

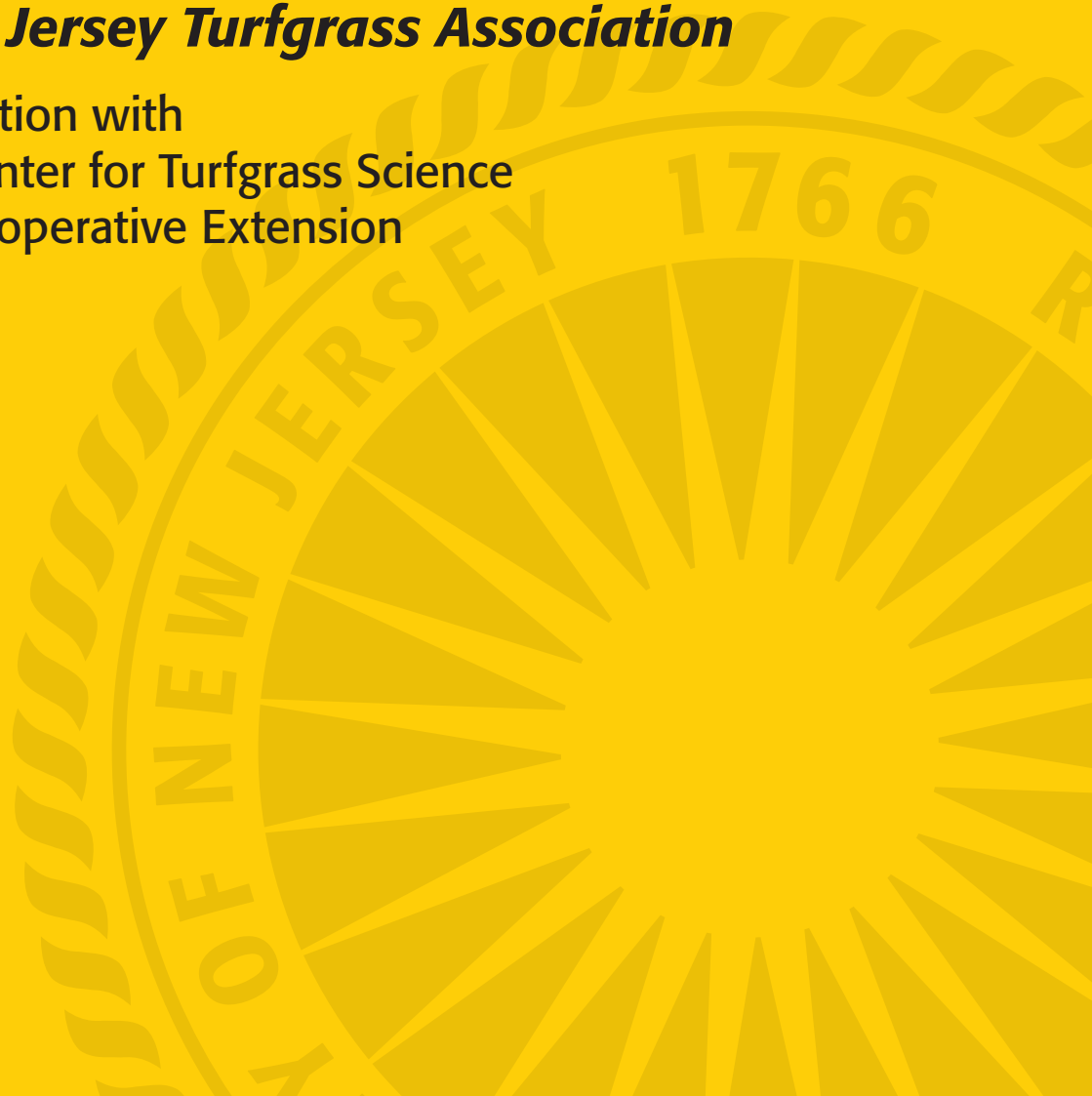
RUTGERS

New Jersey Agricultural
Experiment Station

2012 Turfgrass Proceedings

The New Jersey Turfgrass Association

In Cooperation with
Rutgers Center for Turfgrass Science
Rutgers Cooperative Extension



2012 RUTGERS TURFGRASS PROCEEDINGS

of the

GREEN EXPO Turf and Landscape Conference

December 4-6, 2012

Trump Taj Mahal

Atlantic City, New Jersey

The Rutgers Turfgrass Proceedings is published yearly by the Rutgers Center for Turfgrass Science, Rutgers Cooperative Extension, and the New Jersey Agricultural Experiment Station, School of Environmental and Biological Sciences, Rutgers, The State University of New Jersey in cooperation with the New Jersey Turfgrass Association. The purpose of this document is to provide a forum for the dissemination of information and the exchange of ideas and knowledge. The proceedings provide turfgrass managers, research scientists, extension specialists, and industry personnel with opportunities to communicate with co-workers. Through this forum, these professionals also reach a more general audience, which includes the public.

This publication includes lecture notes of papers presented at the 2012 GREEN EXPO Turf and Landscape Conference. Publication of these lectures provides a readily available source of information

covering a wide range of topics and includes technical and popular presentations of importance to the turfgrass industry.

This proceedings also includes research papers that contain original research findings and reviews of selected subjects in turfgrass science. These papers are presented primarily to facilitate the timely dissemination of original turfgrass research for use by the turfgrass industry.

Special thanks are given to those who have submitted papers for this proceedings, to the New Jersey Turfgrass Association for financial assistance, and to Barbara Fitzgerald, Anne Diglio, and Ann Jenkins for administrative and secretarial support.

Dr. Ann Brooks Gould, Editor
Dr. Bruce B. Clarke, Coordinator

PERFORMANCE OF BENTGRASS CULTIVARS AND SELECTIONS IN NEW JERSEY TURF TRIALS

Eric N. Weibel, Tracy J. Lawson, William K. Dickson, Joseph B. Clark,
James A. Murphy, Bruce B. Clarke, William A. Meyer, and Stacy A. Bonos¹

Bentgrass species possess a distinct ability to form very dense, uniform, and fine textured surfaces under an extremely low height of cut. As a result, bentgrasses are often used in specialized, high maintenance areas such as golf course fairways, tees, and putting greens. Three bentgrass species predominantly used for turf include creeping bentgrass (*Agrostis palustris* Huds.; synonym = *A. stolonifera* L.), colonial bentgrass (*A. tenuis* L. or *A. capillaris* L.), and velvet bentgrass (*A. canina* L.). In addition, highland or dryland bentgrass (*A. castellana* Boiss. & Reut.) is an option for stressful locations, but turfs of this species tend to be less attractive than the more common species when a high quality turf is needed and are, therefore, less commonly utilized. Due to their aggressive growth habits and adaptability to a variety of climates, creeping and velvet bentgrasses are most suitable for the very low cutting heights required for golf course greens in the U.S. Colonial bentgrass responds best to a slightly higher height of cut, therefore it is usually better suited for fairways in temperate areas of the U.S.

Creeping bentgrasses are highly stoloniferous and have a prostrate growth habit, which allows for persistence under very low mowing heights. Cutting heights of 1/10 of an inch are not uncommon on many top tier golf courses. This species is highly adapted to both cool temperate as well as warm humid regions of the U.S., making it the most popular species used on golf course putting greens in temperate areas. Its vigorous spreading growth habit also contributes to its ability to repair damaged areas quickly. In 1954, H. B. Musser released 'Penncross', the first seeded synthetic variety of creeping bentgrass (Musser, 1959). Since that time, breeding efforts have markedly improved creeping bentgrasses to withstand the

increasing demands of the game of golf. Compared to older varieties, improved characteristics include better turf quality, darker green color, improved shoot density, improved traffic tolerance and recuperative ability, and increased disease and stress tolerances.

Creeping bentgrasses are susceptible to a number of pathogens and pests. Dollar spot (caused by the fungus *Sclerotinia homoeocarpa*) is one of the main disease problems of close-cut creeping bentgrass. However, these grasses can also be susceptible to brown patch (caused by *Rhizoctonia solani*), copper spot (*Gloeocercospora sorghi*), anthracnose (*Colletotrichum cereale*), and diseases caused by *Pythium* spp.

Colonial bentgrass, also referred to as browntop, has traditionally been used as a lawn and golf course grass in areas of Northern Europe and New Zealand that have mild (cool and humid) summers. Compared to creeping bentgrasses, colonial bentgrasses have a finer leaf texture and a more upright and less aggressive spreading growth habit and are generally better adapted for fairway or tee use in the warmer summer climates of the United States. Colonial bentgrasses perform best in New Jersey when mowed no lower than 3/8 of an inch. They typically have a brighter green color and better color retention during cool weather compared to creeping bentgrasses. Although colonial bentgrasses generally have better dollar spot resistance and better wear tolerance, they are much more susceptible than creeping bentgrasses to brown patch. While not lethal, the playability of golf courses may be affected if brown patch is not controlled on colonial bentgrass. Current breeding efforts include improving the tolerance of colonial bentgrasses to this disease.

