7#	8.7#	8.2#	8.1#	8.4#
DPLX 99X35	6.5#	6.9#	7.0#	7.3#	6.0#	5.6#	7.9#	8.7#	8.3#	8.2#	7.7#
FM 819	5.1#	5.8#	5.8#	5.7#	5.9#	4.0#	6.1#	7.3#	7.0#	6.8#	6.6#
FM 832								7.1#			
FM 958	5.0#	5.5#	5.3#	5.7#	4.3#	3.5#	5.8#	6.8#	7.3#	6.8#	6.5#
FM 966							5.4#	6.7#	6.3#	6.4#	6.1#
Jajo 8185 (comparison var.)	8.3	8.2*	8.4	8.1	7.3	6.9*	9.5*	10.3*	9.6	9.8	9.9*
Jajo 8190 (application var.)	**8.0**	**7.5**	**8.2**	**8.1**	**7.3**	**6.1**	**8.9**	**9.8**	**9.4**	**9.7**	**8.9**
Jajo 8200							8.3#	9.1#	8.2#	8.7#	8.4#
OA 87							8.5#	9.4#	9.1	8.8#	8.3#
OA 90							7.7#	8.4#	8.1#	8.1#	7.9#
PM 1218 BG/RR	6.7#	7.2	6.8#	7.3#	6.2#	5.3#	7.8#	8.3#	8.1#	8.0#	7.7#
PSC 355 (check,01-02)	7.5#	7.9*	8.2	8.4	7.4	6.2	8.9	9.9	9.5	9.5	9.3*
PSC PH98M-2983							7.9#	8.8#	8.6#	8.5#	8.1#
SG 105	7.3#	7.2	7.4#	7.4#	6.2#	5.4#	7.3#	8.4#	8.3#	8.2#	8.0#
SG 215 BG/RR	7.7	8.2*	8.0	8.1	7.2	5.8	8.5#	9.2#	8.8#	9.0#	8.6
SG 521 RR							8.8	9.1#	8.8#	8.7#	8.5#
SG 747 (check,01)	7.5#	7.8	8.4	8.0	7.1	6.2					
SG 821 (check,01)	8.3	8.7*	8.6*	8.7*	7.0	6.9*					
STV 457	8.8*	8.6*	9.4*	9.2*	8.5*	7.0*	10.7*	10.6*	10.1*	10.3*	10.1*
STV 4793 RR							8.1#	8.3#	8.3#	8.3#	8.1#
STV 4892 BG/RR (check,02)	6.3#	6.8#	7.2#	7.0#	6.0#	5.3#	7.9#	8.6#	8.2#	7.9#	7.9#
STV BXN 47	6.5#	6.8#	7.0#	7.2#	6.3#	5.4#		8.5#			
STV BXN 49B	6.7#	6.5#	7.0#	6.9#	6.1#	5.2#	7.9#	8.7#	8.2#	7.9#	7.9#
TX 28R							7.2#	7.8#	8.1#	7.5#	7.4#
TX 295							6.8#	8.1#	7.3#	7.3#	7.2#
Mean	6.9	7.1	7.3	7.4	6.5	5.6	7.9	8.7	8.4	8.3	8.0
LSD @ 0.05	0.5	0.4	0.4	0.5	0.9	0.4	0.4	0.4	0.6	0.4	0.4
C.V. (%)	4.7	3.0	3.0	3.9	8.9	4.6	3.3	2.5	4.3	3.1	3.3

1/ Determined from 50-boll samples taken from 3 replications.

2/ Tested as DPLX 00S13 BR

*, # = Significantly higher and lower, respectively, than the application variety based on LSD for the respective tests.

PVP, JAJO 8190, Exhibit C, Supplement-2 (LA 2001-02 Medium-Maturity CVT), Lint %.
(for indirect comparisons of JAJO 8185 and JAJO 8190 with Non-Transgenic Medium Maturing Varieties)

2001-02 LA CVT, Medium Maturity Test (MMT), Lint %													
	Lint % by Test Sites, 2001						Lint % by Test Sites, 2002						
Name	Alex	BC	SJ,CSL	SJ,Clay	Win,Irr	Win,N-Irr	Alex	BC	SJ,CSL	SJ,Clay	Win,Irr	Win,N-Irr	Avg
DP 448 B	36.6#	41.2#	40.4#	40.1#	40.1#	39.3#	37.4#	39.9#	38.2#	39.9#	39.0#	40.1#	39.4
DP 449 BG/RR							36.4#	39.1#	38.3#	39.8#	39.7#	40.1#	
DP 458 B/RR (Ck 02)	38.2#	41.5#	39.9#	40.1#	40.6#	40.1#	38.8#	40.3#	40.0#	41.1#	40.2#	40.8#	40.1
DP 491	43.1#	44.2#	42.9#	44.0#	44.5	44.1	39.9	44.2	42.1	44.7	43.5	43.9#	43.4
DP 493							43.5*	43.7	43.8*	45.4*	44.2	46.0	
DP 5415 RR							39.2	40.2#	40.0#	41.8#	41.1#	41.3#	
DP 545 BG/RR							42.8	42.9#	41.3#	43.2	41.6#	43.7#	
DP 555 BG/RR	43.2#	44.8#	45.5	45.5	44.4	45.1	44.0*	44.9	44.0*	45.4*	43.8	46.0	44.7
DP 565	39.3#	42.0#	41.8#	42.4#	42.4#	39.9#	37.6#	40.0#	40.3#	41.7#	41.1#	41.3#	40.8
DP DeltaPEARL	41.4#	42.0#	43.0#	43.5#	43.0#	42.1#	41.6	41.7#	41.0#	43.0#	41.3#	43.5#	42.3
DP NuCotn 33B (Ck 01-02)	37.7#	40.2#	39.1#	39.3#	39.4#	39.0#	37.9#	39.1#	37.3#	39.8#	38.8#	39.5#	38.9
FM 832	38.2#	39.3#	38.8#	38.8#	39.7#	38.7#	37.2#	39.1#	37.6#	38.5#	39.9#	40.7#	38.9
FM 832 B							38.5#	39.0#	37.9#	39.3#	39.5#	41.3#	
FM 966	40.0#	42.1#	41.1#	42.0#	42.5#	40.8#							
FM 989							35.5#	40.2#	37.9#	39.3#	39.7#	40.0#	
FM 989 BR							37.1#	38.1#	37.5#	38.9#	38.7#	40.2#	
FM 989 R							39.3	40.9#	38.6#	40.1#	40.7#	40.4#	
FM 991 R							38.5#	38.5#	38.0#	39.1#	39.5#	39.9#	
JAJO 8098 (comparison var.)	43.2#	44.8#	43.8	43.5#	44.8	42.9#	41.5	43.5#	42.7	44.1	43.7	45.3	43.6
OA-87							39.2	42.1#	40.8#	42.2#	41.1#	42.5#	
OA-90							42.7	43.6#	42.2	44.6	43.8	44.8#	
PSC 355 (Ck 01-02)	40.3#	42.5#	40.1#	40.3#	41.8#	40.4#	39.7	39.6#	38.9#	40.1#	41.7#	42.3#	40.6
SG 747 (Ck 01)	40.4#	43.6#	42.1#	42.3#	41.5#	41.6#							
SG 821 (Ck 01)	39.3#	42.0#	40.6#	40.4#	40.4#	40.6#							
STV 4892 BG/RR (Ck 02)							40.5	42.1#	40.4#	41.7#	41.2#	43.5#	
STV 5599 BG/RR¶	40.5#	42.8#	41.4#	40.9#	42.0#	42.3#	40.4	41.1#	39.8#	41.2#	41.4#	42.5#	41.4
STV 580	38.8#	41.8#	41.2#	40.3#	41.0#	40.0#	38.8#	40.2#	38.8#	40.5#	40.3#	41.0#	40.2
STV GC 271§	35.3#	38.0#	37.1#	37.6#	38.4#	36.5#	37.1#	38.6#	35.6#	37.6#	37.5#	37.9#	37.3
STV LA 887(comparison var.)							37.6#	40.7#	39.3#	41.1#	40.9#	41.6#	
STV X0003							37.8#	40.1#	39.1#	40.5#	40.1#	40.9#	
Texas 24 R							39.2	41.2#	40.7#	41.3#	41.3#	41.5#	
Texas 245							37.2#	39.9#	37.2#	39.5#	38.9#	40.1#	
Texas 30 R							35.4#	38.1#	35.8#	37.3#	37.0#	37.9#	
Mean	39.7	42.0	41.2	41.3	41.6	40.8	39.1	40.7	39.5	41.1	40.7	41.7	
LSD (0.05)	1.2	1.1	1.4	0.9	1.3	1.1	2.1	1.6	0.8	0.9	1.3	1.1	
C.V (%)	0.5	0.4	0.8	0.3	0.6	0.4	4.5	1.0	0.2	0.3	0.6	0.5	
JAJO 8185 (comparative)€	42.4	43.6	42.9	42.1	42.4	42.1	39.4	43.0	42.1	43.2	43.7	43.4	42.5
JAJO 8190 (comparative)€	**44.7**	**46.0**	**44.4**	**45.2**	**45.3**	**44.8**	**40.9**	**45.2**	**42.8**	**43.9**	**44.0**	**46.1**	**44.4**

*, # = higher and lower,respectively, than JAJO 8190; (indirect comparison of adjusted mean using LSD for the respective MM Test).
¶ = tested as Stv X9905 in 2001.
§ = tested as Germaine GC 271 in 2001.
€ = calculated by dividing mean of 4 checks in MMT by their mean in the EMT to obtain a conversion factor and then multiplying respective values for Jajo 8185 and Jajo 8190 in EMT by this factor.

PVP, JAJO 8190, Exhibit C Supplement-2 (LA 2001-02 Medium Maturity CVT), Boll Weight
(for indirect comparison of JAJO 8185 and JAJO 8190 with Medium Maturing Varieties)

2001-02 LA CVT, Medium Maturity Test (MMT), Boll Weight

	Boll Weight, 2001						Boll Weight, 2002					
Name	Alex	BC	SJ,CSL	SJ,Clay	Win,Irr	Win,N-Irr	BC	SJ,CSL	SJ,Clay	Win,Irr	Win,N-Irr	Avg
DP 448 B	5.6	5.1#	4.1#	4.5#	4.7#	5.0	4.7#	5.1#	5.1#	5.0#	5.0	4.9
DP 449 BG/RR							4.3#	5.1#	4.7#	4.7#	4.5#	
DP 458 B/RR (check, 02)	5.1#	4.8#	4.1#	4.4#	4.7#	4.5#	4.6#	4.7#	4.7#	4.6#	4.9#	4.6
DP 491	5.8	5.2	4.7	4.9#	5.0	5.3	5.4	5.6	5.2#	5.4#	5.2	5.2
DP 493							4.6#	5.1#	4.9#	4.9#	4.9#	
DP 5415 RR							4.6#	4.6#	4.6#	4.4#	4.6#	
DP 545 BG/RR							4.9#	5.2#	5.1#	5.1#	4.9#	
DP 555 BG/RR	5.1#	4.7#	3.9#	4.3#	4.8#	4.5#	4.5#	4.8#	4.7#	4.9#	4.6#	4.6
DP 565	5.4#	4.8#	4.0#	4.4#	4.9#	4.5#	4.7#	4.9#	4.9#	4.8#	4.7#	4.7
DP DeltaPEARL	4.9#	4.8#	4.2#	4.6#	5.0	4.2#	4.7#	5.1#	4.8#	4.9#	4.7#	4.7
DP NuCOTN 33B (check 01-02)	5.0#	4.9#	4.0#	4.5#	4.8#	4.6#	4.4#	4.9#	5.0#	4.8#	5.1	4.7
FM 832	6.3	5.4	5.2	5.6#	4.8#	5.4	6.1*	6.5*	6.3	5.9	5.5	5.7
FM 832 B							5.8	6.1*	6.3	6.2	5.3	
FM 966	6.0	5.5	5.0	5.7	5.6	5.3						
FM 989							5.3	5.5#	5.3#	5.3#	4.5#	
FM 989 BR							4.9#	5.4#	5.6#	5.4#	5.3	
FM 989 R							4.8#	5.5#	5.4#	5.2#	4.9#	
FM 991 R							4.9#	5.1#	5.0#	5.0#	5.0	
JAJO 8098 (comparison var.)	5.7	5.5	4.3#	5.2#	5.4	4.4#	5.3	5.7	5.7	5.6#	5.4	5.3
OA-87							5.1#	5.4#	5.4#	5.2#	5.1	
OA-90							4.8#	5.3#	4.9#	5.1#	5.0	
PSC 355 (check 01-02)	5.4#	4.4#	4.2#	4.7#	4.7#	4.3#	4.7#	5.2#	5.3#	4.8#	4.5#	4.7
SG 747 (check,01)	5.4#	5.5	4.5#	4.9#	4.8#	4.5#						
SG 821 (check,01)	5.4#	5.0#	4.3#	5.4#	4.9#	4.6#						
STV 4892 BG/RR (check,02)							5.0#	5.8	5.3#	5.1#	5.1	
STV 5599 BG/RR¶	6.4	6.1*	4.7	5.9	6.0*	6.1*	6.2*	6.2*	6.1	6.1	6.0	6.0
STV 580	5.3#	5.0#	4.2#	4.9#	4.7#	5.0	4.9#	5.1#	5.3#	4.9#	5.0	4.9
STV GC 271§	4.8#	4.9#	4.4#	4.5#	4.6#	4.3#	4.8#	5.2#	5.3#	5.0#	5.0	4.8
STV LA 887(comparison var.)							5.7	6.0	6.0	5.8	6.0	
STV X0003							5.2	5.4#	5.5#	5.0#	5.5	
Texas 24 R							4.7#	4.7#	5.2#	4.7#	4.7#	
Texas 245							5.4	5.5#	5.9	5.4#	5.1	
Texas 30 R							4.6#	5.2#	5.0#	4.8#	4.7#	
Mean	5.5	5.1	4.3	4.9	4.9	4.8	5.0	5.3	5.3	5.1	5.0	5.0
LSD (0.05)	0.8	0.5	0.4	0.4	0.4	0.5	0.4	0.3	0.4	0.3	0.6	
C.V (%)	9.0	6.2	5.8	4.4	5.1	6.7	5.4	3.6	4.4	3.3	7.2	
JAJO 8185 (comparative)€	6.2	5.3	4.5	5.0	5.1	5.0	5.1	5.6	5.5	5.6	5.6	5.3
JAJO 8190 (comparative)€	**6.2**	**5.6**	**5.0**	**6.0**	**5.3**	**5.4**	**5.5**	**5.8**	**6.0**	**6.0**	**5.5**	**5.7**

*, # = higher and lower, respectively, than adjusted JAJO 8190 mean,using LSD from each respective MMT.

