

2025 Product Guide

CANOLA | SOYBEANS | FORAGES & CORN | BIOLOGICALS | SEED PRODUCTION

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From Your Friend In The Field

This is a real field. You're a real farmer. So that's where we keep our focus.

At BrettYoung, we focus on what's real, like good products, good information, and good local choice. It's how we've become Canada's Largest Independent Seed Company. Read on to see how we can help your farm.





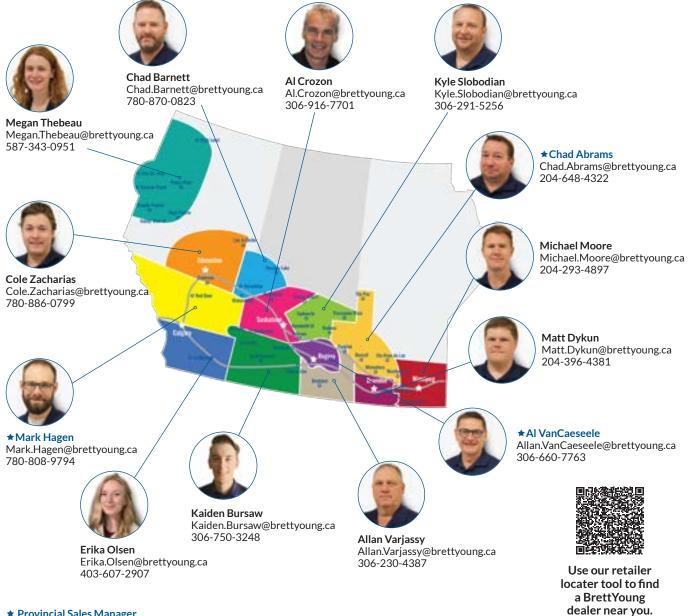
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Regional Account Manager (RAM) Territory Map

BrettYoung RAMs are spread out across the Prairies to work directly with you in your community and offer product and agronomic support. Reach out to yours with any questions.

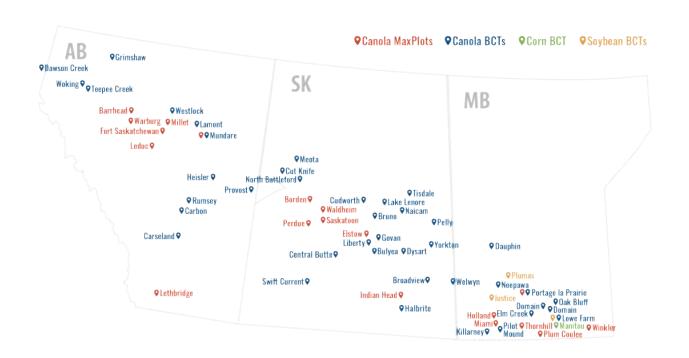


★ Provincial Sales Manager

Performance Trials

BrettYoung Comparison Trials (BCTs)

The BCTs compare BrettYoung commercial and pre-commercial canola, soybean, and corn varieties against other industry leading products. The BCT sites are replicated field-scale strip trials managed by growers and agronomists or a BrettYoung RAM. BCTs allow you to see each product's agronomic characteristics while generating local yield data to assess product performance across different geographies. The latest product insights and trial results will be published in the fall of 2024 – you can view them at **brettyoung.ca/product-performance**.



2024 BCT and MaxPlot Locations

Canola MaxPlots

In partnership with DL Seeds, MaxPlots were established to showcase new hybrids from the DL Seeds' breeding program along with BrettYoung commercial products. The MaxPlots consist of entries with hybrids from the LibertyLink[®] and TruFlex[®] herbicide systems compared together at many sites across Western Canada. These sites allow BrettYoung, DL Seeds, and you to assess new advancements in canola genetics and how they compare to familiar commercial products. This is a great opportunity to have a glance, in a small-plot format, at what's to come.

Speak with your retailer or local BrettYoung RAM to arrange a visit to any of our trial sites this season.

Canola

The first in our new generation of LibertyLink[®] hybrids is here. BY 7204LL is our premier LibertyLink hybrid, equipped with Pod DefendR[®], our shatter reduction trait, and Clubroot DefendR, next-generation clubroot resistance. With strong yield potential, excellent standability, and the LibertyLink herbicide system, you can have it all with BY 7204LL.

We will also have limited quantities available of our newest TruFlex hybrid - BY 6219TF. This mid-maturity hybrid has the Pod DefendR and Clubroot DefendR traits, very good standability and is suited to all season zones.

Keeping Clubroot Under Control

Clubroot has been ravaging fields in Western Canada for almost two decades now. The soil-borne disease causes galls to form on the roots of canola plants, eventually killing them prematurely. It's well documented in intensive clubroot zones that short canola rotations are a serious factor in aggravating the disease and creating conditions for it to thrive in, allowing new pathotypes to emerge.

The University of Alberta has identified over 43 clubroot pathotypes in Western Canada, of which 25 pathotypes are able to overcome some sources of clubroot resistance. Pathotype 3A is the most common in the region, followed closely by 3H and 3D.

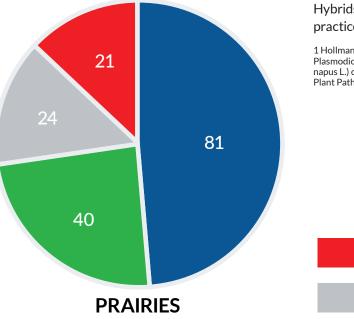
Clubroot is spread easily through soil movement. Root galls release spores back into the soil where they remain dormant until susceptible plants are grown again. So, if you can't prevent it, what can you do?

BrettYoung's Clubroot DefendR: Broad Resistance with a Multi-Genic Approach

Selection of a Clubroot DefendR hybrid is a strong step in the fight against clubroot. Along with the identification of new pathotypes, plant breeders have been identifying and incorporating new sources of resistance into their latest canola hybrids. This includes the stacking of multiple sources of clubroot resistance in hybrids like the new BY 7204LL and BY 6219TF, plus BY 6216TF and BY 6217TF. These hybrids have resistance to the older pathotypes that were first identified on the Prairies (2F, 3H, 5I, 6M, and 8N), and several recently discovered resistance-breaking pathotypes.

BrettYoung, through our primary canola genetics supplier, DL Seeds, continues to screen clubroot resistant hybrids against the most common and newly emerging clubroot pathotypes.

Choose BrettYoung's Clubroot DefendR hybrids for areas where resistance breakdown is suspected and in other areas to minimize clubroot spore buildup. Hybrids thrive with help from other agronomic practices such as crop scouting and crop rotation.



