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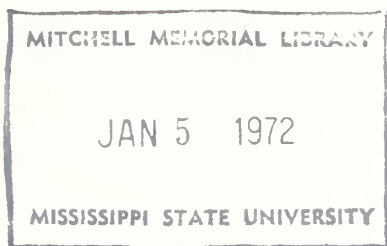
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The Influence Of Planting Date On Agronomic And Fiber Properties Of Cotton

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AGRICULTURAL AND FORESTRY EXPERIMENT STATION

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Conclusion

These data indicate that the highest yields were obtained from the April 17-21 planting. The lack of a variety x date interaction indicates that variety selection would not be influenced by planting date. The presence of a year x planting date interaction for fiber properties indicated that environment in any particular year was more important than planting date.

The Influence Of Planting Date On Agronomic And Fiber Properties Of Cotton

R. R. BRIDGE, W. R. MEREDITH, JR., and J. F. CHISM¹

The influence of planting date on agronomic and fiber properties of cotton was measured by planting six varieties on the planting dates in 1968 and 1969.

Planting dates were April 17, May 2, and May 22 in 1968 and April 21, May 1, and May 20 in 1969. The varieties included in this study were; Stoneville 213, Deltapine 16, Stoneville 508, Coker 413-68, Hopicola, and Pee Dee 2165. Seed of these varieties were increased at Iguala, Mexico, to obtain approximately the same seed quality for each variety.

A split-plot design with eight replications was used each year. Main plots were planting dates and subplots were varieties. The plots consisted of two rows, 65 feet long with 40-inch spacing between rows. The seeding rate was approximately 15 pounds per acre of acid linted seed planted in hills 15 inches apart. All seed received an in-furrow treatment of Terraclor Super X granules and Di-Syston applied at the rate of 5.4 lbs. per acre.

Data were obtained for each character from a sample taken directly from the cotton picker in each of the eight replications. Data were obtained on lint yield, lint percentage, seed index, seed germination, fiber length (2.5 percent and 50 percent length), fiber strength (g per tex), fiber elongation, and fiber fineness (micronaire) for both first and second harvest. Fiber property evaluations were made by the U.S. Cotton Fiber Laboratory, the Plant Science Research Division, Agricultural Research Service, U.S. Department of Agriculture, Knoxville, Tennessee.

Data are presented in 15 tables where Tables 1, 2, 7, 8, and 9 present 1968 results; Tables 3, 4, 10, 11, and 12 present 1969 results; and Tables 5, 6, 13, 14, and 15 present combined (1968-69) results

Results and Discussion

Yield: The 2-year average (1968-69) shows lint yields to be significantly higher on the April planting date and to decrease with each later planting. The data indicate that the April 17-21 planting was 6 percent and 21 percent higher in yield than the May 1-2 and May 20-22 plantings, respectively.

These data also show that harvesting was completed much sooner for the early planting. Harvesting was completed by October 20, October 28, and November 19 for the April 17-21, May 1-2, and May 20-22 plantings, respectively. The 2-year average (1968-69) of all planting dates showed Stoneville 213 and Deltapine 16 to be the highest yielding varieties. Stoneville 213 yielded significantly more lint than the other varieties tested in both 1968 and 1969. These data showed that there was no significant variety x date interaction for lint yield.

Ranney (2) obtained maximum stands, stand uniformity, and yield with May 1-5 plantings. He also showed that in April plantings, stand, stand uniformity and yield were significantly increased by the use of a planter-box fungicide treatment. In later plantings, after May 1, there was no significant increase from the use of supplemental fungicides. Ranney also stated that farm operations should be planned to permit planting on April 21 or as soon thereafter as possible. Planting should be done when there is a high

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²RANNEY, C.D. 1968. Studies on planting dates of cotton on effect of three chemical treatments. Miss. Agr. Exp. Sta. Bull. 761: 20 p.

probability of having a 68°F soil temperature for a 10-day period following planting.