¶ = Tested as Stv X9905 in 2001.

§ = Tested as Germaine GC 271 in 2001.

€ = Calculated by dividing mean of 4 checks in MMT by their mean in the EMT to obtain a conversion factor and then multiplying respective values for Jajo 8185 and Jajo 8190 in EMT by this factor.

PVP, JAJO 8190, Exhibit C Supplement-2 (LA 2001-02 Medium Maturity CVT), Micronaire.
(for indirect comparison of JAJO 8185 and JAJO 8190 with Medium Maturing Varieties)

2001-02 LA CVT, Medium Maturity Test (MMT), Micronaire

	Micronaire by 2001 Tests						Micronaire by 2002 Tests						
Name	Alex	BC	SJ,CSL	SJ,Clay	Win,Irr	Win,N-Irr	Alex	BC	SJ,CSL	SJ,Clay	Win,Irr	Win,N-Irr	Avg
DP 448 B	4.7#	4.5#	4.5#	4.7#	4.3#	5.3#	4.3#	5.1#	4.7#	4.8#	4.6#	4.9#	4.70
DP 449 BG/RR							4.5#	5.1#	4.9#	4.9	4.6#	5.0#	
DP 458 B/RR (check,02)	5.0	4.7#	4.6#	5#	4.9	5.5#	4.7	5.3	5.1#	5.2	4.8#	5.4	5.02
DP 491	4.7#	4.6#	4.4#	4.7#	4.6#	5.4#	4.6#	4.9#	4.6#	4.6#	4.5#	4.7#	4.69
DP 493							4.9	5.2	5.0#	4.8#	4.6#	5.2#	
DP 5415 RR							4.9	5.4	4.9#	5.1	5.0	5.3	
DP 545 BG/RR							4.7	4.9#	4.7#	4.5#	4.5#	5.1#	
DP 555 BG/RR	4.9	4.8	4.5#	4.8#	4.5#	5.4#	4.7	5.0#	4.7#	4.7#	4.6#	4.8#	4.78
DP 565	4.9	4.8	4.4#	5.0#	4.8#	5.5#	4.5#	5.3	5.0#	5.0	4.9	5.3	4.95
DP DeltaPEARL	5.0	4.9	4.6#	4.9#	4.6#	5.5#	4.7	5.2	4.9#	4.9	4.6#	5.0#	4.90
DP NuCOTN 33B(check 01-02)	4.7#	4.6#	4.4#	4.9#	4.6#	5.4#	4.6#	5.2	4.9#	4.9	4.7#	4.9#	4.82
FM 832	4.5#	4.5#	4.4#	4.6#	4.1#	5.2#	4.2#	5.0#	4.5#	4.4#	4.3#	4.6#	4.51
FM 832 B							3.9#	4.8#	4.5#	4.0#	4.5#	4.7#	
FM 966	4.6#	4.7#	4.6#	4.8#	4.6#	5.5#							
FM 989							4.4#	4.9#	4.7#	4.6#	4.5#	4.6#	
FM 989 BR							4.3#	4.7#	4.8#	4.6#	4.5#	4.7#	
FM 989 R							4.1#	4.9#	4.7#	4.7#	4.4#	4.4#	
FM 991 R							4.6#	5.0#	4.9#	4.7#	4.3#	4.6#	
JAJO 8098 (comparison var.)	4.8#	4.9	4.9	5.1#	4.5#	5.5#	4.6#	5.1#	5.1#	4.9	4.8#	5.0#	4.94
OA-87							4.5#	5.2	5.1#	5.0	4.7#	4.9#	
OA-90							4.9	5.2	5.0#	5.0	4.9	5.1#	
PSC 355 (check 01-02)	5.2	4.9	4.8#	5.0#	5.0	5.8	4.8	5.2	5.0#	4.9	5.0	5.2#	5.06
SG 747 (check, 01)	5.0	5.0	5.1	5.4	4.7#	5.8							
SG 821 (check, 01)	4.9	4.9	5.0	5.0#	4.7#	5.8							
STV 4892 BG/RR (check,02)							4.8	5.5*	5.3	5.2	5.0	5.4	
STV 5599 BG/RR¶	5.0	4.5#	4.6#	5.2#	4.7#	5.8	4.7	5.3	4.8#	4.9	4.8#	5.4	4.97
STV 580	4.9	4.9	4.6#	5.1#	4.5#	5.7	4.6#	5.3	5.0#	5.0	4.7#	5.0#	4.94
STV GC 271§	4.9	4.7#	4.8#	5.1#	4.6#	5.4#	4.5#	5.2	5.0#	4.9	4.7#	5.0#	4.90
STV LA 887(comparison var.)							4.6#	5.2	5.1#	5.0	4.8#	5.0#	
STV X0003							4.7	5.2	5.1#	5.0	4.8#	5.2#	
Texas 24 R							4.6#	4.7#	4.9#	5.0	4.7#	4.9#	
Texas 245							4.0#	4.8#	4.4#	4.4#	4.2#	4.5#	
Texas 30 R							4.1#	5.0#	4.7#	4.5#	4.5#	4.6#	
Mean	4.86	4.74	4.64	4.96	4.61	5.53	4.58	5.14	4.87	4.85	4.69	5.02	
LSD (0.05)	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
C.V (%)	2.4	3.0	3.1	2.1	3.8	2.0	4.6	2.2	2.2	2.2	3.0	3.1	
JAJO 8185 (comparative)€	4.95	4.67	4.68	5.05	4.85	5.65	4.93	5.22	5.13	5.04	4.95	5.10	
JAJO 8190 (comparative)€	**5.05**	**4.97**	**5.02**	**5.71**	**5.15**	**5.86**	**4.83**	**5.32**	**5.30**	**5.08**	**5.05**	**5.40**	

*, # = significantly higher and lower respectively, than JAJO 8190 adjusted means, using LSD for each respective MMT.

¶ = Tested as Stv X9905 in 2001.

§ = Tested as Germaine GC 271 in 2001.

€ = Calculated by dividing mean of 4 check in MMT by their mean in the EMT to obtain a conversion factor and then multiplying respective values for Jajo 8185 and Jajo 8190 in EMT by this factor.

PVP, JAJO 8190, Exhibit C Supplement-2 (LA 2001-02 Medium Maturity CVT), UHM.
(for indirect comparison of JAJO 8185 and JAJO 8190 with Medium Maturing Varieties)

2001-02 LA CVT, Medium Maturity Test (MMT), UHM Fiber Length

	UHM by 2001 Tests						UHM by 2002 Tests						
Name	Alex	BC	SJ,CSL	SJ,Clay	Win,Irr	Win,N-Irr	Alex	BC	SJ,CSL	SJ,Clay	Win,Irr	Win,N-Irr	Avg
DP 448 B	1.16	1.10*	1.10	1.15*	1.12*	1.10	1.14*	1.13	1.17	1.15	1.17*	1.11*	1.13
DP 449 BG/RR							1.12	1.11	1.15	1.16	1.12	1.10*	
DP 458 B/RR (check,02)	1.15	1.08*	1.10	1.15*	1.11*	1.10	1.13	1.14*	1.14	1.13#	1.16	1.08	1.12
DP 491	1.23*	1.12*	1.18*	1.18*	1.18*	1.18*	1.20*	1.19*	1.25*	1.21*	1.25*	1.20*	1.20
DP 493							1.14*	1.15*	1.19*	1.15	1.16	1.10*	
DP 5415 RR							1.12	1.12	1.13#	1.12#	1.12	1.10*	
DP 545 BG/RR							1.12	1.13	1.17	1.14	1.18*	1.10*	
DP 555 BG/RR	1.12#	1.07	1.10	1.14	1.11*	1.08	1.12	1.13	1.16	1.15	1.16	1.11*	1.12
DP 565	1.17	1.10*	1.12	1.18*	1.13*	1.13	1.16*	1.15*	1.18	1.17	1.15	1.10*	1.15
DP DeltaPEARL	1.19*	1.10*	1.13	1.16*	1.13*	1.14*	1.16*	1.17*	1.22*	1.19*	1.24*	1.14*	1.16
DP NuCOTN 33B (check,01-02	1.17	1.10*	1.10	1.14	1.11*	1.14*	1.11	1.12	1.15	1.13#	1.14	1.13*	1.13
FM 832	1.23*	1.13*	1.17*	1.21*	1.20*	1.19*	1.20*	1.19*	1.21*	1.25*	1.24*	1.15*	1.20
FM 832 B							1.19*	1.19*	1.27*	1.23*	1.24*	1.16*	
FM 966	1.18*	1.11*	1.12	1.18*	1.13*	1.13							
FM 989							1.17*	1.16*	1.20*	1.19*	1.17*	1.11*	
FM 989 BR							1.13	1.10#	1.16	1.17	1.15	1.09	
FM 989 R							1.12	1.12	1.15	1.13#	1.10#	1.11*	
FM 991 R							1.15*	1.15*	1.17	1.19*	1.16	1.12*	
JAJO 8098 (comparison var)	1.09#	1.06	1.07#	1.10	1.09	1.07	1.09#	1.11	1.14	1.13#	1.12	1.06	1.09
OA-87							1.07#	1.05#	1.08#	1.08#	1.09#	1.04#	
OA-90							1.11	1.12	1.15	1.13#	1.12	1.08	
PSC 355 (check, 01-02)	1.15	1.06	1.14	1.13	1.07	1.10	1.12	1.14*	1.15	1.17	1.14	1.08	1.12
SG 747 (check,01)	1.14	1.08*	1.09#	1.11	1.11*	1.12							
SG 821 (check,01)	1.12#	1.07	1.09#	1.14	1.09	1.09							
STV 4892 BG/RR (check,02)							1.09#	1.09#	1.16	1.15	1.12	1.08	
STV 5599 BG/RR¶	1.17	1.08*	1.12	1.13	1.14*	1.07	1.12	1.15*	1.19*	1.17	1.17*	1.12*	1.14
STV 580	1.12#	1.08*	1.12	1.15*	1.09	1.08	1.12	1.15*	1.15	1.17	1.12	1.11*	1.12
STV GC 271§	1.15	1.10*	1.13	1.18*	1.16*	1.14*	1.14*	1.16*	1.19*	1.20*	1.18*	1.12*	1.15
STV LA 887(comparison var)							1.15*	1.15*	1.19*	1.18	1.17*	1.12*	
STV X0003							1.09#	1.10#	1.12#	1.13#	1.11#	1.06	
Texas 24 R							1.10#	1.10#	1.12#	1.15	1.12	1.09	
Texas 245							1.18*	1.19*	1.22*	1.23*	1.23*	1.20*	
Texas 30 R							1.17*	1.14*	1.18	1.18	1.17*	1.10*	
Mean	1.16	1.08	1.11	1.15	1.12	1.11	1.13	1.14	1.17	1.16	1.16	1.11	1.13
LSD (0.05)	0.03	0.03	0.04	0.04	0.03	0.04	0.02	0.02	0.03	0.03	0.03	0.03	
C.V (%)	1.7	1.4	2.0	1.9	1.7	1.9	1.6	1.3	1.7	1.7	1.8	1.5	
JAJO 8185 (Comparative)€	1.15	1.07	1.09	1.12	1.05	1.11	1.09	1.12	1.14	1.13	1.11	1.08	1.11
JAJO 8190 (Comparative)€	**1.15**	**1.05**	**1.13**	**1.11**	**1.07**	**1.10**	**1.12**	**1.12**	**1.16**	**1.16**	**1.14**	**1.07**	**1.12**

*, # = significantly higher and lower trespectively, than JAJO 8190 adjusted means, using LSD of each respective MMT.

¶ = Tested as Stv X9905 in 2001.

§ = Tested as Germaine GC 271 in 2001.

€ = Comparative means calculated by dividing means of 4 checks in each MMT by their mean in each EMT to obtain a conversion factor and then multiplying respective values for Jajo 8185 and Jajo 8190 in each EMT by this factor.

PVP JAJO 8190, Exhibit C Supplement-2 (LA 2001-02 Medium Maturity CVT), Fiber Strength.
(for indirect comparisons of JAJO 8185 and JAJO 8190 with Medium Maturing Varieties)

2001-02 LA CVT, Medium Maturity Test (MMT), Fiber Strength													
	Fiber Strength (T1), 2001						Fiber Strength (T1), 2002						
Name	Alex	BC	SJ,CSL	SJ,Clay	Win,Irr	Win,N-Irr	Alex	BC	SJ,CSL	SJ,Clay	Win,Irr	Win,N-Irr	Avg
DP 448 B	30.7	27.0#	28.0#	29.4#	28.5#	31.0#	31.1	30.0	32.4	30.8#	29.3#	30.1#	29.9
DP 449 BG/RR							32.6	31.5	34.6*	34.4*	31.5	31.1	32.6
DP 458 B/RR (check,02)	31.1	27.9	29.1	31.4	30.6	32.3	31.5	31.6	32.4	32.8	31.5	31.0	31.1
DP 491	34.2*	28.9	30.8	32.4*	31.7*	33.5	34.6*	32.8*	35.2*	33.4	33.2*	32.4	32.8
DP 493							33.5*	30.9	33.7	33.1	31.6	32.2	32.5
DP 5415 RR							31.2	31.5	32.2	31.5	29.7#	31.3	31.2
DP 545 BG/RR							30.6#	29.8#	31.5#	31.6	29.7#	28.9#	
DP 555 BG/RR	30.3	25.6#	28.0#	29.7	28.4#	30.8#	30.6#	30.1	31.5#	30.8#	28.7#	29.1#	29.5
DP 565	31.5	27.7	30.0	31.4	30.1	32.8	33.2*	32.2*	34.3	33.1	30.2	30.8#	31.4
DP DeltaPEARL	31.7	28.0	28.8#	30.8	31.0	32.0	32.2*	32.3*	31.9	33.4	30.7	32.1	31.2
DP NuCOTN 33B(check,01-02)	30.0	27.9	29.1	30.0	28.7#	31.8	31.3	30.1	33.5	32.0	30.6	31.6	30.6
FM 832	34.1*	30.5*	31.6	33.4*	32.9*	34.5*	34.8*	35.1*	35.2*	35.5*	34.8*	33.6*	33.8
FM 832 B							34.1*	33.2*	34.4*	33.9	33.3*	32.8	
FM 966	35.8*	31.2*	33.1*	35.0*	33.9*	34.9*							
FM 989							36.0*	34.5*	37.0*	34.6*	34.4*	33.5*	
FM 989 BR							32.7	29.9	33.5	34.3*	32.9*	31.9	
FM 989 R							34.4*	33.1*	36.5*	34.2*	33.0*	33.3*	
FM 991 R							33.5*	32.6*	34.8*	35.3*	32.7*	33.3*	
JAJO 8098 (comparison var)	29.9	28.7	28.4#	29.8	29.5	31.5	31.3	31.4	32.3#	32.2	30.5	31.2	30.6
OA-87							29.7#	28.3#	29.8#	30.7#	28.4#	28.9#	
OA-90							30.5#	31.1	30.6#	30.9#	28.9#	29.7#	
PSC 355 (check,01-02)	32.3*	29.6*	31.2	32.2*	31.4*	33.2	32.0	32.1	33.5	33.8	30.6	32.9	32.1
SG 747 (check,01)	29.9	28.7	28.8#	28.3#	28.4#	30.5#							
SG 821 (check,01)	31.4	29.6*	29.9	30.8	30.4	32.2							
STV 4892 BG/RR (check,02)							30.9	30.9	33.7	32.9	30.3	31.8	
STV 5599 BG/RR¶	31.6	27.3	29.2	30.9	30.2	30.4#	31.8	31.2	32.5	33.1	30.8	31.0	30.8
STV 580	31.2	29.4	30.0	31.0	30.0	32.5	32.6	31.9	33.4	33.3	30.5	31.8	31.5
STV GC 271§	33.2*	30.4*	32.0*	32.4*	32.8*	34.7*	33.9*	33.3*	36.1*	36.8*	34.4*	33.8*	33.7
STV LA 887(comparison var)							36.1*	34.3*	35.6*	35.2*	32.8*	35.1*	
STV X0003							33.4*	33.4*	33.8	35.1*	33.0*	33.8*	
Texas 24 R							30.7	30.2	31.8	32.2	29.6#	30.9	
Texas 245							34.6*	33.4*	34.6*	33.9	33.6*	34.5*	
Texas 30 R							31.2	30.6	31.8	31.8	30.1	29.7#	
Mean	31.6	28.3	29.7	30.9	30.2	32.2	32.6	31.8	33.5	33.2	31.4	31.8	31.4
LSD (0.05)	1.3	1.3	1.4	1.3	1.3	1.2	1.1	1.2	1.4	1.3	1.3	1.4	
C.V (%)	2.4	2.8	2.9	2.5	2.5	2.3	2.8	2.2	2.5	2.4	2.6	2.6	
JAJO 8185 (Comparative)€	31.8	29.1	30.5	31.2	31.2	32.4	30.6	32.0	33.9	31.9	29.8	32.4	31.4
JAJO 8190 (Comparative)€	**30.9**	**28.3**	**30.4**	**30.8**	**30.1**	**32.5**	**31.7**	**31.0**	**33.0**	**32.7**	**31.1**	**31.8**	**31.2**

