

cotton Varieties
for Louisiana
2001





Introduction

Each year, scientists with the Louisiana Agricultural Experiment Station evaluate cotton varieties at the Dean Lee Research Station at Alexandria, Red River Research Station at Bossier City, Northeast Research Station at St. Joseph and Macon Ridge Research Station at Winnsboro. Varieties are grown using only practices recommended for producing nontransgenic varieties. Data from this research are used to determine recommended varieties based primarily on yield. Yields presented in the tables are the average yields for 1998-2000 (Tables 1-6). Recommended varieties for each location (Tables 1-6) are indicated by bold type. A variety is recommended when its three-year average yield is 90% or more of the three-year average of the three top-yielding varieties. Yield values of other varieties (those not boldfaced) are included for comparative purposes only and not recommended by the LSU Agricultural Center's Cooperative Extension Service.

This information accurately reflects the performance of varieties evaluated at the experiment stations, but performance may vary on individual farms because of soil type, environment and other factors. Producers should select recommended varieties tested at the location most representative of their farms. While these varieties are separated based on yield, producers should consider other factors (pest resistance, fiber quality, earliness, etc.) when making their selections.

Fiber Properties and Earliness

Cotton variety performance and HVI fiber properties for recommended varieties are presented in Table 7. Relative earliness of varieties is estimated by harvesting each plot on two dates about one to two weeks apart and calculating the percentage of the total crop harvested at the first harvest date.

HVI Classing - The fiber properties shown in Table 7 were determined using the High Volume Instrumentation (HVI) classing system. This system determines fiber properties with machines rather than by hand. Producers should consider these fiber properties along with yield when selecting varieties for 2001.

The HVI system includes measurements for fiber strength, micronaire, length, uniformity and elongation. Fiber strength is expressed as grams per tex. Strength values between 23.5 and 25.4 will not receive a premium or discount. Values below 23.5 will be discounted, and values above 25.4 will carry a premium on the loan chart. The length (UHM) represents the average length of the longest one-half of the fibers measured. The uniformity index is determined by dividing the average staple length of all the fibers by the UHM. Micronaire is a measurement of the lint surface area. Measurements above 4.9 or below 3.5 will result in a discount.

Varieties for Wilt Soils

Many of the light-textured (sandy) soils in which cotton is grown in Louisiana are infested with plant pathogenic nematodes and *Fusarium*, the fungus responsible for fusarium wilt. While either pest alone can injure the crop, the combination can be devastating. Nematodes injure cotton by wounding the roots and feeding on the exudates. *Fusarium* gains entry into the plant through the wound made by the nematode, develops inside the plant and may eventually stunt and/or kill the plant by secreting toxins and clogging the conductive tissue (the circulatory system).

Cotton varieties have been evaluated for tolerance or resistance to these pests at the Red River Research Station on soils infested with moderate levels of *Fusarium* and root-knot nematode.

If the wilt-nematode complex is severe, rotating the field out of cotton may be best. In fields with low to moderate populations of these pests, tolerant or resistant varieties and/or nematicides may provide acceptable control. Two-year average wilt and nematode ratings for the varieties tested are in Table 8.

Genetically Modified (transgenic) Cottons

Cotton varieties are commercially available that have been genetically altered to resist certain herbicides and/or insects. These cottons contain genes that confer resistance to Buctril herbicide applied overtop (BXN varieties), or Roundup Ultra (glyphosate) herbicide (Roundup Ready varieties) and/or to specific insects (Bt

EARLY MATURING GROUP

Variety	Yield
Phytogen PSC 355	1008
Sure-Grow SG 747	940
Stoneville BXN 47	852

Table 1.

Paymaster PM 1218 BR	926*
Stoneville ST 474	838
Deltapine DP 20B	828
Deltapine DP 436 RR	810
Deltapine DP 428 B	805
FiberMax FM 819	680

Performance of cotton varieties on Norwood Silt Loam at Alexandria non-irrigated. Three-year average yield of lint per acre. Yield averages for early maturing varieties are represented by 1997 and 1999-2000 data. Medium maturing varieties are represented by data from 1998-2000.

