

Variety Survey Results Show Changing Face of Crop Varieties

Mike Grenier, Agronomist

The 2007 CWB Variety Survey results are in. More than 8,500 farmers participated in this year's variety survey, with more than 35 per cent filing on line.

Ten years of survey results are now complete and it is evident that newer variety introductions are being adopted more quickly, making knowledge of varietal trends even more important. A number of new reporting features are now available online, and you can now study historical trends more easily through the Variety Survey Trends Tool. Also new for 2007 is a crop district report, which allows you to look in more detail at class and variety breakdown at a more regional level within the Prairie provinces.

To check out the new survey trend tool and to view complete survey results, please go to:

<http://www.cwb.ca/public/en/farmers/surveys/variety/2008/>

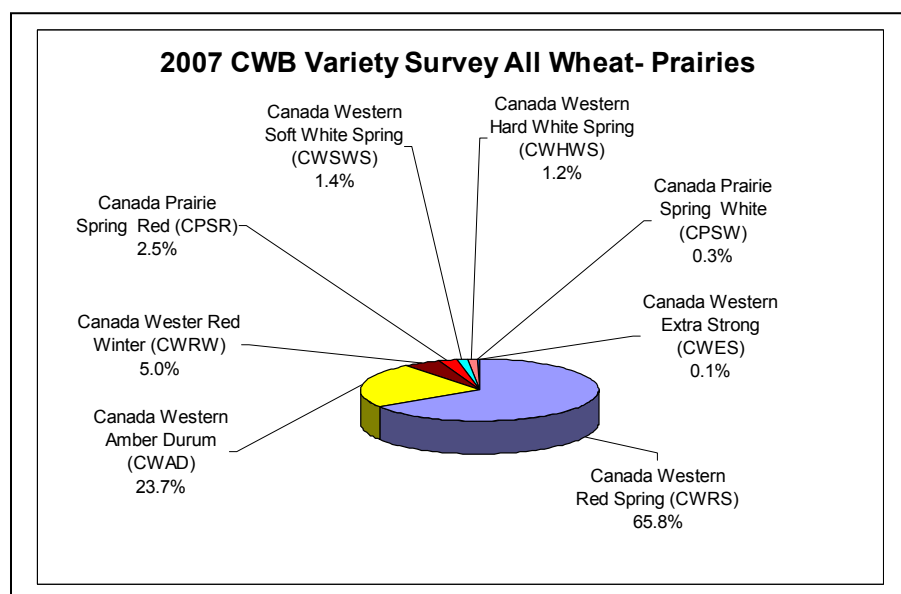
Overview of Survey Results

Wheat

Proportion of Wheat Classes Making up Wheat Acres

CWRS is by far the largest class of wheat grown across the Prairies, followed by CWAD. In Saskatchewan and Alberta, these two classes, CWRS and CWAD, account for 90 per cent of wheat acreage. CWRS accounts for 83 per cent of the Manitoba provincial wheat acreage.

Smaller classes account for the remaining 10 per cent of the acreage. The increasing winter wheat acreage means CWRW now ranks as the third largest wheat class at five per cent of the total prairie wheat acreage. CWRW ranks as the second largest wheat class in Manitoba, third largest in Saskatchewan and fourth in Alberta. Growing interest in high-yielding feed-type wheat to service feed and ethanol markets is showing some regional changes on the prairies. In Alberta, CPS Red ranks as the third largest class and comes in fourth overall across the prairies, while dryland production of CWSWS increased in Saskatchewan to rank just ahead of CPS Red. Production of CWHWS has declined in each of the three provinces, while CWES and CPS White account for less than 0.5 per cent of the prairie acreage.



Canada Western Red Spring (CWRS)

The trend in turnover of varieties is no more apparent than in CWRS. For the CRWS class – which represents most of wheat we grow on the Prairies – nearly half the varieties that farmers grew in 1998 are no longer around today.

One of the newest CWRS varieties, Lillian, demonstrated a strong introduction in 2006 at three per cent of the prairie acreage and now in 2007 shows more than a four-fold increase to 14 per cent. It is now the top ranking wheat variety grown on the prairies.

AC Barrie, which had dropped out of first place in the CWRS wheat class in 2006, held fairly steady. It declined slightly to just less than 14 per cent and remains the second ranked variety across the prairies.

