

MACOUN DURUM WHEAT

Macoun is a new durum wheat (*Triticum durum* L.) developed by scientists of the Agriculture Canada Research Stations at Swift Current, Regina and Winnipeg. The cross, RL3607/DT182, was made in Winnipeg in 1964. The F₃ seed was divided between the Manitoba and south Saskatchewan programs. Macoun was selected at Regina and Swift Current and was tested under the designation DT332. The name was chosen to honor John Macoun who, while working for the Canadian Government, collected botanical material on the Canadian Prairies in the 1880's. He corrected earlier impressions of the West by stating that the area had great agricultural potential.

Compared to Wascana, Macoun has a slight advantage in most characteristics (Tables 1 and 2). It is shorter, stronger strawed, earlier maturing, has higher hectoliter weight and is equal in disease resistance. It yields slightly more in the Black

soil zone and is about equal in the Brown soil zone. Its short strong straw makes it comparable to Hercules but its yield and quality are superior. Macoun is better in quality than Wascana, and is equal in quality to Wakooma.

Description

SPIKE. Fusiform, awned, mid-dense; awns white; glumes glabrous, white, mid-long, mid-wide; shoulders narrow, slightly elevated; beaks acute, short.

KERNEL. Amber, short to mid-long, mid-wide, ovate; germ mid-size, oval; crease narrow to mid-wide, shallow to mid-deep; cheeks rounded to angular; brush, small to mid-size, very short to nil.

STRAW. Strong, medium short (slightly taller than Hercules).

MATURITY. Medium early.

DISEASE REACTION. Resistant to loose smut (*Ustilago tritici* [Pers.] Rostr.), bunt (*Til-*

Table 1. Yield of three durum wheats in percent of Hercules (quintals per hectare)

Cultivar	Cooperative tests				South Sask. tests	
	1970-72		1973		1973	
	Black soil 12 station-yr	Brown soil 13 station-yr	Black soil 5 station-yr	Brown soil 5 station-yr	1971-73 35 station-yr	Dry year 13 station-yr
Hercules	100 (31.9)	100(25.0)	100(37.8)	100(16.9)	100(20.3)	100(18.8)
Wascana	98	112	99	117	123	124
Wakooma	-	-	97	121	125	114
Macoun	103	112	100	117	-	115

Table 2. Summary of agronomic and disease data on three durum wheats, 1970-73 (cooperative test)

Cultivar	Days to mature	Lodging (1-9)†	Ht (cm)	HI wt (kg)	1,000- Kwt (g)	Stem rust (%)	Leaf rust (%)	Bunt (%)	Loose smut (%)	Root rot (%)	Kernel smudge (%)	Starchy kernels (%)
	Hercules	99	1.8	92	81	46	tr‡	10MR‡	15	1.3	21	6.7
Wascana	103	3.1	99	79	45	11R	9MR	5	1.3	25	7.6	5.6
Macoun	101	2.2	94	81	45	tr	16MR	4	3.0	20	4.8	4.9

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

‡R, resistant; MR, moderately resistant; tr, trace.

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letia foetida [Wallr.] Liro), leaf rust (*Puccinia recondita* Rob. ex. Desm. f. sp. *tritici*) and stem rust (*Puccinia graminis* Pers. f. sp. *tritici* Eriks. and E. Henn.) races prevalent; moderately resistant to kernel smudge; equal to Wascana and Hercules to common root rot (*Bipolaris sorokiniana* [Sacc. in Sorok.] Shoem. and *Fusarium* sp.).

MACARONI QUALITY. Superior to Hercules in gluten strength and pigment and fully equal to Wakooma.

Licence No. 1522 was issued for Macoun in 1974 by the Plant Products Division, Production and Marketing Branch, Agriculture Canada.

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