



King's AgriSeeds ^{Inc.}

FEEDING YOUR FARM'S FUTURE.



2021 Late Summer & Fall
Product Information Guide

Helping you optimize productivity on every acre!

Who We Are

We, our staff and dealers, want to get to know YOU and your operation. Our commitment to modern agriculture is strong and our goal is to help you find the products that fit your farm and develop a cropping system that is balanced and profitable. Based out of Lancaster, PA, King's AgriSeeds services Virginia to Maine with a full line of forage and cover crops.



King's AgriSeeds Staff

What's Important to Us

Focused on Optimizing.

To 'optimize' is to make the best or most use of a resource. It's our mission to help you make the most of your land resource through production systems that work for you.

Committed to Quality.

We are committed to bringing you the highest quality products available and providing valuable education to compliment them in your production systems.

Dedicated to Success.

We are dedicated to your success. It's our goal to serve you with honesty and integrity. Whether our recommendation results in a seed sale or not, we do recommend what we feel is best for your operation.

How We Help You

Research and Development

We rely on in-house variety trials and quality samples, as well as utilizing university and privately sponsored trials to bring you top-performing varieties for our region. When a new variety hits your farm, rest assure that it has been trialed extensively to ensure that it aligns with our goals.

Extensive Dealer Network

Our local dealers do more than sell seed. They are your best advisors. Many of them have experience with our products on their own operations, are key members of local forage and conservation programs, and attend our frequent training programs. They have the tools to serve your needs!

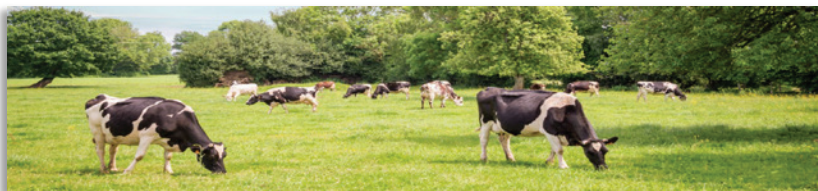


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King's AgriSeeds, Inc
1828 Freedom Rd
Lancaster, PA 17601
(717) 687-6224
KingsAgriSeeds.com



Mission: To serve the agricultural community by providing premium seed along with relevant information to our seed dealers and their customers to develop productive cropping systems. We strive for a God honoring workplace where the gifts and talents of each team member is used for His Kingdom.

KingFisher Alfalfas

Unique alfalfas that solve a variety of problems. For over 20 years we have selected alfalfas based on agronomic AND nutritional performance. We now have one of the largest and most unique alfalfa lineups. Let our dealers help you select from our lineup of alfalfas, the one that's right for your region and your farm!



Featured Products

KingFisher 435 HD.....High Digestibility

The next generation of high digestibility alfalfa, was bred for better quality and delivers outstanding NDFD 48 and TTNDFD scores, and has APH race 2 resistance! KF435HD has an excellent agronomic package that provides a very persistent and healthy plant for top production over a broad range of soils.

Fall Dormancy 4.6, Winter Hardiness 1.7, Disease Rating 35/35

KingFisher Stronghold 35-2....Resilient

Stronghold 35-2 brings a great defense to our alfalfa lineup. Stronghold features a sunken crown great for traffic tolerance, branched roots keep the plant firmly in the ground during freezing and thawing, and helps protect the plant from water damage keeping more roots above the water table. Stronghold also features great winter hardiness and disease resistance. APH Race 2 resistance. Fall Dormancy 4.3, Winter Hardiness 1.8, Disease Rating 35/35

KingFisher 519.....Multi-Foliate

A blend of two high yielding, fall dormancy 5 alfalfas. Blended alfalfas have been proven to boost productivity and increase stand health. Both alfalfas feature multi-foliate leaf structures, which means a higher leaf to stem ratio and a higher feed value for your livestock. Available in CT only.

Fall Dormancy 5, Winter Hardiness 1.9, Disease Rating 30/30

KingFisher PLH 422....Potato Leaf Hopper

PLH 422 is a new high performing Potato Leaf Hopper Resistant variety of alfalfa. In addition to the PLH resistance, 422 features multi-foliate leaf structures for a high leaf to stem ratio.

Fall Dormancy 4.2, Winter Hardiness 2.4, Disease Rating 30/30



What Goes Great with KingFisher Alfalfas?

Grass! Combine these KF alfalfas with high energy grasses for optimizing forage quality and yield. Our perennial mixtures contain two or more KF alfalfas.

Tailored Perennial Mixtures

We put it right on the bag: Tailored Perennial Mixtures. Our lineup consists of 24 perennial mixtures, containing varying amounts of alfalfas, grasses, clovers and forbs. We have mixes designed for all classes of livestock, soil types and climates within our footprint. These well balanced mixtures have been developed over many years with the help of our dealer network and from customers such as yourself.

Talk to your local dealer about how our mixtures may fit into your operation!



Grazing Highlights

King's Northern Grazing Mix— **NEW!**

A highly palatable mixture tailored to a *northern climate*, composed of winter hardy perennial ryegrasses, soft orchardgrasses, meadow fescue, clovers and forage chicory. Excellent for high producing livestock including dairy, grass finished beef, and goats. Ideal for good soils that have high fertility. Chicory is included for better mineral nutrition and other animal health benefits. Adapted to USDA Hardiness zones 4-5.

King's Southern Grazing Mix— **NEW!**

A highly palatable mixture that has improved durability to maintain high palatability in the *southern heat*. It is excellent for high producing livestock including dairy, grass finished beef, and goats. Ideal for good soils that have high fertility. Chicory is included for better mineral nutrition and other animal health benefits. Adapted to USDA Hardiness zones 6-7.

Northern Creekside— **NEW!**

A very palatable mixture of varieties and species designed for wetter soils and *cooler climates*. It will form a nice sod to handle hoof traffic. Its quality will also hold well if conditions are too wet to graze or harvest. This mix is based on meadow fescue, which is of both high quality and palatability. Meadow fescue does not have detrimental endophytes in it. Now with birdsfoot trefoil, which contains tannins that improve protein efficiency in livestock. Adapted to zones 4-5.

Southern Creekside— **NEW!**

A mixture of varieties and species designed for warmer, wetter soils that maintains great palatability that withstands the *southern heat*. It will form a nice sod to handle foot traffic. Its quality will also hold well if conditions are too wet to graze or harvest. Adapted to zones 6-7.

Be sure to check out our full line up in the back of this guide!

Stored Forage Highlights

King's HayPro

A well balanced mixture of leafy, late-heading grasses and traffic tolerant alfalfa that makes soft hay that livestock, calves and horses love. Add it to dairy rations for a great source of high quality, effective fiber to slow down rate of passage without sacrificing quality.

Lowland Hay

A late-heading mix that tolerates wetter soils and has a wide harvest window. Tall Fescue adds consistent high fiber digestibility, superb yields and traffic tolerance. Late-heading timothy dries easily and does not absorb high potassium levels. Red clover is fast starting, provides high protein, and tolerates wetter soils. Lowland Hay can also be mixed with alfalfa on marginal alfalfa soils.

EquiFlex

An easy-to-dry hay mix designed for horse hay producers. EquiFlex forage looks exceptional for resale and performs well in the field. The mix handles a variety of soil conditions and is in general an early maturing mix. This trait allows the species to regrow for a 2nd harvest before extreme heat sets in.