Superb, which had surpassed AC Barrie in 2006, declined from 18 per cent to just below 13 per cent of the prairie acreage. It now ranks as the third most grown variety across the prairies.

Harvest doubled its acreage and now ranks as the number four CWRS variety on the Prairies.

Overall these top four varieties account for half of the CWRS acreage.

There are notable differences in planting trends between the provinces, which influence the overall Prairie averages.

In Saskatchewan, Lillian shows close to a five fold increase and now accounts for 19 per cent of the province. It is followed by three varieties – Superb, McKenzie, and AC Barrie – all near 13 per cent of the provincial acreage.

In Alberta, Harvest was the number two variety in 2006. In 2007, it doubled its acreage, making it the top variety at 23 per cent of the provincial acreage. Lillian more than tripled its acreage to almost 18 per cent to gain the number two position while Superb dropped from number one ranking in 2006 to 14 per cent and the number three ranking in 2007.

However, in Manitoba we see little change. AC Barrie remains the top variety with 34 per cent of the provincial acreage, followed by AC Domain at 18 per cent and Superb at 10 per cent.

Typically, eight to ten additional varieties make up the majority of the remaining 50 per cent of the class. We are also observing a trend in turnover of this group as farmers try out new varieties that show improved yield and/or agronomic characteristics.

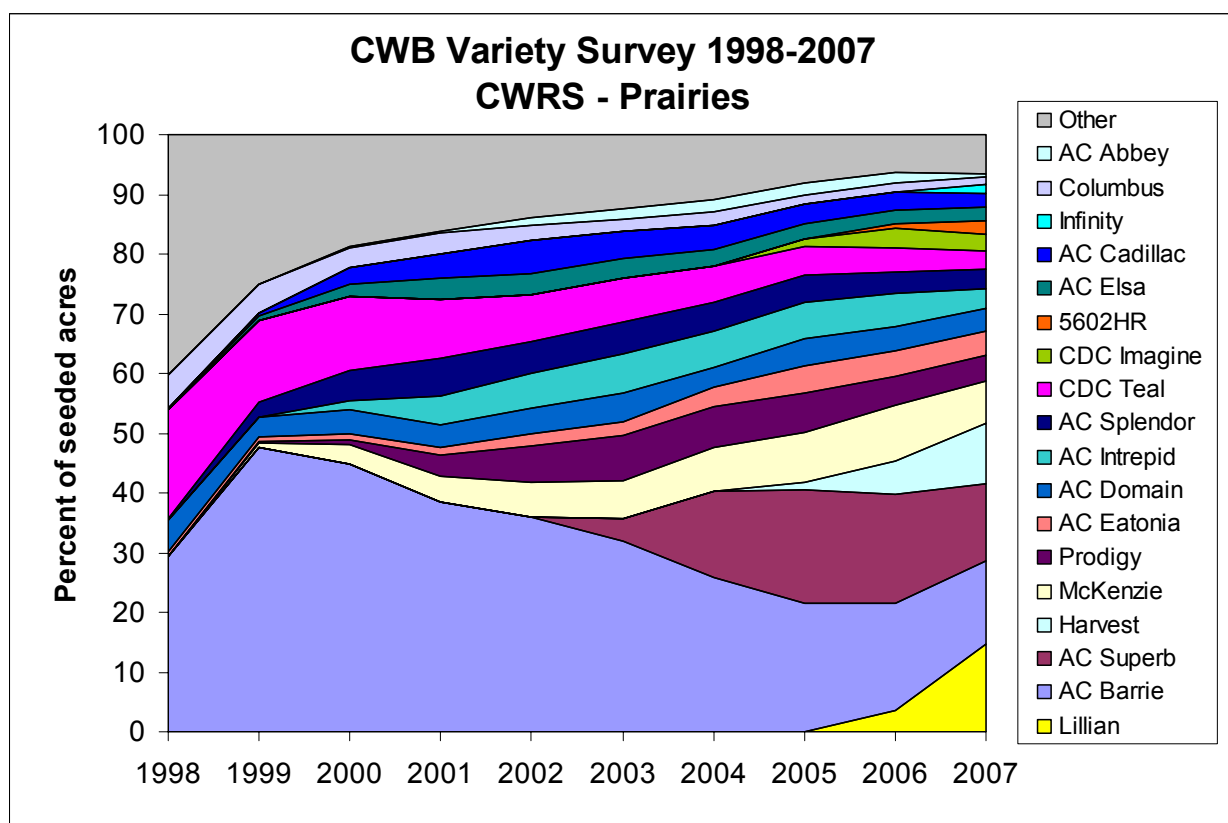
Regional environmental influences relative to agronomic performance are important considerations and become readily apparent in the adoption trends of new wheat varieties.

