



Quality Seeds 

WHERE QUALITY COUNTS

FORAGE SEED GUIDE

2022

Research with Results

Exciting Varieties for 2022

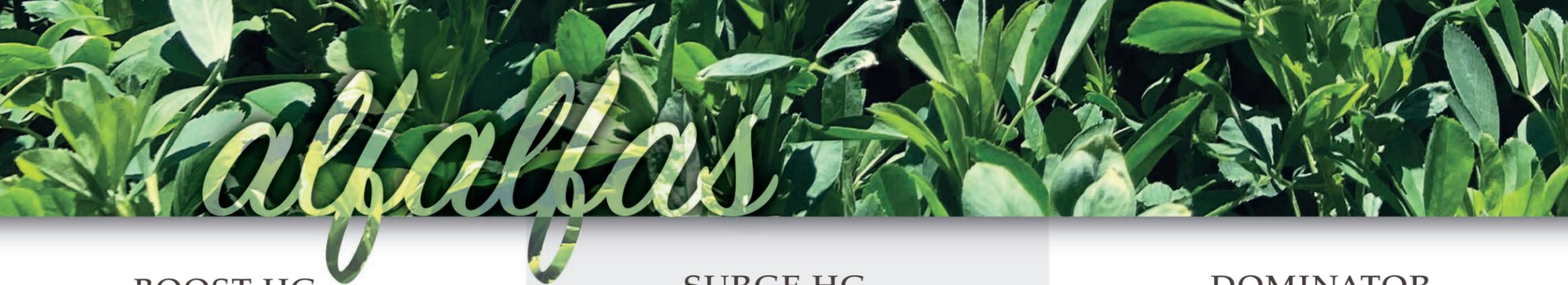
- **Tenero** Meadow Fescue
- **Raskila** Meadow Fescue
- **AAC Royal** Bromegrass
- **AAC Trueman** Alfalfa
- **Shield** Alfalfa
- **Surge HG** Alfalfa
- **QS Legacy** Alfalfa Blend
- **QS HG** Alfalfa Blend
- **QS T.F.P.** Alfalfa Blend
- **Elodie** Tall Fescue
- **Dauphine** Tall Fescue
- **Diceros** Orchardgrass



Our story



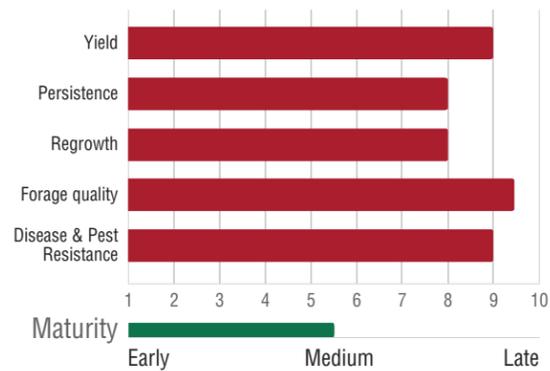
Every year there is an important decision each farmer needs to make. A step that is critical to the success of the operation. **Choosing the right seed is that first step.** In 1956, Paul Ekstein also took a big step and founded Quality Seeds. Having immigrated from Europe in 1939, Paul drove every laneway, building trust with those he sold to. In the last 25 years, the company's major growth and innovation has been with Paul's son Ari, at the helm. Now, one of Canada's largest independently owned seed companies, Quality Seeds still values the same philosophy that started it all. *People buy from People.*



BOOST HG

- Improved fiber digestibility and intake for increased milk production
- Greater harvest flexibility and improved forage quality through

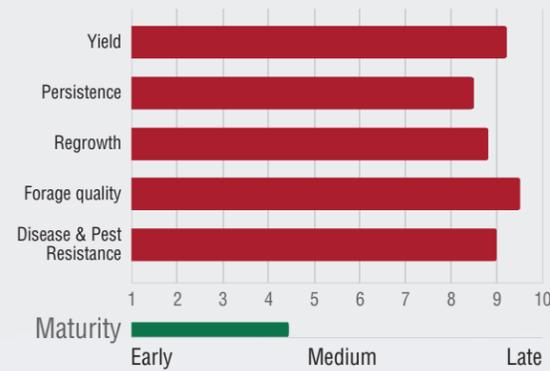
Hi-Gest ALFALFA TECHNOLOGY



SURGE HG

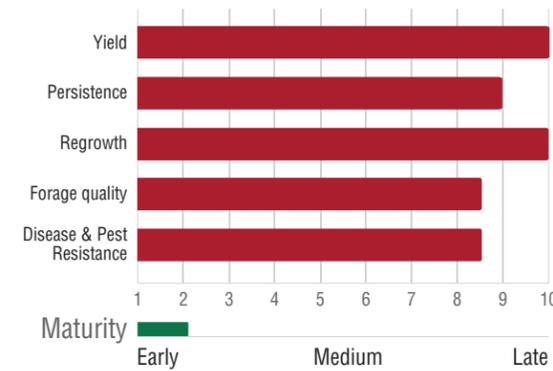
- Improved fiber digestibility and intake for increased milk production
- Earlier maturing HG variety with quicker re-growth

