



At BrettYoung, we strive to be a company like no other. We are proud of our strategic partnerships with world-class organizations through which we source leading technologies and genetics.

We are passionate about bringing choice through distinct and leading products that help keep your business profitable while backing them with knowledge and experience.

The ag industry has undergone significant change as consolidation continues and the number of choices declines. Yet BrettYoung remains a family-owned company. We have strong connections to local markets where, along with investment in innovation and infrastructure, we continue to grow our presence.

We succeed in our markets by bringing **distinct** choices that deliver performance and value. By **design**, our success is deeply rooted within your success; the two are intertwined and grow together. We are **Distinct By Design** and we wouldn't have it any other way.

We Know Forages

Forage seed is the foundation of BrettYoung. It was our primary business for many decades and is still at the core of who we are today. We access forage seed genetics from industry-leading breeders in Canada, Europe and the United States. Our team of Seed Production Specialists partner with Western Canadian

growers to produce the highest quality forage seed available. Through our seed processing and warehousing facilities in Winnipeg, MB, Calmar and Rycroft, AB, and Gormley and Clifford, ON, we process, treat and package forage seed for growers not only in Canada, but around the globe.

Our Regional Account Managers are trained to help provide you with the forage solutions that are best suited to your operation and goals – whether you choose one of our stock blends or a custom blend tailored to your needs.

Canada's Best Managed

Lastly, we're proud to announce BrettYoung has earned the designation as one of **Canada's Best Managed Companies** for the third consecutive year. The award continues to validate all the hard work the entire BrettYoung team does to serve the needs of our amazing customers. It also acknowledges the world-class suppliers who are an integral part of the value we deliver to the field. We especially thank all our customers who choose to do business with BrettYoung as part of your work in feeding the world.



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PREFERRED RETAILER LOCATOR

BrettYoung has a Prairie-wide dealer network and, in most areas, you don't need to look any further than your local crop inputs retailer to find our products. BrettYoung products are carried at most locations of:

• Cargill Ltd.*

• Independent retailers

• Paterson Grain

• Co-op Agro Centre

• Parrish & Heimbecker, Ltd.

• Richardson Pioneer

For the most up-to-date product information, agronomic support and competitive pricing, we recommend that you visit a BrettYoung Preferred Retailer. Use the mapping tool on our website to learn more about which retailers in your area are BrettYoung Preferred Retailers.

Locating your nearest retailer is as easy as 1-2-3!

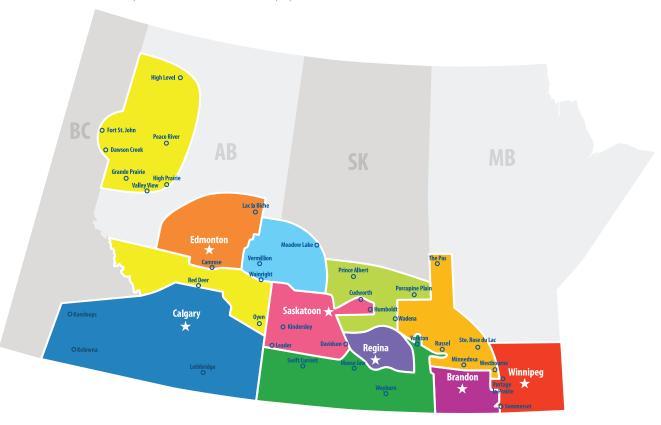
- 1. Go to brettyoung.ca/PreferredRetailer
- 2. Type in your postal code or city/town
- 3. Click on one of the radius buttons (25 km, 50 km or 100 km) to narrow or widen your search
- * Please note, Cargill retail locations do not carry Forages.



REGIONAL TERRITORY MAP

Regional Account Managers (RAMs) are spread out across the Prairies to service the needs of growers. While BrettYoung's head office is located in Winnipeg, Manitoba, RAMs work directly with growers in their own communities – helping with product selection or providing agronomic support. BrettYoung RAMs can help solve issues and answer product inquiries directly.

For the most up-to-date RAM territory map, please visit brettyoung.ca/RegionalTerritoryMap.



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FORAGE AGRONOMY

How to Establish a Productive Forage Stand

The establishment phase is the critical first step in a productive and healthy forage stand. To improve your likelihood of establishment success, follow the agronomic guidelines below.

Time of Seeding

Early spring (mid-April to early June), mid-summer (mid-July to early August) and late fall (after freeze-up) are suitable times for seeding forages. Spring seeding provides the best chance for adequate moisture levels and successful germination. Summer seeding provides less weed competition and a greater likelihood of less moisture. Fall dormant seeding can run risks of early spring runoff or freeze/thaw patterns harming seedlings.

Seedbed Preparation

A firm, well prepared seedbed is required for good forage establishment. This results in proper seed-to-soil contact, adds control to seeding depth and reduces surface drying. Walking on a firm seedbed should not leave footprints deeper than one-quarter inch.

Weed Control

Weed control is essential for good forage establishment. A seedbed free of perennial weeds is critical to minimize seedling and in-crop competition. Control weeds prior to seeding as well as during the year of establishment.

Quality Seed and Seed Coatings

Certified seed guarantees quality including varietal purity, germination and weed-free seed. The agronomic benefits of certified seed are seen in the field through defined varietal characteristics and quality assurance, strong seedling germination, improved plant populations and reduced weed competition. Consider a seed coating to improve handling, visibility in the soil and to protect your investment from seed- and soil-borne diseases. All legumes, if possible, should be inoculated to ensure proper nitrogen fixation.

Seeding Depth

Proper depth of seeding cannot be stressed enough. Many forage establishment failures are due to seeding too deep. All forage species should be seeded no deeper than one-half inch. Most forage seeds will do well planted at about one-quarter inch or less. Always err on seeding shallow rather than deep.

Seeding Rates

Use the proper seeding rates calculated by number of seeds per square foot. Seeding rates depend on species, seed size, seed quality, seeding method, row spacing and annual precipitation. Because most forage seeds are small, light and often chaffy, it can be useful to mix the seed with cracked grain, companion crop seed or use coated seed to improve seed flow.

Fertility

Soil test and fertilize accordingly. Remember that the most cost-effective time to fertilize a forage crop is usually at seeding. Consider the use of higher rates of phosphorus or elemental sulphur to provide a stable nutrition base for the following years. Fifteen pounds per acre of P_2O_5 can be safely seed-placed. Higher rates must be banded away from the seed row to avoid seedling damage.

General Fertility Guidelines for Forage

				Low-Mediu d Potential		,	Medium Yield Poter			High Yield Potential Soils						
		Stand Composition	9	Phosphorus (P_2O_5)	Potassium (K ₂ O)	Nitrogen	Phosphorus (P ₂ O ₅)	Potassium (K ₂ O)	Sulphur	Nitrogen	Phosphorus (P ₂ O ₅)	Potassium (K ₂ O)	Sulphur			
CROP	Grass	<20% Legume	40–90	10–30	10–30	60–100	10–30	50–60	10–15	60–200	30–50	40–60	0–15			
	Grass-	20–40% Legume	30–65	20–30	10–30	40–90	20–40	50–70	15–30	60–80	40–60	60–80	15–20			
	Legume	40–60% Legume	10–30	20–40	10–30	20–40	30–40	50–80	15–30	0–60	40–80	80–150	15–30			
	Legume	>60% Legume	0–30	30–50	10–30	0–30	40–70	60–150	15–30	0–50	60–100	80–200	20–30			

Source: www.agriculture.alberta.ca

Companion Crops

Many growers choose to plant forages with a companion crop such as barley or oats to provide production in the establishment year. Companion or nurse crops compete with new forage seedlings for sunlight, nutrients and moisture. A companion crop can reduce seedling establishment and plant populations adversely affecting forage yield and stand longevity. The benefits of using companion crops include reduction of wind and water erosion and reduction of weed infiltration. If using a companion crop, the following tips will reduce the competition and aid in forage stand establishment.



Companion crop (left and right), vs. no companion crop (centre)



Companion crop (left) vs. no companion crop (right)

Tips for Using Companion Crops in Establishment

- Tip #1 Seed the companion crop at one-third to one-half of normal seeding rate, (when using cereals, 0.5-0.75 bu/acre is ideal).
- Tip #2 Seed forage in a separate pass at an angle to your companion crop to reduce competition and to aid in depth control.
- Tip #3 Increase forage seeding rate to achieve desired plant densities in the stand to compensate for the companion crop.
- Tip #4 Remove the companion crop as early as possible (silage or greenfeed) rather than harvesting the grain.
- Tip #5 If harvesting the companion crop for grain (not recommended), remove all straw from the field. If that is not an option, chop and spread the straw thoroughly across the field. If straw is left in a windrow, it will smother the emerging forage seedlings.
- Tip #6 If seeding forage where soil erosion is prominent, it is recommended that a companion crop is used. The companion crop will aid in covering and protecting the soil during the establishment year.

SELECTING FORAGE SPECIES & BLENDS

Forage Crop Use Recommendations

Consider the following factors when selecting forage species.

Intended Use and Management System

- Is the intended use hay or pasture?
- In hay stands, how many cuts do you expect to take each year?
- In pasture, how intensely will the forage crop be grazed?
- Are you rotational or continuous grazing?

