COMMERCIAL PERFORMANCE
OF FIBERMAX VARIETIES – 1998
L. Rivenbark, R. Bettison, F. Strachan
and Jane Dever
AgrEvo USA Company
Memphis, TN

## Abstract

Commercial cotton varieties under the brand name FiberMax were offered for sale in the United States in 1998. FiberMax varieties are developed by AgrEvo Cotton Seed International (ACSI), a joint venture between AgrEvo and Cotton Seed Distributors of Australia, and distributed in the U. S. by AgrEvo. Cotton Seed Distributors and ACSI have access to one of the world's largest cotton germplasm bases, CSIRO in Australia, for variety development. Five FiberMax varieties were planted on approximately 100,000 acres across the Cotton Belt in 1998, with FM 989 and FM 832 accounting for over 70% of those acres. The balance of the acreage was planted to FM 819, FM 963 and FM 975. FiberMax varieties sold here are sister lines to those currently grown in Australia and were selected based on University and field trials conducted in 1996 and 1997. General variety descriptions were developed based on trials as well as commercial experience. FiberMax 989 is the most widely adapted FiberMax variety available, and performs most competitively in the North Delta, Northern areas of the Southeast growing region and the San Joaquin Valley of California. Large bolls and a very good plant type with relatively short internodes characterize FiberMax 989. FiberMax growers surveyed reported using an average of 6 ounces less PGR per acre. FiberMax 832 performed best in commercial fields on heavy soils and in dryland conditions, with very good results in Louisiana. FiberMax 832 is an okra-leaf variety with exceptional technical fiber properties, often associated with longer boll maturation periods. Management for early-season fruit retention was essential to ensure fiber quality potential and prevent vegetative growth. All the FiberMax varieties demonstrated fast, uniform emergence and vigorous, early growth. The germination rates of FiberMax seed resulted in higher than desirable final plant population on producer fields compared to other varieties.

Large-scale variety trials show FM 832 to be a high-yield, high-value variety in Jonesboro, AR, while FM 989 is superior in field testing in Tyner, NC. Both varieties performed well under commercial conditions in Raymondville, TX, yielding better than varieties with herbicide-resistant and insect-resistant transgenic technology. Producer experience with FiberMax varieties was monitored on the James Moon farm in Trumann, AR, and on the Parker/Jones farm in Senath, MO. One constant

throughout the large-scale trials and producer bales was excellent fiber quality, resulting in avoidance of micronaire discounts and premium points for length and strength. Texas Road Gin in Waterproof, LA, reported their first 39 staple ever on a bale of FiberMax 832. Russell Mills contracted a significant number of bales of FiberMax cotton in Georgia produced under conditions ranging from good, irrigated cotton to drought, burned up acres to fields with boll rot. Bales of FM 989 had fiber length ranging from 1.19"-1.25", fiber strength from 31.5-36.5 g/tex, and micronaire from 4.1-4.8. Bales of FM 832 had fiber length ranging from 1.23"-1.30", fiber strength from 32.7-42.2 g/tex. and micronaire from 4.2-4.6. For properties important to mills but not measured on the official class, FiberMax varieties show less short fiber content in a bale, reinforcing earlier observations that FM 832 and FM 989 have genetically lower short fiber content than standard Midsouth and Southeast cotton varieties.