Hi-Gest ALFALFA TECHNOLOGY



DOMINATOR

- Unbeatable yield in a 4-5 cut system
- An extremely fast regrowing variety



At Quality Seeds we strive to be a leader in every element of the forage business. One of our key focuses is to offer the best performing lineup of alfalfas available. From our relationships with global breeding partners to our own local plot program (see page 18) we go above and beyond to ensure that the seed in the bag offers you the best possible advantage on your farm. In today's market, reaching anything less than 100% of your profit potential on your farm is simply not acceptable.

WE ARE IN THIS BUSINESS FOR SUCCESS.
YOUR SUCCESS.

QS T.F.P. Blend (Total Forage Performance)

T.F.P. is a proprietary blend of quality alfalfas specially selected to excel in a variety of environments. With a 60% Stellar II and 40% Shield Alfalfa blend, T.F.P. has exceptional yield with excellent forage quality.

QS Legacy Blend

QS Legacy Blend combines 60% Shield alfalfa and 40% AAC Trueman alfalfa. These two varieties paired together provide excellent forage quality with the added tolerance of heavier soils and variable drainage with both a creeping rooted and branch rooted alfalfas.

QS HG Alfalfa Blend

This exciting blend of Surge HG & Boost HG alfalfas will provide extremely high quality & high yields, with improved regrowth.

Allied Brand

Allied Brand alfalfa is an economical blend of top performing proprietary alfalfas. This blend is suited for hay or haylage production.

FSG 421LH

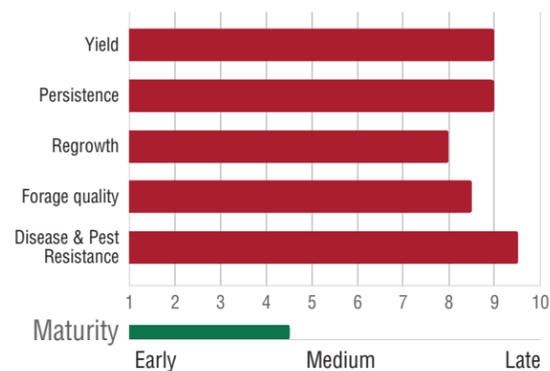
FSG 421LH provides an added layer of protection for growers looking to mitigate leafhopper pressure in their alfalfa stands.



Low Lignin, Roundup Ready alfalfa.

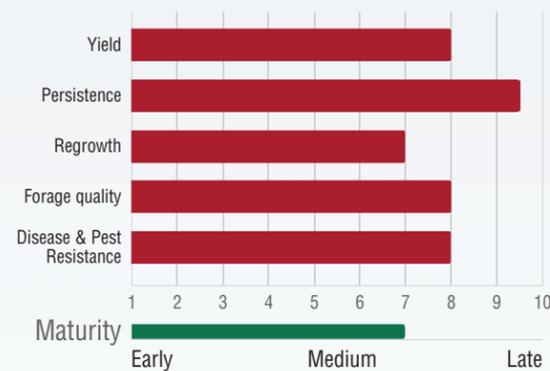
SHIELD

- Excellent for hay & haylage production
- A high quality branch rooted variety



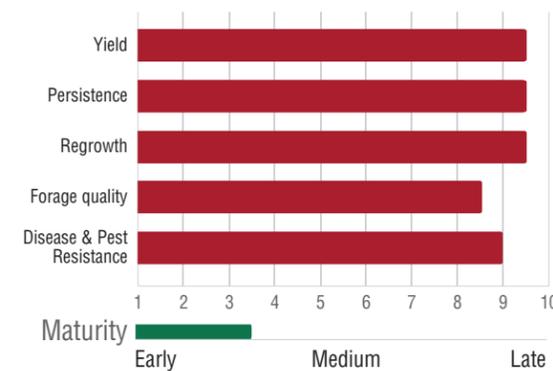
AAC TRUEMAN

- Excellent persistence in wet soil conditions
- A strong creeping rooted variety



