

PICKSEED®
good things growing...



2012 Western Canada Product Guide




“Innovation, Dedication, Integrity, Loyalty, Teamwork, Prudence” these are the values that drive PICKSEED



Otto Pick founded PICKSEED 65 years ago; he focused on helping farmers improve their pastures and farming success with quality, innovative seed products. This focus has remained a core value of PICKSEED.

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PICKSEED Today

PICKSEED is a leader in the development, production and distribution of turfgrass, forage crop and hybrid corn seeds. Since our beginning in 1947, PICKSEED has built a trusted and proven reputation for quality, agronomic advice and a commitment to research and technology. PICKSEED's dedicated team provides practical and effective solutions to improve your profitability and reduce your operating risk.

It All Begins With Research

PICKSEED operates the most extensive private forage testing program in Canada. This rigorous testing gives us an unmatched ability to identify varieties with superior yield and persistence, faster regrowth, exceptional forage quality and superior disease resistance, specifically for tough Canadian conditions.



We test at three locations in Ontario, three locations in Québec and four locations in Western Canada. Each year 35-45 new alfalfa varieties enter our replicated trials with each trial being harvested two to four times per year (depending on location). We also do forage quality sampling and analysis on our trials and monitor the quality characteristics of our varieties.

PICKSEED's trials adhere to well-recognized government and university testing protocols, which require replicated testing (four plots of each variety in each trial). This rigorous testing ensures that only the best adapted varieties are advanced. PICKSEED selects and advances one to two elite varieties from this extensive testing program every few years.

The emphasis on development of new forage varieties at PICKSEED provides an unmatched level of genetic advancement. As a result of our constant and steady genetic improvement system PICKSEED is able to continually introduce outstanding new varieties.

Why We Test Varieties In-House

When you buy varieties from PICKSEED, you can have confidence in your decision because our performance promise is backed by extensive regional testing. We only register an alfalfa variety for sale in Canada after we have grown it and tested it right across the country. We are not dependent on varieties tested only in the USA or on a limited basis in Canada. When we compare varieties, we compare them head-to-head, where the varieties appear in the same trials.

We also conduct tough winter survival trials to screen our varieties for winterhardiness, ensuring that only the most resistant make it to the farmer.

The advantages of this testing regime are proven yield, predictable performance and persistence, all of which allow you to plan with confidence and peace of mind.





“Our proprietary development brings you the best in yield, forage quality and agronomics”

We are the Forage Leaders.

At PICKSEED, we start with performance trials and testing programs to develop proprietary forage products. We contract our forage seed needs with highly skilled Canadian seed growers, who work closely with our experienced field representatives to ensure our seed crops are of top quality. Our expert sales and technical staff are always ready to support and assist you with your forage product choices and agronomic needs.

Seed Treatments to Ensure Better Performance

- We add Apron® XL* treatment on our proprietary alfalfa seed to protect the seedling from early season diseases and provide superior germination and stand establishment.
- Alfalfa seed is pre-inoculated with Nitragin® Gold** inoculant to ensure that alfalfa roots become properly nodulated and are capable of fixing a maximum of atmospheric nitrogen.
- We operate facilities in four provinces to clean, treat and mix our forage products.

* Apron® XL is a registered trademark of Syngenta Crop Protection Canada Inc. ** Nitragin® Gold is a registered trademark of E.M.D. Inc.

ALFALFA

Vision Alfalfa

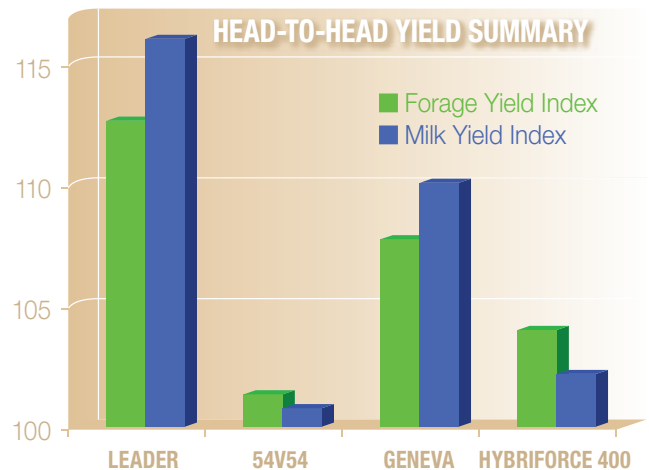
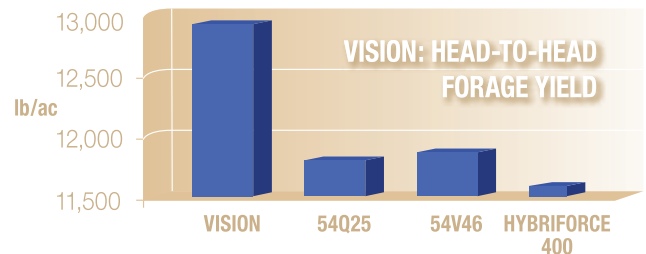
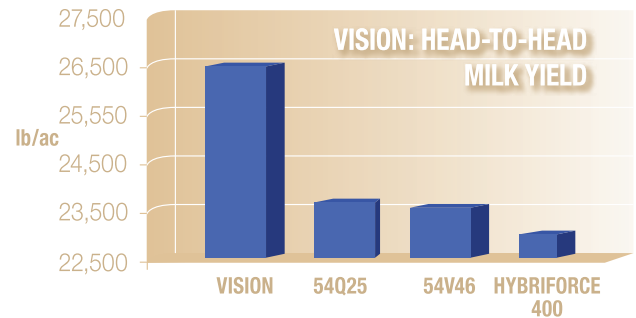
Vision represents a high performance, value-driven alfalfa. It combines the highest yield, feed quality, rapid regrowth with excellent persistence under a frequent cut regime. Adaptability advantage to a range of locations and conditions is one of the benefits and High Resistance (HR) to all six major alfalfa diseases is part of the forward-looking combination. Against the average of 54Q25, 54V46 and HybriForce 400, Vision has 110% Forage yield advantage and 114% Milk yield advantage. For field performance data on Vision go to page 21.

Leader Alfalfa

Leader is a new generation in performance with all the features and benefits we expect to see in a leading edge alfalfa variety. It has been tested and proven to provide industry-leading yield, persistence, forage quality, regrowth, multifoliolate expression and disease resistance. For field performance data on Leader go to page 21.

PICKSEED 2065MF Alfalfa

PICKSEED 2065MF has excellent winterhardiness, persistence in all environments, top yield and improved forage quality. PICKSEED 2065MF provides excellent regrowth and the opportunity of an extra cut (depending on 1st cut date and “critical rest period” date).



