FIELD NOTES

Message from the Chair



As the harvest season closes I hope everyone had a safe and successful season. With the barley in the bins it is a time to look at getting it to our customers and planning for the next crop. SaskBarley is actively involved in many areas including policy development, research collaboration

and investment, and market development activities, with the goal of developing a profitable and sustainable barley industry within the province.

An important area we are working on for barley producers is variety development within Canada. SaskBarley is a member in the new Wheat and Barley Variety Working Group (WBVWG) which includes representatives from all Western Canadian producerelected cereal associations, with the Western Grains Research Foundation acting as facilitator. The goal of the WBVWG is to: "have world class sustainable wheat and barley variety development programs contributing to increased net profitability per acre for Canadian producers." The next meeting of the WBVWG in November will result in the release of a consultant report in December 2015. The report will present an objective business case analysis of a range of options for producer involvement in wheat and barley variety development. Producers will be consulted in the new year, and asked for their input before the project moves forward.

Along with superior barley varieties, a reliable and transparent transportation system to move grain to market is critical to Saskatchewan producers. In July SaskBarley co-hosted the Farmer Forum for Grain Transportation with the Agricultural Producers Association of Saskatchewan and the Saskatchewan Wheat Development Commission. The purpose of the event was to focus on the path forward for grain transportation and to ensure producers' concerns over transportation are at the forefront as a solution is forged over the coming months. Full presentations are available to view on the SaskBarley website under Events (www. saskbarleycommission.com/industry-events)

NOVEMBER 2015 EDITION

This fall is also a season of change for Saskatchewan barley producers. October 19th saw a new federal majority government elected. SaskBarley is committed to working with the new government to ensure issues important to producers, such as transportation of grain, still see progress. SaskBarley is also in the middle of its own election. I highly encourage you to participate in this election as the directors are your voice, and guide the direction of SaskBarley and the use of your levy dollars. Completed ballots must be received by the returning officer by 4:00 pm CST on December 2.

In closing I would like to invite you all to the SaskBarley Annual General Meeting on January 11, 2016 from 2:15 pm to 3:15 pm at TCU Place in Saskatoon.

Cam Goff – Chair, SaskBarley

MARK YOUR CALENDARS!

SaskBarley Annual General Meeting January 11, 2016 2:15 - 3:15 pm TCU Place Saskatoon, SK



2014-2015 Board of Directors

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Message from the Executive Director



As I talk to Saskatchewan barley producers, two questions dominate my conversations; where are the new barley varieties? And, why are there two check-offs deducted on my cheque? These two questions significantly influence the current and future barley industry; and both are issues that SaskBarley is taking an active role in during the 2015-2016 crop year.

The first question of access to new and agronomically

improved barley varieties requires a strategic approach at all levels of the supply chain. It is not enough that we have a world class barley breeding program, we have to ensure that the new varieties that are developed are accepted at all levels of the supply chain. This includes seed companies, farmers, maltsters and brewers. This is one of the key priorities for SaskBarley. Through continued work with the entire value chain, we are pushing for greater acceptance of these new varieties so that farmers can access them and realize the benefits on their farm.

Part of the development and acceptance of new varieties includes key institutions, such as the Crop Development Centre (CDC) and the Canadian Malting Barley Technical Centre (CMBTC). The CDC operates a world class barley breeding program, while CMBTC also conducts research on malt varieties and helps facilitate market development. Both organizations also receive some of their funding through check-off dollars from the Western Canadian Deduction. As the months roll down to July 31, 2017 we want to ensure these organizations have the stability to continue exceptional research and market development activities for Saskatchewan barley farmers. We also want to ensure that the producers paying the levy fees have greater input into where their dollars are going. For more information on the WCD please see the article in this newsletter. By transitioning the WCD levy and the SaskBarley levy to one check-off fee, we can strengthen Saskatchewan barley producers' voice through more direct representation and increased efficiency.

If you have questions or concerns about your check-off dollars, please feel free to call one of the SaskBarley directors, our office, or come out to our AGM in Saskatoon on January 11, 2016. We welcome your input.

Jillian McDonald Executive Director, SaskBarley

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Want to receive this newsletter by email? Send your request to: jvancleemput@saskbarleycommission.com



SaskBarley DEVELOPMENT COMMISSION Annual General Meeting

Monday January 11, 2016 2:15 to 3:15 PM Gallery A TCU Place Saskatoon, SK Registration January 11, 2016 1:15 - 2:15 PM Gallery A TCU Place Saskatoon, SK

SaskBarley AGM held in conjunction with Cropspere 2016

You do not need to be registered for Cropsphere to attend the AGM. You will require an AGM ONLY attendance pass available for pick up at the Conference Registration Desk









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Calgary, AB — Canadian International Trade Minister Ed Fast has announced an agreement that officially solidifies a Trans-Pacific Partnership (TPP) deal that includes Canada. The Barley Council of Canada (BCC) and its members are extremely pleased with the negotiation results for barley.

