REGISTRATION OF TIMWIN WHEAT
(Reg. No. 544)
R. G. Shands

'TIMWIN' (CI 13575), Wis. 216, is a short strawed, soft red winter wheat (Triticum aestivum L. em. Thell, spp. vulgare (Vill., Host) Mac Key) developed and released cooperatively by the ARS, USDA, and the Wisconsin Agricultural Experiment Station (1).

Timwin was selected in the F1 generation in 1960 from the cross 'Ill. 1'/'Chinese'/7/T. timopheevi/ 5/Turkey/6'/Minnski/ 5/Blackhawk/6'/'Brevog' x 'Norin 10-10'/7/'Knox'. The pedigree of Timwin has been described in detail (2). The second cross was highly sterile, but the third cross resulted in a single selfed seed. Its progenies had 42 chromosomes, were late maturing, and had good rust resistance transferred from T. timopheevi Zhuk. Late rust and rust resistance were strongly associated, but early recombinants were obtained when crossed with Minturki (3). Brevor/Norin 10-10 provided the reduced height characteristic while Blackhawk and Knox donated good agronomic and grain quality features. Timwin is white chaffed and awned. The straw is of good strength, and plant height is from 91 cm (30 to 36 in) on soils of average fertility, or about three-quarters as tall as 'Racine'. Timwin is less winterhardy than Blackhawk and successful in planting later than Racine, but ripens about 3 days earlier than Racine (2). It is low in kernel plumpness and test weight.

Timwin has a high degree of resistance to leaf rust, stem rust, and bunt. It is intermediate in response in trials with loose smut and bunt. Septoria tritici occurs naturally, yet has not been epidemic on this variety.

Timwin undergoes natural crossing readily. When it is grown near taller-strawed varieties, outcrosses result in tall plants. This seems to be characteristic of certain short-strawed progenies derived from the Brevor/Norin 10-10 ancestor.

The milling and baking characteristics, as determined by the USDA Soft Wheat Laboratory at Wooster, Ohio, resemble those of Knox. In a large number of international trials (4), Timwin ranked near the top for production of protein units per area. When winterkilling is absent, Timwin often yields more than other varieties adapted in Wisconsin. Timwin was first distributed in 1967. In 1969 Timwin was grown on 6.7% of Wisconsin wheat area (5). Breeder seed will be maintained by the ARS, USDA, and Professor, Department of Agronomy, University of Wisconsin, Madison, WI 53706.

REFERENCES

REGISTRATION OF KENOSHA WHEAT
(Reg. No. 545)
H. L. Shands, R. A. Forsberg, and Z. M. Arawinko

'Kenosha' (CI 14025), Wis. X68-3, is a soft red winter wheat (Triticum aestivum L. em. Thell, spp. vulgare (Vill., Host) Mac Key] released by the Wisconsin Agricultural Experiment Station for planting in 1968 (1). The plants are intermediate in height with awned spikes (kernels) and have white chaff. The parentage of Kenosha is 'Ill. 1'/'Chinese'/7/T. timopheevi/ 5/Turkey/6'/Minnski/ 5/Blackhawk/6'/'Brevog' x 'Norin 10-10'/7/'Knox'. The product of the first three crosses was obtained from R. G. Shands (6). This unnamed selection had leaf and stem rust resistance derived from T. timopheevi Zhuk. The fifth cross, involving Racine, was made in 1965 and the final cross, involving Racine, was made in 1956. Yield testing began in 1961.

'Kenosha' was selected in the F1 generation in 1960 from the cross 'Ill. 1'/'Chinese'/7/T. timopheevi/ 5/Turkey/6'/Minnski/ 5/Blackhawk/6'/'Brevog' x 'Norin 10-10'/7/'Knox'. The parentage of Kenosha is 'Ill. 1'/'Chinese'/7/T. timopheevi/ 5/Turkey/6'/Minnski/ 5/Blackhawk/6'/'Brevog' x 'Norin 10-10'/7/'Knox'. The product of the first three crosses was obtained from R. G. Shands (6). This unnamed selection had leaf and stem rust resistance derived from T. timopheevi Zhuk. The fifth cross, involving Racine, was made in 1965 and the final cross, involving Racine, was made in 1956. Yield testing began in 1961.

The main reason for distributing Kenosha was to provide a winter-hardy variety with stem rust resistance, stem rust having reduced the yields of Racine in the early 1960's. Kenosha is more winter-hardy than 'Timwin.'

Yield tests indicate that Kenosha yields as well as Racine and Timwin in Wisconsin, but it was low in average yield in the Uniform Eastern Soft Wheat Nursery (5). Kenosha has shorter straw than Racine and tends to lodged slightly more than Racine. Kenosha appears more susceptible to leaf rust, but more resistant to stem rust than Racine.

The milling and baking characteristics, as determined by the USDA Soft Wheat Laboratory at Wooster, Ohio, indicate that Kenosha has test weight and quality essentially like that of Racine. Breeder seed will be maintained by the Wisconsin Agricultural Experiment Station, Madison, WI 53706.

'Tecumseh,' Triticum aestivum L. em. Thell., CI 17297, is a soft white winter wheat, jointly released in December 1973, by ARS, USDA, and the Michigan Agricultural Experiment Station. Tecumseh has the same complex parentage as 'Arthur' soft red winter wheat: 'Minhari'/7/Webstah/5/Fuljiel Selection/3/Hung/4/3/Wabash/4/1/Chihe/6'/Red harvest' 5/Whitney CI 12635/7/Viggo/4/'Tirumuli/2'/Hope/Hussar/5/Thulie'/Pur- kof (Purdue 427al-1-3) 5/7/Kenya Farmer.' The series of crosses including the final cross 573251 were made at Purdue University, with selection in F2 and beyond at Michigan State University. Breeders seed originated from 60 advanced selection lines and was grown and observed for uniformity in 1971.

REFERENCES

REGISTRATION OF TECUMSEH WHEAT
(Reg. No. 546)

'Tecumseh,' Triticum aestivum L. em. Thell., CI 17297, is a soft white winter wheat, jointly released in December 1973, by ARS, USDA, and the Michigan Agricultural Experiment Station. Tecumseh has the same complex parentage as 'Arthur' soft red winter wheat: 'Minhart/h/Whastah/5/Fuljiel Selection/Hung/3/Inko/4/3/Wabash/4/1/Chihe/6'/Red harvest' 5/Whitney CI 12635/7/Viggo/4/'Tirumuli/2'/Hope/Hussar/5/Thulie'/Pur- kof (Purdue 427al-1-3) 5/7/Kenya Farmer.' The series of crosses including the final cross 573251 were made at Purdue University, with selection in F2 and beyond at Michigan State University. Breeders seed originated from 60 advanced selection lines and was grown and observed for uniformity in 1971.

REFERENCES
1. Registered with the Crop Science Society of America. Received June 24, 1974.
2. Professor, Professor, and Assistant Professor of Agronomy, University of Wisconsin, Madison, WI 53706.
3. Registered with the Crop Science Society of America. Received June 24, 1974.

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