¹Field Researcher IV, Research Farm Supervisor I, Turfgrass Research Farm Supervisor, Principal Laboratory Technician, Extension Specialist in Turfgrass Management, Extension Specialist in Turfgrass Pathology, Professor, and Associate Professor, respectively, New Jersey Agricultural Experiment Station, School of Environmental and Biological Sciences, Rutgers, The State University of New Jersey, New Brunswick, NJ 08901-8520.

Velvet bentgrass forms the finest-textured and most dense turf of the bentgrasses and can nearly resemble green velvet when managed properly. It spreads mainly through profuse production of erect tillers with short stolons. This grass can tolerate very close mowing, heat, cold and shade, and is one of the most drought tolerant of the bentgrasses used for turf (Skogley, 1973). Due to the density and vigor of this turf, even under very low mowing conditions, it has been shown to be extremely effective at preventing the encroachment of the most prolific weed on a golf course, *Poa annua*. The spread of velvet bentgrass via stolons is more aggressive than colonial bentgrass, but not as strong as creeping bentgrass.

Velvet bentgrass can form excessive thatch, especially at high fertility rates, increased irrigation, and higher cutting heights, and can thus become problematic if not maintained properly. Years of mismanagement with subsequent poor turf quality has given velvet bentgrass a poor reputation, but recent research shows that when managed properly, velvet bentgrass can create a superior turf (Brilman and Meyer, 2000).

Velvet bentgrass can be susceptible to red thread (caused by *Laetisaria fuciformis*) and copper spot, but generally has good resistance to dollar spot and brown patch. Seedlings of velvet bentgrasses are susceptible to Pythium seedling root rot during establishment.

During colder weather, velvet bentgrass will turn a dark purple color and take longer than the other bentgrass species to “green-up” in the spring. Velvet bentgrass has not been used extensively for high maintenance turf, largely because its range of adaptation has not been well characterized. Selections of velvet bentgrass have persisted for many years in trials under New Jersey growing conditions. Recent research at Rutgers indicates that the species may one day serve as a viable alternative to creeping bentgrass for use on golf course greens in the northeastern U. S., as long as proper cultural management inputs are implemented. Some of the major breeding objectives for velvet bentgrass include resistance to copper spot and Pythium diseases, and better wear tolerance.

The New Jersey Agricultural Experiment Station participates in the National Turfgrass Evaluation Program (NTEP), which evaluates many species of turfgrass including bentgrasses at various locations throughout the United States. The Rutgers turfgrass

breeding program conducts extensive field evaluations of collections and new material developed in the improvement program, many of which are a result of recent collection trips within the United States and throughout Europe and Asia. Collections from Norway, Sweden, Spain, Portugal, France, Finland, Switzerland, Scotland, Italy, Greece, Poland, Holland, Bulgaria, Romania, Croatia, China, and the Slovak Republic serve to enhance the genetic diversity of the germplasm used in this breeding program. The Rutgers turfgrass breeding program focuses on improving turfgrasses for overall quality, color, density, uniformity, texture, disease resistance, salt tolerance, traffic tolerance, and many other aspects of a turf to be grown for a variety of purposes.

PROCEDURES

Bentgrass evaluation trials were established at the Rutgers Horticultural Research Farm II in North Brunswick, NJ in the fall of 2008 (Tables 1 to 3), 2009 (Tables 4 and 5), 2010 (Tables 6 to 8), and 2011 (Tables 9 to 11). Trials were established on a modified Nixon loam. Plot size was 3 x 5 ft for all trials except for the two 2008 NTEP trials (putting greens and fairway/tee, Tables 1 and 2, respectively) which were 4 x 6 ft. Plots were hand-seeded at a rate of approximately 1.0 lb per 1000 ft². All tests were arranged in a randomized complete block design with three replications.

All sites were well drained and openly exposed to both sunlight and air circulation, except the 2008 NTEP putting green trial, which had somewhat enclosed air circulation. The annual rate of nitrogen applied, mowing height, cultivation/topdressing practices, and pesticide applications for each test are presented in Table 12. The putting green tests were mowed five to six times per week during periods of active growth with a triplex or walk-behind reel mower equipped to collect clippings. The fairway tests were mowed three times per week with a triplex reel mower and clippings were removed during periods of active growth. Soil pH was maintained in the range of 5.4 to 6.8 with agricultural limestone. All tests were irrigated to avoid drought stress.

Plots were evaluated frequently during the growing season for overall turf quality (i.e., turf density, texture, uniformity, color, growth habit, and presence of disease and insect damage). Turf quality (Tables 1 to 11), spring green-up (Tables 1, 2, 6, 7, 9 to 11), establishment (Tables 9, and 10), bentgrass suscep-

tibility to a pre-emergence herbicide (Dacthal W-75) phytotoxicity (Tables 2, 3, 5, 8, and 11), localized dry spot (Tables 6 and 7), sod web worm damage (Table 2), and disease were rated on a 1 to 9 scale, where 9 represented the most desirable turf characteristic. Disease ratings included dollar spot (Tables 1, 4, 6 to 11), brown patch (Tables 8 to 10), anthracnose (Table 4), copper spot (Table 1), and Root Pythium (Tables 9 and 10). All data were subjected to analysis of variance. Means were separated using Fisher's protected least significant difference (LSD) means separation test.

RESULTS AND DISCUSSION

Turf Quality Evaluations

Entries in Tables 1 through 8 are ranked according to their overall multi-year quality average. Tables 9 through 11 are ranked by the average turf quality for 2012 only. Throughout the years that turf quality was assessed, a few varieties in each bentgrass species stood out as better performing entries. For creeping bentgrasses maintained at a putting green height of cut, Luminary, Barracuda, Pure Distinction, Focus, Proclamation, and the experimental selections IS-AP 18, CAS2 Comp, FLE Comp, CMC Comp, LUC Comp, EBC Comp, PCM Comp, PPG-AP 102, R6, R10, and R11 all performed very well, while Brighton, Penncross, Providence, and Sandhill were consistently among the poorest performers. At fairway height, Luminary, Proclamation, Focus, Shark, Authority, and the experimental selections SRX 1WM, IS-AP 18, CAS2 Comp, FLE Comp, EBC Comp, LUC Comp, CMC Comp, R6, R10, and R12 creeping bentgrasses had excellent turf quality while the lowest scoring cultivars were Penncross, Providence, Sandhill, Century, and Brighton. In the NTEP putting green/tee trial (Table 1), Luminary, Pure Distinction, Shark, Barracuda, Proclamation, V8, and Focus were the top creeping bentgrass cultivars and selections. In the NTEP fairway trial (Table 2), Luminary, Proclamation, Pure Select, Authority, Pin-Up, and SRP 1WM were among the top performing creeping bentgrasses.

Overall turf quality for velvet bentgrasses was evaluated in the 2008, 2009, 2010, and 2011 trials (Tables 1, 4, 6, 7, and 9) under greens height of cut. Legendary, Villa, and the experimental entries PSG 7PC2, IS-AC 4, IS-AC 5, and many Rutgers composite entries performed among the top performing velvet bentgrasses within all trials in which they were

included, although IS-AC 4 and PSG 7PC2 were not entered in the NTEP greens/tee trial. Entries SR 7200 and Greenwich displayed poor quality under these greens-type management conditions. PSG 7PC2 were not entered in the NTEP greens/tee trial. The cultivar SR 7200 had the poorest quality under these greens-type management conditions.

As mentioned previously, colonial bentgrasses perform better at a fairway cutting height and typically have poorer performance under putting green conditions as shown in Tables 4, 7, and 10. Nevertheless, there were several colonials in each trial that exhibited acceptable turf quality at greens height including BCQ Comp and WBM Comp (Table 4), Capri, EDM Comp, DML Comp, and CDD Comp (Table 7), and FDC Comp, CEM Comp, and CED Comp (Table 9). Under fairway conditions (Tables 2, 3, 5, 8, and 11), however, the experimental selections A08-FT12, WBM Comp, BCQ Comp, DML Comp, EDM Comp, DDL Comp, CMD Comp, CED Comp, FDC Comp, and the cultivar Capri were the best performing colonial bentgrasses, while SR 7150, SR 7100, Alister, Tiger II, and BCD generally exhibited the poorest performance under fairway cutting heights when included in trials. In the NTEP fairway height trial (Table 2), A08-FT12, Green Time, and BCD had the highest turf quality, while PST-R9D7 did not perform as well as other colonial bentgrass entries.