STELLAR II

- Extremely winter hardy & persistent
- Very drought tolerant with excellent regrowth



VELVET II

- A proven fine stemmed and leafy alfalfa
- Optimal for dry hay production



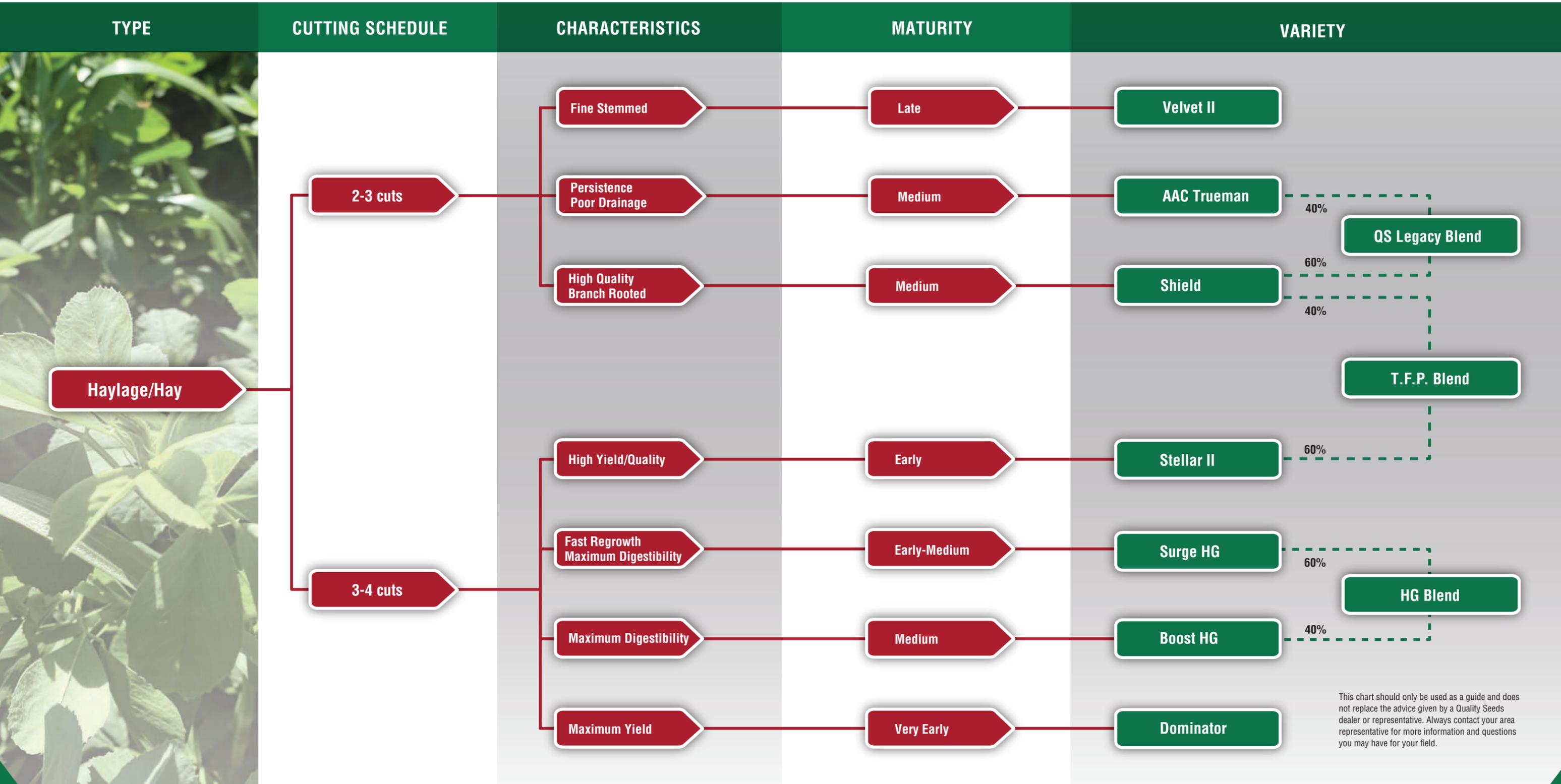
CHOOSING THE RIGHT ALFALFA

Using the below flow chart can help guide you in the right direction for the correct alfalfa for your operation.

Simply start at the left and follow your way through the route that best suits your needs. Each path leads to one of our proprietary varieties best suited for that situation.