*, # = significantly higher and lower, respectively, than JAJO 8190, using LSD for the respective MMT.

¶ = Tested as Stv X9905 in 2001.

§ = Tested as Germaine GC 271 in 2001.

€ = Comparative means calculated by dividing means of 4 checks in each MMT by their means in each EMT to obtain a conversion factor and then multiplying respective values for Jajo 8185 and Jajo 8190 in each EMT by this factor.

PVP, JAJO 8190, Exhibit C Supplement-2 (LA 2001-02 Medium Maturity CVT), Fiber Elongation.
(for indirect comparisons of JAJO 8185 and JAJO 8190 with Medium Maturing Varieties)

2001-02 LA CVT, Medium Maturity Test (MMT), Fiber Elongation (E1)												
	Fiber Elongation (E_1,%), 2001						Fiber Elongation (E1,%), 2002					
Name	Alex	BC	SJ,CSL	SJ,Clay	Win,Irr	Win,N-Irr	BC	SJ,CSL	SJ,Clay	Win,Irr	Win,N-Irr	Avg
DP 448 B	6.5#	6.8#	5.4#	5.9#	6.6#	4.9#	7.3#	7.9#	8.0#	7.7#	7.6#	**6.8**
DP 449 BG/RR							7.1#	7.6#	7.7#	7.3#	7.2#	
DP 458 B/RR (check,02)	7.0#	6.7#	5.9#	6.0#	6.8#	5.0#	8.2#	8.5#	8.4#	8.2#	7.9#	**7.1**
DP 491	5.8#	6.0#	5.0#	5.3#	5.7#	4.1#	6.7#	7.2#	7.0#	7.1#	7.1#	**6.1**
DP 493							6.9#	7.4#	7.4#	7.2#	6.9#	
DP 5415 RR							8.8	8.9	8.9#	8.8#	8.3	
DP 545 BG/RR							6.6#	7.1#	7.1#	6.9#	6.6#	
DP 555 BG/RR	5.9#	6.1#	5.2#	5.0#	6.0#	4.2#	6.5#	6.9#	7.0#	6.9#	6.6#	**6.0**
DP 565	6.6#	6.5#	6.0#	6.0#	6.4#	4.9#	7.6#	7.8#	7.8#	7.9#	7.9#	**6.9**
DP DeltaPEARL	5.8#	5.6#	5.0#	5.2#	5.9#	3.9#	6.6#	7.2#	7.1#	7.1#	6.7#	**6.0**
DP NuCOTN 33B (check,01-02)	6.9#	7.0#	5.8#	6.4#	7.1#	5.2#	7.7#	8.0#	8.0#	8.2#	7.6#	**7.1**
FM 832	5.7#	5.6#	4.9#	4.9#	5.6#	3.7#	6.4#	7.3#	7.1#	6.9#	6.8#	**5.9**
FM 832 B							6.8#	7.4#	7.4#	7.0#	7.2#	
FM 966	4.7#	4.6#	4.0#	4.3#	5.0#	3.2#						
FM 989							6.6#	7.0#	7.3#	7.1#	6.9#	
FM 989 BR							7.1#	7.3#	7.3#	7.0#	7.1#	
FM 989 R							6.6#	7.2#	7.2#	7.0#	7.0#	
FM 991 R							7.2#	7.5#	7.5#	7.4#	7.3#	
JAJO 8098 (comparison var.)	7.1#	6.7#	5.9#	6.0#	6.9#	5.5#	8.0#	8.1#	8.3#	8.2#	7.7#	**7.1**
OA-87							8.9	8.9	8.7#	9.2#	8.2	
OA-90							8.2#	8.0#	8.3#	7.9#	7.9#	
PSC 355 (check,01-02)	8.2#	8.2*	7.4	7.8*	8.1	6.0	8.7	9.3	9.4	9.6	9.2*	**8.4**
SG 747 (check,01)	8.2#	7.7	6.8	7.2	7.9#	6.4						
SG 821 (check,01)	8.4	8.5*	7.6	7.8*	8.6	6.9*						
STV 4892 BG/RR (check,02)							7.9#	8.4#	8.2#	8.3#	7.6#	
STV 5599 BG/RR¶	5.8#	6.2#	5.5#	4.9#	5.8#	4.4#	6.8#	7.5#	7.2#	7.2#	6.7#	**6.2**
STV 580	7.9#	6.8#	6.2#	7.0#	7.4#	5.5#	8.9	8.8#	8.9#	8.9#	8.8	**7.7**
STV GC 271§	6.3#	6.3#	5.6#	5.7#	6.3#	4.8#	7.3#	7.8#	7.6#	7.8#	7.7#	**6.7**
STV LA 887(comparison var.)							8.3#	8.6#	8.4#	8.5#	8.1	
STV X0003							7.3#	7.9#	8.0#	7.7#	7.3#	
Texas 24 R							8.8	8.7#	8.4#	9.0#	8.4	
Texas 245							6.6#	7.1#	7.2#	7.1#	6.9#	
Texas 30 R							8.3#	7.8#	8,0#	7.8#	7.5#	
Mean	6.7	6.7	5.8	6.0	6.7	5.0	7.5	7.8	7.8	7.8	7.5	**6.8**
LSD (0.05)	0.3	0.4	0.7	0.3	0.4	0.4	0.5	0.5	0.4	0.4	0.5	
C.V (%)	3.1	3.8	7.7	3.3	3.3	5.0	4.1	3.6	3.4	3.2	3.7	
JAJO 8185 (comparative)€	8.9	8.3	7.2	7.3	8.4	7.0	9.6	9.7	9.5	9.9	9.5	**8.7**
JAJO 8190 (comparative)€	**8.5**	**7.6**	**7.1**	**7.3**	**8.4**	**6.2**	**9.0**	**9.3**	**9.3**	**9.8**	**8.5**	**8.3**

*, # = significantly higher and lower, respectively, than JAJO 8190, using LSD values for respective MMT.

¶ = Tested as Stv X9905 in 2001.

§ = Tested as Germaine GC 271 in 2001.

€ = Comparative means calculated by dividing means of 4 checks in each MMT by their means in each EMT to obtain a conversion factor and then multiplying respective values for Jajo 8185 and Jajo 8190 in each EMT by this factor.

PLANT VARIETY PROTECTION APPLICATION

APPENDIX A

SOURCE OF DATA AND STATISTICAL ANALYSIS FOR EXHIBIT B AND EXHIBIT C

CULTIVAR 'JAJO 8190'

PVP data were collected by Dr. Jack E. Jones, Owner and Breeder, at St. Joseph in 2002 using two different randomized block tests with six entries and four replications each. The two planting dates and soil types (5/2/02, Commerce Silt Loam and 5/13/02, Mhoon Silty Clay Loam) at the Northeast Louisiana Research Station were used to represent different environments.

Description of general plant characteristics and of leaf, stem, gland, and flower traits were from visual observations made in replicated PVP tests conducted in 2002 and seed increase plots from 1999 to 2002. Data on height of 1st fruiting branch, number of nodes to 1st fruiting branch, and mature plant height were measured and/or counted from a 10-plant random sample per plot from four replications each of the two PVP tests (two environments). Earliness data were based on counts of opened and unopened bolls from 1-meter of row on 9/12/02 and 10/1/02 for Tests 1 and 2, respectively (ca. 50 to 75% open), and is expressed as % opened bolls. Data on boll, seed and fiber traits were from the 2002 PVP Tests (two environments) of 40 random bolls per plot and three replications (Exhibit C). Seed cotton was ginned on a small laboratory saw-gin, and lint and seed weighed to the nearest 0.1 gram. Fiber properties from a 30-gram random sample of lint were measured by the LSU Cotton Fiber Testing Laboratory using approved HVI equipment and procedure in a control environment for relative humidity and temperature. A combined statistical analysis of variance of data for each trait from the two PVP tests (six entries with three or four replications) was run using the Microsoft Office statistical package of two factors with replications. Treatment means for each trait were separated by Duncan's Multiple Range Test and summarized in Exhibit C. The statistical analysis by traits is given in Appendix A.

Supplemental data on earliness (measured by % harvested at 1st picking), boll and fiber traits were obtained from the LAES 2001 and 2002 Early-Maturity Cotton Variety Test at six environments (Cotton Variety Trials in Louisiana, LA Agr. Exp. Stn., Research Summary # 140 and # 149, respectively). The LAES data used are a subset that includes the application variety and Jajo 8185 (comparison variety) and other cultivars, including four check cultivars common with the LAES 2001 and 2002 Medium-Maturity Cotton Variety Tests, which allow for indirect comparisons of Jajo 8190 with LA 887, Jajo 8098 and other cultivars of interest (Exhibit C, Supplement). An LSD @ 0.10 (Alexandria location) or 0.05 level of probability (other locations), as reported by the investigators, was used to test significant differences of the application variety from other entries.

Source of data, experimental methods, statistical analysis, and summary data on reaction to Fusarium Wilt and to Root-Knot and Reniform Nematodes are given in Appendix B.

PVP, SJ, 2002, JAJO APPLICANTS, Combined ANOVA, "Lodging Index"

Lodging Index by tests, variety and reps, (1=erect; 4=lodged), rated near maturity.

	8098	8185	8190	LA887	MD51ne	SG125
Test 1	1.00	3.00	2.00	2.00	1.00	3.00
	2.00	3.00	2.00	2.00	1.00	2.00
	2.75	3.00	3.00	2.00	1.00	3.00
	3.00	3.00	2.25	2.00	1.00	4.00
Test 2	2.00	2.75	1.00	2.00	1.00	2.00
	2.00	2.00	1.00	1.00	1.00	3.00
	1.00	2.00	1.00	1.00	1.00	1.00
	2.00	2.00	2.00	2.00	1.00	3.00

Anova: Two-Factor With Replication

SUMMARY	8098	8185	8190	LA887	MD51ne	SG125	Total	Average
Test 1								
Count	4	4	4	4	4	4	24	
Sum	8.75	12.00	9.25	8.00	4.00	12.00	54.00	
Average	2.19	3.00	2.31	2.00	1.00	3.00	13.50	2.25
Variance	0.807	0.000	0.224	0.000	0.000	0.667	1.698	
Test 2								
Count	4	4	4	4	4	4	24	
Sum	7.00	8.75	5.00	6.00	4.00	9.00	39.75	
Average	1.75	2.19	1.25	1.50	1.00	2.25	9.94	1.66
Variance	0.250	0.141	0.250	0.333	0.000	0.917	1.891	
Total								
Count	8	8	8	8	8	8		
Sum	15.75	20.75	14.25	14	8	21		
Average	3.94	5.19	3.56	3.50	2.00	5.25		
Variance	1.057	0.141	0.474	0.333	0.000	1.583		
Grand Avg								
Mean	1.97	2.59	1.78	1.75	1.00	2.63		
Variance	0.529	0.070	0.237	0.167	0.000	0.792		

ANOVA

Source of Var	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Tests	4.2305	1	4.2305	14.15	0.00060	4.113
Variety	14.7305	5	2.9461	9.85	0.00001	2.477
Int T x V	1.3555	5	0.2711	0.91	0.48760	2.477
Error	10.7656	36	0.2990			

Duncan's=sq r 0.299/8=0.1933*2.875=0.556 for 2; 0.584 for 3; 0.603 for 4; 0.616 for 5

Note: Use combined analysis for mean separation since T x V interaction was non-significant

Variety	Mean
MD 51 ne	1.00 a
LA 887	1.75 b
Jajo 8190	1.78 b
Jajo 8098	1.97 b
Jajo 8185	2.59 c
SG 125	2.63 c

PVP, SJ, 2002, JAJO APPLICANTS, Combined ANOVA "% Open Bolls".