Lint Percentage: Planting date had no consistent effect on lint percentage. In 1968, the May 2 planting had a significantly lower lint percentage and in 1969 the April 21 planting was significantly lower. In most cases lint percentage was higher on the second harvest. This is probably due to the fact that the seed of the second harvest were smaller and more immature. The different weather conditions associated with the harvesting dates probably accounted for most of the interactions associated with lint percentage.

Seed Index and Seed Germination: Planting date had very little effect on seed index. In 1968, seed of the April 17 planting were significantly smaller than the other plantings. In 1969, there was no significant difference in seed index for the first

harvest. Seed from the second harvest were smaller than those from the first harvest for all plantings.

There was very little difference in germination for first harvest in 1968 and 1969. In 1968, seed from May 2 planting had significantly better germination than the April 17 and May 2 first harvest seed. Seed from the second harvest was nearly always lower in germination than the seed obtained at first harvest. Generally, seed from the second harvest should not be used for planting. Seed quality of first harvest seed will probably be associated more with existing environmental conditions than with planting dates.

Fiber Properties: Planting date had no consistent effect on fiber properties. The presence of a year x planting date interaction for all fiber properties indicated that environment in any particular year was more important than planting date.

COTTON PLANTING DATES

Date-Variety	Total	Lint per acre		Percent first pick	Lint percent		Seed index		Seed germination	
		First pick	Second pick		First pick	Second pick	First pick	Second pick	First pick	Second pick
Stoneville 213	1256	114.3	37.8	91	38.5	37.8	10.2	8.0	85	77
Deltapine 16	1191	104.3	37.5	88	37.5	37.6	10.1	8.1	86	81
Stoneville 508	1105	96.5	36.8	87	36.8	36.4	10.6	9.0	86	75
Coker 413-68	1071	94.1	36.8	88	36.8	36.6	10.1	8.4	88	78
Hopicala	1006	80.2	39.0	80	39.0	38.1	11.3*	9.6	87	74
Pee Dee 2165	972	85.6	38.4	85	38.4	37.8	11.7	9.3	84	74
Average	1100 a	95.3 a	37.8 a	87 a	37.8 a	37.4 a	10.6 b	8.7 b	86 b	76 c
Stoneville 213	1260	108.7	36.5	86	36.5	37.9	10.4	9.0	87	86
Deltapine 16	1138	95.3	35.7	84	35.7	37.7	10.1	8.9	85	89
Stoneville 508	1039	84.7	34.0	81	34.0	36.4	11.0	10.0	90	87
Coker 413-68	1016	85.3	34.5	84	34.5	36.1	10.0	9.0	88	87
Hopicala	951	67.4	34.5	71	34.5	38.7	12.5	11.2	86	85
Pee Dee 2165	947	72.6	35.3	77	35.3	38.0	12.2	11.4	82	90
Average	1058 a	85.6 b	35.1 b	81 b	35.1 b	37.5 a	11.0 a	9.9 a	86 b	86 b
Stoneville 213	1135	102.0	38.0	90	38.0	36.5	10.3	9.2	93	81
Deltapine 16	1076	97.9	37.5	91	37.5	35.7	9.5	8.7	93	83
Stoneville 508	943	83.2	35.0	88	35.0	34.7	11.2	10.0	92	85
Coker 413-68	890	76.1	36.4	85	36.4	34.9	10.2	9.3	92	82
Hopicala	904	67.1	38.8	74	38.8	36.5	12.7	11.5	90	80
Pee Dee 2165	860	75.2	38.7	87	38.7	36.5	12.1	11.2	92	82
Average	968 b	83.6 b	37.4 a	86 a	37.4 a	35.8 b	11.0 a	10.0 a	92 a	82 b

A - Planted April 17 - Defoliated Sept. 10 - Harvested Sept. 25 and Oct. 18, 1968.

B - Planted May 2 - Defoliated Sept. 26 - Harvested Oct. 9 and Oct. 28, 1968.

C - Planted May 22 - Defoliated Oct. 16 - Harvested Oct. 28 and Nov. 19, 1968.