GrassPro

An all grass mix that is great for stored forage that is based on premium endophyte free tall fescues as the dominant grass. Can be seeded alone or with the legume of your choice.



MAGNIVA[®]
for **HAY**

Capable of colonizing hay baled at 18-22% moisture and preventing the proliferation of spoilage organisms. The *pediococcus pentosaceus* grow quickly, tying up nutrients across a wide range of temperatures.

Benefits include:

- Bale Earlier and Longer
- Greener Color
- Fresher Smell
- Higher Protein Retention & Digestibility

A mixture is only as good as it's components!

We select from a global pool of seed genetics and screen them for performance in our region.

Thank you to our industry leading suppliers:



Thinking Cool Season Grass?

Heat & Drought Tolerant- Orchardgrass

Orchardgrasses are more heat and drought tolerant than most cool season grasses, and thus produces more feed in the summer. Orchardgrass is sensitive to cutting height, so we recommend a residual cutting/grazing height of 4 inches.

Inavale- Inavale is a medium-late maturing leafy orchardgrass with strong disease resistance. Its summer heat tolerance makes it a great choice for grazing or hay. This orchardgrass was screened heavily in northern Kentucky and have been superb in our Lancaster plots.



HLR-A mixture of Barenbrug leafy late maturing orchardgrass varieties. Has high leaf ratio for improved digestibility. HLR Orchardgrass holds its quality exceptionally well if harvest is delayed.

Olathe- An early orchardgrass that stands up well to disease and heat. Olathe has become our top choice orchardgrass for the south but will also do well in the north. Olathe is now included in many of our grazing and early hay mixtures.

Enhanced Quality- Festulolium

Festuloliums are crosses between ryegrass and tall fescue or meadow fescue. The variety differences can range from short lived to perennial. They also range in their agronomic traits from ryegrass-like to fescue-like.

Fojtan- A long lived hexaploid variety festulolium that tolerates heat and drought well. Fojtan is a tall fescue type festulolium with enhanced nutritional qualities. The appearance of Fojtan is much like tall fescue. The two key differences are enhanced feeding quality and it is not aggressive in mixtures. Adapted to zones 6 and warmer.

Perun- Tetraploid variety of festulolium, An Italian ryegrass type with high yield with great sugar content. Utilized for silage as a pure crop or in a mixture. Perun is the main ingredient in our ever popular GreenFast Mixture. Perun has high dry matter yield with great quality. Adapted to zones 5 and cooler.

Stability & Durability– Tall Fescue

Older varieties with toxic endophytes have given tall fescue a bad name. Tall fescue is a very stable grass, both agronomically and nutritionally throughout the growing season. Where many other grasses thin out, tall fescue keeps chugging along. Our lineup of tall fescues feature improved palatability are either endophyte-free, or contain beneficial endophytes for improved durability in warmer climates

STF 43 Tall Fescue Blend-A blend of Barenbrug soft leaf, late heading varieties. Strong yields of digestible fiber.

Kora- A newer late very high yielding hay type tall fescue with improved digestibility. Kora has impressed us with very high yields almost everywhere we put it. Kora works well mixed with alfalfa and helps it dry more easily.

**Looking for
Beneficial
Endophyte?
Contact us!**

Winter Crops- Rates and Uses– Abridged

By David Hunsberger

Cover crops are being utilized on more acres here in the Northeast USA every year categories. Usage is split into two main categories, winter forage production for ruminant animals and for soil cover and improvement. Both these forks in the winter crop roadmap find the same species useful – often the combinations of species and the rates of application vary quite distinctly.

Forage:

When harvesting a large crop of DM from the non main growing season of fall and winter, the execution of timing of the seeding is crucial. Both rate and early window of opportunity timing are critical for achieving full mass yield potential. We require a dense sward with lots of fall tillering and some autumnal fertility to enhance the volume of the harvested crop. Again, timing is even more critical than rate; you cannot make up for late planting by simply by adding seed to compensate for being tardy. You can, however mitigate the loss of yield with an increase in seeding rate, but not account for all the opportunity cost. To ensure a timely planting, order seed early have it on hand, make sure planters are at the ready, chase the combine or chopper with the next pass of seeding!

Rates for cereals and some cereal mixes to consider are as follows: Double Play 175 lbs/A, Wheat 5 bu/A, cereal rye and triticale 125lbs/A, CARGO 120+lbs/A. If we are including a legume like crimson, vetch, or winter peas the timing is also crucial to have enough height and plant reserves to overwinter, it is paramount that we get them in, with good seed to soil contact on time, legumes are a little slower than grasses and cereals to achieve winter hardy status. If you grow your own cereal grain crop our small and large box boosters are great at providing easy access to crop diversity without a mixing facility or tying up a large number of bags of different species to get the ratios correct. USDA hardiness zone maps can inform on specific dates for your individual locales.

Cover:

For Planting Green management or just a soil protecting/soil building cover to burn down ahead of planting we do not need, nor do we want such a heavy mat of forage top growth to deal with. We want active roots and a residual mulch but not excessive DM to plant through. A caveat to this is when using a rye or triticale as a roll down for weed control in soybeans or pumpkins or other vine crops. In these circumstances you will want to use the very heavy rates and early establishment dates as you need a thick several tons of DM/acre to provide a season long roll down mulch. Waiting until full seed head emergence and the anthers begin to drop will ensure you have maximum DM accumulation; hollow stems and the crop will remain down after you roll it.

A mix from Kings that is specifically designed for planting green is our Green N Low. This is a simple mix of the dwarf turf type LowBoy annual ryegrass and Dixie crimson clover. The crimson will fix nitrogen and the LowBoy will have aggressive fibrous roots for soil building and aggregate stability, but the top growth will be more limited allowing planter operation to move down the rows with minimal interference. Our standard seeding rates are 20-25 lbs/ acre with Green N Low.



The author also attempted some lower seeding rates, 10 & 15 lbs/acre in late October. These rates all provided good cover by late spring, the soil was shaded, and was easy to plant into. I wanted to have a fibrous rooted crop component as I feel that is critical to maintain soil structure following an N fixing crop like soybeans, without some off season root exudates contributing carbohydrates as I feel the soil biome will rob the glomalin glue from aggregates to get the C: N ratio in balance.

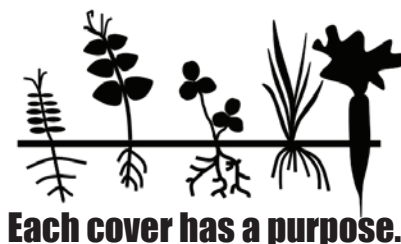
If planting into heavy fodder, use larger seed size crops performed better in this instance, emerging, and thrusting through the heavy fodder. In late March I did seed 25lbs of spring oats as a rescue green cover plan and had 12-18 inch oats to plant into by mid May.

Another low-rate plant green crop I used in autumn 2020 was the TerraLife, Rigol DT this has a recommended rate of 18-20 lbs/acre. It is designed for soil compaction relief and nutrient sequestration and was very nice to plant into this spring also and easy to terminate. I am trusting that my plant green acres will provide a soil moisture holding mulch summer 2021.

In summary as you plan your winter forage crop needs and acres you wish to plant green into you can adjust your seeding rates and establishment dates to achieve desired results.

Cover Crops & Mixtures

Whether you are farming conventionally, organically or aiming for no-till, each field should have a living crop for as many months of the year as possible.