Forage Timing

• When would you like your forage to be available?

Environmental Conditions

- How much annual precipitation does your area receive?
- How harsh are your winters?

Soil Type

- What is your soil type (sand, clay, loam)?
- How well does your soil drain?
- Is there a problem with saline or alkaline soils?
- Is the organic matter content high or low?

	Production Timing		Crop Use F	Recommendation		Rest, Re	egrowth
Forage Species	Period of Major Production	Continuous Grazing	Rotational Grazing	Stored Feed	Stockpiled Forage	Grazing Tolerance	Pasture Regrowth
Alfalfa (2010)	Spring to fall	Poor	Good	Excellent	Poor	Good	Fair
Alfalfa (3010)	Spring to fall	Poor	Good	Excellent	Poor	Good	Good
Alfalfa (Other Varieties)	Spring to fall	Poor	Good	Excellent	Poor	Fair	Excellent
Birdsfoot Trefoil	Spring to fall	Poor	Good	Good	Fair	Fair	Good
Cicer Milkvetch	Late spring to fall	Poor	Good	Fair	Good	Good	Fair
Red Clover (Single Cut)	Spring	Poor	Good	Good	Poor	Good	Fair
Red Clover (Double Cut)	Spring	Poor	Good	Good	Poor	Good	Excellent
White Clover	Spring	Good	Good	Poor	Poor	Excellent	Excellent
Alsike Clover	Spring	Fair	Fair	Fair	Poor	Good	Good
Sweet Clover	Spring	Fair	Fair	Good	Poor	Fair	Poor
Sainfoin	Spring	Poor	Fair	Good	Poor	Poor	Poor
Bromegrass (Smooth)	Spring	Good	Fair	Excellent	Fair	Good	Poor
Bromegrass (Hybrid)	Spring, fall	Good	Good	Excellent	Good	Good	Good
Bromegrass (Meadow)	Spring, fall	Good	Excellent	Good	Good	Excellent	Excellent
Timothy	Spring through summer	Poor	Good	Excellent	Good	Fair	Poor
Reed Canarygrass	Spring through summer	Fair	Fair	Good	Fair	Good	Good
Orchardgrass	Spring through fall	Good	Excellent	Good	Good	Excellent	Excellent
Annual Ryegrass	Late summer and fall	Good	Excellent	Fair	Good	Excellent	Excellent
Italian Ryegrass	Late summer and fall	Good	Excellent	Fair	Good	Excellent	Excellent
Perennial Ryegrass	Spring, summer and fall	Good	Excellent	Poor	Good	Excellent	Excellent
Tall Fescue	Spring through fall	Good	Excellent	Good	Excellent	Good	Excellent
Meadow Fescue	Spring through fall	Fair	Good	Good	Good	Good	Good
Creeping Red Fescue	Spring, fall	Excellent	Good	Poor	Good	Good	Excellent
Meadow Foxtail	Spring	Good	Good	Fair	Fair	Excellent	Good
Kentucky Bluegrass	Spring, fall	Excellent	Good	Poor	Fair	Excellent	Excellent
Crested Wheatgrass	Spring, fall	Good	Fair	Good	Good	Excellent	Poor
Intermediate Wheatgrass	Spring, summer and fall	Fair	Fair	Excellent	Good	Fair	Fair
Pubescent Wheatgrass	Spring, summer and fall	Fair	Fair	Excellent	Good	Fair	Fair
Northern Wheatgrass	Late spring	Fair	Fair	Poor	Fair	Fair	Fair
Slender Wheatgrass	Spring and early summer	Fair	Fair	Good	Good	Fair	Fair
Tall Wheatgrass	Late spring	Fair	Fair	Good	Fair	Fair	Poor
Western Wheatgrass	Late spring	Fair	Fair	Good	Fair	Good	Fair
Altai Wildrye	Late spring	Fair	Fair	Fair Poor		Good	Fair
Dahurian Wildrye	Late spring	Good	Good	Good	Good	Good	Good
Russian Wildrye	Spring, fall	Good	Good	Poor	Good	Good	Fair

For information on variety and species characteristics with respect to environmental conditions and soil type, see the detailed tables on pages 28 to 31 and 36 to 41 of this guide.

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FORAGE BLENDS

Your field is not the same as your neighbour's, so why settle for the same forage blend? At BrettYoung, we will custom-build a blend to suit your specific needs or recommend a stock blend that will achieve your production goals.

Custom Blends

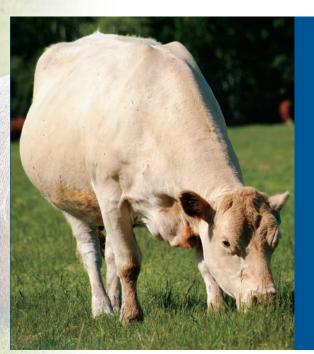
Although we put a lot of thought into creating the stock blends presented on the following pages, in some instances a forage blend should be custom-built to fit your needs if they are not met by a stock blend.

Our team of experienced Regional Account Managers can help you determine what species and varietal characteristics are best suited to achieving your forage production goals.

Visit brettyoung.ca/Forages to learn more about our extensive portfolio of forage products.

Stock Blends

BrettYoung has carefully crafted its stock blends to provide a high level of productivity over a wide range of environments and uses that are tailored for Western Canadian conditions. To find the stock blend best suited to your needs, use the stock blend selector on pages 14 and 15 or visit our online stock blend selector tool at brettyoung.ca/Stock-Blend-Selector for a recommendation.



Our stock blend selector will help you select the right blend for your soil, environment and management system.

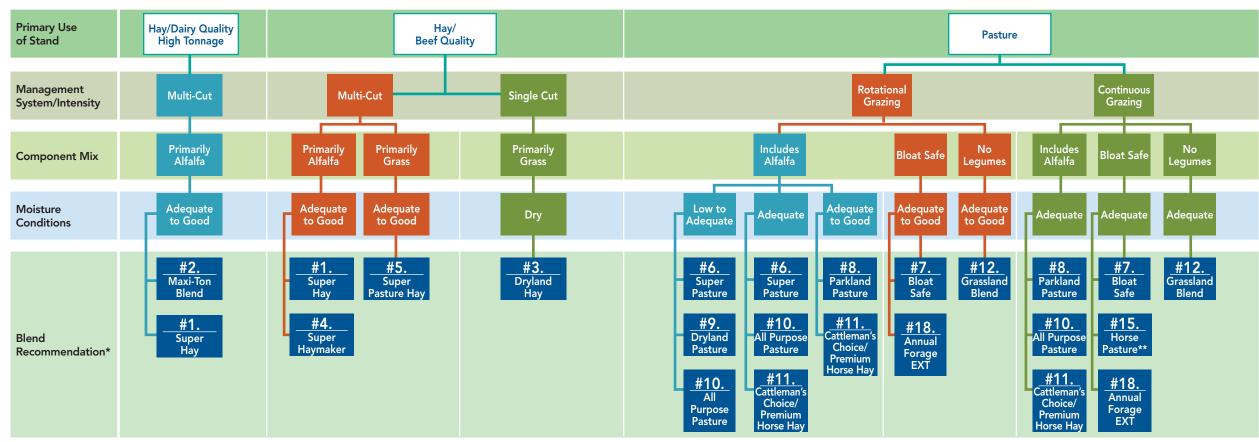
Find your perfect stock blend by visiting brettyoung.ca/Stock-Blend-Selector.



STOCK BLEND SELECTOR

Factors to Consider

BrettYoung has carefully crafted its stock blends to provide a high level of productivity over a wide range of environments and uses in Western Canada. Follow this stock blend selector to find the blend best suited for your soil, environment and management system.



^{*} See pages 16 to 18 for more information on the stock blends and their compositions.

Land conditions, such as salinity or flooding, will impact your choice of blends.

Use the flow chart below to select an appropriate stock blend when challenged with these conditions.

Stock Blend Seeding Rates by Soil Zone

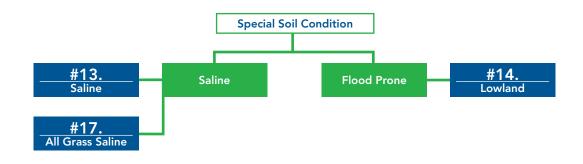
Recommended forage blend seeding rates. Generally, plant populations and consequently, seeding rates, should increase with increasing soil quality and availability of moisture.

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Brown soil: 8 - 10 lbs. per acre
Dark brown soil: 10 - 12 lbs. per acre
Black soil: 12 - 14 lbs. per acre
Grey wooded soil: 10 - 14 lbs. per acre
Irrigation: 14 - 16 lbs. per acre

Considerations:

- All rates assume Canada #1 Grade for purity and germination
- When broadcasting, seeding rate should increase by approximately 30%



^{**} White clover can cause bloat in cattle.

STOCK BLEND DESCRIPTIONS

BrettYoung offers a wide variety of stock blends built for Western Canadian conditions and management practices. The following pages provide more details on blend components, intended use and management system.



