

# ARIZONA AGRICULTURIST

VOL. 1

JANUARY, 1924

No. 1

## What Will the Harvest Be?

### Some Arizona Cotton Problems. What Type of Cotton Will Pay the Grower Best in the Long Run?

By G. K. York

Long staple cotton versus short staple cotton! Will the long stapled American Egyptian or the shorter stapled uplands return the Salt River Valley cotton farmer the great-

According to a report of the United States Department of Agriculture, made public January 5, 1924, Arizona produced during 1923 a cotton crop valued at \$14,000,000 of which the

83,000 bales was valued at \$14,000,000.

Arizona's annual production is small when compared with annual world's production, but the annual



LONG STAPLE COTTON IN THE SALT RIVER VALLEY

est dividends over a long period of years? Can American Egyptian compete in the world market with Egyptian cotton produced with cheap labor? Is there a demand for American Egyptian cotton on the world market? What premium is necessary to profitably grow Pima cotton? Since the bottom fell out of the cotton market in 1920 there has been more or less gradual tendency toward the shorter stapled varieties in the Salt River Valley. Will this tendency continue?

To answer some of these questions let us look for a moment at Arizona's place in the cotton scheme of things.

department estimated that approximately \$11,000,000 worth was produced in the Salt River Valley. This is a tremendous increase over any previous year. Part of this increase is due, according to the report, to an increase in acreage, the acreage devoted to cotton in the entire state in 1921 having been 90,000 acres; in 1922, 101,000 acres; and in 1923, 128,000 acres.

The value of the cotton produced in this state during the past year, however, showed a larger increase than production. In 1922, 47,000 bales of cotton brought \$7,000,000 and in 1923 and estimated yield of

world's production and the world market mean a great deal to the Arizona cotton grower. The United States has a monopoly on the world market with an annual production of from 11 to 12 million bales, as compared to the world's average annual production of 18 million bales. A ten-year average of our carryover has been almost 4 million bales. Last year our reserve had dwindled until our carryover was only 1 million bales. What do these figures mean to the cotton grower? Just this: At the present rate of consumption of over one-half million bales of cotton per month in the United States

and with our exports the present cotton crop and our reserve supply will all be used up before the next crop comes in. This augurs well for 1924 cotton prices and will be an incentive for increased production in the entire cotton belt where possible.

In the section east of the Mississippi River there will probably not be a very great increase in acreage due to the ravages of the boll weevil and the desire of the banks not to finance any more than necessary the weevil-infested area. It has been estimated that in Arizona the increase in acreage will be about one-third greater than in 1923, or approximately 171,000 acres in 1924. It has been estimated that in the Salt River Valley 125,000 to 130,000 acres will be planted to the following varieties:

	Acres.
Acala .....	75,000
Hartsville .....	25,000
Mebane, Pima and others.....	25-30,000

A close scrutiny of this estimated acreage shows several things. First of all it shows that the Salt River Valley which in 1920 was a one variety community entirely planted to Pima, a long stapled American Egyptian cotton, has changed its ideas. From 100 per cent long stapled cotton in 1920; 40 per cent long staple and 60 per cent short staple in 1923; to 90 per cent short staple and 10 per cent Pima in 1924!

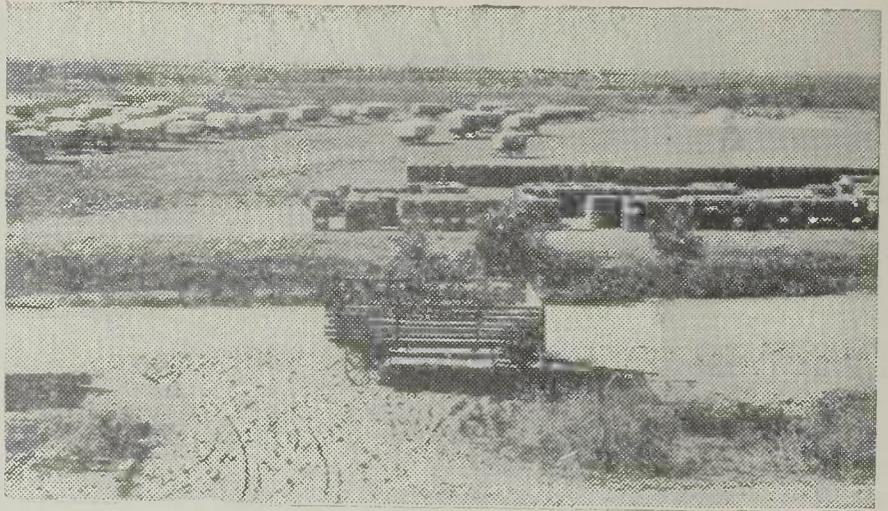
There were several factors entering into the decreased acreage of Pima, the chief of which was the profit received. In grading cotton there are two factors which influence the grade:

(1) Amount of foreign matter and impurities contained.

