



Great in Grass[®]



USA

 **BARENBRUG**



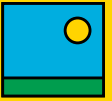
BARENBRUG

Barenbrug USA is a branch of the Royal Barenbrug Group, the largest privately owned grass seed company in the world. The Barenbrug Group has 20 corporate facilities in 12 countries located on five continents.

Our company is known for many special traits including longevity, quality, capacity for research and innovation. For more than 100 years, Barenbrug's experience in the grass seed industry – the partnerships we have established and the effectiveness of our marketing – has contributed to a strong global reputation.

At its core, the Barenbrug Group concentrates on leadership in the research, production, marketing and sale of innovative grass seed products. That focus and determination are evident in the solutions we develop for the turf industry, whether for world-class golf fairways and greens, sports turf, professional landscape or residential lawns.

Our research and development covers all the major U.S climate zones, often working closely with leading universities and private institutes. We like to think that, when it comes to grass seed, you can't find a better, more committed and reliable supplier than Barenbrug. We're working hard to sustain that reputation for another 100 years!



Contents

Research and Innovation	2
Partnerships	5
Descriptions of Key Varieties	6
 Golf	8
 Sports Turf	12
 Lawn & Landscape	16
 Sod	20
Turf Characteristics	23
Barenbrug USA Territory Managers	24
Turf Grass Species	25



The Barenbrug Group has more than 20 locations in 12 countries on five continents.

Research and Innovation

Barenbrug conducts research all over the world, because our customers are located all over the world. We create products **specific** to climate zones where customers live. Having access to the largest global genetic germplasm pool allows us to develop a specific variety for a specific purpose.

The company has three research facilities in the US and we supplement that capacity with numerous partnerships with leading universities and private research institutes. Our scientists have one overarching goal: to bring more value to our customers. That goal is accomplished through innovation. You'll see it exhibited throughout our catalog; this is what sets Barenbrug apart and gives our customers an advantage.

RTF®

RTF® (Rhizomatous Tall Fescue) is a good example of how Barenbrug's innovations bring exceptional value to the turf industry. RTF® is the only tall fescue available with rhizomes. The significance, of course, is that with numerous rhizomes, turf can repair itself, filling in bare spots and reducing the need to overseed. The deep rhizomes of RTF® help in recovering from injury due to traffic or disease, whereas other tall fescues do not recover if the plant is damaged.



Barenbrug introduced RTF® to the market after exhaustive research, selecting for special rhizome traits. Since its introduction, competitors have struggled to duplicate our patented product. They have yet to succeed! Recent trials, conducted with a university, show that RTF® outproduces other varieties in rhizome generation.

RTF® seed is a critical component of the *Turf Saver® with RTF®* blend. RTF® seed is also available as sod quality for the RTF® Producers Association.

Barcampsia

Our research on *Deschampsia* yielded a unique variety of tufted hairgrass. Called Barcampsia, this variety exhibits a very high shade tolerance as well as tremendous wear tolerance. No other variety in the world combines those highly desired characteristics. Barcampsia is ideal for sports fields and golf courses as well as shady home lawns.

Bargold

The uniqueness of Bargold is in its tolerance for very low mowing. Our researchers created a fine leaved perennial ryegrass variety that can be mown as close as 1/5 of an inch. Before Bargold, such grasses couldn't be cut shorter than one inch. Bargold has such fine leaves that it blends easily with fine fescues. This makes it ideal for overseeding high traffic areas in links-style fine fescue courses. Bargold was most recently used in the Barenbrug mixture for the 2006 World Cup Soccer Tournament in Germany. Bargold is available in *Turf Star® XPC®*.

Yellow Jacket™ Coating

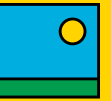
Barenbrug is an internationally acknowledged leader in innovative grass seed coatings. Having worldwide research facilities, our scientists are best equipped to develop new coating solutions for the turf industry, enhancing seed and turf performance.



Yellow Jacket™ is our proprietary seed coating. Yellow Jacket™ contains a totally natural (corn starch based) product called Zeba®. The value of Zeba® is that it holds up to 600 times its own weight in water. Research trials at the University of New Mexico proved that seed coated with Yellow Jacket™ established faster and required less water. In the US and globally, water has become a precious asset. Yellow Jacket™ simultaneously helps seed thrive while conserving water.



Yellow Jacket may contain Zeba®. Zeba® is a registered trademark of, and used under license from, Absorbent Technologies, Inc.



Fast-establishing bluegrass

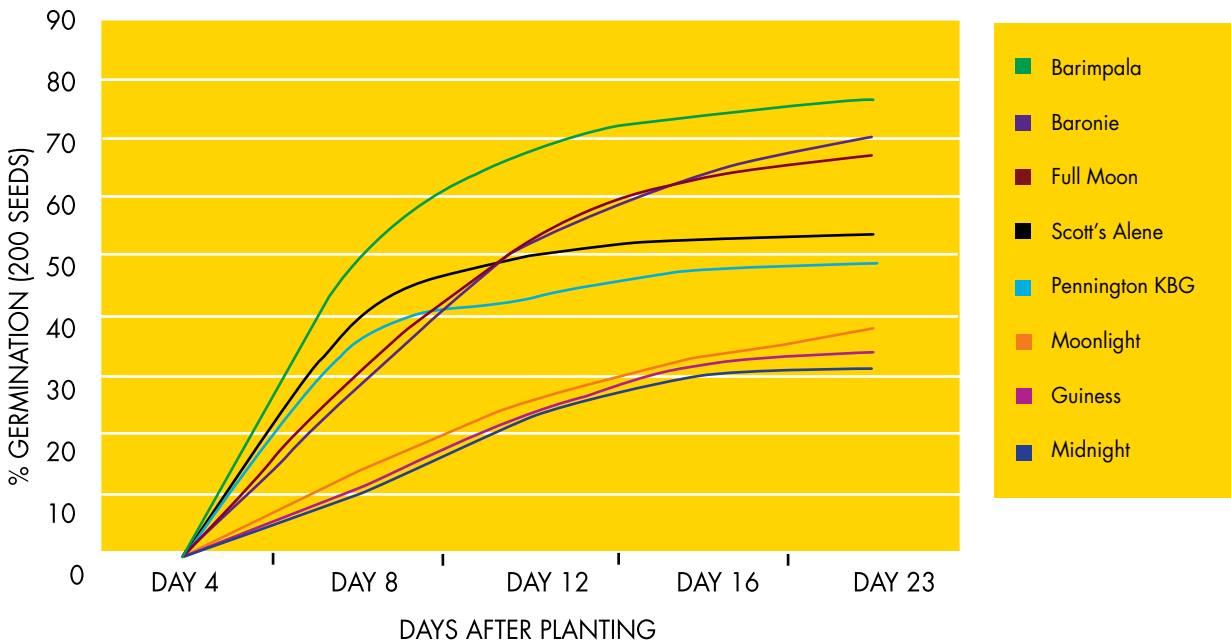
Getting bluegrass seed to germinate quickly has been a major issue, and one we're glad to have solved! While many bluegrass varieties are very slow to take root, Barenbrug specializes in varieties that germinate and establish quickly (see the chart below) and still have excellent turf quality. Faster establishment means quicker results and fewer weeds in your turf. A fast-establishing bluegrass can help produce commercial sod faster, have your fairways ready sooner, play on your sports field earlier or help you finish your landscape project ahead of schedule.

