TWENTY YEARS OF COTTON PRODUCTION IN NEW MEXICO

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Abstract

The New Mexico Agricultural Experiment Station has had a long history of input into the genetics of today's cotton plant. New Mexico State University's breeding program has influenced 45% of other pedigrees of upland cotton cultivars (Bowman *et al.*, 1996). Cotton production in New Mexico, however, has been experiencing a decline in acreage and overall production. Roughly 5% of New Mexico agriculture was dedicated to cotton production in 1994 which is down from 13% of the crop land in 1972. The decline is more dramatic for Doña Ana, Chaves and Eddy counties which accounted for two-thirds of the cash receipts for upland cotton in 1994. Doña Ana county acreage has declined from a maximum of 48% of the acreage in 1974 to 20% in 1994. Chaves county has declined 30% in 1974 to 11% in 1994.

Meanwhile, progress has been made in production per acre with an overall increase in yield from approximately 500 pounds lint per acre to nearly 700 pounds lint per acre when using NM Agricultural Statistics Service data. The regional variety trial data, however, indicate little yield differences between 1972 and 1994 when averaged over all varieties tested. There were also no differences in overall yield between Artesia and Las Cruces locations. Lint yields have varied greatly among years, however, the average has been 1150 pounds per acre since 1972.

Variety stability, or the effect of a good year versus a bad year on cotton yield generally had a slope of less than one, indicating fair production in bad years and good production in good years.

The difference between the yields reported in the New Mexico Agricultural Statistics and the yields in the regional variety trials could be due to several factors. Plot yields are typically greater in research farms, however, the increase in yields since 1972 as reported by the NM Agricultural Statistics Service could indicate adoption of better varieties and production practices. Yields and quality will undoubtedly continue to increase as improvements are made both in production practices and genetics.

References

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