was derived from a sister of the original ‘Acala 1517’. Coquette was an experimental strain developed at the Louisiana Agric. Exp. Stn. Acala strain 6612 was bulked in 1959, tested for 4 years, and released as Acala 1517V in 1964.

The plants of Acala 1517V have a medium-narrow profile, and the locks of the boll are attached to some extent to the burr at the bottom of the lock. These characters make it well adapted to machine harvesting with the spindle picker. This cultivar has a relatively high level of resistance to *Verticillium albo-atrum* Reinke and Berth, and is moderately resistant to *Fusarium* wilt. It is susceptible to *Xanthomonas malvacearum* (E. F. Smith) Dows.

Acala 1517V is similar in height to ‘Acala 1517C’. Bolls are ovate and average 7.1 g of seed cotton as compared to 7.5 g for Acala 1517C. Seeds are quite fuzzy and medium-large (13.6 g/100). Lint percentage averages 6.6%, as compared to 6.0% for Acala 1517C. The 2.5% span length averages 31.0 mm as measured on the digital fibrograph. Tensile strength averages 227 m N/Tex as measured on the stelometer. At the time of release, Acala 1517V had shown an average yield of 107% of ‘Acala 1517D’, a high yielding but moderately wilt-susceptible cultivar.

The original Acala 1517V was replaced in 1969 by a sister line of Acala 6612. Acala 9450 strain was bulked in 1963, tested for 5 years and released in 1969, as the “new” Acala 1517V. The newer version is similar in plant type and general appearance, except for having darker green foliage, but it has a more extensive fruiting framework, larger bolls, higher lint percentage, and good attachment of seed cotton to the burr. On severely wilt-infested soils, Acala 9450 showed a greater expression of wilt symptoms than Acala 6612, yet the newer cultivar yielded about 6% more cotton.

Lint percentages compared to Acala 6612 are about 1.3% higher; 2.5% span, micronaire, and yarn strength (22's carded) are slightly improved.

Breeder seed of Acala 1517V will be maintained by the New Mexico Agric. Exp. Stn.

Acala 1517-70 deviates in several particulars from the original Acala 1517 type as described4 for Acala 1517C. In New Mexico, the plants are about 8% shorter and wider in profile. The leaves are generally more numerous, with more numerous and more longer. Vegetative (monopodial) branches are more numerous but individually smaller than those produced by Acala 1517C. Bolls of Acala 1517-70 are medium-large, and average only 7 g of seed cotton as compared to 8 g for Acala 1517C.

Seeds are quite fuzzy and medium-large, averaging about 37 for hand-picked samples as compared to 34 for Acala 1517C.

Acala 1517-70 is slow in coming into bloom, rapidly in mid-season and is medium in maturity for a New Mexico type. Acala 1517-70 does not yield as well as Acala 9450 when planted in the hot valleys of Arizona and California, but is tolerant of marginal conditions and has performed very well on the Southern High Plains of Texas. Probably owing to tolerance of low temperatures, it matures well into the autumn months. Acala 1517-70 produces premium quality fiber which averages 22's in 2.5 span length, generally classing as 1-1/8 in. staple. Fiber elongation is lower than for other Acala types, but the tensile strength is excellent, averaging about 220 m N/Tex as measured on the stelometer when grown in the New Mexico Agric. Exp. Stn.

Breeder seed will be maintained by the New Mexico Agric. Exp. Stn.

---

1 Registered by the Crop Science Society of America. Accepted 23 Sept. 1977.
2 Professor, associate professor, research specialist, associate professor, associate professor and professor, respectively, Dep. of Agronomy, New Mexico State Univ., Las Cruces, NM 88003.

REGISTRATION OF ACALA 1517-70 COTTON1


‘ACALA 1517-70’ cotton (Gossypium hirsutum L.) was developed from a cross of two experimental strains, ‘ACALA 6612’ and ‘ACALA 9450’, made in 1966 at New Mexico State University. The cross was made from the ‘ACALA 1517V’ family. Acala 6612 was derived from a cross of ‘Deltapine 14’ × ‘K3131’. K3131 was an African introgression of many years of crossing and selecting with the objectives of combining high yield and fiber quality with practical levels of resistance to the two major diseases of cotton in New Mexico. Acala 9450 strain was bulked in 1963, tested for 5 years and released 8 as Acala 1517V in 1964.

Acala 1517-70 deviates in several particulars from the original Acala 1517 type as described4 for Acala 1517C. In New Mexico, the plants are about 8% shorter and wider in profile. The leaves are generally more numerous, with more numerous and more longer. Vegetative (monopodial) branches are more numerous but individually smaller than those produced by Acala 1517C. Bolls of Acala 1517-70 are medium-large, and average only 7 g of seed cotton as compared to 8 g for Acala 1517C.

Seeds are quite fuzzy and medium-large, averaging about 37 for hand-picked samples as compared to 34 for Acala 1517C.

Acala 1517-70 is slow in coming into bloom, rapidly in mid-season and is medium in maturity for a New Mexico type. Acala 1517-70 does not yield as well as Acala 9450 when planted in the hot valleys of Arizona and California, but is tolerant of marginal conditions and has performed very well on the Southern High Plains of Texas. Probably owing to tolerance of low temperatures, it matures well into the autumn months. Acala 1517-70 produces premium quality fiber which averages 22's in 2.5 span length, generally classing as 1-1/8 in. staple. Fiber elongation is lower than for other Acala types, but the tensile strength is excellent, averaging about 220 m N/Tex as measured on the stelometer when grown in the New Mexico Agric. Exp. Stn.

Breeder seed will be maintained by the New Mexico Agric. Exp. Stn.

---

1 Registered by the Crop Science Society of America. Accepted 23 Sept. 1977.
2 Professor, associate professor, research specialist, associate professor, associate professor and professor, respectively, Dep. of Agronomy, New Mexico State Univ., Las Cruces, NM 88003.

REGISTRATION OF ACALA 1517-75 UPLAND COTTON

(Reg. No. 67)