Quality Seeds

WHERE QUALITY COUNTS







2023 **FORAGE** SEED GUIDE



RESEARCH

CLOSE TO OUR HEART

In addition to data received from the breeding companies we work with around the world, we are proud to work with plots that are located at our headquarters. This allows us to observe the varieties on a day-to-day basis and collect more in-depth data.

We also document important data from our on farm trials. Every year we plant multiple on farm 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.

At home test plots to collect additional data.



On farm plot program to compare against other varieties and to ensure winter survival in specific areas.



SERVICE

KNOWLEDGE & EXPERIENCE ON HAND

Our team of forage professionals are at your service to provide guidance with all your forage needs



Doug Baker
District Sales Manager
Eastern Ontario, Eastern Canada
19 Years of Forage and Feed Experience

613 532 0850
doug@qualityseeds.ca



Joel Bagg
QS Forage Specialist,
District Sales Manager
Central Ontario,Eastern Canada
40 Years of Forage and Feed Experience

705 878 6528
joel@qualityseeds.ca



Fred Brown
District Sales Manager
North Western Ontario
18 Years of Forage and Feed Experience

519 270 5101
fred@qualityseeds.ca



Colin Pool
District Sales Manager
South Western Ontario
8 Years of Forage and Feed Experience

226 377 6477
colin@qualityseeds.ca



PERFORMANCE

HIGHER YIELDS, HIGHER DIGESTIBILITY & HIGHER PROFITS

Quality Seeds offer varieties that will see higher yields and drive profitabilty for your farm. Speak to one of our district sales managers (see page 3) to discuss which Quality Seeds products are right for you.





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 (Diceros), Tall Fescue (Dauphine/Elodie), Meadow Fescue (Tetrax, Pardus/Raskila) and Perennial Ryegrass (Valerio) offer significant benefits.

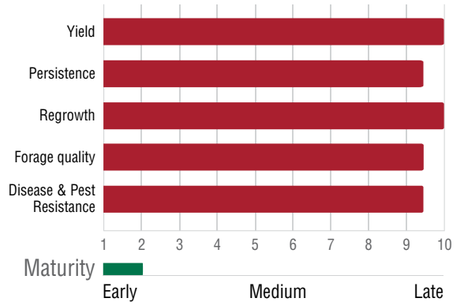




NEW!

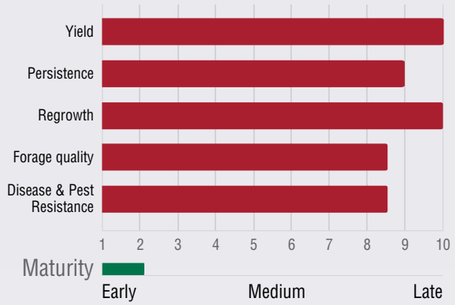
DOMINATOR II

- Unbeatable yield
- An extremely fast regrowing variety



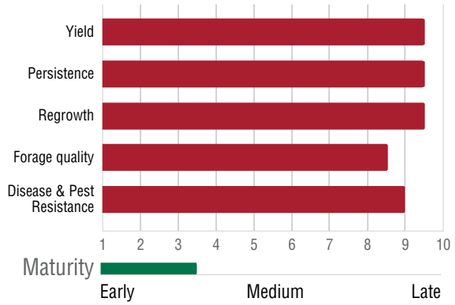
DOMINATOR

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



STELLAR II

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

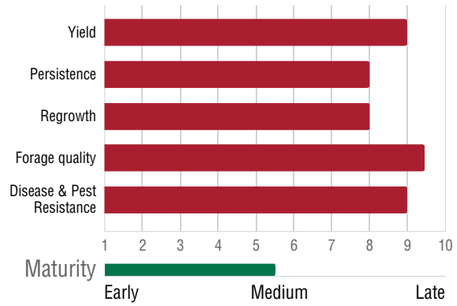


At Quality Seeds we strive to be a leader in every element of the forage business. One of our key focuses is to offer the best performing lineup of alfalfas available. From our relationships with global breeding partners to our own local plot program we go above and beyond to ensure that the seed in 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.