(Leaves, dirt, sand, strings, notes, neps, gin cut fiber and unripe seed.)

(2) Color of lint.

In the matter of lint color, Pima was discriminated against somewhat because it was yellow. In the amount of foreign matter content Pima had to compete with Egyptian long staple cotton produced in Egypt with exceedingly cheap labor. It is true that because of the size of the bolls Pima is harder to pick, and harder to pick clean. The Salt River Valley cotton grower had to pay an extra premium for picking Pima, an extra cost for ginning and more for irrigation. If the cotton was picked with trash in it, such leaves, etc., the ginning process did not remove it. On the other hand, in Egypt with the cheap labor available, care could be taken to exclude the trash and the Egypt-



A GIN YARD SCENE AT MARANA, PIMA COUNTY

tian grower was able to put his long stapled cotton on the world market at a lower rate than the American grower.

During war times when the long stapled Egyptian was needed to manufacture fabric for aeroplanes there was a great demand and a high price paid for the lint of Pima cotton. Now the textile mills claim they do not know what to expect from Pima cotton in length or strength, and they do not like the yellow color. The mills and the cotton buyers are not paying the premium necessary to raise Pima profitably in comparison with the shorter stapled varieties and the pendulum is swinging back in the direction of short staple cotton very rapidly.

A look at the estimated planting for 1924 shows 75,000 acres will probably be planted in the Acala variety which has a length of lint of from 11-16 to 11-18 inches, and 25,000 acres in Hartsville, which has a length of staple of 13-16 to 11-4 inches. These two varieties will take up about four-fifths of the estimated planting in the Salt River Valley.

The Acala variety is of the Big Balled Upland type (50-60 to the pound), is storm resistant and has a lint percentage of 32-35 per cent, the lint is extra strong and has a good drag. Acala always has a good market when longer staples are not wanted by the textile mills.

Hartsville is of the Long Stapled Upland type, is a plant of moderate size, has large bolls averaging 55 to the pound and easy to pick. The lint is quite silky and strong and the lint gives out about 30 per cent in Arizona. Its season of maturity is medium and is very resistant to lodging.

During the past season there was

no premium of more than 1 1-2 cents paid for the long stapled upland such as Hartsville over and above the price paid for Acala. At the same time, according to quotations on the eastern markets, these long stapled uplands should have paid a premium of from 2 to 2 3/4 cents over Acala, but the Arizona buyers did not and do not pay it. Probably when the producers are further along in their organization better results will obtain. All the figures seem to show that during normal times—when normal times arrive—that there will be larger premiums paid for such long stapled uplands as Hartsville and that there will be a larger return over a period of years.

With such a large acreage of Acala to be planted next year, there will be a large demand for pure Acala seed. In the past few years most of the Acala seed has come from the Coachilla Valley in California. This is a one variety community and the Coachilla grower makes part of his profit by roguing out all off type plants and selling his pure seed at a premium. This year the seed will in all probability sell for not less than 6 cents, and some may bring as high as 10 cents.

Just outside of Tucson there was planted about 4,000 acres of Acala cotton during this past year. As it is a one variety community there is not much chance of the variety becoming crossed and if the farmer would take the added care of roguing out off type plants, he would have a larger source of income than by disposing of his seed as he does.

There are about seven or eight varieties of cotton grown in Arizona which is a fortunate situation and it

(Continued on page 7)

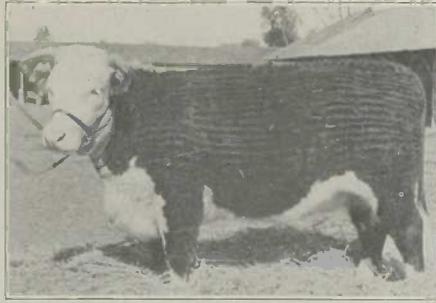
## What Will the Harvest Be?

