Tara 2000 is an intermediate height, semidwarf plant. It has lax, fusiform heads with white awns and medium length, white glumed spikes with elliptical kernels that are red, hard, and smooth texture. Seed of Tara 2000 has a round germ with a narrow, shallow crease, rounded cheeks, and a short, noncolored brush.

Among the major pests of spring wheat in the Pacific Northwest, USA, Tara 2000, has moderate nonrace-specific, high-temperature, adult plant resistance, similar to ‘Jefferson’ (Souza et al., 1999) and ‘Scarlet’ (Kidwell et al., 1999), for stripe rust (caused by *Puccinia striiformis* Westend.) races common in North America, including CDL-17, 37, 43, and 45, on the basis of results from noninoculated and inoculated field disease screening trials conducted at Mt. Vernon, WA, and Pullman, WA, for four crop years. Tara 2000 also has moderate adult-plant resistance to leaf rust (caused by *P. triticina* Eriks.) similar to ‘Westbred 926’, on the basis of 2 yr of noninoculated field disease ratings from Pullman, WA. On the basis of controlled environment insect screening trials conducted at Kansas State University and the University of Idaho, as well as field trials conducted in Walla Walla, WA, and Pullman, WA, Tara 2000 is tolerant to Hessian fly biotypes E, F, and GP. On the basis of pedigree and natural field infestation ratings from Pullman, WA, Tara 2000 is susceptible to the Russian wheat aphid (*Diuraphis noxia* (Mordvilko)).

Tara 2000 was evaluated in replicated field trials under fallow, nonirrigated, and irrigated conditions. Grain yields of Tara 2000 typically equaled or exceeded those of other hard red spring wheat entries in nonirrigated field production in Washington, Oregon, and Idaho from 1996 to 2000. In 41 tests conducted over 3 yr in nonirrigated production regions in Washington State, the grain yield averages of Tara 2000, Westbred 926, Jefferson, and Scarlet were 4166 kg ha⁻¹, 3910 kg ha⁻¹, 4240 kg ha⁻¹, and 4152 kg ha⁻¹, respectively. Tara 2000 produced 81 to 410 kg ha⁻¹ more grain than Westbred 926, depending on location.

On the basis of nine site years of data in the intermediate to high rainfall zone, Tara 2000 (5644 kg ha⁻¹) produced significantly more grain than Westbred 926 (5234 kg ha⁻¹), Jefferson (5409 kg ha⁻¹), and Scarlet (5301 kg ha⁻¹). Grain volume weight of Tara 2000 averaged 782.5 g L⁻¹, which was significantly higher than that of Jefferson (776.1 g L⁻¹), Westbred 926 (764.5 g L⁻¹), and Scarlet (770.9 g L⁻¹). Thousand-kernel weight averages of Tara 2000, Westbred 926, Jefferson, and Scarlet were 46.4 g, 49.8 g, 37.5 g, and 39.2 g, respectively. The average plant height of Tara 2000 was 86 cm, 5 cm taller than Westbred 926, and approximately the same height as Jefferson and Scarlet. Lodging percentages of Tara 2000 (5%) were comparable with those of Westbred 926 and Jefferson, but lower than those of Scarlet (5–10%). Tara 2000 (Day of Year 167) headed 2, 3, and 4 d earlier, respectively, than Westbred 926, Jefferson, and Scarlet.

In tests conducted by the USDA-ARS Western Wheat Quality Laboratory at Pullman, WA, using grain produced in breeding and commercial variety testing trials in Washington State from 1996 through 2000, average grain protein concentration of Tara 2000 (134 g kg⁻¹) was significantly lower than Westbred 926 (137 g kg⁻¹). Average yield of Tara 2000 (4946 kg ha⁻¹) was larger than those for Westbred 926 (4848 kg ha⁻¹), Jefferson (886 kg ha⁻¹), and Scarlet (945 kg ha⁻¹).

Seed of Tara 2000 will be maintained by the Washington State Crop Improvement Association under supervision of the Department of Crop and Soil Sciences, Washington State University, Pullman, WA, and the Washington State Agricultural Research Center, and may be obtained by contacting the corresponding author or through the National Plant Germplasm System. U.S. Plant Variety Protection status for the cultivar is pending.


References


Registration of ‘H3860224’ Barley

‘H3860224’, a two-rowed spring feed barley (*Hordeum vulgare* L.) (Reg. no. CV-300, PI 619102), was developed by Montana Agricultural Experiment Station and released for commercial production in February 2002.

H3860224 was selected from a cross of ‘Lewis’/Apex at Bozeman, MT, in 1982. The parent Lewis (CLh05 15) is a two-rowed barley, was developed by ARS and Montana University from the cross ‘Hector’/‘Klages’. The parent Lewis is a two-rowed barley cultivar developed by Cebeceq in the Netherlands.

H3860224 originated at Bozeman from F₃ plants selected in 1985 that provided seed for two-rowed F₄ plots in 1986. One of these F₄ plots was selected for replicated yield evaluation and was named ‘MT860224’. Following 4 yr of evaluation, 60 F₅ headrows were evaluated from the MT860224 population. The third entry in this group of lines is H3860224. H3860224 is midseason in maturity with midlong spikes with rough awns that are semi-decumbent to decumbent before and after maturity, similar to Apex. Kernels have buff, finely wrinkled hulls, white aleurone, and rachillas are short. Glume awns are equal to the length of the midlong, hairy glume. H3860224 flowers nearly 2 d later than the maternal parent, Lewis (Table 1). H3860224 is approximately 2–3 kg less than the F₅ entries. 2–3 kg less than the F₅ entries.