We have developed a variety of mixtures designed and tested to improve soil health. Multi-species blends are more beneficial at improving the life of your soil than monocultures. Cover crops are proven to help optimize your soil's long term productivity and profitability.

Featured Products

Green-N-Low

A simple 2 species cover crop mix for those who do not need forage. The low growing, annual ryegrass increases soil tilth due to its aggressive fibrous root system. The crimson clover in the mix produces nitrogen.

Product Contents:

- Lowboy Annual Ryegrass
- Crimson Clover

Possible Applications:

- Planting green
- Traditional burndown
- Organic full-till program

Soil Builder Plus Mix

A mix of triticale, crimson clover, hairy vetch, annual ryegrass, and daikon radish. An excellent spring forage and/or overwintering cover crop. Can also be used for wildlife food plots. Clovers and vetch provide protein in a forage application, and triticale and ryegrass contribute effective fiber and bulk. This mix is ideal for a spring grazing or cutting when the triticale reaches flag leaf or boot stage.

Product Contents:

- Triticale
- Annual Ryegrass
- Crimson Clover
- Hairy Vetch
- Daikon Radish



Ray's Crazy Fall Mix

This 8 way mix is the fall formulation of our cover crop cocktail. This is a versatile cool season mix made up of grasses, legumes, and brassicas that can be used as a short-term cover crop, a soil-building transition crop to renovate depleted soils, a grazing mix, and a wildlife food plot. It also contains several blooming species that, if left to grow and flower, will attract beneficial species.

Product Contents:

- Winter Pea
- Forage Oats
- Triticale
- Hairy Vetch
- Crimson Clover
- Annual Ryegrass
- Daikon Radish
- Barkant Turnips



Didn't Find What You Like in a Mix?
We also do custom mixtures for specific cover crop/grazing needs!

Already Use Small Grains as Cover? Give Them a **BOOST** with King's Small Grain Booster Mixtures!

Our new Booster mixes are designed to help you add diversity to your small grain cover crop program, without the hassle of buying multiple products. The added benefits of the components in the booster mixes include fixing nitrogen, preserving additional nutrients and breaking up compaction. As a bonus, these mixtures can help you qualify for USDA conservation grants, which can bring your cover crop cost down even further.

Large Box Booster

This *booster* formulation features Keystone Winter Peas, which has excellent early vigor in the fall, and strong growth in the fall. Peas and Crimson contribute to Nitrogen production, daikon radish helps break up compaction.

Mix the Booster with your small grain of choice in the large box of your drill, layering it in.

Not approved for organic or transitioning farms.

Small Box Booster

This *booster* formulation features VNS Hairy vetch, an early maturing vetch. The legumes in this mix contribute to nitrogen production, the timothy to soil tilth, and the daikon radish to compaction. This mix could also be used in a forage setting. For drills with large and small boxes, can also be used for broadcasting.

TerraLife® Mixtures



Late Summer Options

BetaMaxx

The cover crop mix for vegetable and cultivation.

- Winterkills (Black oats can be an exception).
- Creates ideal seed bed conditions.

Rigol DT

Strong root growth stabilizes the soil structure.

- Very deep roots.
- Use on compacted soils.

MaizePro DT

Balanced, partly winter hardy cover crop for intensive corn crop program.

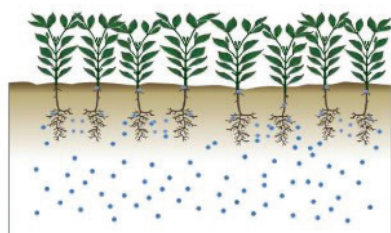
- Leaves optimal soil structures.
- Supports deep roots.
- Very good nitrogen exploitation.

VitaMaxx DT

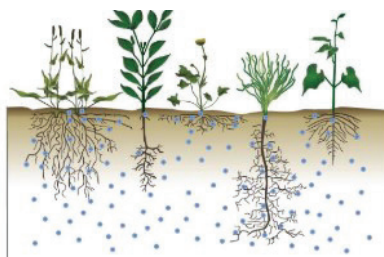
Fast growing mix with extended planting window.

- Legume free.
- Preserves nutrients over winter.
- High level of allelopathy, primarily from black oats, to control weeds in following crop.

Single Species Cover Crop



TerraLife® Mixtures



Complex mixtures need a complex inoculant! Try BioTrigger Cover Crop this season!



King's Triticale & Triticale Mixtures

Split your acreage between our proven products to reduce your weather risk. Below is a recommended forage harvest guide that gives your farm more harvest windows to make superior forage quality and excellent tonnage.

Surge™ – NEW!!

This high sugar awnless variety is facultative, meaning that it does not need to go through a cold period to be productive. Can be planted in either the fall or the spring. Produces a high yield of a quality silage that is tall, erect and late.

Gainer 154™ – Big Yield & Early

Gainer 154 is a high-yielding variety. It is very responsive to good fertility and crop management. With its early maturity (compared to some other triticales), early spring management is important. Apply spring fertilizer earlier to push the crop out of dormancy for maximum yield and protein.

TriCal i Blend – Leafy & Late

A blend of the 815 you know and love, with the added bonus of a harvest indicator variety. The small portion of Gainer 154 will head out approximately 1 week prior to the 815, giving a clear indicator when it is time to harvest for optimal quality.

Triticale Harvest Management

For best results, cut prior to boot stage. Triticale's window of harvest is wider than most other small grains, so it maintains quality longer. Wide swath for best drying.

Why go with a proven forage triticale product?

- Wide Leaf
 - Wide Harvest Window
 - Later Maturity
 - Graze It
 - Harvest It
 - Make Milk with It.
 - Increase ADG with It.
- Out-Yield Your Neighbor!**

Need More Info?

Ask your dealer about our Research Report to compare products and mixtures or visit- KingsAgriSeeds.com

Pictured: Gainer 154

Featured Products

DART™

-One Cut System

A triticale based mix designed for one spring haylage cut. This mix features TriCal i Blend, which serves as a harvest indicator. The winter hardy annual ryegrass improves soil health via increasing organic matter and soil tilth while also increasing forage quality. Daikon radish helps control winter annual weeds and also improves soil productivity.

Harvest Management

For best results, cut prior to boot state. Triticale's window of harvest is wider than most other small grains, so it maintains quality longer. Annual Ryegrass also maintains high quality even after the head begins to emerge. Wide swath for best drying.

King's Triticale Plus™

- Two Cut System

A mixture of triticale and annual ryegrass. Designed for two spring cuts of haylage and/or grazing. This mixture will have superior NDFd when harvested prior to boot stage and bounces back quickly for a second cutting. Two cuts will grow more quality & quantity than a one cut triticale system.

Harvest Management

As a two cut system, harvest the first cut about one week prior to a one cut harvest date (around when rye/barley is in boot stage). If weather does not allow the first harvest before flag leaf, a one cut option will also give great forage quality. If taking a second cut, leave 4" stubble and apply 50 units of N plus some Sulfur. Wait approximately 3 weeks for regrowth, a second cutting should be made. The second cutting will be mostly ryegrass. Wide swath for best drying.

King's Double Play™

-One Fall & One Spring Cut

An annual mixture that that will give both quick fall growth and a spring harvest when planted Mid-August. Oats and annual ryegrass will give quick fall growth. The oats winter kill once temperatures drop into the teens. Both the triticale and the annual ryegrass will overwinter (with proper fall management) and produce a cutting of high quality forage in the spring. This mix is a balance for both fall and spring production.