For example, with increasing pest pressure from sawfly, mainly in Saskatchewan and Alberta, we see increasing acreage of solid stem varieties being used as a management tool. Previously we observed an increase in solid stem varieties AC Eatonia and AC Abbey. The 2006 introduction of Lillian saw strong adoption due to its improved yield performance, and it quickly entered into the top 10 varieties for both Saskatchewan and Alberta. This year the trend continued with Lillian dramatically increasing its acreage and vaulting to the number one variety ranking in Saskatchewan and number two in Alberta.

In Manitoba, Fusarium Head Blight pressure continues to influence adoption of new varieties and we see a slower move away from AC Barrie. A new variety 5602HR with improved Fusarium tolerance broke into the top 10 ranking in 2006 and shows a four-fold increase in 2007 to almost eight per cent, attaining the number four ranking for Manitoba.

In general, older varieties such as AC Intrepid, Prodigy, CDC Teal, AC Splendor, AC Cadillac, AC Elsa and Columbus have been showing declining acreages since about 2002. There are exceptions such as the variety McKenzie, which continues to hold a high ranking in Saskatchewan, and the variety AC Domain, which continues to show steady and substantial acreage in Manitoba.

A new noteworthy variety introduction in 2007 is Infinity, which came in at 1.5 per cent. It will be interesting to see how this variety performs going forward. CDC Imagine, introduced in 2005, is the first variety to offer the Clearfield herbicide trait option. Adoption had increased to near three per cent for both 2006 and 2007. Additional varieties just beginning to be tracked include AC Somerset, CDC Alsask, Peace, and AC Kane.



Canada Western Amber Durum (CWAD)

The Strongfield variety was introduced in 2006, supported by an Identity Preserved Contract Program (IPCP). It quickly gained 18 per cent of the total durum acreage. Because of its strong

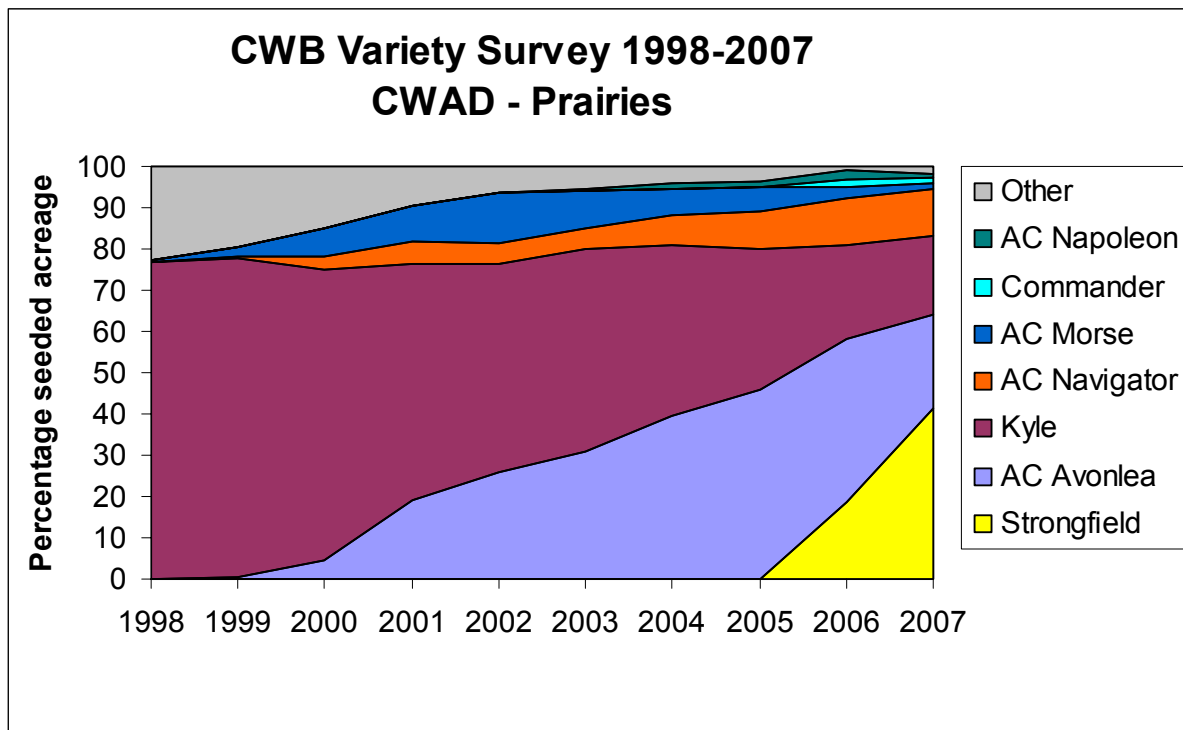
agronomic performance, Strongfield doubled its acreage to more than 40 per cent and attained the number one CWAD variety ranking.

