REGISTRATION OF CROP CULTIVARS

1517-75 averaged 1054 kg lint/ha, which was 105 and 111% of Acala 1517V and 'Acala 1517-70', respectively.

Boll size (6.6 g seed cotton) is smaller than that of Acala 1517V (7.1 g). Seed index has averaged 13.1 g/100, compared to 13.5 g/100 for Acala 1517V. Lint percentage, 2.5% span, micronaire, tensile strength, and 22's yarn strength have averaged essentially the same as for Acala 1517V.

Acala 1517-75 has compact, ovate, well-shaped open bolls with the seed cotton firmly held in the burr which, combined with the plant type, makes it ideally suited for harvesting with the spindle picker.

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

REGISTRATION OF ACALA 1517E-1 COTTON


‘ACALA 1517E-1’ was developed from a cross of ‘Acaca 3080’ × ‘Pee Dee 2165’ made at New Mexico State Univ.

The Acaca 3080 parent originated from a cross of ‘Acaca 9136’ × Acaca 49 × Hartsville. Acaca 49 and Hartsville were breeding lines with moderate resistance to Verticillium wilt. Acaca 9136 came from a complex cross involving G. barbadense ‘Tanguis’ introgression into G. hirsutum, and carries genes for resistance to races 1 and 2 of Xanthomonas malvacearum (E. F. Smith) Dows. Plant-to-row selection procedures resulted in strain B8040 which was bulked as an F₃ in 1971. After 4 years testing this strain was released as Acaca 1517E-1 in 1976.

Plants of Acaca 1517E-1 are pyramidal in shape, and the shortest statured of all Acala 1517 cultivars, growing about 80% as tall as ‘Acaca 1517C’ under the same conditions.

Acaca 1517E-1 is early 1 week in maturity than all other Acaca 1517 types, with the single exception of Acaca 1517-75 which matures about 3-4 days later than Acaca 1517E-1. In short, cool seasons Acaca 1517E-1 has outyielded the old standard types, but often falls below the standard types in long hot seasons, especially on poor soils. Owing to early bloom and short stature, Acaca 1517E-1 is not as likely to become rank or vegetative when grown on highly fertile soils.

Acaca 1517E-1 is moderately resistant to damage from Verticillium albo-astrum Reinke and Berth, and resistant to races 1 and 2 of bacterial blight Xanthomonas malvacearum (E. F. Smith) Dows. The cultivar is only mildly tolerant to Fusarium wilt.

Bolls of Acaca 1517E-1 are ovate, usually 4-locked, averaging about 6.6 g of seed cotton. Seed index ranges near 13 g/100, and lint percentage of hand-picked bolls is from 36 to 39%. Acaca 1517E-1 has slightly shorter fiber than other Acaca 1517 types, with an average 2.5% span of 30 μm as measured on the digital fibrograph. Fiber strength and elongation are very similar to other Acaca 1517 cultivars but fiber uniformity and particularly micronaire are higher. Micronaire generally runs about 0.4 units higher than other Acaca 1517 types grown under similar cultural conditions. The genetic potential for uniform, high micronaire fiber is an advantage under cultural conditions that tend to delay maturity of the fiber, such as excess soil fertility

REGISTRATION OF THEIS SWEET SORGHUM

(D. Dempsey, K. C. Freeman, O. H. Cole, and Natale Zummo)

‘THEIS’ is a sirup-type sweet sorghum, Sorghum bicolor Moench, developed at the U. S. Sugar Crops Field Station, Meridian, Miss., in the cooperative research program of the USDA and the agricultural experiment stations of Florida, Georgia, and Mississippi.

The cultivar was selected from the progeny of a cross between ‘C.P. Special’ and PI 152965 (MN 1054) × ‘Met. 51-2 (M. African)’ × PI 139466 (Mn 660). The cultivar was developed from the F₂ progeny in 1962 at Meridian, Miss., and was released under the breeding number Mer. 67-10. The cultivar is semi-compact in growth habit and has a deciduous plant type, makes it ideally suited for harvesting with the spindle picker.

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

REGISTRATION OF WILDRYE

(S. Smolik)

1 Registered by the Crop Science Society of America and the U. S. Sugar Crops Field Station, Meridian, Mississippi, 1977.

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