REQUEST FOR SUPPORT OF REGISTRATION OF CDC GO

CROP KIND: Wheat

TYPE: Canada Western Red Spring

PROPOSERS: P. Hucl: CDC, Univ. of Saskatchewan, Saskatoon, SK, S7N 5A8

TEST NUMBERS: BW781, W98096

PEDIGREE: Grandin/SD3055

BW781 was selected from the cross Grandin/SD3055. BW781 is derived from a bulked F_5 head row. BW781 was evaluated as W98096 in local yield tests in and in the Western Bread Wheat 'B' test in 1999. BW781 was subsequently evaluated in the Western Bread Wheat Cooperative Test from 2000 to 2002.

AREA OF ADAPTATION: Saskatchewan and Alberta. No data is available for Manitoba.

STRENGTHS: Semi-dwarf and strong-strawed.

WEAKNESSES: Susceptible to leaf spots.

DESCRIPTION: BW781 is a short-strawed, awned, hollow-stemmed wheat with slightly earlier maturity than AC Barrie (Table 1). In three years of testing in the Western Bread Wheat Cooperative Test, BW781 was 3.2, 3.2, and 7.8% higher yielding than AC Barrie, Laura and AC Abbey, respectively. BW781 was 5 to 6 cm shorter strawed than the two hollow-stemmed check cultivars and 1.3 cm shorter than AC Abbey. Lodging in BW781 was similar to that of AC Barrie and lower than for the two other check cultivars. BW781 had a test weight similar to that of the checks but a higher kernel weight.

BW781 gave a moderate (MRMS to MS) reaction to prevalent races of leaf rust and a resistant to moderately resistant reaction to stem rust (Table 2). Reaction to loose smut was MS to MR. BW781 was resistant to bunt. The average FHB index level for BW781 was similar to that of AC Barrie but lower than that of the remaining checks (Table 2). BW781 tended to be susceptible to leaf spots.

Table 1. Agronomic performance of BW781 compared to the check cultivars, based on · data from the Western Bread Wheat Cooperative tests (2000 - 2002).

	Yield				Maturit y	Height	Lodging	Test wt	Kernel wt
	(kg/ha)				(days)	(cm)	(1-9)y	(kg/hL)	(mg)
	Zone	Zone 2	Zone 3	Mean					
-	1z				-		· . ·		л. •
AC Barrie	3477	3271	4624	3509	100.8	82.6	1.8	80.6	34.2
Laura	3342	3361	4287	3509	101.8	83.8	3.1	79.8	31.9
AC	3230	3150	4351	3352	99.9	78.4	2.8	79.6	32.3
Abbey									
BW781	3578	3428	4528	3620	100.3	77.1	1.9	80.3	37.8
# Tests	3	23	5	31	19	27	9	30	30

z Zone 1 = Swift Current, Zone 2 = Central Saskatchewan, Zone 3 = Parkland x All means are weighted by the number of tests within a zone
y 1, all plants vertical; 9 all plants horizontal