The majority of the increase in Strongfield acreage came at the expense of AC Avonlea which declined to just more than 20 per cent of the durum acreage and dropped to the number two ranking.

Kyle, a variety that has been declining from its peak acreage of 78 per cent of sown acres in 1999, continues its decline, dropping slightly to less than 20 per cent in 2007 and into the number three ranking.

AC Navigator remained steady at 11 per cent of seeded durum acres in the 2007 season. AC Morse continued to drop in acreage, falling to less than two per cent. AC Napoleon dropped to less than one per cent.

AC Commander, a new extra-strong durum variety, was introduced in 2006 under a CWB Identity Preserved Contract Program and currently accounts for just over one per cent of the overall CWAD class.



Minor Wheat Classes

Canada Western Red Winter (CWRW)

With the introduction of new winter wheat varieties with improved winter hardiness and disease resistance, winter wheat acreage has expanded substantially from an annual average of about 100,000 acres in the early '90s to more than 1,100,000 acres today.

Within the CWRW class, variety adoption is strongly influenced by agronomic adaptability of individual varieties across the various prairie regions where winter wheat is currently grown.

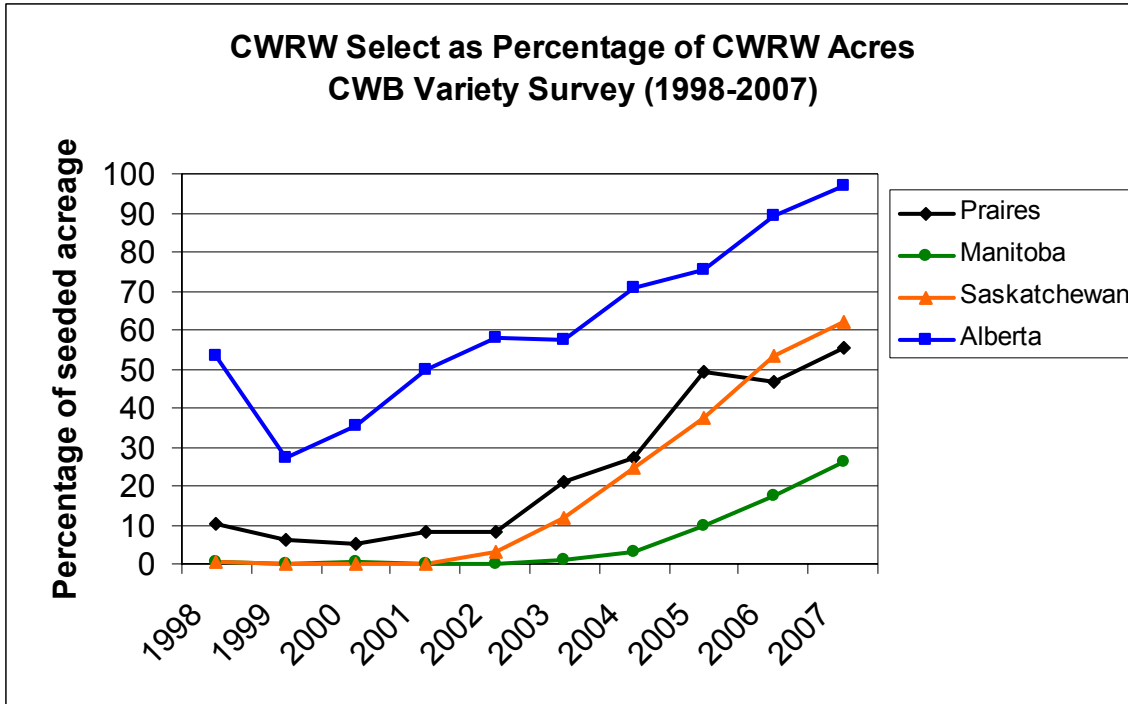
In Alberta, Radiant, increased rapidly to 23 per cent in 2006 after being introduced in 2005. It climbed to nearly 40 per cent in 2007 and gained the top ranking for winter wheat varieties in that province. The majority of the increase in Radiant acreage came at the expense of AC Bellatrix which dropped by more than 20 per cent acreage down to 33 per cent and is now the number two variety within the province. Other varieties with small acreage in Alberta include CDC Osprey, AC Readymade, AC Tempest, CDC Clair and CDC Buteo.