Harvest Management

Fall growth: Prior to the end of university recommended wheat planting dates, a fall cutting must be made. Leave at least 5-6" of stubble. Short cuttings may result in winterkill or low yields in spring.

Spring growth: Oats will normally winter kill, leaving triticale and ryegrass for one cutting.

Relative Harvest Dates

	April				May			
VNS Rye								
Triticale Plus								
Double Play								
DART								
Soil Builder								
Gainer 154								
TriCal i Blend								
Surge								

Key: Blue— Single Cut, Green— Double Cut
Yellow— Spring & Fall Cut

For high quality dairy forage, do not delay harvest.

For beef forage, harvest can be delayed for more tonnage.

*Dates are based on Lancaster County, PA averages.

Trigger Success with KF Biotrigger Annual grasses!

Ask your local dealer about our Trichoderma inoculant.



Pictured: DART™

PERENNIAL PRODUCTS

PERENNIAL MIXTURES:

	Wt.		Seed Rate	Comments:
King's & Barenbrug Perennial Mixtures				
Balancer	33	MST	25 to 35	A rugged mix of Martin II novel endophyte tall fescue with early orchardgrass & clovers.
Beefmaster	50	UT	30 to 35	Good for finishing beef. Contains perennial ryegrass, fescue, orchardgrass and clover.
Browsemaster	50	YJ	22	A grazing mixture for goats, wildlife and more. Contains a lot of forbs.
Clean & Green	33	UT	35 to 75	For conservation. 80% tall fescue and 20% annual ryegrass. Adjust seeding rate to erosion risk.
(Northern) Creekside	33	MST	25	A highly palatable mix for wetter soils. (Adapted to Zones 4 & 5)
(Southern) Creekside				A strong mix for wetter soils. (Adapted to Zones 6a, 6b, 7a)
EquiFlex Forage	33	MST	25 to 30	A dual purpose, early hay/grazing mix with lower carbohydrates.
Equinemaster Paddock	25	UT	30 to 100	For exercise areas. Contains soft leaf tall fescue, KY bluegrass and perennial ryegrass.
Grass Maxx	33	MST	20 to 30	A rugged mix of Martin II novel endophyte tall fescue with early new-release orchardgrass.
GrassPro	33	MST	20 to 30	A mix of endophyte free tall fescue & late-heading orchardgrass & timothy. If seeding w/ legume, 3-8 lbs/acre.
Greenfast	33	MST	30 to 40	Aggressive 3 to 5 year mix. Good for shorter term pastures and renovation. (Adapted to zones 4, 5 & 6)
Highland Hay	33	OC	25	A PLH alfalfa/grass hay mix including: 50% alfalfa, 25% orchardgrass, 25% tall fescue. (Adapted to zones 6 & 7a)
Hillside	33	MST	25	A strong orchardgrass based grazing mixture. Great for good to drier soils.
King's (Northern) Grazing Mix	33	MST	25 to 35	Our premier managed grazing mix. (Adapted to Zones 4 & 5)
King's (Southern) Grazing Mix				Our premier managed grazing mix. (Adapted to Zones 6a, 6b, 7a)
King's HayPro	33	MST	20 to 30	An easier to dry alfalfa/grass mix that includes soft-leaf tall fescue, orchardgrass & timothy. (Adapted to zones 6 & 7a)
King's Horse Supreme	33	MST	25	Excellent horse mix with no tall fescue. Tolerates short grazing.
Lowland Hay	33	MST	20 to 25	A high-yielding mix for stored forage that includes premium tall fescue, timothy, & red clover.
Milkway	50	UT	35 to 40	50:50 mix of meadow fescue and soft leaf tall fescue. Lower seed rate with legumes (3 to 10lbs).
North Star	50	CT	18 to 25	An 85:15 blend of KF alfalfa with Hipast festulolium and meadow fescue. (Adapted to zones 4 & 5)
NutraMax Hay Mix	50	CT OC	25	Highly digestible alf/clover/grass mix that is primarily adapted to zones 4 & 5. Makes good haylage & baleage.
Performance Max	50	CT OC	20 to 25	70/30 blend of our Kingfisher alfalfas and late tall fescue. Consistent quality and high yield. (Adapted to zones 6 & 7)
Sale Topper Grass Mix	33	MST	15 to 20	Easy to dry. 80% late orchardgrass & 20% timothy. Lower seeding rate with legumes (5 to 10lbs).
NEW Southern Brawn	33	MST	20 to 30	An durable, endophyte-free tall fescue/orchardgrass mix for hay or grazing targeted for zones 6b to 7b.
Versa Mix	33	MST	15 to 30	A versatile forage grass mix. 70% tall fescue type festulolium, 30% orchardgrass. (Adapted to zones 4 to 7)

PERENNIAL LEGUMES:

	Wt.		Seed Rate	Comments:
Alfalfa				
King's Econo	50	CT OC	18 to 22	A respectable alfalfa at a low cost.
KingFisher 406AP2	50	CT OC	18 to 22	Resistant to multiple strains of aphanomyces and branch-rooted. DRI 35/35 with very good quality.
KingFisher 425 HD	50	CT OC	18 to 22	High-yielding, selected for high digestibility. DRI: 30/30, WH: 2.0, FD: 4.5
KingFisher 435 HD	50	CT OC	18 to 22	High-yielding, highly digestible, branch root. DRI: 35/35, WH: 1.7, FD: 4.6
KingFisher 519	50	CT	18 to 22	A strong alfalfa that is both high-yielding and great quality. DRI: 30/30, WH: 1.9, FD: 5
KingFisher PLH 422	50	OC	18 to 22	Potato-leaf hopper resistant. DRI: 30/30, WH: 2.4, FD: 4
King's PLH 544	50	OC	18 to 22	Potato-leaf hopper resistant. DRI: 35/35, WH: 2, FD: 5
KingFisher Profusion2 HX	50	CT OC	18 to 22	High yielding fine stemmed hybrid alfalfa with exceptional quality. Fall Dormancy 4.
KingFisher Secure BR	50	CT	18 to 22	An high yielding branch-rooted alfalfa that will tolerate wetter soils.
KingFisher Stronghold 35-2	50	CT OC	18 to 22	High yielding, branch-rooted variety with a sunken crown. 35/35 DRI.
KingFisher Traffic Pro	50	CT OC	18 to 22	High yielding alfalfa with a deep set crown that takes traffic well. DRI 34/35, FD 3.7, WH 1.5