Hay Blends

#1. Super Hay

Excellent 2-cut alfalfa/grass mix

- 65% Blend 4440 Alfalfa Securus
- 25% Fleet Meadow Bromegrass Securus
- 10% Catapult Timothy

#2. Maxi-Ton

Maximum tonnage and protein

- 90% Blend 4440 Alfalfa Securus
- 10% Catapult Timothy

#3. Dryland Hay

Aggressive growth in dryland regions

- 40% Kirk Crested Wheatgrass
- 40% Carlton Smooth Bromegrass Securus
- 20% 2010 Alfalfa Securus

#4. Super Haymaker

Ideal for 1- or 2-cut systems across most production areas

- 75% Blend 4440 Alfalfa Securus
- 25% Fleet Meadow Bromegrass Securus

#5. Super Pasture Hay

Quick drydown time in a swath

- 50% Fleet Meadow Bromegrass Securus
- 35% Trailburst Orchardgrass
- 10% Catapult Timothy
- 5% Blend 4440 Alfalfa Securus

Pasture Blends

#6. Super Pasture

Excellent early spring pasture, produces well under stress

- 50% Fleet Meadow Bromegrass Securus
- 25% Kirk Crested Wheatgrass
- 15% Cowgirl Tall Fescue
- 10% 3010 Alfalfa Securus

#7. Bloat Safe

Increased quality with no risk of bloat

- 45% Fleet Meadow Bromegrass Securus
- 30% Cicer Milkevich
- 20% Cowgirl Tall Fescue
- 5% Boreal Creeping Red Fescue

#8. Parkland Pasture

High-yielding pasture, works well in high-traffic areas and aggressive grazing systems

- 50% Fleet Meadow Bromegrass Securus
- 25% Trailburst Orchardgrass
- 10% 3010 Alfalfa Securus
- 10% Boreal Creeping Red Fescue
- 5% Tirem Kentucky Bluegrass

#9. Dryland Pasture

Long-lived productive pasture blend for very dry areas

- 50% Kirk Crested Wheatgrass
- 35% Fleet Meadow Bromegrass Securus
- 10% Russian Wildrye
- 5% 2010 Alfalfa Securus

#10. All Purpose Pasture

Widely adapted for most pasture needs with easy establishment and quality regrowth

- 55% Fleet Meadow Bromegrass Securus
- 20% Cowgirl Tall Fescue
- 20% Intermediate Wheatgrass
- 5% 2010 Alfalfa Securus

#11. Cattleman's Choice/Premium Horse Hay

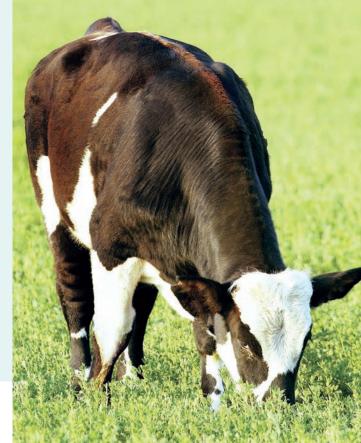
High-protein pasture with superb regrowth, quick to establish and ideal for horses

- 40% Fleet Meadow Bromegrass Securus
- 20% Cowgirl Tall Fescue
- 20% 3010 Alfalfa Securus
- 15% Trailburst Orchardgrass
- 5% Catapult Timothy

#12. Grassland Blend

Maximize regrowth and quality with no risk of bloat, suitable for variable topographies

- 30% Fleet Meadow Bromegrass Securus
- 20% Cowgirl Tall Fescue
- 20% Boreal Creeping Red Fescue
- 20% Trailburst Orchardgrass
- 10% Catapult Timothy



STOCK BLEND DESCRIPTIONS

Miscellaneous Blends

#13. Saline

Quick establishment in saline areas with good longevity, helps reclaim saline areas over time

- 25% Slender Wheatgrass
- 25% Cowgirl Tall Fescue
- 20% Tall Wheatgrass
- 10% Barricade SLT Alfalfa Securus
- 10% Dahurian Wildrye
- 10% Sweet Clover



#14. Lowland

Excellent blend to reclaim areas prone to flooding, aggressive root systems will help utilize moisture

- 30% Rival Reed Canarygrass
- 20% Riding Brand Tall Fescue
- 20% Catapult Timothy
- 15% Boreal Creeping Red Fescue
- 15% Alsike Clover

#15. Horse Pasture

Easy to establish, low-maintenance blend, excellent for acreages, farmyards, high-traffic areas and horse pastures

- 50% Boreal Creeping Red Fescue
- 20% Catapult Timothy
- 15% Bigbang Annual Ryegrass
- 10% Tirem Kentucky Bluegrass
- 5% Grasslands Huia White Clover

#17. All Grass Saline

Rapid establishment in saline areas, good longevity and no risk of bloat

- 40% Cowgirl Tall Fescue
- 20% Carlton Smooth Bromegrass Securus
- 15% Pubescent Wheatgrass
- 15% Slender Wheatgrass
- 10% Dahurian Wildrye

#18. Annual Forage EXT

Long-season, cocktail crop grazing applications with soil improvement benefits

- 50% Fabio Italian Ryegrass
- 15% Purebred Brand Radish
- 15% Purple Top Turnip
- 10% Hairy Vetch
- 10% Forage Brassica





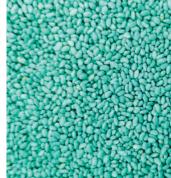
Securus[™] is a proprietary seed coating that improves the appearance, handling and agronomics of our top alfalfas and bromegrasses. The benefits of Securus start with a specially formulated granule that is dissolved in-house to form a dense polymer solution, delivering market-leading durability. These improvements in durability have contributed to more uniform coverage as the coating is bonded to the seed at application and will suffer less damage during handling. The Securus carrier is talc which is a naturally occurring mineral that is highly stable, chemically inert and odorless. Talc has a plate-like cellular structure that more effectively adheres to seed. Better adhesion means improved flowability and less dust-off. The Securus polymer is bacteria friendly and pH neutral, supporting high rhizobia levels and ensuring optimum on-seed survival. Securus includes precise layering of Apron XL® fungicide and OMRI-certified Nitragin® Gold inoculant on alfalfa. Apron XL guards against diseases that can inhibit emergence, plant stand, plant health and ultimately yield potential. Nitragin Gold consistently delivers high levels of nitrogen fixation through specially selected natural rhizobia strains.

Benefits of Securus

- Helps with flowability and accurate seed placement
- Consistent seed appearance and improved visibility in the soil
- Seed environment conducive to improved germination and seedling survival
- Fungicide and inoculant are layered on alfalfa to aid in seedling health, nitrogen fixation and plant growth







Securus alfalfa



Seed Coating

BrettYoung seed coating gives your seed every chance to succeed. The precise layering of inoculant, fungicide and other growth promoting additives on-seed provides value-added benefits. At our state-of-the-art computerautomated seed coating facility, we enhance the appearance, handling and agronomics of our top seed products with Securus.

TURF GRASS BLENDS

BrettYoung is a major producer of cool-season turf grasses. Our portfolio of improved turf grass varieties is designed to offer the utmost in quality, disease and insect resistance, wear and drought tolerance and unique growth habits that will deliver a distinct performance advantage. Whatever turf application you have, BrettYoung stocks several turf blends to meet your needs.

Executive Blend (T8)

Kentucky bluegrass has long been a popular turf grass in temperate zones around the world. Executive Blend is a mixture of BrettYoung's best semi-dwarf Kentucky bluegrass varieties that combine fine leaves, less vertical growth, persistence, heat tolerance, disease resistance and excellent turf quality.

• 100% Premium Kentucky Bluegrass Varieties

Deluxe Turf Blend (T12)

Deluxe Turf Blend combines the benefits of Kentucky bluegrass with additional shade tolerance from Aberdeen, a creeping red fescue with improved turf characteristics. Deluxe Turf Blend also includes 10% improved perennial ryegrass to get your lawn off to a faster start.

- 60% Babe Kentucky Bluegrass
- 30% Aberdeen Creeping Red Fescue
- 10% Dominator Perennial Ryegrass

All Purpose Mix (T6)

All Purpose Mix is well-suited to sun or shade and has annual ryegrass to germinate quicker and aid in establishment. All Purpose Mix does not use improved turf varieties, which reduces turf quality and provides a more economical option for establishing your lawn.

- 40% Common Kentucky Bluegrass
- 40% Common Creeping Red Fescue
- 20% Tetraploid Annual Ryegrass

Drought Tolerant Turf Blend (T9)

Drought Tolerant Turf Blend includes improved varieties of creeping red fescue, sheep fescue, chewings fescue and hard fescue. The result is a mixture that will provide a dense, high-quality turf that has reduced regrowth and requires less water than other turf mixtures.

- 35% Aberdeen Creeping Red Fescue
- 25% Shadow III Chewings Fescue
- 20% Common Sheep Fescue
- 20% Improved Hard Fescue Variety

Playground/Rural Lawn Mix (T3)

For areas that require less maintenance, can experience drought and do not require the look of a high-quality turf, Playground/Rural Lawn Mix is an excellent option. It will do well in sun or shade, but in extreme drought, the Fairway crested wheatgrass will become more dominant.

