

SEED RESEARCH OF OREGON

The germination of ideas

FEATURES

- Withstands extreme heat, cold and humidity
- Superior salt tolerance
- Resistance to Pythium, Brown Patch and Dollar Spot
- Dark green, dense and upright
- Reduced thatch production
- Uses: Excellent choice for greens, tees and fairways of professional golf course superintendents.

BENEFITS

- Smooth, FAST putting surfaces at any height
- High Dollar Spot resistance
- Early spring green-up and winter active growth
- Ease of maintenance
- Wide area of adaptation

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 PLUS

CREEPING BENTGRASS BLEND

Dominant Plus Creeping Bentgrass Blend is a reliable blend of beauty, functionality and durability for greens, tees and fairways. Dominant *Plus* combines three bentgrass varieties selected for moderate maintenance requirements. Dominant *Plus* has broad genetic diversity, superior adaptability and proven performance. Planting a blend of advanced bentgrasses will significantly improve the quality of any turf stand, whether on a new project or renovating an existing course.



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. 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 PLUS?

Dominant *Plus* combines selected versatile varieties to create a turf with a broad genetic base. This broad base will provide a surface with increased resistance to Brown Patch, Dollar Sport, *Pythium*, and most environmental stresses. All are vigorous, fine textured with medium high shoot densities, and have a dark green color. This results in a surface that is easier to maintain and keep in ideal conditions without the high intensity maintenance of other varieties.



BENTGRASS CONVERSION – IT CAN WORK!

By Dr. Leah Brillman — 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 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*
- *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

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, Dominant Plus, Dominant X-treme 7 or Dominator** 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

- Bigelow, C.A. and D.R. Chalmers. <http://sudan.cses.vt.edu/html/Turf/bigelow.htm>
- Kopek, D.M. <http://ag.arizona.edu/turf/glf0399b.html>
- Murphy, J.M. et. al. 1999. 1999 Rutgers Turfgrass Proceedings. pg. 227-238.
- Ralston-Hooper, K. and Z. Reicher. 2002. www.agry.purdue.edu/turf/report/2002/page80.pdf
- Reicher, Z. and Hardebeck, G. 1997. Conversion of fairways without using nonselective herbicides.
- Annual Purdue Turfgrass Research Report (1997).
- Watschke, T.L. 1997. Convert your fairway to bentgrass. Grounds Maintenance. July.