Table 2: Influence of Planting Date on Fiber Length, Strength, Elongation, and Fineness. Stoneville, Mississippi. 1968.

Date-Variety	2.5% Span length		50% Span length		Fiber strength, Tl		Fiber elongation		Micronaire	
	First pick	Second pick	First pick	Second pick	First pick	Second pick	First pick	Second pick	First pick	Second pick
Stoneville 213	1.12	1.12	.53	.50	17.85	18.92	6.97	8.54	4.37	3.56
Deltapine 16	1.15	1.14	.54	.51	18.94	19.50	8.18	9.73	3.98	3.40
Stoneville 508	1.18	1.22	.55	.53	18.90	20.29	7.41	8.83	3.67	3.00
Coker 413-68	1.17	1.17	.54	.52	19.25	20.41	6.40	7.17	3.72	3.18
Hopicala	1.10	1.15	.56	.55	22.30	23.65	6.32	7.38	4.06	3.26
Pea Dee 2165	1.15	1.18	.54	.54	20.91	23.54	5.50	6.74	4.15	3.42
Average	1.14 a	1.16 b	.54 a	.53 b	19.69 a	21.05 a	6.80 c	8.06 a	3.99 b	3.30 b
Stoneville 213	1.10	1.09	.53	.49	17.74	17.00	7.73	8.18	4.54	3.87
Deltapine 16	1.13	1.13	.53	.51	18.82	17.88	8.92	9.53	4.23	3.80
Stoneville 506	1.19	1.18	.55	.52	19.21	17.89	7.76	8.58	3.95	3.24
Coker 413-68	1.16	1.15	.54	.50	19.33	18.33	6.86	7.40	3.91	3.53
Hopicala	1.11	1.10	.57	.53	22.55	21.60	6.77	7.29	4.35	3.88
Pea Dee 2165	1.14	1.16	.55	.54	21.25	21.54	5.78	6.22	4.42	4.03
Average	1.14 a	1.14 c	.54 a	.51 c	19.82 a	19.04 c	7.31 b	7.83 b	4.18 a	3.72 a
Stoneville 213	1.10	1.13	.51	.53	17.69	17.83	8.26	8.29	4.35	3.85
Deltapine 16	1.14	1.18	.54	.54	18.28	18.19	9.46	9.09	4.09	3.43
Stoneville 508	1.21	1.23	.55	.56	18.74	19.27	8.51	8.30	3.56	3.26
Coker 413-68	1.16	1.20	.55	.56	19.03	18.77	7.25	7.47	3.88	3.55
Hopicala	1.13	1.19	.56	.60	21.70	22.13	7.20	6.91	4.44	3.84
Pea Dee 2165	1.14	1.20	.55	.56	21.47	21.37	6.28	6.30	4.42	3.79
Average	1.15 a	1.19 a	.54 a	.56 a	19.49 a	19.60 b	7.83 a	7.73 b	4.12 a	3.62 a

A - Planted April 17 - Defoliated Sept. 10 - Harvested Sept. 25 and Oct. 18, 1968.

C - Planted May 22 - Defoliated Oct. 16 - Harvested Oct. 29 and Nov. 19, 1968.