Bluegrass quality: seed size and seeding rate research with U of Illinois

In Kentucky bluegrass, the number of seeds per pound differs greatly between varieties. Some varieties have 900,000 seeds per pound while others have almost two million per pound. Barenbrug and University of Illinois studied the turf quality of bluegrass in relation to number of seeds planted in a unit area. The research gave us very interesting data.

Some varieties performed better with lower than "normal" seeding rates. See the table on the next page.

Rate of Germination of Kentucky Bluegrass Varieties



Quality Rating at Different Rates

Variety	seeds / lb	QUALITY	
		high seed count	low seed count
Barrister	1,290,000	5.9	5.8
Bariris	1,260,000	5.6	5.3
Baron	1,008,831	5.4	5.5
Full Moon	1,053,000	5.3	5.8
Barimpala	1,570,000	5.9	6.3
Baroness	1,887,198	5.1	5.2

Variety trials on traffic tolerance with Iowa State University

Barenbrug conducted research with Iowa State's David Minner. Different species were tested for germination and establishment under a high traffic situation. Bluegrasses, it turns out, had problems while perennial ryegrass and annual ryegrass were far superior. Out of all the grasses tested, Panterra turf type annual ryegrass provided the best cover when a quick repair was needed during the autumn traffic season. This combination is available in our product *SOS™ Cool Season*.

Overseeding study at Ohio State University

Ohio State researcher Pam Sherratt conducted an overseeding study with fast establishing ryegrasses. Her team found that overseeding sports fields with Panterra turf type annual ryegrass combined with perennial ryegrass is optimal. The combination germinates and establishes rapidly.

Super Over Seeding (SOS™) research with Texas A&M University

Barenbrug and Texas A&M conducted research on the winter overseeding of Bermudagrass. Dr. David Chalmers directed the study and found that different combinations of perennial ryegrass and Barenbrug's turf type annual ryegrass resulted in different rates of transition back to Bermudagrass, allowing better transition control. The research formed the basis of Barenbrug's current *SOS™* system for winter overseeding Bermudagrass.

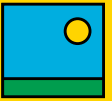
Yellow Jacket™ coating trial at Ohio State University

Pam Sherratt, mentioned previously in Barenbrug's overseeding research, also conducted a study with grass seed coatings. She found that Yellow Jacket™ with Zeba® was quite beneficial, even for fast establishing grasses like perennial ryegrass and turf type annual ryegrass. The coated seed was not as disease prone as the uncoated entries, particularly when the coating contained a fungicide. Whereas fungicide usually washes off the seed too quickly to be of benefit, the Zeba® coating held the fungicide longer.

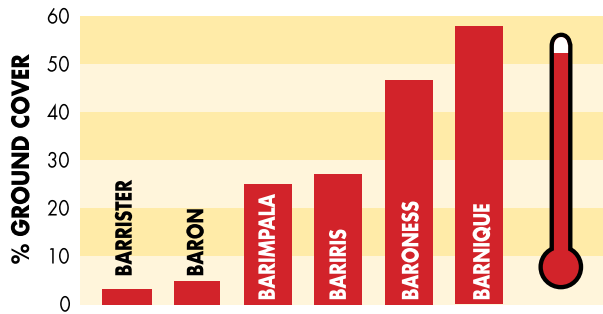
Seed coating research at New Mexico State University

Barenbrug conducted two extensive studies on seed coating with Bernd Leinauer at New Mexico State University. Bermudagrass, bentgrass, bluegrass, tall fescue and fine fescue seeds coated with our proprietary *Yellow Jacket™* coating showed better germination and establishment than uncoated seed. As mentioned above, *Yellow Jacket™* contains Zeba®.

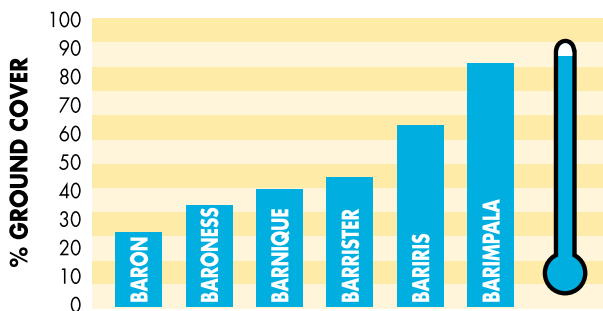




% Germination at 95°F 20 days after seeding



% Germination at 45°F 20 days after seeding



Germination temperature study at Germany's University of Hohenheim

Barenbrug is the first company to develop comprehensive data on how different bluegrass varieties germinate at different temperatures - ranging from 45 degrees to 95 degrees F. The graph to the left shows the results.

The genetic makeup of each variety determines its optimal germination temperature. With this information, we adapt bluegrass blends for many specific needs. Whether seeding in lower temperatures (early spring or late fall), or warmer temperatures (later spring), customers can now select varieties that germinate and perform well under those circumstances. In either case, Barenbrug has a *Turf Blue*™ blend for your local climate and seasonal needs.

Partnerships

BARENBRUG

Success stories are built on innovation, persistence and great partnerships.

At Barenbrug we never forget that a growing partnership with the turf industry and our customers is the foundation of our success.



Descriptions of Key Varieties

Kentucky bluegrass

Poa pratensis

BARIMPALA

Very fast establishing, especially when compared to “high-end NTEP” varieties. Barimpala also germinates and establishes quickly under a wide range of extreme temperatures. Barimpala has outstanding heat and drought tolerance. Barimpala keeps its turf quality under wear. It has quick spring green-up and good crown rust and leaf spot tolerance.

BARONESS

Baroness is a highly rated NTEP rated variety and the #1 rated NTEP variety for drought tolerance. Baroness is also in the top 10 for brown patch resistance, in the top six for dollar spot resistance and in the top 15 for leaf spot resistance. Baroness holds its high quality under wear tolerance and under shady conditions. Baroness is available with Yellow Jacket™.

BARNIQUE

Barnique is another highly rated NTEP variety with a medium dark green color. Barnique has great turf quality. It is the #1 rated NTEP variety for red thread resistance and is rated #4 for dollar spot resistance. Barnique is available with Yellow Jacket™.

BARDUKE

Barduke is a versatile new variety with a dark green color. It germinates and establishes fast. Barduke has good drought tolerance and resistance to diseases such as leaf spot.

BARIRIS

Ohio State University tested Bariris and found it the #1 variety for wear tolerance. Bariris is also one of the best wear tolerant varieties in NTEP. Bariris maintains similar turf quality under traffic or no traffic conditions. Combined with fast establishment, Bariris is a great variety for sports turf managers, sod producers and landscapers. Bariris has a medium dark green color and is fine leaved.

BARRISTER

Barrister was rated #1 in the 2006 NTEP trials and is still on top. Barrister is very dark green, very fine leaved and is recommended in any region bluegrass is used. Barrister has a very high wear tolerance, as proven in the NTEP trials as well. Barrister can tolerate close mowing and is already used by many satisfied customers.

BARON

Baron is a widely adapted and dependable variety. It is a versatile low maintenance variety making it a great choice for home lawns, parks and other turf areas that receive minimal care. It has a medium green color. Baron has good seedling vigor and notable heat and drought tolerance.

Fine Fescues

Festuca rubra spp.

BARCROWN II

Barcrown II slender creeping red fescue is the successor of Barcrown, a variety recognized worldwide. Barcrown II has dark green color and is listed #1 in the NTEP for slender creeping red fescue. It is a very dense variety with high shoot density. The variety is ideal for close mowing applications and has a very quick green-up in the spring. Barcrown II tops all other varieties in the NTEP for low mowing and quick recovery. For premier fine fescues, you should use slender creeping red fescue.

