

Trends in Production and Markets for Western Canadian Barley Varieties

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INTRODUCTION

CWB surveys of farmer seeded acres are showing a trend towards increasing acreage of newer recommended two-row malting barley varieties, while older established malting varieties have been decreasing in preference over the last five years. This adoption of newer two-row malting varieties has also resulted in an increasing share of the total barley acreage with corresponding decrease in feed and hullless varieties and to a lesser extent displacing six-row malting varieties.

VARIETY SURVEY TRENDS

Survey results over the period 1999-2003 (Table 1) indicate:

- Two-row varieties, as a percentage of total barley acreage, have been increasing to satisfy increasing malting barley demand, and in some areas because they compete well agronomically with feed barley varieties.
- Six-row malting varieties have been declining in acreage since 2000.
- Feed varieties, with the exception of 2002, have remained relatively stable. The 2002 result is likely due to the drought conditions and abandoned seeded acreage.
- Hullless varieties have been in decline since 1999, reflecting the lack of demand by the feed industry.

TABLE 1. Percentage of barley area sown by type in W. Canadian provinces

	Manitoba				
	2003	2002	2001	2000	1999
Two-row malting	35.6	44.6	26.0	18.2	13.2
Six-row malting	39.9	44.3	42.0	55.6	54.9
Feed (2R and 6R)	23.7	8.8	22.0	18.8	23.5
Hullless (2R and 6R)	0.7	2.4	10.0	7.4	8.4

	Saskatchewan				
	2003	2002	2001	2000	1999
Two-row malting	65.8	67.0	61.8	51.2	52.5
Six-row malting	14.8	15.2	18.4	27.0	21.8
Feed (2R and 6R)	19.1	16.9	19.2	19.7	22.4
Hullless (2R and 6R)	0.4	0.9	0.6	2.1	3.3

	Alberta				
	2003	2002	2001	2000	1999
Two-row malting	49.2	53.9	47.3	43.5	37.1
Six-row malting	2.3	4.2	2.4	3.9	5.2
Feed (2R and 6R)	48.1	41.3	49.3	51.6	55.3
Hullless (2R and 6R)	0.4	0.6	1.0	1.0	2.4

	Prairie Average				
	2003	2002	2001	2000	1999
Two-row malting	54.6	58.9	50.8	43.7	40.5
Six-row malting	12.3	14.5	14.8	20.7	18.5
Feed (2R and 6R)	32.7	25.7	32.4	33.2	37.5
Hullless (2R and 6R)	0.4	1.0	2.0	2.3	3.5

Harrington has been in continuous decline since 1999 (Table 2). In 2003, Harrington had just 22 per cent of the two-row malting barley area compared to 56 per cent in 1999. Harrington has been replaced to a large extent by the rise of AC Metcalfe and to a lesser extent by the growth in CDC Kendall, CDC Stratus and Merit. The decline of Harrington is expected to continue with the further expansion of other newer varieties such as CDC Copeland, which are also gaining customer acceptance. Older varieties, such as Manley, B1215 and Oxbow have declined and are now out of production.

TABLE 2. Percentage of two-row malting acreage by variety

Variety	Prairie average (Percentage of seeded acreage)				
	2003	2002	2001	2000	1999
AC Metcalfe	39.5	37.8	26.9	19.7	3.6
Harrington	22.1	25.9	36.6	45.1	56.4
CDC Kendall	13.2	11.3	10.3	4.5	1.7
CDC Stratus	9.1	8.8	8.0	7.6	6.0
Merit	5.7	5.4	3.6	1.9	0.2
Stein	5.0	6.2	6.8	9.0	5.9
Other	3.2	2.9	2.8	3.1	4.0
CDC Copeland	1.4	0.5	0.2	0.0	n/a
B1202	0.6	0.8	2.1	n/a	n/a
AC Bountiful	0.1	0.2	0.2	0.0	n/a
Manley	0.0	0.2	2.6	5.3	10.7
AC Oxbow	0.0	0.0	n/a	2.3	8.2
B1215	0.0	0.0	n/a	1.4	3.3

Robust and Excel have been the predominant six-row malting varieties, grown mainly in response to firm U.S. demand. B1602 declined until 2000, after which the decline stabilized due to a minimum demand from certain customers. Newer six-row varieties, such as CDC Sisler, have shown modest growth since 1999, while Legacy has shown rapid adoption since its introduction in 2002.