Date-Variety	Lint per acre		Percent first pick	Lint percent		Seed index		Seed germination	
	Total	First pick		First pick	Second pick	First pick	Second pick	First pick	Second pick
Stoneville 213	950	829	87	34.5	38.8	10.4	9.5	93	91
Deltapine 16	893	750	85	34.3	39.6	10.0	9.2	92	92
A Stoneville 508	789	672	85	33.1	37.4	11.0	10.0	84	77
Coker 413-68	636	532	84	31.6	36.8	11.2	9.5	93	93
Hopicala	665	432	65	37.8	37.8	11.6	10.8	92	87
Fee Dee 2165	726	587	81	33.5	38.1	12.2	10.6	94	90
Average	776 a	635 a	81	34.5 b	38.1 b	11.1 a	9.9 a	91	88
Stoneville 213	899	801	89	37.4	38.8	10.1	9.5	95	83
Deltapine 16	806	705	87	36.1	37.7	10.0	9.5	96	79
B Stoneville 508	723	605	84	35.2	36.4	10.9	10.3	85	63
Coker 413-68	583	539	92	34.9	38.3	10.5	9.7	92	78
Hopicala	643	408	63	39.5	39.0	11.7	11.0	96	66
Fee Dee 2165	648	524	81	37.5	38.3	11.8	10.6	95	76
Average	717 b	597 b	83	36.8 a	38.1 b	10.9 a	10.1 a	93	74
Stoneville 213	724	573	79	38.5	40.0	10.3	9.0	93	79
Deltapine 16	723	572	79	38.3	41.0	10.1	8.3	95	68
C Stoneville 508	613	394	64	36.8	38.8	11.2	9.7	91	79
Coker 413-68	457	269	59	36.0	40.5	10.9	8.3	94	81
Hopicala	452	171	38	39.0	41.0	12.0	10.3	89	72
Fee Dee 2165	514	376	73	37.3	39.9	11.6	9.7	94	69
Average	580 c	392 c	67	37.6 a	40.2 a	11.0 a	9.2 b	92	75

A Planted April 21 Defoliated Sept. 12 Harvested Sept. 22 and Oct. 20, 1969.
 B Planted May 1 Defoliated Sept. 25 Harvested Oct. 2 and Oct. 23, 1969.
 C Planted May 20 Defoliated None Harvested Oct. 20 and Nov. 14, 1969.

Table 4: Influence of Planting Date on Fiber Length, Strength, Elongation, and Fineness. Stoneville, Mississippi, 1969.

Date-Variety	2.5% Span length		50% Span length		Fiber strength T ₁		Fiber elongation		Micronaire	
	First pick	Second pick	First pick	Second pick	First pick	Second pick	First pick	Second pick	First pick	Second pick
Stoneville 213	1.13	1.09	.53	.51	18.65	18.14	7.91	7.65	4.18	4.53
Deltapine 16	1.16	1.09	.53	.50	19.37	18.48	8.97	8.61	3.96	4.34
Stoneville 508	1.17	1.14	.52	.51	19.25	18.99	8.77	8.30	3.26	3.67
Coker 413-68	1.16	1.14	.52	.53	20.00	18.63	6.73	7.06	3.54	3.97
Hopicala	1.08	1.09	.54	.54	23.10	23.20	6.83	7.23	4.23	4.13
Pee Dee 2165	1.14	1.15	.54	.55	21.83	22.39	5.88	6.07	4.18	4.31
Average	1.14 a	1.11 b	.53 b	.52 b	20.37 a	19.97 b	7.51 a	7.50 b	3.89 c	4.16 a
Stoneville 213	1.08	1.11	.49	.50	17.92	17.99	7.39	8.14	4.50	4.20
Deltapine 16	1.11	1.13	.49	.50	18.78	17.92	8.57	8.96	4.30	4.04
Stoneville 508	1.14	1.17	.49	.50	19.15	18.85	7.52	8.15	3.65	3.50
Coker 413-68	1.13	1.16	.50	.50	19.36	19.12	6.17	6.76	3.95	3.93
Hopicala	1.06	1.10	.53	.54	22.96	22.24	6.72	7.15	4.56	4.13
Pee Dee 2165	1.10	1.14	.52	.52	21.45	21.83	5.37	6.25	4.57	4.25
Average	1.10 b	1.13 a	.50 c	.51 b	19.94 b	19.66 b	6.96 b	7.57 b	4.26 b	4.01 b
Stoneville 213	1.08	1.12	.53	.53	18.61	18.81	7.38	8.33	5.03	3.92
Deltapine 16	1.12	1.14	.55	.54	19.37	19.13	8.97	9.73	4.68	3.77
Stoneville 508	1.16	1.18	.56	.56	19.31	20.51	7.71	8.57	4.30	3.45
Coker 413-68	1.15	1.15	.56	.53	20.51	19.32	6.41	7.63	4.45	3.40
Hopicala	1.11	1.10	.56	.54	23.96	22.87	6.55	7.70	4.65	3.76
Pee Dee 2165	1.13	1.16	.56	.55	22.63	22.36	5.69	7.08	4.67	3.63
Average	1.12 a	1.14 a	.55 a	.54 a	20.73 a	20.50 a	7.12 b	8.17 a	4.63 a	3.65 c

