NATIONAL TURFGRASS EVALUATION PROGRAM

The National Turfgrass Evaluation Program (NTEP) is designed to develop and coordinate uniform evaluation trials of turfgrass varieties and promising selections in the United States and Canada. Test results can be used by national companies and plant breeders to determine the broad picture of the adaptation of a cultivar. Results can also be used to determine if a cultivar is well adapted to a local area or level of turf maintenance.

Briefly, the NTEP is a self-supporting, non-profit program, sponsored by the Beltsville Agricultural Research Center and the National Turfgrass Federation, Inc. Program policy is made by a policy committee consisting of one member from each of the four (4) Regional Turfgrass Research Committees in the United States, one member from the Lawn Seed Division of the American Seed Trade Association, one member from the United States Golf Association (USGA) Green Section, one member from the Golf Course Superintendents Assoc. of America (GCSAA), one member for the Turfgrass Producers International (TPI), one member from the Turfgrass Breeders Association and an executive director. The program does not make variety recommendations. However, the data from tests can be used by extension specialists and others for making recommendations.

The policy committee is responsible for determining program policy including, (1) requirements for submission of entries, (2) scheduling tests, (3) evaluation methods, (4) selecting standard or control test entries, (5) setting entry fees, (6) coordinating tests in their respective regions, (7) establishing guidelines for publication and data distribution and (8) scheduling committee meetings.

Executive Director - Kevin N. Morris, National Turfgrass Evaluation Program, Inc.

CURRENT POLICY COMMITTEE MEMBERS:

Mr. Aaron Kuenz, Mountain View Seeds
Mr. Ryan Jeffries, Columbia Seeds, Inc.
Dr. Mike Kenna, USGA Green Section
Dr. Jason Kruse, University of Florida
Dr. David Kopec, University of Arizona
Mr. Gary Wilbur, Oakwood Sod Farms
Mr. Mark Johnson, Golf Course Superintendents Assoc. of America
Dr. Eric Watkins, University of Minnesota
Mr. Steve Reid, DLF Pickseed USA
Dr. Scott Ebdon, University of Massachusetts

FOR ADDITIONAL REPORTS OR INFORMATION CONTACT:

Kevin Morris, Executive Director
National Turfgrass Evaluation Program
Beltsville Agricultural Research Center-West
Building 005, Room 307
Beltsville, Maryland 20705
kmorris@ntep.org
www.ntep.org

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ON-SITE TESTING OF GRASSES FOR OVERSEEDING OF BERMUDAGRASS FAIRWAYS

INTRODUCTION

With the initiation of on-site testing of bentgrass and bermudagrass on putting greens, interest is now increasing for the evaluation of other grasses used on golf courses. Grasses are needed that provide exceptional playing surfaces with less pesticides, fertilizer and water. Therefore, grasses that have superior drought, cold, heat, disease and insect resistance need to be identified.

Overseeding bermudagrass fairways is a common practice throughout the southern half of the United States. Millions of pounds of seed are bought and sown each autumn on golf courses in this region. Golf course owners, managers and superintendents seek grasses that establish quickly, exhibit exceptional playability, are aesthetically pleasing and require less inputs. This project evaluates new and established cultivars on bermudagrass fairways at golf courses in the Southern and Western U.S. This on-site testing program will provide scientific information of a more applied nature about cultivars for overseeding.

Information from this project is valuable to the golfing industry because it will determine the adaptation of grasses for golf course use. Information obtained from on-site testing will be of particular value to plant breeders, researchers, extension educators, USGA agronomists, golf course architects, and superintendents who need to select the best adapted cultivars for overseeding in a particular regional climate.

Location and Number of Trial Sites

This evaluation trial is jointly sponsored by the United States Golf Association (USGA) Green Section and the National Turfgrass Evaluation Program (NTEP). Trial sites are located on golf courses near a land grant university with a turfgrass research program or in a major metropolitan area which is readily accessible to a university turfgrass scientist. Ten evaluation trial sites have been established. Trials are located on active play sites where golfers hit fairway golf shots and/or drive golf carts. Host clubs provide daily maintenance of the fairway site.