MORE PERENNIAL LEGUMES ON THE NEXT PAGE

**PERENNIAL LEGUMES
CONTINUED:**

	Wt.		Seed Rate	Comments:
Birdsfoot Trefoil				
Wellington Birdsfoot Trefoil	50	OC	20 to 25	A high yield hay variety that can also be used for pasture and conservation.
Clovers (Perennial)				
Alice White Clover	25	YJ OC	2 to 4	Large leaf and medium height. Popular for grazing.
Alsike Clover +	50	UT	6 to 8	N source, tolerates flooding, poorly drained and acidic or alkaline soils. Not for horses.
Clifford Red Clover	50	OC	4 to 20	High-yielding, large leaf size. Excellent disease resistance with aggressive growth and persistence.
Clover Pollinator Mix	5 25	OC	5 to 12	A mix of 6 clover species that will provide excellent nectar flow to pollinators. Best late summer planted.
Dutch White Clover "VNS"	5 25	OC	2 to 4	Excellent for between vegetable rows. For pasture it is lower yielding and low growing.
Freedom! MR Red Clover	25	YJ OC	4 to 20	A mildew-resistant variety with less "hairs" makes a high quality hay.
Kakariki White Clover	5 25	OC	2 to 4	A new long-lived white clover with large leaves and high stolon density.
Ladino White Clover "VNS"	50	OC	5 to 9	Living mulch, erosion protection, green manure, beneficial insects.
Medium Red Clover "VNS"	50	CT OC	4 to 20	N source, soil builder, weed suppressor, attracts beneficials, forage.
Premium Clover Mix	25	YJ/CT OC	4 to 6	A mixture of premium red, white and ladino clovers. Seed alone or with grass.
RegalGraze Ladino	25	OC	2 to 4	A less aggressive large leaf white clover that tolerates heat, drought and cold very well.
3-Way Clover	50	OC	10 to 15	Clover mixture of Yellow Blossom Sweet Clover, Red Clover and Ladino Clover.
Forbs (Perennial)				
Forb Feast Chicory	10 25	OC	2 to 5	Deep tap root. High mineral content. Helps break up hard pans.

Exciting New Product Mixture: **Southern Brawn**

When quality, durability, and cost matters. This all grass mix is designed for zones 6b to 7b making it an ideal fit for VA, MD, DE and Southeastern PA.

Components

60% Cajun II- A durable endophyte free tall fescue that persists well in the south.

25% Persist NP (CT Coated)- An orchardgrass with good grazing tolerance & southern persistence.

15% Olathe UT- A very strong, early orchardgrass with excellent disease resistance & improved quality.

**PERENNIAL
GRASSES:**

	Wt.		Seed Rate	Comments:
Bromegrass <i>Offers good drought tolerance.</i>				
Artillery Smooth Brome	50	OC	30 to 40	(LIMITED) A very high yielding variety selected for drought tolerance. Maintains green hay color. Late maturity.
Carlton Smooth Brome	50	UT	30 to 40	(LIMITED) A traditional smooth brome. Maintains green hay color. Late maturity.
s/o Arsenal Meadow Brome	50	OC	25 to 35	Arsenal has excellent yield, drought tolerance, and disease resistance. Makes soft palatable forage. Early maturity.
Cache Meadow Brome	50	OC	25 to 35	Cache has yield, drought tolerance, and disease resistance. Makes soft palatable forage. Early maturity.
Festulolium				
Fojtan	50	UT	30 to 40	A long lived heat tolerant tall fescue type with good nutrition.
Hipast	50	UT	30 to 40	A high-quality, tall fescue type that is late maturing festulium with high yields.
Perseus	50	UT	30 to 40	A 3 year Italian ryegrass type with excellent nutritional quality. (Adapted to zones 4, 5, 6a.)
Perun	50	UT	30 to 40	A 3 year Italian ryegrass type with excellent nutritional quality. (Adapted to zones 4, 5, 6a.)
Meadow Fescue <i>Very palatable and very cold tolerant. More summer productive than ryegrasses.</i>				
s/o HDR Meadow Fescue	50	UT	35 to 45	Barenbrug's blend of high disease resistant meadow fescue.
s/o Liherold Meadow Fescue	50	OC	35 to 45	A top performing variety with strong early growth.
s/o Tetraex Meadow Fescue	55	UT	35 to 45	A tetraploid variety ideal to mix w/ new alfalfa seedings to increase energy levels in strong grass-growing regions.
Orchardgrass <i>Good Drought Tolerance. All varieties are less bunched.</i>				
s/o Echelon	32.5	UT	20	A very late heading and high yielding orchardgrass variety. Moves south well.
HLR Orchardgrass Blend	25	UT	20	Barenbrug high-leaf-ratio blend of late maturing, leafy orchardgrasses.
		YJ	23	Coated at 50% Yellow Jacket which improves seed flow through the small box.
Inavale	32.5	UT	20	An impressive med-late orchardgrass with high-yielding with good disease tolerance. Moves south well.
		OC	23	
Olathe	32.5	UT	20	An early orchardgrass with high yield and disease resistance. Excellent southern performance.
Persist NP	50	CT	20	A persistent early variety selected in western TN under tight grazing.
Ryegrass (Perennial & Intermediate) <i>Highest energy grass. Great spring and fall production.</i>				
Astoncrusader	55	UT	35 to 45	A high-yielding intermediate ryegrass.
BG-24T Blend	50	UT	35 to 45	A perennial Barenbrug blend of premium tetraploid & diploid varieties.
Kentaur	50	UT	40 to 50	A perennial tetraploid variety with excellent cold tolerance.
Mara	50	UT	40 to 50	A strong perennial Barenbrug diploid variety.
Remington	50	UT	40 to 50	A perennial tetraploid variety with excellent southern & northern performance.
Tall Fescue <i>Offers excellent drought and heat tolerance.</i>				
BarOptima Plus E34	25	UT	35 to 40	Improved soft leaf tall fescue with a beneficial endophyte.
Cajun II	50	UT	35 to 40	An early, high yielding and durable variety with no endophyte.
Kora	50	UT	35 to 40	Very high yielding hay type with late maturity. Improved digestibility with no endophyte.
Martin II Protek	50	UT	35 to 40	Martin II is an early-medium maturity, novel endophyte tall fescue.
STF 43	50	UT	35 to 40	A blend of Barenbrug's best soft leafed tall fescue varieties. Late maturity. No endophyte.
Timothy <i>Most palatable grass. Makes low potassium hay.</i>				
Climax (not certified)	50	UT	10 to 15	The old standard variety for the Northeast USA. Mid-maturity.
Comtal	50	UT	10 to 15	An improved variety that is good for both hay & grazing. Similar maturity as climax.
KY Early	50	UT	10 to 15	A high-yielding, very early timothy variety bred in Kentucky.
Glacier	50	UT	10 to 15	An improved high-yielding early timothy.
Tenho	50	UT	10 to 15	An improved high-yielding variety with good Penn State data. Similar maturity as climax.
s/o Zenyatta	50	UT	10 to 15	A high-yielding, early timothy with an excellent track record.
Turf <i>Subject to sales tax if for residential use.</i>				
s/o Turf Star	50	UT	300	A turf type perennial ryegrass blend. Great for seeding between produce rows.
Sun and Shade	50	YJ	175	A multipurpose fine leafed turf.
Water Saver Pro	50	YJ	300	Turf type tall fescue blend. Excellent for durability and lower maintenance.
Miscellaneous Perennial Grasses				
Balin Kentucky Bluegrass	50	UT	15	Forage type with improved productivity.
Companion Mix	25	UT	50	A mix for orchards, vineyards, and between vegetable rows that requires less mowing.
Reed Canarygrass	50	UT	12 to 18	Very wet & drought tolerant. Once established it is very persistent. Low alkaloid.

