ITEMS FROM ROMANIA

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'ANDRADA' - a new winter wheat cultivar.

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Andrada, a hard red winter wheat cultivar (*Triticum aestivum* L. subsp. *aestivum* var. *Ferrugineum*) developed by the Agricultural Research & Development Station of Turda, was released in 2012 because of its high yield associated with enhanced bread-making quality. Andrada was selected from the cross 'Dropia/T57-90' using a pedigree-selection method. The single cross between Dropia and T57-90 was made in 2001. The main aim of this cross was to obtain a combination between the superior bread-making quality of the cultivar Dropia with the high-yielding capacity from our breeding line T57-90. Following our breeding procedure that was presented previously (Ann Wheat Newslet 48:113-115), individual selection started in the F₂ generation and, after subsequent reselection, we obtained the line T150-03 that was advanced to the Official Yield Trials at the State Institute for Variety Testing and Registration (ISTIS) in the autumn of 2008. After 3 years of evaluation (2009–11) in eight locations, T150-03 was registered under the name 'Andrada' and released to growers due to its good yield performance and broad adaptation to Transilvania environments as well as improved bread-making quality.

Andrada is an awned, red-spiked, semidwarf wheat. Juvenile growth is semierect. Foliage is green at the boot stage. Plant height (82 cm) is similar to that of Dropia, and 5-10 cm shorter than that of T57-90. Spikes are awned and lax with red glumes. Kernels are red, ovate, with a medium-sized germ; the kernel crease is medium wide and medium deep, with rounded cheeks. The kernel size is quite large; 1,000-kernel weight averagex 47 g and has a quiet good test weight (volume weight) at 77 kg/hectoliter.

Andrada is medium-early in maturity (267 days), similar to that of Dropia. The winterhardiness of Andrada is adequate for most Transilvania growing conditions. Andrada has excellent straw strength, which confers good lodging resistance.

For disease resistance, Andrada is moderately resistant to yellow rust and powdery mildew, but is moderately susceptible to leaf rust. Andrada also showed moderate resistance to Fusarium head blight.

Andrada has shown good yield performance in most of official test sites (ISTIS). Averaged across three years (2009–11) and eight locations (24 location-years), Andrada did not differ widely in grain yield from that of the highest yielding entry in the trials. The average grain yield of Andrada in 2011 was 7,011 kg/ha, which is 8% higher than check cultivar Delabrad 2. The maximum grain yield of Andrada was 8,016 kg/ha, obtained at Center for Testing Varieties (CTS), Targu-Secuiesc.

Andrada meets domestic quality criteria for high-quality bread flour production. The quality characteristics of Andrada are reflected by a grain protein content up to 12.73% associated with an excellent glutenic index (76–100) and loaf volume (520 cm³). Andrada can be classified in the B1–A2 quality wheat. Breeder and foundation seed of Andrada will be maintained by the Agricultural Research & Development Station Turda.