- 35% Common Kentucky Bluegrass
- 35% Common Creeping Red Fescue
- 10% Fairway Crested Wheatgrass
- 10% Deputy Tall Fescue
- 10% Diploid Annual Ryegrass



Recommended Use

	Sports Fields	Perfect Lawn	Economy Lawn	Sun Mixture	Shade Mixture	Playgrounds	Low Maintenance	Drought
Executive Blend (T8)	\checkmark	\checkmark		\checkmark				
Deluxe Turf Blend (T12)	\checkmark	\checkmark		\checkmark	\checkmark			
All Purpose Mix (T6)	\checkmark		\checkmark	\checkmark	\checkmark			
Drought Tolerant Turf Blend (T9)			\checkmark	\checkmark	\checkmark		\checkmark	\checkmark
Playground/Rural Lawn Mix (T3)						\checkmark	\checkmark	\checkmark

Establishing Your Lawn

Here are some tips to make sure your lawn establishes:

- Seed at four pounds per 1,000 square feet.
- Use a high-quality starter fertilizer: 18-24-12 with 50% slow-release nitrogen is ideal at a rate of 10 pounds per 1,000 square feet.
- Grass seed needs water and light to germinate. Seed shallow and frequently water at low rates for three to four weeks until full germination is reached.

ALFALFA FEATURED PRODUCTS

Move milk production to the next level - introducing Surge HG with Hi-Gest[™] Alfalfa Technology. Improve fibre digestibility and forage quality while maintaining yield, persistence and multiple pest resistance.

Hi-Gest ALFALFA TECHNOLOGY

Improved Fibre Digestibility

Lignin is a complex organic compound that hardens and strengthens plant cell walls. In mature plants, lignin negatively affects forage quality and interferes with animal digestion. Through focused breeding, Hi-Gest varieties offer high yield and improved fibre digestibility, which can improve animal intake by five to ten per cent, the extent of fibre digestion by five to ten per cent, and crude protein by three to five per cent.* The net impact can be 2.5 pounds or more of milk per cow per day.

Introducing Surge HG

- Elite genetics through conventional plant breeding
- Improved fibre digestibility when compared to other conventional dormant varieties for enhanced animal performance
- · Management flexibility to work around the weather or manage tonnage and quality to maximize return per acre
- Patent pending variety

4.0
1.7
93%
34/35

Surge HG Description

Surge HG is medium height with a dense, leafy canopy and high leaf-to-stem ratio. As a non-transgenic variety, Surge HG does not require special stewardship management considerations. Surge HG has the flexibility to adjust to aggressive harvest systems to maximize yield and quality or to more relaxed schedules focused on tonnage. Lodging tolerance is comparable to other high-yielding competitive varieties.

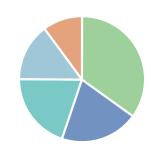


Fine stems and leafy



The Premier Certified Alfalfa Blend for the Canadian Prairies

Blend 4440 is a mixture of premium, certified alfalfas that combine the strengths of our best varieties: high yield, superior winterhardiness, disease resistance, salt and traffic tolerance, multifoliate expression and unique rooting habits such as branch and creeping root characteristics. The combination of these unique characteristics are suitable for a wide range of growing conditions. Demand the best varietal alfalfa in the prairies - choose Blend 4440 alfalfa.



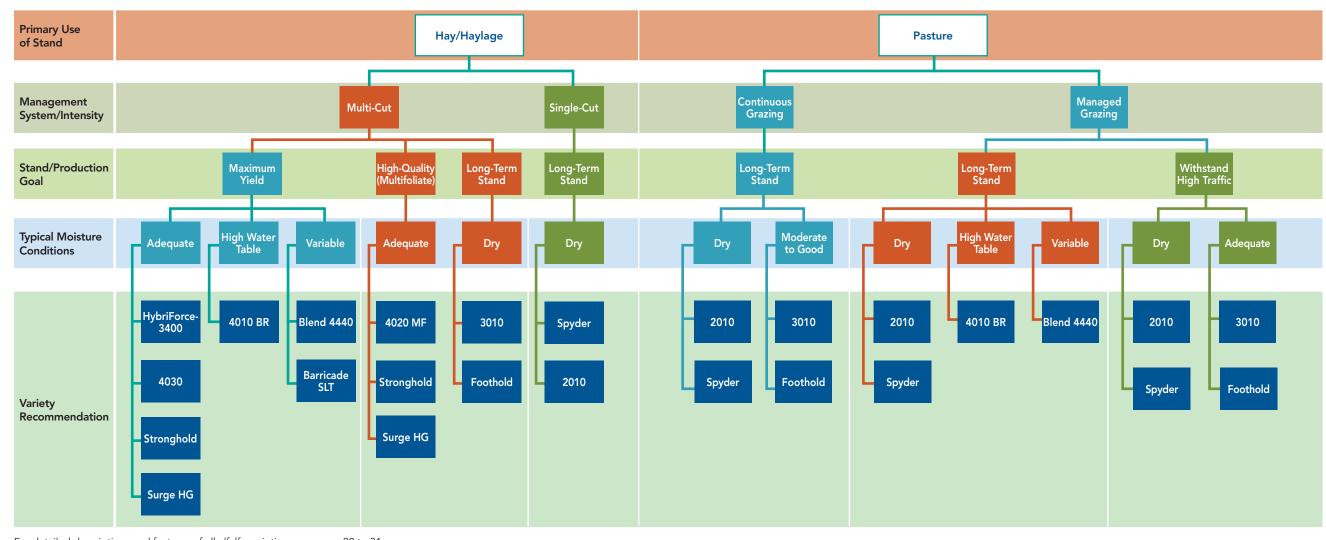
Blend Composition	Description
4010 BR (Branch Root)	Root system that is up to 80% branched for optimum performance in poorly drained soils.
4020 MF (Multifoliate)	High multifoliate expression resulting in higher, softer-leaved feed value.
3010 (Sunken Crown)	Deep-set crown protects from harsh winters, heavy machinery and animal traffic.
Barricade SLT (Salt Tolerant Tap Root)	Salt tolerant tap root has an outstanding disease package with high yields and is more persistent in salinity.
2010 (Creeping Root)	Strong dormancy with exceptional winterhardiness and improved disease resistance. Prostrate growth habit tends to fill in bare ground.

^{*} The increased rate of fibre digestion, extent of digestion and crude protein data was developed from replicated research and on-farm testing. During the 2015 growing season at West Salem, WI and Woodland, CA, the following commercial dormant, semi-dormant and non-dormant alfalfa varieties were compared head-to-head with Hi-Gest alfalfa for rate of digestion, extent of digestion and percent crude protein; America's Alfalfa Brand Ameristand 427TQ, Croplan Brands LegenDairy XHD and Artesia Sunrise, Fertizona Brand Fertilac, S&W Seeds Brands SW6330, SW7410 and SW10, and WL Brands WL 319HQ and WL 354HQ. Also during the 2015 growing season, 32 on-farm Hi-Gest hay and silage samples were submitted to Rock River Laboratory, Inc. for forage analysis. The results for rate of digestion, extent of digestion and percent crude protein were averaged and compared to the 60-day and four-year running averages for alfalfa in the Rock River database, which included approximately 1,700 alfalfa hay and 3,800 silage 60-day test results and 23,000 hay and 62,000 silage tests results in the four-year average.

ALFALFA VARIETY SELECTOR

Factors to Consider

BrettYoung's complete portfolio of high-performance alfalfa will meet any need. Follow this alfalfa selector to find the variety best suited for your management system and environment to achieve your production goals.



For detailed descriptions and features of all alfalfa varieties, see pages 28 to 31.

Pure Stand Alfalfa Seeding Rates by Soil Zone

Generally, plant populations and consequently, seeding rates, should increase with increasing soil quality and availability of moisture.

Brown soil: 8 - 10 lbs. per acre
Dark brown soil: 10 - 12 lbs. per acre
Black soil: 12 - 15 lbs. per acre
Grey wooded soil: 10 - 15 lbs. per acre
Irrigation: 14 - 18 lbs. per acre

Considerations:

- All rates assume Canada #1 Grade for purity and germination
- When broadcasting, seeding rate should increase by approximately 30%