BRIDGEPORT II

Bridgeport II chewing fescue is suitable for a wide variety of applications. This variety exhibits high shoot density and is able to withstand close mowing. Bridgeport II is ideal for greens, approaches, tees, fairways, roughs, parks and home lawns. Bridgeport II is dark in color and blends very well with the

other fine fescues from Barenbrug. It also can be mixed with other species like Kentucky bluegrass and fine leaved perennial ryegrass.

BARGENA III

Bargena III is a highly ranked creeping red fescue. It is a dark variety with a high turf quality compared to other red fescues. Bargena III greens-up fast in spring. Bargena III can be blended with other fine fescues or can be mixed with other species like fine leaved perennial ryegrass and Kentucky bluegrass. Bargena III performs best on fairways, roughs, parks or home lawns.

BAROK

Barok is one of the world's few fine leaved sheep's fescue suitable for turf. Sheep's fescue is known for excellent drought tolerance. Barok fits perfectly on “links” style golf courses and is used mainly on roughs where it performs very well. Barok can also be used on fairways and approaches where it will tolerate close mowing.

HARDTOP

Hardtop is a highly ranked hard fescue, with outstanding features. It is very drought tolerant and it can withstand short mowing - as close as 1/2 inch. Hardtop can compete in shade better than other fine fescues. Hardtop can grow very well in the northern climates, but is also a good performer in warmer, drier climates as a component in mixtures.

Tall Fescue

Festuca arundinacea

RTF®

Barenbrug was issued a Utility Patent for RTF® in January 2004 – “U.S Patent No. 6,677,507”. RTF® stands for Rhizomatous Tall Fescue, and this unique patented tall fescue is still the only tall fescue with rhizomes available. Normally, tall fescue grows as a bunch type but RTF® is a unique product because, as bare spots occur, RTF® is able to fill in using its rhizomes. RTF® is available as sod (through the RTF® Turf Producers Association) and as seed in Turf Saver with RTF®.

BARVADO

Barvado tall fescue was developed by breeders and given the breeder code “EBP” meaning “Enhanced Brown Patch.” It was bred from plants that survived a brown patch epidemic. Barvado combines this excellent brown patch tolerance with excellent turf quality. This is a dark green variety, highly ranked in NTEP trials. It is a semi dwarf variety and has medium leaf texture. Barvado has high live endophyte content as well; these endophytes give Barvado improved disease and insect resistance. Barvado is highly suited for sod production, golf courses and sports fields. If Barvado is not part of your program, it should be!

BARROBUSTO

BarRobusto is a very high quality, very dark green tall fescue. It performs extremely well in the southern transition zone. BarRobusto also has high brown patch resistance. BarRobusto contains a high level of endophyte, which increases its resistance to diseases and pests.

BARLEXAS II

Barlexas II is a dark green variety with a high ranking in the NTEP. Barlexas II can withstand short mowing height and is able to handle drought very well. Barlexas II is fine leaved and very quick to establish.

BARRINGTON

Breeders developed Barrington by selecting plants that performed well under an artificial traffic simulator. Because of Barrington's tolerance to heavy traffic conditions, it is highly suitable for sports turf applications. Barrington has a fine leaf texture and a dark green color. Barrington performs great in southern and transition regions. Barrington exhibits early spring green-up, and can tolerate close mowing.



BARRERA

Barrera exhibits excellent turf quality in full sun and shade. Barrera has excellent resistance to brown patch and leaf spot. Barrera has fine leaves and is a dwarf, turf type tall fescue. The variety is adapted for both low and high pH. Barrera is suitable for use over a broad range of the USA.

TRACER

Tracer has a very dark color making it one of the darkest varieties we have available. It also has a very fine leaf texture and one of the lowest vertical growth patterns commercially available. Tracer has outstanding wear tolerance and is highly tolerant to low mowing.

TF66

TF66 will germinate quickly and establishes a beautiful dense turf. TF66 has excellent color, texture and disease resistance.

BARLEXAS

Barlexas has a dark green color and has a fine leaf texture. It has a deep root system that makes the variety drought tolerant. Barlexas can also tolerate close mowing.

Perennial ryegrass

Lolium perenne

BARLENNIUM

Barlennium exhibits an excellent dark green color with fine leaf texture. Barlennium shows early spring green-up and is very wear tolerant. An outstanding variety for overseeding, it exhibits excellent salt tolerance and is highly ranked in the NTEP trials. Barlennium will give you superior performance over other perennial ryegrasses when effluent water usage is high.

PINNACLE II

Pinnacle II is a high quality, very dark green, disease resistant perennial ryegrass. It has very fine leaf texture, which makes a very dense turf. Pinnacle II shows extraordinary performance under high, medium and low maintenance conditions. Quick germination and fast establishment make Pinnacle II an excellent choice for overseeding and new turf establishment. Pinnacle II seed is high in endophyte.

PREMIER II

Premier II is a versatile grass with excellent dark green color, very quick spring green-up and a very fine leaf blade. It forms a very dense turf and displays great adaptability to a wide range of soil conditions. Premier II consistently rates high in turf quality, disease resistance, density, color and low mowing adaptability.

PACE

Pace perennial ryegrass is a very versatile grass displaying favorable growth and management characteristics. Pace has excellent rust tolerance in high humidity conditions. This variety exhibits quick germination, fast establishment and develops into a dense, lush green turf. Pace has an excellent adaptability to a wide range of soil conditions.

PEAK

Peak has rapid germination and very fast establishment. It exhibits a medium green color, fine leaf texture and excellent mowing characteristics. Peak excels in the overseeding of dormant southern turf grasses. The quick establishment, excellent winter qualities and great transition in spring make this variety very good for overseeding. Peak is part of the SOS™ (Super Over Seeding) plus Panterra Program.

PIROUETTE

Pirouette forms a nice dense low growing turf. Pirouette has quick germination and very fast establishment. When used for overseeding, Pirouette transitions out easily when warm season grasses come back to life in spring. Pirouette shows a dark color, excellent mowing quality and overall ease of management.

BARGOLD

Bargold is a new variety from Barenbrug's unique breeding program. Bred for low mowing tolerance, Bargold can withstand mowing as low as 1/5 of an inch. Bargold was one of the main varieties chosen by FIFA for the 2006 World Cup Soccer Championship in Germany. Bargold was used on every field because it has great traffic tolerance as well as shade tolerance. With its fine leaf texture, it mixes very well with other species such as fine fescues and bentgrasses. Bargold is also good for overseeding high traffic areas in fine fescue golf courses and athletic fields.

Creeping bentgrass

Agrostis stolonifera

BENGAL

Bengal is a very highly rated creeping bentgrass on the NTEP list. Bengal is the best variety in the NTEP trials for drought tolerance; this makes Bengal a perfect choice where water use is restricted. Bengal shows excellent spring green-up, good green color and very high turf quality. Use Bengal coated with Yellow Jacket™ and increase your water savings.

REGENT

Regent is the progeny of elite clones selected for their increased disease resistance to dollar spot and brown patch, uniformity, and attractive turf quality. Regent has exhibited excellent heat and drought tolerance, good winter color, uniformity of texture and overall turf appearance in both small trials and golf course applications.

Colonial bentgrass

Agrostis capillaris

BARKING

BarKing is a new fine leaved colonial bentgrass which performs very well under low mowing. It is the successor of the worldwide known variety Bardot. BarKing has excellent winter performance, great color and superb wear tolerance. BarKing performs great under dry conditions. BarKing has good dollar spot and brown patch tolerance.

