REGISTRATION OF ALTONA SOYBEANS
(Reg. No. 71)
B. R. Stefansson

'Altona' soybeans (Glycine max (L.) Merr.) originated as a selection from the cross 'Flambeau' × 052-909 in a breeding program at the Department of Plant Science, University of Manitoba. Prior to release Altona was identified as S59-377 in tests in Manitoba and as UM15 in U.S. Regional Soybean Tests. Altona was licensed for sale in Canada in April 1966.

Altona is of Group 00 maturity and is adapted where extreme earliness is essential. The best relative performance of the variety appears to occur along the northern periphery of soybean growing areas in Ontario where an acreage of this variety appears to be developing.

Most of the characteristics of Altona are similar to those of Flambeau. Altona matures three to four days earlier than Flambeau and has produced essentially the same yields of seed in four years of testing. Altona plants are slightly taller than those of Acorn or Portage. Flower color is purple and pubescence is brown. The seed is yellow with a black hilum. The variety is resistant to phytophthora root rot.

Breeder seed will be maintained by the Plant Science Department of the University of Manitoba.

Other information on Altona soybeans has been published in the Canadian Journal of Plant Science 46: 605, 1966.

REGISTRATION OF LEE 68 SOYBEANS
(Reg. No. 72)
C. E. Caviness and H. J. Walters

'Lee 68' soybeans [Glycine max (L.) Merr.] were developed in a backcross program to add a higher degree of resistance to phytophthora root rot caused by Phytophthora megasperma Drechs. var. sojae A. A. Hildeb. to the 'Lee' variety (registration No. 23). It originated from a composite of 30 resistant F1 lines from the cross of Lee (6) × 'Arksoy' in a cooperative program of the Arkansas Agricultural Experiment Station and the U. S. Regional Soybean Laboratory. Before release Lee 68 was identified as R64-501. It is classed as maturity Group VI and is adapted where extreme earliness is essential. The best relative performance of the variety appears to occur along the northern periphery of soybean growing areas in Ontario where an acreage of this variety appears to be developing.

Most of the characteristics of Altona are similar to those of Flambeau. Altona matures three to four days earlier than Flambeau and has produced essentially the same yields of seed in four years of testing. Altona plants are slightly taller than those of Acorn or Portage. Flower color is purple and pubescence is brown. The seed is yellow with a black hilum. The variety is resistant to phytophthora root rot.

Breeder seed will be maintained by the Plant Science Department of the University of Manitoba.

Other information on Altona soybeans has been published in the Canadian Journal of Plant Science 46: 605, 1966.

REGISTRATION OF H 53-263 SUGARCANE
(Reg. No. 8)
Don J Heinz and Rokuro Urata

'H 53-263' sugarcane (Saccharum sp.) was selected and propagated as a single clone selection from the cross 'H 46-518 × ?' by the staff of the Genetics Department of the Experiment Station, Hawaiian Sugar Planters' Association. The cross resulted from random pollination of H 46-818 in a polycross nursery involving many selected clones, as described by Warner 6 and Mangelsdorf. H 53-263 has germplasm from S officinarum L., S. sinense Roxb. amend. Jeffier, and S. spontaneum L.

H 53-263 is a high-tonnage, 24-month crop variety. It is slow-growing, good-stooling, large-stalked, and has an average ratio of tons-cane to tons-sugar when compared to other Hawaiian varieties. In replicated yield trials, it out-yields (sugar per acre) 'H 49-5' and 'H 39-7028' and has shown the same potential in field blocks.

In Hawaii it is resistant to eye spot (Helminthosporium sacchari (van Breda de Haan) Butler), leaf scald (Xanthomonas albilineans (Ashby) Dowson), red rot (Physalospora tucumanensis Spec.), and mosaic (virus); it is susceptible to brown spot (Cercospora longiper Butler). It is susceptible to Fiji disease (virus) and resistant to downy mildew (Sclerospora sacchari Miy.); these two diseases are not present in Hawaii, but reaction was tested in cooperation with the South Pacific Sugar Mills, Limited, of Lautoka, Fiji. It is susceptible to raton stunting disease (virus).

This variety is susceptible to herbicide damage (especially diuron); precautions are necessary to prevent an over-application. H 53-263 is replacing H 49-5 in the lower lands of the Hilo Coast on the island of Hawaii, and in the upper irrigated and unirrigated areas of windward Kauai. At the end of 1967 it occupied 7.6% of the area devoted to sugarcane in Hawaii, with large acreages scheduled for planting in 1968. Vegetative cuttings will be maintained by the Experiment Station, Hawaiian Sugar Planters' Association, Honolulu, Hawaii. A detailed morphological description is available upon request.

1 Registered by the Crop Science Society of America. Published with the approval of the Director as Paper No. 299 in the Journal Series of the Experiment Station, Hawaiian Sugar Planters' Association. Received Aug. 2, 1968.

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