Special Soil Condition

Saline

Barricade SLT

ALFALFA VARIETY SUMMARY

															Environme	ental Tolerance	95		
Gro	oup	ntended Use	Variety	Rooting Habit	Plant Type	Preferred Growing Conditions	Variety Key Features	Species Limitations	Production Period	Fall Dormancy Rating	Winter- hardiness	Disease Resistance Index	Drought	Flooding	Optimum pH	Acidity	Alkalinity	Salinity	Approx. Seeds/lb
			4030	Tap root	Upright	Widely adapted	 High yield potential Excellent digestibility Fast recovery and regrowth	Bloat hazardNeeds good drainage	Spring – Fall	4.0	1.6	30	Good	Low	6.0–7.8	Low to Moderate	Moderate to High	Low to Moderate	225,000
			4020 MF	Tap root	Upright Multifoliate	Widely adapted	 High multifoliate expression Fast recovery Good winterhardiness	Bloat hazardNeeds good drainage	Spring – Fall	4.0	1.8	30	Good	Low	6.0–7.8	Low to Moderate	Moderate to High	Low to Moderate	225,000
			4010 BR	Branch root	Upright	Widely adapted; does well with higher water table	 Branch root tolerates wet soils High forage yield Persistent Highly resistant to major diseases 	• Bloat hazard	Spring – Fall	3.6	1.6	30	Good	Low to Moderate	6.0–7.8	Low to Moderate	Moderate to High	Low to Moderate	225,000
			Blend 4440	Mixed	Upright	Widely adapted	Blend of certified varietiesWidely adaptedHigh yield potentialExcellent winterhardinessDisease resistance	Bloat hazard Needs good drainage	Spring – Fall	3.5	1.8	30	Good	Low	6.0–7.8	Low to Moderate	Moderate to High	Low to Moderate	225,000
		Нау	Barricade SLT	Tap root	Upright	Widely adapted; suitable for moderately saline conditions	 Improved salt tolerance Excellent forage yield potential Broad disease and pest resistance 	Bloat hazard Needs good drainage	Spring – Fall	4.0	2.0	30	Good	Low	6.0–7.8	Low to Moderate	Moderate to High	Moderate	225,000
91-91	Alfalfa		HybriForce- 3400	Tap root	Upright Hybrid	Widely adapted; top yield and quality	 Highest forage yield potential Rapid recovery Excellent disease resistance Dense, persistent stands Fine stems and high quality 	Bloat hazard Needs good drainage	Spring – Fall	4.0	1.8	33	Good	Low	6.0–7.8	Low to Moderate	Moderate to High	Low to Moderate	225,000
			Stronghold	Tap root	Upright Multifoliate	Widely adapted; winterhardiness and quality	 Excellent yield and quality Superior winterhardiness, with low dormancy Excellent disease resistance 	Bloat hazardNeeds good drainage	Spring – Fall	3.0	1.3	30	Good	Low	6.0–7.8	Low to Moderate	Low to Moderate	Low to High	225,000
			Surge HG	Tap root	Upright Multifoliate	Widely adapted	 Hi-Gest Alfalfa Technology Improved fibre digestion and crude protein More pounds of milk per cow 	Bloat hazard Needs good drainage	Spring – Fall	4.0	1.7	34	Good	Low	6.0–7.8	Low to Moderate	Moderate to High	Low to Moderate	225,000
			3010	Deep-set crown	Upright	Widely adapted; suitable to pasture production	 High traffic tolerance due to deep-set crown High forage yield Excellent disease- resistance package 	Bloat hazard Needs good drainage	Spring – Fall	2.5	1.8	30	Good	Low	6.0–7.8	Low to Moderate	Moderate to High	Low to Moderate	225,000
		Hay & Pasture	Foothold	Spreader	Prostrate Multifoliate	Widely adapted; suitable to pasture or long- lived hay	 High traffic tolerance due to oversized crown High leaf-to-stem ratio Excellent winterhardiness and disease resistance 	Bloat hazard Needs good drainage	Spring – Fall	2.0	1.7	30	Good	Low	6.0–7.8	Low to Moderate	Moderate to High	Low to Moderate	225,000
			2010	Creeping root	Upright	Drier regions	Excellent winterhardinessCreeping-rooted typeGood regrowth	Bloat hazardNeeds good drainage	Spring – Fall	2.4	1.9	29	Good	Low	6.0–7.8	Low to Moderate	Moderate to High	Low to Moderate	225,000
-\{			Spyder	Creeping root	Upright	Drier regions	Excellent winterhardinessCreeping-rooted typeGood regrowth	Bloat hazardNeeds good drainage	Spring – Fall	1.0	1.0	27	Good	Low	6.0–7.8	Low to Moderate	Moderate to High	Low to Moderate	225,000

* Disease Resistance Index is a scale that quantifies a variety's level of resistance to the major diseases affecting alfalfa. Score is out of 30 o

LEGUME VARIETY SUMMARY

											Environmental Tolerances							
Group	Intended Use	Species	Variety	Rooting Habit	Plant Type	Preferred Growing Conditions	Variety Key Features	Species Limitations	Production Period	Winter- hardiness	Drought	Flooding	Optimum pH	Acidity	Alkalinity	Salinity	Approx. Seeds/lb	Pure Stand Seeding Rate Ib/ac
		Birdsfoot Trefoil	Leo	Tap root with branches	Low- growing	Adapted to areas with higher moisture	Good winterhardinessHigh flood toleranceBloat-free legume	• Difficult to establish	Spring – Fall	Moderate to Good	Moderate	High	6.2–6.5	Moderate to High	Moderate	Low to Moderate	370,000	7
Bloat-Free Legume	Pasture	Cicer Milkvetch		Creeping root	Upright	Widely adapted; creeps best in coarser, textured soils	 Widely adapted Moderately tolerant to salinity Ideal pasture legume Bloat-free legume 	• Difficult to establish	Late Spring – Fall	Very High	Moderate to High	Low	6.0–7.8	Low to Moderate	Moderate	Low to Moderate	120,000	10-12
Bloat		Sainfoin		Tap root	Upright	Widely adapted to well-drained soils	 Good drought tolerance Good to excellent winterhardiness Good tolerance to alkaline soils Bloat-free legume 	• Limited regrowth	Spring – Summer	Good	Moderate to High	Low	6.0–7.8	Low	Moderate	Low	25,000	40
		Alsike Clover	Aurora	Branch root	Low- growing	Low-lying moist areas	 Tolerant to poorly drained soils Excellent winterhardiness Flood tolerance 7–14 days Fits shorter-term stands 	Bloat hazardRisk for grazing horses	Spring	Excellent	Poor to Moderate	Moderate to High	5.7–7.0	Moderate	Low to Moderate	Low	680,000	5
	Pasture	Double-Cut Red Clover	Wildcat	Tap root with branches	Upright	Best suited to areas with good moisture and good drainage; tolerates lower pH soils	Top-yielding red cloverStrong winterhardinessHigh moisture tolerance	Bloat hazard Short-lived	Spring	Strong	Low	Moderate	5.5–7.5	Moderate	Moderate	Low	240,000	6-8
Clover	Hay & I	Red Clover Single-Cut		Tap root with branches	Upright	Best suited to areas with good moisture and good drainage; tolerates lower pH soils	Excellent emergence Tolerates acidic soils Short-lived perennial	• Bloat hazard • Short-lived	Spring	Good	Low to Moderate	Moderate	5.5–7.5	Moderate	Moderate	Low	275,000	6-8
		Yellow Blossom Sweet Clover		Tap root	Upright	Widely adapted; very productive on well-drained, fertile soils	 Low coumarin for reduced risk of bleeding diseases in cattle Commonly used as a soil builder Good winterhardiness 	• Biennial	Spring of second (biennial)	Good	Moderate to High	Low	6.5–7.5	Low	Moderate	Moderate	250,000	8-10
	Pasture	White Clover	Grasslands Huia	Rhizo- matous	Low- growing	Prefers heavier, moist soils	Low-growing Tolerant to close mowing and grazing	• Bloat hazard	Spring – Fall	Good	Poor	Low to Moderate	5.5–7.0	Moderate	Low	Low	775,000	5

GRASSES & ANNUAL FORAGES

Give your stand the boost it needs with BrettYoung's full line of perennial grasses or annuals. Whether you are seeking higher productivity, rapid regrowth or disease resistance, the specialists at BrettYoung will supply the seed you need for a successful hay, grazing, or cover crop stand.

FORAGE GRASSES

Whether you are looking for high productivity, rapid regrowth or disease resistance, when it comes to a successful hay or pasture stand, don't settle for anything less than BrettYoung's full line of premium forage grasses.

Full Line of Forage Grasses

Improved grass varieties are an important component in most hay and pasture stands. They add to the productivity, yield, quality and production timing of most mixtures. BrettYoung is constantly working with plant breeders to offer a complete portfolio of improved varieties to meet Western Canadian production needs.

Selecting the right grass for your operation is critical to achieving your production goals. Our Regional Account Managers will work with you to make the best choices for your farm. Our guide offers a number of tools to help you learn about our grass species, improved varieties and their adaptation.

Forage Grass Species

- Ryegrass
- Bromegrass
- Fescue
- Orchardgrass
- Timothy
- Wheatgrass
- Wildrye
- Native seed





SWAJ Tall Fescue

Outstanding Winterhardiness and Soft-Leaved Palatability

SWAJ is a Nordic tall fescue bred for its winterhardiness, specifically its tolerance to harsh winter conditions characterized by frost, snow and ice. Selected for softleaved palatability and improved feed quality, SWAJ enhances digestibility and pounds of gain. Its ideal maturity provides complementary timing and blend compatibility with most hay and pasture uses.

SWAJ has a bunch-type growth habit, average flag leaf size and tall plant height delivering more biomass. A strong disease package includes resistance to crown rust.

Features

Soft-leaved palatability	Crown rust resistance
Outstanding winterhardiness	High yield
Endophyte free	





Catapult Timothy

Explosive Spring Vigour and Summer Regrowth

Catapult is an aggressive growing, early maturity timothy. A semi-erect growth habit, medium to dark green colour, and taller plant height are characteristic of this variety. Bred for spring vigour and summer regrowth, Catapult comes out of the ground fast with rapid recovery after cutting. Its superior stand persistence lasts all season and continues year after year. Ideal companion for legumes and other forage grasses or as a pure stand.

