Weber was tested for yield in Iowa from 1974 to 1978, and in Northern Regional Soybean Tests from 1976 to 1978 under the designation A75-102032.

Weber has white flowers, tawny pubescence, brown pods at maturity, and dull yellow seeds with black hila. It is of Group I maturity and best adapted to 43° to 44° N Lat. In comparison with Corsoy, Weber is 3 days earlier for time of maturity, slightly better in lodging resistance, 5 cm shorter, significantly better in resistance to iron deficiency chlorosis, and has seed that are 2.1 g/100 seed smaller, 1.0% lower in protein, and 0.8% higher in oil.

Weber is moderately resistant to pod and stem blight (caused by *Diaporthe phaseolorum* (Cke. & Ell.) var. *sojae* Wehm.) and purple stain (caused by *Cercospora kikuchii* (T. Matsu & Tomoyasu) Chupp). It is moderately susceptible to phytophthora rot (caused by *Phytophthora megasperma* (Drechs.) var. *sojae* A. A. Hildebrand) and brown stem rot (caused by *Phialophora gregata* (Allington and Chamberl.) W. Gams.).

Breeder seed of Weber was distributed to foundation seed organizations in Iowa, Michigan, Minnesota, and South Dakota for planting in 1979. Breeder seed will be maintained by the Iowa Agric. and Home Economics Exp. Stn.

**REGISTRATION OF NEBSOY SOYBEANS**

(Reg. No. 138)

J. H. Williams, J. E. Specht, A. F. Dreier, R. S. Moomaw, and L. V. Svec

'Nebsoy' soybeans [*Glycine max* (L.) Merr.] originated as an *F₂* plant selection from a cross of two *F₁* lines from a 'Kent' × ('Blackhawk' × 'Harosoy') cross in the cooperative program of the Nebraska Agric. Exp. Stn. and AR-SEA-USDA. The cross and the generation advance to the *F₂* by single seed descent was made at the Purdue Agric. Exp. Stn. Selection for resistance to phytophthora rot caused by *Phytophthora megasperma* Drechs. var. *sojae* was made in each generation. The *F₂* plant selection was made at the Univ. of Nebraska, Mead Field Laboratory. Prior to its release, Nebsoy was designated U11406 and was evaluated in Nebraska tests from 1971 to 1978 and in Preliminary and Uniform Test II, Northern Region, from 1976 to 1978.

Nebsoy, classed as Group II maturity, matures the same as 'Amsoy 71'. In Nebraska irrigated and nonirrigated tests, Nebsoy has consistently out-yielded and has had more lodging resistance than 'Amsoy 71', 'Besnon' or 'Corsoy'. In regional tests Nebsoy has been less.

Distinguishing characteristics of Nebsoy are white flowers, tawny pubescence and brown pods. Seeds have yellow seed coats with shiny black hila. Nebsoy, an indeterminate cultivar, is slightly shorter in centimeters than Amsoy 71 or Besnon, with medium dark green. Seed is larger than Amsoy 71 or Besnon, averaging about 5900 seeds per kg. Seed oil and protein percentages are similar to Besnon. Nebsoy has a better elongation score and emergence than either Amsoy 71 or Besnon. Its response to *AI* in nutrient solution at Beltsville, Maryland, by methods previously described (7, 5). About 180 lines were tested, with 85% agreement between the two methods. These were the principal source of male parents. Additional lines (both winter and spring types) were used as male parents. A list of these parents and additional information is published in Performance of Soybean varieties in Nebraska, 1979 by a grant from the Nebraska Crop Improvement Association.

Breeder seed of Nebsoy may be sold only as a class of certified seed. Other in-process seed and foundation will be provided to Nebsoy. Nebsoy shows chlorosis on high pH soils.

Nebsoy was released in 1979 by the agronomy and genetics sections of Nebraska, Illinois, Indiana, and Michigan Agric. Exp. Stn. has designated the Nebsoy strain as a new foundation, registered, and certified and will register under the U.S. Plant Variety Protection Act. Feb. 1980.

1Registered by the Crop Sci. Soc. of Am. Cooperation investigation of Nebraska Agric. Exp. Stn. and AR-SEA-USDA, supported in part by a grant from the Nebraska Soybean Development Utilization Foundation, registered, and certified and will maintain breeders seed.

2Professor, assistant professor, and professor, Dep. of Agronomy, Lincoln; professor of agronomy, Northeast Regional Research Center; associate professor of agronomy, South Centre, respectively, Univ. of Nebraska, Lincoln, NE 68583.

**Registration of Germplasms**

REGISTRATION OF BARLEY COMPOSITE CROSS XXXIV

(Reg. No. GP 33)

D. A. Reid, L. A. J. Slootmaker, O. Stølen, and J. C. Craddock

BARLEY (Hordeum vulgare L.) Composite Cross XXXIV was developed and released by AR-SEA-USDA and the Arizona Agric. Exp. Stn. to provide a diverse gene pool made up of segregates from all known available lines tolerant to aluminum and/or acid soils. Female parents of the cross were genetic male-sterile segregates from the six spring types previously described (7, 5). About 180 lines were used as male parents. A list of these parents and additional information is published in Performance of Barley varieties in Nebraska, 1979 by a grant from the Nebraska Crop Improvement Association.

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'Dayton' (CI 9517), 'Smooth Awn 86' (CI 10680), and 'Kirmse 5' (CI 10299), and two spring types: 'Beardless' (CI 1803) and 'Breuns Wisa' (CI 10685).

Slootmaker and Reid (unpublished data) used as male parents. A winter and facultative winter barleys in the U.S. were tested for response to acid soil at Wageningen, The Netherlands (1). Field response to Al in nutrient solution at Beltsville, Maryland, was previously described (7, 5). About 180 lines were used as male parents. A list of these parents and additional information is published in Performance of Barley varieties in Nebraska, 1979 by a grant from the Nebraska Crop Improvement Association.

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