WAKOOMA DURUM WHEAT

‘WAKOOMA’ durum wheat (Triticum turgidum var. durum) (Reg. No. 673) was developed at the Agriculture Canada Research Stations at Regina and Swift Current from the cross ‘Lakota’*S/Pelissier’. Wakooma was selected using early generation tests for yield, seed size, and quality (2). It was evaluated in the Durum Wheat Cooperative Tests from 1967 to 1970 as DT 316 and was granted license number 1418 in 1975.

Wakooma is similar to ‘Wascana’ in most respects, but has stronger gluten and better pasta cooking quality. In tests in southwestern Saskatchewan, Wakooma has slightly stronger straw and a little more drought tolerance than Wascana. The kernels of Wakooma are slightly smaller than those of Wascana, but Wakooma has a greater hectolitre weight. It is similar to Wascana in grain yield.

Spikes of Wakooma are fusiform and mid lax to middense with black awns. The glumes are glabrous, white, midlong and narrow; shoulders are narrow, usually oblique, but occasionally apiculate, and beaks are long and straight. The kernel is medium amber colored, midsized to small, elliptical to ovate with oval midsized germ. The cheeks are rounded to slightly angular. The straw is 2 cm shorter than Wascana. Wakooma is similar to Wascana in maturity. Wakooma is resistant to prevalent races of stem rust (caused by Puccinia graminis Pers. f. sp. tritici Eriks. and E. Henn.) leaf rust (caused by P. recondita Rob. ex Desm. f. sp. tritici), loose smut (caused by Ustilago tritici [Pers.] Rostr.), and bunt (Tilletia foetida [Wall.] Liro); moderately resistant to kernel smudge; and equal to Wascana and ‘Hercules’ in resistance to common root rot (caused by Helminthosporium sativum P.K. & B. and Fusarium sp.).

A more detailed description has been published (1). Breeder seed of Wakooma is maintained at the Research Station, Agriculture Canada, Regina, Saskatchewan, S4P 3A2.

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References and Notes

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3. S4P 3A2, respectively. Registration by the Crop Sci. Soc. of Am. Accepted 16 May 1985.

MACOUN DURUM WHEAT

‘MACOUN’ durum wheat (Triticum turgidum L. var. durum) (Reg. No. 674) was developed by scientists of the Agriculture Canada Research Stations at Swift Current, Regina, and Winnipeg. The cross RL 3607/DT 182 was made at Winnipeg in 1964 and a portion of the F₂ seed was sent to the South Saskatchewan Wheat Program located at Swift Current. Macoun was developed at Regina and Swift Current by selecting for grain yield and pasta quality. It was evaluated as DT 352 in the Durum Wheat Cooperative Tests and granted license number 1522 in 1974.

Macoun has a slight advantage over ‘Wascana’ in many characteristics. It is 4 cm shorter, 2 days earlier maturing, and similar in disease resistance. Macoun also has stronger straw, higher test weight, and is equal in yield to Wascana in the Aridic and Typic Boroll soil zones and slightly higher yielding in the Udic Boroll soil zone of Western Canada.

Spikes of Macoun are fusiform and mid dense with white awns. Glumes are white, glabrous, midlong, and midwide; shoulders are narrow and slightly elevated; and beaks are acute and short. The kernels are amber, short to midlong, midwide, and ovate with midsized oval germ. The crease is narrow to midwide, shallow to middeep and the cheeks are rounded to angular. The brush is small to midsize, very short to nil. Macoun is resistant to prevalent races of stem rust (caused by Puccinia graminis Pers. f. sp. tritici Eriks. and E. Henn.), leaf rust (caused by P. recondita Rob. ex Desm. f. sp. tritici), loose smut (caused by Ustilago tritici [Pers.] Rostr.), and bunt (Tilletia foetida [Wall.] Liro); moderately resistant to kernel smudge; and equal to Wascana and ‘Hercules’ in resistance to common root rot (caused by Helminthosporium sativum P.K. & B. and Fusarium sp.).

Macoun has high semolina pigment content and strong gluten. A more detailed description of the cultivar has been published (1). Breeder seed is being maintained at the Research Station, Agriculture Canada, Regina, Saskatchewan, S4P 3A2.

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References and Notes

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3. S4P 3A2, respectively. Registration by the Crop Sci. Soc. of Am. Accepted 16 May 1985.

CREW, A MULTILINE WHEAT CULTIVAR

‘CREW’ (Reg. No. 675, CI 17951) was developed cooperatively by the USDA-ARS and the Agriculture Experiment Stations of Idaho, Oregon, and Washington. It was released by the USDA-ARS and the Agriculture Experiment Stations of Idaho and Washington in October, 1982.

Crew is an awnless, semidwarf soft-white-winter club wheat (Triticum aestivum L.) multiline cultivar made up of a composite of 10 closely related wheat lines which have resistant to intermediate resistant reactions to the prevalent U.S. races of stripe rust caused by Puccinia striiformis West. The 10 lines are essentially backcross derivatives. Their recurrent parents represent either ‘Omar’, (CI 13072) or semidwarf derivatives of Omar. Omar is a winter-type, midseason to late, midtall, white-stemmed cultivar with very dense (club), erect, awnleted, brown-glume spikes which have white, soft, and short kernels (3). It has excellent soft wheat milling, baking and physicochemical flour quality traits. Omar and the semidwarf derivatives used to develop the components of Crew are susceptible to prevalent races of the stripe rust pathogen. The nonrecurrent parents of these components have resistance to stripe rust.

‘Tyee’ (CI 17773) and ‘Farro’ (CI 17590) are commercially grown club wheat cultivars and comprise two of the components of Crew. Their development and other pertinent information have been described previously (2,5). Information on the development, morphology, agronomic, disease, and quality traits of the other eight components (CI 17912 to CI 17919) was recently reported (1).