Lafayette, IN, and the technical staff of the Soft Wheat Quality Laboratory, USDA-ARS, OARDC. Wooster, OH.


References and Notes


REGISTRATION OF 'HILLSDALE' WHEAT

'HILLSDALE', (P1498686) a soft red winter wheat (Triticum aestivum L.) (Reg. no. 710) developed at the Michigan State University Agricultural Experiment Station in cooperation with USDA-ARS, was released in 1983. It was tested in Michigan and regionally as B6310 and M0295. It was named for the city of Hillsdale, the site of one of the early grist mills in Michigan and a milling center since 1837. Hillsdale was released because of its excellent powdery mildew resistance (caused by Erysiphe graminis DC. f. sp. tritici E. Marchal), broad adaptation, excellent agronomic performance, and milling and baking quality.

Hillsdale was a F₅ selection made in 1976 from the cross 'Asosan'/'Genesee*4'/'VA66–54–10. Dr. T. M. Starling (1982, personal communication) reported that the parentage of VA 66–54–10 is Purdue F4126A9-n32–2/5/'Valart'/'Frondosa'/'Vahart/C112658/3/Asosan/4/'Norin 10'/Brevor'.

Pedigree selections for powdery mildew, height, and plant type were made from F₅ and F₆ headrows; winterhardiness and pre-harvest dormancy were evaluated in the F₄ and subsequent generations; selection for milling and baking quality was made from F₅ headrows.

Seed from approximately 700 individual head rows, which were phenotypically similar, were increased in 5.3 m² plots, rechecked for plant type, height, glume color, maturity, kernel color, and bulked for breeder's seed.

Hillsdale was evaluated in advanced nurseries from 1978 to 1983 and in the Uniform Eastern Soft Red Winter Wheat Nursery during 1980 to 1984. Hillsdale was a F₅ selection from a single F₄ plant, one of 19 F₄s selected in 1976. It was derived from the cross C112666/6*Omar'/3/Tres'/4/Omar in 1982. Tres was derived from a single F₅ plant from a cross C112666/6*Omar'/3/Tres'/4/Omar. It is an intermediate, one-gene cultivar with awnleted compact spikes, white glumes, and white seed and is resistant to biotype 4 Hessian fly.

Hillsdale has two genes for resistance to Hessian fly.

Hillsdale has no Hessian fly [Mayetiola destructor] resistance.

Variety protection has been applied for under the Plant Variety Protection Act, Public Law 91-577, in accordance with the certified seed option, which specifies that Hillsdale may be sold only by cultivar name as certified seed. Only two generations from Breeder seed are permitted. Breeder seed is maintained by the Michigan State University Agricultural Experiment Station, East Lansing, MI 48824.


References and Notes


REGISTRATION OF 'TRES' WHEAT

'TRES' wheat, (Triticum aestivum L.) (Reg. no. 708) is a soft white club winter wheat cultivar developed cooperatively by the USDA-ARS and the College of Agriculture and Home Economics of Washington State University. It was jointly released by USDA-ARS and the Washington State University Experiment Station of Washington, Oregon, and Idaho in August 1984.

Tres was derived from a single F₅ plant from the cross C112666/6*Omar'/3/Tres'/4/Omar. It is an intermediate, one-gene cultivar with awnleted compact spikelike, white glumes, and white seed. Its kernels are white, short, soft, ovate, with a small germ, and short brush.

Tres expresses intermediate adult-plant resistance to the current local stripe rust races (R. F. Line, 1985, personal communication). It has moderate resistance to powdery mildew (caused by Erysiphe graminis DC. f. sp. tritici E. Marchal), broad adaptation, excellent agronomic performance, and milling and baking quality.

Tres was released because of its excellent powdery mildew resistance (caused by Erysiphe graminis DC. f. sp. tritici E. Marchal), broad adaptation, excellent agronomic performance, and milling and baking quality.

Tres was evaluated in advanced nurseries from 1978 to 1983 and in the Uniform Eastern Soft Red Winter Wheat Nursery during 1980 to 1984. Tres has high yield and milling and baking quality.

Tres was derived from a single F₅ plant from a cross C112666/6*Omar'/3/Tres'/4/Omar. It is an intermediate, one-gene cultivar with awnleted compact spikelike, white glumes, and white seed. Its kernels are white, short, soft, ovate, with a small germ, and short brush.

Tres expresses intermediate adult-plant resistance to the current local stripe rust races (R. F. Line, 1985, personal communication). It has moderate resistance to powdery mildew (caused by Erysiphe graminis DC. f. sp. tritici E. Marchal), broad adaptation, excellent agronomic performance, and milling and baking quality.