In Saskatchewan, CDC Buteo a recent variety introduction jumped from just under three per cent in 2005 to 26 per cent in 2006. It now has more than 44 percent in 2007 and remains as the top variety ranking within the province. This increase in acreage is mainly at the expense of CDC Clair, which has dropped to number three ranking at less than 12 per cent, down from its peak of 71 per cent in 2001. CDC Raptor remains near 17 per cent and retains the number two ranking, while other varieties such as AC Bellatrix, CDC Falcon, CDC Osprey, Radiant, CDC Kestrel, CDC Harrier and McClintock make up the remaining acreage.

In Manitoba, CDC Falcon continues to dominate provincial acreage at over 66 per cent, followed by two newer varieties, CDC Buteo and McClintock, at 15 and 10 per cent of the acreage respectively. They are the top three varieties for the Province. The remaining provincial acreage is made up of CDC Raptor, CDC Harrier, and CDC Clair.

The CWB has been running an IPCP to segregate Select varieties of CWRW that show improved milling quality characteristics. For 2008-09, CWRW Select is no longer part of the IPCP although a segregation contract program remains in place, and a premium continues to be offered for CWRW Select.

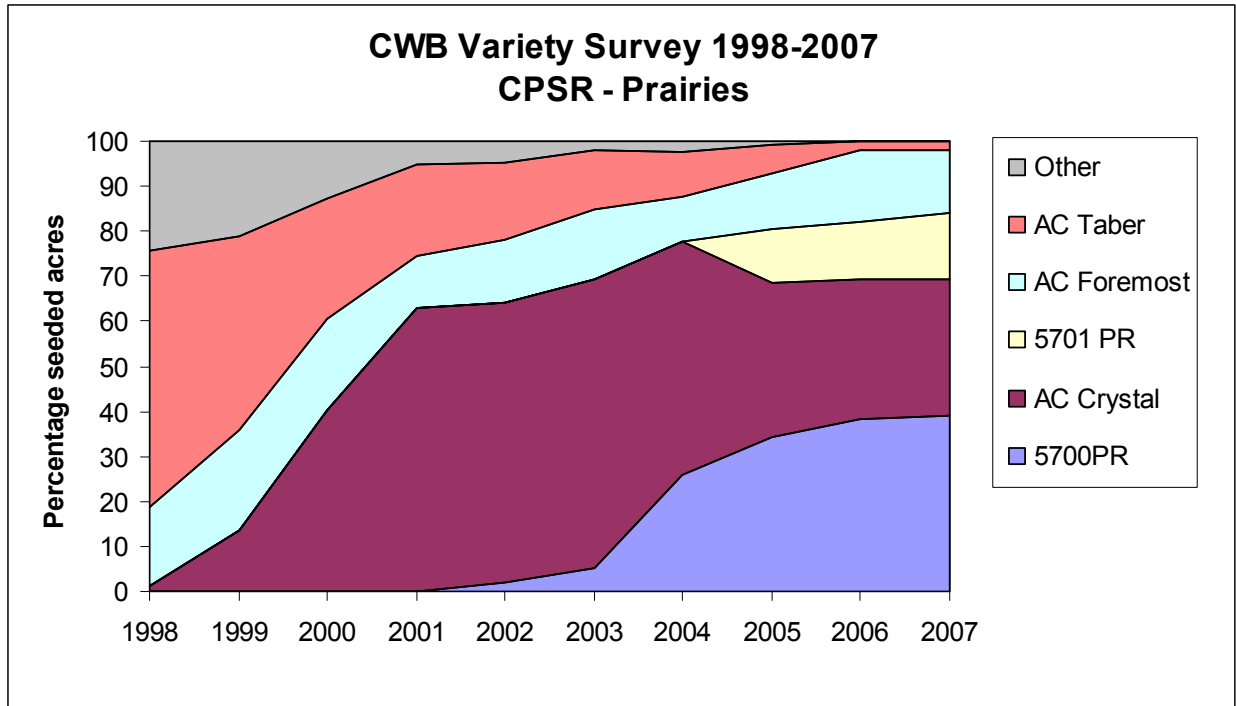
Eligible Select varieties for 2008-09 are: AC Bellatrix, AC Readymade, AC Tempest, CDC Buteo, CDC Osprey, McClintock, Norstar and Radiant and Norstar. Survey results indicate increasing acreage of these Select eligible varieties across the Prairies. The total Select acreage is now more than half of the entire CWRW class acreage.