HERIOT

Heriot is a compact and fine leaved colonial bentgrass variety. On several official tests, Heriot has one of the finest leaves of the entries. Heriot has high shoot density and slow growth rate to give fine, dense turf. Heriot can be mown closely for great performance on greens.

Bermudagrass

Cynodon dactylon

PANAMA

Panama is a genetically advanced, turf type Bermudagrass. Panama's leaf texture is fine and displays a dark green color. Seedling vigor and aggressive establishment help promote Panama as a dense turf. It is a widely adapted variety which displays excellent overall turf quality. Panama is available with the new Yellow Jacket™ coating. Yellow Jacket™ contains Zeba® which holds water around the seed during germination and establishment. This unique coating allows for quicker germination and establishment with a requirement for less water.

PALMA

Palma has been designed for those that want better quality than common Bermuda, but at an affordable price. Palma has fine leaves, smaller leaf length and produces fewer clippings than other comparable Bermudagrass varieties.



| Golf

The reason why the world's most exclusive golf courses choose Barenbrug is that they've experienced the superior mechanical and genetic qualities inherent in Barenbrug grass seed products. To meet the high standards for an industry continuing to "raise the bar," we invest tremendous capital in research and development. The results – we offer the best varieties and the right formulations. And we strive to out-perform all other brands. That's why St. Andrews, Pebble Beach, Valhalla (Ryder Cup 2008) and Bandon Dunes, to name a few, all rely on high quality Barenbrug products for their legendary courses.

Over and above our commitment to the best seed product, Barenbrug further supports the industry in other distinct ways. First, we contributed to the market our proprietary Yellow Jacket™ advanced seed coating, which helps seed establish quickly and conserves precious water resources. Secondly, Barenbrug is the exclusive grass seed supplier in the Golf Course Superintendents Association of America's (GCSAA) Partner Recognition Program. By purchasing Barenbrug seed, you join us in supporting the GCSAA and its local chapters.

Our investments – both in the lab and in the industry – are helping to advance the economics of golfing, as well as the growth and vitality of the game.



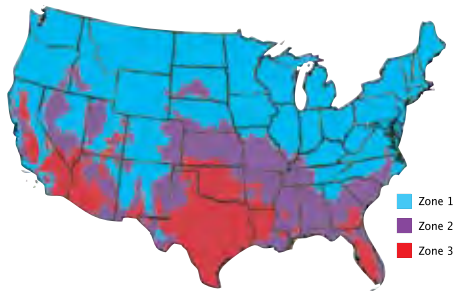


SOS™ plus Panterra

For overseeding Bermudagrass on golf courses you should use our innovative overseeding program called Super Over Seeding (SOS™). The SOS™ program allows you to choose exactly what product fits your needs. First, choose your climate area and then choose the desired transition speed you are most comfortable with. The product for your needs will easily be identified. Our SOS™ program is based on research from Texas A&M University.



- Control transition
- Excellent turf quality
- High wear tolerance
- Excellent disease resistance
- Fast establishment and coverage
- Excellent germination at low temperatures



Climatic map based on information from the National Climatic Data Center

DESIRED TRANSITION SPEED

	RAPID	IDEAL	SLOW
ZONE 1	SOS 400 15 lbs./1,000 sq. ft.	SOS 400 15 lbs./1,000 sq. ft.	SOS 310 20 lbs./1,000 sq. ft.
ZONE 2	SOS 400 15 lbs./1,000 sq. ft.	SOS 220 15 lbs./1,000 sq. ft.	SOS 202 20 lbs./1,000 sq. ft.
ZONE 3	SOS 400 15 lbs./1,000 sq. ft.	SOS 211 15 lbs./1,000 sq. ft.	SOS103 20 lbs./1,000 sq. ft.

Step 1 Locate your zone.

Use the map to the right to locate your climatic zone.

Step 2 Choose your desired transition speed.

For each climatic zone there are three S.O.S. products which exhibit Rapid, Ideal or Slow rates of transition.

Go to www.barusa.com to choose the SOS™ mixture you need.

Turf Saver® w/RTF®

Turf Saver® w/RTF® is the most advanced tall fescue blend on the market. It is a very unique combination of regular, high quality tall fescues and RTF®. RTF®, Rhizomatous Tall Fescue, gives Turf Saver the added value no other tall fescue blends have.

RTF® is very useful for golf course roughs. Valhalla, host of The 2008 Ryder Cup, uses Turf Saver® w/RTF® on all its roughs.

- Fill your bare spots automatically
- Reduce clumps in thinning turf
- Great turf quality
- Better disease resistance because of endophytes
- Tolerates low mowing
- Very deep root system utilizes water more efficiently

Product Composition

40% *Rhizomatous Tall Fescue*
60% *Tall fescue*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1 - 2"
Sowing rate	6 - 8 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Turf Star®

Turf Star® is the best quality perennial ryegrass available. If you want dark colored perennial ryegrass and you want to be sure about genetic and mechanical purity, use Turf Star®. Turf Star® also exhibits fast germination and quick establishment.

- Dark green color
- Fast germination
- High wear tolerance
- Great recoverability

Product Composition

100% *Perennial ryegrass*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	2/16 - 2"
Sowing rate	10 - 15 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Turf Star[®]XPC

Are you seeing too much *Poa annua* in your turfgrass? Conceal it with Turf Star[®]XPC. Annual bluegrass is light green colored, so why use dark green varieties that do nothing but accentuate the problem. Turf Star[®]XPC is a unique blend of Barclay and Bargold perennial ryegrasses designed to reduce the appearance of *Poa*. If you are tired of wasting your time and money fighting *Poa*, start using Turf Star[®]XPC and watch your *Poa* fade away.

- Lighter colored to conceal *Poa annua*
- Adapts to your existing turf color
- Can be mown as close as 1/4"
- Great for tees, fairways, approaches, etc.
- Beautiful turf with very fine leaves

Product Composition

100% *Fine leaved perennial ryegrass*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1 – 2"
Sowing rate	6 – 8 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Bengal

Bengal is a very highly rated bentgrass on the NTEP list and rated the best variety on the NTEP for drought tolerance. As there are a lot of golf courses under water restrictions, you can save water with Bengal. Bengal shows an excellent spring green-up, a nice green color and very high turf quality. You can save even more water with the optional Yellow Jacket[™] coating.

- Very drought tolerant
- Fast establishment
- Excellent spring green-up
- High turf quality
- Uses less water
- Save even more water with Yellow Jacket[™] coating

Product Composition

100% *Creeping bentgrass* *Bengal*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1/16 – 1/5"
Sowing rate	1 1/2 – 2 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Pin High

Pin High is a blend of creeping bentgrass. Bengal and Regent are the varieties in Pin High. Pin High has exhibited excellent heat and drought tolerance, good winter color, uniformity of texture, high disease resistance, fast establishment, excellent spring green-up and overall turf appearance in both small trials and golf course applications. You can save more water with the optional Yellow Jacket[™] coating.

- Excellent heat and drought tolerance
- Fast establishment
- Excellent spring green-up
- Uniform dense turf
- Resists fusarium, pythium, dollar spot and rhizoctonia
- Grows upright for fast, consistent putting

Product Composition

50% *Creeping bentgrass* *Bengal*
50% *Creeping bentgrass* *Regent*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1/16 – 1/5"
Sowing rate	1 1/2 – 2 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Dunes Mix

Barenbrug is known worldwide for high quality fine fescue varieties. Our Dunes Mix is a superior quality blend of these genetically advanced fine fescues. As the need for low-input grasses increases, more and more golf courses are discovering fine fescue. It's no coincidence that the world's best-known fine fescue courses (St. Andrews and Bandon Dunes) choose fine fescues from Barenbrug.