Features

reaction	
Strong Seedling Vigour	Excellent Summer Regrowth
Stand Persistence	Exceptional Yield
Tall Plant Height	



GRASSES & ANNUAL FORAGES

FORAGE GRASS VARIETIES

											Environmental Tolerances							
Group	Intended Use	Species	Variety	Rooting Habit	Plant Type	Preferred Growing Conditions	Variety Key Features	Species Limitations	Production Period	Winter- hardiness	Drought	Flooding	Optimum pH	Acidity	Alkalinity	Salinity	Approx.	Pure Stand Seeding Rate Ib/ac
ass		Meadow Brome	Fleet	Bunch- grass	Basal	Widely adapted; prefers well- drained soils	Excellent pasture varietyWidely adaptedExcellent regrowth	 Poor tolerance to flooding 	Early Spring – Late Summer	Very Good to Excellent	Moderate to High	Low	6.0–7.5	Moderate	Moderate	Low to Moderate	90,000	18–28
Bromegr		Smooth Brome	Carlton	Aggressive Sod- forming	Elongating	Widely adapted	 Excellent winterhardiness Aggressive sod-forming roots Slow regrowth Widely adapted Exhibits disease resistance 	 Considered an invasive species in many range areas 	Mid Spring – Mid Summer	Excellent	Moderate to High	Moderate	6.0–7.5	Moderate	Moderate	Low to Moderate	142,000	12–16
	& Pasture	Creeping Red Fescue	Boreal	Sod- forming	Basal	Widely adapted; does best in high rainfall areas	 Does well with wide range of soil types Is most productive under high-moisture conditions Tolerates close grazing and survives drought 	 Low production under drier conditions 		Excellent	Moderate to High	Moderate	5.5–7.5	Moderate to High	Moderate	Low to Moderate	375,000	3–6
	Hay 8	Meadow Fescue		Bunch- grass	Basal	Prefers soils with good moisture and good drainage	Basal leaf growth suitable for grazingTolerant to acidity	 Not always winter- hardy 	Spring – Fall	Fair to Good	Moderate	Moderate to High	5.5–6.5	Moderate	Moderate	Moderate	230,000	8–12
Fescues	NE	Tall Fescue	SWAJ	Bunch- grass	Basal	Excellent tolerance to harsh winter conditions (frost, snow and ice)	 Soft-leaved palatability Outstanding winterhardiness Crown rust resistance High yield Endophyte free 	 Widely adapted; does best on moist, heavy- textured soils 		Very Good	Moderate	Moderate to High	5.5–6.5	High	Moderate	Moderate to High	205,000	8–12
		Tall Fescue	Cowgirl	Bunch- grass	Basal	Widely adapted; does best in moist, heavy- textured soils	Soft-leavedImproved palatabilityEndophyte free	 Not always winter- hardy 	Spring – Fall	Fair to Good	Moderate	Moderate to High	5.5–6.5	High	Moderate	Moderate to High	205,000	8–12
		Tall Fescue	Riding Brand	Bunch- grass	Basal	Widely adapted; does best in moist, heavy- textured soils	 Excellent heat and drought tolerance Endophyte free Good seedling vigour Adapted to a variety of soil types 	• Not always winter- hardy	Spring – Fall	Good	Moderate	Moderate to High	5.5–6.5	High	Moderate	Moderate to High	205,000	8–12



FORAGE GRASS VARIETIES

												E							
Group	Intended Use	Species	Variety	Rooting Habit	Plant Type	Preferred Growing Conditions	Variety Key Features	Species Limitations	Production Period	Winter- hardiness	Drought	Flooding	Optimum pH	Acidity	Alkalinity	Salinity	Approx. Seeds/lb	Pure Stand Seeding Rate lb/ac	
		Creeping Foxtail		Sod- forming	Basal	Adapted to soils with continuous moisture	Excellent flood tolerance	• Difficult to handle seed	Spring – Fall	Very Good	Poor	High	5.5–7.5	Moderate to High	Low	Low to Moderate	785,000	3–6	
	ure	Kentucky Bluegrass	Tirem	Sod- forming	Basal	Does best on well- drained, highly productive soils	Long-livedHighly palatableTolerance to flooding and close grazing	• Does not tolerate drought	Spring – Fall	Excellent	Low to Moderate	Moderate	5.5–7.5	Low to Moderate	Low to Moderate	Low	2,100,000	4–6	
Miscellaneous	Pasture	Meadow Foxtail		Bunch- grass	Basal	Prefers cool conditions and high water tables	• Excellent flood tolerance	• Difficult to handle seed	Early Spring – Fall	Good	Low	High	5.5–7.5	Moderate to High	Moderate	Low	410,000	3–6	
Misce		Perennial Ryegrass	Tribal	Bunch- grass	Basal	Medium- to high- fertility soils with adequate moisture	Very leafy bunchgrassHigh-quality forageSusceptible to winterkillRequires high fertility	Very susceptible to winterkill	Mid to Late Summer, Fall	Poor	Low	Moderate	5.5–7.5	Moderate	Low to Moderate	Low to Moderate	240,000	8–12	
		Reed Canary- grass	Rival	Sod- forming	Elongating	Grows well on poorly drained soils prone to flooding	Low alkaloid varietyCan be subjected to temporary flooding up to 8 weeksExcellent winterhardiness	• Not saline tolerant	Spring – Summer	Excellent	Moderate	Excellent	5.5–7.5	Moderate	Moderate	Low	535,000	4–8	
lgrass		Orchard- grass	AC Killarney	Bunch- grass	Basal	Prefers medium textured well-drained soils with good moisture	 Good winterhardiness Late maturity Dense leafy production	Not always winter-hardy	Spring – Fall	Good	Moderate	Low to Moderate	6.0–7.5	Moderate	Low	Low to Moderate	425,000	3–7	1
Orchardgrass	R Pasture	Orchard- grass	Trailburst	Bunch- grass	Basal	Prefers medium textured, well-drained soils with good moisture	Selected for vigour and plant healthHigh forage quality and palatabilityDisease and stem rust resistanceHigh yields	• Not always winter-hardy	Spring – Fall	Fair to Good	Moderate	Moderate	6.0–7.5	Moderate	Low	Low to Moderate	425,000	3–7	
othy	Hay &	Timothy	Catapult	Bunch- grass	Basal	Adapted to cool, moist areas; good tolerance to waterlogged soils	Strong seedling vigourExcellent summer regrowthStand persistenceExceptional yieldTall plant height	Not saline or drought toleranNot tolerant to continuous grazing	^t Spring – Summer	Very Good to Excellent	Low	High	5.6–7.3	High	Low	Low	1,200,000	3–10	
Timothy		Timothy	Summergraze	Bunch- grass	Basal	Adapted to cool, moist areas; good tolerance to waterlogged soils	Medium maturityHigh yieldsVery good to excellent winterhardinessExcellent stand density	Not saline or drought toleranNot tolerant to continuous grazing	^t Spring – Summer	Very Good to Excellent	Low	High	5.6–7.3	High	Low	Low	1,200,000	3–10	
								TALL WAS				II A		100		Jan X			

FORAGE GRASS VARIETIES

											Environmental Tolerances							
Group	Intended Use	Species	Variety	Rooting Habit	Plant Type	Preferred Growing Conditions	Variety Key Features	Species Limitations	Production Period	Winter- hardiness	Drought	Flooding	Optimum pH	Acidity	Alkalinity	Salinity	Approx. Seeds/lb	Pure Stand Seeding Rate lb/ac
		Crested Wheat- grass (Fairway Type)	Fairway	Bunchgrass	Basal	Widely adapted; does best in medium to coarse, well-drained soils; does better than standard types under more moist conditions	Diploid typeFiner-stemmedTolerates more moisture	• Forage quality drops after heading	Early Spring	Excellent	Excellent	Low	6.6–8.4	Low	Moderate to High	Low to Moderate	300,000	10–15
		Crested Wheat- grass (Standard Type)	Kirk	Bunchgrass	Basal	Widely adapted; does best in medium to coarse, well-drained soils	Tetraploid typeTolerant to heavy grazingAggressive vigour and high yields	• Forage quality drops after heading	Early Spring	Excellent	Excellent	Low	6.6–8.4	Low	Moderate to High	Low to Moderate	195,000	10–15
		Inter- mediate Wheat- grass		Slow sod- forming	Elongating	Widely adapted; prefers well-drained soils with adequate moisture	Deep-feeding root systemProduces excellent pasture yieldsShort-lived under intensive use	Shorter- lived under intensive management	Late Spring – Mid Summer	Very Good	Moderate to High	Low	6.0–8.4	Low	Moderate	Low to Moderate	80,000	18–24
SS		Northern Wheat- grass		Sod-forming	Elongating	Prefers dry, medium to coarse textured soils	Cures well on stem; suitable for late season or winter pasture		Mid Spring – Mid Summer	Very Good	Very High	Moderate	6.6–8.4	Low to Moderate	Moderate to High	Moderate	145,000	12–16
Wheatgrass	t)	Pubescent Wheat- grass	Greenleaf	Slow sod- forming	Elongating	Widely adapted; prefers well-drained soils with adequate moisture	Widely adaptedModerately tolerant to salinityGood in mixtures with alfalfa	• Shorter- lived under intensive management	Spring – Summer	Very Good	Moderate to High	Low	6.0–8.4	Low	Moderate	Low to Moderate	80,000	16–22
	Hay & Pasture	Hybrid Wheat- grass	AC Saltlander	Rhizomatous, creeping root	Elongating	Adapted to saline and alkaline soils	 Dewater saline areas and spread out Palatable and nutritious hay or pasture Competes with foxtail barley and downy brome 	• Fair to good forage quality	Early Spring - Late Summer	Excellent	Moderate to High	Moderate to High	6.6–8.4	Low	High	Very High	111,000	5–10
- 1		Slender Wheat- grass		Bunchgrass	Elongating	Adapted to a wide range of soils; prefers well-drained loam soils	Saline tolerantSpring flood tolerant	• Short-lived perennial	Mid Spring – Summer	Good	Moderate	Moderate	6.6–8.4	Low to Moderate	Moderate to High	High	135,000	10–14
		Tall Wheat- grass		Bunchgrass	Basal	Adapted to poorly drained alkali soils; prefers a high water table	Excellent winterhardinessGood flood toleranceVery tolerant to saline soil conditions	• Lower palatability	Late Spring – Mid Summer	Excellent	High	Moderate to High	6.6–8.4	Low to Moderate	High	Very High	75,000	20–30
		Western Wheat- grass		Sod-forming	Elongating	Widely adapted; prefers heavy soils	Drought tolerant Saline tolerant		Spring – Fall	Excellent	Moderate to High	Moderate to High	6.6–8.4	Low to Moderate	Moderate to High	High	115,000	16–22
		Dahurian Wildrye		Bunchgrass	Basal	Widely adapted but short-lived	Very vigorous seedlingsUsed in hay and pasture mixes for establishment	• Short-lived perennial	Spring – Fall	Good	Moderate	Low	6.0–8.4	Low	Moderate	High	80,000	12–16
Wildrye		Russian Wildrye		Bunchgrass	Basal	Widely adapted; most productive on fertile loam soils; most commonly used in drier regions	 Excellent pasture grass, good for winter grazing Good early growth Salt tolerant Excellent drought tolerance when established 	• Poor seedling vigour	Early Spring – Mid Summer	Excellent	Very High	Low	6.6–8.4	Low to Moderate	Moderate to High	High	150,000	8–12