Variety	Yield
Deltapine DP 458 BR	796
Sure-Grow SG 821	782

EARLY MATURING GROUP

Variety	Yield
Stoneville BXN 47	1417
Stoneville ST 474	1102

MEDIUM MATURING GROUP

Variety	Yield
Sure-Grow SG 821	1261
FiberMax FM 832	1243
FiberMax FM 989	1104
Deltapine DP 458 BR	1092
Deltapine DP 5415 RR	1090
Deltapine NuCOTN 33B	1084

*Data for the early maturing varieties is represented by the three-year average yield for 1997 and 1999-2000.

varieties with the Bollgard™ gene technology). In addition, producers should not plant 100% of their acreage to a specific transgenic variety, but should use multiple varieties to spread risk. Consult your county agent for specific uses.

Roundup Ready Varieties - The use of Roundup Ready technology in cotton has resulted in excellent control of grasses and many broadleaf weeds such as pigweeds, cocklebur and sicklepod. Limited control may occur when applying Roundup Ultra to morningglory, hemp sesbania and prickly sida larger than the sizes listed on the label. Roundup Ultra may be applied over-the-top through the 4-leaf stage. When applying Roundup Ultra after the 4-leaf stage, measures must be taken to eliminate herbicide-to-plant contact or plant development and/or yield could be adversely affected. Refer to the Louisiana Cooperative Extension Service publications 1366 and 1565 for specific rates and weeds controlled.

Many generic glyphosate (active ingredient in Roundup Ultra) products are available. When choosing a product for use on Roundup Ready cotton, make sure

Table 2.

Performance of cotton varieties on Norwood Silt Loam at Bossier City. Three-year average yield of lint per acre, 1998-2000.

Deltapine DP 5415 RR	728
Deltapine DP 5415 RR	700
Deltapine NuCOTN 33B	700
FiberMax FM 989	689
FiberMax FM 832	660

EARLY MATURING GROUP

Note: Varieties not in bold type are not recommended for planting in 2001 and are included for comparative purposes only.

Variety	Yield
Phytogen PSC 355	1008
Sure-Grow SG 747	940
Stoneville BXN 47	852
Paymaster PM 1218 BR	926*
Stoneville ST 474	838
Deltapine DP 20B	828
Deltapine DP 436 RR	810
Deltapine DP 428 B	805
FiberMax FM 819	680

MEDIUM MATURING GROUP

Variety	Yield
Deltapine DP 458 BR	796
Sure-Grow SG 821	782
Deltapine DP 5415 RR	728
Deltapine NuCOTN 33B	700
FiberMax FM 989	689
FiberMax FM 832	660

Note: Varieties not in bold type are not recommended for planting in 2001 and are included for comparative purposes only.
* Susceptible to bronze wilt.

it is labeled for use on Roundup Ready cotton. Some of these (non-labeled) products may contain surfactants that may cause some foliar injury and may or may not affect fruiting. Be certain to read the label. Generally, those glyphosate products that require the addition of surfactant will not be labeled for use on Roundup Ready cotton. Examples of some glyphosate products labeled for use on Roundup Ready cotton at this time include: Roundup Ultra, Roundup Ultra dry, Roundup Ultra Max, Glyphosate Original and the glyphosate that is a part of the Staple Plus prepack of Staple plus glyphosate.

A new formulation of Touchdown will be available in 2001 that will be labeled for use on Roundup Ready cotton. This formulation will be marketed simply as "Touchdown IQ," whereas the older formulation was marketed as "Touchdown 5." Touchdown 5 is extremely injurious to Roundup Ready cotton, and great care should be taken to ensure that it is not mistakenly applied. Be certain to read and follow label directions of this new formulation, because product use rates are not the same as for the older formulation.

Table 3.

Performance of cotton varieties on Commerce silt loam at St. Joseph. Three-year average yield of lint per acre, 1998-2000.

EARLY MATURING GROUP

Variety	Yield
Stoneville BXN 47	1345
PhytoGen PSC 355	1344
Sure-Grow SG 747	1330
Deltapine DP 20 B	1320
Stoneville ST 474	1309
Paymaster PM 1218 BG/RR	1351*
FiberMax FM 819	1171
Deltapine DP 436 RR	1151
Deltapine DP 428 B	1133

MEDIUM MATURING GROUP

Variety	Yield
Deltapine NuCOTN 33B	1300
Deltapine 458 BR	1272
Deltapine DP 5415 RR	1266
Sure-Grow SG 821	1255
FiberMax FM 832	1140
FiberMax FM 989	1023

Note: Varieties not in bold type are not recommended for planting in 2001 and are included for comparative purposes only.

* Susceptible to bronze wilt.