Dollar Spot

Sclerotinia homoeocarpa, the causal agent of this widespread turfgrass disease, causes silver dollar-shaped spots of dead turf to form that may converge to cause larger areas of damage (Belanger et al., 2005). While potentially one of the more damaging turf diseases on golf courses in the northeast, dollar spot can be easily managed with the use of fungicides. Since the fungus is so prevalent, however, fungicide use can be expensive. In addition, resistance of *S. homoeocarpa* to fungicides, particularly to DMI fungicides (Smiley et al., 2005), has become more prevalent, and increased fungicide use is not beneficial to the environment.

Breeding for dollar spot resistance in bentgrass is an important objective of the Rutgers breeding program. Typically, velvet and colonial bentgrasses have better resistance to dollar spot than creeping bentgrass, however the results from recent trials (Tables 1, 4, 7, 8, 9, and 11) indicate that significant improvements in creeping bentgrass have been made. Memorial, 13M, Declaration, Luminary, SRP

1WM, Proclamation, H05TP-295-12, H05TP-300-1, EBC Comp, and CMC Comp all show a high resistance to this disease, while Ninety-Six Two, Penn A-4, Crenshaw, Southshore, RJM26, RHTAV524, and RHTAV318 showed higher susceptibility.

Brown Patch

Whereas velvet bentgrass typically exhibits the greatest tolerance to brown patch among the bentgrass species used for turf, colonial bentgrass is the most susceptible. Dramatic improvements have been made in breeding colonial and creeping bentgrasses for improved resistance to this disease (Tables 8 to 10). In the 2011 greens trial (Table 10), Luminary, LUC Comp, CMC Comp, PSG 1VAH10, PSG 1VAH1, PST-ORPA Bulk, PSG RHN42, and PSG RHN48 are all creeping bentgrasses that were top-rated for resistance to this fungus, while Alpha, SR 1119, Crenshaw, L-93, Declaration, PrvovSLT, SadSLT, and PSG SLT2M2 were susceptible. Of note, several resistant creeping bentgrasses rated higher than velvet bentgrass entries (Table 9), which could be indicative of improvement in cultivars for resistance to this disease.

The resistance of colonial bentgrass to brown patch has been the subject of significant research, and gradual improvements have been made in recent years. In the cycle evaluated in the 2010 fairway trial (Table 8), the experimental selections A08-FT12, SCBF 3, EDM Comp, CMD Comp, Green Time, Revere, and Tiger II exhibited significantly improved brown patch resistance over entries BCD, DML Comp, CTP Comp, PSG 7NBC, and PST-Syn 9EFR.

Spring Green-up

Spring green-up data was collected on trials from 2008 (Tables 1 and 2), 2010 (Tables 6 and 7), and 2011 (Tables 9 to 11). The NTEP fairway trial contained both creeping and colonial bentgrass species, whereas the NTEP greens/tee trial contained creeping and velvet bentgrass species.

In general, velvet bentgrass typically has the poorest spring green-up compared to colonial and creeping bentgrass and can even exhibit a reddish or purple color during cold winter months and into the spring. In 2012 there was statistical difference between velvet bentgrass entries in the 2008 NTEP greens/tee test (Table 1), in which Villa and Legendary possessed the earliest spring green-up while Greenwich and SR 7200 were slower to green up. Creeping

bentgrasses Luminary, Shark, Focus, V8, and Pure Distinction had the highest ratings for spring green-up, while Penncross, L-93, Southshore, Crenshaw, Alpha, and Memorial exhibited the latest spring green up. In the NTEP fairway trial (Table 2), colonial bentgrasses A08-FT12, BCD, and EBM showed earlier green-up than Green Time, Tiger II, and PST-9RD7. In the same trial, creeping bentgrasses Luminary, Pin-Up, Authority, Declaration, SRP 1WM, CY-2 and 13M displayed earlier green-up, while L-93, Penncross, and Princeville were among those slower to green up.

In other greens/tee trials (Tables 6, 7, 9, and 10) velvet entries exhibiting early spring green-up included Legendary, Villa, IS-AC 4, IS-AC 5, and PST-Syn VH9, while Greenwich, SR 7200, VGER Bulk, ESV Comp, and CDS Comp were slower to green up. Pure Distinction, Luminary, IS-AP 18, R6, R10, R11, R12, PPG-AP 102, EBC Comp, LUC Comp, PSG 1VAH10, PSG 7CL3, and PSG 7CL33 were creeping bentgrasses with early green-up, as opposed to Southshore, Penncross, Brighton, Providence, Putter, and Century. Under fairway conditions (Table 11), IS-AP 18, PPG-AP 102, EBC Comp, LUC Comp, PCM Comp, and GMCSLT exhibited early green-up, but Providence, Century, Sandhill, and Penn G-2 had the lowest spring green up ratings. The colonial bentgrasses A08-FT12, FDC Comp, and CEM Comp were quicker to green-up than Tiger II, Alister, SR 7100, PST-0HME Bulk, and PST-0HFN Bulk.

Dacthal Sensitivity

One problem many turf managers face is controlling weed populations within their stands of turf. To combat this, turf managers use a plethora of pre- and post-emergence herbicides. One such herbicide available to them is Dacthal (active ingredient DCPA). In April 2012, Dacthal Flo was applied to 2008, 2009, 2010, and 2011 fairway trials (Tables 2, 3, 5, 8, and 11) and the 2011 greens/tee trial (Table 10). This was a one-time application at a rate equivalent to 8 pt per acre. In general, both creeping bentgrasses and velvet bentgrasses showed acceptable levels of tolerance to this herbicide. While there was some noticeable damage among the creeping bentgrass entries, the differences were largely insignificant, and the velvet bentgrass entries exhibited zero ratable damage to turf stands. Some discoloration was recorded, but all of the entries recovered.

In contrast, colonial bentgrasses displayed noticeable and significant differences in Dacthal sensi-

tivity, independent of height of cut. In severe cases, colonial bentgrass plots turned a deep rust color and, in some cases, thinned down to the ground. It should be noted, however, that while rates of recovery varied, in most every instance the plots recovered 100% by the following growing season. In summary, the colonial bentgrasses A08-FT12, Glory, PST-9RD7, PBP Comp, PST-920 Bulk, WQD Comp, CMD Comp, EDM Comp, FDC Comp, CED Comp, CMD Comp, and CEM Comp exhibited significantly less damage than BCD, Green time, Tiger II, IS-AT 10, Alister, and SR 7100.

ACKNOWLEDGMENTS

New Jersey Experiment Station Publication No. E-12180-06-42. This work was conducted as part of NJAES Project No. 12132, supported by the Rutgers Center for Turfgrass Science, the New Jersey Agricultural Experiment Station, State and Hatch Act funds, other grants and gifts. Additional support was received from the United States Golf Association-Golf Course Superintendents Association of America Research Fund, New Jersey Turfgrass Association, the New Jersey Turfgrass Foundation and the National Turfgrass Evaluation Program.

REFERENCES

- Belanger, F. C., S. A. Bonos, and W. A. Meyer. 2005. Improving dollar-spot resistance in creeping bentgrass. USGA Green Section Record, July-August.
- Brilman, L. A., and W. A. Meyer. 2000. Velvet bentgrass: Rediscovering a misunderstood turfgrass. Golf Course Management. October.
- Musser, H. B. 1959. Turf management: Grasses. USGA Journal and Turf Management 12:31-32.
- Skogley, C. R. 1973. Velvet bentgrass. University of Rhode Island Cooperative Extension Service Bulletin Number 199.
- Smiley, R. W., P. H. Dernoeden, and B. B. Clarke. 2005. Compendium of Turfgrass Diseases, 3rd. APS Press, St. Paul, MN.

Table 1. Performance of bentgrass cultivars in a putting green trial established in September 2008 at North Brunswick, NJ. (Includes all entries of the 2008 National Bentgrass Greens Test - NTEP.)