- Save money with less input of water and fertilizer
- Highest quality fine fescue blend available
- Create the Bandon Dunes look on your golf course
- Great for fairways, tees, roughs and greens

Product Composition

Dunes Mix is available in different compositions. Depending on the customer's need, different blends and percentages are recommended. Combinations of chewing fescue, slender creeping red fescue, hard fescue and sheep's fescue are available.



Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	2/16 – 2"
Sowing rate	2 – 7 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Water Saver Pro

This high quality tall fescue blend performs very well in low-maintenance (semi) rough areas. Water Saver Pro contains varieties with fine leaves and excellent disease resistance. It has very high drought tolerance, so you can conserve water and still maintain quality turf. This blend will exhibit great performance, especially in areas of the US transition zone and north.

Water Saver Pro is available with Yellow Jacket™ coating, which holds water around the seed during germination and establishment. A key component of Yellow Jacket™ is Zeba®, a corn starch derivative that can hold up to 600 times its own weight in water. This gives the seed an advantage because it requires less water than uncoated seed.

- Save valuable water with the deep root system
- Excellent in sun and shade
- Tolerates low mowing
- High traffic tolerance
- Save more water with unique Yellow Jacket™ coating
- Beautiful dark green turf

Product Composition

100% *Tall fescue*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1 – 2"
Sowing rate	6 – 8 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Turf Blue™

Problems with your Kentucky bluegrass? Why keep using the same varieties that have slow germination, slow establishment and do not stand up to wear? If you want to use bluegrasses on your golf course, Turf Blue™ is the way to go. Turf Blue™ is available in a number of unique blends. These blends have been specially formulated to exhibit very specific characteristics. So whether you need lighter varieties

to conceal *Poa* in your fairway or faster establishing varieties to repair your high traffic areas, you can count on the Turf Blue™ family of blends to meet your expectations.

- Turf Blue™ Express for quick establishment and faster turnaround sod
- Turf Blue™ XPC for a medium green color
- Turf Blue™ Polar for extending your growing season
- Turf Blue™ for a traditional bluegrass appearance
- Turf Blue™ Sport for extreme wear tolerance

Product Composition

100% *Bluegrass (adapted to your needs!)*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1/2 – 2"
Sowing rate	4 – 6 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Panama

Panama provides high quality turf suitable for fairways, tees and roughs. Panama is genetically advanced and provides a very high quality turf compared to common Bermudagrass. Panama has a dark green color and excellent drought tolerance. It has good frost tolerance and exhibits early spring green-up. Panama comes coated with Yellow Jacket™, containing Zeba®, which holds water around the seed during germination and establishment. Zeba® can hold up to 600 times its own weight in water.

- Fine leaf texture
- Dark green color
- Excellent drought tolerance
- Improved winter survivability
- Excellent frost tolerance
- Early spring green-up
- Yellow Jacket™ coating allows for better establishment and germination with less water

Product Composition

100% *Bermudagrass* *Panama*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1/2 – 2"
Sowing rate	2 – 3 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast



Sports Turf

Barenbrug has a long and durable partnership with the sports turf industry. We've been a player for decades, experiencing what rugged sport does to grass. In pursuit of ever tougher, traffic-resistant turf, Barenbrug develops and tests varieties for durability under foot and in world class competitive conditions.

Among the high profile customers using Barenbrug products: **The Rose Bowl** and the NFL **Philadelphia Eagles**. Barenbrug grasses were also used **in every venue** at the **2006 World Cup Soccer** games in Germany. The results were spectacular – on the field and on TV!



Barenbrug is the only seed company in the US with a breeding program that selects and tests varieties for tolerance to heavy, sustained beating by artificial traffic simulators. The sports turf products purchased for the world's best athletes are the same tough grass you can buy for your stadium, your municipal sports complex or your own back yard. With Barenbrug seed you won't be disappointed.

Selling a great product is of primary importance to us. But we're also intent on supporting the industry where we can; for example, Barenbrug is a contributing member of the Sports Turf Manager's Association and a major sponsor of their annual convention.



Turf Saver® w/RTF®

Turf Saver® w/RTF® is the most advanced tall fescue blend on the market. It is a very unique combination of regular, high quality tall fescues and RTF®. RTF®, Rhizomatous Tall Fescue, gives Turf Saver® the added value no other tall fescue blends have.

RTF® is very useful for golf course roughs. Valhalla, host of The 2008 Ryder Cup, uses Turf Saver® w/RTF® on all its roughs.

- Fill your bare spots automatically
- Reduces clumps in thinning turf
- Great turf quality
- Better disease resistance because of endophytes
- Tolerates low mowing
- Very deep root system utilizes water more efficiently

Product Composition

40% *Rhizomatous Tall Fescue*
60% *Tall fescue*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1 – 2"
Sowing rate	6 – 8 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Water Saver Pro

This high quality tall fescue blend performs very well in low-maintenance (semi) rough areas. Water Saver Pro contains varieties with fine leaves and excellent disease resistance. It has very high drought tolerance, so you can conserve water and still maintain quality turf. This blend will exhibit great performance, especially in areas of the US transition zone and north.

Water Saver Pro is available with Yellow Jacket™ coating, which holds water around the seed during germination and establishment. A key component of Yellow Jacket™ is Zeba®, a corn starch derivative that can hold up to 600 times its own weight in water. This gives the seed an advantage because it requires less water than uncoated seed.

- Save valuable water with the deep root system
- Excellent in sun and shade
- Tolerates low mowing
- High traffic tolerance
- Save more water with unique Yellow Jacket™ coating
- Beautiful dark green turf

Product Composition

100% *Tall fescue*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1 – 2"
Sowing rate	6 – 8 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Turf Blue™

Problems with your Kentucky bluegrass? Why keep using the same varieties that have slow germination, slow establishment and do not stand up to wear? If you want to use bluegrasses on your sports fields, Turf Blue™ is the way to go. Turf Blue™ is available in a number of unique blends. These blends have been specially formulated to exhibit very specific characteristics. So whether you need lighter varieties to conceal *Poa* or faster establishing varieties to repair your high traffic areas, you can count on the Turf Blue™ family of blends to meet your expectations.

- Turf Blue™ Express for quick establishment and faster turnaround sod
- Turf Blue™ XPC for a medium green color
- Turf Blue™ Polar for extending your growing season
- Turf Blue™ for a traditional bluegrass appearance
- Turf Blue™ Sport for extreme wear tolerance

Product Composition

100% *Bluegrass (adapted to your needs!)*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1/2 – 2"
Sowing rate	4 – 6 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

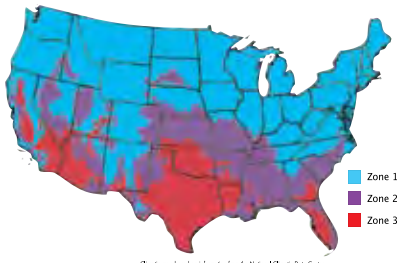
Sports Turf

SOS™ plus Panterra

For overseeding Bermudagrass on sports fields you should use our innovative overseeding program called Super Over Seeding (SOS™). The SOS™ program allows you to choose exactly what product fits your needs. First, choose your climate area and then choose the desired transition speed you are most comfortable with. The product for your needs will easily be identified. Our SOS™ program is based on research from Texas A&M University.



