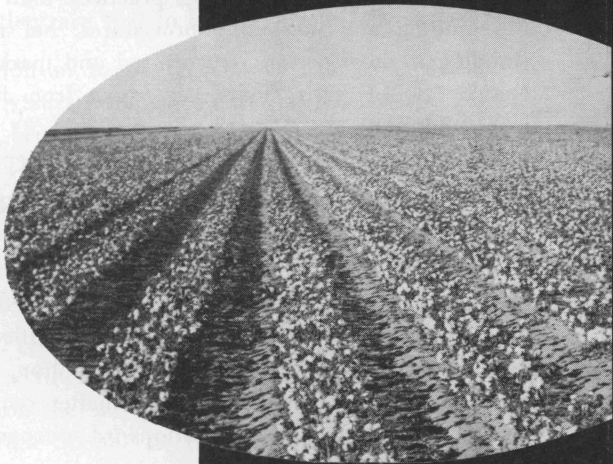


growing high plains COTTON

Mr. J. D. Allard

*To M
Delivered
Wagon
yellow*



**For Better
Quality
and Greater
Profits**

TEXAS AGRICULTURAL
EXTENSION SERVICE
J. E. Hutchison, Director,
College Station, Texas

Growing High Plains Cotton . . . for better quality and greater profit

THE PLAINS COTTON SITUATION

THE PURPOSE OF THIS GUIDE is to help High Plains cotton farmers grow quality cotton and to have it processed and marketed for greater profit.

The income of cotton producers on the High Plains has been penalized because some of their cotton lacked uniformity, quality and character.

Production practices in general govern quality and yield. Processing procedures are problems of the farmer in harvesting, and of the ginner in ginning cotton. The cotton farmer has a greater opportunity to improve his production and harvesting practices than to better the ginning and marketing procedures, but an understanding of how cotton is processed and marketed may enable him to realize more net return from his investment and labor.

PRODUCTION PROBLEMS

Land Preparation

Land preparation affects the quality of cotton only as it affects tilth. Check your soil for fertility needs—for maximum production of quality cotton, nitrogen, phosphorus, potassium and organic matter requirements must be met. Heavy applications of nitrogen should not be made after July 1.

Planting

Optimum planting dates on the High Plains are May 5-20. Later planting usually results in lower quality. If planting must be done after June 1, select an early maturing variety.

Minimum soil temperature should average 60 degrees for 10 days at 8-inch depth from the top of the bed. Delinted, treated seed should be used.

A uniform stand of approximately four stalks per foot in 40-inch rows is recommended. Plant 20 to 30 pounds of seed per acre, adjusting the rate according to germination tests. Use a seed press wheel and make the furrow shallow so that plant emergence will be rapid.

The method of harvest to be used should help determine the variety to plant. Storm-resistant cottons maintain quality longer in the field and strip better than open-boll types.

Insect Control

Early season insect control is profitable 3 out of 5 years. It insures early fruiting and maturity and results in higher quality cotton. Late season control should be based on the amount of insect infestation. Ask your county agent for a copy of L-218, "Texas Guide for Controlling Cotton Insects."

Irrigation

Irrigation before planting is important in the production of quality cotton. The soil profile should be moist to a depth of 4 to 6 feet to insure adequate moisture storage and root development. Eliminate any hard pan so that roots can penetrate deep.

The first summer irrigation should be made after the cotton begins blooming. It should provide moisture to a depth of 2 to 3 feet. Earlier irrigation encourages vegetative growth, retards fruiting and delays maturity. Additional summer irrigations tend to increase yields but lower quality, which may mean lower net returns.

Irrigation systems and field layouts should be designed to conserve and make maximum use of rainfall and irrigation water. The cut-off date should occur at the last average effective boll set, or about August 25. Later irrigations cause immature cotton. Weed and grass control are important because these pests use valuable moisture.

PROCESSING

Harvesting

Defoliant and desiccants are recommended if the crop reaches maturity before frost. Applications before 60 percent of the bolls are open usually lower the micronaire (fiber fineness).

