REGISTRATION OF CROP CULTIVARS

REGISTRATION OF LANCOTA WHEAT
(Reg. No. 621)

J. W. Schmidt, V. A. Johnson, P. J. Mattern,
A. F. Dreier, and D. V. McVey

‘LANCOTA’ wheat (Triticum aestivum L. em Thell.), CI 17389, is a hard red winter wheat selected in the F2 generation from the cross ‘Atlas 66’/’Comanche’/’Lancer’ made in 1965 at the Nebraska Agricultural Experiment Station. It was developed cooperatively by the Nebraska Agricultural Experiment Station and the AR, SEA, USDA, and was tested in 1972-75 Nebraska yield trials, the 1972-74 Southern Regional Performance Nursery, and the 1975 Northern Regional Performance Nursery as NE701132.

Lancota is a medium to late maturing cultivar and similar to Lancer in plant height. Its spike is awned, oblong to tapering, mid-dense, and usually erect. Glumes are white to yellow, glabrous, short to mid-long and medium wide. Beaks are moderately short and acuminate. Awns are white and 5 to 9 cm long. Kernels are red, medium hard, moderately long, and elliptical, with kernel weight approaching that of ‘Scout 66’. The kernels have a mid-sized germ, shallow crease, rounded cheeks, and short to medium brush; they are not collared.

Lancota has a low vernalization requirement and is not as winterhardy as Scout 66. It has excellent yield potential and produces grain with above-average protein content. Lancota has good milling properties; its baking characteristics are similar to those of Lancer and include a medium dough mixing time, good mixing tolerance, and good loaf volume potential.

Lancota has been moderately resistant to the physiological forms of leaf rust (incited by Puccinia recondita Rob. ex Desm. f. sp. tritici Eriks.) and stem rust (incited by Puccinia graminis Pers. f. sp. tritici Eriks. and E. Henn.) present during its testing period. Lancota is variable for reaction to soil-borne mosaic virus and intermediate in reaction to wheat streak mosaic virus and Septoria leaf blotch (incited by Septoria tritici Rob. ex Desm.). It is either susceptible to other diseases or its reaction is unknown.

Lancota, named and released jointly in 1975 by the Agricultural Experiment Stations of Nebraska, Kansas, South Dakota, and Texas and AR, SEA, USDA, is protected (Certificate 76TQ002) under the Plant Variety Protection Act, Public Law 91-577, by the Nebraska Agricultural Experiment Station and the SEA, USDA and may be sold only as a class of certified seed. Seed classes recognized are breeder, foundation, registered, and the SEA, USDA and may be sold only as a class of certified seed. Seed classes recognized are breeder, foundation, registered, and certified. The Nebraska Agricultural Experiment Station will maintain breeder seed.

REGISTRATION OF TITAN WHEAT
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 Titan originated from the cross TN 1434/1057Fc33, two experimental Ohio-developed lines which were never released as cultivars. TN 1434 originated from the cross ‘Lucas’/’CI 12530’ and 1057Fc33 originated from the cross ‘Norin 10’/’Brevor’. Titan traces back to a single head selection in ‘Lucas’//Lucas. Titan has been moderately resistant to the physiological form of wheat rust (Puccinia graminis f. sp. tritici) and to leaf rust (Puccinia recondita Rob. ex Desm. f. sp. tritici) and to wheat scab (Pseudoperonospora triticina). It is tolerant to wheat spindle streak mosaic virus and resistant to Septoria leaf blight (Septoria tritici Rob. ex Desm.).

Titan has a high tillering capacity. Glumes are midden to dense, tapering, apically awned, and slightly nodding at maturity. Spike length and width average about 11 cm and 13 mm, respectively. Glumes are glabrous, short to mid-long and medium wide with generally square shoulders and acute to obtuse tips. Spikelet color is normal white with generally no straw or brown. Kernels are red, ovate with a short, non-collared brush, and average 7 mm long, 3 mm wide, and 35 g/1,000. Phenol reaction is black.

Titan possesses the H3 gene for resistance to the powdery mildew (Erysiphe graminis DC. f. sp. tritici Em. Marchal) and to leaf rust (Puccinia recondita Rob. ex Desm.). It is tolerant to wheat spindle streak mosaic virus and to soil-borne mosaic virus. No data on barley yellow dwarf virus reaction are available.

Millling and baking properties, as determined by the Soft Wheat Quality Laboratory, Wooster, Ohio, have been superior to the Arthur-type cultivars. Protein content has been somewhat lower than Arthur and Abe and slightly lower than Logan, a trait shared by Titan, Logan, and Ruler. Titan has a high tillering capacity. Glumes are midden to dense, tapering, apically awned, and slightly nodding at maturity. Spike length and width average about 11 cm and 13 mm, respectively. Glumes are glabrous, short to mid-long and medium wide with generally square shoulders and acute to obtuse tips. Spikelet color is normal white with generally no straw or brown. Kernels are red, ovate with a short, non-collared brush, and average 7 mm long, 3 mm wide, and 35 g/1,000. Phenol reaction is black.

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