BG Varieties - Research evaluations of Bollgard™ transgenic gene technology have determined that this technology provides satisfactory control of tobacco budworm populations. Producers who choose to plant Bt cottons should be aware that several insect pests may cause economic damage to these cottons. Therefore continued scouting to evaluate damage from such pests as bollworm, beet armyworm, fall armyworm, boll weevil, tarnished plant bug, cotton aphids, stink bugs and thrips is strongly recommended. For more information on Bollgard™ technology, consult the Louisiana Cooperative Extension Service publication 1083, "Control Cotton Insects."

Boll Weevil Eradication – Bt cotton is recommended to reduce the threat of serious tobacco budworm outbreaks. Broad scale use of malathion in the Northeast Boll Weevil Eradication Zone, particularly early-season use, can greatly reduce beneficial insect populations. Reducing beneficial insect populations can help tobacco budworms develop to high levels throughout

Table 4.

Performance of irrigated cotton varieties on Gigger silt loam at Winnsboro. Three-year average yield of lint per acre, 1998-2000.

EARLY MATURING GROUP

Variety	Yield
Stoneville ST 474	1577
PhytoGen PSC 355	1537
Sure-Grow SG 747	1535
Deltapine DP 20 B	1514
Stoneville BXN 47	1459
Deltapine DP 428 B	1421
Paymaster PM 1218 BG/RR	1449*
FiberMax FM 819	1361
Deltapine DP 436 RR	1332

MEDIUM MATURING GROUP

Variety	Yield
Sure-Grow SG 821	1431
Deltapine DP 5415 RR	1406
Deltapine DP 458 BR	1399
Deltapine NuCOTN 33B	1362
FiberMax FM 832	1254
FiberMax FM 989	1202

Note: Varieties not in bold type are not recommended for planting in 2001 and are included for comparative purposes only.

* Susceptible to bronze wilt.

the season. The federal label requires that all producers planting a Bt-cotton variety comply with the prescribed insecticide resistance management plans. Copies of specific requirements can be obtained from Monsanto or Bt-cotton dealers. Plant several different varieties to spread environmental risks. Fields near environmentally sensitive areas should be planted to a Bt-cotton variety. Examples are fields located near schools, water sources or residential areas

! Caution Statement ! - A serious problem referred to as Bronze Wilt or Phloem Necrosis has been observed with the Paymaster varieties PM 1218 BG/RR, PM 1560 BG and PM 1560 BG/RR. This problem also has been observed in Stoneville ST 373. Foliage on affected plants turned red to bronze, wilted and partially defoliated. Terminals were noticeably warmer than non-affected plants. Squares and bolls were shed, and yield of affected plants was severely reduced. Although these symptoms were not observed in many cotton-producing areas, this is the reason that some high yielding varieties are not

Table 5.

Performance of cotton varieties at Gigger silt loam at Winnsboro, non-irrigated. Three-year average yield of lint per acre, 1998-2000.

EARLY MATURING GROUP

Variety		Yield
Sure-Grow SG 747		536
PhytoGen PSC 355	519	
Stoneville ST 474		470
Stoneville BXN 47		467
Deltapine DP 20 B		464
Deltapine DP436 RR	458	
Paymaster PM 1218 BG/RR		452*
Deltapine DP 428 B		413
FiberMax FM 819		388

MEDIUM MATURING GROUP

Variety		Yield
Deltapine DP 458 BR	391	
Sure-Grow SG 821		390
FiberMax FM 832		385
FiberMax FM 989		348
Deltapine NuCOTN 33B		335
Deltapine DP 5415 RR		329

Note: Varieties not in bold type are not recommended for planting in 2001 and are included for comparative purposes only.

* Susceptible to bronze wilt.

Table 6.

Performance of cotton varieties at St. Joseph on Sharkey clay. Three-year average yield of lint per acre, 1998-2000.

-

EARLY MATURING GROUP

Variety		Yield
PhytoGen PSC 355	1252	
Sure-Grow SG 747		1199
Deltapine DP 20 B		1182
Stoneville ST 474		1124
FiberMax FM 819		1118
Paymaster PM 1218 BG/RR		1173*
Stoneville BXN 47		1044
Deltapine DP 436 RR	1039	
Deltapine DP 428 B		1035

MEDIUM MATURING GROUP

Variety		Yield
Sure-Grow SG 821		1094
Deltapine NuCOTN 33B		1067
Deltapine DP 458 BR	1038	
FiberMax FM 832		1008
Deltapine DP 5415 RR		982
FiberMax FM 989		871

Note: Varieties not in bold type are not recommended for planting in 2001 and are included for comparative purposes only.