ALFALFA VARIETY COMPARISONS

VARIETY	DRI	BW	VW	PRR	FW	AN	APH	PLH	PA	SAA	SN	RKN	QUALITY	MULTIFOLIOLATE	OTHER
Vision	30	HR	HR	HR	HR	HR	HR	S	R		R	R	Very High	Very High	Yield, Persistence, Adaptability, Regrowth, Quality
Leader	30	HR	HR	HR	HR	HR	HR	S	HR	R	R		Very High	Very High	Yield, Quality, Persistence, Regrowth
PICKSEED 2065MF	29	HR	R	HR	HR	HR	HR	S	MR	HR	MR		Very High	Very High	Yield, Persistence, Regrowth, Quality
Steak	29	HR	HR	HR	HR	HR	R	S	MR	HR			High	High	Beef Production
AC Grazeland Br	5	R	S										Normal	No	Bloat Reduced

DISEASES & PESTS: BW = Bacterial Wilt; VW = Verticillium Wilt; PRR = Phytophthora Root Rot; FW = Fusarium Wilt; AN = Anthracnose; APH = Aphanomyces Root Rot; PLH = Potato Leafhopper; PA = Pea Aphid; SAA Spotted Alfalfa Aphid; SN = Stem Nematode; RKN: Root Knot Nematode; DRI = Disease Resistance Index max score = 30
QUALITY: Based on evaluation of % Crude Protein, ADF (Acid Detergent Fibre), NDF (Neutral Detergent Fibre), NDFD (Neutral Detergent Fibre Digestibility), RFQ (Relative Forage Quality)

ALFALFA CONTINUED

AC Grazeland Br Alfalfa

Animals experience up to 80% lower incidence of bloating with AC Grazeland Br. The culmination of 20 years of research by Agriculture and Agri-Food Canada, AC Grazeland Br features a superior rate of gain for beef cattle and increased milk production.

PICKSEED 3006 Alfalfa

PICKSEED 3006 is Western Canada's highest yielding dry-land alfalfa. Its aggressive creeping root combined with a moderate level of multifoliolate expression make it an excellent choice for multi-cut hay and grazing systems. Other features include high persistence, high resistance to Bacterial Wilt and moderate resistance to Verticillium Wilt. PICKSEED 3006 out-yields the competition – 114% in Alberta, 120% in Saskatchewan and 105% in Manitoba as compared to the check varieties of Beaver and Rambler.

Able Alfalfa

One of the most disease resistant alfalfas available with 10-20% of its root system creeping rooted, giving it the adaptability for multi-cut hay or grazing systems. It is winterhardy, has tremendous regrowth and is suitable for less than ideal soil conditions.

WestStar Alfalfa Blend

The only choice for growers who insist on high quality alfalfa and require the adaptability provided by a mix of alfalfa types, including multifoliolate, creeping root and taproot. It is a drought tolerant, winterhardy blend with good forage quality and multifoliolate expression. Only Certified Seed is used in this blend.

WestBlend Alfalfa Blend

This top quality blend grows well in a wide range of growing conditions with its drought tolerance, broad disease resistance, winterhardiness and multifoliolate expression. Composed of creeping root, multifoliolate and taproot alfalfa types.

Steak Alfalfa (Bred for Beef)

Steak outperforms in the 2-cut system often favoured by beef producers and shows high yield in other cutting regimes. Steak alfalfa has improved forage quality with higher pectin content (more digestible cell walls) and higher average daily gain with lower fibre content for more beef or milk.

OTHER LEGUMES

Tempus Red Clover

This high-producing tetraploid, double-cut variety demonstrates outstanding persistence – producing superior yields into the fourth harvest year.

OTHER LEGUMES CONTINUED

Altaswede Red Clover

A late flowering (single-cut) diploid variety, Altaswede was developed at the University of Alberta from Swedish landrace material. Used for plowdown and short term forage crops, providing rapid establishment with tremendous yields.

Dawn Alsike Clover

An improved, elite clover variety for low-lying moist areas. High-yielding with production exceeding Aurora by 102%.

Crescendo Ladino White Clover

A high yielding upright, ladino white clover with fine stems and large dark green leaves. Active stolon growth in the spring of the year fills in gaps, this variety also shows freedom from leaf diseases and virus pressure.

Bull Birdsfoot Trefoil

A persistent, long-lived, no bloat legume that is a standard reference for trefoil performance across Canada. It tolerates lower pH levels, has excellent seedling vigour, regrowth and establishes well with other legumes. It makes an excellent long-term pasture, especially on hard-to-work ground.

TIMOTHY

Richmond Timothy

Richmond is known for its high yield and its excellent regrowth - very important in a multi-cut alfalfa system to ensure uniform grass content at each forage harvest. Richmond is a reliable top yielding performer in trials across the country.

Glacier Timothy

Glacier is ideal for two-cut compressed timothy production. It has very early maturity (earlier than Aurora), excellent regrowth and great persistence. This variety is ideally suited to the compressed hay export market under two or three cut management.

Comtal Timothy

A late heading variety with excellent yield and disease resistance. A long-headed, soft-leaved variety, it excels in pasture mixes with its steady yield distribution over the growing season. It is a superior companion for late harvest species like single cut red clover and birdsfoot trefoil.

GRASSES

OKAY Orchardgrass

Excellent winterhardiness, rapid regrowth, more drought tolerance than timothy and great persistence. It is well suited to growing in a mix with alfalfa for hay or silage under a more frequent cutting regime. It is also an excellent choice for hay or pasture use. OKAY is a highly palatable grass with excellent early season growth. It is one of the few orchardgrass varieties with tolerance to stem rust, giving it better performance in hot, dry climates.

MBA Meadow Bromegrass

Fast regrowth and high yield of top quality forage are what MBA is known for. Great for season-long grazing or for hay/haylage use. This variety has excellent persistence and great adaptability across the Western provinces in all soil types. Starts early in the spring and produces to the fall. High drought tolerance.

Magna Smooth Bromegrass

Magna smooth bromegrass is widely adaptable for hay and pasture with leafy, palatable young plants that grow vigorously in the early season. Its aggressive creeping roots provide a measure of tolerance to overgrazing, quickly filling in thin areas. Magna provides strong disease resistance as well as good lodging resistance.

AC® Success Hybrid Bromegrass

This new development from Agriculture and Agri-Food Canada is an inter-species cross of smooth and meadow bromegrasses and combines the best features of both types - yield, persistence, fast regrowth and forage quality.

