high resistance to black rot, wildfire, and tobacco mosaic. The new cultivar was developed from N. tabacum crosses involving 'Ky 151,' 'Madole,' 'Little Crittenden,' and 'Black Mammoth.' Black rot resistance was obtained from a dark tobacco breeding line carrying resistance from Nicotiana debneyi. Wildfire resistance was obtained from 'Burley 21' and mosaic resistance was transferred from Ky 151. It was in the tenth selfed generation from the last cross at the time of release.

Ky 171 was evaluated in replicated plots for 6 years and in farmer tests for 1 year. In all tests, the new cultivar was not different from Ky 151 in days to flower, leaf size, and plant height. Ky 171 has about two more leaves per plant than Ky 151 and the leaves grow in a semi-erect position. The yield of Ky 171 has been approximately 357 kg/ha above Ky 151 on disease-free land. The quality of leaf as measured by federal grades has been comparable to Ky 151. Ky 171 has the same usefulness in the tobacco trade as Ky 151 and has been accepted by growers and manufacturers.

The new cultivar was released in 1971. Breeder seed will be maintained and distributed by the Kentucky Agricultural Experiment Station, Lexington, Ky., 40506.

REGISTRATION OF POLK WHEAT

(Reg. No. 491)

R. E. Heiner and D. V. McVey

'Polk,' (Triticum aestivum L. em Thell.), C.I. 13773 is a hard red spring wheat selected from a cross of 'Thatcher'/'Supreza'/'Kenya 58'/'Newthatch'/'Frontana' made in 1965 at the Minnesota Agricultural Experiment Station. It was entered in the Uniform Regional Nursery in 1963 as Minn. II-55-11.

Polk is resistant to the prevalent races of stem and leaf rust. It is also resistant to black chaff, bunt and ergot. This variety appears to be susceptible to Septoria. The bushel weight is very good, averaging 2 to 3% better than 'Chris.' Regional and Minnesota yield trials show Polk to be equal to Chris and better than 'Selkirk,' 'Marquis,' 'Thatcher,' and 'Justin' in grain yield. Milling and baking characteristics of Polk are excellent, placing it above Chris in quality.

Characteristics of Polk include: spring habit, midseason, mid-tall, moderately stiff straw, awned, bronze chaff, and large seed.

Polk was released jointly by Minnesota, North Dakota, South Dakota and Montana Experiment Stations, and the Agricultural Research Service, U.S. Department of Agriculture, in the spring of 1968. Breeder seed will be maintained by the Minnesota Agricultural Experiment Station.

REGISTRATION OF FLETCHER WHEAT

(Reg. No. 492)

R. E. Heiner and D. V. McVey

'Fletcher,' (Triticum aestivum L. em Thell.), C.I. 13985, is a hard red spring semidwarf wheat selected from the cross, II-55-10/4/Fb/II-52-329/3/II-53-38/III-58-4/II-53-546. Varieties in its pedigree include 'Frontana,' 'Thatcher,' 'Mida,' 'Kenya 117A,' 'Kenya 58,' 'Lee,' 'Newthatch,' and 'Polk' sib. The semidwarf character was introduced via a selection obtained from Montana and labelled III-58-4 at the Minnesota Station. It was first entered in yield trials in 1965 and as Minn. II-62-2.

Fletcher is an awned, yellow chaffed, mid- to late-maturing semidwarf wheat with good lodging resistance. It is resistant to the prevalent races of stem rust and appears to have a broader spectrum of resistance than 'Chris' or Polk. It is also resistant to leaf rust, black chaff and bunt. Ergot does not appear to infect Fletcher. This variety also appears to be tolerant of Septoria and mildew. Fletcher's bushel weight is slightly lower than that of Chris but is satisfactory. Regional and Minnesota performance trials show that Fletcher yields about 5 to 10% more grain than Chris. Milling performance and mixing characteristics are satisfactory, but this variety is lower in protein content and bake absorption when compared to Chris. General baking quality is variable.

Fletcher was named and released jointly by the Minnesota Agricultural Experiment Station and the Agricultural Research Service, U.S. Department of Agriculture in the spring of 1970. Breeder seed will be maintained by the Minnesota Agricultural Experiment Station.

REGISTRATION OF ERA WHEAT

(Reg. No. 493)

R. E. Heiner and D. V. McVey

'Era,' (Triticum aestivum L. em Thell.), C.I. 13986, is a hard red spring semidwarf wheat selected from the cross, II-55-10/4/Fb/II-52-329/3/II-53-38/III-58-4/II-53-546. Varieties in its pedigree include 'Frontana,' 'Thatcher,' 'Mida,' 'Kenya 117A,' 'Kenya 58,' 'Lee,' 'Newthatch,' and 'Polk' sib. The semidwarf character was introduced via a selection obtained from Montana, and labelled III-58-4 at the Minnesota Station. It was first entered in yield trials in 1965 as Minn. II-62-61.

Era is an awned, yellow chaffed, midseason semidwarf wheat with good lodging resistance. It is resistant to the prevalent races of stem rust and appears to have a broader spectrum of resistance than Chris or Polk. It is also resistant to leaf rust, black chaff, and bunt. Ergot does not appear to infect Era. This variety also appears to be tolerant of Septoria and mildew. Era's bushel weight is slightly better than that of Chris but lower than that of Polk. Regional and Minnesota performance trials show that Era yields about 20 to 25% more grain than Chris and Polk. Milling performance and mixing characteristics are satisfactory. This variety is significantly lower in protein content and bake absorption than Chris. These and other deficiencies place Era below Chris in bread-making quality. Era was named and released by the Minnesota Agricultural Experiment Station in the spring of 1970. Breeder seed will be maintained by the Minnesota Agricultural Experiment Station.

1 Registered by the Crop Science Society of America. Cooperative investigations of the Plant Science Research Division, Agricultural Research Service, U.S. Department of Agriculture, and the Minnesota Agricultural Experiment Station. Published with the approval of the Director, Minnesota Agricultural Experiment Station, St. Paul, Minnesota, as Paper No. 7525. Received May 5, 1971.

2 Research Geneticist and Research Plant Pathologist, Plant Science Research Division, Agricultural Research Service, U.S. Department of Agriculture, cooperating with the Minnesota Agricultural Experiment Station, St. Paul, Minn. 55101.

3 Registered by the Crop Science Society of America. Cooperative investigations of the Plant Science Research Division, Agricultural Research Service, U.S. Department of Agriculture, and the Minnesota Agricultural Experiment Station. Published with the approval of the Director, Minnesota Agricultural Experiment Station as Journal Paper No. 7524. Received May 5, 1971.

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