COOL-SEASON ANNUAL PRODUCTS

COOL-SEASON ANNUAL MIXTURES:

	Wt.		Seed Rate	Comments:
Cool-Season Annual Mixtures				Seeding rate is for cover crop usage ONLY. The soil benefits are listed below.
Booster Mix- Large Box +	50	CT	20	An easy to terminate 3-way mix designed to add diversity to 50-100 lbs/acre of small grain.
Booster Mix- Small Box +	50	UT	10 to 20	A 5-way mix of small seeded product to boost 50-100 lbs/acre of small grain.
Broadcaster	50	PI	25 to 30	Best seeded in late summer. Annual ryegrass, radish, crimson, red & yellow blossom clovers.
CARGO	50	PI	110 to 130	Grass-legume green manure, nutrient scavenger, nitrogen fixer, soil builder, and forage. Use 60 lbs/acre for cover crop.
DART	50	UT	125	A one-cut triticale, annual ryegrass & daikon radish mix featuring 815i (harvest indicator).
Double Play	50	UT	150 to 200	Forage for this fall and next spring. Contains oats and Triticale Plus.
King's Pea-Oat Mix +	50	UT	100	For grain or forage. A 50/50 mix of forage oats and 4010 peas.
King's Soil Builder Plus +	50	PI	120 to 140	Forage and soil building mix of triticale, crimson clover, vetch, annual ryegrass & radish.
Ray's Crazy Fall Mix +	50	UT	40 to 60	An 8-way mix for cover crop and/or forage. Includes grasses, legumes and brassicas.
Oats Plus Mixture	50	UT	75 to 90	For good quick feed. Contains 60% oats, 40% annual ryegrass.
Triticale Plus	50	UT	80 to 100	A mix of 2/3 triticale & 1/3 annual ryegrass. Best for two spring cuts.

TERRALIFE MIXTURES:

	Wt.		Seed Rate	Comments:
TerraLife Cover Crops				The Special Cover Crop Program (Not for forage production)
BetaMaxx +	50	UT	35 to 40	A cover crop mix for vegetables including crucifers (and brassicas), beets and more.
MaizePro DT +	50	UT	35 to 40	A partly winter hardy cover crop mix for intensive corn crop rotations and more.
Rigol DT	50	UT	18 to 20	Strong root growth that stabilizes soil structure for most crops other than crucifers (brassicas).
VitaMaxx DT	50	UT	18 to 22	This non-legume diverse mix is designed to reduce nutrient losses on manure rich fields.

FOUNDATIONFIRST MIXTURES:

	Wt.		Seed Rate	Comments:
FoundationFirst Forecrop				Start From the Ground Up (Not for forage production)
NEW Construct	50	UT	20	A soil health building forecrop designed to set up tobacco & other high value crops.
Green-N-Low	50	PI	20-25	A balanced Lowboy and crimson clover mix that improves tilth and fertility. Best late summer seeded.
NEW MulchMaster RD	50	UT	100	An excellent forecrop planted in the fall, rolled down in the spring. Suppresses weeds & keeps pumpkins/melons off the ground.

COOL-SEASON ANNUAL GRASSES:

	Wt.		Seed Rate	Comments:
Annual Ryegrass				Best for late summer and early fall seeding.
Kodiak	50	UT	35 to 40	An annual ryegrass with superior cold tolerance. High yield and quality.
McKinley	50	UT	35 to 40	A winter hardy variety with high yield and quality.
Lowboy Annual Ryegrass	50	UT	15 to 20	A dwarf-type annual ryegrass that has great cover crop application. DO NOT USE FOR FORAGE.
Italian & Intermediate Ryegrass				Two year potential crop. Fast starting and very high quality.
Green Spirit Blend	50	UT	35 to 45	A Barenbrug tetraploid/diploid Italian blend. Does not go to head when spring seeded.
Kingfisher Allegro Blend	50	UT	35 to 45	A Kingfisher Italian ryegrass blend. Does not go to head when spring seeded.

**COOL-SEASON
ANNUAL LEGUMES:**

	Wt.		Seed Rate	Comments:
Clovers (Annual)				
Balady 1 Berseem Clover	50	OC	15 to 20	An annual clover that resembles alfalfa.
Frosty Berseem Clover	50	OC	15 to 20	An improved late-maturing, multicut forage variety with good winter hardiness.
Crimson Clover +	50	CT UT	15 to 25	A winter annual clover, good for hay, grazing and green manure.
Viper Balansa Clover	50	OC	3 to 8	A cool season annual legume with similar winter hardiness to winter peas & crimson clover.
Clovers (Biennial)				
White Sweetclover 'VNS'	50	OC	5 to 18	Deep tap root helps break up compacted soils. 2nd year nectar flow is later than YBSC.
Yellow Blossom Sweetclover	50	OC	15 to 25	Deep tap root helps break up compacted soils. 2nd year has strong nectar flow.
Hairy Vetch				
AU Merit Hairy Vetch	50	OC	25 to 30	An early, winter hardy hairy vetch. Excellent nitrogen producer in cover crop programs.
Patagonia	50	OC	25 to 30	An early, winter hardy hairy vetch. Excellent nitrogen producer in cover crop programs.
Peas				
40-10 Spring Peas +	50	UT	80 to 100	A high-quality purple flower forage pea. Can be planted spring or fall. Small seed size.
Keystone Winter Peas +	50	UT	90 to 100	A facultative, white flowering pea that can be seeded in the spring or fall.

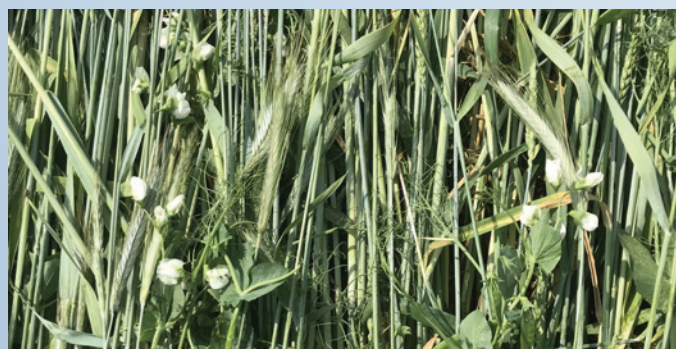
**COOL-SEASON
SMALL GRAINS:**

	Wt.		Seed Rate	Comments:
Small Grains- Spring			<i>Suggested for planting in the spring, or late summer for forage.</i>	
AC King Spring Barley	50	UT	125 to 150	A strong two row spring barley that can be used for fast forage or grain.
Badger Oats	50	UT	100	An early high-yielding grain oat with high test weight. For short season forage-@ 150lbs/acre.
Canmore Oats	50	UT	95 to 130	A dual-purpose, medium early, taller variety.
Cosaque Black Oats	50	UT	30 to 100	Primarily used a cover crop to suppresses weeds and nematodes. Can be used for forage.
Everleaf 126 Oats	50	UT	80 to 100	Very high forage quality. Stays leafier, longer. Latest maturing variety. Susceptible to rust.
Niagara Oats	50	UT	95 to 130	A tall, medium maturing forage oat.
Reeves Oats	50	UT	95 to 130	An early, dual-purpose oat that is 1-2 days later than Badger.
Byron's Spring Triticale	50	UT	125 to 150	Forage spring triticale. Tall-awned, forage type.
MORE COOL-SEASON / WINTER ANNUAL SMALL GRAINS ON THE NEXT PAGE				

Exciting New Product Series: **FoundationFirst**

MulchMaster RD

Growing pumpkins or Melons? This mix is for you! An excellent forecrop that is planted in the fall and rolled down after flowering to terminate prior to planting in the spring. This mix builds soil, and the rolldown mat suppresses weeds and keeps the melons and pumpkins off the soil to help prevent disease. Ask about it today!



