REGISTRATION OF 'LHo 83-153' SUGARCANE

'LHo 83-153' (Reg. no. CV-91, PI 560160), is an interspecific hybrid of *Saccharum spontaneum* L., *S. officinarum* L., and *S. barberi* Jeswiet, developed through cooperative research by the Louisiana Agricultural Experiment Station of the Louisiana State University Agricultural Center, the USDA-ARS, and the American Sugar Cane League of the USA. LHo 83-153 was selected from progeny of the cross CP 77-405 × CP 74-339 made at Houma, LA, in 1978.

LHo 83-153 yielded well on both silt loam and clay soils. Data from 82 mechanically harvested replicated trials indicated that LHo 83-153 is equal to 'CP 70-321' (1), the leading commercial cultivar, in total recoverable sucrose yield (kg ha⁻¹) and cane yield (Mg ha⁻¹) in the plant-cane crop and was superior to CP 70-321 for these traits in the first- and second-ratoon crops. The cultivar produces a high population of stalks similar in stalk weight, stalk number, and ratooning ability to 'CP 74-383' (2). The recoverable sucrose content and maturity of LHo 83-153 is intermediate between CP 70-321 and CP 74-383. It possesses a moderate fiber content (12.7%) and average juice extraction. The cultivar is generally erect and similarly suited to mechanical harvesting as CP 70-321.

The cultivar is resistant to the spread of sugarcane mosaic virus in the field and is considered resistant to smut caused by *Ustilago scitaminea* Syd. & P. Syd. It appears resistant to rust caused by *Puccinia melanocephala* Syd. & P. Syd. and is resistant to injury by the sugarcane borer, *Diatraea saccharalis* F. Ratoon stunting disease (Clavibacter xyli subsp. xyli) has caused significant reductions of cane and sucrose yields of this cultivar in the ratoon crop. Preliminary data suggest that LHo 83-153 is tolerant to herbicides used in sugarcane production.

Seed cane of LHo 83-153 will be maintained at the St. Gabriel Research Station of the Louisiana Agricultural Experiment Station. A small number of cuttings are available upon request.


REGISTRATION OF 'PIMA S-7' AMERICAN COTTON

'PIMA S-7' AMERICAN PIMA COTTON (*Gossypium barbadense* L.) (Reg. no. CV-101, PI 560140) was developed by the USDA-ARS and was jointly released with the Arizona Agricultural Experiment Station in August 1991. The major advantages of Pima S-7 over the current cultivar, Pima S-6, are earlier maturity, greater yield potential at low (<450 m) and intermediate (450–750 m) elevations, and increased heat tolerance at high elevations (>750 m).

Pima S-7 is an F₅ selection from a cross between experimental strains 6614-91-9-3 and 6907-513. Pima experimental strain 6614-91-9-3 is related to Pima S-6 (2), both having descended from the same parental row. Pima experimental strain 6907-513-509-501 was selected at Safford, AZ, and descends from a cross of experimental strain P28 and 'Pima S-4' (4).

Pima S-7 was tested as P69 in 36 replicated Pima Regional Tests from 1987 through 1990. The yield of Pima S-7 averaged 110% of that of Pima S-6 at low and intermediate elevations. The yield of Pima S-7 was 96% of that of Pima S-6 in high-elevation tests. Pima S-7 has a similar plant type, is 4 to 5 d earlier in maturity, and has greater heat tolerance (1,3) than Pima S-6. Pima S-7 begins fruiting lower on the plant and continues fruiting throughout the season, resulting in shorter plant height than Pima S-6 at high elevations. At high elevations on less productive soils, Pima S-7 tends to set fruit very low on the plant.

Pima S-7, compared with Pima S-6, has similar boll size, 0.9% lower lint percentage, slightly longer 2.5% span fiber length, similar uniformity ratio, slightly longer classer's staple, 6% stronger fiber, slightly finer fiber, 3% more reflectance, and 3% less yellowness. In processing, Pima S-7 gives 6% stronger yarns than Pima S-6 with similar yarn appearance and yarn imperfections.

Breeder seed may be obtained upon written request to the USDA-ARS, Maricopa Agricultural Center, 37860 West Smith-Enke Road, Maricopa, AZ 85239.

E. L. Turcotte,* R. G. Percy, and Carl V. Feaster (5)

References and Notes