

## Hybrid (Kentucky X Texas) Bluegrass for Turf Use in Colorado

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In the 1990s, Dr. James Read of Texas A&M University, successfully crossed Kentucky bluegrass (*Poa pratensis*) and Texas bluegrass (*Poa arachnifera*, a bluegrass species native to the Panhandle of Texas). He named the first commercially available variety 'Reveille'. Turf breeders have since created a number of similar hybrids. The Scotts Company has released hybrids under the names 'Thermal Blue', 'Thermal Blue Blaze', 'Solar Green' and 'Dura Blue'; other commercially available hybrids from the Turfseed/Scotts include 'Longhorn' and 'SPF 30'. The varieties 'Bandera' and 'Spitfire' are from Seed Research of Oregon. Releases from other turf seed companies will occur in the near future.

There are a number of potential advantages to using these Kentucky x. Texas bluegrass hybrids for lawn and sports turf applications in Colorado. The following observations and comments are based on limited research at CSU, as well as field observations and testimonials from sod producers and those who have planted these hybrids in the Western U.S.

1. **Excellent heat tolerance.** This grass, in fact, seems to grow better the warmer it gets in the summer. The growth and vigor of most Kentucky bluegrass varieties will generally decline under high heat (upper 80s-100s), which can reduce its traffic and wear tolerance during the hottest times of the growing season. The Texas hybrid appears to maintain more active summer growth, which translates into better traffic tolerance and ability to recover from traffic injury.
2. **Deep and extensive root production.** These hybrids produce an extensive root system, which enhances heat and drought resistance. A dense root system will also improve traffic tolerance, ability to recover from wear, and will improve footing (traction) in a sports turf application.
3. **Extensive and aggressive rhizome formation.** These grasses form large, extensive and aggressive rhizomes (underground stems). Different from roots, rhizomes contain growing points that produce new grass plants. Grasses that produce rhizomes are better able to tolerate traffic and will recover more quickly from traffic-induced wear – often without the need to reseed the worn areas. An aggressive rhizome system also means better traction in a sports turf situation.
4. **Low mowing height tolerance.** Its excellent heat tolerance and aggressive root and rhizome formation characteristics allow this grass, when necessary, to be mowed at lower heights than many Kentucky bluegrasses – especially during the heat of summer. This can be important for “showcase” sports turf applications.
5. **Potential to require less irrigation.** There is a good amount of anecdotal field evidence that these hybrid bluegrasses require less supplemental irrigation than some of the Kentucky bluegrasses, and perhaps less than turf-type tall fescue. This ability to sustain growth and vigor with less irrigation is likely due to its ability to form deeper roots than most other bluegrasses.
6. **Less severe sod transplant shock.** Field observations suggest that the sod of these hybrids may be less susceptible to the shock that other turf species frequently exhibit following planting – especially if watering is not begun soon after sod planting.

In the summer of 2008, a number of the commercially available and experimental Kentucky bluegrass x. Texas bluegrass hybrids will be evaluated at CSU in Fort Collins for establishment vigor, as well as heat, drought and traffic tolerance.