1 Hollman, K.B., Hwang, S.F., Manolii, V.P., Strelkov S.E. 2021. Pathotypes of Plasmodiophora brassicae collected from clubroot resistant canola (Brassica napus L.) cultivars in western Canada in 2017-2018. Canadian Journal of Plant Pathology. DOI: 10.1080/07060661.2020.1851893

3D

3A

Other

3H

Fig. 1 Prevalence of Plasmodiophora brassicae pathotypes across the Canadian Prairies. Based on collections made from canola crops in 2017 and 2018. One hundred and sixty-six P. brassicae field isolates were tested, including 146 from Alberta, and 10 from each of Manitoba and Saskatchewan. Pathotype classifications are according to the Canadian Clubroot Differential set.

DEFENDR Genetic Traits

DefendR is an easy-to-understand approach that highlights the superior harvest management and disease resistance genetics developed by our primary canola breeding partner, DL Seeds. The DefendR trait platform is gene-driven and can be an important piece of your overall canola management and production strategy. BrettYoung uses the DefendR designation to signal genetic tolerance to pod shatter and durable resistance to two prominent disease complexes affecting canola: clubroot and blackleg.

DefendR Traits

Trait	Minimum Resistance Level	Hybrids
DEFENDR.	A dependable level of shatter tolerance, well suited to straight-cut or delayed swathing harvest systems. Pod DefendR-rated hybrids score a minimum of 7.0 on the Canola Council of Canada's canola shatter rating scale.	BY 7204LL BY 6219TF BY 6217TF BY 6211TF
DEFENDR.	Multi-genic (multiple major genes) resistance to blackleg, and a strong resistance (R) rating for adult plant blackleg resistance.	BY 6217TF BY 6216TF BY 6214TF BY 6211TF
DEFENDR	Stacked 1st and next-generation clubroot resistance genes that provide protection against a broad array of established patho- types like 3H and newer pathotypes such as 2B, 3A, and 3D.	BY 7204LL BY 6219TF BY 6217TF BY 6216TF BY 6214TF

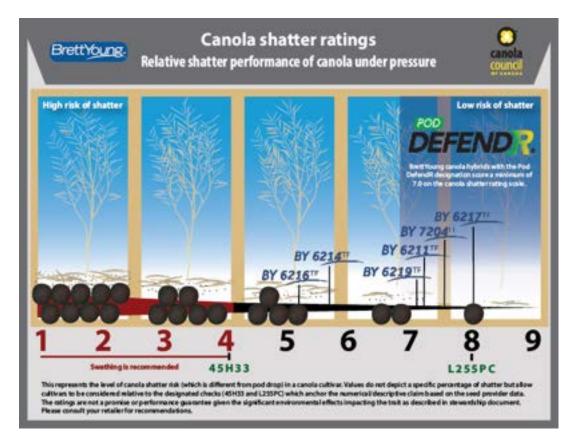
The introduction of pod shatter-resistant hybrids to canola growers several years ago led to a significant increase in adoption of both direct harvesting and delayed swathing of canola crops. BrettYoung canola growers can now enjoy this same flexibility because of our new pod shatter resistance trait, which delivers the dependable levels of shatter tolerance expected by today's growers.

Pod shattering, and the seed dispersion associated with it, is a survival mechanism found in nature and, despite decades of breeding and domestication, canola pods still have a natural tendency to split and open at maturity, with the goal of scattering seeds. Plant breeders and trait developers have been working to understand the physiology of canola pod ripening and pod shatter mechanisms.

DL Seeds, and its parent companies, have researched their own solutions, and what has emerged is an understanding of a complex pathway of gene interaction that controls pod valve function.

Much of this work has meant isolating specific genes from other brassica species and breeding them into canola to interrupt these shatter-inducing pathways. If you've ever grown mustard, you're aware of the substantial pod shatter resistance in that crop.

The result is Pod DefendR, a specific genetic trait that reduces pod tension built up at maturity and ultimately, the tendency for canola pods to split at the pod dehiscence zone (pod seam) that holds both sides of the pod (valves) together.



BrettYoung canola hybrid pod shatter resistance scores are developed through internal and breeder trial data.



Blackleg is a disease that has made a resurgence in intensive canola production areas. Most agree that a combination of crop rotation, crop management (including regular field scouting), and proper hybrid selection are important factors to reducing the impact of this disease.

The Blackleg DefendR trait means the BrettYoung canola hybrid is rated as resistant (R) to blackleg. It also means the hybrid incorporates multiple major genes to be completely resistant against specific races of the pathogen. Blackleg DefendR hybrids achieve an enhanced level of resistance compared to competitor's R-rated hybrids.



Clubroot is now established in all three Prairie provinces. Since 2013, when the first resistance-breaking pathotype was identified in Alberta, several new and more virulent pathotypes have evolved that can evade what is known as 1st generation (Mendel-type) resistance. The Clubroot DefendR trait indicates the canola hybrid has 1st generation resistance stacked with newer, next-generation clubroot resistance gene(s). This approach means resistance to the older, first-identified pathotypes, but also resistance to recently identified ones like 3A, 3D, and 3H. DL Seeds has a robust pipeline coupled to high performance hybrids that BrettYoung will continue to commercialize to support you in keeping one step ahead of this impactful disease. For the latest around the conversation on clubroot see the article on page five of this guide.

Managing Blackleg with Stubble Tests

Crop scouting is always the first step when managing blackleg. Assessing the level of incidence and severity of blackleg in the field can help growers to develop an estimate of blackleg risk for the future. There are two main management strategies once growers know what they're dealing with, one is crop rotation. A minimum two-year break between canola crops allows for crop residue housing the blackleg-causing pathogen to break down. A second way to manage the disease is by growing blackleg-resistant canola hybrids.

Fortunately, as blackleg advances, so do we. One of the biggest steps some of the industry has taken recently is labelling the major blackleg resistance genes found in their canola hybrids, something BrettYoung has been doing for years. This is important information as it can be used to rethink the approach towards effective blackleg management.

Canola hybrids use two sources of resistance – quantitative and qualitative (major gene). Quantitative resistance is a sort of "catch-all", meaning it has numerous genes working together to slow the infection of blackleg in your canola plants. Because quantitative resistance has so many genes working within it, it's more difficult to classify and harder to screen for. Qualitative resistance, on the other hand, are major genes that stop blackleg right at the site of infection. BrettYoung Regulatory & Agronomic Services Manager Justine Cornelsen said the industry's shift to labelling major genes and paired with quantitative resistance is a good thing as it provides more concrete protection for growers.