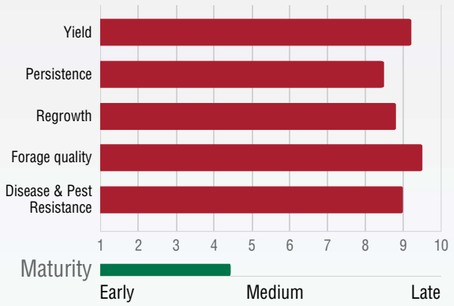
BOOST HG

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



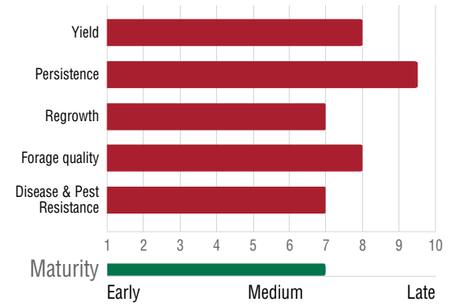
SURGE HG

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



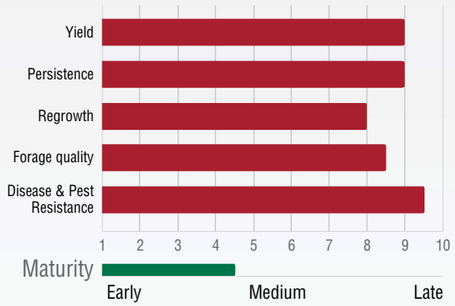
AAC TRUEMAN

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



SHIELD

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



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.

HARVXTRA with Roundup Ready® Technology

Low Lignin, Roundup Ready alfalfa.

CHOOSING THE RIGHT ALFALFA

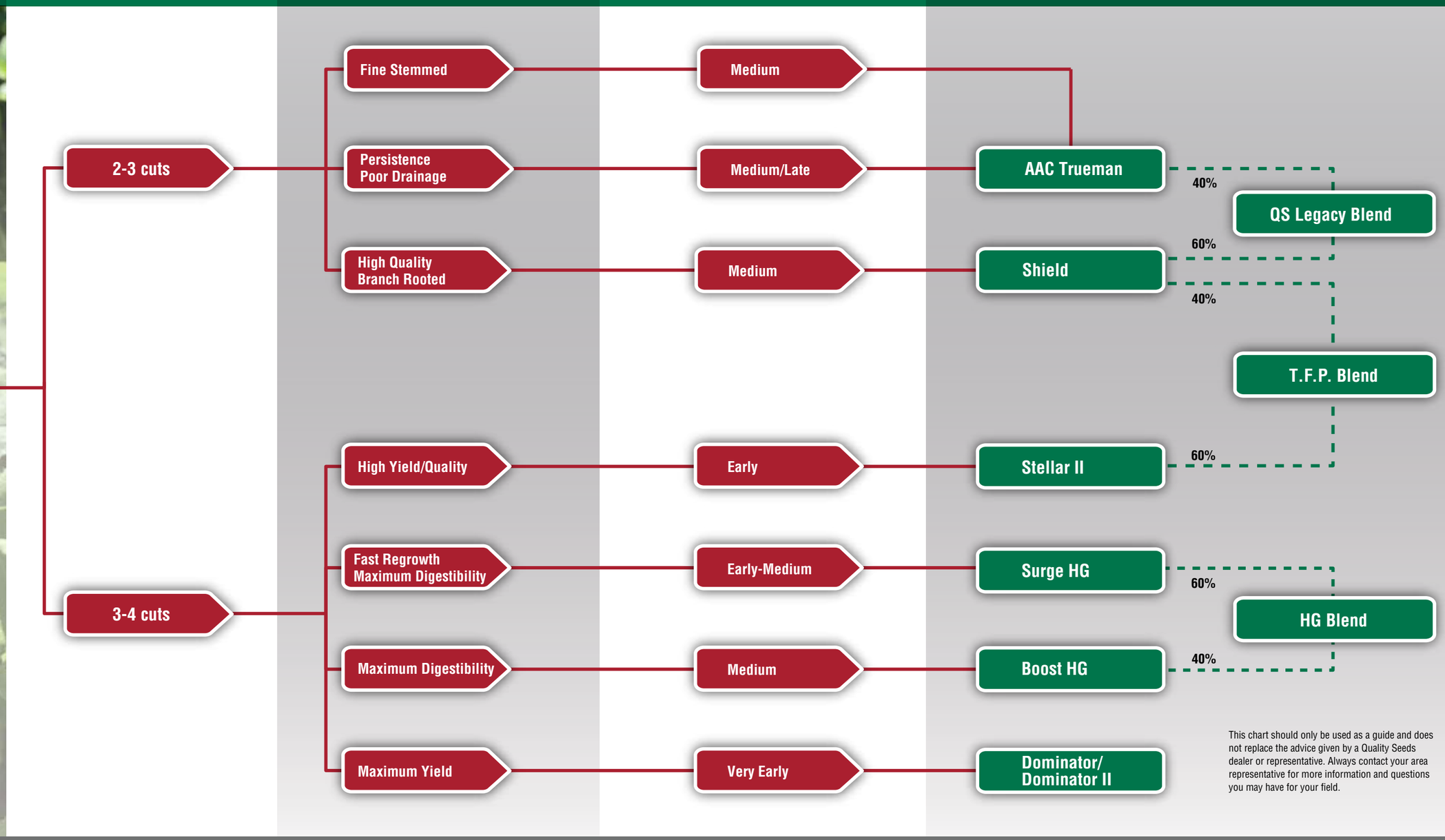
Using the below flow chart can help guide you in the right direction for the correct alfalfa for your operation.