Trial Specifics

The NTEP functions as the coordinating agent for the cultivar trials. These trials are two years in duration, established in fall 2016 and again in fall 2017. Trials are conducted under mutually agreed upon guidelines, procedures, and funding outlined in a research agreement agreed to and signed by the appropriate representatives of USGA and NTEP and each research cooperator (i.e. university turfgrass researcher). Trials are conducted at each location under the leadership of the assigned research cooperator. These persons are responsible for establishing and conducting the trial, and collecting and transferring the data to NTEP according to the research agreement.

Trials are maintained by the golf course superintendent at each location using management procedures common to their golf course, the geographical area and in consultation with the research cooperator. No special management practices are prescribed as these trials are intended to receive real-world golf course conditions and stresses.

ON-SITE TESTING (continued)

This trial is conducted principally with named cultivars and commercially available blends or mixtures. Various species used in overseeding, such as perennial ryegrass and *poa trivialis* have been allowed. Experimental lines that will be released in the immediate future (i.e. before the end of the testing cycle) were also included in this trial at the sponsoring company's discretion.

The research cooperator is responsible for data collection. The following data has been collected from each trial:

1. Percent establishment rate (4-6 weeks after seeding)
2. Turfgrass quality (monthly during winter, 2 - 4 times per month during the spring and fall transition period)
3. Plot color, genetic color (twice - late fall/early winter and spring)
4. Rate or speed of transition from bermudagrass to overseeded grass in fall (2 - 4 times per month during fall)
5. Rate or speed of transition from overseeded grass to bermudagrass in spring (2 - 4 times per month during spring)
6. Environmental stress, traffic and divoting damage, disease and insect damage and other data deemed appropriate and feasible by the research cooperator.

Administration

The NTEP administers the program and its funding, sets the advisory committee and gathers their input and recommendations for each species trial. The NTEP organizes and distribute the seed which constitute the entries for each trial location. The NTEP provides the data collection protocols to each site; collects, analyzes and disseminates the performance data in annual and final reports; and conducts an annual site visit for each trial.

For more information or additional copies of reports, please contact:

Kevin Morris, Executive Director
National Turfgrass Evaluation Program
Beltsville Agricultural Research Center-West
Building 005, Room 307
Beltsville, Maryland 20705 USA

NTEP reports can also be found on the World Wide Web at http://www.ntep.org.

A Guide to NTEP Turfgrass Ratings

Introduction

The quality and scientific merit of NTEP data is extremely important. However, the evaluation of turfgrass species and cultivars is a difficult and complex issue. Furthermore, turfgrass evaluation is generally a subjective process based on visual estimates of factors, like genetic color, stand density, leaf texture, uniformity and quality. These factors cannot be measured in the same way as other agricultural crops. Turfgrass quality is not a measure of yield or nutritive value. Turfgrass quality is a measure of aesthetics (i.e. density, uniformity, texture, smoothness, growth habit and color), and functional use. The most common way of assessing turfgrass quality is a visual rating system that is based on the turfgrass evaluator's judgement.

General Considerations

Most visual ratings collected on NTEP trials are based on a 1 to 9 rating scale. One is the poorest or lowest and 9 is the best or highest rating. However, a few characteristics, such as winter kill or percent living ground cover, are rated on a percentage basis, again by using the evaluator's judgement. Most disease ratings found in NTEP reports will use the 1-9 scale, 9=no disease except where the evaluator made a judgement of the percentage of disease in each plot. Percent disease data will be found in separate tables and will normally not be included with disease data using the 1-9 scale.