"With quantitative resistance, you have multiple genes working together to slow the pathogen down as it moves through the plant," said Cornelsen. "This minimizes the overall severity of the disease but doesn't eliminate it. Qualitative resistance is when a major gene matches an avirulence gene within the blackleg pathogen to initiate a defense response within the plant, that stops the pathogen at the site of infection." One of the most common avirulence genes found in fields across Western Canada where blackleg is present is AvrLm7, and with the Rlm7 major resistance gene recently deployed in Canada, a few canola hybrids now have a new tool to defend with. The blackleg pathogen is known as *Leptosphaeria maculans*. Blackleg stubble tests determine the pathogen genotype and phenotype, the phenotype being the important information for growers with blackleg concerns. The phenotype results will show growers the blackleg races present in their field, which is useful when making hybrid decisions for the field.

Identifying the Avirulence Profile

Leptosphaeria maculans races Phenotype: AvrLm2-4-5-6-7-11 (25%) AvrLm4-5-6-7-11 (50%) AvrLm1-4-5-6-7 (25%)

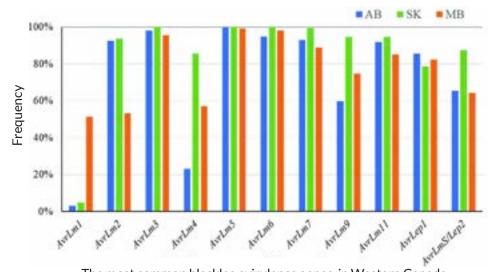
Corresponding R-genes to initiate defense response: RIm4, RIm5, RIm6, & RIm7

Figure 1. An example of stubble test results showing the identified races. Note RIm5 and RIm6 aren't yet in Canadian germplasm.

Growing a canola hybrid with blackleg resistance is the main way to combat the pathogen. When purchasing seed for the year, Cornelsen said it's imperative to choose a hybrid with at least one major gene that will match the avirulence genes present in your field — having just one match will ensure your crop is protected from blackleg.

"If you don't have that information, you're pretty well guessing," she said. "Stubble tests are the only way to know which *L. maculans* races are in your field, so they're the only way to know how which major genes you need."

One of the most predominant blackleg avirulence genes in Western Canada is AvrLm7. With the addition of the Rlm7 resistance gene to canola hybrids, Cornelsen said there's a good chance most growers with blackleg issues will have much stronger success in minimizing disease pressure if they're growing a hybrid with that major gene as it matches 90% of *L. maculans* races detected in the region.



The most common blackleg avirulence genes in Western Canada

Figure 2. Avirulence (Avr) gene frequencies in the population of *Leptosphaeria maculans* on the Canadian Prairies in 2021. The higher an Avr-gene frequency, the greater chances for the corresponding R genes to be effective in a region.

Like most pathogens, *L. maculans* changes with time to build tolerance towards resistance genes. Cornelsen noted the Rlm3 resistance gene is a good example of this — the gene has been used in Western Canada for so long, it's rarely seen in *L. maculans* races anymore or is suppressed by other genes.

BrettYoung currently has four canola hybrids with the RIm7 resistance gene:

- BY 7204LL
- BY 6219TF
- BY 6217TF
- BY 6216TF

BY 6217TF has both the RIm3 and RIm7 genes, while BY 6216TF, BY 6219TF, and BY 7204LL have just the RIm7 gene. The quantitative resistance in each hybrid also helps slow the rate of infection from the few remaining races that don't include AvrLm7.

L. maculans phenotype	Major Resistance Genes	BrettYoung Hybrids to Utilize
AvrLm4-5-6-7-11	RIm4, RIm5, RIm6, RIm7, RIm11	BY 7204LL, BY 6219TF, BY 6217TF, BY 6216TF
AvrLm2-3-5-9-S	Rlm2, Rlm3 , Rlm5, Rlm9, Rlm5	BY 6214TF, BY 6211TF, BY 5125CL

Selecting a BrettYoung canola hybrid based on common L. maculans races.

Growers across the Prairies can submit canola plants to the following testing labs for blackleg detection and *L. maculans* race identification:

- Manitoba's Pest Surveillance Initiative (PSI) Lab
- Discovery Seed Labs
- 20/20 Seed Labs
- SGS Canada Labs

Consult the Canola Council of Canada's website (blackleg.ca) for the latest information on blackleg management.

References

Figure 1. Soomro W, Kutcher HR, Yu F, Hwang SF, Strelkov SE, Fernando WGD, McLaren D, Peng G. 2021. Race structure of Leptosphaeria maculans in western Canada between 2012 and 2014 and its influence on blackleg of canola. Can J Plant Path. 43: 480-493. Figure 2. Liu F, Zou Z, Peng G, Fernando WGD. 2021. Leptosphaeria maculans isolates reveal their allele frequency in western Canada. Plant Disease 105: 1440–1447.

Canola Portfolio

Realize your yield potential with BrettYoung canola. BrettYoung has industry-leading hybrids in the TruFlex, LibertyLink, and Clearfield systems, sourcing the best technology and genetics to keep your operation profitable.

BrettYoung's premium canola genetics also carry the DefendR trait platform as part of an active disease and harvest management strategy. A variety of maturity and DefendR trait combinations will help you find the best canola hybrid fit for your farm.



For product performance information scan this QR code or visit brettyoung.ca/product-performance.

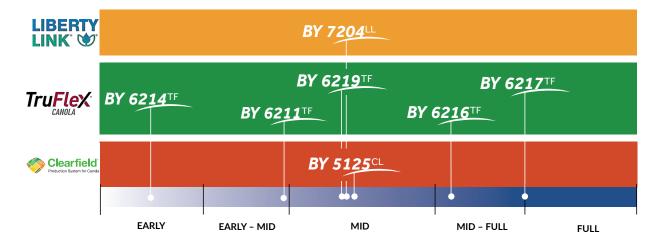
	Variety	Herbicide System	Yield Rating ¹	Blackleg Rating	Blackleg Major Gene	Clubroot Rating	DefendR Disease Designation
NEW	BY 7204LL		105%	R – E ₂	RIm7	R (Next-generation* resistance)	DEFENDR.
NEW	BY 62 <u>19</u> ™	TruFlex [®]	100%	R – E ₂	Rlm7	R (Next generation* resistance)	DEFENDR.
	BY 6217 ^{TF}	TruFlex CANOLA	106%	$R - CE_2$	Rlm3, Rlm7	R (Next generation* resistance)	
	BY 6216TF		102%	R – E ₂	RIm7	R (Next generation* resistance)	
	BY 6214 [™]	TruFlex [®]	103%	R - AG	RImS, LepR3	R (Next generation* resistance)	
	BY 6211 ^{TF}	TruFlex [®]	101%	R – AG	Rlm3, RlmS	-	DEFEND ?.
	BY 5125℃	Clearfield Production System for Canola	106%	R - C	Rlm3	R (1st generation** resistance)	_

Disease Management Rating: R = Resistant

² Pod shatter tolerance rating. This is based on the Canola Council of Canada's shatter tolerance scale of 1 – 9. 1 = poor, 9 = excellent. Results may vary slightly on your farm due to environmental factors and management practices.