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.



THE FACTS ABOUT HIGH QUALITY FORAGE

THERE IS MORE TO HIGH QUALITY FEED THEN JUST CRUDE PROTEIN LEVELS

Higher percentage stands of alfalfa can often have very high crude protein (CP) levels, but the CP can be very soluble, limiting its efficient utilization by the cow. Mixed alfalfa-grass stands can have high CP content with better protein utilization.

Grasses are higher in fibre (NDF) than alfalfa, but are also much higher in fibre digestibility (NDFD). Grasses may have 12 – 13 % points higher NDF than alfalfa, but grasses also have at least 12 –13% points higher NDFD. Grasses contain much more hemicellulose than alfalfa, which is the highly digestible component of forage fibre.

Higher fibre digestibility has two benefits – higher digestible energy per unit of feed and higher cow intake. Both result in **more milk per cow**. This is especially the case where intake is limiting production in transition, fresh and high producing cows. A study by Oba & Allen, MI State 1999 concluded that for every 1 percentage point increase in NDFD, intake increases 0.37 lbs/day and milk increases 0.55 lbs milk/day. Dr Jerry Cherney, Cornell University, has stated “Feeding trials across the USA have shown that a one percentage unit increase in NDFD increases milk production by 0.5 to 1.0 lbs/cow/day, and more than 1.0 lb/cow/day for the highest producing cows”. Grasses in early cut alfalfa-grass mixtures can complement the alfalfa by improving fibre digestibility. Even small percentages of **MD grasses** in an alfalfa-grass mix can provide significant improvements in NDFD. Alfalfa-grass mixtures with 25% grass can significantly improve NDFD by over 3 percentage points over straight alfalfa.

M.D.
MAXIMUM DIGESTIBILITY
GRASSES

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.

MORE MILK!

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.