* Susceptible to bronze wilt.

recommended.

Promising Varieties

Promising varieties are determined at each test location. A promising variety is a variety that, after two years of testing, has an average yield that is within 95% of the two-year average of the three top-yielding varieties at the test location. These varieties are not recommended and should not be planted on most of your acreage. These varieties are listed in table 9.

Seeding Rate and Stand

Two to three plants per row foot (one plant every 4 to 6 inches) in rows spaced 30 to 40 inches apart is ideal. Research has shown that higher plant populations reduce yield. Lower plant populations tend to reduce harvesting efficiency of spindle pickers and may reduce yield. While slightly thicker stands can probably be tolerated in cotton planted in a skip-row pattern without a reduction in yield, thicker stands will not necessarily improve the yield of skip-row cotton.

Seeding depth will vary with soil type and moisture. Therefore it is critical to consider soil type and available moisture when planting. As a general rule, seed should be planted 0.75 to 2 inches deep. In most cases, seed planted in heavy (clay) soils should be planted shallower than seed planted in sandy soils. In addition to soil type, soil moisture will affect the depth of planting. Typically, seed is planted deeper in dry soils than in soils with adequate moisture for germination.

Most cottonseed used for planting will have a percentage germination of 80 or more in laboratory tests conducted under nearly ideal conditions. Seed planted in the field are seldom, if ever, planted when environmental conditions are ideal for maximum emergence. Therefore, under 'normal' growing conditions, it is reasonable to expect at least half of the seed planted to produce healthy plants. Therefore a seeding rate of four to six seed per row foot is usually adequate to ensure an acceptable stand planted in 30- to 40-inch rows. Since cottonseed vary in size and in the number of seed per pound, planting rate should be based on number of

Table 7.

Performance and HVI fiber properties of recommended and promising cotton varieties, two-year average, 1999-00¹

Performance and HVI fiber properties of medium maturing cotton varieties, two-year average, 1999-00.

Variety	Lint	*Earliness %	Boll (% 1st harv)	Micronaire WT./gms	Length	Uniformity (UHM)	Strength Index (UI)	Elongation (gms/tx)
Deltapine NuCOTN 33B	37.6	86.8	4.4	4.7	1.12	83.9	29.0	6.9
Deltapine DP5415 RR	38.6	87.0	4.3	4.8	1.10	83.8	30.1	6.8
Deltapine 458 BR	38.6	86.3	4.3	4.8	1.10	83.7	29.3	6.7
Sure-Grow SG 821	39.0	90.5	4.6	4.8	1.11	84.3	31.1	8.1
Paymaster PM 1560 BR	38.1	88.3	4.6	4.4	1.11	84.1	29.2	6.7
FiberMax FM 832	37.5	93.7	5.2	4.2	1.19	85.7	32.0	5.7
FiberMax FM 989	37.9	92.4	4.6	4.4	1.13	84.4	32.2	5.7

*Percent earliness from Winnsboro Irrigated 1999 and Alexandria 2000.

Performance and HVI fiber properties of early maturing cotton varieties, two-year average, 1999-00.

Variety	Lint	*Earliness %	Boll (% 1st harv)	Micronaire WT./gms	Length	Uniformity (UHM)	Strength Index (UI)	Elongation (gms/tx)
Deltapine DP 451BR	35.9	89.0	4.7	4.7	1.11	83.9	26.8	6.6
Deltapine DP 428B	37.7	86.8	4.6	4.8	1.09	83.7	26.3	6.7
Deltapine DP 20B	39.2	85.0	4.8	4.6	1.09	83.4	27.5	7.5
Deltapine DP 422 BR	37.1	88.3	4.8	4.5	1.08	83.5	27.4	7.7
Deltapine DP 388	39.4	89.1	4.1	4.6	1.08	83.5	29.4	7.4
Deltapine DP 436 RR	35.7	90.0	4.7	4.7	1.10	83.8	27.5	7.4
Paymaster PM 1218 BR	40.0	92.3	5.2	4.9	1.06	83.3	27.2	7.4
FiberMax FM 958	40.0	86.8	5.0	4.6	1.13	83.9	29.6	5.3
FiberMax FM 819	39.5	90.6	4.1	4.4	1.14	84.5	30.7	5.6
Sure-Grow SG 501 BR	38.6	88.2	4.6	4.8	1.07	84.0	30.6	7.4
Sure-Grow SG 747	41.0	90.2	4.6	5.0	1.09	83.8	28.5	7.6
PhytoGen PSC 355	39.4	93.7	4.2	4.9	1.08	84	30.9	7.7
Stoneville ST 4892 BR	40.4	88.6	4.5	4.8	1.09	84	28.6	6.6
Stoneville ST 4691 B	40.6	90.8	4.6	4.7	1.09	83.5	27.7	6.5
Stoneville BXN 47	40.5	92.4	4.3	4.8	1.08	83.6	28	6.6
Stoneville ST 474	41	91.7	4.3	4.9	1.08	83.8	28.2	6.7
Stoneville ST 4793 R	41	90.0	4.5	4.9	1.09	83.8	28.5	6.6