% opened on 9/12/02 (Test 1) and 10/1/02 (Test 2) by Reps and Entries (1 meter of row)								
	8098	**8185**	**8190**	**LA887**	**MD51ne**	**SG125**		
Test1	45.1	65.9	58.9	29.3	45.4	61.0		
	56.2	51.9	55.2	58.0	51.6	58.5		
	59.4	58.4	55.6	48.0	67.1	67.5		
	44.2	77.3	55.6	52.2	56.7	74.6		
Test 2	71.9	89.5	56.3	62.7	48.9	76.8		
	75.8	67.1	59.8	38.2	59.8	96.9		
	78.0	81.7	83.9	46.9	71.2	84.2		
	81.1	77.9	83.3	73.6	86.3	72.8		
Anova: Two-Factor With Replication								
SUMMARY	8098	8185	8190	LA887	MD51ne	SG125	Total	Avg
Test 1								
Count	4	4	4	4	4	4	24	
Sum	204.9	253.5	225.3	187.5	220.8	261.6	1353.6	
Average	51.225	63.375	56.325	46.875	55.2	65.4	338.4	**56.4**
Variance	59.4825	118.9025	2.9825	154.0892	84.2866667	52.00667	471.75	
Test 2								
Count	4	4	4	4	4	4	24	
Sum	306.8	316.2	283.3	221.4	266.2	330.7	1724.6	
Average	76.7	79.05	70.825	55.35	66.55	82.675	431.15	**71.9**
Variance	14.96667	86.78333	219.7025	250.87	256.256667	112.2358	940.815	
Total								
Count	8	8	8	8	8	8		
Sum	511.7	569.7	508.6	408.9	487	592.3		
Average	127.925	142.425	127.15	102.225	121.75	148.075		
Variance	74.44917	205.6858	222.685	404.9592	340.543333	164.2425		
Average of Tests								
Mean	**64.0**	**71.2**	**63.6**	**51.1**	**60.9**	**74.0**		**64.1**
Variance	37.22	102.84	111.34	202.48	170.27	82.12		
ANOVA								
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*		
Test	2867.521	1	2867.521	24.36**	1.8289E-05	4.11		
Variety	2629.654	5	525.9308	04.47**	2.8683E-03	2.48		
Int. T x V	340.4892	5	68.09783	0.58	7.1608E-01	2.48		
Error	4237.695	36	117.7138					
Total	10075.36	47						
Treatment Means Over Dates								
SG125	74.0a							
Jajo 8185	71.2ab							
Jajo 8098	64.0ab							
Jajo 8190	63.6ab							
MD51ne	60.9 bc							
LA 887	51.1 c							
Ducan's =sq r 117.7138/8 =3.8359 x 2.875=11.02, x 3.021=11.58, x 3.117=11.96								
Note: Use combined analysis data for mean separation since Int T x V was non-significant								

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PVP, SJ, 2002, JAJO APPLICANTS, Combined ANOVA (cm to 1st fr br)

	8098	8185	8190	LA887	MD51ne	SG125		
Test 1	18.6	20.9	14.4	21.6	18.3	21.8		
	15.9	18.2	15.2	20.9	15.9	19.3		
	14.3	16.4	16.8	19.8	17.9	17.6		
	12.9	18.6	17.3	19.2	15.5	19.2		
Test 2	28.1	27.2	23.8	27.3	24.7	25.4		
	26.7	25.8	27.8	32.3	27.8	27.4		
	25.2	28.2	23.5	30.1	25.9	27.9		
	25.4	21.5	23.9	28.1	21.1	24.9		
Anova: Two-Factor With Replication								
SUMMARY	8098	8185	8190	LA887	MD51ne	SG125	Total	**Avg**
Test 1								
Count	4	4	4	4	4	4	24	
Sum	61.7	74.1	63.7	81.5	67.6	77.9	426.5	
Average	15.425	18.525	15.925	20.375	16.9	19.475	106.625	17.77
Variance	5.9825	3.4225	1.835833	1.1625	1.973333	3.0091667	17.385833	2.90
Test 2								
Count	4	4	4	4	4	4	24	
Sum	105.4	102.7	99	117.8	99.5	105.6	630	
Average	26.35	25.675	24.75	29.45	24.875	26.4	157.5	26.25
Variance	1.803333	8.71583	4.163333	4.996667	7.9625	2.1666667	29.808333	4.97
Total								
Count	8	8	8	8	8	8		
Sum	167.1	176.8	162.7	199.3	167.1	183.5	1056.5	
Average	41.775	44.2	40.675	49.825	41.775	45.875	264.125	
Variance	7.785833	12.1383	5.999167	6.159167	9.935833	5.1758333	47.194167	
Grand Avg (Testss 1 & 2)								
Genotype	**20.89**	**22.10**	**20.34**	**24.91**	**20.89**	**22.94**		
Variance	3.893	6.069	3.000	3.080	4.968	2.588		
ANOVA								
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*		
Test	862.7552	1	862.7552	219.37	6.86E-17	4.11		
Genotype	116.881	5	23.37621	5.94	0.000419	2.48		
Int T x G	21.78604	5	4.357208	1.11	0.373392	2.48		
Error	141.5825	36	3.932847					
Total	1143.005	47						
Note: Use combined analysis for mean separation since int. of Test x Genotype was non-significant								
Duncan: st error = sq r 3.932847/8 = 0.7011*2.875=**2.012** for 2 var; **2.118** for 3 var;								
2.185 for 4 var; **2.233** for 5 var								
Jajo 8190 = 20.34 a								
Jajo 8098 = 20.89 ab								
MD 51 ne = 20.89 ab								
Jajo 8185 = 22.10 ab								
SG 125 = 22.94 bc								
LA 887 = 24.9 c								

PVP, SJ, 2002, JAJO APPLICANTS, Combined ANOVA " Plant Height"

Mature Plant Height (mean of 10 plants/plot in meters)								
	8098	**8185**	**8190**	**LA887**	**MD51ne**	**SG125**	Grand Avg	
Test 1	81.1	69.2	74.3	91.5	82.4	78.7		
	62.5	58.6	74.1	68.2	77.1	69.7		
	65.8	72.4	69.1	73.1	80.6	83.5		
	63.2	48.2	54.2	68.0	80.7	52.0		
Test 2	62.9	63.1	66.1	67.3	74.6	57.9		
	72.3	66.7	80.5	75.2	97.0	57.8		
	78.5	70.9	76.4	89.8	88.0	74.9		
	72.6	86.5	67.9	77.8	98.4	66.0		
Average	**69.9**	**67.0**	**70.3**	**76.4**	**84.9**	**67.6**	**72.7**	
Anova: Two-Factor With Replication								
SUMMARY	8098	8185	8190	LA887	MD51ne	SG125	Total	Avg
Test 1								
Count	4	4	4	4	4	4	24	
Sum	272.6	248.4	271.7	300.8	320.8	283.9	1698.2	70.8
Average	68.2	62.1	67.9	75.2	80.2	71.0	424.6	
Variance	76.55	120.65	89.51	123.65	4.95	192.74	608.06	
Test 2								
Count	4	4	4	4	4	4	24	
Sum	286.3	287.2	290.9	310.1	358	256.6	1789.1	74.5
Average	71.6	71.8	72.7	77.5	89.5	64.2	447.3	
Variance	41.60	106.20	47.04	86.90	119.91	66.12	467.77	
Total								
Count	8	8	8	8	8	8		
Sum	558.9	535.6	562.6	610.9	678.8	540.5		
Average	139.7	133.9	140.7	152.7	169.7	135.1		
Variance	118.15	226.85	136.55	210.55	124.86	258.87		
Grand Avg								
Average	69.9	67.0	70.3	76.4	84.9	67.6		
Variance	59.07	113.43	68.28	105.27	62.43	129.43		
ANOVA								
Source of Var	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*		
Tests	172.14	1	172.14	1.92	0.174	4.113		
Variety	1873.37	5	374.67	4.18	0.004	2.477		
Int T x V	362.53	5	72.51	0.81	0.551	2.477		
Error	3227.48	36	89.65					
Total	5635.52	47						
Note: Use combined analysis for mean separation since T x V Int was non-significant								
Duncan's range: sq r 89.65/8=3.3476x2.875=9.6; x3.021=10.1; x3.117=10.4								
C.V. = sq root 89.65/72.7)*100=13.0%								
Variety	Mean							
Jajo 8185	67.0 a							
SG 125	67.6 a							
Jajo 8098	69.9 a							
Jajo 8190	70.3 a							
LA 887	76.4 ab							
MD51ne	84.9 b							

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PVP, SJ, 2002, JAJO APPLICANTS, Combined ANOVA "Seed Index"

	PVP, St. Joseph, 2002 Seed Index (wt of 100 fuzzy seed), 40-boll sample							
		Ent 1	Ent 2	Ent 3	Ent 4	Ent 5	Ent 6	
Rep	Plant Date	**Jajo 8098**	**Jajo 8185**	**Jajo 8190**	**LA 887**	**MD 51ne**	**SG 125**	Sum
1	**Test 1**	9.4	9.9	10.1	11.8	9.3	10.0	60.5
2		9.3	9.6	9.8	11.0	9.5	10.0	59.2
3		9.7	9.9	10.0	11.2	9.7	10.1	60.6
5	**Test 2**	9.6	9.8	10.5	11.6	10.1	9.9	61.5
6		10.0	10.2	10.1	11.7	9.5	9.8	61.3
7		9.4	9.6	10.2	11.0	9.8	10.0	60.0
	Average	9.6	9.8	10.1	11.4	9.7	10.0	363.1
	Anova: Two-Factor With Replication							
	SUMMARY	**Jajo 8098**	**Jajo 8185**	**Jajo 8190**	**LA 887**	**MD 51ne**	**SG 125**	**Total**
	Test 1							
	Count	3	3	3	3	3	3	18
	Sum	28.4	29.4	29.9	34	28.5	30.1	180.3
	Average	9.466667	9.8	9.966667	11.33333	9.5	10.03333	10.01667
	Variance	0.043333	0.03	0.023333	0.173333	0.04	0.003333	0.452059
	Test 2							
	Count	3	3	3	3	3	3	18
	Sum	29	29.6	30.8	34.3	29.4	29.7	182.8
	Average	9.666667	9.866667	10.26667	11.43333	9.8	9.9	10.15556
	Variance	0.093333	0.093333	0.043333	0.143333	0.09	0.01	0.436732
	Total							
	Count	6	6	6	6	6	6	
	Sum	57.4	59	60.7	68.3	57.9	59.8	
	Average	9.566667	9.833333	10.11667	11.38333	9.65	9.966667	
	Variance	0.066667	0.050667	0.053667	0.129667	0.079	0.010667	
	ANOVA							
	Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*	
	Test	0.173611	1	0.173611	2.6483	0.11672	4.2597	
	Variety	13.33139	5	2.666278	40.6720	5.95E-11	2.6207	
	EntInt T x V	0.204722	5	0.040944	0.6246	0.682541	2.6207	
	Error	1.573333	24	0.065556				
	Total	15.28306	35					
	Note Use Duncan's for combined analysis for mean separation since Int of T x V was non-sig.							
	Duncan's=sq root 0.065556/6*2.919=0.305 for 2; *3.066=0.3204 for 3; *3.160=0.3302 for 4							
	LA 887	11.38	a					
	Jajo 8190	10.12	b					
	SG 125	9.97	b					
	Jajo 8185	9.83	bc					
	MD 51ne	9.65	c					
	Jajo 8098	9.57	c					

PVP, SJ, 2002, JAJO APPLICANTS, Combined ANOVA "Lint Index"

PVP, 2002, St. Joseph - Lint Index

		Entry Name (Lint Index)					
Rep		Jajo 8098	Jajo 8185	Jajo 8190	LA 887	MD 51ne	SG 125
1	Test 1	7.31	7.20	7.86	7.80	5.77	6.69
2		7.17	6.91	7.40	7.24	5.78	6.47
3		7.47	7.47	7.79	7.39	6.05	6.64
5	Test 2	7.73	7.33	8.10	7.65	6.32	7.35
6		7.61	7.65	7.99	7.51	5.98	6.57
7		7.40	7.26	7.75	7.53	6.03	6.66

Anova: Two-Factor With Replication

	Jajo 8098	Jajo 8185	Jajo 8190	LA 887	MD 51ne	SG 125	Total	Avg.
Test 1								
Count	3	3	3	3	3	3	18	
Sum	21.95	21.58	23.05	22.43	17.6	19.8	126.41	
Average	7.32	7.19	7.68	7.48	5.87	6.60	7.02	**7.02**
Variance	0.0225333	0.0784333	0.0614333	0.0840333	0.0252333	0.0133	0.4346683	
Test 2								
Count	3	3	3	3	3	3	18	
Sum	22.74	22.24	23.84	22.69	18.33	20.58	130.42	
Average	7.58	7.41	7.95	7.56	6.11	6.86	7.25	**7.25**
Variance	0.0279	0.0432333	0.0320333	0.0057333	0.0337	0.1821	0.4212614	
Total								
Count	6	6	6	6	6	6		Average
Sum	44.69	43.82	46.89	45.12	35.93	40.38		
Average	**7.448**	**7.303**	**7.815**	**7.520**	**5.988**	**6.730**		**7.13**
Variance	0.0409767	0.0631867	0.05819	0.03816	0.0413367	0.09844		

ANOVA

Source	*SS*	*df*	*MS*	*F*		*P-value*	*F crit*
Test	0.4466694	1	0.4467	8.792	**	0.006741	4.260
Variety	13.296025	5	2.6592	52.341	***	0.000000	2.621
Int T x V	0.0354472	5	0.0071	0.140	NS	0.981302	2.621
Error	1.2193333	24	0.0508				
Total	14.997475	35					

Note: The interaction T x V was non-significant so combined analysis is appropriate for mean separation

DMR=sq root(.0508/6)*t(2.06)=0.1895*2.919=0.553 for 2; *3.066=0.581 for 3; *3160=0.599 for 4 means.