Avoid hand snapping cotton while it is wet. Use large enough trailers (250 to 300 cubic feet of trailer space per bale) and avoid tramping.

Stripper harvest should be planned from the beginning of the season. Wait until the open bolls are dry. Take advantage of separation devices to separate the green bolls from mature bolls. Proper adjustment and operation of the stripper is essential. A well-trained operator can make money for any producer.

When ginning is delayed, cotton maintains quality longer if stored on a well-drained spot in the field than when left on the stalk.

Two-sided bales are the result of mixing cotton of different quality. Do not mix irrigated and dryland cotton into the same trailer.

Weed and grass control is important before harvest to prevent grassy bales, field losses and machine stoppage. Ginning efficiency depends largely on the condition of the seed cotton received. Work with your ginner to produce quality cotton. When possible, group your cotton as to moisture, method of harvest or other characteristics before ginning. This will help prevent the two-sided bales.

Packaging

Automatic sampling and high density presses at the gin hold great promise for neat, uniform bales and as an aid to maintaining quality and increasing sales. The Texas Cotton Association and the Commodity Credit Corporation have rules regarding weights of bales. Avoid underweight and overweight bales. To be eligible for a loan, the CCC requires that each bale weigh not less than 350 nor more than 650 pounds. The bale must be packaged adequately in accepted materials and the heads must be covered.

MARKETING

High Plains cotton farmers should know the end uses of their cotton. These are woven cloth, cotton yarn and thread and waste that is sold to other industries for batting, wadding and mattress felts.

They also should have a general knowledge of how the cotton market fluctuates. Price in relation to the loan is valuable in marketing. Each farmer should know the quality, grade and staple of his cotton. Knowledge of its micronaire and tensile strength may aid in selling when dates of "green cards" are figured off because the cotton was classed after a certain date.

All cotton should be grouped according to grade, staple and quality, and not sold as a mixed lot. Cotton with a micronaire reading below 3.5 may be discounted and should not be sold with cotton having a micronaire reading of 3.5 and above; otherwise the price for the whole lot may be reduced.

Do not put light and full spots on the same loan note. In selling equities later, they must be redeemed together and the price for the light spots may be lowered because they are tied to less desirable full-spotted bales.

In addition to the grade and staple of cotton, the spinning values indicated by the micronaire and Pressley tests are becoming more important in the marketing of cotton. The micronaire test measures the fiber fineness which in turn can be related to maturity. Generally, the higher the "mike" reading, the better the cotton. Research and market personnel state that cotton should test above 4.0 for maximum returns.

The Pressley test determines the tensile strength of the cotton fiber. This is important to some mills, depending on the end product. High Plains cottons have tested from 55,000 to more than 90,000 pounds per square inch, but most of it probably falls within the 70,000 to 80,000-pound range. Usually the higher the Pressley test, the greater the value of the fiber. Research workers recommend that High Plains farmers strive to produce cotton that tests 80,000 or above for maximum market acceptability.

Longer staple cotton naturally is more desirable, but the average goal lies around 31/32 to an inch, under present conditions. Reliable market surveys indicate cotton below 15/16 inch has limited market demands.

In grade, white cotton naturally is more desirable. Light spots are more valuable than full spots, and frequently they equal white cotton in spinning value.

Net income—take home pay—should be the most important consideration for the cotton farmer. For

this reason, the production of quality cotton for greater profit is most important. Each farmer should realize the individual production potential of his farm.

Follow the 7-step cotton program.

1. Fit cotton into balanced farming.
2. Take care of your soil and water.
3. Act together on the best variety.
4. Make labor and machinery count.
5. Control insects and diseases.
6. Handle, harvest and gin for high grades.
7. Sell for grade, staple and variety value.

This guide was prepared by members of the Texas Agricultural Extension Service, the Texas Agricultural Experiment Station and representatives of the Plains Cotton Growers. For additional information, see your local county agricultural agent.