**REGISTRATIONS OF CULTIVARS**

Registration of ‘Hopewell’ Wheat

‘Hopewell’ soft red winter wheat (*Triticum aestivum* L.) (Reg. no. CV-909, PI 595678) was developed by the Ohio State University—Ohio Agricultural Research and Development Center (OSU-OARDC) and released in February 1995. Previous experimental numbers for Hopewell were ‘R19182B-33-2’ and ‘OH490’. Hopewell was released because of its superior yield, excellent straw strength, and diverse pedigreed. Hopewell was named after the native American mound building peoples that flourished in the Ohio valley 2100 yr ago.

Hopewell’s pedigree is ‘Logan’/Hart’/3270A/Rousalka’/3/TN1685/1A22’/6767/216-6-3 (Lafever, 1968; Sechler et al., 1977). 32070A was an Ohio experimental line with the pedigree: 2669F/Logan. 2669F, was an Ohio experimental F2 population with the pedigree ‘S410/Logan/Logan/Arthur’ (Patterson et al., 1974). S410 was a dwarf spring wheat of unknown ancestry. TN1685 was an Ontario experimental line from the cross ‘Heines VII’/Pur5752cl-7/Talbot’ (Whiteside and Gfeller, 1966). Pur5752cl-7 was an Indiana AES experimental line. 6767 was an Ontario experimental line with the pedigree TN1493/ Pur 5724B3-SP-8-2. TN1493 was an Ontario experimental line with the pedigree ‘Redcoat’/TN1345 (Patterson et al., 1978). TN1345 was an Ontario experimental line with the pedigree ‘Lucas/Citr 12530 (Heyne, 1960). Materials received through the International Rust and Powdery Mildew Nursery Program include Rousalka (P1520076), a winter wheat cultivar developed by CIMMYT; ‘1A22’ (IAPAR 22-Guarauna), a *T. aestivum* cultivar developed in Brazil; and 216-6-3, a French experimental line of unknown pedigree possessing resistance to *Stagonospora nodorum* (Berk.) Castellani & E.G. Germano.

The final cross, designated R19182B, was made by H.N. Lafever in 1982. The population R19182B was advanced without selection to the F3 generation at the OSU-OARDC research farm, Wooster OH. Thirty spikes were harvested randomly. The F3 generation was evaluated for maturity, height, and disease resistance as 30 hill plots, each containing grain from a single F2 spike. Two spikes were selected from a single F1 hill plot based on visual selection for height, heading date, and resistance to powdery mildew (caused by *Erysiphe graminis* D.C.f. sp. tritici) Ém. Marchal; syn. *Blumeria graminis* (DC.) E.O. Spreck). The F3 generation was evaluated for maturity, height, and disease resistance as two hill plots, each containing grain from a single F1 spike, and one plot, designated R19182B-33-2, was selected as above. A single-row F3 plot, 3.3 m in length, was evaluated for heading date, height, resistance to powdery mildew, glume blotch, leaf rust (caused by *Puccinia triticina* Eriks.), standability, and uniformity. Harvested grain was evaluated for yield, test weight, and milling and baking quality. R19182B-33-2 was advanced from the F2 generation in replicated yield trials, initially at Wooster and then throughout Ohio. R19182B-33-2 was renamed OH490 in the F3 generation. OH490 was also evaluated in the Uniform Preliminary and Advanced Four-state (now Five-state) nurseries, a cooperative effort between the small grains breeders at Ohio State University, Purdue University, University of Illinois, University of Missouri, and University of Kentucky from 1991 to 1993.

A separate purification head row nursery was initiated in the F3 generation from 60 hill plots, each containing grain from a single F2 spike. The purification hill plots were evaluated for similarity of heading date, height, plant and spike morphology.

Selected hill plots were harvested and advanced with selection for uniformity for two more generations. In 1994, the F5 generation was compiled from selected uniform purification increase drill strips and grown as a Breeder Seed unit. Hopewell was released in the Spring of 1997. Hopewell was released because of its superior yield, excellent straw strength, and diverse pedigreed. Hopewell was named after the native American mound building peoples that flourished in the Ohio valley 2100 yr ago.

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