SOMETHING FOR EVERYONE

Choosing the correct alfalfa for your forage program is a critical part of the success of your operation. Everything from agronomy to feed comes into play while trying to navigate a sea of factors that every farmer faces. We offer varieties that span the spectrum from very early and aggressive haylage suited varieties all the way to late maturing, dry hay options.



This chart should only be used as a guide and does not replace the advice given by a Quality Seeds dealer or representative. Always contact your area representative for more information and questions you may have for your field.

grasses

NEW TECHNOLOGY, WITH TRADITIONAL WISDOM

In recent years, we have seen dramatic improvements in grass varieties available that hold many great advantages in forage production. **Quality Seeds has been an early adapter in the forage industry and now utilizes the newest grasses in order to achieve the best returns in the field.**

Newer grass varieties bring superior fiber digestibility and palatability with an added level of persistence in today's harsh climate. These late maturing grasses will not push your cutting schedule, but most importantly, come back for consistent regrowth in all cuts.

We firmly believe that grasses as a companion to alfalfa are the most resilient and profitable forage stands for the climate and production across Canada.

In 2019 we introduced the MD (Maximum Digestibility) designation on our most digestible grasses. Grass varieties that are marked MD are significantly higher in fibre digestibility (NDFD) than other varieties of the same species. These grasses offer maximum fiber digestibility and increased intakes to help promote higher milk production and beef gains.

M.D. MAXIMUM DIGESTIBILITY GRASSES

Increased milk production with M.D. Grasses

Samples taken from the same field by producer at Listowel, Ontario

- 90/10 Dominator alfalfa/Tetrax meadow fescue
 - 63.04% NDFD (48Hr), 1661 kgs of milk per tonne

VS.

- Competitor Alfalfa 90/10 Timothy
 - 61.12% NDFD (48Hr), 1549 kgs of milk per tonne

112 kgs MORE MILK per tonne with MD Grass

MORE MILK!

CHOOSING THE RIGHT GRASSES

With the new generation of soft-leaf tall fescues, tetraploid/diploid meadow fescues and late maturing orchardgrass, farmers can now gain exponentially more from their field and tap into previously unrealized yield and quality potential. These new grasses help boost the bottomline, no doubt about it.

BREEDING PARTNERS

We are not plant breeders and we do not pretend to be. We have gone to great lengths building relationships worldwide with the best breeders in the business. Due to the cooler wetter climate in parts of Europe, grasses are a significant part of their forage ration. This allows them to focus on grasses, breeding the best genetics for use in today's forage production fields.

FEEDING YOUR GRASSES FOR MAXIMUM PRODUCTION

As a general rule, 60 lbs/ac N should be applied to mixed stands with one-third to one-half legume. For stands with less than one-third legume, treat as a pure grass stand, a rule of thumb is to apply 45 lbs N per tonne of expected dry matter yield. For many grass stands in the spring, an initial application of 90 lbs/ac N may be optimum.



Tenero Meadow Fescue



- Extremely soft leaved variety
- Outstanding digestibility and palatability
- The only Tetraploid Meadow Fescue available in Canada
- A very persistent grass

Elodie/Dauphine Tall Fescue



- Extremely soft leaved varieties
- Outstanding palatability
- Excellent drought tolerance & persistence
- Endophyte Free

Diceros/Dividend VL Orchardgrass

- Very late maturing orchardgrasses
- Greater compatibility with alfalfas
- Maintains forage quality
- Extremely soft leaved varieties