ANNUAL FORAGES

Annual forages provide quick establishment, soil improvement properties and high biomass yield over the course of one growing season. Annual production increases flexibility due to the short-term nature of the stand and can provide a compliment to perennial forages to extend the duration and quality of forage availability. Annuals have been used in various applications in Western Canada including hay, grazing, winter stockpiling, companion crops, and cover crops.

Common Definitions

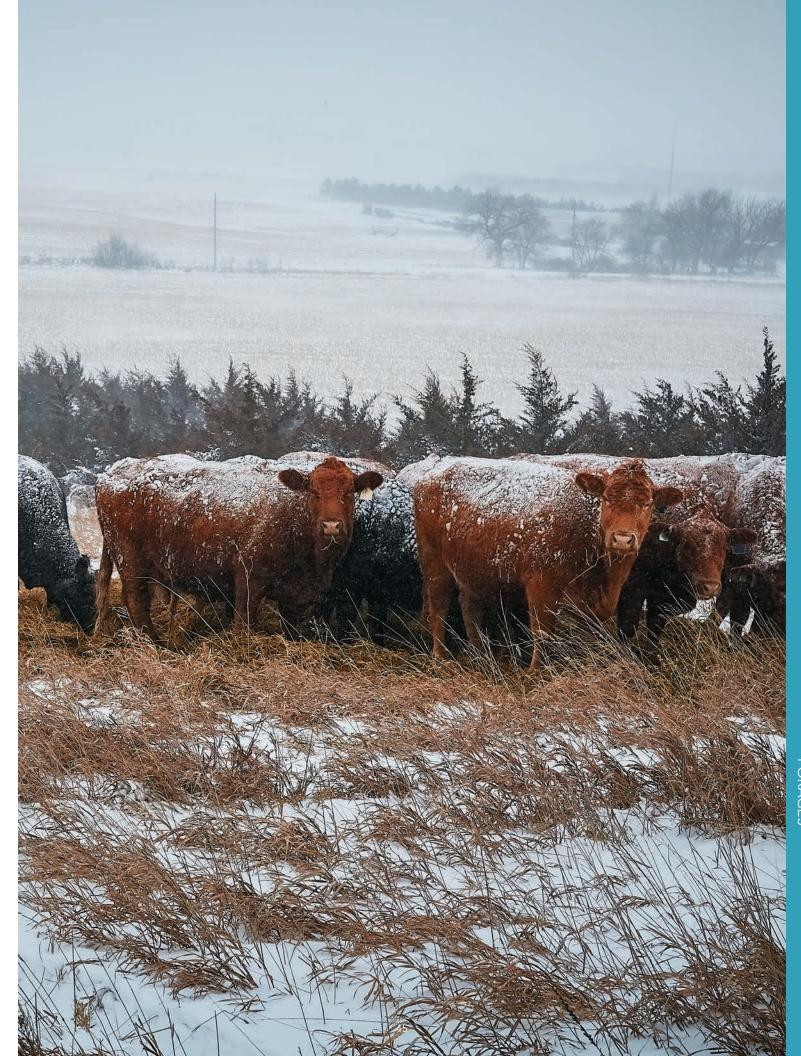
Term	Definition
Cover Crop	Crops that are planted with the intent to build and improve the soil, including managing soil erosion, soil fertility and soil quality.
Companion Crop	The planting of annual and perennial forages in combination to provide a production increase in the seedling year.
Stockpiling	The practice of saving certain hay or pasture fields for grazing in the fall, and winter, after forage growth has stopped.

Cover Crops

In a cover crop application, sometimes referred to as cocktail crops, forages are planted primarily for soil improvement benefits such as erosion control, soil health and biodiversity. Most cover crop blends are comprised of multi-species annual forages including ryegrass, brassicas, and legumes such as vetch or clover to fix nitrogen. Many of these species have been selected for their nutrient dense profiles and digestibility. The management of the resulting biomass is an important consideration if you are planting a cover crop, preferred methods are grazing and plough down.

Try the #18 Annual Forage EXT stock blend for mid-to-late season cocktail crop grazing and stockpiled forage applications.

Note: Snow cover and frost can affect availability of stockpiled forage.



GRASSES & ANNUAL FORAGES

ANNUAL FORAGE VARIETIES

												Er	vironmental Tolerances					
Group	Intended Use	Species	Variety	Rooting Habit	Plant Type	Preferred Growing Conditions	Variety Key Features	Production Period	Species Limitations	Winter- hardiness	Drought	Flooding	Optimum pH	Acidity	Alkalinity	Salinity		Pure Stand Seeding Rate lb/ac
	Silage, Grazing, Greenfeed	Sorghum Sudangrass	Sorghum Sudangrass	Fibrous	Warm-season grass	Prefers warm soil and growing conditions	Triazine tolerant High yields	Late Summer, Fall	Nitrate risk	Annual	Moderate to High	Moderate	6.0–7.5	Moderate	Moderate	Moderate	25,000	25–30
	Silage, Gree	Millet	Golden German	Fibrous	Warm-season grass	Prefers warm soil and growing conditions	Very good for swath grazing	Late Summer, Fall	• Nitrate risk	Annual	Moderate to High	Moderate	6.0–7.5	Moderate	Moderate	Moderate	200,000	15–30
Annual	Silage, reenfeed	Oat/Pea	Sprint Maxx	Mixture	Cool-season grass legume mixture	Widely adapted	Good nurse crop Good quality	Summer		Annual	Moderate	Moderate	6.0–7.5	Moderate	Moderate	Moderate	12,000	120–150
Ā	Sila	Triticale/ Pea	Tripper Maxx	k Mixture	Cool-season grass legume mixture	Widely adapted	Good nurse crop Good quality	Summer		Annual	Moderate	Moderate	6.0–7.5	Moderate	Moderate	Moderate	14,000	120–150
		Forage Radish	Purebred Brand Radish	Тар	Brassica	Prefers well-drained soils and cool growing conditions	In-season and late-season grazingSoil improvementOilseed type	Late Summer, Fall		Annual	Low to Moderate	Low	5.5–7.5	Moderate to High	Moderate	Low to Moderate	150,000	8–10
		Turnip	Purple Top Turnip	Тар	Brassica	Prefers well-drained soils and cool growing conditions	In-season and late-season grazing Soil improvement	Late Summer, Fall		Annual	Low to Moderate	Low	5.5–7.5	Moderate to High	Moderate	Low to Moderate	150,000	8–10
ass		Annual Ryegrass	Bigbang	Bunch- grass	Basal	Soil of medium to high fertility with adequate moisture	Tetraploid typeVery leafy bunchgrassSuitable for annual hay production in high-moisture areas	Mid to Late Summer, Fall	• Prone to drought stress	Annual	Low	High	5.5–7.5	Moderate to High	Low to Moderate	Low to Moderate	220,000	20–30
Ryegrass	ercropping	Italian Ryegrass	Fabio	Bunch- grass	Basal	Soil of medium to high fertility with adequate moisture	 Tetraploid type Fast-growing leafy and high-quality annual grass High-quality and palatable feed Requires high fertility 	Mid to Late Summer, Fall	• Prone to drought stress	Annual	Low	High	5.5–7.5	Moderate to High	Low to Moderate	Low to Moderate	220,000	12–20
	Hay, Grazing, Intercropping	Hairy Vetch		Shallow Tap Root	Upright	Well suited to sandy, well drained soils	 Excellent nitrogen fixer High protein content Highest shade tolerance of legumes Sprawling vine biomass production 	Summer – Fall	 Limited tolerance to drought Consumption of seed can be poisonous to livestock Not adapted to poorly drained soils Natural resistance to glyphosate Slow establishment and regrowth 	Annual or Biennial	Low	Moderate	6.0–7.0	Moderate	Moderate	Low	20,000	20–25
Cover Crop		Crimson Clover		Taproot	Upright	Thrives in well- drained sand and clay soils	 Nitrogen fixer Biomass production More resistant to disease and nematodes than other clovers Strong tap root that will survive well in blends 	Summer – Fall	 Cannot tolerate extreme heat or cold Low tolerance to drought Does not overwinter Slight bloat risk 	Annual	Moderate	Low – Moderate	6.0–7.0	Moderate – High	Moderate	Low	140,000	10–15
		Berseem Clover		Shallow Tap Root		Slightly alkaline loam and silty soils	Aggressive warm season growthDoes not cause bloatNitrogen fixerBig biomass production	Summer – Fall	 Does not overwinter and susceptible to frost Does not grow well in sandy soils Can be slow to establish in spring Little regrowth Low tolerance to disease 	Annual	Moderate	Moderate – High	6.0–7.0	Moderate	Moderate – High	Moderate	140,000	8–12

