Andrews (see below)


Andrews has winter habit, early to midseason maturity, and semidwarf stature. It has a midstrong white stem with an awned, oblong to fusiform, middense to lax inclined spike. Its glumes are glabrous, white, and midlong. The awns are white, 2 to 7 cm long. The kernels of Andrews are red, midlong, hard, ovate to elliptical in shape, with a small germ and a midlong, midsize brush. The crease is midwide and middeep. The checks are rounded.

Andrews was tested as WA006820 in Washington trials during the crop years 1980 to 1986 and in the Western Regional Hard Red Winter Wheat nursery during the crop years 1982 to 1986. The yield performance of Andrews has been consistently better than ‘Weston’, ‘Hatton’, or ‘Manning’ in Douglas county where snowmold is a serious problem. Inconsistent comparative yields have been obtained at other locations in Washington. Test weight is comparable to that of ‘Neeley’ and Manning, but ≈20 g L⁻¹ lighter than that of Hatton.

Winterhardiness of Andrews is less than that of Hatton or Weston. Andrews has typically poor semidwarf emergence characteristics and a midlength coleoptile similar to ‘Sprague’ and ‘Lewjain’. Andrews has better tolerance to snowmold than Weston or Manning, but somewhat less than Sprague. Andrews is moderately resistant (mature plant type) to local races of stripe rust caused by *Puccinia striiformis* Westend. and good resistance to common bunt caused by *Tilletia caries* (DC.) Tul. & C. Tul., possessing genes *Bi4*, *Bi8*, and additional unknown factors. It is only moderately resistant to dwarf bunt caused by *Tilletia controversa* Kühn in Rabenh. Andrews is susceptible to leaf rust caused by *Puccinia recondita* Robe ex Desmaz., stem rust caused by *Puccinia graminis* Pers.:Pers., strawbreaker foot rot caused by *Pseudocercosporella herpotrichoides* (Fron) Deighton, and dryland foot caused by *Fusarium culmorum* (Wm. G. Sm.) Sacc.

The USDA-ARS Western Wheat Quality Laboratory at Pullman, WA, has shown that, after milling, the flour yield and loaf volume for Andrews are slightly lower than those of Hatton or Wanser, with the flour protein and optimal bread mix time equal to those of Hatton or Wanser.

Breeder and foundation seed of Andrews will be maintained by the Washington State Crop Improvement Association under the supervision of the Agronomy and Soil Department, Washington State University, Pullman, Washington, 99164-6420.

Five white seeds per pound are allowed in foundation, registered, and certified classes of seed.

EDWIN DONALDSON,* G. W. BRUEHL, AND G. L. RUBENTHALER (1)

**REGISTRATION OF ‘ANDREWS’ WHEAT**

‘Andrews’, a hard red winter wheat (*Triticum aestivum* L.) (Reg. no. CV-765, PI 512282) was developed by the College of Agriculture and Home Economics of Washington State University in cooperation with the USDA-ARS. It was joint-

**References and Notes**