¹ Yield and maturity ratings based on relative to check performance in co-op registration trials.

Canola Hybrid Maturities



Standability	Pod DefendR Rating	Maturity ¹
Excellent	DEFENDR. 7.5 ²	Mid
Excellent	DEFENDR. 7.1 ²	Mid
Excellent	DEFENDR . 8.0 ²	Mid - Full
Very Good	-	Mid - Full
Very Good	_	Early
Very Good	DEFENDR. 7.2 ²	Early - Mid
Excellent	_	Mid

Canola Seed Treatments

BrettYoung canola hybrids have a base treatment of Helix[®] Saltro[®] with optional add-on treatments of Fortenza[®] Advanced, BUTEO[®] start, and Fortenza.

Pests Controlled by Seed	Base With Optional Add-on Treatment				
Treatments	Helix Saltro	Fortenza Advanced	BUTEO start	BUTEO start + Fortenza	
Pythium spp.	\checkmark	\checkmark	\checkmark	\checkmark	
Fusarium spp.	\checkmark	\checkmark	\checkmark	\checkmark	
Rhizoctonia spp.	\checkmark	\checkmark	\checkmark	\checkmark	
Seed-borne Blackleg	\checkmark	\checkmark	\checkmark	\checkmark	
Airborne Blackleg	\checkmark	\checkmark	\checkmark	\checkmark	
Flea Beetles	\checkmark	\checkmark	\checkmark	\checkmark	
Leaf Hoppers	\checkmark	\checkmark	\checkmark	\checkmark	
Enhanced Flea Beetle Control		\checkmark	\checkmark	\checkmark	
Cutworms		\checkmark		\checkmark	

* Next-generation resistance includes pathotypes covered by 1st generation resistance plus resistance to newer pathotypes such as 3A, 3D, 3H, and other provalent pathotypes

prevalent pathotypes. ** 1st generation resistance means resistant to pathotypes 2F, 3H, 5I, 6M, and 8N (these are equivalent to pathotypes 2, 3, 5, 6, 8 on the Williams' Differential set).

Canola Hybrids





The Future of Canola Hybrid Technology is Here: Consistent, High-Yield Performance in a Mid-Maturity Hybrid with Pod and Clubroot DefendR Genetic Traits

- Pod DefendR durable shatter resistance technology
- DefendR-rated next-generation clubroot protection
- Strong early season vigour and excellent standability



BrettYoung's premier hybrid with Pod DefendR shatter resistance

- TruFlex canola hybrid equipped with the latest in herbicide trait technology
- DefendR-rated clubroot resistance
- Mid maturity suitable for all zones

Yield	Blackleg	Blackleg Major Gene	Clubroot	Standability	Maturity	Pod Shatter Tolerance Rating
100%	R – E ₂	Rlm7	R (Next-generation* resistance)	Excellent	Mid	7.1









Pod, Clubroot, and Blackleg DefendR Protection and Flexibility of the TruFlex Canola System

- Another BrettYoung canola hybrid with Pod DefendR a shatter reduction trait
- DefendR-rated clubroot and blackleg resistance
- Mid to full maturity suitable for mid- and full-season zones
- TruFlex canola hybrid equipped with the latest in herbicide trait technology

Yield	Blackleg	Blackleg Major Gene	Clubroot	Standability	Maturity	Pod Shatter Tolerance Rating
106% ¹	R – CE ₂	Rlm3, Rlm7	R (Next-generation* resistance)	Excellent	Mid - Full	8.0

Disease Management Rating: R = Resistant

 * Next-generation resistance includes pathotypes covered by 1^{st} generation resistance plus resistance to newer pathotypes such

as 3A, 3D, 3H, and other prevalent pathotypes.

¹ Yield and maturity ratings based on relative to check performance in co-op registration trials.

^{** 1}ª generation resistance means resistant to pathotypes 2F, 3H, 5I, 6M, and 8N (these are equivalent to pathotypes 2, 3, 5, 6, 8 on the Williams' Differential set).







A Mid-Maturity Hybrid with Full Season Yield Performance and DefendR-Rated Clubroot and Blackleg Protection

- DefendR-rated next-generation clubroot protection
- A unique blackleg major resistance gene effective against predominant blackleg races
- Mid-maturity suitable for mid and full-season zones
- TruFlex canola hybrid equipped with the latest in herbicide trait technology

102% ¹ R - E ₂ RIm7 R (Next-generation* resistance) Very Good Mid - Full 5.1	Yield	Blackleg	Blackleg Major Gene	Clubroot	Standability	Maturity	Pod Shatter Tolerance Rating
	102%1	R – E ₂	Rlm7	R (Next-generation* resistance)	Very Good	Mid - Full	5.1

TruFleX

BY 6214TF

High-Performing, Mid-Maturity Hybrid with Advanced Disease Resistance Traits

- · Pod integrity that is suitable for delayed swathing
- Next-generation clubroot resistance, including resistance to newer pathotypes such as 3A, 3D, 3H, and others
- DefendR-rated blackleg protection

Yield	Blackleg	Blackleg Major Gene	Clubroot	Standability	Maturity	Pod Shatter Tolerance Rating
103%1	R – AG	RImS, LepR3	R (Next-generation* resistance)	Very Good	Early	5.5

BY 6211TF

DEFENDR

New Level of Pod Shatter Resistance with Blackleg DefendR Protection

- Contains a genetic source of pod shatter resistance well suited to direct harvest and delayed swathing systems
- DefendR-rated multi-genic blackleg resistance
- Excellent yield potential with mid-season maturity

Yield	Blackleg	Blackleg Major Gene	Clubroot	Standability	Maturity	Pod Shatter Tolerance Rating
101%1	R – AG	Rlm3, RlmS	_	Very Good	Early - Mid	7.2

BY 5125^{CL}



An Outstanding Yield Performer in the Clearfield® Segment

- 1st generation** clubroot protection
- Blackleg resistant
- Can be marketed under the Clearfield (non-GMO) canola premium programs

Yield	Blackleg	Blackleg Major Gene	Clubroot	Standability	Maturity	Pod Shatter Tolerance Rating
106% ¹	R – C	Rlm3	R (1st generation** resistance)	Excellent	Mid	_

PROTECT THAT START OF THE SEASON FEELIN' FROM FLEA BEETLES

BUTEO[®] start is the powerful seed treatment that protects your canola and your start of the season spirit. BUTEO start is specifically engineered to defend your canola against early flea beetle pressure, delivering unparalleled protection right through the three-leaf stage putting you on the path to strong plants and even stronger yields. So make this year one for the record books and start strong with BUTEO start.