Carnival Tall Fescue

Demonstrates top yield, persistence and winterhardiness. High quality, medium-maturing forage with excellent adaptability to heat, drought, poor drainage and variable soil pH. Highly palatable, Carnival out-yields other tall fescues in field trials across Western Canada, including Courtenay, often considered to be a standard reference for persistence and yield in tall fescue.

Feeder Perennial Ryegrass

This variety is designed for multi-cut hay, greenchop or pasture systems. It is high-yielding with medium maturity, rapid regrowth and good seedling vigour.

Chief Intermediate Wheatgrass

Chief intermediate wheatgrass is an easy to establish hay and pasture grass that is suitable to grow with alfalfa. It out-yields both crested wheatgrass and smooth bromegrass. It is a sod forming grass that possesses good winterhardiness and drought tolerance.

GRASSES CONTINUED

Bellevue Reed Canarygrass

Bellevue is a reed canarygrass with low alkaloid content, meaning improved animal performance. The improved palatability in Bellevue means better forage intake in most livestock classes than traditional reed canarygrass varieties. With season long growth and excellent winterhardiness, this extremely adaptable forage can withstand extended periods of flooding as well as being tolerant of dry conditions.

Max Annual (Italian) Ryegrass

Max is extra leafy and highly palatable. Excellent for companion seeding with cereals to increase protein content of the silage, providing tremendous regrowth for fall grazing. Max is tolerant to low pH and is able to rapidly establish on a wide variety of soil types. Max is great in mixtures because of its adaptability, height, large leaves, upright growth and it does not produce seed heads in the seeding year. Leaf diseases are not a problem. Max is adaptable and can be used in forage mixes as: a nurse crop; a break crop in potato rotations; and a green manure crop. Use for pasture, green chop or stored feed (hay, silage).

FORAGE FOR BEEF

PICKSEED offers a wide selection of legumes, grasses and designed forage mixtures to meet your needs for beef. Our premium quality improved pasture mixtures have been specifically designed for increased stand life and better animal performance. Our varieties are bred and selected to:

- Increase the daily gains of calves and yearlings
- Supply all of the beef cow's energy and protein needs, as well as nearly all the minerals and vitamins – one of the biggest expenses in beef production is energy – a PICKSEED alfalfa/grass mix can provide that energy source to gestating and lactating beef cows
- Provide a more even seasonal distribution of forage
- Provide a higher level of herd health
- Produce surplus hay that can provide additional income for the beef producer



FORAGE MIXTURES

PICKSEED's forage mixtures are designed to improve yields and maximize profits using proprietary varieties that are tested to meet Canadian conditions and your specific requirements. Custom mixes are always available to meet specific and unique needs. A minimal charge is applied to custom mixes of five bags or less.

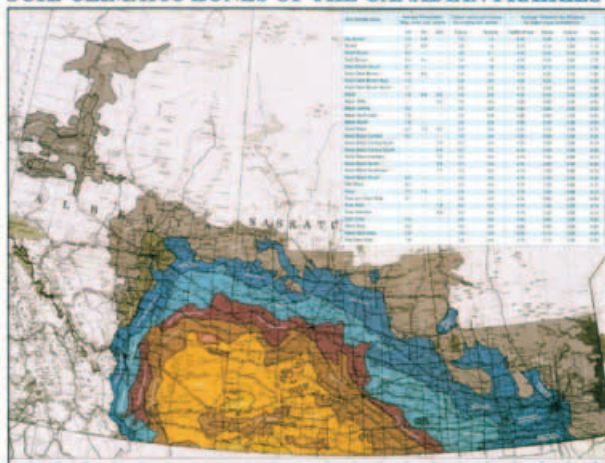
Mixture Name	Composition	Best Soil Type	Seeding Rate Per Acre	Purpose	Remarks
Cattlemans	40% Fleet Meadow Bromegrass 15% Kirk Crested Wheatgrass 15% Carnival Tall Fescue 15% Swift Russian Wild Ryegrass 15% AC Grazeland Br Alfalfa	Brown Dark Brown Black Grey Wooded Irrigated	6.5 kg/14 lb	Pasture	Ideal grassland pasture. Quick regrowth, good drought tolerance and season long growth. Built for Beef!
Stockmans	35% Fleet Meadow Bromegrass 20% OKAY Orchardgrass 20% Oxley II Cicer Milkvetch 10% Carnival Tall Fescue 10% HiPro Perennial Ryegrass 5% Richmond Timothy	Brown Dark Brown Black Grey Wooded Irrigated	6.5 kg/14 lb	Pasture	Widely adaptable. A well-balanced mixture. Non-bloating Cicer Milkvetch utilized to increase quality.
PasturePro	30% Fleet Meadow Bromegrass 25% AC Grazeland Br Alfalfa 15% HiPro Orchardgrass 15% Carnival Tall Fescue 10% HiPro Perennial Ryegrass 5% Richmond Timothy	Dark Brown Black Grey Wooded Irrigated	5.5 kg/13 lb	Pasture	Widely adaptable. Highest yielding pasture blend. Season long performance. Designed for maximum growth.
RangePro	50% Fleet Meadow Bromegrass 15% Russian Wildrye 10% Fariway Crested Wheatgrass 10% OKAY Orchardgrass 10% Carnival Tall Fescue 5% Richmond Timothy	Brown Dark Brown Black Grey Wooded Irrigated	6.5 kg/14 lb	Pasture	Long term pasture with no legume. Adapted to the drier areas of the Prairies.
SaltPro	10% WestStar Alfalfa Blend 20% Tall Wheatgrass 10% Dahurian Wildrye 10% Norgold Sweet Clover 20% Russian Wildrye 20% Carlton Smooth Bromegrass 10% Carnival Tall Fescue	All saline prone soils	6 kg/13 lb	Pasture	Formulated for salinity prone pastures.
Drylands	40% Fleet Meadow Bromegrass 20% Kirk Crested Wheatgrass 20% Pubescent Wheatgrass 10% Dahurian Wild Ryegrass 10% PICKSEED 3006 Alfalfa	Brown Dark Brown Black (Dry)	6.5 kg/14 lb	Pasture	Use for long term production. Excellent persistence. Season long growth.
Lowlands	30% Meadow Foxtail* 10% Boreal Creeping Red Fescue 15% Richmond Timothy 10% Dawn Alsike Clover 10% Bellevue Reed Canarygrass 25% Carnival Tall Fescue	All poorly drained soils	6 kg/13 lb	Pasture	A persistent mixture for soils that are moist for long periods of time. Can survive up to six weeks of spring flooding. Caution is recommended if feeding Alsike clover to horses.