Cultivar or Selection	Species	-----Turf Quality ¹ -----					Dollar Spot ² 2012 Avg.	Spring Green-up ³ April 2012	Copper Spot ⁴ Oct. 2012	Turf Density ⁵ Dec. 2012	Leaf Texture ⁶ Dec. 2012	Genetic Color ⁷ Dec. 2012
		2009-2012 Avg.	2009 Avg.	2010 Avg.	2011 Avg.	2012 Avg.						
1 Luminary	Creeping	7.7	7.5	8.0	7.9	7.5	7.2	8.3	6.3	6.7	8.0	8.0
2 Pure Distinction	Creeping	7.6	7.5	7.7	8.0	7.1	5.7	8.7	4.3	8.0	8.7	8.0
3 Legendary	Velvet	6.8	7.4	6.8	6.6	6.5	7.5	5.3	4.0	6.3	8.3	2.7
4 Barracuda	Creeping	6.8	7.1	6.3	6.9	6.9	7.0	7.0	4.3	6.7	7.7	8.0
5 Shark	Creeping	6.7	7.0	6.5	6.9	6.3	4.5	7.3	4.3	6.3	7.3	6.7
6 V8	Creeping	6.5	6.8	6.2	6.0	6.8	5.8	8.0	5.3	7.3	7.7	6.3
7 Villa	Velvet	6.4	7.2	6.3	5.9	6.3	7.7	5.7	3.3	7.7	9.0	3.0
8 Focus	Creeping	6.3	6.8	6.0	6.0	6.4	6.8	7.3	4.7	5.3	8.0	6.7
9 Proclamation	Creeping	6.3	6.4	6.2	6.7	6.0	5.7	5.3	6.0	5.0	7.3	5.0
10 Pin-Up	Creeping	6.0	5.8	5.5	6.0	6.6	5.7	6.3	5.0	6.0	7.0	7.0
11 Greenwich	Velvet	5.8	6.9	5.2	5.5	5.5	8.0	3.7	4.7	6.3	8.3	2.0
12 Declaration	Creeping	5.7	6.4	5.5	5.5	5.4	7.2	6.7	5.7	5.7	7.3	6.7
13 OO7	Creeping	5.6	5.9	5.5	5.8	5.4	5.8	4.0	6.3	5.7	7.3	5.3
14 Authority	Creeping	5.4	6.5	4.9	4.9	5.4	5.7	7.0	4.3	5.3	6.7	6.0
15 Penneagle II	Creeping	5.3	6.2	4.7	5.3	4.9	5.7	4.7	5.7	4.3	5.0	4.0
16 Penn A-4	Creeping	5.2	6.1	4.2	5.1	5.4	5.2	5.0	5.0	5.3	6.0	5.0
17 SRP-1BLTR3	Creeping	5.2	5.6	5.2	4.9	4.9	4.7	6.3	3.3	5.3	5.7	5.3
18 T-1	Creeping	5.0	6.1	4.6	4.6	4.9	5.3	4.0	5.7	5.3	6.3	4.0
19 AFM	Creeping	4.8	5.2	4.7	4.5	4.9	6.7	6.3	5.3	4.3	5.0	5.3
20 Kingpin	Creeping	4.6	5.7	4.9	4.0	3.8	7.2	6.0	7.3	3.7	5.3	4.7

(Continued)

Table 1. Bentgrass green trial, 2008, NTEP (continued).

Cultivar or Selection	Species	-----Turf Quality ¹ -----					Dollar Spot ² 2012 Avg.	Spring Green-up ³ April 2012	Copper Spot ⁴ Oct. 2012	Turf Density ⁵ Dec. 2012	Leaf Texture ⁶ Dec. 2012	Genetic Color ⁷ Dec. 2012
		2009- 2012 Avg.	2009 Avg.	2010 Avg.	2011 Avg.	2012 Avg.						
21 Penn A-1	Creeping	4.6	5.3	4.3	4.4	4.5	5.8	4.3	5.0	3.3	5.0	4.0
22 Alpha	Creeping	4.5	5.8	4.0	4.3	4.0	6.2	3.3	7.0	2.3	4.7	3.3
23 Tyee	Creeping	4.4	4.5	4.0	4.5	4.6	5.5	5.0	5.0	5.0	6.3	5.3
24 Penn A-2	Creeping	4.1	4.3	3.8	4.3	4.3	5.8	4.7	5.0	3.7	6.0	3.3
25 SR 7200	Velvet	3.9	5.8	3.3	2.9	3.7	6.8	2.7	4.7	5.3	7.7	4.0
26 Memorial	Creeping	3.9	4.7	3.8	3.8	3.3	7.3	3.3	7.0	3.0	4.7	3.3
27 13M	Creeping	3.9	5.1	3.7	3.5	3.3	7.2	4.3	6.7	3.7	4.3	4.7
28 Crenshaw	Creeping	3.9	4.8	3.2	3.7	3.8	3.5	2.3	5.7	3.3	3.3	3.7
29 Penn G-2	Creeping	3.6	3.8	3.7	3.3	3.6	6.2	4.7	4.7	5.7	6.3	5.0
30 L-93	Creeping	3.5	4.0	3.0	3.7	3.1	6.2	3.3	7.7	3.0	3.7	3.7
31 Southshore	Creeping	3.2	4.0	3.1	3.1	2.7	5.8	3.0	7.0	2.0	3.3	3.0
32 Penncross	Creeping	2.5	3.8	2.3	2.0	1.8	7.3	3.3	7.0	1.3	2.3	2.3
LSD at 5% =		0.6	0.8	0.9	0.9	0.8	0.9	1.6	2.2	1.6	1.7	1.1

¹Turf quality rated on a 1 to 9 scale, where 9 = best turf quality

²Dollar spot rated on a 1 to 9 scale, where 9 = best disease resistance. Data is an average of two rating dates.

³Spring green-up rated on a 1 to 9 scale, where 9 = earliest spring green-up

⁴Copper spot rated on a 1 to 9 scale, where 9 = best disease resistance

⁵Turf density rated on a 1 to 9 scale, where 9 = highest shoot density

⁶Leaf texture rated on a 1 to 9 scale, where 9 = finest leaf texture

⁷Genetic color rated on a 1 to 9 scale, where 9 = darkest green color

Table 2. Performance of bentgrass cultivars in a fairway/tee trial established in September 2008 at North Brunswick, NJ. (Includes all entries of the 2008 National Bentgrass Fairway Test - NTEP.)

Cultivar or Selection	Species	-----Turf Quality ¹ -----					Spring	Dacthal	Sod Web	Leaf	Turf	Genetic
		2009-2012 Avg.	2009 Avg.	2010 Avg.	2011 Avg.	2012 Avg.	Green-up ² April 2012	Recovery ³ June 2012	Worm ⁴ July 2012	Texture ⁵ Dec. 2012	Density ⁶ Dec. 2012	Color ⁷ Dec. 2012
1 Pure Select	Creeping	7.2	7.3	6.7	7.0	8.0	6.0	9.0	9.0	9.0	9.0	8.0
2 Luminary	Creeping	7.1	7.3	6.5	6.9	7.5	7.7	9.0	8.0	7.0	8.3	9.0
3 Proclamation	Creeping	6.9	6.7	6.6	7.1	7.1	6.3	9.0	8.3	6.3	7.3	5.7
4 Pin-Up	Creeping	6.8	6.4	6.3	7.0	7.6	7.0	9.0	8.7	7.7	8.3	9.0
5 Authority	Creeping	6.7	6.9	6.7	6.4	6.8	7.7	9.0	8.0	7.3	7.0	7.0
6 SRP 1WM	Creeping	6.7	6.6	6.3	6.7	7.0	7.0	9.0	8.0	8.0	7.0	6.0
7 Declaration	Creeping	6.5	6.6	6.8	6.3	6.0	7.3	9.0	7.3	6.7	6.7	5.7
8 Barracuda	Creeping	6.4	7.3	6.7	6.3	5.6	6.0	9.0	5.3	6.3	6.3	6.3
9 OO7	Creeping	6.4	6.3	6.2	6.8	6.4	4.7	9.0	7.3	7.7	7.3	6.3
10 CY-2	Creeping	6.1	6.2	5.8	6.4	6.0	7.7	9.0	4.7	6.7	8.0	9.0
11 Penn A-4	Creeping	6.1	6.2	5.8	6.2	6.2	4.3	9.0	5.7	7.0	7.0	7.3
12 T-1	Creeping	5.7	6.3	4.9	5.6	5.9	4.7	9.0	4.0	6.0	6.3	5.0
13 A08-FT12	Colonial	5.6	6.1	5.7	5.9	4.7	6.0	5.7	9.0	3.3	3.7	1.3
14 BCD	Colonial	5.4	5.8	5.4	5.9	4.5	5.0	1.3	9.0	3.0	2.3	2.7
15 Crystal BlueLinks	Creeping	5.3	6.5	4.4	4.9	5.5	4.3	9.0	4.3	5.3	5.7	6.0
16 Benchmark DSR	Creeping	5.2	6.4	4.5	4.9	5.3	6.0	9.0	4.7	5.7	6.7	4.7
17 13M	Creeping	5.0	5.7	4.5	5.3	4.6	6.7	9.0	2.3	4.7	5.7	5.0
18 Green Time	Colonial	5.0	5.6	4.8	5.0	4.5	3.7	2.3	9.0	2.0	2.7	2.3
19 A08-EBM	Colonial	4.8	5.4	4.6	5.3	4.0	5.0	3.7	9.0	3.3	3.7	1.3
20 Tiger II	Colonial	4.8	5.5	4.4	5.2	4.2	3.0	1.3	9.0	2.3	1.7	1.3

(Continued)

Table 2. Bentgrass fairway/tee trial, 2008, NTEP (continued).