"We'd like to thank Minister Fast, Minister Ritz and their entire negotiation team and support staff for their tireless work on concluding a TPP deal that enables Canadian exporters the ability to continue to grow and ensure Canada's future agri-food economic prosperity and security," says BCC chair Brian Otto.

The future for Canada's barley industry looks a lot brighter now that it will have predictable, increased, and secured access into major TPP markets, such as Japan.

"The TPP is good news for Canada's barley industry," says Otto. "It grants us additional market access opportunities, reduces and eliminates tariffs, and secures specific volume provisions in markets that would otherwise have cost us more concessions and less benefits if we had to negotiate our way back into the TPP at a later date." As one of the 12 member countries of the TPP, it will enable Canada and its co-members the opportunity to set the conditions of entry for other prospective countries who want to participate in this historic trade deal.

"Our entire barley value chain is eager to capture the opportunities that will now open up for Canadian barley," says Otto.

More export opportunities for Canadian beef and pork will also significantly increase domestic demand for feed barley.

"The Canadian barley industry will reap the rewards of increased beef and pork sales, as over 65 percent of harvested barley goes towards feed production for livestock," says Otto.

The TPP agreement is a complex regional trade agreement. Canada negotiated with 11 other countries that collectively represent 40 per cent of global GDP, or around \$28 trillion, as well as 800 million people.

Caitlan Carver Manager, Communications and Stakeholder Relations 403-219-6263 ccarver@barleycouncil.com BarleyCanada.com

Conseil de l'orge du Canada



Barley Council _{of} Canada



In 2012, the federal government established a transitional check-off on wheat and barley called the Western Canadian Deduction (also known as the Western Wheat and Barley Check-Off). For barley, this transitional check-off was designed to provide stable funding directly to the Canadian Malting Barley Technical Centre (CMBTC) and to an important selection of research initiatives administered through the Western Grains Research Foundation (WGRF). These initiatives included core funding agreements for public breeding and variety development, and cluster projects. Prior to 2012, an export levy on barley sold by the Canadian Wheat Board provided funding to these programs.

The transitional Western Canadian Deduction check-off was established with the intention to provide an operational bridge until each newly established provincial grower commission, like SaskBarley, would have the capacity to assume those responsibilities. The transitional check-off administrative agreement sunsets as of July 31, 2017.

Over the past year, SaskBarley has been working

with the other cereal grower organizations across Western Canada that will be jointly assuming these responsibilities in order to ensure a seamless transition to this new era of governance. We have also been in contact with the recipients of the Western Canadian Deduction funding to provide assurance that as long as they continue to provide value to producers, there will be stability in funding to continue important long-term work.

The proposed changes will bring value to Saskatchewan barley producers by:

- Increasing efficiency and effectiveness of levy administration
- Strengthen Saskatchewan barley producers voice through more direct representation
- Provide long term stability to market development and public research programs that have and continue to serve producers well.

Watch for the more detailed proposal on this transition with your 2016 AGM material. We look forward to your feedback and the discussion at our AGM at 2:15 pm on January 11, 2016 in Saskatoon.

ELECTION REMINDER COMPLETED BALLOTS MUST BE RECIEVED BY THE RETURNING OFFICER BY 4:00 PM CST DECEMBER 2, 2015





adapted from the Alberta Barley "Barley Grain - Feed Industry Guide" First Edition 2015

Barley variety, growing conditions, method of harvest and storage all have implications in the final quality of feed barley. An understanding of how each factor affects quality allows a farmer to produce the best quality crop possible.

TYPE OF BARLEY

Barley type, two- or six-row and hulled or hulless, can result in differences in feed intake and feed efficiency. Two-row varieties tend to produce larger kernels per plant and better feed barley. Six-row varieties tend to produce less plump kernels, especially under dry conditions, and this can result in lower starch content and higher protein and fiber. Fiber is less digestible therefore these kernels provide less available energy when fed to livestock.

In Canada, 99% of barley grown is hulled varieties. Hulless barley has higher crude protein and lower crude fiber than hulled barley as the hull accounts for a large portion of the crude fiber. Hulless barley also contains higher levels of β -glucan. β -glucan is undesirable in malting but is highly desirable in human food barley as it is linked to health benefits. Hulless feed barley has been shown to have higher digestibility, protein and energy content and lower fiber than hulled barley. The higher β -glucan can be problematic when feeding to swine and poultry. While hulless barley has beneficial characteristics in terms of livestock feed there are issues faced by the producer including lower yields, lack of premium and difficulty segregating it from hulled barley within the grain transport system.

