REGISTRATION OF ‘SALUDA’ WHEAT

‘SALUDA’, PI 480474, is a soft red winter wheat (Triticum aestivum L.) (Reg. no. 705) developed by the Virginia Agricultural Experiment Station and released in 1985. It was selected from the F₃ generation of the cross Va. 71-54-147 CI 17449/’Coker 68-15’.' The parentage of Va. 71-54-147 is ‘Taylor’*2//Norin 10’/’Brevor’/3//Thorne’*7/199-4. The parent designated 199-4 was an F₃ plant with the parentage ‘Asosan’/3/’Supresa’/’Redhart’//’Chancellor’/4/ P55-47.1-5 [‘Chinese Spring’ with resistance to leaf rust (Puccinia recondita Rob. ex Desm. f. sp. tritici)] transferred from Aegilops umbellulata Zhuk.].

Saluda was evaluated prior to release as Va. 79-54-254. It has been an entry in the Uniform Southern Soft Red Winter Wheat Nursery from 1981 through 1984, and in the Uniform Eastern Soft Red Winter Wheat Nursery from 1982 through 1984. When averaged across locations, Saluda’s yield in these nurseries has ranked among the highest six entries in each of the test years. Saluda has been evaluated in 25 tests in Virginia conducted over a period of 4 yrs. Its average yield has been highest among the eight cultivars included in all tests. It has outyielded ‘McNair 1003’, ‘Coker 747’, and ‘Wheeler’ by approximately 15%; ‘Coker 916’ and ‘Massey’ by 9 to 10%; and ‘Feland’ and ‘Tyler’ by 6 to 7%. Saluda’s test weight is high, similar to that of Wheeler. Tests conducted by the USDA Soft Wheat Quality Laboratory at Wooster, OH have shown Saluda to have good milling quality scores, but to be variable in baking quality scores, ranging from good to poor. Flour milled from Saluda tends to be high in alkaline water retention capacity and to bake cookies with poor spread and poor top grain quality.

Saluda is moderately winter hardy, matures in midseason, and is moderately short, being approximately 3 days earlier and .15 m shorter than Tyler. Despite its reduced height, Saluda tends to lodge more than Tyler. At maturity, Saluda’s stems are moderately stiff and white, with some residual purple. Spikes are fusiform, middense, and usually apically awnleted, but occasionally awnleted. The tip awns are white and range from 10 to 36 mm in length, averaging approximately 20 mm. Glumes are midlong to long, midwide to mostly wide, and serrulate on the midvein toward the tip. Shoulders are midwide to wide, oblique but occasionally square; beaks are obtuse and wide. The penultimate leaf measures 5 to 14 mm in width, averaging 12, and .14 to .24 m in length, averaging .17 m. Distance from the flag-leaf node to the penultimate-leaf node ranges from .19 to .25 m, averaging .22 m. Kernels are oval, short to usually midlong, with a large germ. The brush is midlong with a slight to occasionally conspicuous collar; the earse is narrow to middeep; cheeks are rounded.

Under Virginia conditions, Saluda is moderately resistant to leaf rust and powdery mildew (caused by Erysiphe graminis DC. sp. tritici E. Marchal). The resistance to powdery mildew apparently is derived from Asosan. It is moderately susceptible to wheat spindle streak mosaic virus, and is susceptible to stem rust (caused by Puccinia graminis Pers. f. sp. tritici Eriks. and Hen.) and to races B and D of Hessian fly (Mayetiola destructor Say]).

The foundation seed released in the fall of 1983 was slightly variable for plant height and time required for vernalization. A subsequent lot of breeder seed has been produced in which an attempt was made to remove these variants. Breeder seed will be maintained by the Agronomy Department, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061. Foundation seed will be produced and distributed by Virginia Crop Improvement Association (VCIA) Foundation Seed Farm, Box 78, Mt. Holly, VA 22524. An application for protection (no. 8500007) under the Plant Variety Protection Act with the certification option has been submitted.

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References and Notes

1. Professor of agronomy, professor of plant pathology, and assistant professor of agronomy, respectively, Virginia Polytechnic Inst. and State Univ., Blacksburg, VA 24061. Registration by the Crop Sci. Soc. of Am. Accepted 10 June 1985.

REGISTRATION OF ‘MONROE’ DURUM WHEAT

‘MONROE’, (Reg. no. 706) PI478298, is a spring durum wheat (Triticum turdium L. var. durum) developed by the Agricultural Experiment Station, North Dakota State University, in cooperation with USDA-ARS and released on 15 Jan. 1985. It was tested as D793 with the pedigree DC. f. sp. tritici transferred from Aegilops umbellulata Zhuk.].

Monroe is a daylength sensitive durum wheat that is similar in plant height and maturity to ‘Rolette’. The culms are white and the peduncle is slightly recurved. The spikes are awned (usually deciduous), oblong, dense, and erect. The glumes are glabrous, white, long, and midwide; the glume shoulders are narrow and elevated; and the beaks wide to acuminate, and 3 to 4 mm long. The awns are 10 to 14 cm in length. The kernels are amber, hard, long, and elliptical; germ midsized; creased midwide and shallow; cheeks angular to rounded; and the brush is absent.

Yield performance of Monroe in the Uniform Regional Durum Nursery from 1981 to 1984 was similar to Vic. The...