(Continued from page 4)

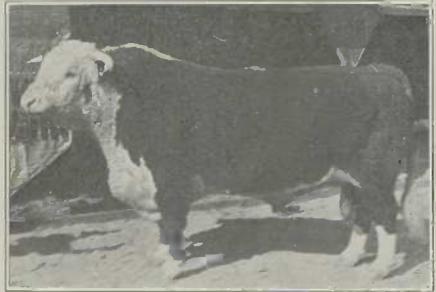
might be well in passing to enumerate some of the advantages of a one variety community such as the Post Project near Tucson where only the Acala variety of cotton is grown.

- (1) Where there is only one variety grown, grading is comparatively simple, while if there is a number of varieties it makes fitting the cotton into the standard grades a difficult task.
- (2) Cotton grown in a one variety community being of a more uniform grade is more sought for by textile mills and brings a resultant higher price. Uniformity of length of lint is very necessary in obtaining top prices from spinners. Different lengths of lint make a rough, weak thread and such lint will be liberally cut by buyers.
- (3) The variety in a one variety community can be kept pure while in many a variety community it is almost impossible. Cross pollination and the commercial gin both are factors in mixing the varieties of cotton.
- (4) More money can be obtained for pure seed in a one-variety community if the fields are systematically rogued. It is difficult to obtain pure seed in the Salt River Valley at the present time, due to the mixture of varieties grown there. The Coachilla Valley growers in California are reaping the benefit by roguing their one variety of Acala and selling the seed to the Salt River Valley grower at a premium.
- (5) In a one-variety community it is easy to form a more profitable co-operative selling and buying organization when all the members have common needs and aims.

The boll weevil hit our annual production during the war and with our reserve supply of cotton diminished almost to the vanishing point, the present extra demand has resulted in high prices. Cotton is cotton during such a time, but the community that plans several years ahead is the community that will still be making money when normal times arrive. The price paid for cotton in the past has usually followed production in an inverse ratio. From this it would seem the best policy to try for high production per acre and to cut



EDWINA DONALD, 110,577  
GRAND CHAMPION FEMALE, ARIZONA  
STATE FAIR, NOV., 1923  
BABBIT & COWDEN, OWNERS



CARLOS DONALD 2d, 907,480  
GRAND CHAMPION, ARIZONA STATE  
FAIR, NOVEMBER, 1923  
BABBIT & COWDEN, OWNERS

Appointment of Professor Elwood Mead of the University of California to the special advisory committee to study government reclamation was made recently by Secretary Work. Dr. Mead is considered a world's expert in this work. He has just returned from the Holy Land and Australia where he served as reclamation consultant for the British Government.

The agricultural extension conference of the twelve western states will be held in Tucson this year. The twelve states to be represented are Arizona, Washington, California, Oregon, Idaho, Montana, Nevada, Utah, Colorado, Wyoming, New Mexico and Texas. The date of this year's conference has not been decided, but it is expected to be held in November.

down on production costs wherever possible. From data available long stapled uplands seem to hold the greatest promise for the largest returns over a number of years for long stapled uplands, such as Hartsville have commanded an average premium of 8 cents or better for the past ten years.

## Co-operation in the Dairy Industry

(Continued from Page 5)

Cream and Butter Association, organized in 1911, is operating successfully in Los Angeles. For several months after going into the marketing business it seemed that the attempt would result in failure. Its success was due to the loyalty of its members and directors, and to the uniformly high quality of its product, and to courteous, efficient service rendered to its patrons. Later the Danish Association of Los Angeles united with it and at present more than 35,000 pounds daily, or over 40 per cent of the butter distributed from Los Angeles is sold under the two brands.

Practical application of the co-operative idea can be made in breeding better dairy cattle and in the purchase of feed and supplies. In the most prosperous dairy sections of the United States the dairymen have been thoroughly convinced that it is a distinct advantage for the community to keep but one breed of cattle and own pure bred sires co-operatively. By following such a practice the quality of the herds has gradually increased, and likewise the profits therefrom.

The National Co-operative Milk Producers Federation has started a movement to cause the teaching of economics in educational institutions to be directed so as to give a clearer understanding of the spirit and principles of co-operation.

Co-operation is not a panacea for all ills which beset the dairy industry, but it is worthy of serious consideration by dairymen who intend to continue long in the business.

### CIRCULATION STAFF INCREASED

The circulation staff of the ARIZONA AGRICULTURIST was increased to two the past week when a new boy arrived at the home of Willie Williams. Heretofore the circulation department has consisted of one man; henceforth it will consist of one man and a boy.

A high price crop causes the farmers to plunge on that crop for the following year. Those that take exceptions to this rule and plant what was a low price, and what other farmers are not planting, reap a good price because of the great demand for their products.