

# Alternative Turfgrass Trials 2002-2006

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In the fall of 2002, a second alternative turfgrass trial was planted at three locations: the Minnesota Landscape Arboretum, Chanhassen, MN; Lake Harriet Rose Garden, Minneapolis; and the Turfgrass Outreach and Research Center, St. Paul. The objective of the trial is to evaluate plant materials under reduced inputs and compare them to traditional turfgrasses. The project is planned for data collection over three years: 2003-2005, with final results published in 2006. Cooperators include the University of Minnesota Department of Horticultural Science, College of Agricultural, Food, and Environmental Science, Minnesota Landscape Arboretum, and the City of Minneapolis Park and Recreation Board.

**Methods and Materials:** Materials were planted in late August and early September in 10' x 10' plots with three replications at each of the three locations.

2. Fertilization in early September and early October, 27-6-20, 50% slow release nitrogen
3. No additional fertilizer after initial soil preparation. Herbicide, Fungicide and Insecticide application  
No pesticides will be applied.

**Irrigation:** If necessary, irrigation will be supplied for 2 weeks after seeding, then no supplemental irrigation is planned.

**Plot Design:** Each of the materials will be planted in 3, 10' x 10' plots at each location. Plots will be randomized within three blocks of the 12 materials. 36 plots in total at each location, except in Minneapolis where eight materials or 24 plots will be studied.

**Evaluation:** Materials will be evaluated twice monthly

Material	Supplier	Seeding/Planting Rate	Comments
1. Barkoel	Barenburg	2 lb/1,000 sq ft	<i>Koeleria cristata</i>
2. Barleria	Barenburg	2 lb/1,000 sq ft	<i>Koeleria cristata</i>
3. Barcampsia	Barenburg	2 lb/1,000 sq ft	<i>Deschampsia caespitosa</i>
4. Turtleturf	Agrono-Tech	4 lb/1,000 sq ft	<i>Koeleria cristata</i>
5. No Mow	Prairie Nursery	5 lb/1,000 sq ft	fine fescue blend
6. Dryland	Nichols Nursery	2 lb/1,000 sq ft	KB, PR, CRF
<b>Ecology Lawn Mix</b>			
7. Sunny Mix	Twin City Seed	4.5 lb/1,000 sq ft	CKB, CRF, PR
8. Clover & Fescue	Twin City Seed	6 oz & 5 lb/1,000 sq ft	white clover and CRF
9. Juncus tenuis	Ernst Seeds	1 oz/ 1,000 sq ft	native path rush
10. Carex flacca	Morris ROC collection	12" spacing	vigorous rhizomes
11. Carex pensylvanica	Arboretum collected	12" spacing	native sedge
12. Viola labridorica	Stepables	12" spacing	hardy, native violet

Juncus, Viola, and Carex will not be planted at the Minneapolis location since they will be mowed at a minimum maintenance level.

**Mowing:** Plots will be maintained at three mowing heights: 2", 4" and minimum maintenance or two mowings: mid June and mid October. Minneapolis plots will be maintained at one constant height of 2-3".

**Fertilization:** Soil tests indicated adequate P and K, therefore 1 lb nitrogen per 1,000 sq ft was incorporated just prior to planting. Three fertility treatments will be maintained:

1. Fertilization in early September, 27-6-20 50% slow release nitrogen, rate of 1 lb/1,000 sq ft

during the growing season for color, cover and overall quality. Color and cover will be evaluated on a scale of 1-5, 5 being the best color or most cover. Overall quality will be rated on a 1-3 scale with 3 being the most desirable. Several evaluators will contribute evaluations including general public and Master Gardeners.

**Sponsors:** Barenburg, USA, Albany OR; Agrono-Tec Seed Co, Wildomar, CA; Prairie Nursery, Westfield WI; Twin City Seed, Edina, MN; Nichols Nursery, Albany OR; Ernst Conservation Seed, Meadville, PA; Stepables, Inc, Salem, Oregon.

(Editor's Note: Mary H. Meyer is an Associate Professor in the Department of Horticultural Science at the University of Minnesota.)