REGISTRATION OF OKLAN BERMUDAGRASS1
(Reg. No. 12)
Charles M. Taliaferro and William L. Richardson2

‘Oklan’ bermudagrass [Cynodon dactylon (L.) Pers.] was released in 1974 by the Oklahoma Agric. Exp. Stn. (OAES). It is a highly infertile, vegetatively propagated, F1 hybrid plant selected in 1968 from an abandoned bermudagrass breeding nursery whose many plants had grown together. Although we cannot positively identify Oklan’s parents we believe the male parent is OAES accession 9945A (P.I. 206427), C. dactylon var. dactylon. The female parent is either OAES accession 10429 (P.I. 288221) or 10325 (P.I. 288222). Accessions 10429 and 10325 belong to the taxon C. dactylon var. crousii (Camus) Harlan et deWet and both were collected in the Malagasy Republic. Accession 9945 was collected near Elazig, Turkey. Oklan was tested under the experimental designation, OK-69B.

Compared to ‘Midland,’ Oklan grows taller, has larger stems and broader and longer leaves. It produces few seed heads compared to other cultivars, normally remaining vegetative throughout most of the growing season. The inflorescences of Oklan bear racemes much

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REGISTRATION OF BEESON 80 SOYBEAN1
(Reg. No. 133)

‘Beeson 80’ soybean [Glycine max (L.) Merr.] is a composite of 21 phytophthora rot (caused by Phytophthora megasperma Drechs var. sojae A. A. Hildeb) resistant F2 lines from the backcross Beeson4 × ‘Arksoy’. Hybridization, disease evaluations, and selection of Beeson 80 were done at the Purdue Univ. Agric. Exp. Stn. in cooperation with AR-SEA-USDA.

The initial cross of Beeson × Arksoy was made in 1973. The F1’s were backcrossed to Beeson. F1 plants from this backcross were inoculated with P. megasperma var. sojae, race 3, and surviving plants were again backcrossed to Beeson. This process was repeated for seven successive backcrosses. F1 plants of Beeson4 × Arksoy were inoculated with race 3 of P. megasperma var. sojae in the greenhouse in 1976. F2 seedlings from surviving plants were inoculated in the greenhouse in the spring of 1977, and surviving plants grown to maturity. Seventy-four F2 lines were grown in 2-m rows in 1977. The F3 lines phenotypically identical to Beeson were harvested individually, and progeny were tested for reaction to races 1, 3, and 6 of P. megasperma var. sojae. Twenty-one F3 lines that were homozygous resistant in their reaction to the above races were composited and evaluated as C Beeson PB, in The Uniform Soybean Tests, Northern States. Both cultivars have purple flowers, glabrous pods, and dull yellow seeds with imperfect brown var. sojae.

Publicity on Beeson 80 was released on August 1, 1979 and found to be resistant to races 1, 3, and 6, it is also resistant to races 2, 7, 8, and 9 of P. megasperma var. sojae.

REGISTRATION OF BSR 301 SOYBEAN2
(Reg. No. 134)


‘BSR 301’ soybean [Glycine max (L.) Merr.] was developed by AR-SEA-USDA, the Iowa Agric. and Home Econ. Exp. Stn., the Puerto Rico Agric. Exp. Stn. It has moderate resistance to brown stem rot [caused by Phialophora gregata (Allington and Chamberl.) Allington and Chamberl.] that is superior to other public cultivars of similar maturity. Under such conditions, BSR 301 has about a 10% yield advantage compared to other cultivars of similar maturity. The cultivar is recommended specifically for fields in which the previous soybean crop was infected with a brown stem rot. In southern Oklahoma, Oklan has yielded as well as, and in some cases better than, Midland where good stands were maintained by careful management. Its seasonal yield potential is greatest in the summer and fall months. It remains greener and frequently makes more growth than Midland during periods of drought stress. Oklan’s moderate level of winterhardiness and lack of rhizomes results in a more digestible forage in the fall, an advantage when feeding to livestock. The cultivar is effective in a replicated grazing trial conducted near Stillwater. Oklahoma’s average daily steer gains for Midland and Oklan were 1.26 and 1.30 kg, respectively, but winter injury resulted in a decline and reduced carrying capacity of Oklan. Oklan was favorably reviewed by the National Soybean Variety Review Board in February, 1974.