REGISTRATION OF KOTA OATS

(Rog. No. 227)

R. S. Albrechtsen

'Kota' oats (Avena sativa L.), C.I. 8178, S.D. RRO11-B-60-2, 149, was developed at the South Dakota Agricultural Experiment Station and was released as a variety in January, 1969.

Kota is a selection from the cross 'Clinton' x 'Landhafer' 2 x RL 2120 3 x 'Garry.' RL 2120 is a rust-resistant strain from the cross 'Victoria' x 'Hajira' x 'Banner' x 'Victoria' x 'Hajira' x 'Roxton.' The initial selection from which Kota originated was made by D. D. Harpeast. Final selection and purification were done by R. S. Albrechtsen. Various state and federal agencies participated in the final agronomic and pathologic evaluation of Kota in regional tests coordinated by the U.S. Department of Agriculture, 1965-68.

Kota is a midseason variety, similar to 'Porta!' in height, heading date, maturity date, test weight and kernel size. It has moderately good straw strength. Approximately 75% of the kernels are yellow in white light and dark brown under ultraviolet; the remaining 25% are lighter yellow in white light and fluoresce blue-white under ultraviolet. Protein content of the grain is good. Preliminary milling tests suggest Kota to be a suitable milling oat.

Data from the Uniform Midseason Oat Performance Nursery over a 3-year period (1965-67) show Kota to be equal to 'Holden' in crown rust and stem rust resistance. Both are resistant to the prevalent older races but susceptible to some of the new races. Kota is resistant to the oat smuts and has shown some new dwarf resistance.

Kota combines high yield of good quality grain with good disease resistance and a large area of adaptation. It was the second highest yielding strain of 26 entries in the Uniform Midseason Oat Performance Nursery grown at 19 locations throughout the North Central Region of the United States and in Canada in 1967, being exceeded only by an unreleased experimental strain. 'Clinton' was the only strain in these tests that exceeded Kota in weight per bushel in 1967. Kota appears best adapted to eastern South Dakota but has the highest state-wide and regional average yield of the six check varieties with which it was compared during the period 1965-68.

Tabular data on the performance of Kota in South Dakota and its agronomic and pathologic characteristics have been published. Detailed information on its performance in uniform 3-year oat tests during the period 1965-68 has been reported.

Kota seed was increased and released by the South Dakota Foundation Seed Stock Division to County Crop Improvement Associations and to the South Dakota Seed Trade Association for registered and certified seed production in 1969. Minnesota, North Dakota and manaska participated in a simultaneous increase and release of Kota seed. Breeder seed will be maintained by the South Dakota Foundation Seed Stock Division, South Dakota State University, Brookings, S. D. 57006.

REGISTRATION OF YANCEY OATS

(Rog. No. 228)

Charles F. Murphy

'YANCEY' oats (Avena sativa L.), C.I. 8420, N.C. 2334, is a pure line selection from the cross 'Carolee' x 'Fulgrain.' Final selection was made in the F2 generation in 1962. It was released by the North Carolina State University Agricultural Experiment Station in 1968.

Yancey is a very stiff-strawed winter oat with high yield, good test weight and, grain quality. It has been grown in yield tests since 1964 and has been entered in the North Carolina Official Variety Test since 1965. It has been tested in the Uniform Central Area Oat Nursery for two years. The variety is resistant to stem rust and mildew and moderately resistant to soil-borne mosaic virus. It is not resistant to barley yellow dwarf virus, and it does not have sufficient crown rust resistance for those southern areas where crown rust is a serious problem.

Yancey is characterized by its semiprostrate juvenile growth; yellow, mid-sized stems and glabrous internodes. The leaf blade is mid-wide and liguled. The panicle is equilateral, small to medium size, in length, mid-wide in length, ovate in form. The panicle branches are ascending, and the rachis is flexuous. Spikelet separation is of a semi-abscission type, and floret separation results in a heteroabsciss. The lemma is yellow and very short. The floret is plump. Lemma basal hairs are few or absent. The short, non-twisted awns are few or absent.

Breeder seed will be maintained by the Crop Science Department, North Carolina State University.

REGISTRATION OF PETTIS OATS

(Rog. No. 229)

J. M. Poehlman

'PETTIS' spring oats (Avena sativa L.), C.I. 7803, Mo. 04935, originated at the Missouri Agricultural Experiment Station from the cross 'Victoria' x 'Hijara' x 'Banner' x 'Victoria' x 'Hajira' x 'Ajax' x 'Fulgrain.' The oat selection 'RL. 2100,' Victoria x Hajira x Banner x Victoria x Hajira x Ajax, was received from the Canada Department of Agriculture, Winnipeg, and crossed to C.I. 4988, Mo. 0-205 in 1950 with reselections subsequently backcrossed to Mo. 0-205 in 1953 and 1954. Pettis was released jointly with the Crops Research Division, U.S. Department of Agriculture, in 1968.

The principal features of Pettis are high grain yield, high test weight, high test weight, per bushel, earliness, smut resistance, and BYDV tolerance. Pettis has the ABC genes for stem rust resistance. Grain is red, moderately plump, and heavy.

REGISTRATION OF FLORIGIANT PEANUTS

(Rog. No. 1)

W. A. Carver

'FLORIGIANT' (Arachis hypogaea L.) is a Virginia-type peanut with an ancestry that includes Spanish, runner, and Virginia commercial types. It is closely related to the 'Early Runner' cultivar, as both parents of Florigiant were derived from crosses involving sister lines of Early Runner.

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