

NEW VARIETIES FOR 2011 FROM ALL-TEX SEED**C. Cook****B. Shook****All-Tex Seed Company****Victoria, TX****C. Poage****J. Quillin****R. Percival****J. Newsom****All-Tex Seed Company****Levelland, TX****Abstract**

In 2011, All-Tex Seed Company will launch four new varieties that were developed within the All-Tex breeding program. Two varieties, ATX 81220 and ATX 81227 contain B2RF technology from Monsanto. The other two varieties, ATX LA122 and ATX 7A21, are conventional varieties. In addition, a new high fiber quality variety, ATX 81144, that is scheduled for a 2012 is also discussed.

Introduction

All-Tex Seed Company is a privately owned cotton variety seed company located in Levelland, TX. In the past, the company's variety development was generally focused on the Texas High Plains stripper cotton market. Today, the breeding program not only develops varieties for the picker and stripper markets of Texas/Oklahoma, but also for the Mid-South and Southeast cotton growing areas.

Results and Discussion**ATX 81220 B2RF**

In both University Official Variety Tests and on-farm tests, ATX 81220 B2RF and ATX 81227 B2RF, showed excellent yield potential and good fiber quality. ATX 81220 B2RF was well adapted to the Lower Rio Grande Valley, the Coastal Bend, the Texas Rolling Plains, the High Plains, and the El Paso Valley. It is characterized as having good to excellent fiber quality, medium plant height, semi-smooth leaf, moderately stormproof boll, good Fusarium wilt tolerance, and moderate Verticillium wilt tolerance.

ATX 81227 B2RF

ATX 81227 B2RF, in University Official Variety Tests and on-farm tests, showed excellent yield potential and good fiber quality. Results indicate that ATX 81227 B2RF is better adapted to the northern Texas High Plains and Rolling Plains as well as the Coastal Bend area. It is characterized as having good fiber quality, short to medium plant height, semi-smooth leaf, a semi-stormproof boll, and moderate tolerance to Fusarium wilt and Verticillium wilt. ATX 81227 B2RF generally has a higher micronaire value, produces a shorter plant, and has a more stormproof boll, when compared to ATX 81220 B2RF.

ATX 81144 B2RF

In the first year of being entered in University Official Variety and on-farm tests in Texas, ATX 81144 B2RF, has shown excellent variety potential. In tests in Corpus Christi and San Angelo, TX, ATX 81144 B2RF produced excellent yields, but equally important was the premium fiber that ATX 81144 B2RF possesses. When compared to 47 variety entries at Corpus Christi and 48 variety entries at San Angelo, ATX 81144 B2RF ranked second and first, respectively, in loan value. In two of three University of Georgia test locations, ATX 81144 B2RF produced excellent yields with excellent fiber quality. ATX 81144 B2RF also has good tolerance to the Fusarium wilt/Root-knot nematode complex and to Verticillium wilt. Commercial launch is tentatively scheduled for 2012.

ATX LA122

ATX LA122 was derived from a selection in the All-Tex Seed nursery in Vidalia, LA. In University Official Variety Tests and on-farm tests, ATX LA122 has demonstrated excellent yield potential, good fiber quality, and a broad range of adaptation. Averaged across eight Georgia locations ATX LA122 produced lint yields very similar

to Phytogen 375 WRF, FiberMax 1740 B2RF, and DP&L 0920 B2RF and higher yields than the conventional variety SSG Linwood. In Mississippi State University tests averaged across four locations, lint yield of ATX LA 122 was very similar to Phytogen 375 WRF and 5% less than DP&L 0912 B2RF, whereas the conventional variety SSG 210CT produced lint yields that were 20-25% less than Phytogen 375 WRF and DPL 0912 B2RF. In tests conducted by the Texas AgriLife, ATX LA122 consistently produced greater yields than the conventional varieties, SSG 210CT and SSG 212 CT and also was similar in yield to most B2RF varieties. ATX LA122 is well adapted to the Lower Rio Grande Valley, the Coastal Bend, the Texas Upper Gulf Coast, the Brazos River Valley, the Concho Valley, and the southern regions of the Mississippi Delta and Mississippi Hills, and the southern region of Georgia. ATX LA122 is well adapted to both irrigated and dryland conditions and is generally characterized as having good fiber quality and turnout, a medium to medium-short plant height, a semi-stormproof boll, and as being medium-early in maturity.

ATX 7A21

ATX 7A21 was derived from the same cross as ATX LA122, but the selections were made in the All-Tex Seed nurseries in Weslaco, TX and Corpus Christi, TX. ATX 7A21 has shown very good yield and adaptability in the Lower Rio Grande Valley, the Coastal Bend, the Texas Rolling Plains and Texas High Plains, and in irrigated areas of Mississippi, Louisiana, and Georgia. ATX 7A21 has very good Fusarium and Verticillium wilt tolerance, excellent fiber quality and turnout, a stormproof boll, and is medium-early in maturity.

Summary

All-Tex Seed Company, once known for its stormproof stripper cotton varieties, has expanded its breeding goals to develop cotton varieties for the entire cotton belt. In addition, conventional varieties are being developed and marketed for growers not wishing to plant varieties containing genetically modified traits. In 2011, the initial launch of new, All-Tex bred varieties is being made. Varieties, ATX 81220 B2RF and ATX 81227 B2RF, are well adapted to most growing regions of Texas, with ATX 81227 B2RF generally being able to move better into the more northern regions of the Texas High Plains. ATX LA122 and ATX 7A21 offer conventional and organic growers two excellent variety choices. ATX LA122 generally has a broader range of adaptability to the southern region of the cotton belt, both irrigated and dryland. ATX 7A21 is well adapted to irrigated areas of south Texas, the Texas High Plains, and Georgia, and has excellent fiber quality.