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BAYER ER R

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Soybeans

BY Deno XT is our exceptional soybean variety, with notable yield potential and disease resistance. With a relative maturity of 00.3, BY Deno XT is sure to be a fit on your farm.

We're introducing two new soybean varieties this year as well – BY Nebo XT and BY Arvon XT.

BY Nebo XT is our earliest variety with a relative maturity of 000.5. This variety has a robust defense package, offering protection against Soybean Cyst Nematode (SCN), Phytophthora Root Rot (PRR), and Iron Deficiency Chlorosis (IDC), and it promises growers exceptional yield in its category. BY Arvon XT has a relative maturity of 000.9 and combines impressive yields with strong disease resistance and performing exceptionally in the Red River Valley.

Soybean Portfolio

BrettYoung brings premium soybean products specifically suited to growing conditions in Western Canada. Our soybeans are high-yielding with a range of characteristics to meet the distinct challenges of your farm.

	Variety	Brand	Trait	Maturity	Pod Height	IDC	PRR	White Mould
	AMIRANI R2	ELITE	Ready 2 YIELD SOVBEANS	000.5 RM 2150 CHU	Very Good	Semi-Tolerant	VG Field Resistance (Rps 1k gene)	Very Good
NEW	BY NEBO XT	BrettYoung.	ROUNDUP READY 2 TEND SOYBEANS	000.5 RM 2150 CHU	Very Good	Semi-Tolerant	VG Field Resistance (Rps 1c gene)	Very Good
NEW	BY ARVON XT	BrettYoung.	ROUNDUP READY 2 TEND SOYBEANS	000.9 RM 2250 CHU	Very Good	Semi-Tolerant	VG Field Resistance (Rps 1ck gene)	Very Good
	BY HECTOR XT	BrettYoung.	ROUNDUP READY 2	00.1 RM 2300 CHU	Very Good	Tolerant	VG Field Resistance (Rps 1c gene)	Very Good
	BY DENO XT	BrettYoung.	ROUNDUP READY 2	00.3 RM 2375 CHU	Very Good	Semi-Tolerant	VG Field Resistance (Rps 1c gene)	Very Good
	AKRASR2	ELITE	Ready 2 VIELD SOVBEANS	00.3 RM 2375 CHU	Excellent	Tolerant	VG Field Resistance (Rps 1c gene)	Very Good
	BY ROBSON XT	BrettYoung.	ROUNDUP READY 2 TEND SOYBEANS	00.6 RM 2450 CHU	Very Good	Semi-Tolerant	Good Field Resistance (Rps 1c gene)	Good



Roundup Ready 2 Xtend[®] System — Minimize Weeds, Maximize Yields

Built on the high-yielding Roundup Ready 2 Yield[®] soybean technology, Roundup Ready 2 Xtend soybeans are the industry's first biotech-stacked soybean trait with both dicamba and glyphosate herbicide tolerance. With tolerance to glyphosate and dicamba, farmers will have access to additional tools to help control tough-to-manage broadleaf weeds.

The technology offers the yield and quality potential that farmers already know and trust from their Roundup Ready 2 Yield soybeans.



For product performance information scan this QR code or visit brettyoung.ca/product-performance.

SCN Resistant	Plant/Canopy Type	Plant Height	Row Spacing	Standability	Seedling Vigour	Hilum	Pubescence	Flower
_	Semi-Bushy	Tall	7" to 22"	Very Good	Excellent	Yellow	Brown	Purple
Yes	Semi-Bushy	Medium	7" to 22"	Very Good	Very Good	Black	Tawny	Purple
_	Semi-Bushy	Tall	7" to 22"	Very Good	Very Good	Black	Tawny	Purple
-	Bushy	Tall	7" to 22"	Very Good	Excellent	Black	Tawny	Purple
Yes	Semi-Bushy	Medium	7" to 22"	Very Good	Good	Black	Light Tawny	Purple
-	Semi-Bushy	Medium	7" to 22"	Excellent	Excellent	Imperfect Black	Grey	Purple
_	Semi-Bushy	Medium	7" to 22"	Excellent	Good	Black	Light Tawny	Purple

RM: Relative maturity; CHU: Corn heat units; IDC: Iron Deficiency Chlorosis; PRR: Phytophthora root rot; SCN: Soybean cyst nematode Excellent (E) > Very Good (VG) > Good (G) > Poor (P)

Benefits

- Employing multiple modes of action to control the same weed spectrum is part of a good weed resistance management strategy.
- Roundup Ready 2 Xtend soybeans are tolerant to both dicamba (Group 4) and glyphosate (Group 9) and are intended to provide soybean growers with the option of applying Roundup Xtend[®] 2 (an easy-to-use, premixed formulation), or

XtendiMax[®]2 (dicamba), or Roundup WeatherMAX[®] (glyphosate) herbicide for maximum weed control.

• The residual activity of dicamba may reduce early weed competition and improve late-season control, supporting higher yields, and cleaner fields at harvest.

To learn more, visit Traits.Bayer.ca

Soybean Varieties

AMIRANI R2



Performance Way Beyond Its Class

- Excellent yield potential
- Excellent spring vigour
- Excellent standability
- Extreme early maturity

Maturity	Pod Height	IDC	PRR	White Mould	SCN Resistant	Canopy Type	Plant Height	Standability	Seedling Vigour	Row Spacing	Hilum
000.5 RM 2150 CHU	Very Good	Semi- Tolerant	VG Field Resistance (Rps1k gene)	Very Good	No	Semi- Bushy	Tall	Very Good	Excellent	7" to 22"	Yellow



Strong Yield, Ultra-Early Maturity

- Strong defense package for excellent yield potential in ultra-early maturity
- Attractive phenotype and great performance in early market

Maturity	Pod Height	IDC	PRR	White Mould	SCN Resistant	Canopy Type	Plant Height	Standability	Seedling Vigour	Row Spacing	Hilum
000.5 RM 2150 CHU	Very Good	Semi- Tolerant	VG Field Resistance (Rps1c gene)	Very Good	Yes	Semi- Bushy	Medium	Very Good	Very good	7" to 22"	Black





Superior Early Performance

- Very competitive yield in this maturity
- Solid defense
- Very Good IDC, PRR, and white mould tolerance
- Tall plant

Maturity	Pod Height	IDC	PRR	White Mould	SCN Resistant	Canopy Type	Plant Height	Standability	Seedling Vigour	Row Spacing	Hilum
000.9 RM 2250 CHU	Very Good	Semi- Tolerant	VG Field Resistance (Rps1ck gene)	Very Good	No	Semi- Bushy	Tall	Very Good	Very Good	7" to 22"	Black