Cultivar or Selection	Species	-----Turf Quality ¹ -----					Spring	Dacthal	Sod Web	Leaf	Turf	Genetic
		2009-2012 Avg.	2009 Avg.	2010 Avg.	2011 Avg.	2012 Avg.	Green-up ² April 2012	Recovery ³ June 2012	Worm ⁴ July 2012	Texture ⁵ Dec. 2012	Density ⁶ Dec. 2012	Color ⁷ Dec. 2012
21 L-93	Creeping	4.7	4.9	4.3	5.3	4.3	4.0	9.0	5.7	4.0	4.7	4.7
22 Memorial	Creeping	4.6	5.2	4.3	4.4	4.6	5.3	9.0	4.7	4.7	4.3	4.0
23 Princeville	Creeping	3.5	3.9	3.3	3.3	3.4	2.7	9.0	5.0	2.3	3.7	4.3
24 PST-R9D7	Colonial	3.3	3.7	3.3	3.3	3.0	4.0	6.3	9.0	2.7	2.3	2.3
25 Penncross	Creeping	3.3	4.5	2.3	3.2	3.1	3.3	9.0	2.7	2.0	4.0	2.3
LSD at 5% =		0.6	0.7	0.8	0.9	1.0	1.3	1.0	1.9	1.6	1.3	1.7

- ⊖ ¹Turf quality rated on a 1 to 9 scale, where 9 = best turf quality
- ²Spring green-up rated on a 1 to 9 scale, where 9 = earliest spring green-up
- ³Recovery from Dacthal injury rated on a 1 to 9 scale, where 9 = best recovery from herbicide damage
- ⁴Damage caused by sod web worm rated on a 1 to 9 scale, where 9 = greatest resistance to damage
- ⁵Leaf texture rated on a 1 to 9 scale, where 9 = finest leaf texture
- ⁶Turf density rated on a 1 to 9 scale, where 9 = highest shoot density
- ⁷Genetic color rated on a 1 to 9 scale, where 9 = darkest green color

Table 3. Performance of creeping and colonial bentgrass cultivars and selections in a fairway/tee trial seeded in September 2008 at North Brunswick, NJ.

Cultivar or Selection	Species	-----Turf Quality ¹ -----					Dacthal Recovery ² June 2012
		2009-2012 Avg.	2009 Avg.	2010 Avg.	2011 Avg.	2012 Avg.	
1 SEC Comp	Creeping	6.1	6.0	6.9	5.4	6.3	9.0
2 MSS Comp	Creeping	6.0	6.2	6.3	5.6	6.0	9.0
3 07-MGD Comp	Colonial	5.8	6.4	6.1	5.9	4.7	2.7
4 Shark	Creeping	5.5	5.8	6.1	4.4	6.0	9.0
5 ESS Comp	Creeping	5.5	5.6	6.5	4.7	5.5	9.0
6 NBC Comp	Colonial	5.5	6.3	6.1	5.8	3.7	2.0
7 BQC Comp	Colonial	5.4	5.5	5.5	6.0	4.8	4.0
8 Authority	Creeping	5.4	5.8	6.1	4.0	5.7	9.0
9 DC1 Comp	Creeping	5.4	6.5	6.6	3.9	4.5	9.0
10 SDS Comp	Colonial	5.3	6.2	5.7	5.8	3.5	2.7
11 PST-Syn-9HO	Colonial	5.2	5.8	5.1	5.3	4.5	7.3
12 EBM	Colonial	5.1	5.7	4.8	5.3	4.6	6.0
13 Penneagle II	Creeping	5.1	5.4	5.5	4.2	5.4	9.0
14 PBP Comp	Colonial	5.0	5.1	4.9	4.6	5.3	8.7
15 07-PCC Comp	Colonial	4.9	4.3	4.6	5.0	5.9	8.7
16 PST-Syn-9BC3	Colonial	4.9	5.4	4.7	4.9	4.6	6.7
17 PST-9NCS Bulk	Colonial	4.9	4.7	4.4	4.9	5.5	6.7
18 PRO AT-1	Colonial	4.8	5.6	4.8	4.8	4.1	3.7
19 Independence	Creeping	4.8	5.6	5.1	3.6	5.1	9.0
20 Revere	Colonial	4.7	5.2	4.6	4.7	4.6	6.7

10

(Continued)

Table 3. Bentgrass fairway/tee trial, 2008 (continued).

	Cultivar or Selection	Species	-----Turf Quality ¹ -----					Dacthal Recovery ² June 2012
			2009-2012 Avg.	2009 Avg.	2010 Avg.	2011 Avg.	2012 Avg.	
	21 PST-Syn-9NCS	Colonial	4.7	4.8	4.9	4.7	4.6	6.3
	22 Tyee	Creeping	4.7	5.9	6.2	3.7	3.1	9.0
	23 OO7	Creeping	4.7	5.7	5.9	3.2	4.0	9.0
	24 PSG 1RHG1	Creeping	4.7	5.1	4.7	4.0	4.9	9.0
	25 PST-920 Bulk	Colonial	4.6	4.8	4.4	4.3	5.1	8.7
	26 PST-Syn-9MS	Colonial	4.6	5.1	4.2	4.7	4.5	5.0
	27 Penn G-1	Creeping	4.5	4.8	5.2	3.5	4.6	9.0
	28 13M	Creeping	4.5	5.2	4.7	3.6	4.3	9.0
	29 Tiger II	Colonial	4.4	5.0	4.3	4.4	3.8	3.0
11	30 Alister	Colonial	4.4	4.8	4.1	4.1	4.5	7.7
	31 Penn A-4	Creeping	4.4	5.5	5.4	2.8	3.8	9.0
	32 Declaration	Creeping	4.3	5.9	4.9	3.0	3.5	9.0
	33 Kingpin	Creeping	4.3	5.1	4.4	3.5	4.0	9.0
	34 Mackenzie	Creeping	4.2	4.7	5.6	3.1	3.2	9.0
	35 Memorial	Creeping	4.2	4.9	4.3	3.4	4.0	9.0
	36 Alpha	Creeping	4.1	4.6	4.4	2.6	4.9	9.0
	37 Glory	Colonial	4.1	4.5	3.5	3.9	4.3	8.0
	38 PSG 1RHG12	Creeping	4.1	4.2	3.8	3.6	4.8	9.0
	39 SR 7100	Colonial	3.9	4.3	3.9	3.6	3.7	6.7
	40 PSG 1RHG13	Creeping	3.8	3.7	3.7	3.2	4.8	9.0
	41 T-1	Creeping	3.8	4.8	4.2	2.5	3.7	9.0
	42 SR 1150	Creeping	3.8	4.7	5.1	2.8	2.5	9.0
	43 PST-OPUF Bulk	Creeping	3.8	4.0	4.8	2.8	3.5	9.0
	44 Putter	Creeping	3.8	4.9	4.3	2.7	3.2	9.0
	45 L-93	Creeping	3.7	4.6	4.2	2.6	3.3	9.0

(Continued)

Table 3. Bentgrass fairway/tee trial, 2008 (continued).