Jajo 8190	7.815 a	C.V.= sq root(.0508)/7.1342*100=3.2%
LA 887	7.520 a	
Jajo 8098	7.448 a	
Jajo 8185	7.303 a	
SG 125	6.730 b	
MD 51ne	5.988 c	

PVP, SJ, 2002, JAJO APPLICANTS, Combined ANOVA, "Lint %"

Lint %, determined from a 40-boll sample of seedcotton (3 reps per test)							
	Jajo 8098	Jajo 8185	Jajo 8190	LA 887	MD 51ne	SG 125	Grand Avg
Test 1	0.438	0.421	0.438	0.398	0.383	0.401	
	0.435	0.421	0.430	0.397	0.378	0.393	
	0.435	0.430	0.438	0.398	0.384	0.396	
Test 2	0.446	0.428	0.436	0.398	0.385	0.399	
	0.432	0.429	0.442	0.391	0.386	0.401	
	0.441	0.431	0.432	0.406	0.381	0.400	
Average	0.4378	0.4267	0.4360	0.3980	0.3828	0.3983	0.4133
Anova: Two-Factor With Replication							
SUMMARY	Jajo 8098	Jajo 8185	Jajo 8190	LA 887	MD 51ne	SG 125	Total
Test 1							
Count	3	3	3	3	3	3	18
Sum	1.308	1.272	1.306	1.193	1.145	1.190	7.414
Average	0.436	0.424	0.435	0.398	0.382	0.397	2.471
Variance	3E-06	2.7E-05	2.13E-05	3.33E-07	1.03E-05	1.63E-05	7.83E-05
Test 2							
Count	3	3	3	3	3	3	18
Sum	1.319	1.288	1.31	1.195	1.152	1.2	7.464
Average	0.43966667	0.429333	0.436667	0.398333	0.384	0.4	2.488
Variance	5.0333E-05	2.33E-06	2.53E-05	5.63E-05	7E-06	1E-06	0.000142
Total							
Count	6	6	6	6	6	6	
Sum	2.627	2.56	2.616	2.388	2.297	2.39	
Average	0.87566667	0.853333	0.872	0.796	0.765667	0.796667	
Variance	5.3333E-05	2.93E-05	4.67E-05	5.67E-05	1.73E-05	1.73E-05	
ANOVA							
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*	
Test	0.000069	1	0.000069	3.78	0.063797	4.260	
Variety	0.016093	5	0.003219	175.03	4.57E-18	2.621	
Interaction	0.000022	5	0.000004	0.23	0.943519	2.621	
Error	0.000441	24	0.000018				
Total	0.016625	35					
Note: Use combined analysis for mean separation since T x V was non-significant.							
Duncan's=sq root 0.000018/6=.0017*2.919=0.005 for 2; *3.066=0.0052 for 3; *3.160=0.0054 for 4							
C.V.%=sq root0.000018*100/0.413=1.0%							
Jajo 8098 = .4378 a							
Jajo 8190 = .4360 a							
Jajo 8185 = .4267 b							
SG 125 = .3983 c							
LA 887 = .3980 c							
MD 51 ne = .3828 d							

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PVP, SJ, 2002, JAJO APPLICANTS, Combined ANOVA "Seed per Boll"

PVP, St. Joseph, 2002: Seed per Boll								
(calculated value, using seed index to calculate seed per sample/ no. of bolls)								
		Entry Name						
Rep	Test	Jajo 8098	Jajo 8185	Jajo 8190	LA 887	MD 51ne	SG 125	
1	Test 1	35.7	32.2	34.4	32.7	35.6	32.1	
2		34.6	34.4	36.4	33.5	42.7	34.9	
3		34.3	33.4	33.5	33.2	33.6	34.1	
5	Test 2	33.8	34.9	33.0	32.9	33.1	31.9	
6		33.8	31.6	33.1	31.4	34.3	33.2	
7		35.4	34.0	34.0	33.4	33.5	32.1	
Anova: Two-Factor With Replication								
SUMMARY	Jajo 8098	Jajo 8185	Jajo 8190	LA 887	MD 51ne	SG 125	Total	**Avg.**
Test 1								
Count	3	3	3	3	3	3	18	
Sum	104.6	100	104.3	99.4	111.9	101.1	621.3	
Average	34.87	33.33	34.77	33.13	37.30	33.70	34.52	**34.52**
Variance	0.543333	1.213333	2.203333	0.163333	22.87	2.08	5.522647	
Test 2								
Count	3	3	3	3	3	3	18	
Sum	103	100.5	100.1	97.7	100.9	97.2	599.4	
Average	34.33	33.50	33.37	32.57	33.63	32.40	33.30	**33.30**
Variance	0.853333	2.91	0.303333	1.083333	0.373333	0.49	1.161176	
Total								
Count	6	6	6	6	6	6		
Sum	207.6	200.5	204.4	197.1	212.8	198.3		
Average	**34.60**	**33.42**	**34.07**	**32.85**	**35.47**	**33.05**	**33.91**	**33.91**
Variance	0.644	1.657667	1.590667	0.595	13.33067	1.535		
ANOVA								
Source	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*		
Test	13.3225	1	13.3225	4.5564	0.043211	4.2597		
Variety	30.1825	5	6.0365	2.0645	0.105355	2.6207		
Int. T x V	13.26917	5	2.6538	0.9076	0.492472	2.6207		
Error	70.17333	24	2.9239					
Total	126.9475	35						
Note: Int. of T x V was non-significant so it is appropriate to use combined error for mean separation								
C.V.=sq root(2.9239)/33.91*100=5.0%.								
MD 51ne	35.5 a							
Jajo 8098	34.6 a							
Jajo 8190	34.1 a							
Jajo 8185	33.4 a							
SG 125	33.1 a							
LA 887	32.9 a							

PVP, SJ, 2002, JAJO APPLICANTS, Combined ANOVA, "Boll Weight"

Rep	Test	Jajo 8098	Jajo 8185	Jajo 8190	LA 887	MD 51ne	SG 125	AVG.
1	**Test 1**	5.98	5.52	6.17	6.40	5.36	5.35	
2		5.70	5.71	6.26	6.12	6.52	5.75	
3		5.90	5.80	5.95	6.18	5.29	5.71	
1	**Test 2**	5.85	5.99	6.15	6.33	5.44	5.26	
2		5.95	5.65	5.99	6.03	5.31	5.43	
3		5.95	5.73	6.11	6.19	5.31	5.34	
	Average	**5.89**	**5.73**	**6.11**	**6.21**	**5.54**	**5.47**	**5.82**

Anova: Two-Factor With Replication

SUMMARY	Jajo 8098	Jajo 8185	Jajo 8190	LA 887	MD 51ne	SG 125	Total
Test 1							
Count	3	3	3	3	3	3	18
Sum	17.58	17.03	18.38	18.7	17.17	16.81	105.67
Average	5.86	5.68	6.13	6.23	5.72	5.60	35.22
Variance	0.0208	0.020433	0.025433	0.021733	0.477233	0.048533	0.614167
Test 2							
Count	3	3	3	3	3	3	18
Sum	17.75	17.37	18.25	18.55	16.06	16.03	104.01
Average	5.92	5.79	6.08	6.18	5.35	5.34	34.67
Variance	0.003333	0.0316	0.006933	0.022533	0.005633	0.007233	0.077267
Total							
Count	6	6	6	6	6	6	
Sum	35.33	34.4	36.63	37.25	33.23	32.84	
Average	11.776666	11.46667	12.21	12.41667	11.07667	10.94667	
Variance	0.024133	0.052033	0.032367	0.044267	0.482867	0.055767	

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Test	0.0765	1	0.0765	1.328	0.260433	4.260
Variety	2.6616	5	0.5323	9.239	0.000052	2.621
Interaction T x V	0.2609	5	0.0522	0.905	0.493801	2.621
Error	1.3829	24	0.0576			
Total	4.381889	35				

DMR=(sq root0.0576/6)=**0.098** *2.919=0.286 for 2: *3.066=0.3005 for 3; *3.160=0.3097 for 4

Note: The interaction of T x V was non-significant so it is appropriate to use combined analysis for mean separation.

LA 887 = 6.208 a

Jajo 8190 = 6.105 ab

Jajo 8098 = 5.888 bc

Jajo 8185 = 5.733 cd

MD 51ne = 5.538 d

SG 125 = 5.473 d

C.V. = (sq root 0.0576)/5.824*100=4.1%

PVP, SJ, 2002, JAJO APPLICANTS, Combined ANOVA, "Fiber Length"

	2002, PVP UHM Length							
		UHM Fiber Length (inch)						
Rep	**Test**	**Jajo 8098**	**Jajo 8185**	**Jajo 8190**	**LA 887**	**MD 51ne**	**SG 125**	**AVG**
1	Test 1	1.11	1.12	1.16	1.18	1.19	1.16	
2		1.10	1.14	1.13	1.17	1.16	1.19	
3		1.12	1.16	1.17	1.16	1.18	1.16	
1	Test 2	1.10	1.16	1.13	1.16	1.14	1.18	
2		1.14	1.14	1.15	1.18	1.19	1.16	
3		1.11	1.16	1.16	1.17	1.19	1.19	
	Average	**1.113**	**1.147**	**1.150**	**1.170**	**1.175**	**1.173**	**1.155**
	Anova: Two-Factor With Replication							
	SUMMARY	**Jajo 8098**	**Jajo 8185**	**Jajo 8190**	**LA 887**	**MD 51ne**	**SG 125**	**Total**
	Test 1							
	Count	3	3	3	3	3	3	18
	Sum	3.33	3.42	3.46	3.51	3.53	3.51	20.76
	Average	1.1100	1.1400	1.1533	1.1700	1.1767	1.1700	1.1533
	Variance	1E-04	0.0004	0.000433	0.0001	0.000233	0.0003	0.000741
	Test 2							
	Count	3	3	3	3	3	3	18
	Sum	3.35	3.46	3.44	3.51	3.52	3.53	20.81
	Average	1.116667	1.153333	1.146667	1.17	1.173333	1.176667	1.156111
	Variance	0.000433	0.000133	0.000233	0.0001	0.000833	0.000233	0.000684
	Total							
	Count	6	6	6	6	6	6	
	Sum	6.68	6.88	6.9	7.02	7.05	7.04	
	Average	**1.113**	**1.147**	**1.150**	**1.170**	**1.175**	**1.173**	
	Variance	0.000227	0.000267	0.00028	8E-05	0.00043	0.000227	
	ANOVA							
	Source of Var.	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*	
	Test	6.94E-05	1	0.000069	0.236	0.631625	4.260	
	Variety	0.016747	5	0.003349	11.375	0.000010	2.621	
	Int T x V	0.000414	5	0.000083	0.281	0.918873	2.621	
	Error	0.007067	24	0.000294				
	Total	0.024297	35					
	DMR=(sq root .000294/6)=.0070*2.919=.0204 for 2; *3.066=.0215 for 3; *3.160=.0221 for 4.							
	The interaction of T x V was nonsignificant, thus separation of means on combined error term							
	is appropriate.							
	Strains	**Mean UHM**						
	MD 51ne	1.1767	a	**CV (%)=(sq root.000294)/1.155=1.5%**				
	LA 887	1.1700	ab					
	SG 125	1.1700	ab					
	Jajo 8190	1.1533	bc					
	Jajo 8185	1.1400	c					
	Jajo 8098	1.1100	d					

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2002 Jajo PVP, St. Joseph, LA, Length Uniformity

	2002, PVP Length Uniformity Index							
		Fiber Length Uniformity (%)						
Rep	**Test**	**Jajo 8098**	**Jajo 8185**	**Jajo 8190**	**LA 887**	**MD 51ne**	**SG 125**	**AVG.**
1	Test 1	84.9	84.6	84.9	84.9	85.2	85.4	
2		84.3	84.7	85.1	85.9	84.6	85.2	
3		85.3	84.6	85.4	85.6	85.1	84.3	
1	Test 2	83.9	84.4	85.6	85.4	84.5	85.7	
2		85.2	86.1	84.8	84.3	85.2	85.4	
3		83.5	84.7	84.9	85.0	85.7	85.5	
	Average	**84.52**	**84.85**	**85.12**	**85.18**	**85.05**	**85.25**	**84.99**

Anova: Two-Factor With Replication

SUMMARY	Jajo 8098	Jajo 8185	Jajo 8190	LA 887	MD 51ne	SG 125	Total	
Test 1								
Count	3	3	3	3	3	3	18	
Sum	254.5	253.9	255.4	256.4	254.9	254.9	1530	
Average	84.83	84.63	85.13	85.47	84.97	84.97	85.00	a
Variance	0.253333	0.003333	0.063333	0.263333	0.1033333	0.3433333	0.1917647	
Test 2								
Count	3	3	3	3	3	3	18	
Sum	252.6	255.2	255.3	254.7	255.4	256.6	1529.8	
Average	84.20	85.07	85.10	84.90	85.13	85.53	84.99	a
Variance	0.79	0.823333	0.19	0.31	0.3633333	0.0233333	0.4645752	
Total							G.Avg	
Count	6	6	6	6	6	6		
Sum	507.1	509.1	510.7	511.1	510.3	511.5		
Average	**84.52**	**84.85**	**85.12**	**85.18**	**85.05**	**85.25**	**84.99**	
Variance	0.537667	0.387	0.101667	0.325667	0.195	0.243		

ANOVA

Source of Var.	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Test	0.001111	1	0.001111	0.004	0.951503	4.2597
Variety	2.208889	5	0.441778	1.502	0.2264322	2.6207
Int T x V	1.888889	5	0.377778	1.284	0.3032634	2.6207
Error	7.06	24	0.294167			
Total	11.15889	35				

Note: "F test showed no significant differences for test, variety, and interaction; combined analysis for mean separation is appropriate.

Strain	Mean UI	
SG 125	85.25	a
LA 887	85.18	a
Jajo 8190	85.12	a
MD 51ne	85.05	a
Jajo 8185	84.85	a
Jajo 8098	84.52	a

C.V.(%)=(sq root0.294167)/84.99*100=0.6%

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	2002, PVP Strength									
		T1 Fiber Strength (g/tex)								
Rep	Test	Jajo 8098	Jajo 8185	Jajo 8190	LA 887	MD 51ne	SG 125	AVG		
1	Test 1	31.5	32.0	32.5	34.4	35.8	31.2			
2		31.0	33.2	31.3	34.9	36.9	30.5			
3		32.2	34.0	34.7	36.4	36.6	30.6			
1	Test 2	31.0	32.2	33.7	33.3	35.9	30.5			
2		32.3	33.3	33.1	33.9	35.7	30.3			
3		30.3	32.2	32.6	33.9	35.9	30.3			
	Average	31.4	32.8	33.0	34.5	36.1	30.6	33.1		
	Anova: Two-Factor With Replication									
	SUMMARY	Jajo 8098	Jajo 8185	Jajo 8190	LA 887	MD 51ne	SG 125	Total	AVG	
	Test 1									
	Count	3	3	3	3	3	3	18		
	Sum	94.7	99.2	98.5	105.7	109.3	92.3	599.7		
	Average	31.57	33.07	32.83	35.23	36.43	30.77	33.32	**33.32**	a
	Variance	0.3633333	1.0133333	2.9733333	1.0833333	0.3233333	0.1433333	4.7967647		
	Test 2									
	Count	3	3	3	3	3	3	18		
	Sum	93.6	97.7	99.4	101.1	107.5	91.1	590.4		
	Average	31.20	32.57	33.13	33.70	35.83	30.37	32.80	**32.80**	a
	Variance	1.03	0.4033333	0.3033333	0.12	0.0133333	0.0133333	3.5141176		
	Total	Jajo 8098	Jajo 8185	Jajo 8190	LA 887	MD 51ne	SG 125			
	Count	6	6	6	6	6	6			
	Sum	188.3	196.9	197.9	206.8	216.8	183.4			
	Average	**31.38**	**32.82**	**32.98**	**34.47**	**36.13**	**30.57**		**33.06**	
	Variance	0.5976667	0.6416667	1.3376667	1.1866667	0.2426667	0.1106667			
	ANOVA									
	Source of Var.	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*			
	Test	2.4025	1	2.4025	3.704	0.066214	4.260			
	Variety	123.1025	5	24.6205	37.959	0.000000	2.621			
	Int. T x V	2.6158333	5	0.5232	0.807	0.556274	2.621			
	Error	15.566667	24	0.6486						
	Total	143.6875	35							
	DMR=(sq root 0.6486/6)=0.5734*2.919=1.67 for 2; *3.066=1.76 for 3; *3.160=1.81 for 3									
	Note: Interaction of test x variety was nonsignificant, so separation of means based on combined analysis									
	is appropriate.									
	Entry	Mean T1								
	MD 51ne	36.13	a	CV(%)=(sq root0.6486)/33.06*100=2.4%						
	LA 887	34.47	ab							
	Jajo 8190	32.98	bc							
	Jajo 8185	32.82	bc							
	Jajo 8098	31.38	cd							
	SG 125	30.77	d							