Ingredients may change without notice.
* GroKoted optional

FORAGE MIXTURES

Mixture Name	Composition	Best Soil Type	Seeding Rate Per Acre	Purpose	Remarks
HayGraze	60% AC Grazeland Br Alfalfa 30% AC Success Hybrid Bromegrass 10% OKAY Orchardgrass	Dark Brown Black Grey Wooded Irrigated	6 kg/13 lb	Dual	Rapid regrowth and great quality. Use as multi-cut hay and still have extra to graze in the fall.
HayGraze Dry	50% AC Grazeland Br Alfalfa 10% Kirk Crested Wheatgrass 40% Fleet Meadow Bromegrass	Brown Dark Brown Black (Dry)	5 kg/11 lb	Dual	Obtain superior yield and quality in drier conditions without sacrificing bloat safety.
Horsemans	10% WestStar Alfalfa Blend 25% Fleet Meadow Bromegrass 15% Richmond Timothy 20% HiPro Orchardgrass 20% Forage type Kentucky Bluegrass 10% Perennial Ryegrass	Dark Brown Black Grey Wooded Irrigated	7 kg/15 lb	Dual	Well balanced for proper nutrition. Stands up well under heavy grazing. Excellent Spring, Summer and Fall growth. Adaptable and suitable for all acreage ruminants.
DairyPro	90% PICKSEED 2065MF Alfalfa 10% Richmond Timothy	Dark Brown Black Grey Wooded Irrigated	5 kg/11 lb	Hay	Highest quality hay. Custom designed for dairy production needs.
HayPro T5	80% PICKSEED 2065MF Alfalfa 15% OKAY Orchardgrass 5% Richmond Timothy	Dark Brown Black Grey Wooded Irrigated	5.5 kg/12 lb	Hay	Rapid establishment with great persistence. Very adaptable.
HayPro T10	60% WestStar Alfalfa Blend 30% AC Success Hybrid Bromegrass 10% Richmond Timothy	Dark Brown Black Grey Wooded Irrigated	6 kg/13 lb	Hay	Highest yielding for regular rotations. Extremely adaptable with multiple disease resistance.
HayPro Dry	30% PICKSEED 3006 Alfalfa 40% Carlton Smooth Bromegrass 30% Kirk Crested Wheatgrass	Black (Dry) Brown Dark Brown	7 kg/15 lb	Hay	Well suited for dry sandy soils. Great for single-cut hay systems that require fall grazing.

SOIL CLIMATIC ZONES OF THE CANADIAN PRAIRIES*



- GREY SOIL
- WET BLACK
- MOIST BLACK
- BLACK
- MOIST DARK BROWN
- DARK BROWN
- MOIST BROWN
- BROWN

LEGUMES

Forage Adaptation & Comparison Guide

Forage Species	Use	Longevity	Winter-hardiness	Drought Tolerance	Flooding Tolerance	Salinity Tolerance	Alkalinity Tolerance	Acidity Tolerance	# Seeds per kg	# Seeds per lb
Alfalfa	Hay & Pasture	Long	Good	Good	Low	Low to Moderate	Moderate to High	Low	440,000	200,000
Alsike Clover	Hay & Pasture	Short	Fair	Poor	Moderate	Low	Low to Moderate	Moderate	1,540,000	700,000
Birdsfoot Trefoil	Pasture	Long	Good	Moderate	High	Low to Moderate	Moderate	Moderate to High	825,000	375,000
Cicer Milkvetch	Pasture	Long	Good	Moderate to High	Low	Moderate	Moderate	Moderate	286,000	130,000
Red Clover	Hay & Pasture	Short	Poor	Low	High	Low	Moderate	Moderate	605,000	275,000
Sainfoin	Pasture	Long	Fair	High	Low	Low	High	Low	66,000	30,000
Sweetclover	Hay & Silage	2 Years	Fair	Moderate to High	Low	Moderate	Moderate	Low	572,000	260,000

NATIVE GRASSES

Forage Adaptation & Comparison Guide

Forage Species	Use	Longevity	Winter-hardiness	Drought Tolerance	Flooding Tolerance	Salinity Tolerance	Alkalinity Tolerance	Acidity Tolerance	# Seeds per kg	# Seeds per lb
Green Needlegrass	Pasture	Long	Good	High	Moderate	Moderate to Low	Moderate	Moderate	375,000	170,000
Little Bluestem	Pasture	Long	Good	High	Low	Moderate	Moderate	Moderate	529,000	240,000
Northern Wheatgrass	Pasture	Long	Good	Very High	Moderate	Moderate	Moderate	Low	341,000	155,000
Reed Canarygrass	Hay & Pasture	Long	Good	Moderate	Very High	Low	Moderate	Moderate	1,175,000	534,000
Slender Wheatgrass	Hay & Pasture	Short	Good	Moderate	Low	High	High	Low	352,000	160,000
Streambank Wheatgrass	Hay & Pasture	Long	Good	Very High	Moderate +	Low to Moderate	Moderate	Low	344,000	156,000
Switchgrass	Pasture	Medium	Fair	Low	Moderate	Moderate	Low	Low	716,000	325,000
Western Wheatgrass	Hay & Pasture	Long	Excellent	High	Moderate to High	High	High	Moderate	254,000	115,000

These grasses are indigenous to North America. Available varieties have been improved through plant breeding programs.
(Source: Manitoba Agriculture & Food)

SPECIES ADAPTATION AND COMPARISON

Forage Species	Preferred Climate and Growing Conditions	Growing Period	Positive Features	Negative Features	Plant Type
Alfalfa	Widely adapted to most prairie soils but will not tolerate areas that have periodic flooding.	Spring to Fall	Easy to establish. High yields, rapid regrowth. Highest nutrition of all forages.	Bloat hazard. Needs good drainage.	Tap, Branch, Rhizomatous, Creeping Rooted
Alsike Clover	Prefers low-lying moist areas.	Spring	Easy establishment. Tolerant to poor drainage and acid soils.	Bloat hazard. Short life span and low yield.	Branched
Birdsfoot Trefoil	Prefers moist areas.	Spring to Fall	Non bloating. Reseeds itself. Feed value similar to alfalfa.	Poor seedling vigour. Poor competitor and lower yielding.	Tap Rooted with Branches
Cicer Milkvetch	Widely adapted but exhibits its creeping habit best on more coarse textured soils.	Late Spring to Fall	Non bloating. Hardier than alfalfa. Very aggressive once established.	Slow to establish. Hard seeds. Slow regrowth after grazing.	Creeping Rooted
Red Clover	Best suited to humid areas with moderate temperatures.	Spring	Easy establishment. Tolerates wetter and more acid soils than alfalfa.	Bloat hazard. Short life span.	Tap Rooted with Side Branches
Sainfoin	Best on brown and dark brown soil areas. In very dry areas it yields poorly. Does well on thin gravelly soils.	Spring to Summer	Non bloating. More drought and cold tolerant than alfalfa.	Poor regrowth. Slow to establish.	Tap Rooted
Sweetclover	Especially productive on fertile soils.	Spring of Second Year	Widely adapted. Good for soil and drainage improvement.	Low palatability unless harvested early. Self seeds.	Tap Rooted