Milk Max

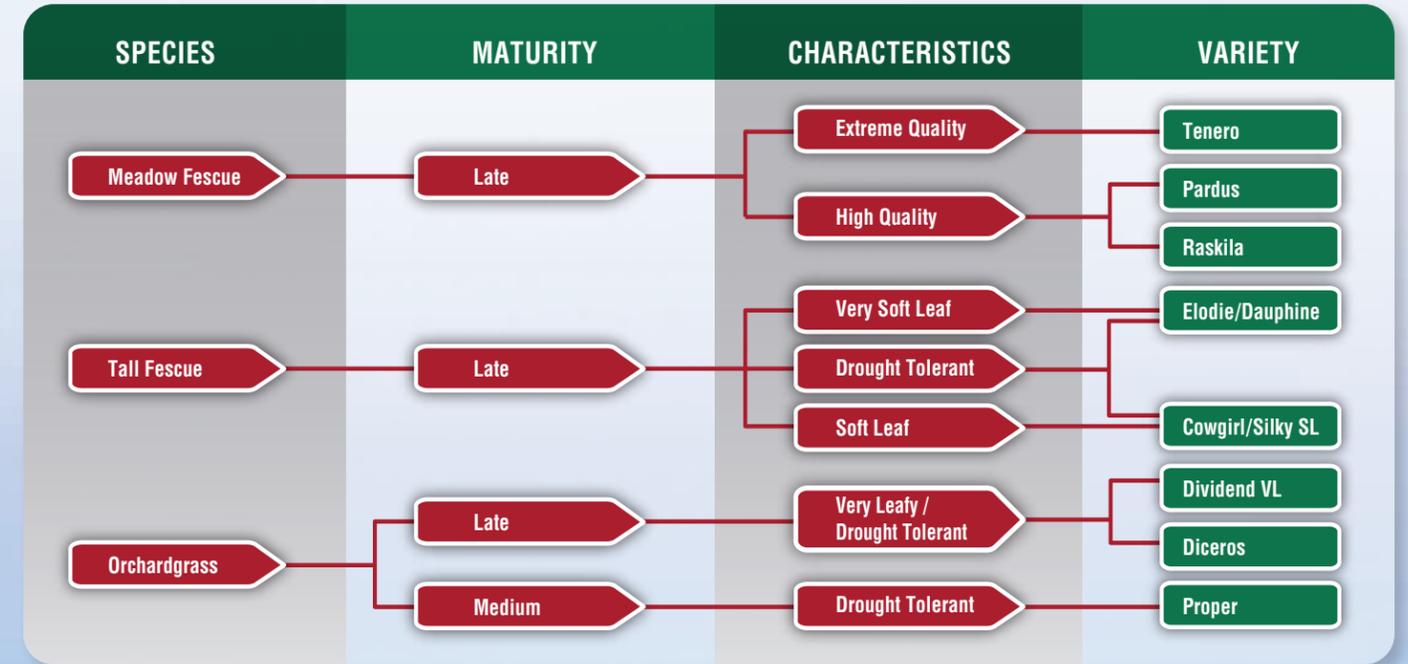
- A very high quality, all grass mixture
- Increased fiber digestibility
- Excellent regrowth
- For Haylage or Baleage production only

Hay Max

- Specialized all grass mixture for dry hay production
- Contains extremely palatable late maturing varieties
- Excellent re-growth in all cuts

Evolution Italian Ryegrass

- A fast establishing ryegrass blend
- A blend of high quality diploid and tetraploid Italian ryegrasses



Organic Forage Seed

- We offer a full lineup of Organic Seed
- Certified Organic by Centre for Systems Integration

Additional Quality Varieties

- Raskila/Pardus Meadow Fescue
- Express Timothy – Medium-Late Maturity
- Dawn Timothy – Early Maturity
- Tuukka Timothy – Medium Maturity
- ACC Royal/Peak Smooth Bromegrass
- Melquatro Italian Ryegrass
- Marathon Reed Canarygrass
- Tetragain Perennial Ryegrass
- Santa Fe DC Red Clover
- Will Ladino Clover
- Cowgirl Tall Fescue – Endophyte Free
- Silky SL Tall Fescue – Endophyte Free
- Stratus Meadow Bromegrass

THE BEST OF BOTH WORLDS GRASSES FOR YOUR FORAGE STAND

Selecting the correct alfalfa-grass mixture is key.

Suitable grass species and varieties can offer significant advantages when included in alfalfa-grass mixtures. These advantages include significant nutritional improvements in fibre digestibility (NDFD), increased intake and higher milk production, as well as agronomic and harvest advantages. Yield improvements of more than 15- 20% have been reported. Nitrogen fixed by the alfalfa is used by the grasses to meet their high

nitrogen requirements. There is currently a great deal of interest by dairy producers to include newer grasses in alfalfa-grass mixtures, and a move away from the use of timothy. Improved Quality Seeds' varieties of Orchardgrass (Dicerol/Dividend VL), Tall Fescue (Elodie/Dauphine), Meadow Fescue (Tenero, Pardus/Raskila) and Perennial Ryegrass (Tetragain) offer significant benefits.

