Prospect has spring growth habit, is medium-early heading, and is semidwarf in height with a white, hollow stem at maturity. Spikes are awned, fusiform, mid-dense, and erect. Awns are white and 7 to 120 mm long. Glumes are white, short, and narrow with narrow, elevated shoulders. The beaks are narrow, acuminated, and 5 to 11 mm long. Kernels are red, hard, midsize, and ovate with rounded cheeks and with a narrow and mid-deep crease.

In 58 field performance trials in South Dakota from 1982 through 1987, Prospect yielded 103, 103, 106, and 106% of 'Guard', 'Stoa', 'Shield', and 'Marshall', respectively. Grain volume weight is greater than Stoa and Marshall, but less than Shield and similar to Guard. Prospect was resistant to leaf rust (incited by *Puccinia recondita* Rob. ex Desm. f. sp. *tritici*) present in the field during the test period. Prospect probably has *Lr1*, *Lr2a*, *Lr10*, and *Lr13* genes for leaf resistance. They were identified in seedling tests conducted at South Dakota State University. Prospect was resistant to prevalent races of stem rust (caused by *Puccinia graminis* Pers. f. sp. *tritici* Eriks. and E. Henn.) currently present in the field. However, approximately 5.0% of the population is susceptible to stem rust race TNMH. Seedling tests at the Cereal Rust Lab., St. Paul, MN, indicated that the probable genes for stem rust resistance are *Sr11* and *Srwd1*.

Prospect has satisfactory milling and bread baking quality. Grain protein content of Prospect is classified as medium low, being greater than Marshall, less than Stoa, and similar to Guard. Flour extraction percent is similar to Guard. Loaf volume, bake absorption, and mixing time requirements are all similar to Marshall.

Application for plant variety protection has not been made for Prospect. Breeder seed will be maintained by the Foundation Seed Stocks Project, South Dakota State University, Brookings, SD 57007.

**References and Notes**


Published in Crop Sci. 30:233-234 (1990).

---

**REGISTRATION OF ‘HYAK’ WHEAT**

‘HYAK’ (Reg. no. 749, PI 511674) is a club type soft-white winter (SWW) wheat (*Triticum aestivum* L.) cultivar developed by USDA-ARS Wheat Genetics, Quality, Physiology, and Disease Research Unit at Pullman, WA. It was jointly released by USDA-ARS and the Agricultural Experiment Station of the Agronomy and Soils Department, Washington State University, Pullman, WA 99164.

The grain volume weight of Hyak (787 kg m^(-3)) is comparable to ‘Tres’ for emergence properties but inferior to ‘Stephens’. Hyak heads to lodging, such as irrigation. The vulnerability of Hyak to lodging is comparable to Tyee but less than Tres (797 kg m^(-3)) when averaged across 16 test-yr. Hyak is similar in plant height to Tres and other semidwarf club SWW cultivars and ± 6% of common SWW have averaged 5250, 5250, 5110, 5920, and 5990 kg ha^(-1), respectively.

In eight replicated trials of diseased (inoculated with *P. recondita* Rob. ex *tritici*) vs. control plots (sprayed with fungicide) conducted during 1981 to 1988, Hyak, Tyee, 'Ste- phens', 'Daws', and 'Nugaines' had mean strawbreaker inoculated trials were 6680, 5280, 5190, and 4100 kg ha^(-1), respectively. Significant (*P < 0.05*) yield reductions occurred in 2 of the 8 trials for Hyak, while Tyee, Stephens, Daws, and ‘Lewjain’ (common SWW) had mean strawbreaker inoculated trials were 4570, 4620, 4840, and 5070 kg ha^(-1), respectively.

The overall mean yields of Hyak, Tyee, Stephens, Daws, and ‘Lewjain’ (common SWW) had mean strawbreaker inoculated trials were 6680, 5280, 5190, and 4100 kg ha^(-1), respectively. Significant yield losses in 7, 7, 7, and 8 trials for Hyak, while Tyee, Stephens, Daws, and ‘Lewjain’ had mean strawbreaker inoculated trials were 6680, 5280, 5190, and 4100 kg ha^(-1), respectively.

The grain volume weight of Hyak (787 kg m^(-3)), greater than Crew (777 kg m^(-3)) but less than Tres (797 kg m^(-3)) when averaged across 16 tests-yr. Hyak is similar in plant height to Tres and other semidwarf club SWW cultivars.

During 1980 to 1987, Hyak has expressed moderately high resistance to strawbreaker (caused by *Pseudocercosporella herpotrichoides*), flag smut (caused by *Urocystis agropyri* tritici), and most races of *Erysiphe graminis* Kuhn, E. Marchal); flag smut (caused by *Erysiphe tritici* E. Marchal); and flag smut (caused by *Erysiphe tritici* E. Marchal); cephaleosphorium striatum, *alsosporium gramineum* Nir. & Ika.); and *letia tritici* (Bjerk.) Wint., *T. laevis* Kuhnh.)

The USDA-ARS Western Wheat Quality Laboratory has evaluated Hyak as satisfactory to very satisfactory for overall score, and flour yield. It is like Moro for noodle score.

Breeder and foundation seed of Hyak is maintained by the USDA-ARS Western Wheat Quality Laboratory. Breeder seed is maintained by the Washington Crop Improvement Association, one piece of the Agronomy and Soils Department, Agricultural Research Center, Washington State University, Pullman, WA 99164.