- Control transition
- Excellent turf quality
- High wear tolerance
- Excellent disease resistance
- Fast establishment and coverage
- Excellent germination at low temperatures



DESIRED TRANSITION SPEED

	RAPID	IDEAL	SLOW
ZONE 1	SOS 400 15 lbs./1,000 sq. ft.	SOS 400 15 lbs./1,000 sq. ft.	SOS 310 20 lbs./1,000 sq. ft.
ZONE 2	SOS 400 15 lbs./1,000 sq. ft.	SOS 220 15 lbs./1,000 sq. ft.	SOS 202 20 lbs./1,000 sq. ft.
ZONE 3	SOS 400 15 lbs./1,000 sq. ft.	SOS 211 15 lbs./1,000 sq. ft.	SOS103 20 lbs./1,000 sq. ft.

Step 1
Locate your zone.
Use the map to the right to locate your climatic zone.

Step 2
Choose your desired transition speed.
For each climatic zone there are three S.O.S. products which exhibit Rapid, Ideal or Slow rates of transition.

Go to www.barusa.com to choose the SOS™ mixture you need.

SOS™ Cool Season

Turf Xpress is ideal if you have bare spots or need quick recovery of your sports field. Turf Xpress is a combination of turf type annual ryegrass (Panterra) and perennial ryegrass. Research at Iowa State University and Ohio State University showed that Panterra germinates very well under traffic compared to perennial ryegrass, bluegrass and tall fescue.

Turf type annual ryegrass is traditionally used for southern overseeding of warm season species, but its speed of germination allows it to be used for quick overseeding of northern sports fields, too. Trial data from Iowa State

University showed Panterra was 70% established after little more than two weeks while only 50% of the perennial, 25% of the tall fescue and 7% of the bluegrass had established.

- Very fast establishment
- Quick recovery of bare spots
- High wear tolerance
- Perfect for over seeding sport fields

Product Composition

50% Perennial ryegrass
50% Turf type annual ryegrass

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1 - 2"
Sowing rate	7 - 10 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Panama

Panama provides high quality turf suitable for sports fields. Panama is genetically advanced and provides a very high quality turf compared to common Bermudagrass. Panama has a dark green color and excellent drought tolerance. It has good frost tolerance and exhibits early spring green-up. Panama comes coated with Yellow Jacket™, containing Zeba®, which holds water around the seed during germination and establishment. Zeba® can hold up to 600 times its own weight in water.

- Fine leaf texture
- Dark green color
- Excellent drought tolerance
- Improved winter survivability
- Excellent frost tolerance
- Early spring green-up
- Yellow Jacket™ coating allows for better establishment and germination with less water

Product Composition

100% Panama Bermudagrass

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1/2 - 2"
Sowing rate	2 - 3 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast



Turf Star®

Turf Star® is the best quality perennial ryegrass available. If you want dark colored perennial ryegrass and you want to be sure about genetic and mechanical purity, use Turf Star®. Turf Star® also exhibits fast germination and quick establishment.

- Dark green color
- Fast germination
- High wear tolerance
- Great recoverability

Product Composition

100% Perennial ryegrass

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1/16 - 1/5"
Sowing rate	1 1/2 - 2 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Turf Star®XPC

Are you seeing too much *Poa annua* in your turfgrass? Conceal it with Turf Star®XPC! Annual bluegrass is light green colored so why use dark green varieties that do nothing but accentuate the problem. Turf Star®XPC is a unique blend of Barclay and Bargold perennial ryegrasses designed to reduce the appearance of *Poa*. If you are tired of wasting your time and money fighting *Poa*, start using Turf Star®XPC and watch your *Poa* fade away.

- Lighter colored to conceal *Poa annua*
- Adapts to your existing turf color
- Can be mown as close as 1/4"
- Fast establishing
- Beautiful turf with very fine leaves

Product Composition

100% Fine leaved perennial ryegrass

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	2/16 - 2"
Sowing rate	10 - 15 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast





Lawn & Landscape

Being a part of the lawn and landscape industry for more than 100 years gives Barenbrug a distinct advantage over other turf seed companies. We have been a major contributor in an industry continually seeking unique solutions for a growing number of commercial, municipal and residential uses. Whether you need turf that saves on your water bill, stands up to a lot of foot traffic or grows well in shade, Barenbrug will continue to offer the best available options.

Our partnership in the professional turf industry is founded in part by membership, active participation and support in the leading U.S. golf, sports turf and landscape associations. Barenbrug views this support as a vital means of investing in the future health and stability of a professional industry.



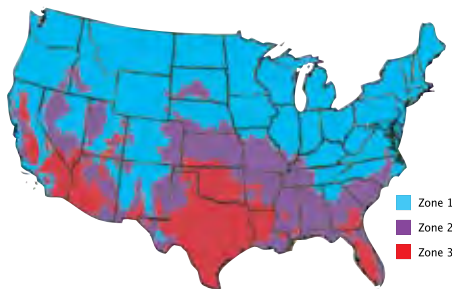


SOS™ plus Panterra

For overseeding Bermudagrass on home lawn or landscapes, you should use our innovative overseeding program called Super Over Seeding (SOS™). The SOS™ program allows you to choose exactly what product fits your needs. First, choose your climate area and then choose the desired transition speed you are most comfortable with. The product for your needs will easily be identified. Our SOS™ program is based on research from Texas A&M University.



- Control transition
- Excellent turf quality
- High wear tolerance
- Excellent disease resistance
- Fast establishment and coverage
- Excellent germination at low temperatures



Climatic map based on information from the National Climatic Data Center

DESIRED TRANSITION SPEED

	RAPID	IDEAL	SLOW
ZONE 1	SOS 400 15 lbs./1,000 sq. ft.	SOS 400 15 lbs./1,000 sq. ft.	SOS 310 20 lbs./1,000 sq. ft.
ZONE 2	SOS 400 15 lbs./1,000 sq. ft.	SOS 220 15 lbs./1,000 sq. ft.	SOS 202 20 lbs./1,000 sq. ft.
ZONE 3	SOS 400 15 lbs./1,000 sq. ft.	SOS 211 15 lbs./1,000 sq. ft.	SOS103 20 lbs./1,000 sq. ft.

Step 1 Locate your zone.

Use the map to the right to locate your climatic zone.

Step 2 Choose your desired transition speed.

For each climatic zone there are three S.O.S. products which exhibit Rapid, Ideal or Slow rates of transition.

Go to www.barusa.com to choose the SOS™ mixture you need.

Turf Saver® w/RTF®

Turf Saver® w/RTF® is the most advanced tall fescue blend on the market. It is a very unique combination of regular, high quality tall fescues and RTF®. RTF®, Rhizomatous Tall Fescue, gives Turf Saver® the added value no other tall fescue blends have.

RTF® has a proven history of excellent performance in lawn and landscape turf.

- Fill your bare spots automatically
- Reduces clumps in thinning turf
- Great turf quality
- Better disease resistance because of endophytes
- Tolerates low mowing
- Very deep root system utilizes water more efficiently

Product Composition

40% *Rhizomatous Tall Fescue*
60% *Tall fescue*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1 - 2"
Sowing rate	6 - 8 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Turf Star®

Turf Star® is the best quality perennial ryegrass available. If you want dark colored perennial ryegrass and you want to be sure about genetic and mechanical purity, use Turf Star®. Turf Star® also exhibits fast germination and quick establishment.