Construct

Growing tobacco & other specialty crops? Plant this mix in the late summer during alfalfa seeding dates. Set your high value crops up for success by investing in your soil structure, increase your tilth with this mix! Most of this mix will not overwinter, with the exception of Lowboy, a dwarf annual ryegrass that has an amazing root system and possibly a touch of clover. Terminate the Lowboy approximately three weeks prior to transplanting or seeding the next crop to create a resilient soil that is easy to plant into. Talk to one of our agronomists today to learn more!

WINTER ANNUAL PRODUCTS

WINTER ANNUAL SMALL GRAINS CONTINUED:

	Wt.		Seed Rate	Comments:
Small Grains- Winter			<i>Can be used in the spring for grazing and nurse crop purposes.</i>	
Keystone Winter Pea +	50	UT	60 to 100	Semi-leafless white flowering winter pea with excellent standability and nutritional value.
Cosaque Black Oats	50	UT	30 to 100	Marginal winter hardiness. Suppresses weeds and nematodes. Can be used for forage.
KWS Propower Hybrid Rye*	800K	T	800-1200K	A later maturing wide harvest window cereal rye. Use low seeding rate if seeded early.
VNS Cereal Rye	56	UT	168	A Canadian rye that is leafier and later than local rye.
Sonic Spelt	50	UT	125	Excellent disease resistance and high forage, straw, and grain yield.
		T		
Sungold Spelt	50	UT	125	A taller food grade spelt exhibiting better standability and winter survival. Also a good forage.
		T		
Malabar Wheat	50	UT	100 to 150	Awnless, tall red winter wheat. Very high yielding & multipurpose. 50% higher straw yields.
Gainer 154 Triticale	50	UT	100 to 150	An early, high-yielding triticale variety. About 5-7 days earlier than TriCal 815.
Surge Triticale	50	UT	125 to 150	A new & improved facultative triticale that can be planted in spring or fall.
TriCal i Triticale Blend	50	UT	100 to 150	This blend is a 95% TriCal 815 and 5% Gainer 154. The Gainer 154 acts as a harvest indicator.

FORBS

FORBS:

While classified as a summer annual, many forbs can be used throughout the full growing season, particularly brassicas & radishes.

	Wt.		Seed Rate	Comments:
Brassicas			<i>High quality forage. Great for summer feed or late fall feed.</i>	
Barkant Turnip	10	UT	4 to 5	A leafy variety with a tankard shaped bulb.
	25	UT		
Purple Top Turnip	50	UT	4 to 5	A lower cost variety best for cover crops.
Barsica Rape	25	UT	4 to 5	A new forage rape that is fast maturing. Over-wintering.
T-Raptor Hybrid	25	UT	4 to 5	A turnip like hybrid that's super for multiple grazings (no bulb).
Specialty Items				
s/o Braco White Mustard	50	UT	8 to 10	Bio-fumigant crop. Disease and nematode suppression, break crop, quick cover, weed suppression.
Buckwheat 'VNS'	50	UT	50 to 70	Cool season or summer quick soil cover, weed suppressor, nectar for pollinators, loosens topsoil.
Lifago Buckwheat	55	UT	25 to 35	A later maturing small seeded buckwheat for cover crop programs. Not for grain. Does not attract pollinators.
Daikon Radish	5	UT	12 to 14	Deep root growth, improves tilth, scavenges N, weed suppressor, bio-fumigant and break crop.
	50			
s/o SuperBee Phacelia	5	UT	8 to 12	Excellent for beneficial insects including honey bees. Also an excellent soil builder.
s/o	50			
Peredovik Sunflowers	50	UT	40	A great sunflower for cover crop and wildlife programs.

CERTIFIED ORGANIC PRODUCTS

	Wt.		Seed Rate	Comments:
King's Certified Organic Mixtures		<i>Custom mixes are available but arrangements must be made in advance.</i>		
Dairy Green	33	OC	25 to 35	A mix that will thrive on good to moist soil.
Partner	33	MST	20 to 30	Grass hay blend to seed with alfalfa or alone. Use lower seeding rate with legumes (3 to 8lbs).
Star	33	OC	25 to 30	For dairy quality pasture on varying soil types.
Alfalfa				
429 Alfalfa	50	OC	18 to 22	High-yielding, fast recovery. Deeper crown to tolerate hoof traffic. DRI 29/30, FD 4
Clovers		<i>Best for grazing & silage. For better establishment & more productive stands, inoculate before seeding.</i>		
Premium Org. Clover Mix	25	OC	4 to 6	A mixture of premium red, white and ladino clovers. Seed alone or with grass.
Common Medium Red Clover	50	OC	4 to 8	A short lived, lower cost red clover.
Harmonie Red Clover	50	OC	4 to 8	A European red clover.
Klondike Ladino Clover	25	OC	2 to 4	A quick growing, large leaf clover. Include with pasture seeding or overseed into pastures.
s/o Renegade Red Clover	50	OC	4 to 8	An improved red clover.
Rivendel White Clover	25	OC	2 to 5	A very persistent, small leaf white clover.
Festulolium				
Fojtan	50	UT	30 to 40	A long lived heat tolerant tall fescue type with good nutrition.
Meadow Fescue				
s/o Laura	50	UT	35 to 45	High yielding and high quality. Doesn't get heady in the summer.
Orchardgrass				
Echelon	25	UT	20	A very late heading and high yielding orchardgrass variety.
Ryegrass- Annual				
s/o VNS Annual Ryegrass	50	UT	40 to 150	A fast starting grass for patching up abuse areas.
Ryegrass- Italian & Intermediate				
Kingfisher Allegro Blend	50	MST	35 to 45	A Kingfisher tetraploid, diploid Italian ryegrass blend.
Astoncrusader	55	UT	35 to 45	A high-yielding intermediate ryegrass.
Ryegrass- Perennial		<i>Highest energy grass. Great spring and fall production. Needs high fertility and moisture.</i>		
Kingfisher TD Blend	33	MST	35 to 45	A Kingfisher blend of European tetraploid and diploid varieties.
Premium	50	UT	35 to 40	An intermediate maturing diploid variety that does well under lower nitrogen fertility.
s/o Polim	50	UT	40 to 50	A late-maturing tetraploid with excellent quality & productivity.
Tall Fescue		<i>Tolerates drought, heat, wet soil and traffic. Very long lived.</i>		
Kora Tall Fescue	50	UT	35 to 45	Extremely productive. Hay type. Very digestible.
Timothy		<i>A very palatable grass.</i>		
Dolina Timothy	50	UT	10 to 15	A high yielding, persistent hay type European variety.
Tenho Timothy	44	UT	10 to 15	An improved high-yielding variety. Similar maturity as climax.
Seasonal Annuals				
Badger Oats	50	UT	100	An early high-yielding grain oat with high test weight. For short season forage sow 150 lbs/acre.
Deon Oats	46	UT	100	A high-yielding early to medium oat with high test weight. Can also be used for forage at 130 lbs/acre.
Jerry Oats	48	UT	100	A taller, older oat variety. Can be used for forage forage at 130 lbs/acre.
Reeves Oats	48	UT	95 to 130	An early, dual-purpose oat that is 1-2 days later than Badger.
Reins Oats	48	UT	100	An early maturing, shorter oat. Excellent high yielding grain oat.
AC Morgan Oats	48	UT	100	A high-yielding early to medium oat with high test weight. Can also be used for forage at 130 lbs/acre.
40-10 Spring Peas +	50	UT	80 to 100	A high quality purple flower forage pea. Can be planted Spring or Fall. Small seed size.
Buckwheat 'VNS'	50	UT	50 to 70	Cool season or summer quick soil cover, weed suppressor, nectar for pollinators, loosens topsoil.
Lifago Buckwheat	55	UT	25 to 35	Small seeded buckwheat for cover crop programs. Not for grain or attracting pollinators.
VNS Cereal Rye	56	UT	168	A Canadian rye that is leafier and later than local rye.
Gainer 154 Triticale	50	UT	100 to 150	An early, high-yielding triticale variety. About 5-7 days earlier than TriCal 815.
TriCal i Triticale Blend	50	UT	100 to 150	A very leafy, highly digestible winter triticale. More tonnage than wheat, rye and barley.
Erisman Wheat	50	UT	100 to 150	A new release, bred for production under lower fertility inputs.

