Averaged across 23 replicated field trials (eight plant cane, eight first ratoon, seven second ratoon) at early harvest (last 2 wk of October), CP 82-1592 produced ~ 96% of the sugar per tonne of cane as the two commercial checks, CP 72-1210 and CP 70-1133. Sugar per hectare yield at early harvest of CP 82-1592 was 7.2% less than that of CP 70-1133, but 12.2% greater than the CP 72-1210 yield. At regular harvest (November–March), sugar per tonne of cane for CP 82-1592 was equal to the yield of CP 70-1133, but was 4% less than that of CP 72-1210. Sugar per hectare yield at regular harvest for CP 82-1592 was 3% less than the yield of CP 70-1133, but 13.1% greater than that of CP 72-1210. Regular harvest cane yield of CP 82-1592 was 4% less than that of CP 70-1133 and 19% greater than that of CP 72-1210. Production of sugar per hectare in first- and second-ratoon crops of CP 82-1592 was 0.7% less than CP 70-1133 and 24.2% greater than CP 72-1210. CP 82-1592 has a millability rating of 0.954 and a fiber content of 10.3%, vs. 0.980 and 10.41% for CP 70-1133.

CP 82-1592 has shown adequate resistance, for commercial production in Florida, to sugarcane mosaic virus, leaf scald [caused by Xanthomonas albilineans (Ashby) Dowsen]; eye spot [caused by Bipolaris sacchari (E.J. Butler) Shoemaker]; and smut (caused by Ustilago scitaminea Syd. & P. Syd.) No sporulating rust pustules (caused by Puccinia melanocephala Syd. & P. Syd.) were observed on CP 82-1592 for the period during which data was taken. However, a very low level of sporulation was observed in subsequently planted increase plots.

Seedcane of CP 82-1592 will be maintained by the USDA-ARS at the Sugarcane Field Station, Canal Point, FL.

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References and Notes


REGISTRATION OF ‘ARCHER’ SOYBEAN

‘ARCHER’ SOYBEAN [Glycine max (L.) Merr.] (Reg. no. CV-290, PI 546487) was developed cooperatively by the Iowa Agriculture and Home Economics Experiment Station and the Puerto Rico Agricultural Experiment Station. It was re-

ducted in the F2 and F3 generations. F2 plants for both alleles were progeny tested, and line agronomic characteristics were bulked to form a cultivar. Archer was tested for seed yield in the Soybean Tests, Northern States, during 1989 under the designation ABSR 101BC. Prior to this testing, Archer was evaluated for yield and maturity in replicated trials at Ames, IA.

Archer is of Maturity Group I and best adapted approximately 43 to 44° N lat. It has purple flower bescence, tan pods at maturity, and dull yellow seeds with imperceptible black hila. In the absence of phytophthora it is moderately resistant to pod and stem blight (Diaporthe phaseolorum (Cooke & Ellis) Sacc.) tan spot (caused by Curtobacterium flaccumfaciens f. sp. cucumferiens (Hedges) Collins & Jones). It is susceptible to purple seed stain (caused by Ceratocystis fimbriata (Matsumoto & Tomoyasu) M.W. Gardner).

Breeder seed of Archer was distributed to foundation organizations in Illinois, Indiana, Michigan, Ohio for planting in 1990. Breeder seed will be maintained by the Iowa Agriculture and Home Economics Experiment Station, Ames.

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References and Notes