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2002, PVP % Fiber Elongation

		Fiber Elongation (E1, %)						
Rep	**Test**	**Jajo 8098**	**Jajo 8185**	**Jajo 8190**	**LA 887**	**MD 51ne**	**SG 125**	**AVG.**
1	Test 1	7.9	9.4	8.6	7.6	7.7	8.4	
2		7.8	9.2	9.2	7.5	7.3	8.6	
3		7.6	9.1	8.4	7.2	7.2	8.3	
1	Test 2	7.7	8.9	8.9	8.3	7.3	8.6	
2		7.8	9.2	8.9	7.9	7.7	8.8	
3		8.0	9.5	8.9	8.2	7.3	8.5	
	Average	**7.80**	**9.22**	**8.82**	**7.78**	**7.42**	**8.53**	**8.26**

Anova: Two-Factor With Replication

SUMMARY	Jajo 8098	Jajo 8185	Jajo 8190	LA 887	MD 51ne	SG 125	Total	
Test 1								
Count	3	3	3	3	3	3	18	
Sum	23.3	27.7	26.2	22.3	22.2	25.3	147	
Average	7.77	9.23	8.73	7.43	7.40	8.43	8.17	b
Variance	0.0233333	0.023333	0.173333	0.043333	0.07	0.023333	0.538824	
Test 2								
Count	3	3	3	3	3	3	18	
Sum	23.5	27.6	26.7	24.4	22.3	25.9	150.4	
Average	7.83	9.20	8.90	8.13	7.43	8.63	8.36	a
Variance	0.0233333	0.09	0	0.043333	0.053333	0.023333	0.426144	
Total							**AVG**	
Count	6	6	6	6	6	6		
Sum	46.8	55.3	52.9	46.7	44.5	51.2		
Average	**7.80**	**9.22**	**8.82**	**7.78**	**7.42**	**8.53**	**8.26**	
Variance	0.02	0.045667	0.077667	0.181667	0.049667	0.030667		

ANOVA

Source of Var.	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Test	0.3211111	1	0.3211	6.531	0.017357	4.260
Variety	14.698889	5	2.9398	59.792	0.000000	2.621
Int. T x V	0.5255556	5	0.1051	2.138	0.095396	2.621
Error	1.180000	24	0.0492			
Total	16.725556	35				

DMR=(sq root 0.049167/6)=.0905*2.919=0.2642 for 2; *3.066=0.2775 for 3; *3.160=0.2861 for 4.

Note: Since interaction of test x variety was nonsignificant, it is appropriate to use combined error for mean separation.

Strain	**Mean**	
Jajo 8185	9.22	a
Jajo 8190	8.82	b
SG 125	8.63	c
Jajo 8098	7.80	d
LA 887	7.78	d
MD 51ne	7.42	e

C.V. (%) = (sq root .0492)/8.26*100=2.7%

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PLANT VARIETY PROTECTION APPLICATION

APPENDIX B

Reaction to Fusarium Wilt, Root-Knot Nematode, and Reniform Nematode

APPLICATION VARIETY: **JAJO 8190**

PVP data on percent Fusarium Wilt [*Fusarium oxysporum* Schleft. f. sp. *vasinfectum* (Atk.) Snyd. and Hans] were collected by K .M. Glass, W .S Gazaway, and E. van Santen and reported in 2001 and 2002 National Cotton Fusarium Wilt Report, Agronomy and Soils Department Series No. 238 (2001) and unnumbered (2002). The data were collected as part of the Regional Fusarium Wilt Screening Nursery at Tallassee, AL (AL Agr. Exp. Stn) on wilt-rootknot infested soil. Copies of pertinent pages from the report with entry identification are attached along with a combined statistical analysis for the 2-year data. Rowden (very susceptible) and M-315 (highly resistant) were used as susceptible and resistant checks every 10th row throughout the nursery. Single row plots, 30 ft. long, were grouped by breeder participants in each replication, bordered on each side by a susceptible and resistant check plot. (I used the average of the two neighboring Rowden plots and the two neighboring M-315 plots as the appropriate values for each check in the combined analysis). Wilted plants were counted and removed at about 2-week intervals during the summer; the remaining healthy plants were counted in early fall and % wilt determined. Percent wilt (+0.5) was converted to Angles for analysis and mean separation and converted back to percent for this summary. The data shows JAJO 8190 to be moderately resistant, compared with Rowden, but not as resistant as the M-315 resistant check. JAJO 8190, JAJO 8098, and JAJO 8185 have similar levels of resistance to this disease.

PVP data on reaction to root-knot nematode were collected by Jack Jones (Professor Emeritus), W. D. Caldwell, and Jim Hayes (LA Agr Exp Stn). Cotton was grown in 2001 and 2002 (two tests) at the Red River Research Station (LA Agr. Exp. Stn.) on soil heavily infested with the root-knot nematode (*Meloidogyne incognita* (Kofoid and White) Chitwood . Cotton followed a 1-year rotation with Kenaf for the purpose of maintaining a high and uniform root-knot population. Plots were grown in one row plots, 40 feet long, in a Randomized Block design. Plants (15 to 25 per plot) were dug, the root system washed of soil, and classified for degree of root galling on a scale of "0" (none) to "5" (severe), and averaged on a plot basis. The PVP data were extracted from the 2001 and 2002 Regional Breeders Strain Tests (full report included), plus an additional Jajo Strains Test in 2002. The combined analysis was conducted for selected JAJO entries plus resistant (LA 887 and Acala Nemx) and susceptible (Stoneville 474) checks. The combined analysis shows that JAJO 8190 and JAJO 8098 were equally as susceptible as the susceptible check (STV 474) and highly significantly different from the resistant checks (LA 887 and Acala Nemx).

Tolerence to reniform nematode was studied by C.G. Cook, A.F. Robinson and others at Weslaco, TX in 2002 on soil heavily infested with reniform nematodes. The experiment (split-plot factorial with 4 replications) was designed to measure tolerance by comparing yield of cotton genotypes under constrasting populations of reniform in Treated (Telone II) and Untreated plots, and comparing performance to a known susceptible check (Stoneville 474). Summary report of their findings is attached. Jajo 8190 was intermediate between Jajo 8185 and Stoneville 474, and yielded significantly more than the latter on untreated plots (1 year data), but evidence of tolerance to this nematode is not conclusive.

APPENDIX B, PVP JAJO APPLICANTS, % Wilt, Tallassee, 2001-02.

	PVP, Fusarium Wilt, Tallassee, AL								
		% Wilt by Entries							
Rep	Test/Year	Jajo 8098	Jajo 8185	Jajo 8190	Jajo 8192	Jajo 8200	M-315	Rowden	
1	2001	6.0	17.0	4.0	44.0	4.0	2.0	70.5	
2		15.0	13.0	21.0	27.0	8.0	4.5	56.0	
3		8.0	20.0	11.0	35.0	59.0	2.0	56.0	
4		0.0	9.0	6.0	5.0	13.0	6.5	80.5	
1	2002	59.0	23.0	59.0	98.0	11.0	0.0	81.5	
2		0.0	10.0	3.0	2.0	3.0	2.0	48.5	
3		19.0	4.0	14.0	79.0	3.0	0.5	63.0	
4		0.0	0.0	3.0	5.0	3.0	0.5	30.0	
		% Wilt+0.5 (Converted to Angles) by Entries							
		Jajo 8098	Jajo 8185	Jajo 8190	Jajo 8192	Jajo 8200	M-315	Rowden	
	2001	14.77	24.73	12.25	41.84	12.25	9.10	57.42	
		23.19	21.56	27.63	31.63	16.95	12.92	48.73	
		16.95	26.92	19.82	36.57	50.48	9.10	48.73	
		4.05	17.95	14.77	13.56	21.56	15.34	64.16	
	2002	50.48	29.00	50.48	82.96	19.82	1.28	64.90	
		4.05	18.91	10.78	9.10	10.78	9.10	44.43	
		26.21	12.25	22.38	63.08	10.78	5.74	52.83	
		4.05	4.05	10.78	13.56	10.78	5.74	33.52	
	Anova: Two-Factor With Replication (Angles)								
	SUMMARY	Jajo 8098	Jajo 8185	Jajo 8190	Jajo 8192	Jajo 8200	M-315	Rowden	Total
	2001								
	Count	4	4	4	4	4	4	4	28
	Sum	58.96	91.16	74.47	123.6	101.24	46.46	219.04	714.93
	Average	14.74	22.79	18.6175	30.9	25.31	11.615	54.76	25.533214
	Variance	63.5212	15.253	46.006492	151.01367	296.01487	9.4097	56.052467	255.78863
	2002								
	Count	4	4	4	4	4	4	4	28
	Sum	84.79	64.21	94.42	168.7	52.16	21.86	195.68	681.82
	Average	21.1975	16.0525	23.605	42.175	13.04	5.465	48.92	24.350714
	Variance	490.22116	111.44069	350.90917	1337.7364	20.4304	10.2929	175.98953	497.4936
	Total								
	Count	8	8	8	8	8	8	8	
	Sum	143.75	155.37	168.89	292.3	153.4	68.32	414.72	
	Average	17.96875	19.42125	21.11125	36.5375	19.175	8.54	51.84	24.941964
	Variance	249.23224	67.266984	177.2139	674.35734	178.63451	19.2504	109.19103	
	Conv.% W	9	10.6	12.5	34.9	10.3	1.7	61.3	
	ANOVA (Angles)								
	Source	SS	df	MS	F	P-value	F crit		
	Years	19.576287	1	19.576287	0.0874	0.7689121	4.0727		
	Entry	10032.172	6	1672.0286	7.4685	1.753E-05	2.3240		
	Y x E	903.5737	6	150.59562	0.6727	0.6722099	2.3240		
	Error	9402.8748	42	223.87797					
	Total	20358.196	55						
	DMR=sq root(223.8780/8)=5.2801*2.858=15.1 for 2 means; *3.006=15.9 for 3; *3.102=16.4 for 3 means								
	It is appropriate to use combined error term for mean separation since interaction of year x entries was not sig.								
	Entry	Mean Ang	Conv. to %						
	Rowden	51.84 a	61.3 a	C.V.=60.0%					
	Jajo 8192	36.54 b	34.9 b						
	Jajo 8190	21.11 c	12.5 c						
	Jajo 8185	19.42 c	10.6 c						
	Jajo 8200	19.18 c	10.3 c						
	Jajo 8098	17.97 c	9.0 c						
	M-315	1.7 d	1.7 d						

2001 Fusarium Wilt Test, Plant Breeding Unit, EVSRC, Tallassee, AL

Entry	Cultivar/Line	Percent wilt per replicate Rep1	Rep2	Rep3	Rep4	Avg.
Jack E. Jones, Jajo Genetics, 246 Maxine Dr., Baton Rouge, LA 70808-6831						
1301	Jajo 1 Jajo 8067	22	15	63	12	28
1302	Jajo 2 Jajo 8098	6	15	8	0	7
1303	Jajo 3 Jajo 8125	19	16	20	4	15
1304	Jajo 4 Jajo 8144	1	25	28	22	19
1305	Jajo 5 Jajo 8185	17	13	20	9	15
1306	Jajo 6 Jajo 8190	4	21	11	6	11
1307	Jajo 7 Jajo 8192	44	27	35	5	28
1308	Jajo 8 Jajo 8200	4	8	59	13	21
	Rowden upper/lower side	62/79	33/79	51/61	97/64	71
	M-315 " " "	0/4	4/5	0/4	15/0	3
Dawn Fraser, Delta and Pine Land Co., P.O. Box 1529, Hartsville, SC 29551						
1401	1	16	29	55	11	28
1402	2	42	50	16	35	36
1403	3	17	18	23	13	17
1404	4	54	2	3	40	25
1405	5	8	6	20	18	13
1406	6	8	17	10	9	11
1407	7	76	67	85	72	75
1408	8	14	59	54	22	37
	Rowden	86	91	88	75	85
	M-315	0	24	3	6	8
Douglas Wessel, Delta and Pine Land Co., 38768 W. Farrell Rd., Maricopa, AZ 85239						
1501	DW-1	96	100	88	100	96
1502	DW-2	3	10	47	8	17
1503	DW-3	29	12	8	6	14
1504	DW-4	74	97	88	91	87
1505	DW-5	2	5	35	15	14
1506	DW-6	9	32	22	6	17
1507	DW-7	4	10	3	3	5
Daryl Bowman, NC State University, Crop Science Dept, Box 8604, Raleigh, NC 27695-8604						
1508	NC98-34	11	18	63	41	33
	Rowden	77	79	72	80	77
	M-315	0	4	5	3	3
Michael Swindle, Aventis Cotton Seed Inter., 117 Kennedy Flat Road, Leland, MS 38756						
1601	ACSI-1	2	6	0	9	4
1602	ACSI-2	12	0	9	55	19
1603	ACSI-3	16	6	14	50	21
1604	ACSI-4	9	21	9	20	15
1605	ACSI-5	6	22	0	12	10
1606	ACSI-6	53	16	19	22	27
1607	ACSI-7	16	4	11	18	12
1608	ACSI-8	1	0	2	8	3
	Rowden	96	14	19	77	51
	[illegible]	1	3	0	18	6

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2002 Fusarium Wilt Test, Plant Breeding Unit, EVSRC, Tallassee, AL