Forage Species	Preferred Climate and Growing Conditions	Growing Period	Positive Features	Negative Features	Plant Type
Green Needlegrass	Performs best on medium to heavy textured soils. Prefers moist sites with good drainage.	Late Spring to Mid Summer	Palatable and nutritious. Tolerant to drought and grasshopper damage.	Seed has high level of dormancy. Easily overgrazed.	Bunch Grass
Little Bluestem	Sandy, gravelly soils with shallow water table or where snow accumulates. Common on prairie upland.	Late Spring to Fall	Highly nutritious and palatable when grazed at early stages.	Light, fluffy seed. Becomes unpalatable in the fall.	Bunch Grass
Northern Wheatgrass	Prefers medium to coarse textured soil.	Mid Spring to Mid Summer	Suitable for erosion control. Easy to establish. Produces good ground cover.	Tends to get sod bound. Becomes wiry and unpalatable in the fall.	Sod Forming
Reed Canarygrass	Moist cool climate. Poorly drained areas subject to temporary flooding.	Spring to Summer	Grows well in wet areas. Withstands flooding for up to two months. Grows tall, good yield.	Slow to establish. Nutrition and palatability low when mature.	Sod Forming
Slender Wheatgrass	Adapted to wide range of soils but prefers sandy loams.	Mid Spring to Mid Summer	High salinity tolerance. Cures well on stem. Good seedling vigour and fast establishment.	Less competitive and persistent than other wheatgrasses. Not tolerant to close, heavy grazing.	Bunch Grass
Streambank Wheatgrass	Widely adapted. Tolerates periodic flooding but requires well drained soils.	Mid Spring to Mid Summer	Good for soil and water conservation. Can be used for lawns, playgrounds and parking lots.	Low in production. Unpalatable when mature.	Sod Forming
Switchgrass	It has potential for good summer pasture when enough moisture. Grows best on loam and sandy loams.	Late Spring to Fall	Warm season grass. Can be used for summer pasture when cool season grasses go dormant.	Slow to establish. Should not be cut or grazed the first year. Unpalatable after maturity.	Bunch Grass
Western Wheatgrass	Widely adapted. Prefers heavy somewhat alkaline soil.	Early Spring to Fall	Salt tolerant and long-lived. Nutritious and productive under moderate grazing. Suitable for erosion control.	Slow to establish. Sensitive to overgrazing.	Sod Forming

TAME GRASSES
Forage Adaptation & Comparison Guide

Forage Species	Use	Longevity	Winter-hardiness	Drought Tolerance	Flooding Tolerance	Salinity Tolerance	Alkalinity Tolerance	Acidity Tolerance	# Seeds per kg	# Seeds per lb
Annual (Italian) Ryegrass	Hay & Pasture	Short Annual 1 Year	Poor	Low	High	Low	Moderate	Moderate	507,000	230,000
Creeping Foxtail	Pasture	Long	Good	Low	High	Moderate	Moderate	Moderate	1,657,000	753,000
Creeping Red Fescue	Pasture Lawn	Long	Excellent	Moderate	Moderate	Low	Moderate	Moderate	1,353,000	615,000
Crested Wheatgrass	Pasture & Hay	Long	Excellent	Moderate to High	Low	Low to Moderate	Moderate to High	Low	485,000	220,000
Dahurian Wildrye	Pasture	Short	Good	Moderate	Low	High	Moderate	Low	175,000	80,000
Intermediate Wheatgrass	Hay & Pasture	Short to Medium	Good	Moderate	Low to High	Low to Moderate	Moderate	Low	194,000	88,000
Kentucky Bluegrass	Pasture Lawn	Long	Excellent	Moderate	Moderate	Low	Low	Low	4,800,000	2,182,000
Meadow Bromegrass	Hay & Pasture	Long	Good	High	Low	Low	Moderate	Moderate	176,000	80,000
Meadow Fescue	Pasture	Short to Medium	Good	Moderate	High	Low to Moderate	Low	Moderate	506,000	230,000
Meadow Foxtail	Pasture	Long	Good	Low	High	Low	Moderate	High	1,270,000	577,000
Orchardgrass	Hay & Pasture	Short	Fair	Moderate	Low to Moderate	Low	Low	Moderate	1,439,000	654,000
Pubescent Wheatgrass	Hay & Pasture	Medium	Good	Moderate to High	Low	Low to Moderate	Moderate	Low	220,000	100,000
Russian Wildrye	Pasture	Long	Excellent	Very High	Low	Very High	High	Moderate	385,000	175,000
Smooth Bromegrass	Hay & Pasture	Long	Excellent	Moderate	Moderate	Low to Moderate	Moderate	Moderate	300,000	136,000
Tall Fescue	Pasture	Long	Good	Moderate to High	Moderate to High	High	High	Very High	500,000	227,000
Tall Wheatgrass	Pasture & Hay	Long	Excellent	Low	High	High +	Low to Moderate	Low to Moderate	174,000	79,000
Timothy	Hay & Pasture	Medium	Good	Low	High	Low	Low	High	2,710,000	1,232,000