Canadian Prairie Spring Red (CPSR)

In the CPSR class, we see very little change from the 2006 results. For 2007, 5700PR with 39 per cent of seeded acres retains the number one ranking which it first gained in 2006. AC Crystal remained steady with 30 per cent of the sown acres and holds the number two ranking. 5701PR the newest variety in the class shows steady acreage with a small increase now near 15 per cent of the class.

These three CPSR varieties represent significant improvements in end-use quality over older varieties of the CPSR class, and account for more than 80 per cent of the class acreage. Rounding out the CPSR acreage on the Prairies are AC Foremost and AC Taber. They captured 14 and 1.8 per cent of sown acres, respectively.



Canada Western Soft White Spring (CWSWS)

AC Andrew, at more than 95 per cent of the prairie acres, remains the dominant variety within the class.

Within the CWSW class there are notable differences between provinces. In the traditional growing region of southern Alberta we see AC Andrew dominate acres at 79 per cent, with smaller acreages of Bhishaj at 10 per cent, AC Meena at seven per cent and AC Nanda at three per cent. No acreage of AC Phil and AC Reed are reported for 2007.

Over the last couple of years we have seen small acreages develop in Saskatchewan and Manitoba. This interest is driven by the potential for high yielding feed-type quality wheat to serve growing demand for ethanol. AC Andrew with its high yield potential is the preferred variety to meet this general purpose feed and industrial demand. However, growers should be cautious and realistic in terms of the agronomic adaptability and limited potential for dryland production of AC Andrew to meet quality specifications for milling markets. There is some interest by malting companies for potential use of CWSWS for wheat malt, and evaluations are underway. Current CWSWS varieties, including AC Andrew, are late maturing, have poor sprouting tolerance and are highly susceptible to Fusarium Head Blight.

Canada Western Hard White Spring (CWHWS)

Currently two varieties, Snowbird and Kanata, make up the CWHWS class. Snowbird continues to account for nearly the entire seeded acreage of this class.

Canadian Prairie Spring White (CPSW)

Two varieties, AC Vista and AC Karma, make up the CPSW class at 94 and six per cent respectively.

The CPSW varieties Genesis and AC 2000 have been de-registered and are no longer eligible for delivery as CPSW.

A small acreage of AC Vista was observed in north-west Manitoba, reflecting interest in this variety for the ethanol market.

It should be noted that due to small survey response for this class that results are quite variable year to year and therefore difficult to put much weight into observed trends for a class of this size.

Canada Western Extra Strong (CWES)

Glenlea, which has held top ranking in this class, dropped dramatically from 43 per cent in 2006 to just under two per cent of the seeded acres. New varieties CDC Rama, AC Corrine, Burnside and Glenavon replaced the Glenlea acres.

CDC Rama the number two CWES variety in 2006 increased the most to 37.5 per cent and gains the top ranking for the class in 2007. AC Corrine also showed a substantial increase to gain the number two ranking at 25 per cent, followed by Burnside at almost 18 per cent and Glenavon at 12 per cent.

Laser dropped by more than two-thirds to five per cent for 2007. No acres were recorded for Bluesky, Amazon Walrus and Wildcat.

Again, due to small survey response for this class, results are quite variable year to year and therefore it is difficult to put much weight into observed trends for a class of this size.

