Dwarf Pima COTTON

Better Variety May Be Developed

This photo shows the relative boll size of Pima 32 and Dwarf Pima. 11 bolls of Pima 32, front row. 8 bolls of Dwarf Pima, rear row.

By W. I. Thomas

Egyptian or Pima type cotton was first grown in Arizona at the Territorial Experiment Station in 1900 at Phoenix, Arizona. The finding of superior plants and subsequent development of varieties of merit led to the development of a Pima cotton growing industry in Arizona which had its heyday about the end of the first World War.

At that time Pima lint sold for a dollar a pound. (Remember too—the inflationary forces were not so strong then as now, the Indians wore expensive bright silk shirts while working the crop, and upland cotton planting was discouraged.)

A collapse in the price of Pima cotton at the end of the first World War led to the adoption of upland cottons, and by the time the second World War began, upland cotton had almost eliminated Pima cotton from the field.

Better Varieties Sought

The development of better varieties by R. H. Peebles of the U. S. Field Station at Sacaton, Arizona, and the necessity of having cotton of this character for military purposes led to considerable planting of this crop during the second World War. But as soon as the war was over, farmers returned to planting upland cotton since it was more profitable.

Now once more it may be necessary to raise a certain amount of Pima or Egyptian cotton for domestic and military uses. Approximately 100,000 bales of this kind of cotton have been used annually in this country in the past.

Objections Are Many

Some of the reasons why farmers object to raising Pima or Egyptian cotton are: It has a very small boll that pickers dislike. It makes a big tree-like plant that is too hot to pick in, or, if it falls over, makes a tangled mass of branches that is hard to pull a pick-sack through. The lint percentage of the harvested cotton is low (30 percent or less) which further adds to the cost of the crop.

This cotton also requires a long season of growth, is comparatively low yielding, and is not easily harvested by mechanical pickers. These undesirable characteristics, combined with keen competition from other countries, plus the difficulty in obtaining labor in the United States in recent years, seem to call for a new Pima cotton.

One of the University of Arizona strains of Pima cotton known as 126-S 1 developed by Professor W. E. Bryan from a cross between Pima and Tanguis (a Peruvian cotton) further intercrossed with Sea Island and upland cottons may help overcome many of the objections to old Pima cotton.

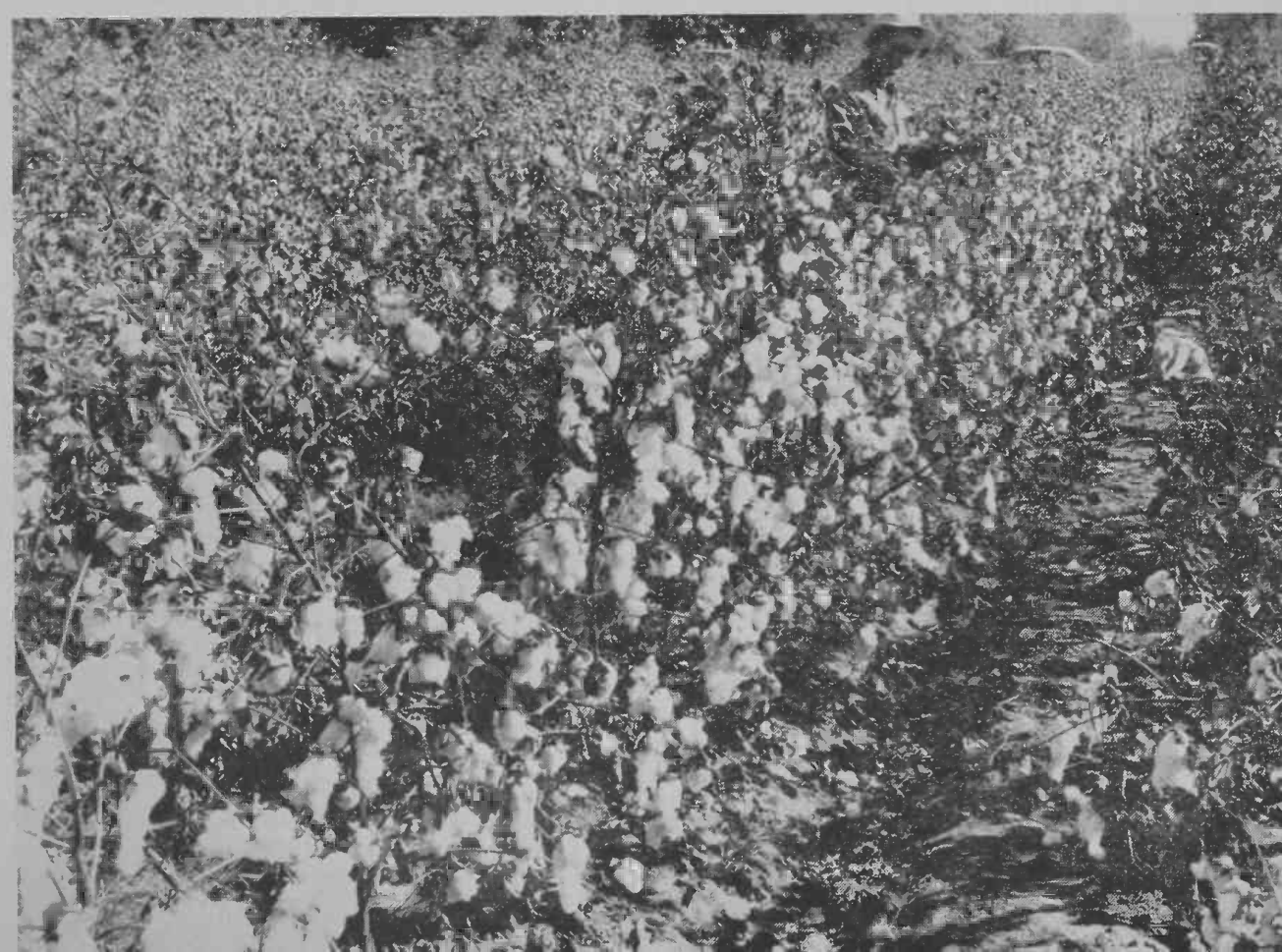
Farmers Name New Variety

Pima strain, 126-S 1 (Bryan), does not grow as tall as old Pima or even Pima 32. This variety, shown at University farm field days, has been named by farmers "Dwarf Pima." It staples the same as Pima 32, and has quite large bolls for a Pima cotton. (See photo.)

The ginning percentage is considerably better than old Pima, but does not compare with upland except at the higher elevations. Whether it can be machine picked is not known, but this might be possible on the weaker soils where the plants do not get too large. The 1950 spinning test for this variety was quite satisfactory. Laboratory tests from earlier years also were satisfactory.

However, "Dwarf Pima" is still an experimental variety and seed stocks are not large. More extensive tests were conducted on this cotton in 1951 and should give a more adequate evaluation of its possibilities as a desirable long-staple variety.

—W. I. Thomas is Assistant Agronomist.



An outstanding row of Dwarf Pima showing its relatively short height and prolific set of large bolls. →