Cultivar or Selection	Species	-----Turf Quality ¹ -----					Dacthal Recovery ² June 2012
		2009-2012 Avg.	2009 Avg.	2010 Avg.	2011 Avg.	2012 Avg.	
46 Penn G-2	Creeping	3.7	3.7	4.5	2.9	3.7	9.0
47 SR 1119	Creeping	3.7	3.9	3.8	3.2	3.7	9.0
48 Southshore	Creeping	3.7	4.4	3.6	3.0	3.6	9.0
49 Crenshaw	Creeping	3.6	4.5	3.9	2.6	3.5	9.0
50 SR 7150	Colonial	3.3	4.1	3.2	3.2	2.7	5.0
51 Providence	Creeping	3.3	3.5	3.1	3.2	3.5	9.0
52 PST-Syn-OPXS	Creeping	3.1	3.6	3.5	2.3	2.7	9.0
53 Brighton	Creeping	3.0	3.9	3.0	2.5	2.9	9.0
54 Sandhill	Creeping	3.0	2.5	3.3	2.9	3.5	9.0
55 PST-ODJ Bulk	Creeping	3.0	4.0	3.0	2.2	2.7	9.0
56 Penncross	Creeping	2.6	3.7	2.3	2.0	2.4	9.0
57 PST-9TO Bulk	Colonial	2.1	1.7	2.0	2.2	2.6	5.7
58 Exeter	Colonial	1.8	1.4	1.5	1.8	2.4	6.0
LSD at 5% =		0.7	0.7	0.9	0.8	1.5	1.5

¹Turf quality rated on a 1 to 9 scale, where 9 = best turf quality

²Recovery from Dacthal injury rated on a 1 to 9 scale, where 9 = best recovery from herbicide damage

Table 4. Performance of creeping, velvet, and colonial bentgrass cultivars and selections in a putting green trial seeded in sand in September 2009 at North Brunswick, NJ.

Cultivar or Selection	Species	-----Turf Quality ¹ -----				Dollar Spot ² 2012 Avg.	Anthracnose ³ April 2012
		2010- 2012 Avg.	2010 Avg.	2011 Avg.	2012 Avg.		
1 H05TP-300-1	Creeping	6.9	7.2	6.4	7.1	7.0	7.3
2 PGC Comp	Creeping	6.8	7.0	7.1	6.4	6.2	7.7
3 CAS2 Comp	Creeping	6.7	7.0	6.8	6.2	6.8	6.3
4 Luminary	Creeping	6.6	7.2	6.5	6.2	6.1	8.3
5 LQC Comp	Creeping	6.6	6.9	6.2	6.7	6.6	7.3
6 PSG 7PC2	Velvet	6.6	7.1	6.1	6.6	7.6	8.3
7 H05TP-295-12	Creeping	6.5	7.0	6.2	6.3	6.7	7.0
8 Barracuda	Creeping	6.2	6.9	5.7	6.1	7.0	6.0
9 DQC Comp	Creeping	6.2	6.1	6.4	6.2	6.4	6.7
10 H05TP-295-1	Creeping	6.2	6.8	6.2	5.7	5.9	7.0
11 IS-AC 4	Velvet	6.2	6.5	5.5	6.6	8.0	7.3
12 IS-AP 18	Creeping	6.1	6.4	6.2	5.8	5.1	8.3
13 IS-AP 15	Creeping	6.1	6.6	6.0	5.6	6.3	7.7
14 CAS1 Comp	Creeping	6.1	5.8	6.1	6.2	6.7	8.0
15 IS-AC 5	Velvet	6.1	6.7	5.5	6.1	6.8	7.7
16 RH 931	Creeping	5.9	6.3	5.9	5.7	5.3	7.7
17 Authority	Creeping	5.9	6.6	5.5	5.6	4.8	8.3
18 Focus	Creeping	5.8	5.9	5.4	6.0	6.4	8.0
19 Pin-Up	Creeping	5.8	6.4	5.2	5.8	6.0	7.3
20 RJM 513	Creeping	5.8	7.0	5.6	4.7	4.2	5.5

13

(Continued)

Table 4. Bentgrass putting green trial, 2009 (continued).

	Cultivar or Selection	Species	-----Turf Quality ¹ -----				Dollar Spot ² 2012 Avg.	Anthracnose ³ April 2012
			2010- 2012 Avg.	2010 Avg.	2011 Avg.	2012 Avg.		
21	Greenwich	Velvet	5.7	6.4	5.2	5.6	7.6	7.3
22	MDS Comp	Velvet	5.7	5.6	5.4	6.1	7.9	7.0
23	RJM 26	Creeping	5.7	6.9	5.4	4.9	3.4	7.5
24	Villa	Velvet	5.6	6.1	5.0	5.8	7.9	7.3
25	Legendary	Velvet	5.6	6.4	4.6	5.8	7.4	6.0
26	Shark	Creeping	5.6	6.3	5.2	5.2	5.2	6.7
27	BCQ Comp	Colonial	5.5	6.0	5.6	5.0	8.5	5.7
28	MDV Comp	Velvet	5.4	5.8	5.0	5.5	6.9	6.0
29	Luminary/A-1	Creeping	5.4	5.9	5.0	5.2	5.9	6.7
30	SRP 1WM	Creeping	5.4	6.7	4.5	5.1	7.0	7.0
31	H04TP-211-7-9	Creeping	5.4	5.9	5.4	5.0	5.2	7.0
32	OO7	Creeping	5.4	6.2	4.8	5.1	5.5	5.7
33	VDE Comp	Velvet	5.4	5.7	4.7	5.7	8.2	6.0
34	RJM 412	Creeping	5.4	6.7	4.5	5.0	4.0	5.5
35	SSS Comp	Velvet	5.3	5.5	4.9	5.6	7.2	7.3
36	RH 0839	Creeping	5.3	6.5	4.6	4.7	4.2	4.7
37	WBM Comp	Colonial	5.3	5.6	5.5	4.9	8.7	5.7
38	Luminary/A-1/Memorial	Creeping	5.2	5.4	4.7	5.4	6.3	7.0
39	Cobra 2	Creeping	5.2	5.9	4.3	5.4	6.5	5.3
40	SR 1150	Creeping	5.2	5.9	4.6	5.1	5.7	7.3
41	Declaration	Creeping	5.1	6.1	4.4	5.0	6.9	6.7
42	Runner	Creeping	5.1	5.5	4.9	4.9	5.1	6.0
43	RJM 56	Creeping	5.1	6.4	4.3	4.6	3.5	5.0
44	OO7/SR 1150	Creeping	5.1	5.8	4.7	4.8	5.2	7.0
45	Tyee/OO7	Creeping	5.0	6.1	4.0	4.9	5.2	7.0

14

(Continued)

Table 4. Bentgrass putting green trial, 2009 (continued).

	Cultivar or Selection	Species	-----Turf Quality ¹ -----				Dollar Spot ² 2012 Avg.	Anthracnose ³ April 2012
			2010- 2012 Avg.	2010 Avg.	2011 Avg.	2012 Avg.		
46	WBE Comp	Colonial	5.0	5.3	5.0	4.7	8.6	3.3
47	A-1	Creeping	5.0	5.8	4.2	5.0	5.9	6.3
48	RH 081	Creeping	5.0	5.9	4.6	4.5	5.2	3.0
49	Tyee	Creeping	5.0	4.6	4.9	5.5	5.2	7.3
50	PST-Syn-VR05	Velvet	5.0	5.8	4.1	5.2	7.8	6.0
51	H05TP-276-2	Creeping	5.0	5.2	4.8	4.9	5.2	6.3
52	FWC Comp	Colonial	5.0	5.4	4.8	4.7	8.4	3.3
53	H05TP-290-2	Creeping	4.9	5.2	4.9	4.7	5.7	4.3
54	H05TP-269-8	Creeping	4.9	5.4	4.5	4.8	5.2	4.7
55	SRP 1BLTR3	Creeping	4.9	6.0	4.2	4.4	5.7	7.0
56	CY-2	Creeping	4.8	5.1	4.7	4.9	7.0	5.0
57	PSG RHG12	Creeping	4.8	5.5	4.4	4.5	4.7	6.0
58	PST-Syn-VH5	Velvet	4.8	5.5	3.9	4.9	8.0	5.7
59	OO7/Mackenzie/Tyee	Creeping	4.8	5.5	4.2	4.6	4.4	6.3
60	SRP 2163	Velvet	4.7	5.0	4.9	4.3	6.5	7.3
61	Independence	Creeping	4.7	5.1	4.2	4.7	5.0	7.7
62	Mackenzie	Creeping	4.6	5.1	4.3	4.4	5.3	6.0
63	SR 7200	Velvet	4.6	5.7	3.8	4.3	7.9	6.0
64	Penn G-1	Creeping	4.6	4.7	4.5	4.5	5.9	6.0
65	WLC Comp	Colonial	4.6	4.8	4.8	4.0	8.7	5.0
66	RH TAV34	Creeping	4.5	5.3	4.3	4.0	3.1	7.0
67	RH TAV317	Creeping	4.5	5.4	4.0	4.3	4.2	8.0
68	OO7/Mackenzie	Creeping	4.5	5.3	4.0	4.3	4.8	4.7
69	Penneagle II	Creeping	4.5	4.9	4.1	4.5	6.2	5.7
70	RH TAV327	Creeping	4.5	5.3	4.0	4.1	4.4	7.3

(Continued)

Table 4. Bentgrass putting green trial, 2009 (continued).