QS SPECIALTY MIXES

90/5/5 TF/MF

- 90% QS Alfalfa
- 5% Elodie/Dauphine Tall Fescue
- 5% Tenero Meadow Fescue

89/4/4/3

- 89% QS Alfalfa
- 4% Elodie/Dauphine Tall Fescue
- 4% Tenero Meadow Fescue
- 3% Dicerol Orchardgrass

90/7/3 TF/DIV

- 90% QS Alfalfa
- 7% Elodie/Dauphine Tall Fescue
- 3% Dicerol Orchardgrass

92/8 TMF

- 92% QS Alfalfa
- 8% Tenero Meadow Fescue

80/17/3 OG

- 80% QS Alfalfa
- 17% QS Timothy
- 3% Dicerol Orchardgrass

80/20, 70/30 QS Alfalfa/Haymax

- Alfalfa/grass mix for beautiful soft hay in all cuts

Horse Hay Mix 50, Horse Hay Mix 25

- Specialized Horse Hay mixtures

LTPM - B

- Long term pasture mix

HPM - 12

- Premium horse paddock mix

LHM

- Lowland hay mix

QS HAY & PASTURE MIXES

- Hay & Pasture Mix/ J Super
- Intensive Rotational Grazing Mix/ Grazier Choice C
- Overseeding Mix/ OSM
- Dry Cow Mix
- Plowdown Mix
- Sheep Pasture Mix/ SPM

We have an extensive lineup of preformulated mixtures. Custom mixtures are also available.



COVER CROP MIXES

60/20/20 Mix

- 60% Oats
- 20% Eco-Till Brand Radish
- 20% Crimson Clover
- Planting rate: 25-30 lbs/acre
 - Rapid establishment to prevent wind and water erosion.
 - Improves soil permeability for increased air and water penetration: reduces soil compaction, breaks up hardpans & increases root development potential of the following crop.
 - Improves organic matter: carbon sequestration.
 - Recycles nutrients that would have been lost to leaching or runoff.

Organic Matter Builder Mix

- 50% Oats
- 36% Eco Brand Annual Ryegrass
- 5% Crimson Clover
- 3% Eco-Till Radish
- 3% Brassicas
- 3% Hairy Vetch
- Planting rate: 25-30 lbs/acre
 - This cover crop mix produces significant amounts of biomass that can be worked back into the soil to increase organic matter.

Soil Health Mix

- 75% Eco Brand Annual Ryegrass
- 10% Brassicas
- 10% Hairy Vetch
- 5% Eco-Till Radish
- Planting rate: 25-30 lbs/acre
 - Radishes create pilot holes to promote water infiltration and better root penetration. Annual Ryegrass and Hairy Vetch break up soil hardpan with their high density root system.

70/20/10 Mix

- 70% Eco Brand Annual Ryegrass
- 20% Crimson Clover
- 10% Eco-Till Brand Radish
- Planting rate: 15-20 lbs/acre
 - Rapid establishment to prevent wind and water erosion.
 - Improves soil permeability for increased air and water penetration: reduces soil compaction, breaks up hardpans & increases root development potential of the following crop.
 - Recycles nutrients that would have been lost to leaching or runoff.
 - Fixes significant atmospheric nitrogen for increased soil nitrogen levels.
 - Best used prior to corn, wheat or the crop requiring significant nitrogen inputs.

Nematode Control Mix

- 60% Oats
- 15% Crimson Clover
- 15% Brassicas
- 6% Phacelia
- 4% Eco-Till Radish Planting Rate: 20-25lbs/acre
 - Brassicas are natural biofumigants with studies showing decreased nematode populations.

Corn Interseeding Mix

- 80% Eco brand Annual Ryegrass
- 20% Crimson Clover
- Planting Rate: 10-15lbs/acre
 - Annual Ryegrass provides quick ground cover after harvested crop and the crimson clover provides nitrogen fixation. Provides great fertility and erosion control for interseeding into corn at V5 – V8 stage.

Custom Cover Crop Mixes Also Available.

STRAIGHT COVER CROP PRODUCTS

Eco-Till Brand Radish

- Superior, deep penetrating taproot
- Reduces soil compaction
- Builds organic matter
- Improves nutrient recycling
- Enhances soil tilth

Eco Brand Annual Ryegrass

- Breaks up natural and manmade hardpans
- Deep root penetration
- Captures and keeps nitrogen and phosphorus in the plant
- Cold tolerant

COVER CROPS INCREASING THE VALUE OF YOUR LAND

Quality Seeds Ltd. has a progressive cover crop program developed to benefit growers by providing species and mixes that improve soil tilth, increase crop yields, break disease & pest cycles, reduce soil erosion, increase water infiltration and recycle valuable nutrients.

