

2004 Low Input Sustainable Turfgrass Trial: A Regional Cooperative Research Project

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Objectives: To identify alternative species adapted to this region with minimum input and obtain information on best management practice for each species.

Experimental methods A total of 13 species will be used for this trial. The cultivar, species name, and seeding rate are described as follows:

- A: 'RoadCrest' Crested Wheatgrass 5 lbs / 1000 ft²
- B: 'LMC-1122' Meadow Fescue (*Festuca elatior*) 7 lbs / 1000ft²
- C: 'Spike' Tufted Hairgrass (*Deschampsia caespitosa*) 1 lb /1000 ft²
- D: 'Blacksheep' Sheep fescue (*Festuca ovina*) 7 lbs/1000ft²
- E: 'Berkshire' Hard fescue (*Festuca longifolia*) 6 lbs/1000 ft²
- F: 'LMC-5000' Prairie Junegrass (*Koeleria cristata*) 2 lbs/1000 ft²
- G: 'Fults' Alkaligrass (*Puccinellia distans*) 1.5 lbs /1000 ft²
- H: 'HB 342' hybrid bluegrass (Kentucky bluegrass X Texas bluegrass) 2 lbs/1000 ft²
- I: 'Dura Blue' Hybrid bluegrass (Kentucky bluegrass X Texas bluegrass) 2 lbs/1000 ft²
- J: 'ShadeStar' Crested dogs tail (*Cynosurus cristatus*) 1.0 lb/1000 ft²
- K: 'Bad river' Blue grama 3 lb/ 1000 ft²
- L: 'SR7150' Colonial bentgrass 1 lb /1000 ft²
- M: 'Grande II' tall fescue 7 lbs /1000 ft²

The trial was established on September 7, 2004 with an entry plot size of 3 x 5 feet. Efforts were made to ensure successful establishment including the use of a starter fertilizer (P₂O₅ at 98kg per ha and 49 kg N per ha) and irrigation. Trimec[®] Classic was applied in April 2005 to control broadleaf weeds. No preemergent herbicides were applied. Three mowing heights at no mow, 2 inch and 4 inch are applied to each species and will be randomized within each of the three blocks as 5 x 39-foot strips perpendicular to and across all entries. Mowing frequency will be once every month during the growing season except for the no mow treatment.

Data collection This is the first year of the trial. No data has been collected yet. We will collect data on persistence and uniformity which will be used as the two primary criteria to determine quality for each plot. Data will be taken monthly during the growing season. Different ratings will be applied toward no mow, 2" and 4" mowing heights as they represent different situations. Other data including density, percent coverage and percent of other species will be taken during the month of May, July and September every year. Data pooled from the 11 participating universities will be published.