Tetrax Meadow Fescue

- Extremely soft leaved variety
- Outstanding digestibility and palatability
- One of the only two Tetraploid Meadow Fescues available in Canada
- A very persistent grass

Dauphine/Elodie Tall Fescue

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

Diceros Orchargrass

- Very late maturing orchardgrass
- Greater compatibility with alfalfas
- Maintains forage quality
- Extremely soft leaf variety

Milk Max

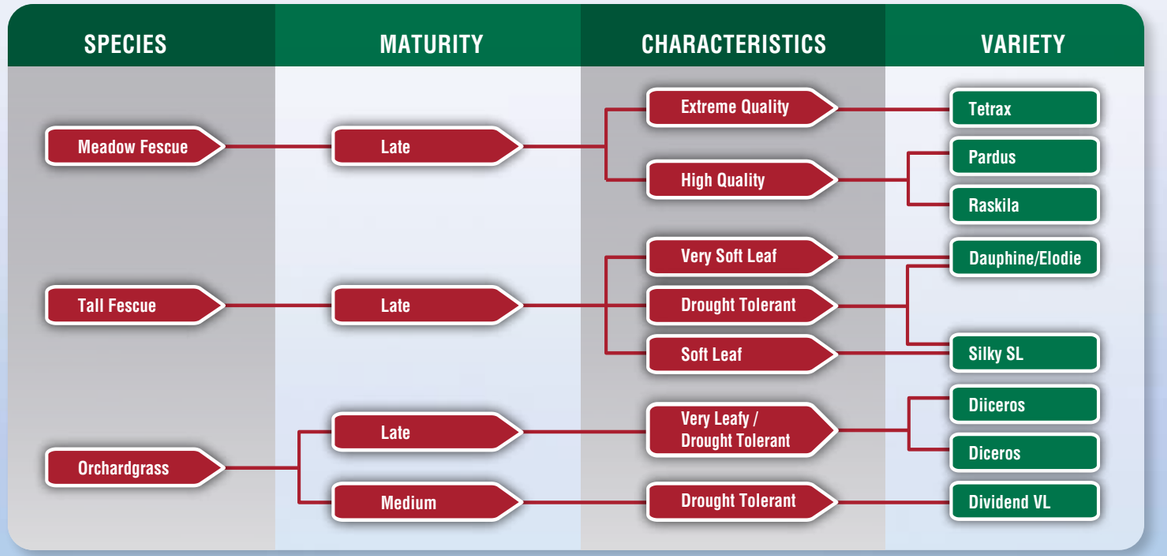
- A very high quality, all grass mixture
- Increased fiber digestibility
- Excellent regrowth
- For Haylage or Baleage production only

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
- Valerio Perennial Ryegrass
- Santa Fe DC Red Clover
- Bombus Ladino Clover
- Silky SL Tall Fescue – Endophyte Free
- Stratus Meadow Bromegrass
- SS2 BMR Sudangrass



QS SPECIALTY MIXES

90/5/5 TF/MF
- 90% QS Alfalfa
- 5% Dauphine Tall Fescue
- 5% Tetrax Meadow Fescue

89/4/4/3
- 89% QS Alfalfa
- 4% Dauphine Tall Fescue
- 4% Tetrax Meadow Fescue
- 3% Diceros Orchardgrass

90/7/3 TF/DIV
- 90% QS Alfalfa
- 7% Dauphine Tall Fescue
- 3% Diceros Orchardgrass

92/8 TMF
- 92% QS Alfalfa
- 8% Tetrax Meadow Fescue

80/17/3 OG
- 80% QS Alfalfa
- 17% QS Timothy
- 3% Diceros 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

Sheep/Goat Hay Mixture
- Specialized/Goat Sheep Hay 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



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.



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 ½ 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 at½ - ¾ 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 P205 and 50 lbs K20 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





Quality Seeds

Your Local Dealer

8400 New Huntington Road,
Vaughan, ON L4H 4Z6

Phone: 905-856-SEED (7333)
Toll-Free: 1-877-856-SEED (7333)

Email: support@qualityseeds.ca

www.qualityseeds.ca