Barley

The 2007 CWB Variety Survey highlights some changing trends for malting barley types.

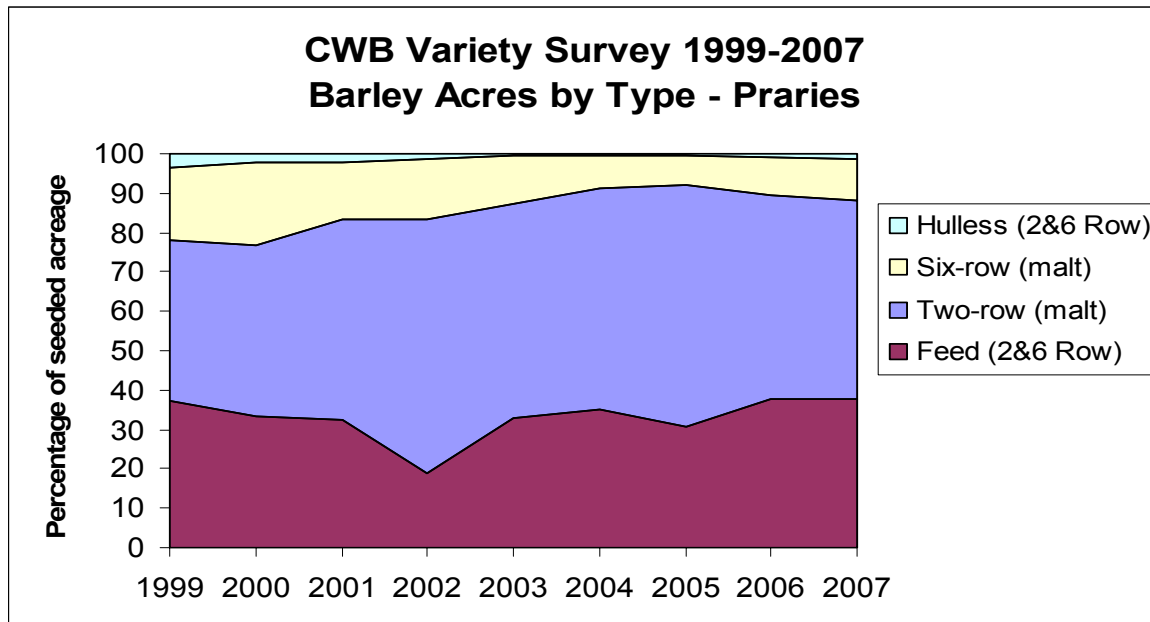
Following several years of unchecked growth, two-row malting barley plantings have declined since 2005. In 1999 these varieties captured about 40 per cent of the barley acreage. By 2005 that had grown to 60 per cent, as six-row malting and feed barley acreage fell over the same period.

In 2007, two-row acreage decreased slightly to about 50 per cent of plantings, while six-row malting varieties show a slight increase to just over 10 per cent of total barley acreage.

Combined, two- and six-row malting barley varieties account for over 61 per cent of total barley acres.

Acreage devoted to feed varieties has remained relatively stable over previous years in the range between 30 and 40 per cent of total barley acreage.

For 2007, feed varieties account for over 37 per cent while hulless varieties continue to account for only one per cent of total barley acreage.



Two-Row Malting Barley

AC Metcalfe continues to rank as the number one two-row malting barley variety at 59 per cent of seeded acres. CDC Copeland shows a slight acreage increase to over 17 per cent and retains the number two variety ranking, while CDC Kendall follows closely in the number three position with a slight decrease to 12 per cent.

CDC Copeland gained acres in both in Alberta and Saskatchewan while CDC Kendall has the majority of its acres in Saskatchewan.

