REGISTRATION OF FULCASTER 612 WHEAT¹
(Reg. No. 410)
Edward L. Smith²

FULCASTER 612, CI 13715, (Tenn. 612) is a soft red winter
wheat developed by the Tennessee Agricultural Experiment
Station. It was distributed in 1940.

According to C. D. Sherbakoff,³ who developed the variety,
Fulcaster 612 resulted from a pure line selection from a field of
bearded wheat (presumably Fulcaster, CI 4862) that had been
grown for a number of years on a farm in Dyer County, Tenn.
The selection was made in 1929.

For a number of years Fulcaster 612 was grown extensively in
Tennessee and to some extent in surrounding states. At the present
time this variety is being grown to a limited extent in Tennessee.

Fulcaster 612 is midseason in maturity, tall in height; the stems
are purple and midweak; the spike is awned, fusiform, and lax;
the glumes are white; and the kernels are soft and red. Fulcaster
612 differs from Fulcaster only in its greater uniformity in appear-
ance and in its consistently higher yielding capacity.⁴

¹ Registered under a memorandum of understanding between the
Crops Research Division, ARS, USDA, and the American Society
of Agronomy. This investigation was conducted in connection with a
project of the Tennessee Agricultural Experiment Station and is
published with approval of the Director. Received Feb. 14, 1963.
² Assistant Professor of Agronomy, University of Tennessee,
Knoxville, Tennessee.
³ Personal communication with C. D. Sherbakoff, Plant Pathol-
ologist (Retired), Tennessee Agr. Exp. Sta., Knoxville, Tenn.
⁴ Sherbakoff, C. D. Wheats for Tennessee growers. Univ. of
Tennessee Agr. Exp. Sta. Cir. 86. 1943

REGISTRATION OF KAW WHEAT¹
(Reg. No. 411)

Kaw, CI 12871, is a hard red winter wheat selection from the
cross (Early Blackhull × Tenmarq) × (Oro × Mediterranean–
Hope), made in 1941. The maternal parent was a sister selection
of Wichita. The final selection, in F₆, was made in 1947 and given
the number Ks 471238. It was entered in the Uniform Hard Red
Wheat Performance Nursery in 1953. Kaw was released
jointly by the Kansas and Oklahoma Agricultural Experiment Sta-
tions in 1960.

Kaw has a winter habit of growth, is early and midtall. The
parts have the following features: stem—white, midweak to weak;
spike—awned, fusiform, middense, inclined; glumes-glabbrous,
white, midlong, narrow to midwide; shoulders—midwide, oblique
to rounded; beaks—midwide, acuminate, 2 to 4 mm. long; awns—
white, 2 to 6 cm. long; kernels—red, midlong, hard, ovate; germ-
mid-sized to small; crease—midwide, shallow; cheeks—rounded;
brush—mid-sized, short.

Kaw is resistant to race 56 of stem rust, but not to race 15B. It
resists the races of leaf rust prevalent in Kansas at the time of
release. Kaw resists the bunt races common in Kansas, per-
cipient to loose smut, soilborne mosaic, and hessian fly. It is not as winter-hardy as Wichita.

The original material released was heterogeneous to stem rust. Later, breeders seed was
now available is homogeneous for resistant progenies were bulked in 1957 and
became Ottawa. It was distributed to Kansas farmers in the fall
of 1960. In 1962 it was grown commercially in Kansas and Illinois.

Ottawa has a winter habit of growth, is medium short. Its parts have the following charac-
teristics: spike—awned, fusiform, middense, hard, red, brown, midlong, narrow to midwide,
rounded to oblique; beaks—narrow, acuminate; awns—white (light brown), 3 to 6 cm. long;
hard, ovate; germ—mid-sized; crease—mid-wide; brush—mid-sized, midlong.

Ottawa is resistant to race 56 of stem rust, and resists, in the adult stage, the races of leaf rust
at the time it was released. It resists soilborne mosaic, bunt, and susceptible to streak mosaic. It resists
hessian fly. Ottawa is moderately susceptible to loose smut, soilborne mosaic, and hessian fly. It has been evaluated for quality by Kansas State
University and by several Baking and Milling Industries.

Several characteristics of Kaw and other recommended varieties for
Tennessee and to some extent in surrounding states. At the present
time this variety is being grown to a limited extent in Tennessee.

Table 1—Yield, test weight, disease response, and quality of
Kaw and other commercial varieties of wheat in Kansas,

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<th>Variety</th>
<th>Yield</th>
<th>Test wt.</th>
<th>Bunt</th>
<th>Leaf</th>
<th>Stem</th>
<th>Mosaic</th>
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