TABLE 3. Percentage of six-row malting acreage by variety

Variety	Prairie average (Percentage of seeded acreage)				
	2003	2002	2001	2000	1999
Robust	37.1	38.9	37.4	35.8	30.2
Excel	31.9	29.1	42.0	44.1	34.5
B1602	13.6	11.6	10.2	8.4	14.5
Legacy	6.9	3.5	n/a	n/a	n/a
CDC Sisler	5.0	4.5	3.4	2.5	0.8
Other	4.5	3.4	6.6	9.2	4.1
CDC Battleford	0.7	0.6	0.4	n/a	n/a
CDC Yorkton	0.3	0.3	0.0	0.0	n/a
Stander	0.0	7.3	n/a	n/a	8.0
Argyle	0.0	0.4	n/a	n/a	1.3
Tankard	0.0	0.3	n/a	n/a	0.7
Foster	0.0	0.0	n/a	n/a	2.6
Duel	n/a	n/a	n/a	n/a	1.6
Bonanza	n/a	n/a	n/a	n/a	1.5

MARKET DISPOSITION OF 2001-02 RECOMMENDED VARIETIES

On the marketing side, the popularity of Harrington continues to give way to relatively newer two-row varieties, such as AC Metcalfe, CDC Kendall, CDC Stratus and, recently, Merit. These varieties are on an upward trend in both acres grown and tonnes selected. The disposition of two-row selections by variety marketed to domestic and export markets is presented in Figure 1. Due to successful plant-scale and sample tests, the CWB and industry was well positioned to sell significant quantities of AC Metcalfe and smaller quantities of CDC Kendall and Merit to China from the 2001 harvest. That same crop saw AC Metcalfe exported to South Africa, Colombia and the United States. Domestic malting companies have also undertaken successful market development for some of the new varieties with their brewing customers in Canada and abroad. About half of the selected AC Metcalfe from the 2001 harvest was exported as malting barley and the other half was processed domestically.

Domestic maltsters processed practically all the selected CDC Stratus. One major domestic brewer used most of this malt. CDC Kendall was sold to both domestic and export markets, with lower available production being its main limiting factor. Most of the demand for Merit was from export markets with limited quantities for domestic use.

The disposition of six-row selections by variety marketed to domestic and export markets is presented in Figure 2. The U.S. is the major market for recommended six-row malting varieties such as Excel and Robust. The majority of selected B1602 is exported to Japan for barley tea use. CDC Sisler was sold strictly domestically and markets for Legacy were split fairly evenly. Both are emerging as new varieties.

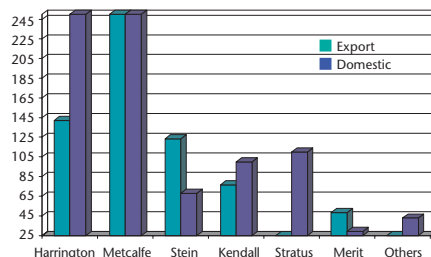


Figure 1. 2001-02 Disposition of two-row selections ('000 tonnes)

2002-03 CWB Variety Survey is available at www.cwb.ca

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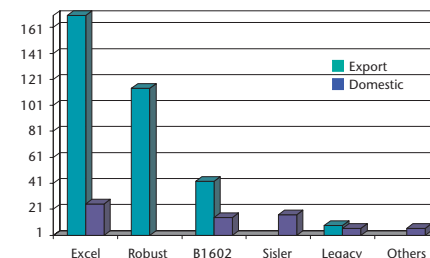


Figure 2. 2001-02 Disposition of six-row selections ('000 tonnes)

It is emphasized that the relative market shares shown above are based on how 2001 harvest production was marketed. The market data for 2002 is not shown as harvest size and quality was not typical of expected trends due to the poor weather. Current malting barley selections for 2003-04 crop year are presented for two-row selections (Figure 3) and six-row selections (Figure 4).

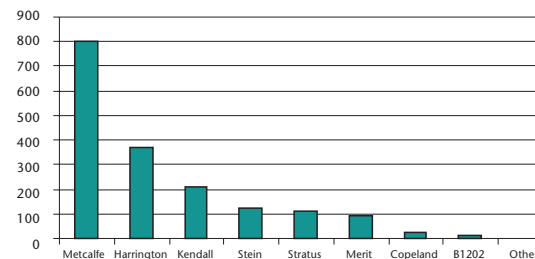


Figure 3. Summary of 2003 two-row selections as of Nov. 25/03 ('000 tonnes)

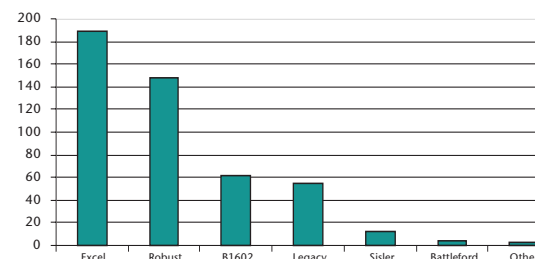


Figure 4. Summary of 2003 six-row selections as of Nov. 25/03 ('000 tonnes)

SUMMARY

The increased production of recommended two-row malting varieties is due to the market pull from increasing domestic and international customer acceptance of these varieties as satisfactory replacements for Harrington. As well, newer two-row varieties offer higher yields, improved agronomic characteristics and feed grain quality attributes. In the eastern Prairies, two-row malting varieties offer improved Fusarium head blight tolerance as compared to other barley varieties.

It is expected that this trend in increasing acreage of two-row malting varieties will continue with the addition of newer higher yielding varieties to the list of recommended malting barley varieties in western Canada.