

SUNDANCE HARD RED WINTER WHEAT

Sundance, a hard red winter wheat (*Triticum aestivum* L.), was developed at the Canada Agriculture Research Station, Lethbridge, Alberta. It was licensed in Canada on June 29, 1971, and is adapted to the traditional winter wheat-growing areas of southern Alberta and southwestern Saskatchewan (Grant et al. 1968). Sundance is superior to Winalta, the currently predominant winter wheat cultivar in Alberta, in yielding potential and winterhardiness. The leaves of Sundance do not show the tip browning and fraying often exhibited by Winalta. Agronomically it resembles Kharkov 22 MC, but is more resistant to shattering.

The characteristics of its large slightly elongated kernel make Sundance eligible for Canada Statutory Grade No. 1 Alberta Red Winter Wheat. It has medium to strong dough characteristics similar to Winalta, but its protein content is slightly lower.

Origin

Sundance originated from the cross Cheyenne \times Kharkov 22 MC made at the Research Station, Lethbridge, Alberta, in 1953. Three thousand plants from a bulk population were increased in individual progeny rows and from these the line designated as 5520-8 was selected in 1960. After preliminary yield trials the selection was entered in the Cooperative Winter Wheat Tests in 1967, where it has been a consistently high yielder. In 1971 selection 5520-8 was named Sundance.

Description and Performance

SPIKE. Mid-dense, tapering, inclined, with white awns; chaff smooth and white; beaks narrow, acuminate, 3–7 mm long; glumes mid-long, mid-wide, shoulders narrow, oblique to square.

KERNELS. Hard red winter wheat type; medium to light red; large to mid-size, mid-long to long (few very long), mid-wide, elliptical to ovate; germ mid-size, oval; cheek rounded to slightly angular; crease narrow to mid-wide, shallow to mid-deep; brush mid-size, mid-long. The kernel type is excellent and the sample attractive.

STRAW. White, hollow, mid-strong; slightly taller than Winalta; auricles tend to be red near heading time.

MATURITY. Winter habit; mid-season, slightly later than Winalta.

SHATTERING. Resistant.

LODGING. Moderately resistant.

SPROUTING. Resistant.

WINTER HARDINESS. Very hardy, approximately equal to Kharkov 22 MC.

DISEASE REACTION. Moderately resistant to common root rot; some resistance to common bunt; susceptible to leaf and stem rust.

QUALITY. Hard red winter wheat type; medium to strong, similar to Winalta but slightly lower in protein content.

YIELD. In 17 tests in Western Canada conducted from 1965 to 1970, yields of Sundance averaged 19% higher than those of Winalta.

Seed Distribution

About 20 metric tons (over 700 bu) of select seed were distributed to seed growers in Western Canada in the fall of 1971. Breeder seed is being maintained at the Research Station, Lethbridge, Alberta.

GRANT, M. N., PITTMAN, U. J., HORRICKS, J. S., HOLMES, N. D., ANDERSON, D. T. and SMITH, A. D. 1968. Winter wheat production in Western Canada. Can. Dep. Agr. Publ. 1056: 14 p

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