REGISTRATION OF NODAWAY 70 OATS¹
(Reg. No. 239)

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‘Nodaway 70’ spring oats (Avena sativa L.), C.I. 8442, Mo. 04978, originated at the Missouri Agricultural Experiment Station as a panicle selection from ‘Nodaway.’ Parentage of Nodaway included the varieties ‘Columbia,’ ‘Marion,’ ‘Victoria,’ ‘Hajira,’ ‘Banner,’ ‘Victory,’ and ‘Roxton’ (Crop Science 2:533, 1962). Nodaway was increased directly from an F₃ plant selection, and was variable in heading date and maturity. Nodaway 70 is more uniform for these characters.

Plant type and seed characteristics of Nodaway 70 are similar to those of Nodaway. Both have a large culm, distinctive brace roots, wide spreading panicles, broad short glumes which spread wide at maturity, and short, plump, white kernels. Nodaway 70 has been tested in Missouri since 1961 and in the Uniform Early Oat Performance Nursery since 1966. In the Uniform Early Oat Performance Nursery Nodaway 70 compared with Nodaway, averaged 1 day earlier, 2.5 cm shorter, .65 kg/hl heavier in test weight, and 108 kg/ha higher in yield. Nodaway 70 is resistant to smut, has a generalized resistance to certain races of crown rust, and has the AB genes for stem rust resistance. Nodaway 70 was released jointly with the Crops Research Division, Agricultural Research Service, U.S. Department of Agriculture in 1970. Breeder seed will be maintained by the Missouri Agricultural Experiment Station.

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REGISTRATION OF CHECOTA OATS¹
(Reg. No. 240)


‘Checota’ winter oats (Avena sativa L.), C.I. 8311, Stillwater 594376, originated as an F₃ head selection from a bulk population of the cross ‘Arlington’/‘Wintok.’ The initial cross was made in 1953. The F₄, which eventually became Checota, was selected in 1958 at the Oklahoma Agricultural Experiment Station. Stillwater, grown as a head row in 1959, and grown in the Stillwater Oat Observation Nursery in 1960. Checota has been entered in rod-row yield trials at several locations in Oklahoma since 1960.

Checota is a high-yielding winter oat variety. The early growth is semiprostrate to slightly upright, and maturity is midseason. Plants tiller well and have midsized, stiff culms. A few hairs are present on internodes. Leaf blades are midwide with glabrous margins, and sheaths are glabrous. Ligules are present. Panicles are equilateral, spreading, midsized, and midlong. The rachis is slightly flexuous. Checota has numerous spikelets per panicle and spikelet separation is by semiabscission to fracture. Floret separation is by disarticulation, but some by heteroabscission. Lemmas are yellow, midlong, midlopulm, and glabrous. A few midsized basal hairs are present. Awns are common, twisted, and geniculate.

Checota yielded 290.5 kg/ha more than ‘Cimarron’ and 405.3 kg/ha more than ‘Forkedeer’ in Oklahoma tests over an 8-year period. The test weight (kg/hl) of Checota is lower than either ‘Cimarron’ or ‘Forkedeer.’ Checota is not as winterhardy as Cimarron or Forkedeer. Checota yielded 290.5 kg/ha more than ‘Cimarron’ and 405.3 kg/ha more than ‘Forkedeer.’

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REGISTRATION OF POLAR SUMMER TURNIP RAPES
(Reg. No. 2)

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‘Polar’ (Brassica campestris L.), a summer rapeseed variety developed by the Plant Science Department of Manitoba, originated as an individual seed stock known as ‘Polish’ in Canada in March 1969. Polar was identified as S 616577 in Cooperative Tests. Polar may replace ‘Echo,’ ‘Arlo,’ and other varieties grown in Manitoba, Saskatchewan, and Alberta.