- Dark green color
- Fast germination
- High wear tolerance
- Great recoverability

Product Composition

100% *Perennial ryegrass*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	2/16 - 2"
Sowing rate	10 - 15 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Lawn & Landscape

Turf Star^{®XPC}

Are you seeing too much *Poa annua* in your turfgrass? Conceal it with Turf Star^{®XPC}! Annual bluegrass is light green colored so why use dark green varieties that do nothing but accentuate the problem. Turf Star^{®XPC} is a unique blend of Barclay and Bargold perennial ryegrasses designed to reduce the appearance of *Poa*. If you are tired of wasting your time and money fighting *Poa*, start using Turf Star^{®XPC} and watch your *Poa* fade away.

- Lighter colored to conceal *Poa annua*
- Adapts to your existing turf color
- Can be mown as close as 1/4"
- Fast establishing
- Beautiful turf with very fine leaves

Product Composition

100% *Fine leaved perennial ryegrass*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	2/16 - 2"
Sowing rate	10 - 15 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Water Saver Pro

This high quality tall fescue blend performs very well under low and high maintenance management practices. Water Saver Pro contains varieties with fine leaves and excellent disease resistance. It has very high drought tolerance, so you can conserve water and still maintain quality turf. This blend will exhibit great performance, especially in areas of the US transition zone and north.

Water Saver Pro is available with Yellow Jacket[™] coating, which holds water around the seed during germination and establishment. A key component of Yellow Jacket[™] is Zeba[®], a corn starch derivative that can hold up to 600 times its own weight in water. This gives the seed an advantage because it requires less water than uncoated seed.

- Save valuable water with the deep root system
- Excellent in sun and shade
- Tolerates low mowing
- High traffic tolerance

- Save more water with unique Yellow Jacket[™] coating
- Beautiful dark green turf

Product Composition

100% *Tall fescue*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1 - 2"
Sowing rate	6 - 8 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Panama

Panama provides high quality turf suitable for lawn and landscape areas. Panama is genetically advanced and provides a very high quality turf compared to common Bermudagrass. Panama has a dark green color and excellent drought tolerance. It has good frost tolerance and exhibits early spring green-up. Panama comes coated with Yellow Jacket[™], containing Zeba[®], which holds water around the seed during germination and establishment. Zeba[®] can hold up to 600 times its own weight in water.

- Fine leaf texture
- Dark green color
- Excellent drought tolerance
- Improved winter survivability
- Excellent frost tolerance
- Early spring green-up
- Yellow Jacket[™] coating allows for better establishment and germination with less water

Product Composition

100% *Panama Bermudagrass*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1/2 - 2"
Sowing rate	2 - 3 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast



Turf Blue™

Problems with your Kentucky bluegrass? Why keep using the same varieties that have slow germination, slow establishment and do not stand up to wear? If you want to use bluegrasses for your lawn or landscape areas, Turf Blue™ is the way to go. Turf Blue™ is available in a number of unique blends. These blends have been specially formulated to exhibit very specific characteristics. So whether you need lighter varieties to conceal *Poa* or faster establishing varieties to repair your high traffic areas, you can count on the Turf Blue™ family of blends to meet your expectations.

- Turf Blue™ Express for quick establishment and faster turnaround sod
- Turf Blue™ XPC for a medium green color
- Turf Blue™ Polar for extending your growing season
- Turf Blue™ for a traditional bluegrass appearance
- Turf Blue™ Sport for extreme wear tolerance

Product Composition

100% Bluegrass (adapted to your needs!)

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1/2 – 2"
Sowing rate	4 – 6 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Dunes Mix

Barenbrug is known worldwide for high quality fine fescue varieties. Our Dunes Mix is a superior quality blend of these genetically advanced fine fescues. As the need for low-input grasses increases, more and more golf courses are discovering fine fescue. It's no coincidence that the world's best-known fine fescue courses (St. Andrews and Bandon Dunes) choose fine fescues from Barenbrug.

- Save money with less input of water and fertilizer
- Highest quality fine fescue blend available
- Create the Bandon Dunes look on your landscape
- Great for home lawns

Product Composition

Dunes Mix is available in different compositions. Depending on the customer's need, different blends and percentages are recommended. Combinations of chewings fescue, slender creeping red fescue, hard fescue and sheep's fescue are available.

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	2/16 – 2"
Sowing rate	5 – 7 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast





Sod

Barenbrug knows the sod industry, knows that these are among the most particular and demanding of customers we have. Sod growers must have high quality seed. It must be of superb genetic make-up to create a remarkable sod product. Seed purity and germination specifications must be superior. Farmers lose money when weeds or other species show up in their product. For these reasons, Barenbrug built its own blending and bagging line specifically for sod customers. There is no compromise in our sod blends.

Our comprehensive research program focuses on better quality sod and producing a faster developing product. This focus has helped us increase profits for our customers and for their customers. The significance of using Barenbrug seed to create a superior sod has helped benefit the entire value-chain. For fine fescue, ryegrass, bluegrass or tall fescue sod, Barenbrug is a trusted seed resource.

Part of Barenbrug's commitment to the sod industry is through our membership in the Turf Producers International (TPI). In fact, Walt Pemrick, a past President of TPI, works exclusively with sod farms on behalf of Barenbrug. Volunteering time is another way in which Barenbrug demonstrates its uniqueness in the sod industry.





Turf Blue™

Problems with your Kentucky bluegrass? Why keep using the same varieties that have slow germination, slow establishment and do not stand up to wear? If you want to upgrade your bluegrasses for sod production, Turf Blue™ is the way to go. Turf Blue™ is available in a number of unique blends. These blends have been specially formulated to exhibit very specific characteristics. So whether you need lighter varieties to conceal *Poa* or faster establishing varieties to repair your high traffic areas, you can count on the Turf Blue™ family of blends to meet your expectations.

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- Turf Blue™ XPC for a medium green color
- Turf Blue™ Polar for extending your growing season
- Turf Blue™ for a traditional bluegrass appearance
- Turf Blue™ Sport for extreme wear tolerance

Product Composition

100% *Bluegrass (adapted to your needs!)*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1/2 – 2"
Sowing rate	2 – 4 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

RTF® Sod

RTF® Sod is the most advanced tall fescue sod blend on the market. It is a very unique combination of high quality tall fescues and RTF®. RTF®, Rhizomatous Tall Fescue, gives RTF® Sod the added value no other tall fescue blends have. This sod is very useful for landscaping, lawns, sports fields and parks. It has also been successfully used on golf course roughs, bunkers and other turf areas. RTF® Sod has a very unique feature, it is the only self-repairing tall fescue available. When turf gets extensive wear or becomes thin, the rhizomes in RTF® will extend into the bare or thin spots and fill them in with new growth! If you would like to produce RTF Sod, please contact out RTF® consultant, Walt Pemrick at (815) 248-9160.

- Grow tall fescue sod without netting
- Turn sod quickly

- Your customers will be more satisfied with self-repairing turf
- Differentiate yourself with RTF®!

Product Composition

40% *Rhizomatous Tall Fescue*
60% *Tall fescue*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1 1/2 – 2"
Sowing rate	6 – 8 lbs / 1000 sq. ft.

1 = low or slow, 10 = high or fast

Water Saver Pro

This high quality tall fescue blend performs very well under low and high maintenance management practices. Water Saver Pro contains varieties with fine leaves and excellent disease resistance. It has very high drought tolerance, so you can conserve water and still maintain quality turf. This blend will exhibit great performance, especially in areas of the US transition zone and north.

Water Saver Pro is available with Yellow Jacket™ coating, which holds water around the seed during germination and establishment. A key component of Yellow Jacket™ is Zeba®, a corn starch derivative that can hold up to 600 times its own weight in water. This gives the seed an advantage because it requires less water than uncoated seed.

