Hybrid bluegrasses analyzed for use in transition zone

November 4 2009

The transition zone can be one of the most challenging places to maintain high-quality turfgrass; changeable growing conditions in these regions often prove too hot for some grasses and too cold for others. Finding turfgrass that thrives in these challenging environments can be perplexing for turf management professionals and homeowners alike.

Now, an answer to this growing dilemma may be found in new breeds of hybrid bluegrasses. Bred for their ability to tolerate heat and drought, these hybrids can outperform traditional bluegrasses in transition zone areas. A study published in a recent issue of HortScience tested two new bluegrass hybrids, 'Thermal Blue' and 'Dura Blue', to investigate optimal seeding rates, correct seed timing, and the interaction of mowing height and fertility requirements for both bluegrass cultivars. The study results show promise for both hybrids in the transition zone.

Travis C. Teuton, John C. Sorochan, Christopher L. Main, and Thomas C. Mueller from the Plant Sciences Department at The University of Tennessee conducted experiments using 'Thermal Blue' and 'Dura Blue' (both hybrids developed by the Scotts Company, Marysville, Ohio). Both grasses are hybrids of Texas bluegrass and traditional Kentucky bluegrass bred specifically for the heat and drought tolerance of Texas bluegrass and the desirable turfgrass quality of Kentucky bluegrass. The research was performed during 2003, 2004, and 2005 in Knoxville.

According to Teuton, 'Thermal Blue' performed well in seeding trials. "However, the addition of a small percentage of perennial ryegrass or

turf-type tall fescue may decrease the time to reach the desired cover and quality and decrease the chance of erosion", he noted. The results also indicated that 'Thermal Blue' can be seeded any time from September to April, allowing adequate time for seed germination and growth before the hot summer months. July seeding in the transition zone is not recommended.

Sorochan concluded that 'Dura Blue' and 'Thermal Blue' are comparable in quality and clipping production; higher mowing heights increase the quality and decrease clippings produced for both grasses at the end of the year. Both hybrids require frequent mowing as a result of their aggressive growth habits, and it was noted that "dethatching will probably be required on a yearly basis".

Irrigation for both grasses will also be required in the transition zone, especially during summer heat stress. The hybrids are susceptible to the disease dollar spot, indicating that fungicide applications are necessary to maintain a high quality turf during the late summer and fall seasons.

The researchers added that further research on disease susceptibility of 'Dura Blue' and 'Thermal Blue', as well as experiments using of grass seed blends to provide more rapid turf cover, would be valuable.

More information: The complete study and abstract are available on the ASHS *HortScience* electronic journal web site: hortsci.ashspublications.org/c … nt/abstract/44/3/815

Source: American Society for Horticultural Science