A Planted April 21 Defoliated Sept. 12 Harvested Sept. 22 and Oct. 20, 1969.

B Planted May 7 Defoliated Sept. 22 Harvested Oct. 20 and Oct. 24, 1969.

C Planted May 7 Defoliated Sept. 22 Harvested Oct. 20 and Oct. 24, 1969.

COTTON PLANTING DATES

Table 5: 2-Year Average (1968-69) Influence of Planting Date on Lint Yield, Lint Percent, Seed Index, and Seed Germination. Stoneville, Mississippi.

Date-Variety	Lint per acre		Percent first pick	Lint percent		Seed index		Seed germination	
	Total	First pick		First pick	Second pick	First pick	Second pick	First pick	Second pick
Stoneville 213	1103	986	89	36.5	38.3	10.3	8.8	89	84
Deltapine 16	1041	901	86	35.9	38.6	10.1	8.7	89	86
Stoneville 508	947	818	86	35.0	36.9	10.8	9.5	85	76
A Coker 413-68	821	736	89	34.2	36.7	10.6	9.0	91	85
Hopicala	868	617	71	38.4	37.9	11.4	10.2	89	80
Pee Dee 2165	849	706	83	37.0	38.0	11.9	9.9	89	82
Average	938 a	794	84	36.2	37.7	10.9	9.3	88	82
Stoneville 213	1079	944	87	36.9	38.3	10.3	9.2	91	84
Deltapine 16	972	829	85	35.9	37.7	10.0	9.2	90	84
Stoneville 508	880	726	82	34.6	36.4	11.0	10.2	87	75
B Coker 413-68	767	696	90	34.7	37.2	10.2	9.3	90	82
Hopicala	829	541	65	37.0	38.8	12.1	11.1	91	75
Pee Dee 2165	797	625	78	36.4	38.1	12.0	11.0	89	83
Average	887 b	727	81	35.9	37.8	10.9	10.0	90	80
Stoneville 213	929	796	86	38.2	38.2	10.3	9.1	93	80
Deltapine 16	900	775	86	37.9	38.3	9.8	8.5	94	75
Stoneville 508	778	613	79	35.9	36.7	11.2	9.9	91	82
C Coker 413-68	680	515	76	36.2	37.6	10.5	8.8	93	81
Hopicala	671	421	62	38.9	38.7	12.3	10.9	89	76
Pee Dee 2165	687	564	82	38.0	38.2	11.9	10.4	93	75
Average	774 c	614	79	37.5	38.0	11.0	9.6	92	78

A Planted April 17-21 Harvested Sept. 22-25 and Oct. 18-20.
 B Planted May 1-2 Harvested Oct. 2-9 and Oct. 23-28.
 C Planted May 20-22 Harvested Oct. 20-28 and Nov. 14-19.

Table 6: 2-Year Average (1968-69) Influence of Planting Date on Fiber Length, Strength, Elongation, and Fineness. Stoneville, Mississippi.

