

WAKOOMA DURUM WHEAT

Wakooma is a new durum wheat (*Triticum durum* L.) developed by researchers of the Agriculture Canada Research Stations at Regina and Swift Current, Saskatchewan, from the cross Lakota/2* Pelissier. Wakooma is a sister line of Wascana and similar in most respects but has stronger gluten and this character is preferred for the export trade. Wakooma has the same high yield in the Brown soils as Wascana (Table 1).

In tests in southwestern Saskatchewan, Wakooma appears to be slightly stronger strawed and a little more resistant to drought than Wascana. Wakooma has a little smaller kernel but is slightly heavier in hectoliter weight than Wascana (Table 2). These two cultivars are similar in resistance to disease except that Wakooma is slightly more resistant to common root rot. They are readily distinguished in the field because Wascana has brown chaff and awns and a dense head whereas the mid-lax head of Wakooma has white chaff and black awns.

Description

SPIKE. Fusiform, awned, mid-lax to mid-dense, glumes glabrous and white, mid-long, narrow with shoulders narrow and usually oblique, but occasionally apiculate; beak straight and long, varying from 2 to 5 mm; awns usually black.

KERNEL. Color medium amber; shape mid-size to small, mid-long to short, mid-wide, elliptical to ovate; germ, mid-size, oval; cheeks, rounded to slightly angular.

STRAW. Medium strong, medium long (3 cm shorter than Wascana).

MATURITY. Medium early.

DISEASE REACTION. Resistant to loose smut, bunt, and leaf and stem rust races prevalent; moderately resistant to kernel smudge; equal to, or slightly more resistant than Wascana and Hercules to common root rot.

MACARONI QUALITY. Superior to Mindum.

License No. 1418 has been issued by the Plant Products Division, Agriculture Canada, for the cultivar designated Wakooma.

Table 1. Yield of four durum wheats in percent of Hercules

Cult	Co-op test 1967-70		Sask. regional tests 1970-72 (35-station yr)
	Black soil	Brown soil	Durum growing area‡
Hercules	100	100	100
Wakooma	97	114	121
Wascana	100	114	120
Pelissier	80†	107	118
Stewart 63	101	106	104

†Reduced in yield by rust.

‡Most of Canada's durum crop is grown in southern, central, and western parts of Saskatchewan best represented by these tests.

Table 2. Summary of agronomic and disease data on four durum wheats, 1967-70 (co-operative test)

Cult	Days to mature	Lodging resistance (1-9)†	Ht (cm)	Hecto-liter wt (kg)	1000-Kernel wt (g)	Stem rust (%)	Leaf rust (%)	Loose smut (%)	Kernel smudge (%)	Root‡ (%)
Hercules	101	3	89	82	44	0.3	8.7	2	6	20
Wakooma	102	4	97	81	41	0.5	6.5	0.5	8	13
Wascana	102	4	99	80	43	5.0	9.5	5	7	21
Stewart 63	105	6	112	82	42	Tr	Tr	65	10	18

†1 = resistant to lodging; 9 = susceptible to lodging.

‡Data from 1969 and 1970. (R. D. Tinline, Research Station, Agriculture Canada, Saskatoon, Saskatchewan.)

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