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 COTTON1
(Reg. No. 68)

'ACALA 1517E-1' was developed from a cross of 'Acala 3080' × 'Pee Dee 2165' made at New Mexico State Univ.2

The Acala 3080 parent originated from a cross of 'Acala 9136' × Acala 49 × Hartsville. Acala 49 and Hartsville were breeding lines with moderate resistance to Verticillium wilt. Acala 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 F2 in 1971. After 4 years testing this strain was released as Acala 1517E-1 in 1976.

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

Acala 1517E-1 is fully 1 week earlier in maturity than all other Acala 1517 types, with the single exception of Acala 1517-75 which matures about 3-4 days later than Acala 1517E-1. In short, cool seasons Acala 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, Acala 1517E-1 is not as likely to become rank or vegetative when grown on highly fertile soils.

Acala 1517E-1 is moderately resistant to damage from Verticillium albo-atrum 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 Acala 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%.

Acala 1517E-1 has slightly shorter fiber than other Acala 1517 types, with an average 2.5% span of 30 mm as measured on the digital fiberscope. Fiber strength and elongation are very similar to other Acala 1517 cultivars but fiber uniformity and particularly micronaire are higher. Micronaire generally runs about 0.4 units higher than other Acala 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 SORGHUM1
(Reg. No. 117)
Dempsey M. Broadhead, K. C. Freeman, O. H. Cole, and Natale Zummo2

'THEIS' is a sirup-type sweet sorghum, Sorghum bicolor (Ces.) G. W. Wils. It is tolerant to most sweet sorghum varieties. This is highly resistant to anthracnose and stalk red rot, both caused by Colletotrichum graminicolum (Ces.) G. W. Wils. It is tolerant to mosaic virus and moderately resistant to downy mildew Xanthomonas sp. sorghi, Weston and Uppal. This is tolerant of insecticides; consequently, it is far superior in this respect.

'OTHERS' matures in 120 to 140 days. It is similar in height, but it is far superior to Wiley in lodging resistance. The stalks are practically free of the external waxy bloom common to most sweet sorghum varieties. This is highly resistant to anthracnose and stalk red rot, both caused by Colletotrichum graminicolum (Ces.) G. Wils. It is tolerant to mosaic virus and moderately resistant to downy mildew Xanthomonas sp. sorghi, Weston and Uppal. This is tolerant of insecticides; consequently, it is far superior in this respect.

This was released for sirup production in the southeastern USA in 1974. It produces sirup with a mild sorghum flavor, good color, and excellent quality. Information on sirup production of Theis has been published.3

Breeder seed will be maintained by the Foundation Seed Stocks Program, Mississippi State Univ., Mississippi State, MS 37 (5):4.

REGISTRATION OF CABREE WILDRYE1
(Reg. No. 45)
S. Smoliak2

1 Registered by the Crop Science Society of America. Participative investigations of the ARS-USDA and the Agricultural Experiment Stations of Alabama, Florida, Georgia, and Mississippi. Accepted 23 Sept. 1977.
2 Research agronomist, collaborator, and planter, U. S. Sugar Crops Field Station, ARS-USDA, Meridian, Mississippi. Accepted 23 Sept. 1977.
3 Breeder from the program of the Plant Breeding Laboratory, U.S. Sugar Crops Field Station, ARS-USDA, Meridian, Mississippi. Accepted 23 Sept. 1977. This is a new variety of sweet sorghum for sirup production. Mississippi Agric. Forestry Exp. Stn. 37 (5):4.