Entry	Cultivar/Line	Percent wilt per replicate Rep1	Rep2	Rep3	Rep4	Avg.	LS Mean	P-value
Jack E. Jones, Jajo Genetics, 246 Maxine Dr., Baton Rouge, LA 70808-6831								
1301	Jajo 1 Jajo 8098	59	0	19	0	19	20	<.0001
1302	Jajo 2 8185	23	10	4	0	9	16	<.0001
1303	Jajo 3 8190	59	3	14	3	20	26	<.0001
1304	Jajo 4 8192	98	2	79	5	46	41	<.0001
1305	Jajo 5 8200	11	3	3	3	5	4	0.350
1306	Jajo 6 0065	7	2	0	4	3	3	0.423
1307	Jajo 7 0098	81	0	20	0	25	21	<.0001
1308	Jajo 8 1202	45	1	5	4	14	7	0.059
	Rowden upper/lower	63/100	44/53	84/39	32/28	55	53	<.0001
	M-315	0-0	1-3.0	1-0.5	1-0.5	1	3	0.400
Dawn Fraser, Delta and Pine Land Co., P.O. Box 1529, Hartsville, SC 29550								
1401	DF_1	77	36	32	6	38	35	<.0001
1402	DF_2	3	16	0	4	6	6	0.111
1403	DF_3	2	0	36	1	10	10	0.009
1404	DF_4	1	3	7	1	3	6	0.112
1405	DF_5	13	18	2	3	9	7	0.076
1406	DF_6	2	23	14	0	10	8	0.033
1407	DF_7	3	3	0	5	3	3	0.432
Kathryn M. Glass, Dept. of Agronomy & Soils, Auburn University, AL 36849-5412								
1408	Deltapine Delta Pearl	14	4	1	18	10	9	0.031
	Rowden	49	19	62	20	37	37	<.0001
	M-315	0	1	0	0	0	3	0.503
Doug Wessel, Delta and Pine Land Co., 38768 W. Farrell Rd, Maricopa, AZ 85239								
1501	DW-1	0	4	0	5	2	2	0.545
1502	DW-2	0	1	0	1	1	0	0.932
1503	DW-3	0	4	6	6	4	6	0.151
1504	DW-4	0	8	16	59	21	20	<.0001
1505	DW-5	5	6	6	25	10	7	0.080
1506	DW-6	17	23	25	75	35	39	<.0001
1507	DW-7	0	0	6	14	5	5	0.176
Kathryn M. Glass, Dept. of Agronomy & Soils, Auburn University, AL 36849-5412								
1508	Stoneville ST 5599BR	1	2	1	17	5	4	0.282
	Rowden	22	73	74	69	59	60	<.0001
	M-315	0	0	0	7	2	3	0.434

Used $\bar{x}$ of checks planted in each side of Jajo plots

continued

200300342 Combined analysis

APPENDIX B, PVP Jajo APPLICANTS, Root-knot, Bossier City, 2001-02

Rep	Test	A.Nemx	LA 887	Jajo8098	Jajo8190	Jajo8200	STV 474	
1	2001 RBST	1.80	1.07	4.07	3.20	3.80	3.67	
2		1.20	2.25	3.13	3.47	3.60	3.06	
3		0.87	1.27	2.47	2.87	3.60	2.80	
4		1.10	1.07	3.47	3.33	4.20	3.47	
1	2002 RBST	0.43	1.15	3.11	3.13	3.14	2.58	
2		0.90	1.50	3.94	3.14	2.85	3.05	
3		0.94	0.65	3.80	3.17	3.35	4.22	
4		1.59	0.64	2.05	3.44	3.70	3.59	
1	2002 Jajo St.	1.33	1.44	2.40	3.50	4.11	3.95	
2		1.95	1.72	3.47	4.45	4.13	3.63	
3		0.65	1.17	3.56	3.11	1.87	2.65	
4		2.33	0.95	3.40	4.39	4.84	4.77	
	AVG	1.26	1.24	3.24	3.43	3.60	3.45	
	Anova: Two-Factor With Replication							
	SUMMARY	A.Nemx	LA 887	Jajo8098	Jajo8190	Jajo8200	STV 474	Total
	2001 RBST							
	Count	4	4	4	4	4	4	24
	Sum	4.97	5.66	13.14	12.87	15.2	13	64.84
	Average	1.2425	1.415	3.285	3.2175	3.8	3.25	2.7016667
	Variance	0.157225	0.3187667	0.4462333	0.065825	0.08	0.1544667	1.1852058
	2002 RBST							
	Count	4	4	4	4	4	4	24
	Sum	3.86	3.94	12.9	12.88	13.04	13.44	60.06
	Average	0.965	0.985	3.225	3.22	3.26	3.36	2.5025
	Variance	0.2272333	0.1745667	0.7452333	0.0218	0.1280667	0.499	1.453837
	2002 Jajo Str.							
	Count	4	4	4	4	4	4	24
	Sum	6.26	5.28	12.83	15.45	14.95	15	69.77
	Average	1.565	1.32	3.2075	3.8625	3.7375	3.75	2.9070833
	Variance	0.5419667	0.1112667	0.2940917	0.4403583	1.6652917	0.7682667	1.6676737
	Total							
	Count	12	12	12	12	12	12	
	Sum	15.09	14.88	38.87	41.2	43.19	41.44	
	Average	1.26	1.24	3.24	3.43	3.60	3.45	
	Variance	0.3182386	0.202	0.4063538	0.2444606	0.574372	0.4379515	
	ANOVA							
	Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*	
	Test	1.9644083	2	0.9822042	2.5849	0.0847106	3.1682	
	Variety	77.001746	5	15.400349	40.5293	4.244E-17	2.3861	
	Int. T x V	1.5337583	10	0.1533758	0.4036	0.9391413	2.0112	
	Error	20.518975	54	0.379981				
	Total	101.01889	71					
	DMR=sq.root(0.379981/12)=0.1779*2.830=0.50 for 2; *2.977=0.53 for 3; * 3.074=0.55 for 4							
	Note: Interaction of T x V was nonsignificant, permitting use of combined error in mean separation							
	LA 887	1.24	a					
	Ac. Nemx	1.26	a					
	Jajo 8098	3.24	b					
	Jajo 8190	3.43	b					
	STV 474	3.45	b					
	Jajo 8200	3.60	b					

PVP, App. B, ROOT KNOT SCREENING, BOSSIER CITY, LA, 2001

		Root-Knot Class by Reps					
Entry	Identification	Rep 1	Rep 2	Rep 3	Rep 4	Total	Avg.1/
461	**XN1649**	1.07	1.53	1.00	1.00	4.60	**1.15***
452	**Acala Nemx (ck)**	1.80	1.20	0.87	1.10	4.97	**1.24***
475	**Jajo 9084**	1.13	1.60	1.20	1.40	5.33	**1.33***
451	**Stv. LA 887 (ck)**	1.07	2.25	1.27	1.07	5.66	**1.42***
456	**PM X00V44**	1.73	1.93	1.60	1.07	6.33	**1.58***
471	**Jajo 8164**	2.87	2.60	1.33	1.33	8.13	**2.03***
470	**Jajo 8125**	1.47	1.50	2.07	3.53	8.57	**2.14***
479	Jajo 0065	2.47	2.47	3.00	1.53	9.47	2.37
476	Jajo 0064	1.93	1.47	2.67	3.56	9.63	2.41
458	PM X00V08	1.93	2.36	2.53	3.88	10.70	2.68
466	Dp M03	3.13	1.93	3.07	2.80	10.93	2.73
484	TAM 96-WD-22	2.10	3.06	3.07	2.80	11.03	2.76
478	Jajo 0097	2.86	2.60	2.47	3.13	11.06	2.77
457	PM X00V32	3.80	2.67	1.20	3.50	11.17	2.79
477	Jajo 0065	2.20	2.94	3.60	3.13	11.87	2.97
454	PM X00V01	2.87	3.00	2.67	3.53	12.07	3.02
460	XN1387	3.67	1.31	3.13	4.13	12.24	3.06
480	TAM 96-WD-81	2.60	2.87	3.33	3.80	12.60	3.15
472	Jajo 8190	3.20	3.47	2.87	3.33	12.87	3.22
481	H 16-24-19	3.73	4.13	1.80	***3.26***	12.92	3.23
453	Stv. 474 (ck)	3.67	3.06	2.80	3.47	13.00	3.25
469	Jajo 8098	4.07	3.13	2.47	3.47	13.14	3.29
462	DP 00X01BR	4.60	4.40	2.00	2.40	13.40	3.35
465	Dp 00Q10B	3.27	2.80	3.27	4.07	13.41	3.35
473	Jajo 8192	3.47	3.60	3.07	3.60	13.74	3.44
459	PM X00V14	3.60	3.93	3.24	3.40	14.17	3.54
464	Dp 00T02	4.00	2.64	4.00	***3.59***	14.23	3.56
468	Jajo 8067	3.45	3.87	4.13	2.93	14.38	3.60
467	Dp 00Q01	3.33	3.93	3.60	4.00	14.86	3.72
486	MAR 53-B-2-99	4.47	2.94	4.27	3.27	14.95	3.74
463	Dp 01X20	4.00	3.93	3.27	3.98	15.18	3.80
474	Jajo 8200	3.80	3.60	3.60	4.20	15.20	3.80
485	H 16-14-20	4.73	3.27	3.27	3.93	15.20	3.80
483	MAR 280-K-1-98	4.67	3.06	4.40	4.47	16.60	4.15
482	MAR 280-L-1-99	4.40	4.73	4.40	4.00	17.53	4.38
455	PM X00V02	4.40	4.87	5.00	4.40	18.67	4.67
	Total	111.56	104.65	101.54	112.06	429.81	

* = Not significantly different from average of resistant checks

Entry 463 was duplicated in Rep 4 (I used avg of 3.83 & 4.13)

Entries ***464 & 481*** had missing values in Rep 4 (I used missing plot formula to calculate values)

PVP, App. B, ROOT KNOT SCREENING, BOSSIER CITY, LA, 2001

Anova: Single Factor

SUMMARY

Entry	Groups	Count	Sum	Avg	Variance
461	PM XN1649	4	4.60	1.15	0.0653
452	Acala Nemx (ck)	4	4.97	1.24	0.1572
475	Jajo 9084	4	5.33	1.33	0.0449
451	Stv. LA 887 (ck)	4	5.66	1.42	0.3188
456	PM X00V44	4	6.33	1.58	0.1352
471	Jajo 8164	4	8.13	2.03	0.6702
470	Jajo 8125	4	8.57	2.14	0.9318
479	Jajo 0065	4	9.47	2.37	0.3742
476	Jajo 0064	4	9.63	2.41	0.8347
458	PM X00V08	4	10.70	2.68	0.7091
466	Dp M03	4	10.93	2.73	0.3068
484	TAM 96-WD-22	4	11.03	2.76	0.2078
478	Jajo 0097	4	11.06	2.77	0.0855
457	PM X00V32	4	11.17	2.79	1.3556
477	Jajo 0065	4	11.87	2.97	0.3388
454	PM X00V01	4	12.07	3.02	0.1352
460	PM XN1387	4	12.24	3.06	1.5281
480	TAM 96-WD-81	4	12.60	3.15	0.2786
472	Jajo 8190	4	12.87	3.22	0.0658
481	H 16-24-19	4	12.92	3.23	1.0353
453	Stv. 474 (ck)	4	13.00	3.25	0.1545
469	Jajo 8098	4	13.14	3.29	0.4462
462	DP 00X01BR	4	13.40	3.35	1.7967
465	Dp 00Q10B	4	13.41	3.35	0.2779
473	Jajo 8192	4	13.74	3.44	0.0630
459	PM X00V14	4	14.17	3.54	0.0884
464	Dp 00T02	4	14.23	3.56	0.4115
468	Jajo 8067	4	14.38	3.60	0.2750
467	Dp 00Q01	4	14.86	3.72	0.0963
486	MAR 53-B-2-99	4	14.95	3.74	0.5582
463	Dp 01X20	4	15.18	3.80	0.1234
474	Jajo 8200	4	15.20	3.80	0.0800
485	H 16-14-20	4	15.20	3.80	0.4812
483	MAR 280-K-1-98	4	16.60	4.15	0.5411
482	MAR 280-L-1-99	4	17.53	4.38	0.0892
455	PM X00V02	4	18.67	4.67	0.0982

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	108.84	35	3.1097	7.38	4E-16	1.532
Within Groups	45.48	108	0.4211			
Total	154.32	143				

se mean diff. = 0.4589; LSD@0.05 = 0.91

PVP, APP. B, Root-knot Ratings,RBST, Bossier City, LA, 2002

			Root-Knot Rating					
Entry	Owner	Name	Rep 1	Rep 2	Rep 3	Rep 4	Average	
301	Bourland	Ark 9108-04-17	2.50	2.65	2.67	2.41	2.56	#
302	Bourland	Ark 9111-57-20	1.18	1.20	1.47	1.73	1.40	*
303	Bourland	Ark 9101-97-10	0.89	1.17	1.68	1.22	1.24	*
304	Bourland	Ark 9108-23-05	2.31	3.00	3.00	2.72	2.76	#
305	Cook	NX 2429	3.94	4.11	4.88	4.53	4.37	
306	Cook	NX99326c	3.10	1.63	2.67	4.25	2.91	
307	Creech	DES 810	3.37	3.50	4.23	3.00	3.53	
308	Creech	DES 816	2.68	3.38	3.21	3.10	3.09	
309	Fraser	99M03	1.76	2.27	1.78	3.37	2.30	#
310	Fraser	Dp 491	2.19	2.65	3.52	4.70	3.27	
311	Jones	JAJO 8098	3.94	3.80	2.05	4.28	3.52	
312	Jones	JAJO 8185	2.93	3.73	3.50	4.00	3.54	
313	Jones	JAJO 8190	3.14	3.17	3.44	4.68	3.61	
314	Jones	JAJO 8200	2.85	3.35	3.70	2.73	3.16	
315	Keim	DPLX 99X35	3.84	3.13	3.07	4.00	3.51	
316	Keim	Dp 493	4.45	3.10	4.40	4.83	4.20	
317	Myers	LA 99405085	3.05	3.56	4.25	2.00	3.22	
318	Myers	LA 00405033	3.83	2.53	3.13	4.45	3.49	
319	Myers	LA 00405071	3.95	2.94	3.93	2.12	3.24	
320	Myers	LA 433287-147	2.61	2.87	3.50	4.28	3.32	
321	Wallace	Miscot 8806	2.77	2.32	3.13	3.75	2.99	
322	S. Check	PSC 355	2.58	3.70	4.00	3.71	3.50	
323	S. Check	FM 958	3.85	4.69	4.28	3.94	4.19	
324	S. Check	DeltaPEARL	4.00	3.50	3.31	4.25	3.77	
325	R. Check	Stv LA 887	1.15	1.50	0.65	0.64	0.99	
326	R. Check	Acala Nemx	0.43	0.90	0.94	1.59	0.97	
327	S. Check	Stv 474	2.58	3.05	4.22	3.59	3.36	
						Avg. =	3.03	

LSD @ 0.05 = 0.92; C.V. = 21.5%

= significantly less than avg. of sus. checks (3.71) but sig. more than avg. of res. checks (0.98).

* = not significantly different from avg. of resistant checks.