* Percent first harvest from Winnsboro Irrig 1999 and Alexandria 2000.

¹ HVI properties were determined from handpicked laboratory ginned samples which results in higher lint percentage than commercially ginned cotton.

² Earliness comparisons should be made only within maturity groups. Comparisons of varieties from different maturity groups are not valid because the early maturity group and medium to late group were harvested on different dates.

Table 8.

Two-year averages for Fusarium wilt and root-knot nematode ratings for some cotton varieties at the Red River Research Station at Bossier City, 1999-2000.

Variety	Wilt Rating ^a	Gall Rating ^b
Deltapine DP 20 B	1.1	2.6
Deltapine NuCOTN 33 B	1.6	3.0
Deltapine DP 388	1.5	3.0
Deltapine DP 436 RR	0.8	2.7
Deltapine DP 458 BR	1.4	3.5
Deltapine DP 5415 RR	1.4	3.1
FiberMax FM 832	1.5	2.8
FiberMax FM 958	1.8	3.4
FiberMax FM 989	0.6	3.0
Paymaster PM 1560 BR	0.7	1.8
PhytoGen PSC 355	1.0	3.4
Stoneville ST 474	1.8	3.3
Stoneville ST 4793 R	1.5	3.1
Stoneville LA 887	0.4	1.5
Sure-Grow SG 501 BR	1.6	2.6
Sure-Grow SG 747	0.9	2.7
Sure-Grow SG 821	0.8	2.9

^aWilt rating on a scale of 0-5; 0=no stem discoloration, 5=complete stem discoloration; rounding errors present.

^bRoot-gall rating on a scale of 0-5; 0=no root galling, 5=severe root galling; rounding errors present.

seed planted per foot rather than number of pounds planted per acre. For maximum accuracy, calibrate planters with seed of the variety to be planted.

The number of acid delinted seed per pound varies from about 4,200 to 5,500 for the varieties planted in Louisiana. At the seeding rate recommended above, about 10 to 15 pounds of seed per acre will be needed. In situations where cotton is planted in less than ideal conditions, or seed quality is a concern, the vigor of a seed lot should be considered. The measure of seed vigor is the cool germination test, which is conducted under cool conditions in the laboratory. The results from the cool germ test are not printed on a seed tag but can be obtained from the seed dealer or company. Growers are urged to find this information. Being aware of the results of a cool germ test is more important than determining what is actually good and bad cool germ. For example, a seed lot with 85% cool germ is more vigorous than one with a 65% cool germ. If the 65% lot is planted in good conditions, however, overall germination may likely be as high as with the 85% lot. A somewhat arbitrary division of the cool germ test results is shown in the following table:

Cool Germination %	
>80	Excellent
65-80	Good
50-65	Acceptable - use with this seed
special care	
<50	Poor - most

Table 9.

Promising cotton varieties for 2001*

Variety	Alexandria	Winnsboro		St. Joseph		Clay	Bossier
		Non-Irr	Irrigated	Commerce			
Early Maturing Group							
Stoneville ST 4892 BR	—	—	1756	1444	—	—	
Stoneville ST 4691 B	1683		1667	1465	1097	—	
Deltapine DP 388	—	508	1596	—	—	—	
FiberMax FM 958	—	—	—	1140	—		
Sure-Grow SG 501 BR	—	—	—	—	1097	—	
PhytoGen PSC 355	1613	—	—	—	—		
Medium Maturing Group							
■ None							

* A promising variety is a variety that after two years of testing will have a two-year average yield within 95% of the average of the three top-yielding varieties.

