

SEED RESEARCH OF OREGON

The germination of ideas

FEATURES

- Tolerates extreme heat, cold and humidity
- Minimal segregation due to similar growth habits
- Good resistance to *Pythium*, Brown Patch and Dollar Spot
- Reduced thatch problems
- Dark green, dense and upright
- Uses: Excellent choice for greens, tees, and fairways

BENEFITS

- Strong seedling vigor for fast establishment
- Reliable putting surfaces at any height
- Dollar Spot resistance
- Early spring green-up
- Reduced chemical input for environmental benefits

SEEDING RATES

- Seeds/lb: 6,000,000
- New turf:
1–1.5 lbs/1,000 sq ft
45–65 lbs/acre
5–7.5 gr/m²
50–75 kgs/hectare
- Overseeding/Interseeding:
2–3 lbs/1,000 sq ft
90–135 lbs/acre
10–15 gr/m²
100–150 kgs/hectare

ESTABLISHMENT

- Germination: 3–5 days (6–10 in cooler weather)
- First mowing: approximately 21 days, depending on usage
- First limited use: approximately 6–8 weeks depending on conditions

DOMINANT

CREeping BENTGRASS BLEND

DOMINANT Creeping Bentgrass Blend is a reliable concept in putting green turf that has a long performance record. Dominant is a blend of two of the best creeping bentgrass varieties available, Providence and SR 1020, two varieties with complimentary and superior attributes. Planting a blend of superior bentgrasses will significantly improve the quality of any golf course project – new or renovated.



Why Plant a Blend?

Traditionally, turf professionals have used blends of different varieties when planting high caliber projects to ensure a broad genetic base that capitalizes on the strengths of the different varieties. This enables the professional turf manager to attain the highest quality turf under varying maintenance conditions and environmental stresses.

Some of the best putting surfaces in the history of golf were the old South German bentgrasses which consisted of mixtures of different varieties and species of bentgrass, compatible in texture and density, with outstanding putting quality. Dominant takes this a step further by using the very best creeping bentgrass varieties available on the market today. However, a blend of just any two or three bentgrasses won't necessarily work. The varieties selected must compliment each others strengths and weaknesses, with similar appearances and growth habits.

Why Dominant?

Using a Certified blend makes sense. Dominant, which contains the five clone synthetics, Providence and SR 1020, creates a turf with a ten parent genetic base. This broad base will provide a putting surface with increased resistance to Dollar Spot, Pythium, and a wide array of environmental stresses. Providence creeping bentgrass has shown increased resistance to Dollar Spot, while SR 1020 has improved resistance to Pythium ssp. and alkaline soils. Providence was selected from germplasm out of Rhode Island and shows excellent cold and heat tolerance. SR 1020 was developed for heat tolerance at the University of Arizona from clones collected throughout the hot, dry, alkaline Southwestern USA. This combination of cold and heat tolerance makes Dominant an excellent choice for areas of the United States that experience both very cold winters and very hot summers.

Dominant is the perfect product for greens, tees, and fairway use, whether for new plantings or overseeding. Providence and SR 1020 are very compatible in a blend; both are vigorous, fine textured, possess high density, and have dark green color with upright growth habit. This results in a turf surface that is easier to maintain and keep in ideal condition without the segregation and high intensity maintenance of other varieties.

BENTGRASS CONVERSION – IT CAN WORK!

By Dr. Leah Brilman — Seed Research of Oregon

Bentgrass conversion can refer to changing from one bentgrass cultivar to another, or converting from *Poa annua* or perennial ryegrass to bentgrass. All of these can be done on greens, tees and fairways but the success rate depends on many factors. These factors include the climate zone of the course, the acceptable amount of disruption of the playing surface, timing of conversion and amount of perseverance.



Key Concepts

- Bentgrass seedlings are very small and initially weak. Some varieties such as **Tyee, 007 and SR 1150** have greater seedling vigor and can greatly increase your chances of success.
- In competition for critical resources including light, water and nutrients the established plant always has an advantage over the seedlings.
- Timing the winter-overseeding to correspond with favorable growing conditions is extremely important. In some regions this may be a fall application, whereas in other regions it may be in the late spring or early summer.
- The existing plants must be weakened to give the seedlings a chance to compete.
- Conversion is more difficult in milder climates where existing turf has a longer period of active growth (and minimal seasonal dormancy).
- The new seedlings must be kept moist, which can make the existing playing surface softer and slower.
- The microclimate within the canopy may be favorable to *Pythium* spp. outbreaks.

Bentgrass to Bentgrass or *Poa annua* to Bentgrass

Success in any conversion depends on the relative competitiveness of the new bentgrass seedlings, the climatic and regional adaptation of *Poa annua*, the health of the stand before conversion, the timing of the seeding and the level of acceptable disruption.

1. Apply a growth regulator such as Primo®, Cutless®, Turf Enhancer®, Prograss®, Embark® or Proxy® — growth regulators that damage turf quality are often more effective but less aesthetically acceptable. **Do not apply a preemergent before seeding.** (Always follow labeled rates and recommendations)
2. Reduce height of cut on existing turf (scalp - <0.115" – or lower).
3. Verticut heavily to reduce any thatch and further weaken existing turf (this can also be done after core aerifying).
4. Core aerify with largest acceptable tines to create holes in canopy. Solid tines may also be used. The aim is to allow seedlings time to establish before competition returns and to assure seed-soil contact.
5. Top-dress or drag in cores to fill holes.
6. Best times for conversion are late spring, through the summer until late summer. *Pythium* control is very important – Allegiance® treatment of the seed will give you 14–17 days of *Pythium* control. Go as late in the spring as you can and still maintain acceptable playing conditions. Go as early in the fall as play allows. Seeding dates of June 19, July 1, August 17 and 20 most successful in New Jersey. August seeding dates were also better at Purdue University. Dr. Watschke at Penn State reports that at soil temperatures above 70° bentgrass germination is favored over *Poa annua*.
7. Seed with **Tyee, 007, SR 1150, SR 1119, Providence, SR 1020, Brighton, Dominant, Dominant Plus, Dominant X-treme or Dominant X-treme 7** at 1-2 lb./1000 ft² and topdress or drag seed into surface. Seed-soil contact is vital.
8. Keep surface moist – Stay on the dry side if converting from *Poa annua*.
9. Fertilize lightly after seedlings germinate with quickly available nitrogen source.
10. Keep height of cut low to enable more light to seedlings and reduce growth of existing stand (<0.125").
11. Dimension may be applied 14-21 days after seedling emergence to limit *Poa annua* competition (Reicher, 2003).
12. Repeat spring and fall for at least two years. Significant results are generally observable in the third year.

References

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