TIMING OF BARLEY SEEDING

With the relatively short growing season in Canada and the fact that barley tends to mature earlier than other major crops, the majority of barley is seeded later in the spring after other crops. Early seeding (early April to May) benefits barley versus later seeding (Late May to Early June). Early seeding can result in 10% increase in yield and a 25% increase in net economic return versus later seeding in eight regions across Western Canada (exception being Peace River region in Northern Alberta where later seeding resulted in 7% increased yield and 30% increase in net economic return). Timing of seeding did not have a significant effect on feed value of barley.

SEEDING RATE

Producers should determine their seeding rates based on seeds sown per unit area rather than kernel weight basis (as previous barley production guides have recommended) as seed size varies among varieties and seed lots. In the past there has also been a recommendation to seed at relatively low rates (100-200 seeds per m²) to obtain plump kernels important for malting grade. Recent studies performed across Western Canada have shown seeding hulled barley at 300 seeds per m² optimized yield, reduced protein and β -glucan content and improved kernel uniformity while having little to no effect on other feed quality traits (Peace River being the exception again with 200 seeds per m² or lower being optimal). In all regions seeding at 200 to 300 seeds per m² produced the highest net economic returns. Seeding hulled barley above 300 seeds per m² lowered yields and economic returns and reduced kernel plumpness likely due to greater lodging.

Seeding rate for hulless barley should be at a rate higher than 400 seeds per m^2 to optimize plant establishment as damage to the embryo during seeding can result in reduced germination and plant establishment. Higher seeding rates can result in an increase in kernel uniformity and lower β -glucan positively affecting malting and feed quality. Uniform kernels are desired in processing feed in the roller mills as they help achieve optimal processing.

FERTILIZING BARLEY

While fertilization application is best determined through soil testing, nitrogen is usually the most limiting nutrient in arable soils in Canada. Numerous studies have shown that both barley yield and protein content increase with an increase in the nitrogen rate. Limiting nitrogen is sometimes recommended to malting barley growers to avoid excessive kernel protein which can result in rejection for malting. Nitrogen also affects feed barley quality. While high protein content is not as major a concern with feed barley, an increase in protein will result in a decrease in starch content. Studies over three years at eight locations in Western Canada have shown that increased nitrogen rates decreased starch content, and increased β -glucan, soluble fiber and lysine content of barley kernels. The increase in lysine is an important feed characteristic as lysine is a very important feed component for livestock. While nitrogen does affect barley characteristics it is not as profound an effect as in malting barley production.

DISEASE MANAGEMENT

Proper crop rotation is an important tool in pest and disease management. Rotating barley with oilseed and pulse crops can reduce incidence of disease including common rot root, net blotch and scald. Rotating barley with...*con't on next page*





Please direct any questions related to elections to: Returning Officer, Ann Smith, 306-975-6853. Questions related to the Commission, the Regulations governing formation of the same or the collection of the levy should be directed to: Jillian McDonald, Executive Director 306-370-7237

canola or field peas not only reduces disease but improves barley yields.

Fusarium head blight (FHB) is of special concern as the fungus produces toxins including deoxynivalenol (DON) and it causes yield and quality loses. There is zero tolerance for DON in malting barley and swine are sensitive to the toxin. In addition to crop rotation, selection of disease resistant feed varieties and systemic fungicide application can mitigate the incidence. Tworow barley varieties are more resistant to (FHB) than sixrow due to their head architecture. Seed treatments are not an effective preventative measure as the inoculum comes from crop residue.

HARVEST AND STORAGE

Barley can be straight combined or swathed to dry. Swathing reduces losses from insects and shattering and reduces problems associated with harvesting grain with green kernels and green undergrowth. Barley for feed and malt should be threshed when grain moisture is less than 14.5 and 13.5% respectively. Barley should not be threshed at moisture higher than 20% or dried above 43°C to preserve grain quality.

Straight combining is preferred by some producers when seed moisture is less than 13.5% and conditions are favourable. Straight combining should be avoided if the crop is excessively weedy or secondary growth has occurred, Green material may cause heating in storage and result in grain spoilage.

Several issues including moulds, insects and chemical changes can adversely impact the nutritional value of grain and are usually related to excessive moisture. During storage, moisture content should be 13% or less and the temperature below 10°C. Aeration systems can provide a safe an economical method for keeping moisture and temperature ideal for storage. Bins should be checked for insects and mould at least every 2-3 weeks.

THE SASKATCHEWAN BARLEY DEVELOPMENT COMMISSION:

The Saskatchewan Barley Development Commission was established in 2013 under the Agri-Food Act, 2004

SASKATCHEWAN BARLEY DEVELOPMENT COMMISSION (SaskBarley)

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