Table 10.

Lint yield (lbs/acre) Across Locations for Early Maturing Cotton Varieties 2000. (1 Year Data)

	Alexandria	Bossier	St. Joseph		Winnsboro		Average Yield
	City		Across Locations				
Variety			Loam	Clay	Irrigated	Non-Irr.	
Paymaster PM 1218 BR	1,931	949 1,291	796	1,230	331	1088	
JAJO 8185	1,723	675 1,380	854	1,290	572	1082	
Seed Source SS 9907	1,798	832 1,443	786	1,328	290	1080	
Sure-Grow SG 747	1,715	899 1,296	786	1,366	380	1074	
Phytogen PSC 355	1,719	874 1,338	785	1,375	333	1071	
Stoneville ST 4691 B	1,845	638 1,341	834	1,361	377	1066	
Sure-Grow SG 215 BR	1,759	976 1,353	737	1,263	300	1065	
Deltapine DP 20 B	1,713	776 1,366	795	1,279	424	1059	
Stoneville BXN 47	1,764	759 1,388	747	1,249	440	1058	
Stoneville ST 4892 BR	1,686	657 1,418	771	1,398	328	1043	
Miss.ST. 8806-3-2-19	1,690	877 1,280	618	1,341	443	1042	
Stoneville ST 474	1,729	717 1,299	697	1,210	495	1025	
JAJO 8184	1,681	681 1,308	870	1,146	433	1020	
FiberMax FM 966	1,691	701 1,395	723	1,171	425	1018	
FiberMax FM 958	1,681	687 1,349	733	1,311	280	1007	
Sure-Grow SG 821*	1,578	778 1,207	876	1,184	405	1004	
Sure-Grow SG 501 BR	1,639	790 1,210	785	1,183	373	997	
Seed Source Condor	1,584	788 1,251	681	1,231	406	990	
Seed Source SS 9901	1,618	684 1,173	876	1,244	334	988	
Stoneville ST 4793 R	1,618	731 1,358	734	1,235	242	986	
Miss.ST. 8839-3-10-2	1,454	733 1,304	771	1,180	442	980	
Deltapine DP 388	1,632	758 1,163	569	1,251	418	965	
Deltapine NuCOTN 33 B*	1,475	671 1,229	874	1,188	349	964	
Sure-Grow SG 521 RR	1,571	865 1,298	634	997	410	962	
Deltapine DP 420 RR	1,641	702 1,224	757	1,188	249	960	
DES X03H16	1,623	663 1,288	680	1,137	362	959	
DES X01H10	1,593	668 1,304	706	1,231	246	958	
Deltapine DP 436 RR	1,566	803 1,176	679	1,138	342	951	
Stoneville X00001	1,558	539 1,260	862	1,034	437	948	
Deltapine DP 428 B	1,565	673 1,130	765	1,253	267	942	
FiberMax FM 819	1,700	661 1,190	684	1,070	315	937	
Deltapine DP 422 BR	1,533	721 1,211	690	1,133	222	918	
Deltapine DP 451 BR	1,499	730 1,196	599	1,090	321	906	
Phytogen GA 161	1,359	626 1,172	801	1,118	278	892	
Novartis NK 2108 ss	1,650	645 967	565	973 255	842		
Garst/Agripro 1500 RR	1,109	590 1,010	657	1,101	275	790	
Avg.	1,630	737 1,266	744	1,208	356	990	

Table 11.

Lint Yield (lbs/acre) Across Locations for Medium Maturing Cotton Varieties 2000. (1 Year Data)