SPECIES ADAPTATION AND COMPARISON

Forage Species	Preferred Climate and Growing Conditions	Growing Period	Positive Features	Negative Features	Plant Type
Annual (Italian) Ryegrass	Produces best on soils of medium to high fertility and grows best with adequate moisture.	Spring to Fall	Easy to establish. Very palatable. Makes good hay or silage. Can be used for companion crop.	Does not withstand drought or hot weather.	Bunch Grass
Creeping Foxtail	Adapted to areas where Reed Canarygrass grows well and soil moisture is continually available.	Early Spring to Fall	Suitable for erosion control. Spreads rapidly once it is established.	Light, fluffy seed. Slow establishment. Poor competition during first six weeks.	Sod Forming
Creeping Red Fescue	Does best in high rainfall areas. Will grow in wide range of soil types.	Spring to Fall	Tolerates close grazing. Tolerates areas too dry for timothy. Grows well late summer to freeze up and retains good quality.	High moisture requirement. Vulnerable to Crown Rot, Root Rots and Snow Mold.	Sod Forming
Crested Wheatgrass	Adapted to dry areas with good soils but will also establish on lighter soils	Early Spring	Excellent for spring pasture. Easy to grow. Withstands close grazing and trampling.	Does not tolerate cool, wet soils. Poor quality after heading out.	Bunch Grass
Dahurian Wildrye	Adapted to all soil zones.	Spring to Fall	Highly competitive and quick to establish.	Short lived.	Bunch Grass
Intermediate Wheatgrass	Well drained soils with ample moisture.	Late Spring to Mid Summer	Easy to establish. Good haygrass with alfalfa. Out yields CWG and smooth brome grass.	Less winterhardy and drought tolerant than crested wheatgrass.	Sod Forming
Kentucky Bluegrass	Prefers cool and humid. Grows on most soils.	Spring to Fall	Tolerates close and frequent defoliation. Useful in erosion control.	Goes dormant in hot, dry weather. Slow to establish. High moisture requirement. Lower yielding.	Sod Forming
Meadow Bromegrass	Grows well on most soils where smooth bromegrass does well.	Early Spring to Late Summer	Very palatable. Good regrowth after grazing or cutting. Less aggressive than smooth bromegrass.	Mainly a pasture grass. Difficult to put up as hay when in pure stand.	Bunch Grass
Meadow Fescue	Prefers soil with good moisture and good drainage.	Early Spring to Late Fall	Best for pasture. Good fall pasture - stays green late in fall.	Susceptible to heavy grazing. Slow regrowth. Susceptible to leaf rust.	Bunch Grass
Meadow Foxtail	Prefers cool moist conditions. High water table.	Early Spring to Fall	Earliest grass to grow in spring. Very palatable when young. Seeds fall off and reseed itself.	Light, fluffy seed. Susceptible to drought. Seeds need to be coated for seeding.	Bunch Grass
Orchardgrass	Prefers moist conditions. Sandy soils are too dry for good growth unless in high rainfall areas.	Spring to Fall	Easy to establish. Very palatable. Fast regrowth. Makes good hay with alfalfa.	Needs high nitrogen for good production. Only moderate winterhardy. Subject to overgrazing.	Bunch Grass
Pubescent Wheatgrass	Widely adaptable with respect to precipitation, temperature, elevation and low fertility soil.	Spring to Mid Summer	Has the ability to stay green into the summer months. Hardier than intermediate wheatgrass.	Strong creeping roots get sod bound and result in unproductive stand after a few years.	Sod Forming
Russian Wildrye	Can be grown on a wide range of soils. Most productive on fertile loams.	Early Spring to Mid Summer	Salt tolerant, early growth and good for winter grazing.	Poor seedling vigour. Slow to establish.	Bunch Grass
Smooth Bromegrass	Well adapted to all soil zones.	Mid Spring to Mid Summer	Winterhardy. Good yield. Palatable even at mature growth stage.	Seed is long, light and difficult to sow due to bridging. Becomes sod bound. Slow regrowth.	Sod Forming
Tall Fescue	Variety of soils. Does well on wet, poorly drained soils.	Late Spring to Fall	Suitable for late fall grazing or stock piling. Easy to establish. Good regrowth. It is one of the more drought resistant grasses.	Slow to cure when used for hay. Starts growing later than many other grasses in spring.	Bunch Grass
Tall Wheatgrass	Adapted to saline and imperfectly drained alkali soils.	Late Spring to Mid Summer	Salt tolerant. High nutrition in early heading stage.	Slow to establish. Poor vigour and competitive ability. Coarse when mature.	Bunch Grass
Timothy	Cool moist areas with good drainage.	Spring to Summer	Low seed costs. Easily established. Excellent hay for horses. Goes well with alfalfa in blends. Suitable for hay export market.	Susceptible to heat and low moisture conditions. Low palatability at maturity.	Bunch Grass



“Selecting the right hybrids with the right genetics and technology equals profitable results.”

Each year PICKSEED coordinates corn yield trials right across Canada to discover and provide leading edge hybrids that excel in various environmental conditions, soil types, geographic areas and crop management methods.

Your success depends on having hybrid options and choices that work for you!

SEED TREATMENTS









All PICKSEED grain and silage hybrids, with the exception of hybrids containing Genuity™ technologies, are supplied with Maxim® XL and Dynasty® seed treatments and either Poncho® 250 or Poncho® 1250. All hybrids containing Genuity™ technologies are supplied with the Acceleron™ seed treatment system.



Black Cutworm	*	*		
Wireworm	*	*		
White Grub	*	*		
European Chafer	*	*		
Corn Flea Beetle	*	*		
Seed Corn Maggot	*	*		
Corn Rootworm		*		

Pythium SPP.			*	*
Fusarium SPP.			*	
Rhizoctonia solani			*	*
Aspergillus SPP.			*	
Penicillium SPP.			*	
Cladosporium SPP.				
Rhizopus SPP.				
Phomopsis longicolla				