SEED PRODUCTION

Producing Seed for BrettYoung

Benefits of Seed Production

Forage and turf seed production is an excellent way to get a head start on next year's seeding, diversify your risk and add some profitable cropping options to your rotation. Forage and turf seed markets have been stable with consistent demand and good prices.

In addition to being some of the more consistently profitable cropping options available to Western Canadian growers, turf and forage seed production also provides agronomic benefits for your farm.

Agronomic Benefits

Turf Seed Production

- Early harvest splits up fall workload
- Increases organic matter, helps improve less productive or marginal soils
- Some species have tolerance to salinity, alkalinity and acidity
- Some perennials have multiple crop years reducing planting season workload

Legume Seed Production

- Improves soil tilth
- Low-input user
- Nitrogen fixation
- Break-crop effect of legumes will benefit following annual crops
- Multiple crop years reduce planting season workload

Economic Benefits

Compared to other commodity crops, forage and turf seed production has an excellent profitability track record. It has consistently pencilled out as a lucrative option for Western Canadian growers. Furthermore, prices for turf seed crops such as perennial ryegrass, annual ryegrass, creeping red fescue and tall fescue have remained strong. Many of BrettYoung's seed production contracts allow growers to lock in these high price levels and do not limit upside, which can really help add to a farm's bottom line.

Perennial Ryegrass Minimum Contract Price and Actual Grower Payments



Grow Seed and Save

Seed Grower Partnership Program

Contract forage and turf seed production with BrettYoung and save with significant cash rebates on purchases of BrettYoung canola and Elite soybeans.

Spring plant a minimum of 150 acres and purchase qualifying crop inputs to earn your cash rebates.



Seed Production Specialist Services

BrettYoung's dedicated team of Seed Production Specialists, with expertise in forage and turf seed production, spans Western Canada. From scouting and selection of production fields, fertility programs, pesticide and growth regulator recommendations, to swathing, harvest timing and cover crop management, Seed Production Specialists are there every step of the way to help growers maximize returns. Forage and turf grass species have shown strong seed yield increases in Western Canada, and efforts continue to improve agronomics, seed yield and quality.

Planning

- Scouting and selection of production fields
- Selection of proper production species
- Recommendation on expected production practices
- Communication of contract terms

Seeding & Crop Development

- Delivery of seed stock
- Multiple field scouting visits
- Fertility recommendations
- Herbicide, fungicide and growth regulator recommendations

Crop Delivery

- Communication of delivery schedule
- Communication of crop quality analysi
- Communication of grower payments

Harvest

- Available for recommendations on harvest timing
- Available for recommendations on equipment settings
- Crop samples taken
- Post-harvest recommendation

Contact a BrettYoung Seed Production Specialist in your area to learn more about contract production opportunities.

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Jason Henderson

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Kerry Dusik – Production Manager Kerry.Dusik@brettyoung.ca 204-229-3397 SEED PRODUCTION

FORAGE ESTABLISHMENT GUARANTEE

BrettYoung will guarantee your forage seed investment in the unfortunate event of an establishment failure. Order your seed and complete the enrolment form by April 2, 2021, to be eligible for 100% coverage.

Agronomic Requirements

To receive replacement seed of qualifying varieties, all of the seeding preparation and agronomic practices noted below must be followed and documented.

Time of Seeding

Forage seed must be planted before June 30, 2021.

If a companion crop is used in the establishment year, the seeding rate must be reduced to one-half or less of the normal recommended seeding rate and harvested as greenfeed or silage. To reduce lodging and severe competition from the companion crop, the soil nitrogen and applied nitrogen must not exceed 50 pounds of actual nitrogen per acre.

Seedbed Preparation

Seed must be planted in a firm, well-prepared seedbed that has undergone proper weed control, crop residue management and good seed-to-soil contact.

Seeding Depth and Packing

Forage seed must be seeded to a depth of one-half to one-quarter inch. Broadcast seeding operations must be incorporated and packed immediately, no deeper than the noted depth.

Seeding Rates

Minimum seeding rates appropriate for the cropping zones and area must be followed. In the drier regions, the minimum rate is eight pounds per acre for hay and pasture mixes. In higher moisture regions, the minimum is 12 pounds per acre for hay and pasture mixes.

Weed and Insect Infestation

The Forage Establishment Guarantee is not available in the event of excess weed competition or insect infestation. Preventative action must be taken to control weed infestation. Reasonable control and monitoring of insects, mainly grasshoppers, is required.

Fertility and Soil pH

Soil pH for alfalfa plantings must be within a range of 6.5 to 8.5. A soil test showing satisfactory soil conditions must be available. Forage seed planted in an area where improper fertility and soil pH are present will be ineligible for coverage.

No more than 15 pounds of P_2O_5 should be placed in the seed row with the seed. Higher rates must be banded away from the seed row to avoid seedling damage.

Chemical Residue

Stand damage due to chemical residue is not eligible for coverage.

Stand Evaluation

Your BrettYoung Regional Account Manager must be notified within 60 days of seeding or by July 30, 2021. By this date, with corrective management such as weed or insect control, the forage stand will establish to its full potential.

Companion Crop

If a companion crop (sometimes referred to as a nurse crop) is used it must be seeded at one-third to one-half of the normal seeding rate. Seed forages in a separate pass at an angle to your companion crop to reduce competition and to aid in depth control. Remove the companion crop as early as possible rather than harvesting the grain. This will reduce the amount of competition for sunlight, moisture and nutrients.

BrettYoung 2021 Forage Establishment Guarantee

Even though you've taken care to properly seed and establish your new forage stand, weather does not always co-operate. Not to worry, BrettYoung will guarantee your forage seed investment on qualifying premium products. In the unfortunate event of establishment failure, the replacement seed cost is borne by BrettYoung. Percent coverage depends on when you enrol in the program, place your seed order and if a companion crop is used.

Program Eligibility Criteria

To be eligible for the program, the following criteria must be met:

- Order seed and enrol in the program by April 2, 2021, and seed without a companion crop to qualify for 100% coverage on replacement seed.
- If a companion crop is used during the April 2, 2021 enrolment period, replacement seed coverage is 50%.
- Enrol in the program by April 30, 2021, and seed without a companion crop to qualify for 50% coverage on replacement seed.
- If a companion crop is used during the April 30, 2021 enrolment period, replacement seed coverage is 25%.
- · Stand must be planted by June 30, 2021.
- Products or blend components used must qualify for the program.
- Must fulfill Agronomic Requirements as outlined on the opposite page.

Program Limitations

- Replacement seed under the Forage Establishment Guarantee is provided only once for the area of the stand that failed to establish and must be seeded in that area.
- Replacement seed will be the same variety or mixture as originally purchased, subject to availability.
- Replacement seed must be planted during the original year of seeding or during spring of the following year.
- Good agronomic seeding preparations and stand establishment practices must be followed and documented as outlined on the opposite page.

Forage Guarantee Key Dates

April 2, 2021

Deadline to order seed and enrol in the program to be eligible for 100% coverage.

April 30, 2021

Deadline to enrol in the program to be eligible for 50% coverage.

June 30, 2021

Seeding deadline on all qualifying forage stands.

Within 60 days of seeding or July 30, 2021

Deadline to notify
BrettYoung Regional
Account Manager of stand
establishment concerns.

Online Registration

Complete the Forage Establishment Guarantee registration form to enrol in the program. Be sure to register and buy qualifying BrettYoung forages before April 2, 2021 to be eligible for 100% coverage.

Download your registration form today at brettyoung.ca/Establishment-Guarantee



Contact your local ag-retailer or BrettYoung for more information.

To find a BrettYoung Preferred Retailer near you, visit: brettyoung.ca/PreferredRetailer.

HEAD OFFICE

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brettyoung.ca

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