Date-Variety	Span length		50% Span length		Fiber strength Tl		Fiber elongation		Micronaire	
	First pick	Second pick	First pick	Second pick	First pick	Second pick	First pick	Second pick	First pick	Second pick
Stoneville 213	1.11	1.11	.51	.51	18.25	18.53	7.44	9.09	4.27	4.05
Deltapine 16	1.11	1.11	.54	.51	19.16	18.99	8.57	9.20	3.97	3.87
Stoneville 508	1.14	1.14	.54	.52	19.07	19.64	8.09	8.56	3.47	3.33
Coker 413-68	1.17	1.17	.54	.52	19.62	19.52	6.57	7.12	3.63	3.57
Hopicala	1.09	1.12	.55	.54	22.70	23.42	6.57	7.30	4.14	3.69
Pee Dee 2165	1.14	1.16	.54	.54	21.37	22.47	5.69	6.41	4.17	3.86
Average	1.14	1.14	.54	.52	20.03	20.51	7.15	7.78	3.94	3.73
Stoneville 213	1.09	1.10	.51	.50	17.83	17.50	7.56	8.16	4.52	4.03
Deltapine 16	1.12	1.13	.51	.50	18.80	17.90	8.74	9.25	4.26	3.92
Stoneville 508	1.16	1.18	.52	.51	19.18	18.37	7.65	8.36	3.65	3.37
Coker 413-68	1.14	1.15	.52	.50	19.35	18.73	6.51	6.98	3.93	3.73
Hopicala	1.08	1.10	.52	.55	22.76	21.92	6.74	7.22	4.45	4.00
Pee Dee 2165	1.12	1.13	.53	.53	21.35	21.68	5.58	6.23	4.49	4.14
Average	1.12	1.13	.52	.51	19.88	19.35	7.13	7.70	4.22	3.86
Stoneville 213	1.09	1.13	.52	.53	18.15	18.32	7.82	8.30	4.69	3.88
Deltapine 16	1.13	1.16	.54	.54	18.82	18.66	9.22	9.41	4.38	3.60
Stoneville 508	1.18	1.21	.55	.56	19.03	19.89	8.10	8.44	3.93	3.35
Coker 413-68	1.15	1.17	.56	.54	19.77	19.04	6.83	7.55	4.16	3.47
Hopicala	1.12	1.14	.56	.57	22.83	22.50	6.87	7.30	4.54	3.80
Pee Dee 2165	1.13	1.18	.55	.55	22.05	21.87	5.98	6.69	4.55	3.71
Average	1.13	1.16	.55	.55	20.11	20.05	7.47	7.95	4.38	3.64

A Planted April 17-21 Harvested Sept. 22-25 and Oct. 18-20.

B Planted May 1-2 Harvested Oct. 2-9 and Oct. 23-28.

C Planted May 20-22 Harvested Oct. 20-28 and Nov. 14-19.

Table 7: Average Variety Performance for Three Planting Dates, 1968

	Total	Lint Yield Per Acre	
		First Pick	Percent First Pick
Stoneville 213	1217 a	1083 a	39 a
Deltapine 16	1135 b	991 b	37 a
Stoneville 508	1021 c	881 c	36 ab
Coker 413-68	992 d	851 c	35 ab
Hopicala	953 e	715 e	25 c
Lee Dee 2165	926 e	718 d	23 b
		Lint Percentage	
		First Pick	Second Pick
Stoneville 213		37.7 a	37.4 a
Hopicala		37.4 a	37.7 a
Lee Dee 2165		37.5 a	37.4 a
Deltapine 16		36.9 ab	36.8 b
Coker 413-68		35.9 b	35.9 c
Stoneville 508		35.3 c	35.8 c
		Seed Index	
		First Pick	Second Pick
Hopicala		12.2 a	10.7 a
Lee Dee 2165		12.0 a	10.6 a
Stoneville 508		11.0 b	9.7 b
Stoneville 213		10.3 c	8.7 c
Coker 413-68		10.1 c	8.9 c
Deltapine 16		9.9 c	8.6 c