DUAL PURPOSE GRAIN/SILAGE HYBRIDS



			1	2	3	4	5	6	7	8	9	
PICKSEED 2304RR 2150 CHU		<ul style="list-style-type: none"> • Good disease package • Very good grain quality • Tall plant height 	SEEDLING VIGOUR	████████████████████								
			STALK STRENGTH	██████████████████								
			DRY DOWN	██████████████████								
			TEST WEIGHT	██████████████████								
PICKSEED 2219RR 2200 CHU		<ul style="list-style-type: none"> • Early flowering dent hybrid • Extremely fast dry down • Tall plant height 	SEEDLING VIGOUR	██████████████████								
			STALK STRENGTH	██████████████████								
			DRY DOWN	██████████████████								
			TEST WEIGHT	██████████████████								
SilEx BtRR 2200 CHU		<ul style="list-style-type: none"> • Good standability with good grain quality, early flowering • Very tall, Bt enhanced hybrid with 5-7 leaves above the ear • Above average test weight with very good stay green 	SEEDLING VIGOUR	██████████████████								
			STALK STRENGTH	██████████████████								
			DRY DOWN	██████████████████								
			TEST WEIGHT	██████████████████								
PICKSEED 2501RR 2300 CHU		<ul style="list-style-type: none"> • Early Roundup Ready® with excellent seedling vigour • Very early flowering and black layer • Medium tall plant with high bushel weight and strong stalks 	SEEDLING VIGOUR	██████████████████								
			STALK STRENGTH	██████████████████								
			DRY DOWN	██████████████████								
			TEST WEIGHT	██████████████████								
PICKSEED 2411GT/CB/LL 2325 CHU		<ul style="list-style-type: none"> • Early maturing hybrid • Exhibits fast drydown • Excellent stalks and roots 	SEEDLING VIGOUR	██████████████████								
			STALK STRENGTH	██████████████████								
			DRY DOWN	██████████████████								
			TEST WEIGHT	██████████████████								
PICKSEED 2604BtRR 2400 CHU		<ul style="list-style-type: none"> • YieldGard Corn Borer Resistance with Roundup Ready® technology • Medium tall plant with strong agronomics • Excellent grain quality and very high test weight 	SEEDLING VIGOUR	██████████████████								
			STALK STRENGTH	██████████████████								
			DRY DOWN	██████████████████								
			TEST WEIGHT	██████████████████								
PICKSEED 2774BtRR 2425 CHU		<ul style="list-style-type: none"> • Outstanding plant health and stay green • Medium tall plant with strong roots and stalks • Big, girthy ear with average test weight grain 	SEEDLING VIGOUR	██████████████████								
			STALK STRENGTH	██████████████████								
			DRY DOWN	██████████████████								
			TEST WEIGHT	██████████████████								
PICKSEED 2594RR 2475 CHU		<ul style="list-style-type: none"> • High yielding long-season silage hybrid • Excellent emergence and seedling vigour • Medium tall hybrid with very good stalk strength and tip fill 	SEEDLING VIGOUR	██████████████████								
			STALK STRENGTH	██████████████████								
			DRY DOWN	██████████████████								
			TEST WEIGHT	██████████████████								

LEAFY SILAGE CORN

Leafy silage corn hybrids are bred and developed specifically for making more and better quality silage while maintaining key agronomic characteristics such as standability. Leafy silage hybrids contain:

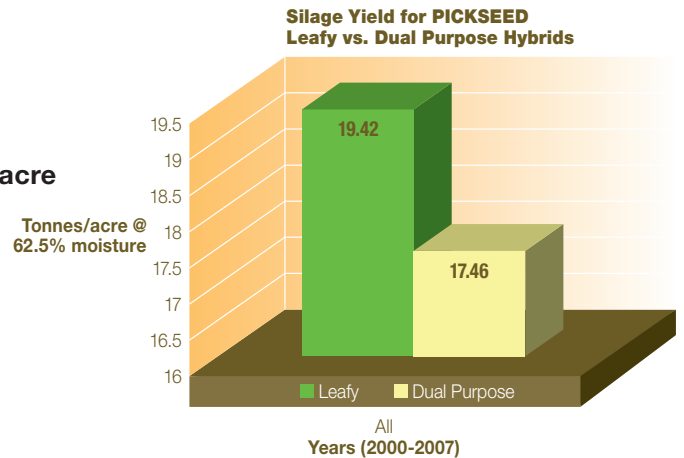
- Larger, softer kernels with more digestible endosperm (starch) and an increased ratio of floury to vitreous starch resulting in an increase in available energy
- Larger cobs to maintain a high ratio of grain: stover
- Reduced lignin content to increase digestibility and intake but not sacrifice standability
- Very tall hybrids with more leaves above the ear for increased yield

SILAGE SPECIFIC LEAFY HYBRIDS

			1	2	3	4	5	6	7	8	9	
ExTend Bt 2100-2300 Silage CHU		<ul style="list-style-type: none"> • Very tall hybrid with YieldGard Corn Borer technology • Very good stalk strength • Very high yield potential 	EMERGENCE	[Progress bar]								
			SEEDLING VIGOUR	[Progress bar]								
			STALK STRENGTH	[Progress bar]								
			HEIGHT	[Progress bar]								
ExAmple 2400 Silage CHU		<ul style="list-style-type: none"> • High dry matter yields • Strong spring vigour and early season growth • Good stalk and root strength • Good stress tolerance and stable performance 	EMERGENCE	[Progress bar]								
			SEEDLING VIGOUR	[Progress bar]								
			STALK STRENGTH	[Progress bar]								
			ROOT STRENGTH	[Progress bar]								
			HEIGHT	[Progress bar]								
ExTreme RR 2650 Silage CHU		<ul style="list-style-type: none"> • White cob and soft starch kernels provide excellent quality silage • Nine - 10 leaves above the ear • Very good stalk and root strength 	EMERGENCE	[Progress bar]								
			SEEDLING VIGOUR	[Progress bar]								
			STALK STRENGTH	[Progress bar]								
			HEIGHT	[Progress bar]								

PICKSEED Leafy Silage Corn Hybrids produce:

- Excellent silage yield per acre - **11.2% more yield**
- Better digestibility - **7% higher**
- More dry matter intake
- Increased Milk production - **up to 5.8% more Milk/acre**
- Lower seeding rates are possible = reduced input expenses



Source: PICKSEED on-farm Silage Yield Evaluation trials, 2000-2007.

TURFGRASS & NATIVE SEED



“Extensive breeding and research bring you some of the most innovative turfgrass species in North America.”

TURFGRASS

PICKSEED is a World leader in turfgrass seed breeding and production. Our innovative research and development efforts and comprehensive quality control processes and standards have earned us a reputation for outstanding turfgrass performance and consistently high seed quality.

From hardworking bentgrass varieties to elite bluegrasses to specialty products like our patented transitional ryegrasses, we're at home on golf courses, athletic fields, sod farms, public parks and backyards around the world.

NATIVE SEED FOR RECLAMATION PROJECTS

PICKSEED is instrumental in developing the specifications for many large reclamation plans and carries a wide variety of native seeds for all areas of Western Canada.

Additional information on PICKSEED's proprietary turfgrass species as well as information on native seeds is available online at www.pickseed.com.





“Canadian trials for Canadian performance on Canadian farms”

We give you head-to-head comparisons that show how our varieties perform where the varieties actually appear in the same trial and in the same harvest years.

We have provided examples of this data with our Vision and Leader alfalfa varieties. Other varietal performance trial data can be found on our website, www.pickseed.com and in our technical data sheets available from our sales and marketing representatives.

Why are the PICKSEED Data Better?

When we say that Vision alfalfa yields 112% of the checks in Canadian trials, we can show you the location of all the trials that make up this number (see page 21).

Helping You Make More Milk

PICKSEED conducts our own forage quality sampling and has samples analyzed by a third party accredited lab. We can show you both the yield advantages and the quality advantage, which combined will help you produce more milk.

