

# Hopicala ... A New Cotton Variety

By WARNER FISHER

Hopicala, a cotton variety being released to Arizona farmers this year, is a product of cooperative effort by state and federal research agencies. The original seed source of Hopicala was obtained in 1950 by the Agronomy Department of New Mexico State University from George J. Harrison of the United States Cotton Research Station, Shafter, Calif.

This seed stock was derived from crosses of the native Hopi Indian cotton and the Acala variety. Eight generations of pedigree selection from this seed stock produced Hopicala. Earlier generations of selection were made by G. N. Stroman and Glen Staten. The final three generations of selection were made by John R. Cotton.

It has been in yield tests in New Mexico since 1959 and in regional tests, including Arizona, since 1962, carrying the designation 4447. Its performance in the western regional tests indicate that it has excellent yielding ability at a wide range of locations. The variety has a moderate degree of tolerance to verticillium wilt, and Arizona tests indicate that it shows the greatest relative advantage in those areas affected by wilt.

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In non-wilt areas such as Yuma and parts of the Salt River Valley, Hopicala has not been the highest yielding variety, but the yields have been high enough that a modest premium for quality could make it competitive.

Hopicala is not currently recommended in New Mexico because the fiber length is about 1/16 inch shorter than the 1517 varieties which produce staple lengths ranging from 1 1/8 to 1 3/16 inches. Fiber and spinning data accumulated from regional tests indicate that Hopicala fiber is slightly longer and slightly stronger than Acala 4-42, a variety long recognized for its excellent quality.

Hopicala has a sturdy, close fruited plant, and is relatively early compared to other Acala varieties. In plant height it grows almost as tall as Acala 44, consequently may become too rank under certain growing conditions. On soils which normally grow big plants, some caution is suggested in the use of water and fertilizer to avoid excessive vegetative growth.

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Dr. Fisher is plant breeder at the U. of A. Cotton Research Center.