- Save valuable water with the deep root system
- Excellent in sun and shade
- Tolerates low mowing
- High traffic tolerance
- Save more water with unique Yellow Jacket™ coating
- Beautiful dark green turf

Product Composition

100% *Tall fescue*

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	1 – 2"
Sowing rate	6 – 8 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast



Turf Star®

Turf Star® is the best quality perennial ryegrass available. If you want dark colored perennial ryegrass and you want to be sure about genetic and mechanical purity, use Turf Star®. Turf Star® also exhibits fast germination and quick establishment.

- Dark green color
- Fast germination
- High wear tolerance
- Great recoverability

Product Composition

100% Perennial ryegrass

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	2/16 – 2"
Sowing rate	10 – 15 lbs / 1,000 sq. ft.

1 = low or slow, 10 = high or fast

Dunes Mix

Barenbrug is known worldwide for high quality fine fescue varieties. Our Dunes Mix is a superior quality blend of these genetically advanced fine fescues. As the need for low-input grasses increases, more and more golf courses are discovering fine fescue. It's no coincidence that the world's best-known fine fescue courses (St. Andrews and Bandon Dunes) choose fine fescues from Barenbrug.

- Save money with less input of water and fertilizer
- Highest quality fine fescue blend available
- Create the Bandon Dunes look on your landscape
- Great for home lawns

Product Composition

40% Slender creeping red fescue
60% Chewings fescue

Germination speed	1 2 3 4 5 6 7 8 9 10
Speed of growth	1 2 3 4 5 6 7 8 9 10
Fertilizer requirement	1 2 3 4 5 6 7 8 9 10
Water requirement	1 2 3 4 5 6 7 8 9 10
Cutting height	2/16 – 2"
Sowing rate	5 – 7 lbs / 1,000 sq. ft.

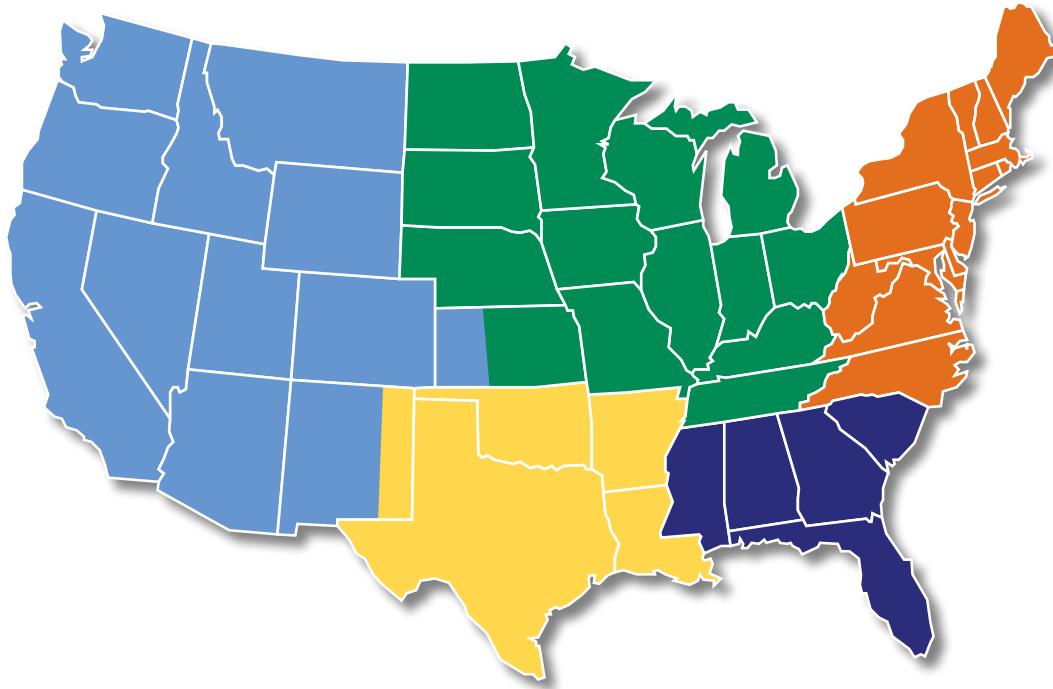
1 = low or slow, 10 = high or fast



Turf Characteristics

Species	SOIL CONDITIONS				MAINTENANCE				
	Seeds per pound (In Millions)	Optimal pH range	Moisture	Salt tolerance	Maintenance level required	Mowing tolerance (In Inches)	Nitrogen requirement	Water requirement	Thatch build up
<i>Agrostis capillaris</i> Colonial bent	6.35	5.6 - 7.0	medium	moderate	medium	0.16 - 1	high	medium	high
<i>Agrostis stolonifera</i> Creeping bent	7.26	5.6 - 7.0	high	good	intensive	0.12 - 1	very high	high	very high
<i>Festuca rubra rubra</i> Strong creeping red fescue	.454	5.5 - 6.8	low	weak	low	.6 - 2.5	low	low	medium
<i>Festuca rubra commutata</i> Chewings fescue	.454	5.5 - 6.8	low	weak	low	0.2 - 2.5	low	low/medium	high
<i>Festuca rubra trichophylla</i> Slender creeping red fescue	.454	5.5 - 6.8	low	good	low	0.2 - 2.5	low	low	high
<i>Festuca ovina tenuifolia</i> Sheeps fescue	.907	4.5 - 5.8	very low	weak	very low	0.4 - 2.5	very low	low/very low	low
<i>Festuca arundinacea</i> Tall fescue	.227	5.5 - 7.0	high	good	medium	0.8 - 2	high	very low	low
<i>Lolium perenne</i> Perennial ryegrass	.227	5.8 - 7.4	medium	medium	medium	0.8 - 2	high	medium	very low
<i>Poa pratensis</i> Kentucky bluegrass	1.497	5.8 - 7.5	medium	weak	medium	0.4 - 2	high	medium	medium
<i>Poa trivialis</i> Rough bluegrass	2.495	5.8 - 7.2	high	weak	medium	0.4 - 2	high	high	medium
<i>Poa nemoralis</i> Wood bluegrass	2.495	6.0 - 7.0	medium	weak	medium	0.6 - 2	high	high	very low
<i>Poa annua</i> Annual bluegrass	2.948	5.5 - 7.5	high	weak	intensive	0.2 - 1	high	high	medium
<i>Koeleria macrantha</i> Crested hairgrass	1.361	5.5 - 7.0	low	good	very low	0.24 - 1.6	very low	low/very low	very low
<i>Deschampsia caespitosa</i> Tufted hairgrass	1.724	5.5 - 6.5	high	medium	low	1.16 - 1.6	medium	high	high
<i>Cynodon dactylon</i> Bermudagrass	.771	5.7 - 7.0	very low	excellent	medium	0.2 - 1	high	very low	high

Turf Managers



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Turf Grass Species



Agrostis capillaris Colonial bentgrass



Agrostis stolonifera Creeping bentgrass



Cynodon dactylon Bermudagrass



Deschampsia caespitosa Tufted hairgrass



Festuca arundinacea Tall fescue



Festuca ovina Hard fescue



Festuca rubra commutata Chewings fescue



Festuca rubra rubra Strong creeping red fescue



Festuca rubra trichophylla Slender creeping red fescue



Holcus lanatus Velvet grass



Koeleria macrantha Crested hairgrass



Lolium perenne Perennial ryegrass



Poa annua Annual bluegrass



Phleum pratense Timothy



Poa pratensis Kentucky bluegrass



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