How to Interpret PICKSEED Yield Information:

We report actual yields measured in the field trials. When we report trial results for one variety compared to another, we show all the trials in which the varieties appear together in the same trial and harvest years. In other words - true head-to-head comparisons. Varieties from different data tables may be grown under different yearly conditions and against different check varieties, both of which will affect performance index.

How Can You Compare Varieties?

Some other testing publications show only a list of varieties and a yield performance index for each. The indices for any two varieties may be calculated based on data from different years, different locations, different number of cuts and even compared to different checks.

You cannot reliably compare varieties using the index system used in many publications. You need head-to-head comparisons, such as we show you here:

IS THE DATA...	PICKSEED	OTHER
Head-to-head	yes	no
You see individual trials	yes	no
Data by location	yes	no
Common check	yes	sometimes
Trial year indicated	yes	no
Checks indicated	yes	no

PERFORMANCE TRIALS

ALFALFA

Vision Alfalfa

108% forage yield advantage and 112% Milk yield advantage against the references listed in the chart below. Forage yield and persistence are outstanding while maintaining improved forage quality. Regrowth and disease resistance are excellent. Fall Dormancy: 4.4; Winter Survival: 1.5

Vision Alfalfa Yield lb/ac Summary 2010

Location	Harvest	Vision	54Q25	54V46	Genoa	HybriForce 400	PS2065MF
Average All sites		12,990	12,134	12,380	12,416	12,168	12,548
%check		107	100	102	102	99	103
St-Hyacinthe, QC	2009	9,157	8,662	8,768	9,263	8,768	8,373
%check		101	96	97	103	97	93
La Visitation, QC	2005	4,790	5,072	5,142	4,790	4,931	4,860
%check		101	107	108	101	104	102
Portage, MB	2006-09	17,320	15,290	17,032	16,662	16,212	16,248
%check		115	99	113	110	104	106
Brooks, AB	2006-08	15,427	15,821	15,534	15,577	15,587	15,769
%check		99	101	99	99	99	100
Josephsburg, AB	2006-09	8,519	8,259	8,404	7,905	8,251	8,688
%check		102	98	99	93	97	101
Taber, AB	2009	10,684	10,020	9,464	8,698	9,683	10,330
%check		110	103	97	89	100	106

Checks 2009: Starbuck, OAC Superior, 2006-08: Starbuck, Magnum IV East, Algonquin West

FORAGE FACT:

Fall dormancy is just a measure of the height of growth produced in the fall. It reflects the degree of dormancy of the variety, but dormancy is only a small part of what gives a variety the ability to survive our winters.

The full data set, that can be found at www.pickseed.com, comprises 72 cuts over 25 station-years, over 10 locations and 4 harvest years (4 replications at each location).

Leader Alfalfa

Leader outperforms all across the country. It is a leader for yield, persistence, forage quality, disease resistance, regrowth and multifoliolate leaf expression.

Leader COMPARATIVE AGRONOMIC DATA:

	FD	WH	PI
Leader	3.4	1.3	9.1

FD: fall dormancy - 1 (most dormant) - 9 (non dormant); PI: persistence index - 1 (least) - 9 (most); WH: winter survival rating - 1 (best) - 6 (worst)

Leader CANADA YIELD (KG/HA) SUMMARY

Site	Seed	Harvest	Leader	%chk	Magnum IV	5312	54V54
Nisku, AB	02	05	17,370	104	16,619	16,805	16,406
Portage, MB	02	04	15,608	98	15,907	15,959	15,637
Nisku, AB	02	04	12,236	100	12,044	12,419	12,124
St-Hyacinthe, QC	02	03	12,416	103	12,021	12,027	11,943
Portage, MB	02	03	11,237	109	10,039	10,633	11,404
Nisku, AB	02	03	20,121	107	18,016	19,482	18,696
Chk: Magnum IV, 5312 Average			15,460	108	14,028	14,585	14,380
Average Persistence			16,801	108	15,255	15,767	15,417

Complete data set can be found at www.pickseed.com



“Our world class seed is produced by the finest growers in the industry.”

SEED PRODUCTION CONTRACTS

PICKSEED operates Canada’s largest private industry forage research program, and has developed top performing proprietary varieties of forage crop and turfgrass seed.

For 65 years PICKSEED has worked with growers in the seed business and has attained the reputation of providing exceptional field support by our qualified field representatives. PICKSEED field representatives work with producers providing agronomic advice to ensure a quality product.

If you are looking to diversify your farming operation, consider forage /turf seed production as part of your crop rotation. Some of the many benefits of forage crop and turfgrass seed production include:

- Improved soil quality
- Reduced soil salinity
- Improved water infiltration and internal drainage
- Reduced field weed populations
- Reduced tillage results in less soil erosion
- Increased soil fertility when growing a legume
- Diversifies field operations
- Spreads risk
- Requires fewer cash inputs than most grain crops that are produced

SEED PRODUCTION

PRODUCTION SPECIES

PICKSEED offers a variety of different contracts to best suit your needs. Production contracts are available for these and other species:

Perennial ryegrass: Quick establishing bunch grass with good adaptability

Timothy: Cool season bunch grass, shallow rooted with good flooding tolerance

Tall fescue: Deep rooted, long-lived perennial with excellent adaptability to all soils

Orchardgrass: Perennial bunch grass, deeply rooted and can tolerate low to moderate flooding

Hybrid bromegrass: Long-lived perennial grass with low to moderate tolerance of saline and acidic soils

Double cut red clover: Short-lived perennial, with excellent moisture tolerance and adaptability

Alsike clover: Short-lived perennial with adaptability and a moderate tolerance to alkalinity and flooding

Birdsfoot trefoil: Long-lived perennial legume, prefers somewhat poorly drained areas

Alfalfa: Easy to establish perennial forage crop that is widely adapted to most prairie soils but will not tolerate areas that have periodic flooding



CONTRACT TERMS

- *Both fixed and open market pricing is available, depending on the species*
- *Freight subsidies, location dependant*
- *Interest free financing of Foundation Seed is available*

There are of course many other factors to keep in mind regarding the seed production industry – more than we can possibly share on only two pages of our forage guide. We strategically place our field representatives throughout Western Canada to provide an unsurpassed level of support to growers.

To determine the field representative for your area visit www.pickseed.com or call 1-800-263-7425.

PICKSEED®

good things growing...

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Fax: (705) 878-9249 Email: info@pickseed.com

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Fax: (450) 799-1026

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Fax: (204) 694-1690

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Seed Research of Oregon

27630 Llewellyn Road, Corvallis, OR 97333
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For more information, visit the PICKSEED office nearest you
www.pickseed.com