Table 8: Average Variety Performance for Three Planting Dates, 1968

	Seed Germination	
	First Pick	Second Pick
Coker 413-68	89 a	82 a
Stoneville 508	89 a	82 a
Stoneville 213	88 a	82 a
Deltapine 16	88 a	84 a
Hopicala	88 a	80 a
Lee Dee 2165	86 a	81 a
	2.5" Spinn Length	
	First Pick	Second Pick
Stoneville 508	1.19 a	1.21 a
Coker 413-68	1.17 a	1.17 b
Lee Dee 2165	1.14 bc	1.18 b
Deltapine 16	1.14 bc	1.15 c
Hopicala	1.11 c	1.14 c
Stoneville 213	1.11 c	1.11 d
	3.0" Spinn Length	
	First Pick	Second Pick
Hopicala	56 a	56 a
Lee Dee 2165	55 b	54 b
Stoneville 508	55 b	53 bc
Coker 413-68	55 b	53 bc
Deltapine 16	54 c	52 c
Stoneville 213	52 c	51 d

Table 9: Average Variety Performance for Three Planting Dates. 1968.

	Fiber Elongation E_1	
	First Pick	Second Pick
Deltapine 16	8.85 a	9.45 a
Stoneville 508	7.90 b	8.57 b
Stoneville 213	7.65 c	8.38 b
Coker 413-68	6.84 d	7.28 c
Hopicala	6.76 d	7.19 c
Pee Dee 2165	5.86 e	6.42 d
	Fiber Strength (grams/tex)	
	First Pick	Second Pick
Hopicala	22.18 a	22.46 a
Pee Dee 2165	21.21 a	22.15 a
Coker 413-68	19.20 b	19.17 b
Stoneville 508	18.95 bc	19.15 b
Deltapine 16	18.68 bc	18.53 c
Stoneville 213	17.76 c	17.92 d
	Fiber Fineness (Micronaire)	
	First Pick	Second Pick
Stoneville 213	4.42 a	3.76 a
Pee Dee 2165	4.33 a	3.75 a
Hopicala	4.28 a	3.66 ab
Deltapine 16	4.10 b	3.54 bc
Coker 413-68	3.84 c	3.42 c
Stoneville 508	3.63 d	3.17 d

Table 10: Average Variety Performance for Three Planting Dates. 1969.

	Total	Lint Yield Per Acre	
		First Pick	Percent First Pick
Stoneville 213	856 a	733 a	85
Deltapine 16	806 b	678 b	84
Stoneville 508	707 c	556 c	78
Pee Dee 2165	628 d	495 d	79
Coker 413-68	558 e	446 d	80
Hopicala	586 e	336 e	57
		Lint Percentage	
		First Pick	Second Pick
Hopicala		38.8 a	39.3 a
Stoneville 213		36.8 b	39.2 a
Pee Dee 2165		36.8 b	38.8 ab
Deltapine 16		36.2 c	39.5 a
Stoneville 508		35.1 d	37.6 b
Coker 413-68		34.2 e	38.5 ab
		Seed Index	
		First Pick	Second Pick
Pee Dee 2165		11.8 a	10.3 b
Hopicala		11.7 a	10.7 a
Stoneville 508		11.0 b	10.0 b
Coker 413-68		10.8 b	9.2 c
Stoneville 213		10.3 c	9.3 c
Deltapine 16		10.0 c	9.0 c

Table 11: Average Variety Performance for Three Planting Dates. 1969.

	Seed Germination	
	First Pick	Second Pick
Deltapine 16	94	79
Pee Dee 2165	94	78
Stoneville 213	93	84
Coker 413-68	93	84
Hopicala	92	75
Pee Dee 2165	94	78
2.5% Span Length		
	First Pick	Second Pick
Stoneville 508	1.16 a	1.16 a
Coker 413-68	1.15 ab	1.15 b
Deltapine 16	1.13 ab	1.12 c
Pee Dee 2165	1.12 bc	1.15 ab
Stoneville 213	1.10 cd	1.11 cd
Hopicala	1.08 d	1.10 d
50% Span Length		
	First Pick	Second Pick
Hopicala	.54	.54
Pee Dee 2165	.54	.54
Coker 413-68	.53	.52
Stoneville 508	.53	.52
Deltapine 16	.53	.51
Stoneville 213	.52	.51

Table 12: Average Variety Performance for Three Planting Dates. 1969.

