

NEEPAWA HARD RED SPRING WHEAT

Neepawa (*Triticum aestivum* L.) was developed by the Rust Area Project Group centered at the Canada Department of Agriculture Research Station in Winnipeg. It is higher yielding, more resistant to lodging, and larger seeded than Manitou, the predominant cultivar in western Canada (Table 1). Neepawa has essentially the same rust resistance and milling and baking qualities as Manitou, and is slightly earlier in maturity. It has a long-day photoperiodic response.

Origin

Neepawa was produced by the pedigree method from the cross RL 4125 × RL 4008 made in 1959. RL 4125 is a full Thatcher backcross (Thatcher⁷ × Frontana) × (Thatcher⁶ × Kenya Farmer); while RL 4008 is a partial backcross: Thatcher² × Frontana-Thatcher. The Frontana-Thatcher parent came from plot 198 of the 1951 "Beltsville" Rust Nursery.

The F_2 , F_4 , and F_6 generations were grown at Ciudad Obregon, Sonora, Mexico. The F_6 was bulked and put in preliminary tests in Canada for three years. This was followed by four years in the Western Wheat Co-operative Test at 19 locations in the prairie provinces. Neepawa was licensed in March, 1969, and some 70 tons of seed were distributed to selected seed growers in Manitoba, Saskatchewan, and Alberta.

Description

SPIKE—Fusiform, lax, erect; apical awnlets; glumes short, mid-wide, glabrous, white; beaks narrow, acute, short; shoulders mid-wide, rounded to square.

KERNEL—Small to mid-size, ovate, short to mid-long, mid-wide, hard, medium red; crease mid-wide to wide, mid-deep; cheeks angular to rounded; brush small to mid-size; mid-long; germ mid-size, round.

STRAW—Strong, medium-length, similar to Manitou.

LODGING—Resistant, better than Manitou.

MATURITY—Mid-season, slightly earlier than Manitou.

SHATTERING—Resistant.

Table 1. Data from Western Wheat Co-operative Tests, 1965 to 1969

Zone*	Cultivar	Yield kg/ha	Maturity days	Lodging 1.0 to 9.0	Seed size g/1000 seeds
1	Manitou	2984	100.2	3.0	30.2
	Neepawa	3168	99.7	2.0	32.6
2	Manitou	3206	119.6	2.7	32.7
	Neepawa	3332	119.4	2.6	33.6
3	Manitou	2220	100.6	1.9	29.0
	Neepawa	2303	99.7	1.3	30.9

*Zone 1, Black soils of Manitoba and Saskatchewan; zone 2, Black and Gray soils of Alberta; zone 3, Brown soils of Saskatchewan and Alberta.

DISEASE REACTION—Resistant to stem rust and to many races of leaf rust. It carries Thatcher adult plant resistance to stem rust, seedling stem rust genes *Sr5* and *Sr7*, and adult plant leaf rust gene *Lr13*. Resistant to common root rot, head discoloration, loose smut and bunt.

SAWFLY REACTION—Susceptible.

QUALITY—Superior to Marquis.

Acknowledgements

Expert technical assistance by K. R. Johnson is gratefully acknowledged.

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