dery mildew (caused by Erysiphe graminis DC. f. sp. tritici E. Marchal), leaf rust (caused by Puccinia recondita Rob. ex Desm. f. sp. tritici), and spindle streak mosaic virus, and is resistant to prevalent races of stem rust (caused by Puccinia graminis Pers. f. sp. tritici Eriks. and Henn.). It is susceptible to Hessian fly [Mayetiola destructor (Say)]. Milling and baking characteristics are good, but not quite equal to those of Wheeler.

Tyler matures in mid- to late season and is midtall. Stems are white and moderately stiff. Spikes are fusiform to occasionally oblong, middense, and awnleted with white awns measuring 2 to 4 cm in length and averaging 2.8 cm. Glumes are white, long, midwide to wide, generally glabrous, but pubescent at the base; midnerves are serrulate toward the summit; shoulders are midnarrow to wide, oblique to square, but sometimes elevated; beaks are obtuse and midwide to wide. Kernels are ovate or occasionally oval and midlong, with large germ; brush is large and long to midlong; the crease is narrow and shallow; the cheeks are usually round, but occasionally angular.

Foundation seed of Wheeler was first distributed to seed growers in the fall of 1980. The original release of Wheeler contained a small percentage (less than 0.5%) of plants which were brown chaffed or taller. However, a subsequent lot of breeder seed was established and these variant types were removed. Breeder seed will be maintained by the Agronomy Dep., Virginia Polytechnic Inst. and State Univ., Blacksburg, VA 24061.

T.M. Starling, C.W. Roane, and H.M. Camper, Jr. (1)

References and Notes

REGISTRATION OF TYLER WHEAT

'Tyler', CI 17899, is a soft red winter wheat (Triticum aestivum L.) (Reg. no. 686) released by the Virginia Agricultural Experiment Station in 1980. It was selected in the F3 generation from the cross 'Blueboy'/ 'Thorne' 5'/199-4/3/ 'Blueboy' selection 68-24-42. The 199-4 parent was the F2 from the cross 'Asosan'/3'/Supreza'/ 'Chancellor'/4'/P55-47-1.5, the latter being 'Chinese Spring' with leaf rust (caused by Puccinia recondita Rob. ex Desm. f. sp. tritici) resistance from Aegilops umbelulata Zhuk. Blueboy selection 68-24-42 was a Virginia selection which had more resistance to powdery mildew (caused by Erysiphe graminis DC. f. sp. tritici E. Marchal) than the Blueboy cultivar. The final cross was made in 1968. The selection, which later became Tyler, was made in 1973 and was evaluated under the experimental designation Va. 75-24-95.

Tyler has been evaluated extensively in Virginia and surrounding states. It was tested in the Uniform Southern Soft Red Wheat Nursery in 1978, 1979, and 1980 and in the Uniform Eastern Soft Red Wheat Nursery in 1980 and 1981. Data from these regional nurseries indicate that this cultivar has high yield over a wide area. In 33 tests conducted in Virginia over a period of 5 years, Tyler has outyielded 'Coker 747', 'McNair 1003', 'Wheeler', and 'Massey' by 20, 21, 11, and 5%, respectively. Test weight has been intermediate, being higher than that of Blueboy and McNair 1003, but less than that of Coker 747, Wheeler, and Massey.

Under Virginia conditions, Tyler has usually been resistant to powdery mildew, carrying a gene for resistance from Asosan. During the spring of 1983, it was slightly susceptible to mildew at some locations. Tyler is resistant to spindle streak mosaic virus, but is susceptible to leaf rust, stem rust (caused by Puccinia graminis Pers. f. sp. tritici Eriks. and E. Henn.), and Hessian fly [Mayetiola destructor (Say)]. Milling and baking characteristics are good, but not quite equal to those of Wheeler.

Foundation seed was first distributed to seed growers in the fall of 1980. The original lot of breeder seed contained a small percentage (less than 1%) of plants which were tall or awned. A subsequent lot of breeder seed was established by growing and evaluating the progeny of approximately 300 head selections, and compositing seed of these rows appearing uniform in type after 2 years of evaluation. The variant types occurring in the original release were eliminated. Breeder seed will be maintained by the Agronomy Dep., Virginia Polytechnic Inst. and State Univ., Blacksburg, VA 24061.

T.M. Starling, C.W. Roane, and H.M. Camper, Jr. (1)

References and Notes

REGISTRATION OF ANZA WHEAT

'Anza' hard red spring wheat (Triticum aestivum L.), CI 15284, (Reg. no. 687) was bred and selected in Mexico by N.E. Borlaug and associates in the Mexico-Rockefeller Foundation prior to the formation of CIMMYT, (International Maize and Wheat Improvement Center) and sent to California in 1964. It was evaluated at Davis in 1964 and in statewide tests in 1965 under the designation D6413. It was reintroduced to California in 1969 in the CIMMYT International Spring Wheat Yield Nursery and subsequently tested throughout California as D6923. The cultivar was named and released by the California Agricultural Experiment Station in 1971. Subsequently or simultaneously very similar or identical cultivars were released in New Zealand (‘Karamu’), Sudan (‘Mexicani’), South Africa (‘Turpin 4’), Chile (‘SNA-1’), and Iran (‘Moghan-1’). The same or a very similar line was used in Australian breeding programs as WW15, but not released in that country as a cultivar.

Anza was selected from the cross (‘Lerma Rojo’ × ‘Norin 10’- ‘Brevor’) × [(‘Yaktana 54’ × Norin 10-Brevor) × ‘Andes’]. Its hybrid and selection number in Mexico is I18739-4R-1M-1R. Anza was selected for uniformity at Davis and the cultivar was released as a bulk of about 250 head-row-derived lines from I18739-4R-1M-1R.

Anza is widely adapted in regions throughout the world