Turfgrass Quality

Turfgrass Quality is based on 9 being outstanding or ideal turf and 1 being poorest or dead. A rating of 6 or above is generally considered acceptable. A quality rating value of 9 is reserved for a perfect or ideal grass, but it also can reflect an absolutely outstanding treatment plot. The NTEP requires quality ratings on a monthly basis. Quality ratings take into account the aesthetic and functional aspects of the turf. Quality ratings are not based on color alone, but on a combination of color, density, uniformity, texture, and disease or environmental stress.

Turfgrass quality ratings are grouped and presented by region, management level, a particular stress (shade, traffic, etc.) and in some cases, by individual location (starting with 2001 data, data from each location will be posted separately as well on the NTEP web site, *http://www.ntep.org*). Also available now is a summary table (Appendix) in the back of this report. This summary table includes various statistical measures not previously compiled for NTEP reports. For an explanation of this table and these changes, please go to the NTEP web site at *http://www.ntep.org/pdf/grandmean.mem.pdf.*

Other Ratings

More detailed information on the ratings of specific characteristics can be found on the NTEP web site at *http://www.ntep.org/reports/ratings.htm*.

Entry No.	Name	Species or Composition	Sponsor
	Landmark Winterseed 3 Blend	33% Majesty, 33% Salinas, 33% Gallop PR blend	Landmark Turf & Native Seed
1	Landmark Winterseed 5 Blend	20% Majesty, 20% Salinas, 20% Benchmark, 20% Sox Fan, 20% Gallop PR	Landmark Turf & Native Seed
2	Brightstar SLT	100% Brightstar SLT perennial ryegrass	Standard
3	Natural Knit	35% Mensa , 35% Savant , 30% Saguaro PR blend	Ledeboer Seed LLC
4	SPR Spreading Ryegrass Overseeding Mix	50% Saguaro PR, 50% High Life perennial ryegrass blend	Ledeboer Seed LLC
5	LBP-PT-601	100% LBP-PT-601 *poa trivialis*	Ledeboer Seed LLC
6	Sabre III	100% Sabre III *poa trivialis*	Standard
7	Breakout	100% Breakout annual ryegrass	Mountain View Seeds
8	Stellar 3GL	100% Stellar 3GL perennial ryegrass	Mountain View Seeds
9	PPG-PR-308	100% PPG-PR-308 perennial ryegrass	Mountain View Seeds
10	CS-PRX	50% Premium, 50% Prominent perennial ryegrass blend	Columbia Seeds
11	LTP-3-PR Blend	33% Seabiscuit, 33% Man O'War, 33.4% Pharoah PR blend	Lebanon Seaboard Corp
12	Prosport 4	100% ProSport 4 perennial ryegrass	SiteOne Landscape Supply
13	Commander ST	100% Commander ST perennial ryegrass	SiteOne Landscape Supply
14	LCP-186	100% LCP 186 perennial ryegrass	SiteOne Landscape Supply
15	Allsport 5	100% Allsport 5 perennial ryegrass	SiteOne Landscape Supply
16	Line Drive II	100% Line Drive II perennial ryegrass	Proseeds Marketing
17	Ringles	100% Ringles perennial ryegrass	Semillas Fito, S.A.
18	Sun	100% Sun perennial ryegrass	Semillas Fito, S.A.
19	Champion GQ	33.3% SR4650, 33.3% SR4650ST, 33.4% Sideways PR blend	Seed Research of Oregon
20	Futura 2500	30% Transit 2600 IR, 23.3% Karma, 23.3% Wicked, 23.4% Fiesta 4 PR	Pickseed
21	Futura 3000	33.4% Karma, 33.3% Wicked, 33.3% Fiesta 4 PR blend	Pickseed
22	IRFL-2-11	100% IRFL-2-11 Intermediate ryegrass	Seed Research of Oregon
23	Ph.D.	33.3% Thrive, 33.3% Aspire, 33.3% Banfield PR blend	DLF Pickseed
24	Transist 2600	100% Transist 2600 Intermediate ryegrass	Standard
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