

1999 YEAR IN REVIEW: THE SOUTHWEST

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Abstract

The 1999 crop year in the Southwest was characterized by erratic weather patterns at planting time and again at harvest. The high and rolling plains started the year with good subsoil moisture and initial planting was timely. Plants emerged and were growing well when major thunderstorms with heavy rain and hail resulted in loss of many acres. Continued rainfall limited replanting to cotton, and many acres were planted to other crops. Most areas had adequate rainfall during June, but July and August were extremely dry, resulting in crop stress and reduced yield and quality. Most irrigated production suffered some loss due to the July and August drought, but many dryland areas were not harvested. A late fall with drought relieving rainfall allowed some additional boll filling. Hurricane Bret hit during harvest in South Texas and damaged cotton waiting to be harvested. In general, cotton fruiting patterns showed normal or slightly higher than normal first fruiting positions. Most irrigated cotton developed on slightly shorter stalk than normal, but plants were well fruited to the top, especially in boll weevil eradication areas.

Insect pressure was lower in 1999 than in previous years. All areas reported less spraying for early season insects, but the real advantage in most areas was lack of bollworm pressure. The increase in Bt cotton acreage was also a contributor to the lower bollworm damage. Almost half of southwest acreage is in some phase of a boll weevil eradication program.

Cotton quality was reflected by stress during blooming and fiber development. Cotton fiber strength was high in most areas, particularly in the stripper varieties on the plains. In areas affected by reduced root systems and/or lack of rainfall in July and August, fiber length was shorter and micronaire was higher than normal.

In the picker harvested areas of central and south Texas, Deltapine 51 was the primary variety planted. In stripper harvested areas, Paymaster HS-26, Paymaster 2326, Paymaster 2200, Paymaster 280, and Paymaster 2280 were primary varieties planted. In picker harvested areas of Southwest Oklahoma, Deltapine 32B, Stoneville 474, and Stoneville BXN 47 were the primary varieties planted. Adaptation of genetically enhanced varieties has been

increasing with approximately 51 percent of the acres in the Southwest being planted to transgenic cotton.

Planted acres increased in the southwest region 3 percent in 1999 compared to 1998. Oklahoma increased 19 percent, New Mexico increased 12 percent, and Texas increased 2 percent over 1998. Harvested acres in 1999 increased 63 percent over 1998. This was due to the large number of abandoned acres in 1998 due to drought. Also, due primarily to the 1998 drought, bales produced increased 44 percent in 1999 compared to 1998. Lint yield per acre in 1999 decreased 11 percent compared to 1998 due to a higher percentage of irrigated cotton being harvested in 1998 because of abandonment of dryland acreage.

Since cotton prices were depressed in 1999, many producers have learned the value of attempting to obtain highest economic yield per acre, instead of specifically attempting higher yields with higher inputs. Some high input/high yielding cotton ended up losing money after production costs were paid.

Due to early season water saturated soils and late season drought, cotton developed a more shallow root system than in normal years. In irrigated systems, time between irrigations needed to be shortened to avoid stress on the plants during fruiting. Stress factors were most apparent during mid bloom, contributing to shorter fiber length. In dryland systems, August rainfall was spotty across the region. Areas receiving a good August rainfall made a good drop and areas missing this rainfall often experienced crop failure.