	Cultivar or Selection	Species	-----Turf Quality ¹ -----				Dollar Spot ² 2012 Avg.	Anthracnose ³ April 2012
			2010- 2012 Avg.	2010 Avg.	2011 Avg.	2012 Avg.		
	71 RH TAV318	Creeping	4.5	5.4	3.5	4.4	3.4	7.3
	72 Penn G-1	Creeping	4.4	5.1	3.7	4.5	5.9	5.3
	73 OO7/SR1119	Creeping	4.4	5.3	3.7	4.1	4.8	6.0
	74 SRP 72P2	Velvet	4.4	5.0	4.2	4.0	5.7	6.3
	75 Penn G-6	Creeping	4.4	5.0	4.0	4.1	5.6	6.0
	76 DPAZ7	Creeping	4.4	5.1	3.5	4.5	4.6	7.7
	77 DPAZ1	Creeping	4.4	5.2	3.7	4.1	4.3	6.3
	78 SL TAZ1	Creeping	4.4	4.4	4.2	4.4	3.8	6.0
	79 Penn A-2	Creeping	4.3	4.7	4.1	4.2	6.0	6.3
16	80 Pennlinks II/Penneagle II	Creeping	4.3	4.9	3.8	4.2	5.7	6.0
	81 SL TAZ3	Creeping	4.3	5.0	3.5	4.4	4.1	3.0
	82 WQD Comp	Colonial	4.3	4.1	4.7	4.2	8.5	3.0
	83 SR 1150/SR 1119	Creeping	4.3	4.7	4.1	4.0	5.6	6.3
	84 SL TAZ2	Creeping	4.3	5.1	3.8	3.9	4.4	6.0
	85 13M	Creeping	4.2	5.0	3.7	4.0	6.8	6.0
	86 RH TAV36	Creeping	4.2	4.6	3.5	4.6	4.4	7.5
	87 PST-Syn-0R56	Creeping	4.2	4.3	4.0	4.2	5.5	5.3
	88 LS-44	Creeping	4.1	4.9	3.7	3.9	5.2	6.0
	89 SRP 2161	Velvet	4.1	4.8	3.9	3.7	5.5	6.7
	90 Penn A-1/Penn A-4	Creeping	4.1	5.3	3.4	3.6	5.7	6.0
	91 Crystal Bluelinks	Creeping	4.1	5.2	3.5	3.5	5.9	5.7
	92 Mackenzie/Penn G-1	Creeping	4.1	4.6	3.6	4.1	4.9	5.7
	93 SRP 2127	Velvet	4.1	4.6	4.0	3.7	5.5	7.0
	94 BCD	Colonial	4.1	4.7	4.3	3.3	8.5	5.0
	95 RH TAV524	Creeping	4.0	5.0	3.2	3.9	4.1	5.0

(Continued)

Table 4. Bentgrass putting green trial, 2009 (continued).

	Cultivar or Selection	Species	-----Turf Quality ¹ -----				Dollar Spot ² 2012 Avg.	Anthracnose ³ April 2012
			2010- 2012 Avg.	2010 Avg.	2011 Avg.	2012 Avg.		
	96 H05TP-207-4	Creeping	4.0	4.8	3.5	3.8	6.0	6.7
	97 SRP 2117	Velvet	4.0	5.3	3.4	3.4	5.6	7.3
	98 PST-ODJ Bulk	Creeping	4.0	5.2	3.4	3.4	5.0	3.7
	99 T-1	Creeping	4.0	5.0	3.3	3.7	4.6	6.0
	100 SRP 2169	Velvet	4.0	4.8	3.8	3.5	4.3	5.5
	101 96-2	Creeping	4.0	4.8	3.6	3.5	5.0	6.7
	102 SRP 72P4	Velvet	4.0	4.8	3.6	3.5	5.2	6.7
	103 SRP 2186	Velvet	4.0	4.5	3.9	3.6	6.0	5.0
	104 SRP 2145	Velvet	4.0	4.4	3.9	3.8	5.5	4.5
17	105 Penn A-4	Creeping	3.8	4.9	3.1	3.6	5.1	5.0
	106 SRP 2145	Velvet	3.8	4.3	3.8	3.4	4.8	6.3
	107 Memorial	Creeping	3.7	4.6	3.4	3.2	6.8	5.7
	108 SRP 72P3	Velvet	3.7	4.5	3.7	3.2	5.3	6.0
	109 Penn G-2	Creeping	3.7	4.5	3.2	3.4	6.5	6.0
	110 SRP 72P1	Velvet	3.7	4.2	3.4	3.4	5.0	4.3
	111 Kingpin	Creeping	3.6	4.8	3.0	3.2	5.6	5.0
	112 L-93	Creeping	3.6	3.9	3.2	3.6	5.8	4.3
	113 SRP 2168	Velvet	3.6	4.3	3.0	3.4	4.8	6.0
	114 RH TAV37	Creeping	3.5	4.4	2.4	3.8	4.5	7.7
	115 Pennlinks II	Creeping	3.4	4.5	2.9	2.9	5.9	6.3
	116 Southshore	Creeping	3.4	4.2	2.7	3.3	5.2	5.3
	117 Alpha	Creeping	3.4	4.4	2.8	2.8	5.0	5.3
	118 Sandhill	Creeping	3.3	4.4	2.6	2.8	5.2	5.0
	119 Century	Creeping	3.2	4.2	2.6	3.0	4.3	3.3
	120 SR 1119	Creeping	3.2	4.3	2.7	2.6	4.6	5.3

(Continued)

Table 4. Bentgrass putting green trial, 2009 (continued).

Cultivar or Selection	Species	-----Turf Quality ¹ -----				Dollar Spot ² 2012 Avg.	Anthracnose ³ April 2012
		2010- 2012 Avg.	2010 Avg.	2011 Avg.	2012 Avg.		
121 Providence	Creeping	3.2	4.1	2.6	3.1	5.4	6.3
122 SRP 2148	Velvet	3.2	4.1	2.7	2.9	5.4	5.7
123 Seaside II	Creeping	3.1	3.8	2.6	2.9	5.4	5.3
124 PST-OPUF Bulk	Creeping	3.1	3.2	3.1	3.0	4.5	6.0
125 Putter	Creeping	3.0	4.2	2.5	2.4	4.7	4.7
126 Crenshaw	Creeping	3.0	3.9	2.3	2.7	4.1	4.7
127 SRP 2164	Velvet	2.9	3.4	2.9	2.6	6.5	3.5
128 Brighton	Creeping	2.8	3.4	2.5	2.4	4.6	5.3
129 Penncross	Creeping	2.4	2.9	2.1	2.0	5.7	5.0
LSD at 5% =		0.7	0.9	1.0	0.9	1.4	1.9

¹Turf quality rated on a 1 to 9 scale, where 9 = best turf quality

²Dollar spot rated on a 1 to 9 scale, where 9 = best disease resistance. Data is an average of three rating dates.

³Anthracnose rated on a 1 to 9 scale, where 9 = best disease resistance

Table 5. Performance of colonial, creeping, and velvet bentgrass cultivars and selections in a fairway/tee trial seeded in September 2009 at North Brunswick, NJ.

Cultivar or Selection	Species	-----Turf Quality ¹ -----				Dacthal Recovery ² June 2012
		2010-2012 Avg.	2010 Avg.	2011 Avg.	2012 Avg.	
1 SSS Comp	Velvet	6.7	5.4	7.1	7.7	9.0
2 MDV Comp	Velvet	6.7	6.1	6.9	7.2	9.0
3 PSG 7PC2	Velvet	6.6	5.8	6.7	7.4	9.0
4 MDS Comp	Velvet	6.5	5.6	7.1	6.9	9.0
5 BCQ Comp	Colonial	6.5	6.9	7.6	4.9	1.0
6 VDE Comp	Velvet	6.4	5.9	6.7	6.6	9.0
7 SRP 1WM	Creeping	6.1	6.0	5.7	6.7	9.0
8 CAS2 Comp	Creeping	6.1	6.3	6.0	5.9	9.0
9 IS-AC 5	Velvet	6.1	6.0	6.5	5.8	9.0
10 WQD Comp	Colonial	6.0	5.9	6.3	6.0	5.7
11 IS-AC 4	Velvet	6.0	5.8	6.4	5.9	9.0
12 WBM Comp	Colonial	6.0	6.8	7.2	4.0	1.0
13 WBE Comp	Colonial	6.0	6.7	7.4	3.8	1.0
14 Focus	Creeping	5.9	6.2	6.0	5.6	9.0
15 A08-FT12	Colonial	5.9	5.9	6.1	5.5	5.3
16 WLC Comp	Colonial	5.8	6.3	6.9	4.3	1.3
17 Barracuda	Creeping	5.8	6.0	5.5	6.0	9.0
18 IS-AP 15	Creeping	5.8	5.9	4.9	6.6	9.0
19 CAS1 Comp	Creeping	5.8	5.5	4.8	7.0	9.0
20 Shark	Creeping	5.7	5.6	5.3	6.2	9.0
21 Villa	Velvet	5.6	5.5	5.7	5.7	9.0
22 IS-AP 18	Creeping	5.5	5.8	5.1	5.7	9.0
23 Authority	Creeping	5.4	5.4	4.2	6.6	9.0
24 FWC Comp	Colonial	5.4	5.3	6.6	4.4	1.3
25 Luminary	Creeping	5.4	5.7	5.1	5.5	9.0

(Continued)

Table 5. Bentgrass fairway/tee trial, 2009 (continued).