COVER CROP BENEFITS

- Weed Control - Seeding at higher rates or by selecting species like radishes & ryegrass with dense leaf canopies and quick establishment will help suppress weeds.
- Reduce Compaction - Radishes create pilot holes to promote water infiltration and better root penetration while annual ryegrass and hairy vetch simply shatter the soil layers with their high density root system.
- Nitrogen Fixation – Crimson Clover, Austrian Winter Peas and Hairy Vetch, can produce up to 200 pounds of nitrogen per acre by spring Straight Cover Crop Products planted in late summer.
- Nematode Control – Many brassicas are natural bio fumigants with studies showing decreased nematode populations.
- Organic Matter – All cover crop species produce significant amounts of biomass that can be worked back into the soil to increase organic matter.
- Erosion Control – Species with quick germination and excellent ground cover such as ryegrass and brassicas will help eliminate erosion issues.

FOR SPECIFIC PURPOSE	DAIKON RADISH	BRASSICAS	BUCK-WHEAT	WINTER PEAS	FALL RYE	ANNUAL RYEGRASS	OATS	CRIMSON CLOVER	BERSEEM CLOVER	HAIRY VETCH
ORGANIC MATTER	•	•	•	•	•	•	•	•	•	•
NITROGEN FIXATION				•				•	•	•
NUTRIENT RECAPTURE	•	•	•	•	•	•	•	•	•	•
REQUIRES NO HERBICIDE TO KILL	•	•							•	•
REDUCE SOIL COMPACTION	•	•				•				•
QUICK FORAGE / GRAZING	•	•			•	•	•	•	•	
DROUGHTY SOILS*			•							
WEED CONTROL	•	•	•		•				•	•
ENHANCE NO TILL	•	•			•	•	•			•
PREVENT SOIL EROSION	•	•	•	•	•	•	•	•	•	•
TOLERATE WET SOILS					•	•	•	•	•	
COLD TOLERANT	•	•	•	•	•	•	•	•		•
BROADCAST SEEDING	•	•			•	•	•	•	•	•
NEMATODE CONTROL	•	•								
SEEDING RATE ALONE lbs/ac	4-8	3-5	45-60	40-50	100-120	20-40	60-100	20-30	15-20	15-25
SEEDING RATE IN MIX lbs/ac	1-4	1-4		20-25		6-10	60-70	4-8	4-8	1-3
SEEDING DEPTH	¼ - ½"	½"	½ - 1"	½ - 1"	1 - 1½"	¼ - ½"	1 - 1½"	¼ - ½"	¼ - ½"	¼ - ½"



SUCCESSFUL FORAGE

ESTABLISHMENT AND MANAGEMENT

Successful forage establishment is a uniform, weed-free stand that grows quickly and vigorously to provide high yields during the first year, and for the life of the stand. A firm, level, clod-free seedbed is most important for uniform seeding depth and good seed-to-soil contact. If necessary, pack before seeding, in addition to packing after the drill. Sprocket packers are preferable over smooth rollers to reduce the risk of crusting and to push any seed on the surface into the soil. As a rule of thumb, seeding depth for most forage species should be 6–12 mm (1/4 – 1/2 in.) on clay and loam soils, and 12–18 mm (1/2 – 3/4 in.) on sandy soils.

Most alfalfa-grass mixtures are seeded in the 18 - 20 lb/ acre range. Apply P and K based on a recent soil test, and also consider S needs. Harvesting a companion cereal crop by combining it as grain is not a preferred practice because it often reduces the establishment of the forage crop for the life of the stand. Planting a companion cereal crop with forage peas at 50-75lbs/acre and harvesting at boot-stage as haylage or baleage reduces the competition, enabling better forage establishment while still allowing weed suppression and erosion control, and providing additional forage. Direct seeding is also an excellent option where rotational weed control is good and water erosion is low risk.



While stands of straight alfalfa can tolerate close cutting heights, pure grass stands require a cutting height of 4 inches for faster regrowth and optimum seasonal yields. In alfalfa-grass mixtures, a cutting height of 3 – 4 inches is a good compromise. While cutting alfalfa during the “Critical Fall Harvest Period” is often done, it does create some additional risk to stand health, depending on the location, stand age, harvest frequency and many other factors. The decision whether to cut alfalfa during the critical harvest window should weigh these factors and the immediate need for forage against the increased risk of winterkill and reduced yields the following year. Leaving excess growth into the winter will not kill alfalfa as the plant lives and dies by the crown of the root. However, leaving too much grass growth in the field can sometimes cause smothering to the grass.

SS2 BMR SUDANGRASS



Nurse Crop for Alfalfa/Grass

We have experienced great success using BMR Sudangrass as a nurse crop to under seeded alfalfa/grass stands. We have seen cases where forage establishment has been superior compared to using cereal/forage pea nurse crops.