	Fiber Elongation E_1	
	First Pick	Second Pick
Deltapine 16	8.84 a	9.12 a
Stoneville 508	8.00 b	8.34 b
Stoneville 213	7.56 c	8.04 b
Hopicala	6.70 d	7.36 c
Coker 413-68	6.43 d	7.15 c
Pee Dee 2165	5.64 e	6.47 d
Fiber Strength (grams/tex)		
	First Pick	Second Pick
Hopicala	23.34 a	22.77 a
Pee Dee 2165	21.97 b	22.19 a
Coker 413-68	19.96 c	19.02 b
Stoneville 508	19.24 d	19.45 b
Deltapine 16	19.17 d	18.51 c
Stoneville 213	18.39 e	18.31 c
Fiber Fineness (Micronaire)		
	First Pick	Second Pick
Stoneville 213	4.57 a	4.22 a
Hopicala	4.48 ab	4.01 a
Pee Dee 2165	4.43 ab	4.06 a
Deltapine 16	4.31 b	4.05 a
Coker 413-68	3.98 c	3.77 b
Stoneville 508	3.73 c	3.54 c

Table 13: 2-Year Average (1968-69) of Six Varieties for Three Planting Dates.

	Total	Lint Yield Per Acre	
		First Pick	Percent First Pick
Stoneville 213	1037	909	86
Deltapine 16	971	835	86
Stoneville 508	868	719	83
Coker 413-68	789	649	82
Pee Dee 2165	778	632	81
Hopicala	756	526	69
		Lint Percentage	
		First Pick	Second Pick
Hopicala		38.1	38.5
Stoneville 213		37.2	38.3
Pee Dee 2165		37.1	38.1
Deltapine 16		36.6	38.2
Stoneville 508		35.2	36.7
Coker 413-68		35.0	37.2
		Seed Index	
Hopicala		12.0	10.7
Pee Dee 2165		11.9	10.4
Stoneville 508		11.0	9.8
Coker 413-68		10.5	9.0
Stoneville 213		10.3	9.0
Deltapine 16		10.0	8.8

Table 14: 2-Year Average (1968-69) of Six Varieties for Three Planting Dates.

	Seed Germination	
	First Pick	Second Pick
Stoneville 213	91	83
Deltapine 16	91	82
Coker 413-68	91	83
Pee Dee 2165	90	80
Hopicala	90	77
Stoneville 508	88	77
	2.5% Span Length	
	First Pick	Second Pick
Stoneville 508	1.18	1.19
Coker 413-68	1.16	1.16
Deltapine 16	1.13	1.14
Pee Dee 2165	1.13	1.18
Stoneville 213	1.10	1.11
Hopicala	1.10	1.12
	50% Span Length	
Hopicala	.55	.55
Pee Dee 2165	.54	.54
Stoneville 508	.54	.53
Coker 413-68	.54	.52
Deltapine 16	.53	.52
Stoneville 213	.52	.51

Table 15: 2-Year Average (1968-1969) of Six Varieties for Three Planting Dates.

	Fiber Elongation	
	First Pick	Second Pick
Deltapine 16	8.84	9.29
Stoneville 508	7.95	8.45
Stoneville 213	7.60	8.19
Hopicala	6.73	7.28
Coker 413-68	6.63	7.21
Pee Dee 2165	5.75	6.44
	Fiber Strength (grams/tex)	
	First Pick	Second Pick
Hopicala	22.76	22.61
Pee Dee 2165	21.59	22.17
Coker 413-68	19.58	19.10
Stoneville 508	19.09	19.30
Deltapine 16	18.93	18.52
Stoneville 213	18.07	18.11
	Fiber Fineness (Micronaire)	
Stoneville 213	4.49	3.99
Pee Dee 2165	4.40	3.90
Hopicala	4.38	3.83
Deltapine 16	4.20	3.79
Coker 413-68	3.91	3.59
Stoneville 508	3.68	3.35