

Considerations for Seeding 2021

Opportunities for New Canadian Malting Barley Varieties

CDC Bow, AAC Connect & CDC Fraser

Canada's barley breeders have developed a promising suite of new malting barley varieties such as **CDC Bow**, **AAC Connect** and **CDC Fraser** each with excellent agronomics and disease resistance. These new varieties are poised to succeed older, established varieties such as AC Metcalfe and CDC Copeland. They have very desirable malting and brewing characteristics, reinforcing Canada's position as a supplier of premium quality barley and malt, and increasingly these new varieties are being accepted by domestic and international maltsters and brewers.

Yields

New Canadian malting barley varieties have significant yield improvements over their predecessors. Provincial seed guides indicate yields among the new varieties are approaching the most widely grown feed barley variety CDC Austenson.

Provincial Yield Data

Alberta*	
% of AC Metcalfe	
AC Metcalfe	100%
CDC Austenson	113%
AAC Synergy	113%
CDC Bow	104%
AAC Connect	104%
CDC Fraser	109%

Saskatchewan**	
% of AAC Synergy	
AAC Synergy	100%
CDC Austenson	102%
CDC Bow	94%
AAC Connect	98%
CDC Fraser	100%

* AC Metcalfe is used as the check variety in Alberta against which yield data from other varieties is compared.

Source: <https://www.seed.ab.ca/variety-trials/cereals/>

** AAC Synergy is used as the check variety in Saskatchewan against which yield data from other varieties is compared.

Source: http://saskseed.ca/wp-content/uploads/2020/12/Saskatchewan-Seed-Guide_2021.pdf

Lodging

In many environments, new Canadian malting barley varieties have improved standability with **good to very good lodging resistance** compared with older varieties. As a result, farmers may be able to boost fertilization rates.

Note: In environments where conditions combined with agronomic management (high rates of nitrogen fertilizer) are favorable for lodging, the new cultivars may still lodge.

Protein

Over the years, farmers have been told that to be selected, protein levels in malt barley should be kept low. But in today's market, partly due to growing exports, higher protein levels are often acceptable. The North American malting and brewing industry is generally looking for protein between 10.5-12.5%, while off-shore markets like China are looking for higher protein levels ranging from 11.0-13.0%. If producers are growing malting barley without a contract, it is likely to go to for export where demand is for higher protein.

As a result, if a farmer typically has lower protein levels in malt barley, they may be able to boost yield with added nitrogen without pushing protein levels beyond the selectable range. And as new varieties tend to have protein content 0.5-1.0% lower than AC Metcalfe, they may be able to handle additional nitrogen application without exceeding acceptable protein levels for malt.

Desired Protein Ranges by End User

Market	Protein
China Brewers	11.0-13.0%
N. Am/Export Brewers	10.5-12.5%
All Malt/Craft Brewers	10.0-11.5%

Note: Producers should talk with an agronomist to ensure appropriate fertilizer rates to avoid lodging and meet target quality parameters such as protein.

Benefits to Farmers

New Canadian malting barley varieties offer important agronomic benefits to producers and are increasingly accepted by domestic and international maltsters and brewers. By choosing to grow a malting barley variety, producers ensure they have access to an additional 2.5 million tonne market place which generally offers a premium of \$0.50-1.00 per bushel over feed barley.

Sources of Information

To find the most up-to-date information for each variety, refer to your province's seed guide to find data and seed distributors. Variety selection should consider yield, agronomic and disease indicators that align with farm-specific needs.

- [Saskatchewan Seed Guide](#)
- [Alberta Seed Guide](#)
- [Manitoba Seed Guide](#)

See also the [CMBTC's Recommended List](#) for the list of barley varieties that have the greatest potential to be selected for malting.

Note: Producers should talk to their local maltster, grain buyer, or contact their provincial grower association or the [CMBTC](#), to discuss which varieties are most suitable to grow in their region.

The CMBTC recommends that producers have a contract when growing malting barley, particularly newer varieties.

Crop Protection Products

Farmers should refer to the [Keep it Clean](#) campaign regarding acceptable crop protection products for malting barley. Pre-harvest desiccants and glyphosate are not accepted by the malting industry. Newly registered plant growth regulators in Canada may be accepted by some end-users, but farmers should check with their grain buyer before using these products.

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For more information

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Information on New Canadian Malting Barley Varieties

Canadian malting barley is recognized by end-users around the world for its contribution to creating high-quality end products including malt and beer. Recently registered varieties such as CDC Bow, AAC Connect and CDC Fraser are the next generation of varieties that will replace older cultivars such as AC Metcalfe and CDC Copeland. With excellent agronomic characteristics and improved yield potential, the new varieties will be attractive to Canadian producers. Also the excellent malting and brewing characteristics of these new varieties will reinforce Canada's value proposition.

CDC Bow has very good standability, lower protein and medium enzymes. CDC Bow is a great option for producers that struggle with lodging. Its quality is suitable for the macro-brewing industry including adjunct brewers and export markets like China, Japan and Mexico, and may also be suitable for craft or all-malt brewers. CDC Bow is increasingly accepted by both domestic and international maltsters and brewers. *Contact your local SeCan seed grower for more information on performance in your area.*

AAC Connect is a widely adaptable variety that has moderate resistance to FHB (i.e. low DON accumulation) and a great option for producers across the prairies. Its quality is suitable for the macro-brewing industry including adjunct brewers and export markets like China, Japan and Mexico, and for craft or all-malt brewers. AAC Connect is increasingly accepted by both domestic and international maltsters and brewers. *Contact your local CANTERRA seed grower for more information on performance in your area.*

CDC Fraser has exceptional grain yield, good lodging resistance and is a highly enzymatic malting barley variety particularly suited to high-adjunct brewers and markets like China, Japan and Mexico. CDC Fraser is a great option for producers in drier climates where pre-harvest sprouting is typically not an issue including southern and central Alberta, as well as western, southwestern and central Saskatchewan. CDC Fraser is in the initial phase of acceptance by domestic and international maltsters and brewers. *Contact your local SeCan seed grower for more information on performance in your area.*