Alternative/Emergency Forage Crop

Due to large amounts of winterkill in 2019 and extreme drought in the 2020 growing season, farmers had to look at alternative sources of forage. With fast establishment, high tonnage and outstanding quality, SS2 BMR sudangrass proved to be an excellent choice for an alternative forage crop.

Additional Points When Underseeding SS2 BMR Sudangrass With Alfalfa-Grass

- Glyphosate burndown and tillage before planting essential
- 20 lbs/ac sudangrass and 18-20 lbs/ac alfalfa-grass blended together, seeded with a no-till drill through the cereal box at 1/2 inch seeding depth (maximum), seedbed well packed and firm
- Nitrogen fertility requirements are the same as above
- Do not apply manure after planting or harvest - very susceptible to traffic damage
- Harvest the last cut before September or just before frost, avoiding the critical fall harvest period

SS2 BMR Sudangrass Management Practises

- Soil temperature at least 15.5 - 18°C (60 - 65° F), typically the last week of May or early June
- Glyphosate burndown essential and preferably some light tillage before planting
- 25 - 30 lbs/ac sudangrass seeded at 1/2 - 3/4 inch seeding depth, seedbed well packed and firm
- 80-90 lbs/ac actual N (185 lbs urea) before seeding, followed by 50-60 lbs (120 lbs urea) after 1st-cut
- P and K removal rates - about 12 lbs P2O5 and 50 lbs K2O per ton of dry matter yield.
- 1st cut harvest rule-of-thumb for high quality dairy feed – 45 days after planting or 45 inches, which ever comes first.
- Subsequent harvests ready about 30 days later
- Cut leaving at least 4 inches of stubble for faster regrowth
- If liquid manure is applied it should preferably be done before planting or immediately after harvest (some susceptibility to heavy traffic damage)
- Harvest the last cut before frost to avoid prussic acid risk and to preserve forage quality



RESEARCH - CLOSE TO OUR HEART

In addition to plots across the country, we are proud to have test plots that grow at our headquarters. This means we can observe the varieties on a day-to-day basis and collect more in-depth data.

In the world of agriculture, on farm testing is an absolute must. When we bring our exclusive varieties to market, we not only rely on data from the breeders but we also plant

them in multiple test plots in order to compare against other varieties and ensure they can survive the harsh Canadian winter conditions. We understand that certain varieties are better suited for different situations than others. With our extensive plot program we can identify those areas of strength and weaknesses in selecting the variety that we are confident will perform in our lineup and that we are proud to put our name on.



CUSTOMER TESTIMONIALS



Pondsedge Farms, Little Pond, PEI

"We made the change to Quality Seed over a decade ago and have constantly improved the quality of our stands. Our yields are much higher and we are on a consistent 3 cut system.

We expanded our dairy herd in 2016 from 200 to 360 milking cows and with expert advice from our Quality Seed team we are farming no more acres but are feeding better quality forages which is reducing our overall feed cost.

We have used a balanced approach with our seeding because of our heavier soils in Eastern PEI.

We currently have 2/3 of our forage coming from AAC Trueman/Stellar II Alfalfa and MD Grasses and 1/3 from Santa Fe DC Red Clover and MD Grasses."



Chris Tracy, Double G Farms, Shawville Quebec

"For years we have struggled to get consistent stands of hay on our various soil types. Now after working closely with our Quality Seeds representatives we have been able to harness their knowledge and experience to put the proper varieties on the proper soil types. We have been able to get more consistent yields of high quality forage."



Adam, Karen, Brock and Lily Schmitchen, Schmitchen Farms, South Woodsee, ON

"Producing high quality forage has been the goal at Schmitchen Farms in Essex County for Karen and Adam Schmitchen. Our hay business consists of a blend of alfalfa and grasses. Our customers come to us from the equine market as well as the beef, dairy and hobby farms. We need a consistent blend of alfalfa and grass to meet the customer's needs. Our traditional 80-20 alfalfa/timothy system has been harder to manage especially in second and third cuts because of the dryer and hotter summers. Our Quality Seed rep suggested we look at incorporating the "TFP" alfalfa blend along with the "Hay Max" MD grass blend into our program. These grasses are drought tolerant and highly digestible and they are consistent in every cut. We were extremely pleased with the yield we received. We averaged 9 - 650 lb. (83.8 % DM) bales to the acre and the quality was awesome. The second is growing well and the grass content has been surprising. We have planted a plot on our farm with the different grasses and some of Quality Seed's popular horse and alfalfa blends. We are excited to see what the results of the plot will show in 2022.



Your Local Dealer

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