Strong Yields and Excellent Defensive Characteristics

- Strong yield potential and early maturity
- Excellent IDC and PRR tolerance and very good white mould
- Tall, bushy plant

Maturity	Pod Height	IDC	PRR	White Mould	SCN Resistant	Canopy Type	Plant Height	Standability	Seedling Vigour	Row Spacing	Hilum
00.1 RM 2300 CHU	Very Good	Tolerant	VG Field Resistance (Rps1c gene)	Very Good	No	Bushy	Tall	Very Good	Excellent	7" to 22"	Black

BY DENO XT



Outstanding Combination of Yield and Disease Resistance

- High yield potential
- Excellent defensive package with very good PRR and white mould

Maturity	Pod Height	IDC	PRR	White Mould	SCN Resistant	Canopy Type	Plant Height	Standability	Seedling Vigour	Row Spacing	Hilum
00.3 RM 2375 CHU	Very Good	Semi- Tolerant	VG Field Resistance (Rps1c gene)	Very Good	Yes	Semi- Bushy	Medium	Very Good	Good	7" to 22"	Black



The Standard in Pod Height

- Exceptional combination of yield, maturity, and dependable performance
- Widely adapted to provide high yield potential throughout early- and mid-season maturity zones
- Very high first pod

Maturity	Pod Height	IDC	PRR	White Mould	SCN Resistant	Canopy Type	Plant Height	Standability	Seedling Vigour	Row Spacing	Hilum
00.3 RM 2375 CHU	Excellent	Tolerant	VG Field Resistance (Rps1c gene)	Very Good	No	Semi- Bushy	Medium	Excellent	Excellent	7" to 22"	Imperfect Black

RM: Relative maturity; CHU: Corn heat units; IDC: Iron Deficiency Chlorosis; PRR: Phytophthora root rot; SCN: Soybean cyst nematode Excellent (E) > Very Good (VG) > Good (G) > Poor (P)





Big Yields and Great Standability

- Great yield potential
- Compact plant with excellent standability
- Excellent fit in the Red River Valley

Maturity	Pod Height	IDC	PRR	White Mould	SCN Resistant	Canopy Type	Plant Height	Standability	Seedling Vigour	Row Spacing	Hilum
00.6 RM 2450 CHU	Very Good	Semi- Tolerant	Good Field Resistance (Rps1c gene)	Good	No	Semi- Bushy	Medium	Excellent	Good	7" to 22"	Black



RM: Relative maturity; CHU: Corn heat units; IDC: Iron Deficiency Chlorosis; PRR: Phytophthora root rot; SCN: Soybean cyst nematode Excellent (E) > Very Good (VG) > Good (G) > Poor (P)

Forages & Corn

BrettYoung corn is designed specifically for silage and grazing in Western Canada. The perfect complement to our forage lineup, our three corn hybrids are broadly adapted to suit the conditions of your region, ensuring consistently high yields and dependable performance.

Whether you want the Roundup Ready[®] Corn 2 system or the VT Double PRO[®] RIB system, we've got it, making BrettYoung your full service forage supplier.

Corn Hybrids

BY BRAVA RR2



High Performance with Broad Adaptation

- High-yielding flint/dent ideal for silage and grazing
- Widely adapted for use across Western Canada
- White cob hybrid with excellent grain quality and slow drydown for a wider harvest window

Genetic Trait:	Roundup Ready [®] Corn 2
Relative Maturity:	78
Grain CHU:	2250
Silage CHU:	2150
Spring Vigour:	Good
Plant Height:	Medium-Tall
Stalk Strength:	Very Good
Root Strength:	Very Good
Drought Tolerance:	Very Good
Silage Potential:	Excellent
Ear Type:	Semi-Flex
Husk Cover:	Good
Test Weight:	Excellent
Drydown:	Slow
Target Population:	30-34 K
Northern Corn Leaf Blight:	Good
Goss's Wilt:	Good

BY GUERNSEY VT2P RIB



Great Performance with Insect Resistance

- High yielding flint/dent ideal for silage and grazing
- Excellent late season stay-green and eye appeal with good stalks and roots
- Early flowering white cob hybrid with high grain quality and slow drydown
- Consistent ear development down the row

Genetic Trait:	VT Double PRO [®] Corn
Relative Maturity:	78
Grain CHU:	2250
Silage CHU:	2150
Spring Vigour:	Good
Plant Height:	Medium-Tall
Stalk Strength:	Very Good
Root Strength:	Very Good
Drought Tolerance:	Very Good
Silage Potential:	Excellent
Ear Type:	Semi-Flex
Husk Cover:	Good
Test Weight:	Very Good
Drydown:	Slow
Target Population:	30-34 K
Northern Corn Leaf Blight:	Good
Goss's Wilt:	Good

BY BELMONT RR2



Consistent High Performance

- High-yielding hybrid well suited for silage and grazing in longer season areas
- Excellent root and stalk strength
- Broadly adapted to various soil types
- Impressive disease tolerance, including very good resistance to Goss's Wilt

Genetic Trait:	Roundup Ready [®] Corn 2
Relative Maturity:	83
Grain CHU:	2450
Silage CHU:	2350
Spring Vigour:	Very Good
Plant Height:	Medium-Tall
Stalk Strength:	Excellent
Root Strength:	Very Good
Drought Tolerance:	Very Good
Silage Potential:	Very Good
Ear Type:	Semi-Flex
Husk Cover:	Good
Test Weight:	Good
Drydown:	Average
Target Population:	30-34 K
Northern Corn Leaf Blight:	Very Good
Goss's Wilt:	Very Good



Forages

BrettYoung is your full-service forage seed supplier. With over 80 years serving Western Canadian growers, we have the products, service, and knowledge to deliver you a productive forage stand.

Download our Forage Guide

BrettYoung's Forage Guide includes information on each of our industry-leading varieties, each of our stock blends, and forage-specific agronomic tips.

For more information, go to **brettyoung. ca/ forages** or scan the QR code



Try our Stock Blend Selector

BrettYoung's online tool helps your narrow down your stock blend options based on your use and soil type.

For more information, go to **brettyoung.ca**/ **stock-blend-selector** or scan the QR code



Enroll in our Forage Establishment Guarantee

BrettYoung's Establishment Guarantee ensures your forage seed investment doesn't go to waste.