SEED STIMULANTS

	Package Size	Rate	Comment:
KF BioTrigger, GroPak, & MST			NOTE: At this time, do not use both KF BioTrigger & MST together.
KF BioTrigger Corn	4 oz. per pack	20 acres	A micronutrient package that includes Mn, S, & Zn that accelerates seedling establishment plus crop specific Trichoderma fungi inoculant to enhance root development over the life cycle of the crop. KF BioTrigger inoculants also serve as a seed lubricant.
	case price (12 pks)	240 acres	
KF BioTrigger Perennial Grasses/Turf	8 oz. per pack	6 acres	
	case price (12 pks)	72 acres	
KF BioTrigger Annual Grasses / Cereals	24 oz. per pack	20 acres	Strain specific Trichoderma fungi inoculant for increased stress tolerance, Rhizobia inoculant for nitrogen fixation plus seed lubricant.
	case price (6 pks)	120 acres	
KF BioTrigger Alfalfa/Clover	8 oz. per pack	10 acres	
	case price (12 pks)	120 acres	
KF BioTrigger Cover Crop	24 oz. per pack	12 acres	Strain specific Trichoderma fungi inoculant for increased stress tolerance, Rhizobia inoculant for nitrogen fixation plus seed lubricant. Legumes include but are not limited to: peas, vetches, sunn hemp, cowpeas, & true clovers.
	case price (6 pks)	72 acres	
Myco Seed Treat (MST)	1 lb.	2 to 8 oz.	An all natural non-GMO seed treatment that increases seedling vigor and overall plant health through a healthier root zone. OMRI-listed. Not to be used with KF BioTrigger products.
Myco Seed Treat (MST)	5 lb.	per 100	
GroPak	12 lb.	3-8 oz. per acre	A hopper box seed treatment that replaces talc & graphite, speeds plant establishment, improves soil environment for germinating seeds. Contains S, MN, Mo & Zn.

Seed Inoculants- OMRI listed

N-Dure Alfalfa/Clover Inoculant	Pkg	For seed that was not preinoculated or coated. Treats 50# of clover or alfalfa. Code #2374
Prevail Alfalfa/Clover Inoculant	Pkg	For seed that was not preinoculated or coated. Treats 100# of clover or alfalfa. Code # 2372
N-Dure Pea/Vetch inoculant	Pkg	For seed that was not preinoculated or coated. Treats 100# of seed. Code # 2400

LALLEMAND FORAGE INOCULANTS

Lallemand Forage Inoculants		<i>The Following Are Available at King's Warehouse in <u>Less than Case Quantities</u> :</i>
Magniva TITANIUM <i>previously: Biotal Buchneri 500</i>	100TT	Achieve a fast front-end forage fermentation, improve digestibility and maintain aerobic stability to maximize the amount of top-quality silage available at feedout. (Treats 66 tons when applying to high moisture corn.)
Magniva TITANIUM OMRI <i>previously: Biotal Buchneri 500 OMRI</i>	50TT	An OMRI-listed product. Achieve a fast front-end forage fermentation, improve digestibility and maintain aerobic stability to maximize the amount of top-quality silage available at feedout. (Treats 33 tons when applying to HMC.)
Magniva SILVER <i>previously: Biotal Plus II</i>	100TT	Drives front-end fermentation to reduce dry matter losses, along with reducing heating during feedout for more available feed.
Magniva SILVER dry-applied	50lb. Bag- 100TT	See above description, but in granular form.
Magniva SILVER OMRI <i>previously: Biotal Plus II OMRI</i>	50TT	An OMRI-listed product. Drives front-end fermentation to reduce dry matter losses, along with reducing heating during feedout for more available feed.
Magniva CLASSIC <i>previously: Sil-All Activate</i>	100TT	Provides a fast, efficient initial fermentation, increased dry matter recovery and improved protein retention.
Magniva Hay <i>previously: BioTal Hay</i>	10TT	A non-corrosive biological inoculant. Allows hay to be baled at a higher moisture and retains more nutrients and protein.
Lallemand Forage Inoculants		<i>The Following Are Available for <u>Direct Shipment In Per Case Quantities</u> :</i>
Magniva TITANIUM <i>previously: Biotal Buchneri 500</i>	10-100TT 4-500TT	Achieve a fast front-end forage fermentation, improve digestibility and maintain aerobic stability to maximize the amount of top-quality silage available at feedout.
Magniva TITANIUM OMRI <i>previously: Biotal Buchneri 500 OMRI</i>	10-50 TT 4-200TT	An OMRI-listed product. Achieve a fast front-end forage fermentation, improve digestibility and maintain aerobic stability to maximize the amount of top-quality silage available at feedout.
Magniva SILVER <i>previously: Biotal Plus II</i>	10-100TT 4-500TT	Drives front-end fermentation to reduce dry matter losses, along with reducing heating during feedout for more available feed.
Magniva SILVER dry-applied	40 bags-100TT	*Freight is not included on the <u>dry applied</u> inoculant. Please call the office for a freight quote.
Magniva SILVER OMRI <i>previously: Biotal Plus II OMRI</i>	10-50 TT 10-200TT	An OMRI-listed product. Drives front-end fermentation to reduce dry matter losses, along with reducing heating during feedout for more available feed.
Magniva CLASSIC <i>previously: Sil-All Activate</i>	10-100TT 4-500TT	Provides a fast, efficient initial fermentation, increased dry matter recovery and improved protein retention.
Magniva CLASSIC dry-applied	40 bags-100TT	*Freight is not included on the <u>dry applied</u> inoculant. Please call the office for a freight quote.
Magniva Hay <i>previously: BioTal Hay</i>	10-10TT	A non-corrosive biological inoculant. Allows hay to be baled at a higher moisture and retains more nutrients and protein.



1828 Freedom Rd, Suite 101
Lancaster PA 17601
(717) 687-6224
KingsAgriSeeds.com

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Northern Region—Green

Rod Porter, Regional Coordinator
(607) 227-0836
RodPorter@KingsAgriSeeds.com



Harold Schrock,
Eastern Northern Dealer Support
(315) 723-1681
HaroldSchrock@KingsAgriSeeds.com



Central Region-Blue

David Hunsberger, Regional Coordinator
(814) 880-5186
DavidHunsberger@KingsAgriSeeds.com



Eastern—Gold

Joy Beam Yoder, Regional Coordinator
(484) 524-3481
JoyYoder@KingsAgriSeeds.com