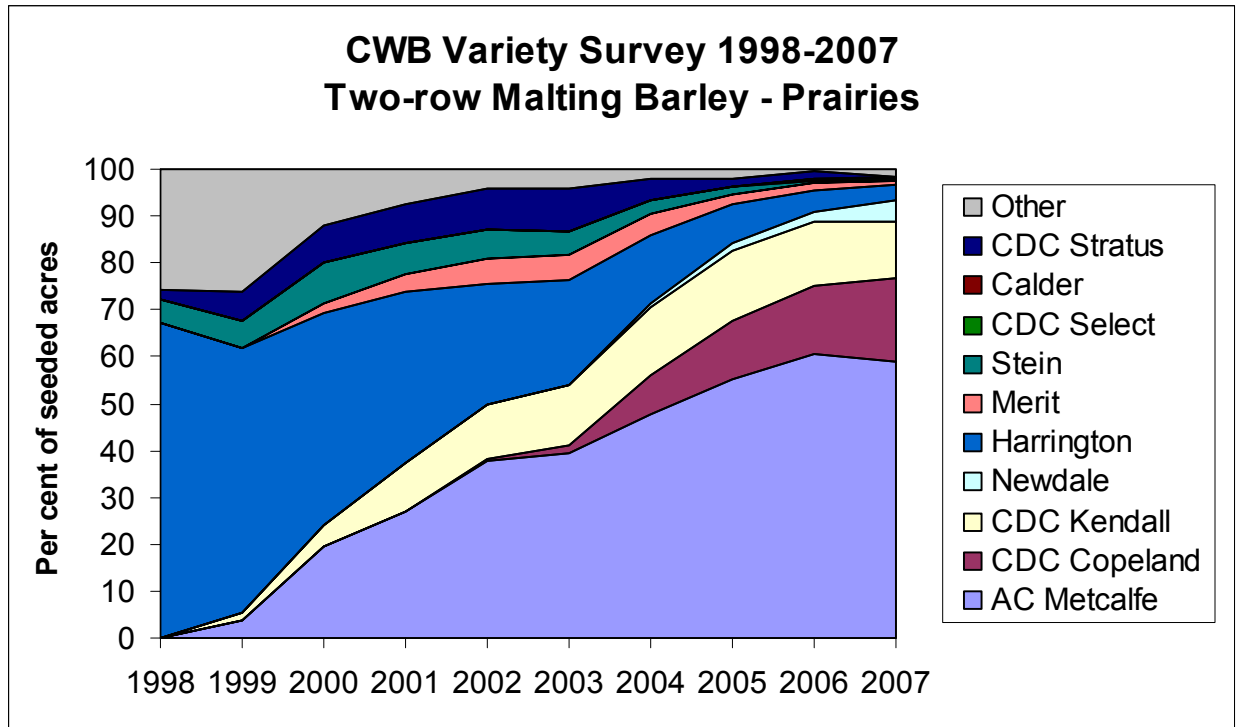
These three varieties (AC Metcalfe, CDC Copeland and CDC Kendall) account for over 88 per cent of the two-row malting barley acreage.

Due to the adoption of these two-row varieties, acreage for Harrington continues its steady decline from its peak of 67 per cent in 1998 to just 3.3 per cent in 2007. The majority of the remaining Harrington acreage can be found in southern Alberta.

In Manitoba, AC Metcalfe dominates two row acres while the Newdale variety continues to show increased acreage over the last three years. Newdale is now the second most popular variety in Manitoba with 24 per cent of the provincial two-row malting barley acreage

Across the Prairies, other varieties such Merit, Stein and CDC Stratus make up the remaining acreage.

New varieties having limited acreage and undergoing market testing and development work for malting purposes include Calder, CDC Select and Newdale.



Six-Row Malting Barley

Six-row malting acreage shows an increase to just over 17 per cent the total malting barley variety acreage in 2007. Six-row acreage was fairly steady in Manitoba and Alberta and increased slightly in Saskatchewan.

Legacy, with growing market demand, continues to increase in acreage and now dominates the class with over 49 per cent of the six-row malting acreage.

Tradition, a new variety with increasing demand, nearly doubled its acreage to over 22 per cent and climbed into the number two ranking across the Prairies. The majority of the Tradition acreage is in Saskatchewan and Manitoba.

Lacey has grow to 11 per cent of the prairie acreage over the last three years and moves into the top three ranking taking over the number three position.

Excel, which has an established but declining demand, continues to drop in seeded acres. It is now under eight per cent and remains in the fourth place ranking.

Robust continues to decline in acreage due to limited market demand. It dropped by more than two-thirds to six per cent for 2007 and out of the top three ranking.

Varieties such as CDC Battleford and CDC Yorkton support small acreage while other six-row malting varieties such as B1602 and CDC Sisler make up less than two per cent of the total acreage.

New varieties having limited acreage and undergoing market testing and development work include CDC Clyde, CDC Laurence, CDC Springside and CDC Tisdale.