For more information, go to brettyoung.ca/ establishmentguarantee or scan the QR code





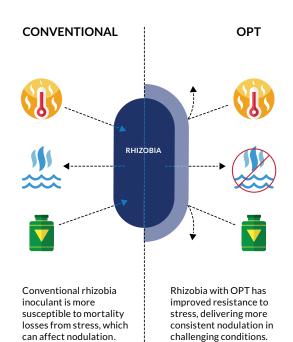
Biologicals

Our biologicals lineup sets the industry standard. With one-of-a-kind technology engineered to enhance performance in even the toughest conditions, our biologicals offer faster nodulation and optimal nitrogen fixation with lower application rates. When you choose BrettYoung biologicals, you choose the best.

Osmo Protector Technology (OPT)

Many of BrettYoung's inoculants come equipped with Osmo Protector Technology, which features high-performance bacteria with longer on-seed survival. Rhizobia with Osmo Protector Technology are better equipped to withstand our tough Prairie conditions and deliver excellent compatibility with many seed treatments.

Osmo Protector Technology strengthens the cell walls of rhizobial bacteria through a longer, stress-inducing manufacturing process. This enhances on-seed survival and performance in challenging environments including exposure to higher temperatures, low moisture soils, and chemical (seed treatment) stresses.



Make the Switch to Liquid Inoculants

Osmium is BrettYoung's premier liquid inoculant, available for pea, lentil, and chickpea crops. Equipped with Osmo Protector Technology, Osmium strengthens the cell walls of rhizobial bacteria, resulting in tougher, high-performance bacteria with industry leading on-seed survival.

Liquid



Granular

X Difficult to Handle

Granular inoculants are bulkier than liquid and require more handling from start to finish.

X More Expensive Per Acre

Granular inoculants are more costly than liquid, costing growers more overall.

X More Effort to Use

Granular inoculants have to be augered or lifted into the air seeder rather than applied directly to the seed.



Seed Treatment Compatibility

Scan the QR code for the latest compatibility information on Osmium, Signum, and Launcher Liquid, our complete liquid inoculant lineup.



Bio-Inducer Technology

To accomplish nodulation, plant roots and rhizobia bacteria communicate using chemical signals. In turn, rhizobia respond with additional chemical signals (called nodulation determinants) initiating the nodulation process.

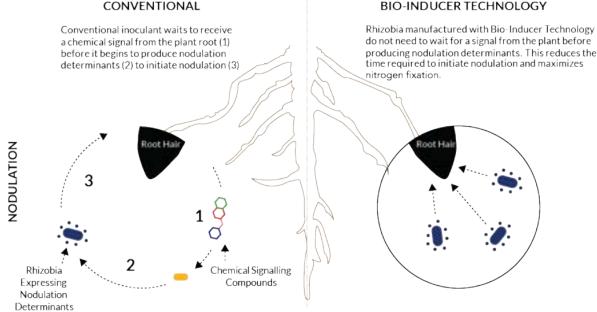
These nodulation determinants include:

- Nod Factors Chemical compounds released by the rhizobia bacteria signaling the plant to initiate nodulation
- Lipopolysaccharides (LPS) Long chain fatty acid molecules responsible for the development of the infection tube
- **Type Three Secretion System (T3SS)** A protein structure used to transport substances between the cells of the rhizobia and the plant

Bio-Inducer Technology assists in the process by stimulating earlier production of specific nodulation determinants through introducing rhizobia to plant-based signaling compounds, called Bio-Inducer components, during the manufacturing process. These compounds mimic what plant roots release naturally in the soil, inducing the rhizobia to respond by releasing nodulation determinants, as if they were already in the presence of a receptive host.

The early presence of these nodulation determinants accelerates the nodulation process in the soil and improves nodulation on a plant's crown and primary roots, where nodules are most effective. This maximizes nitrogen fixation and yield potential, delivering more consistent performance under all conditions.

Signum[®] Soybean inoculants come equipped with Bio-Inducer Technology, which accelerates and improves nodulation. This not only maximizes nitrogen fixation but improves yield potential for your crop.



CONVENTIONAL



Signum Soybean is an effective and convenient inoculant equipped with both Osmo Protector and Bio-Inducer Technology to promote quicker biological fixation of nitrogen, allowing soybean growers to maximize yields even in stressful growing conditions.

- High concentration
- Bio-inducers
- Enhanced performance in challenging environments
- Longer survival on-seed
- Convenient all-in-one liquid formulation

Pea/Lentil	
Osm	ium®
	Protector

Osmium Pea/Lentil is a convenient liquid inoculant featuring Osmo Protector Technology to provide pea and lentil growers with longer on-seed survival and enhances performance in challenging environments.

- Enhanced performance in challenging environments
- Longer survival on-seed
- Convenient all-in-one liquid formulation

Formulation:	Liquid Suspension	
Guaranteed Analysis:	Bradyrhizobium japonicum 1 x 10 ¹⁰ CFU/ml	
Technology:	Bio-Inducer Technology, Osmo Protector Technology	
Crops:	Soybean	
Application:	On-Seed	
Application Rate:	130 ml/100 kg, 2 fl. oz./100 lb	
On-Seed Life:	Up to 120 days ¹	
Package Size:	11.84 L (400 fl.oz.) – treats 400 units (20,000 lb); 1.18 L (40 fl. oz.) – treats 40 units (2,000 lb)	

Formulation:	Liquid Suspension	
Guaranteed Analysis:	Rhizobium leguminosarum bv. Viciae 1 x 10° CFU/ml	
Technology:	Osmo Protector Technology	
Crops:	Pea, Lentil and Faba Bean	
Application:	On-Seed	
Application Rate:	200 ml/100 kg, 3 fl. oz./100 lb	
On-Seed Life:	Up to 15 days ¹	
Package Size:	2 x 5.45 L (2 x 184 fl. oz.) – treats 200 bu (12,000 lb)	



Osmium Chickpea is an inoculant featuring Osmo Protector Technology that provides chickpea growers with a liquid formulation that has on-seed survival that outperforms all other peat and liquid inoculants and enhance performance in challenging environments.

- Enhanced performance in challenging environments
- Longer survival on-seed
- Convenient all-in-one liquid formulation

Formulation:	Liquid Suspension	
Guaranteed Analysis:	Mesorhizobium Ciceri 1 x 10º CFU/mI	
Technology:	Osmo Protector Technology	
Crops:	Chickpea	
Application:	On-Seed	
Application Rate:	200 ml/100 kg, 3 fl. oz./100 lb	
On-Seed Life:	Up to 15 days ¹	
Package Size:	2 x 5.45 L (2 x 184 fl. oz.) – treats 200 bu (12,000 lb)	

¹ Visit brettyoung.ca/compatibility for seed treatment compatibility information



Osmo Protector Technology



Osmo Protecto

Bio-Inducers

Accelerates initial, early communication between rhizobia and plant roots and triggers earlier nodulation for maximum nitrogen fixation.