Anova: Single Factor, Root-knot Rating, RBST, Bossier City, LA 2002

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
Ark 9108-04-17	4	10.23	2.5575	0.01543
Ark 9111-57-20	4	5.58	1.395	0.06737
Ark 9101-97-10	4	4.96	1.24	0.10713
Ark 9108-23-05	4	11.03	2.7575	0.10642
NX 2429	4	17.46	4.365	0.17937
NX99326c	4	11.65	2.9125	1.17589
DES 810	4	14.1	3.525	0.26577
DES 816	4	12.37	3.0925	0.08889
99M03	4	9.18	2.295	0.56923
Dp 491	4	13.06	3.265	1.21937
JAJO 8098	4	14.07	3.5175	0.99776
JAJO 8185	4	14.16	3.54	0.20713
JAJO 8190	4	14.43	3.6075	0.52942
JAJO 8200	4	12.63	3.1575	0.20289
DPLX 99X35	4	14.04	3.51	0.229
Dp 493	4	16.78	4.195	0.56977
LA 99405085	4	12.86	3.215	0.8979
LA 00405033	4	13.94	3.485	0.6961
LA 00405071	4	12.94	3.235	0.77483
LA 433287-147	4	13.26	3.315	0.5535
Miscot 8806	4	11.97	2.9925	0.36483
PSC 355	4	13.99	3.4975	0.39349
FM 958	4	16.76	4.19	0.1454
DeltaPEARL	4	15.06	3.765	0.18923
Stv LA 887	4	3.94	0.985	0.17457
Acala Nemx	4	3.86	0.965	0.22723
Stv 474	4	13.44	3.36	0.499

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	89.1009	26	3.42696	8.08	1.65E-13	1.63
Within Groups (error	34.3408	81	0.42396			
Total	123.442	107				

LSD (0.05) = [sqr(2*0.42396/4)]*t(1.99)= 0.92; C.V. = [sqr(0.42396)]/3.03*100= 21.5%

Root-Knot Screening, Jajo Strains, Bossier City, 2002
(Classified by J. Jones, D. Caldwell, and J.Hayes, Nov 8, 2002)

Screening Jajo Strains for Root-knot Resistance, Bossier City, 2002

			Mean RK Class by Reps (11/8/02)					
Entry	Pedigree	Strain	Rep 1	Rep 2	Rep 3	Rep 4	Avg.	
751	(887/850082)*(MD51/887)	JAJO 8098 ne	2.40	3.47	3.56	3.40	3.21	
752	LA 887/SG125	JAJO 8185	3.67	3.28	3.53	4.63	3.78	
753	LA 887/SG125	JAJO 8190	3.50	4.45	3.11	4.39	3.86	
754	LA 887/SG125	JAJO 8200	4.11	4.13	1.87	4.84	3.74	
755	LA 887/SG125	JAJO 8192	4.00	4.82	2.29	4.71	3.96	
756	H1215/887-9142	JAJO 0065	4.65	4.10	4.76	4.62	4.53	
757	H1215/667-9157	JAJO 0098	2.11	2.60	4.00	2.56	2.82	
758	H1215/667-9157	JAJO 1201	3.81	2.83	1.33	3.69	2.92	
759	H1215/667-9157	JAJO 1202	3.38	4.00	1.68	3.65	3.18	
760	H1215/887-9155	JAJO 1187	1.38	2.53	1.47	3.20	2.15	*,#
761	H1220*(887//725RKR/887)	JAJO 1217	2.44	2.62	3.63	3.00	2.92	
762	(AP/887//51/887)*(887/1560///887/0082//51/887)	JAJO 1113ne	4.45	3.69	1.60	3.68	3.36	
763		Stv LA 887 (ck)	1.44	1.72	1.17	0.95	1.32	
764		Acala Nemx (ck)	1.33	1.95	0.65	2.33	1.57	
765		Stv 474 (check)	3.95	3.63	2.65	4.77	3.75	
							avg=3.13	

= sig less than Stv. 474; * = not sig. different from avg. of resistant checks.
LSD (0.05) = 1.23; C.V = 27.6%

Anova: Single Factor
SUMMARY

Groups	Count	Sum	Average	Variance
JAJO 8098 ne	4	12.83	3.2075	0.2941
JAJO 8185	4	15.11	3.7775	0.349
JAJO 8190	4	15.45	3.8625	0.4404
JAJO 8200	4	14.95	3.7375	1.6653
JAJO 8192	4	15.82	3.955	1.3642
JAJO 0065	4	18.13	4.5325	0.0868
JAJO 0098	4	11.27	2.8175	0.6708
JAJO 1201	4	11.66	2.915	1.307
JAJO 1202	4	12.71	3.1775	1.0611
JAJO 1187	4	8.58	2.145	0.7674
JAJO 1217	4	11.69	2.9225	0.277
JAJO 1113ne	4	13.42	3.355	1.499
Stv LA 887 (ck)	4	5.28	1.32	0.1113
Acala Nemx (ck)	4	6.26	1.565	0.542
Stv 474 (check)	4	15	3.75	0.7683

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups (Strains)	45.19094	14	3.2279	4.3218	9E-05	1.91825
Within Groups (Error)	33.6103	45	0.7469			
Total	78.80124	59				

LSD@0.05=(sq2*0.7469/4)*t(2.01) = 1.23
C.V. = (sq0.7469)/3.13*100 = 27.6%

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PVP, JAJO 8190, Reniform Nematode, 2002
Appendix B

200300342

2002 Field Evaluation of Cotton Cultivar Response to Reniform Nematodes

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Abstract

In recent years, reniform nematodes have become a serious pest to U.S. cotton production. The USDA-ARS at Weslaco, TX has maintained a nursery for evaluating cotton cultivar response to reniform nematodes. Thirty-six entries from private and public breeding programs were evaluated in 2002. Average yield reduction between the fumigated and reniform nematode infested plots was 22.5%. Fourteen entries had significantly higher lint yields than Stoneville 474 in the reniform nematode infested plots. Four entries in the fumigated treatment, Jajo 8185, DPL 545BG/RR, Syngenta NX RN00516, and DPX 03X133, produced higher yields than Stoneville 474. Percent yield loss between treatments were lowest for Syngenta NX 00VC151 (10.3%), Syngenta NX 2723ct (12.2%), Phytogen PSC 01NM-477 (12.8%), Syngenta NX 00VC133 (14.5%) and Phytogen PSC 01NM-481 (14.5%). Reduction in yield between treatments was greatest for Stoneville 474 (33.2%).

Materials and Methods

Research plot location was the USDA-ARS North Farm, Weslaco, TX. Soil type is Hidalgo sandy clay loam. The research plots have been in continuous cotton cultivation since the 1980's. Experimental design was a split-plot, with four replications. Thirty-six entries were planted for evaluation, including Stoneville 474, which was used as the susceptible check. Fertilizer (40 lb N/acre as Ammonium Sulfate) and Telone II fumigation were applied on 14 December 2001. An additional side dress application of 40 lb N/acre (N32) was applied on 6 May 2002. Planting date was 5 March 2002. For preemergence weed control, pendimethalin was applied at 1.0 quart formulation/acre at planting. Experimental plots were one row, 30 ft long and spaced 3.3 ft apart. Harvest dates were 29 July and 7 August. Fiber properties were reported for the reniform nematode infested treatment. Standard crop management practices were used throughout the growing season.

Results

Average lint yield reduction between the fumigated and reniform nematode infested treatments was 22.5% (Table 1). In the untreated, reniform nematode infested plots, 14 entries produced significantly higher yields than Stoneville 474. Only four entries in the Telone II fumigated treatment produced significantly higher yields than Stoneville 474. When yields were compared between treatments, percent yield reduction was lowest for Syngenta NX 00VC151 (10.3%), Syngenta NX 2723ct (12.2%), Phytogen PSC 01NM-477 (12.8%), Syngenta NX 00VC133 (14.5%) and Phytogen PSC 01NM-481 (14.5%). Stoneville 474, the susceptible check, had the greatest yield reduction between treatments (33.2%). JaJo 8185 produced the highest yield in both treatments. Fiber length was longest for Fibermax 832 (1.24) and shortest for TAMU MAR 41A-1-99 (1.08) (Table 2). Fiber strength was highest for Texas 245 (34.8 g/tex), and Fibermax 832 (34.5g/tex). With the exception of Suregrow 747, all micronaire values were in the 3.5 to 4.8 range. Results indicate that germplasm with improved levels of tolerance to reniform nematodes is being developed.

Table 1. Lint yields in reniform nematode-infested (RN) and Telone II fumigated (TL) soils and percent yield reduction between treatments (PYR) of 36 cultivars and strains. 2002

Entry	RN (lb/acre)	TL (lb/acre)	PYR (percent-reduction)
JaJo 8185 (Comparison Var.)	1416*	1685*	15.9
Syngenta NX RN00516	1351*	1650*	18.2
Syngenta NX 2723ct	1290*	1470	12.2
TAM 96WD-22	1282*	1590	19.4
DPX 03X133	1276*	1616*	21.1
Syngenta 00VC133	1271*	1486	14.5
Suregrow 747	1270*	1588	20.0
Phytogen PSC 01NM-481	1252*	1464	14.5
Syngenta 00VC115	1234*	1521	18.9
Syngenta 00VC151	1220*	1361	10.3
Syngenta 2383-2-99	1199*	1468	18.3
Phytogen PSC 01NM-480	1198*	1497	20.0
JaJo 8190 (Application Var.)	1191*	1566	23.9
DPX 01X37	1173*	1586	26.0
DPL 545 BG/RR	1172	1670*	29.8
Phytogen PSC 01NM-479	1155	1534	24.7
Syngenta RN00526	1126	1499	24.9
Phytogen PSC 01NM-477	1120	1285	12.8
JaJo 8098 (Comparison Var.)	1116	1547	27.8
Texas 245	1108	1527	27.5
Syngenta 01VCF4-206	1096	1419	22.8
Syngenta 99574ct2	1092	1477	26.0
Syngenta RN00513	1076	1496	28.1
Syngenta 01VCF4-213	1066	1307	18.4
Fibermax 832	1064	1370	22.4
Phytogen PSC 01NM-476	1061	1416	25.1
DES 816	1019	1439	29.2
Syngenta 00VC211	1002	1278	21.6
DES 810	976	1264	22.8
Stoneville 474 (check)	959	1435	33.2
TAM 96WD-81	958	1364	29.8
TAM 96WD-69s	911	1297	29.8
Texas 295	910	1236*	26.3
TAMU MAR 41A-1-99	822	993*	17.2
TAMU MAR 7A-1-00	725*	1018*	28.8
TAMU MAR 16D-1-00	704*	970*	27.5

* Significantly different from Stoneville 474 at the 0.05 level of probability.

Table 2. Fiber micronaire, length, and strength of 36 cultivars and strains in reniform nematode-infested soil.

Entry	Micronaire (units)	Length (inches)	Strength (g/tex)
JaJo 8185	4.5	1.14	29.8
Syngenta NX RN00516	4.3	1.17	29.9
Syngenta NX 2723ct	4.4	1.11	29.3
TAM 96WD-22	4.3	1.16	29.1
DPX 03X133	4.5	1.16	31.3
Syngenta 00VC133	4.3	1.10	29.7
Suregrow 747	4.9	1.14	27.6
Phytogen PSC 01NM-481	4.2	1.13	30.8
Syngenta 00VC115	4.4	1.11	28.5
Syngenta 00VC151	4.3	1.11	30.3
Syngenta 2383-2-99	4.3	1.13	28.9
Phytogen PSC 01NM-480	4.2	1.19	30.9
JaJo 8190	4.3	1.13	30.1
DPX 01X37	4.7	1.11	30.6
DPL 545 BG/RR	4.6	1.12	31.2
Phytogen PSC 01NM-479	4.4	1.16	30.7
Syngenta RN00526	3.8	1.10	28.8
Phytogen PSC 01NM-477	4.2	1.17	29.3
JaJo 8098	4.4	1.12	31.6
Texas 245	4.0	1.17	34.8
Syngenta 01VCF4-206	4.3	1.11	29.1
Syngenta 99574ct2	4.2	1.13	32.7
Syngenta RN00513	4.6	1.15	31.0
Syngenta 01VCF4-213	4.5	1.13	28.4
Fibermax 832	4.0	1.24	34.5
Phytogen PSC 01NM-476	4.2	1.18	30.7
DES 816	4.5	1.18	32.9
Syngenta 00VC211	4.5	1.11	31.0
DES 810	4.2	1.13	31.1
Stoneville 474 (check)	4.7	1.12	30.9
TAM 96WD-81	4.7	1.10	28.5
TAM 96WD-69s	4.6	1.10	29.3
Texas 295	4.4	1.14	30.4
TAMU MAR 41A-1-99	4.3	1.08	31.3
TAMU MAR 7A-1-00	3.6	1.13	28.2
TAMU MAR 16D-1-00	4.4	1.09	29.6

REPRODUCE LOCALLY *include form number and edition date on all reproductions.* FORM APPROVED-OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E

STATEMENT OF THE BASIS OF OWNERSHIP.

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C.. 552a) and the Paperwork Reduction Act (PRA) of 1995. Application is required in order to determine if a plant variety Protection certificate is to be issued (7 U.S.C.- 2421)- Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT (S)

JACK E. JONES, Ph. D.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER

JAJO 8190, CS 2303

3. VARIETY NAME

JAJO 8190

4. ADDRESS *(Street and No., or R.F.D. No, City. State. and zip and Country)*

246 MAXINE DRIVE,

BATON ROUGE, LA, 70808-6831, USA

5. TELEPHONE *(include area code)*

225/766-0403

6. FAX *(include area code)*

225/766-0403

7. PVPO NUMBER

20030034 2

8. Does the applicant own all rights to the variety? *Mark an "X" in appropriate block. If no, please explain.* [X] YES [ ] NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company? [X] YES [ ] NO

If no, give name of country

10. Is the applicant the original owner? [X] YES [ ] *NO If no, please answer one of the following:*

a. If original rights to variety were owned by individual(s)., is (are) the original owner(s) a U.S. national(s)?

[ ] YES [ ] NO If no, give name of country

b. .If original rights to variety were owned by a company(ies). is (are) the original owner(s) a U.S. based company?

[ ] YES [ ] NO If no. give name of country

11. Additional explanation on ownership *(if needed. use reverse for extra space):* **Cotton variety 'JAJO 8190' was developed solely by Dr. Jack E. Jones, Cotton Breeder, Jajo Genetics, 246 Maxine Dr., Baton Rouge, LA 70808-6831. In November, 2002, an agreement was signed between Jack E. Jones (d/b/a/ Jajo Genetics) and MONSANTO Company, (d/b/a/Cotton States Services Company), 800 North Lindberg Blvd., St. Louis, MO 63167, granting Cotton States Services Company exclusive research, testing and commercial marketing rights to variety 'JAJO 8190' on a royalty basis, but Dr. Jack E. Jones retains all rights and privileges of ownership to this variety.**

PLEASE-NOTE:
Plant variety protection can be offered only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3- If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41 (a)(2) of the Plant Variety Protection Act for definition.