

GTI RESEARCH HILITES

The 1992 GTI Research Report contains some data obtained by Dr. R.E. Pitblado of the Ridgetown College of Agricultural Technology which may be of interest to sports field managers.

The data concerns the rate at which various cultivars of Kentucky bluegrass, turf-type tall fescue and perennial ryegrass establish ground cover. The rate is of particular concern where a turf manager is overseeding or repairing a worn area on a sports field.

Seeding of the plots occurred on August 26, 1992. Rainfall conditions were ideal with a shower within 24 hours and frequent showers throughout the test period. No supplemental irrigation was used. The seeding rate was 4, 8, and 5 lb/1000 ft² for the Kentucky bluegrass, tall fescue and perennial ryegrass respectively. Fertilizer was applied at 0.5 lb N/1000 ft² as 6-24-24 prior to seeding and again one month after seeding as 1 lb N/1000 ft² as SCU-based 25-4-10.

An visual evaluation of the ground cover was made 10, 13, 30 and 60 days after seeding.

Of the three species, Kentucky bluegrass was the slowest to emerge with no visible germination in 10 days (Table 1). Significant differences existed between cultivars with a 3.5 point difference between the best and the poorest cultivars at 60 days.

Tall fescue was intermediate between bluegrass and ryegrass in emergence and also showed significant differences between cultivars in ground cover after 60 days (Table 2). The spread in cover rating between the best and poorest cultivars was similar to bluegrass.

As expected, the most rapid emergence and ground cover completion was obtained with the perennial ryegrass cultivars (Table 3). Essentially complete ground cover was achieved in 30 days with all the ryegrass cultivars. Nevertheless, in the first 13 days there were significant differences between the cultivars.

In many repair situations it is important to rapidly establish a turf cover.

Table 1: Ground coverage by Kentucky blue grass following an August 26, 1992 seeding.

Cultivar	13 days	30 days	60 days
(Rating: 0 = no growth, 10 = full coverage)			
CYPRESS (<i>Poa trivialis</i>)	4.3	8.9	10.0
EAGLETON 1425	2.8	6.8	7.8
BANFF	2.0	6.8	8.3
LIBERTY	2.3	6.0	7.5
GEORGETOWN	1.1	6.5	7.8
WELCOME	1.1	6.6	7.5
HAGA	1.4	6.0	7.5
PRINCETON	1.1	6.1	7.0
CYNTHIA	1.2	6.0	7.0
NUSTAR	1.0	6.0	6.8
CREST	1.4	5.5	6.5
TOUCHDOWN	1.1	5.3	6.8
BRONCO	1.5	5.3	6.5
LIMOUSINE	1.0	5.5	6.5
BARON	0.7	5.8	6.5
NUBLUE	0.8	5.3	6.5
SUPTRNOVA (<i>Poa supina</i>)	0.9	4.8	7.0
ECLIPSE	0.6	5.3	6.5
OPAL	1.0	5.3	6.0
INDIGO	0.9	5.0	6.3
BARZAN	0.9	4.8	6.3
CHATEAU	0.6	5.5	5.8
NASSAU	0.6	5.0	6.3
GNOME	1.3	4.5	6.0
SYDSPORT	0.7	3.8	6.0
MIDNIGHT	0.6	2.8	4.3

Table 2: Ground coverage by tall fescue following an August 26, 1992 seeding.

Cultivar	10 days	13 days	30 days	60 days
(Rating: 0 = no growth, 10 = full coverage)				
REBEL II	3.3	6.0	8.8	10.0
JAGUAR II	2.0	5.3	8.3	9.8
DIXIE	2.3	4.5	7.9	8.5
TRIBUTE	1.8	4.8	7.8	9.8
CROSSFIRE	2.0	4.5	8.0	9.5
SHORTSTOP	2.5	4.5	7.8	8.8
SHENANDOAH	1.1	4.5	7.8	9.3
REBEL 3D	1.9	4.3	7.6	8.8
MUSTANG	1.4	4.3	7.4	8.5
MINI MUSTANG	1.5	4.0	7.5	8.3
CREWCUT	0.6	3.0	6.5	7.8
VEGAS	0.4	2.8	6.5	7.8
TWILIGHT	0.4	2.8	6.5	7.3
BONSAI	0.6	2.8	6.3	6.5

Perennial ryegrass is the obvious choice, followed by tall fescue and finally bluegrass. While this fact has been well documented previously, the turf manager should be aware there are also

differences between cultivars within each species and use this data in making his selection of which cultivar to purchase.

Table 3: Ground coverage by perennial ryegrass following an August 26, 1992 seeding.

Cultivar	10 days	13 days	30 days	60 days
(Rating: 0 = no growth, 10 = full coverage)				
EDGE	5.1	8.3	9.5	10.0
SR 4000	4.9	8.0	9.5	10.0
PALMER	4.5	8.0	9.5	10.0
YORKTOWN III	4.5	7.8	9.5	10.0
ENVY	4.8	7.5	9.5	10.0
COMPETITOR	4.3	7.8	9.5	10.0
OMEGA II	4.8	7.0	9.5	10.0
SATURN	4.8	6.8	9.5	10.0
EXPRESS	4.5	7.9	9.5	10.0
LOWGROW	3.8	7.5	9.5	10.0
SR 4100	4.3	7.0	9.5	10.0
SR 4200	3.8	7.3	9.5	10.0
DELAWARE DWARF	4.0	7.0	9.5	10.0
DIMENSION	3.3	5.5	9.5	10.0
PINNACLE	3.0	5.8	9.5	10.0
GATOR	2.5	5.3	9.5	10.0

Revised OMAF Publication 384 Available

The revised OMAF Publication 384, Recommendations for Turfgrass Management is now available. This publication contains valuable information on turfgrass management including weed, insect and disease control as well as fertilizer recommendations. This publication can be obtained at no charge from your local OMAF county office, through the OMAF Information Centre, 801 Bay St., Toronto, ON. M7A 2B2 or through the Guelph Turfgrass Institute.



IN MEMORIAM

Many members will be saddened to learn of the death of Dr. Steve Fushtey at Agassiz, B.C. Steve shared his wealth of knowledge on plant nematology, plant pathology and turfgrass diseases with turf managers across Canada. During his career he was associated with the Faculty of the Univ. of Guelph from 1954 to 1980 and then with Agriculture Canada at Agassiz as a Research Scientist until 1987. Since retirement he worked with the Western Turfgrass Association, acted as Agronomist for the Royal Canadian Golf Association, and served on the Advisory Committee for the Fairview College Turfgrass Management Program. All aspects of the industry will miss this active turf researcher and advisor.

CLIPPINGS

New York State is reported to have 635,000 acres of home lawns, 80,000 acres of park land in turf, and 27,000 acres of cemeteries in addition to an unrecorded acreage in golf courses, highway medians, college and school campuses.



Early records show bluegrass was known in ancient Greece where it was called Poa. The scientific name for Kentucky bluegrass - *Poa pratensis* - may be translated as "Poa of the meadow".



The first turf experiments were started in the United States by J.B. Olcott at Manchester, Connecticut in 1885. He investigated species suited for turf use and selected bent grasses (*Agrostis* spp.) and fescues (*Festuca* spp.). Five years later similar work began at the Univ. of Rhode Island.