Variety	Alexandria	Bossier	St. Joseph		Winnsboro		Average Yield
	City	City	Loam	Clay	Irrigated	Non-Irr.	Across Locations
Stoneville X9905	2,098	782	1,078	947	1,140	268	1052
Deltapine DP 565	1,799	751	1,202	1,001	1,290	212	1042
PhytoGen PSC 355*	1,869	686	1,131	870	1,230	453	1040
Stoneville ST 474*	1,970	752	1,331	759	1,048	353	1036
Stoneville ST 580	1,701	738	1,243	937	1,199	368	1031
Sure-Grow SG 747*	1,718	762	1,217	816	1,246	340	1016
PhytoGen PSC 952	1,657	706	1,265	926	1,079	410	1007
Deltapine Delta Pearl	1,754	540	1,252	963	1,211	217	990
Garst/Agripro 4600 RR	1,633	692	1,230	785	1,214	330	981
Sure-Grow SG 821	1,648	659	1,078	951	1,323	220	980
Deltapine DPX 99Q47 B	1,504	646	1,158	1,027	1,109	285	955
Deltapine Topaz	1,552	648	1,159	837	1,246	246	948
Seed Source SS 9815	1,595	620	1,209	814	1,177	206	937
Deltapine DP 5415 RR	1,442	611	1,271	819	1,261	189	932
Deltapine DP 458 BR	1,367	742	1,191	785	1,222	259	928
FiberMax FM 832	1,758	491	1,048	847	995	269	901
Deltapine NuCOTN 33 B	1,408	622	1,147	888	1,096	218	897
Paymaster PM 1560 BR	1,564	647	945	843	1,190	152	890
PhytoGen GA161	1,398	577	1,161	750	1,182	234	884
PhytoGen GA894	1,404	588	1,187	711	1,214	186	882
Deltapine DP 655 BR	1,245	601	1,134	783	1,098	230	849
Seed Source Ligur	1,149	585	1,010	868	1,106	301	837
FiberMax FM 989	1,505	532	1,002	739	1,004	207	831
PhytoGen H512	1,292	403	1,140	885	1,026	232	830
Avg.	1,585	641	1,158	856	1,163	266	945

* Early maturing variety included for comparison purposes.

Growers can handle seed with acceptable to good vigor by eliminating as many stresses as possible. When planting seed lots with less vigor, take care not to plant during cool periods, not to plant too deeply; use the higher-end seeding rates and strongly consider protecting the seed with in-furrow fungicides.

When To Plant

When the historical effects of planting date and soil temperature on stand establishment and yield are considered, cotton producers should plant between

mid-April and mid-May. Cotton planted before mid-April will often have good yield potential if a stand can be obtained, but conditions favoring rapid seed germination and emergence are not likely to occur during early April.

Planting in early to mid-April is usually more desirable when planting in clay soil than when planting in silty or sandy soil. Research has shown that yield potential decreases moderately when cotton is planted after mid-May and severely when cotton is planted after June 1.

This material was prepared by the following personnel of the Louisiana Cooperative Extension Service and the Louisiana Agricultural Experiment Station of the LSU AgCenter.

John Barnett, Associate Specialist (Cotton)
Ralph Bagwell, Associate Specialist (Pest Management)
Don Boquet, Professor (Northeast Research Station)
Gene Burris, Associate Professor (Northeast Research Station)
David Caldwell, Professor (Red River Research Station)
Jay Caylor, Research Associate (Northeast Research Station)
A.B. Coco, Research Associate (Northeast Research Station)
Patrick Colyer, Professor (Red River Research Station)
Ivan Dickson, Instructor (Cotton Fiber Laboratory)
Rhett Gable, Research Associate (Northeast Research Station)
Reed Griffin, Research Associate (Red River Research Station)
Steve Hague, Assistant Professor (Northeast Research Station)
Bob Hutchinson, Professor (Northeast Research Station)
Steve Kelly, Assistant Specialist (Weed Science)
Roger Leonard, Associate Professor (Northeast Research Station)
Donnie K. Miller, Assistant Professor (Northeast Research Station)
Gerald Myers, Assistant Professor (Dept. of Agronomy)
Charles Overstreet, Specialist (Nematology)
Boyd Padgett, Associate Professor/Specialist (Plant Pathology)
Elisha Payne, Research Associate (Red River Research Station)
Mildred Deloach, Research Associate (Dean Lee Research Station)
Maurice Wolcott, Research Associate (Dean Lee Research Station)
J Cheston Stevens, Assistant Specialist (Agronomy - Soils)
Sandy Stewart, Assistant professor (Dean Lee Research Station)
Jimmy Thomas, Research Associate (Northeast Research Station)
P.R. Vernon, Research Associate (Red River Research Station)
Ken Whitam, Specialist (Plant Protection)

Visit our website: www.lsuagcenter.com

Louisiana State University Agricultural Center, William Richardson, Chancellor
Louisiana Cooperative Extension Service Jack L. Bagent, Vice Chancellor and Director

Pub. 2135 (4M) 3/01 Rev.

Issued in furtherance of Cooperative Extension work, Acts of Congress of May 8 and June 30, 1914,
in cooperation with the United States Department of Agriculture. The Louisiana Cooperative Extension
Service provides equal opportunities in programs and employment.