REGISTRATION OF NORDIC BARLEY

(Reg. No. 141)

G. A. Peterson, A. E. Foster, O. J. Banasik, and V. D. Pederson

'Nordic' barley (Hordeum vulgare L. emend. Lam.), CI 15216, was developed at North Dakota State University. It originated from a single F1 plant selected in 1964 from the cross 'Dickson' × 'Traill'. It was released as ND B189 for agronomic performance and disease reaction in North Dakota, other North Central States, and Manitoba, Canada. It has been adapted to the major barley growing areas of midwestern United States. Industry has rated Nordic as not acceptable for malting and brewing.

Breeder seed will be maintained by the North Dakota Agricultural Experiment Station, Fargo, North Dakota 58102.

REGISTRATION OF ESSEX SOYBEAN

(Reg. No. 97)

T. J. Smith and H. M Camper

'Essex' (Glycine max (L.) Merr.) originated as an F3 line selected at the Virginia Agricultural Experiment Station from the cross 'Lee' × '7570'. Prior to release in 1972 it was selected as V66-160. S5-7075 is a selection from the cross N48-1248 × 'Perry'. N48-1248 is a selection from the cross 'Roanoke' × a selection from 'Ogden' × 'CNS'.

Essex is characterized by high seed yields, excellent standing ability, good seed quality, and a determinate growth type. Maturity is 3 to 5 days earlier than 'York' and 'Dare' and 4 days later than 'Hill'. Mature plant height is normally 4 to 6 inches shorter than York and Dare. Both the main stem and the branches are abruptly terminating and well podded to the tip. The relatively short plants have pods well off the ground and upright branches that generally give the plants a more narrow profile than found in the varieties York or Dare.

Plants have purple flowers and grey pubescence. Seeds have buff hila, yellow cotyledons, and a yellow seedcoat. The high-quality seeds are smaller than York but about equal in size to Dare, are free from seedcoat motting, and have good resistance to purple seed stain disease. Oil content is equal to York but below Dare and Hill; protein content is above these three varieties.

Essex is resistant to bacterial pustule, several races of downy mildew, and frogeye leafspot and moderately resistant to Phytophthora root rot.

Average yields of Essex exceeded York by 8% and Dare by 16%.

1 Registered by the Crop Science Society of America. Received April 2, 1973.

REGISTRATION OF ARROW WHEAT

(Reg. No. 527)

Neal F. Jensen

'Arrow' wheate (Triticum aestivum L. em. Thell.), C.I. 15079, is a soft white winter wheat developed at the Cornell University Agricultural Experiment Station. Arrow is a pure line selection (formerly NY 5751a-B-3B-9) from the hybrid 'Avon' sib // 'Heine's VII' // NY wheat-rye selection made at Ithaca by the author in 1957.

Featured characteristics of Arrow are outstanding lodging resistance in a medium height plant, high yield (exceeded only by 'Yorkstar' in the Cornell series), and improved kernel characteristics, especially higher test weight per bushel than Yorkstar. Milling and baking quality of Arrow are excellent, resembling Avon most closely. Relative comparisons of Arrow with Yorkstar are: lodging resistance, best; test weight, better; grain yield, almost equal; protein, best; yield, second; height, shortest; and quality, equal. In general Arrow has performed similarly to Yorkstar with reference to winter survival and disease and insect resistance.

Arrow has a winter habit of growth and midseason maturity; the white straw is medium short with lodging resistance superior to Yorkstar and all previous Cornell varieties. The midseason head with red chalk is awnless and upright, tending to nod at full maturity. The kernels of Arrow are soft white, plump, midlong, and ovate to oval; the crease is midwide and middeep; and cheeks are rounded to angular.

Three-year average performance data for Arrow, Yorkstar, and 'Genessie' from 69 reporting stations growing the USDA Uniform Eastern Soft Wheat Nurseries were reported by Jensen and Pardee.

The generation sequence of seed production will be Breeder, Foundation and Certified. Arrow was released and 8 acres of seed were produced in 1971. Commercial sale of Certified Seed began in Fall, 1972. Breeder Seed will be maintained by the Cornell University Agricultural Experiment Station.

1 Registered by Crop Science Society of America. Received April 2, 1973.

2 Professor of Plant Breeding, Cornell University, Ithaca, New York 14850.


REGISTRATION OF BOUNTY 208 WHEAT

(Reg. No. 525)

Byrd C. Curtis, David R. Johnston, and H. Allan Mann

'Bounty 208', (Triticum aestivum L. em. Thell.), C.I. 15078, a hard red spring wheat, was selected by Cargill breeders from germplasm received from the International Maize and Wheat Improvement Center (CIMMYT), Mexico D.F., Mexico.

Bounty 208 is described as follows: plant early maturing, day-length insensitive, semidwarf stature; stem white, strong; spike awned, middense, multiliforous; glumes glabrous, shoulders rounded to elevated; kernels red, short to midlong, hard ovate; germ midshort; crease midwide, shallow; axis narrow, acuminate 3 to 5 mm long.

Bounty 208 has high resistance to stem rust, moderate resistance to leaf rust, and resistance to leaf blight and wheat rust. The first registered seed was distributed in 1971, primarily in the Red River Valley of North Dakota and Minnesota and the

1 Registered by the Crop Science Society of America. Received Feb. 20, 1973.