Enhanced Performance in Challenging Environments Osmo Protector Technology results in tougher bacteria that enhances performance in the field under adverse conditions. This includes high temperatures, low water availability, and chemical (seed treatment) stresses.

Launcher Liquid Soybean Inoculant

Formulation:	Liquid Suspension
Guaranteed Analysis:	Bradyrhizobium japonicum 4 x 10°
Crop:	Soybean
Application:	On-Seed or In-Furrow
On-Seed Application Rate:	130ml/100kg, 2 fl. oz/100 lb
In-Furrow Application Rate:	5ml/100m, 0.5 fl. oz/1,000 ft
On-Seed Life:	Up to 4 days ¹
Package Size:	11.84 L (400 fl. oz.) – treats 400 units (20,000 lb); 1.18 L (40 fl. oz.) – treats 40 units (2,000 lb)

Launcher Granular Soybean

Formulation:	Peat Granular	
Guaranteed Analysis:	Bradyrhizobium japonicum 1 x 10 ⁸	
Crop:	Soybean	
Application:	In-Furrow	
In-Furrow Application Rate:	3.8 lb/ac (4.4 kg/ha) 12-inch row	
Package Size:	18.14 kg (40 lb) or 235.87 kg (520 lb)	



Granular Peas and Lentils

Formulation:	Peat Granular
Guaranteed Analysis:	Rhizobium leguminosarum biovar viciae 1 x 10 ⁸
Crop:	Pea, Lentil
Application:	In-Furrow
In-Furrow Application Rate:	3.8 lb/ac (4.4 kg/ha) 12-inch row
Package Size:	18.14 kg (40 lb) or 235.87 kg (520 lb)



Longer Survival On-Seed

Osmo Protector Technology provides added protection for longer on-seed survival without requiring an extender. This allows growers much greater planting window flexibility compared to other seed-applied liquid and peat inoculants.





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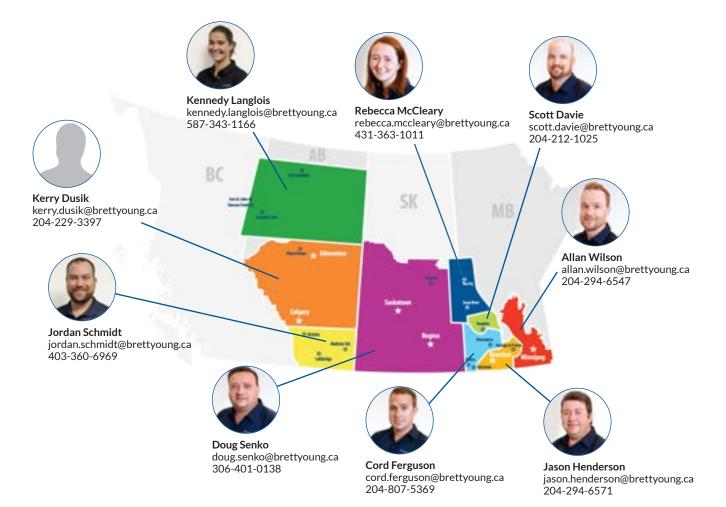
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Producing Seed for BrettYoung

Forage and turf seed production is an excellent way to diversify your risk and add profitable cropping options to your rotation. When you partner with BrettYoung, we help you with every step, from planning and production to harvest and delivery.

Seed Production Territory Map



BrettYoung's dedicated team of Seed Production Specialists is here to guide you with every aspect of forage and turf seed production to help you maximize your field's potential.

Planning	Production	Harvest	Delivery
• Scouting and field selection	• Delivery of stock seed	Harvest timing recommendations	Communication of delivery schedule
Species selectionCover crop	• Multiple field scouting visits	• Equipment setting recommendations	Communication of quality analysis
recommendationsProduction planning	Fertility recommendations	Crop sample collection	Communication of grower payments
Contract terms	• Herbicide, fungicide, and growth regulator recommendations	Post-harvest recommendations	

Benefits of Forage and Turf Seed Production

Forage and turf seed production offers many advantages to your farm. BrettYoung works with a wide range of species and can provide unique seed production opportunities to fit your farm's needs.

Grass Seed Production

Available species are Perennial Ryegrass, Tall Fescue, Annual Ryegrass, Fine Fescue, Meadow Fescue, Timothy, and Bromegrass.

Benefits include:

- Early harvest splits up the fall workload
- Increases organic matter to improve soils
- Some species have tolerance to salinity, alkalinity, and acidity
- Perennial options with multiple crop years, reducing the planting season workload

Legume Seed Production

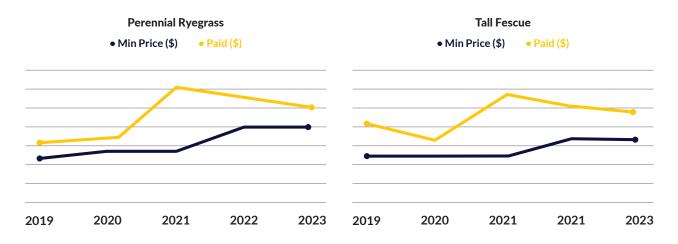
Available species are Alfalfa, Clover, and Trefoil.

Benefits include:

- Improves soil health
- Low inputs
- Nitrogen fixation
- Rotational benefits for following annual crops
- Multiple crop years reduce the planting season workload

Economic Benefits

Forage and turf seed production has an excellent profitability track record. BrettYoung's seed production contracts allow growers to lock in a minimum price without limiting upside, helping add to your bottom line.



Seed Grower Partnership Program

The Seed Grower Partnership Program (SGPP) provides BrettYoung seed growers with tools to help manage risk and maximize the profitability of forage and turf seed production.

Ask a Seed Production Specialist about SGPP and how you can qualify.

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ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. It is a violation of federal law to use any pesticide product other than in accordance with its labeling. NOT ALL formulations of dicamba or glyphosate are approved for in-crop use with products with Roundup Ready 2 Xtend[®] soybeans. ONLY USE FORMULATIONS THAT ARE SPECIFICALLY LABELED AND APPROVED FOR SUCH USES. Contact the Pest Management Regulatory Agency with any questions about the approval status of dicamba herbicide products for in-crop use with Roundup Ready 2 Xtend[®] soybeans or products with XtendFlex[®] Technology.

Roundup Ready[®] 2 Technology contains genes that confer tolerance to glyphosate. Roundup Ready 2 Xtend[®] soybeans contains genes that confer tolerance to glyphosate and dicamba. Glyphosate will kill crops that are not tolerant to glyphosate. Dicamba will kill crops that are not tolerant to dicamba. Contact your Bayer retailer, refer to the Bayer Technology Use Guide, or call the technical support line at 1-888-283-6847 for recommended Roundup Ready[®] Xtend Crop System weed control programs.

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