	Cultivar or Selection	Species	-----Turf Quality ¹ -----				Dacthal Recovery ² June 2012
			2010-2012 Avg.	2010 Avg.	2011 Avg.	2012 Avg.	
	26 Pin-Up	Creeping	5.4	5.5	4.9	5.8	9.0
	27 Declaration	Creeping	5.2	5.3	4.9	5.5	9.0
	28 LQC Comp	Creeping	5.2	5.9	4.5	5.3	9.0
	29 PST-Syn-9HO	Colonial	5.2	5.6	5.6	4.5	4.3
	30 IS-AT 10	Colonial	5.1	5.6	6.4	3.4	1.0
	31 OO7/SR 1150	Creeping	5.1	4.9	5.2	5.0	9.0
	32 A-1	Creeping	5.0	4.8	4.5	5.6	9.0
	33 OO7	Creeping	5.0	5.3	4.7	4.9	9.0
	34 Cobra 2	Creeping	4.9	5.2	4.2	5.4	9.0
20	35 Luminary/Memorial	Creeping	4.9	5.2	4.9	4.7	9.0
	36 OO7/Mackenzie	Creeping	4.9	4.7	4.5	5.6	9.0
	37 RH 931	Creeping	4.9	4.9	4.4	5.3	9.0
	38 Pennlinks II/Penneagle II	Creeping	4.8	5.3	4.4	4.8	9.0
	39 PST-Syn-0COL	Creeping	4.8	5.1	5.0	4.3	7.0
	40 SR 7200	Velvet	4.8	5.4	4.6	4.5	9.0
	41 Runner	Creeping	4.8	5.5	3.7	5.3	9.0
	42 CY-2	Creeping	4.8	5.5	4.5	4.5	9.0
	43 PST-9NCS-Bulk	Colonial	4.8	4.8	5.0	4.5	5.0
	44 OO7/Mackenzie/Tyee	Creeping	4.7	4.4	4.3	5.6	9.0
	45 BCD	Colonial	4.7	5.1	5.6	3.5	2.3
	46 Crystal BlueLinks	Creeping	4.7	4.9	4.5	4.6	9.0
	47 PST-Syn-9BNC	Colonial	4.6	4.6	4.8	4.5	5.3
	48 Penn G-6	Creeping	4.6	4.2	4.6	5.0	9.0
	49 13M	Creeping	4.6	4.5	4.9	4.5	9.0
	50 SRP 1BLTR3	Creeping	4.5	4.8	4.0	4.8	9.0

(Continued)

Table 5. Bentgrass fairway/tee trial, 2009 (continued).

Cultivar or Selection	Species	-----Turf Quality ¹ -----				Dacthal Recovery ² June 2012
		2010-2012 Avg.	2010 Avg.	2011 Avg.	2012 Avg.	
51 OO7/SR 1119	Creeping	4.5	4.3	4.2	5.0	9.0
52 Penn G-1	Creeping	4.5	4.8	4.1	4.6	9.0
53 Tyee/OO7	Creeping	4.5	4.5	4.2	4.8	9.0
54 PST-Syn-9DR5	Colonial	4.5	4.4	4.5	4.6	7.0
55 Penneagle II	Creeping	4.5	4.8	3.7	5.0	9.0
56 Tiger 2	Colonial	4.4	5.4	4.6	3.2	2.0
57 Greentime	Colonial	4.4	5.5	5.1	2.6	2.0
58 Penn A-1/Penn A-4	Creeping	4.4	4.5	3.9	4.8	9.0
59 Memorial	Creeping	4.3	5.2	4.2	3.5	9.0
60 SR 1150	Creeping	4.3	4.4	4.7	3.9	9.0
61 Glory	Colonial	4.3	4.6	4.6	3.8	5.0
62 Penn G-1	Creeping	4.3	4.6	3.8	4.4	9.0
63 PSG RHG12	Creeping	4.2	4.5	4.0	4.3	9.0
64 Mackenzie/Penn G-1	Creeping	4.1	3.7	4.1	4.4	9.0
65 SR 7100	Colonial	3.9	4.7	4.0	3.2	5.3
66 Penn A-4	Creeping	3.9	3.8	3.5	4.4	9.0
67 Alister	Colonial	3.8	4.1	4.4	3.1	4.7
68 SR 1150/SR 1119	Creeping	3.8	4.7	3.8	3.2	9.0
69 SR 7150	Colonial	3.8	4.5	4.3	2.7	3.3
70 L-93	Creeping	3.8	4.3	3.4	3.7	9.0
71 Tyee	Creeping	3.8	3.7	3.7	3.9	9.0
72 Penn A-2	Creeping	3.7	4.1	3.3	3.9	9.0
73 Penn G-2	Creeping	3.7	4.4	3.1	3.7	9.0
74 Independence	Creeping	3.7	3.9	3.3	4.0	9.0
75 Alpha	Creeping	3.7	4.1	3.5	3.7	9.0

(Continued)

Table 5. Bentgrass fairway/tee trial, 2009 (continued).

Cultivar or Selection	Species	-----Turf Quality ¹ -----				Dacthal Recovery ² June 2012
		2010-2012 Avg.	2010 Avg.	2011 Avg.	2012 Avg.	
76 96-2	Creeping	3.7	3.5	3.4	4.4	9.0
77 PST-Syn-0R56	Creeping	3.7	4.5	3.3	3.2	9.0
78 Kingpin	Creeping	3.5	4.6	3.3	2.8	9.0
79 Pennlinks II	Creeping	3.3	3.8	3.3	2.9	9.0
80 Seaside II	Creeping	3.3	3.6	3.4	2.9	9.0
81 Mackenzie	Creeping	3.2	3.5	2.9	3.4	9.0
82 Southshore	Creeping	3.2	3.5	2.9	3.0	9.0
83 Sandhill	Creeping	3.1	3.9	2.7	2.7	9.0
84 Providence	Creeping	3.1	3.5	3.4	2.6	9.0
85 Crenshaw	Creeping	3.0	3.3	2.5	3.3	9.0
86 Penncross	Creeping	3.0	3.4	2.8	2.8	9.0
87 T-1	Creeping	3.0	4.0	2.7	2.5	9.0
88 Putter	Creeping	3.0	3.3	2.9	2.9	9.0
89 Brighton	Creeping	2.8	3.0	2.7	2.9	9.0
90 Century	Creeping	2.7	3.1	2.2	2.8	9.0
91 SR 1119	Creeping	2.6	3.2	2.3	2.3	9.0
LSD at 5% =		0.8	0.8	1.0	1.3	1.0

¹Turf quality rated on a 1 to 9 scale, where 9 = best turf quality

²Recovery from Dacthal injury rated on a 1 to 9 scale, where 9 = best recovery from herbicide damage

Table 6. Performance of velvet bentgrass cultivars and selections in a putting green trial seeded in September 2010 at North Brunswick, NJ.

Cultivar or Selection	Species	-----Turf Quality ¹ -----			Spring Green-up ² April 2012	Localized Dry Spot ³ July 2012	Dollar Spot ⁴ Aug. 2012
		2011-2012 Avg.	2011 Avg.	2012 Avg.			
1 CDE Comp	Velvet	6.1	6.1	6.2	4.7	9.0	9.0
2 PSG 7PC2	Velvet	5.8	5.9	5.7	4.3	9.0	9.0
3 SME Comp	Velvet	5.6	5.2	6.1	5.3	9.0	9.0
4 SMM Comp	Velvet	5.3	5.2	5.4	4.3	9.0	9.0
5 IS-AC 4	Velvet	5.1	4.6	5.7	8.0	8.7	8.7
6 IS-AC 5	Velvet	5.1	4.4	5.7	7.3	9.0	8.7
7 Villa	Velvet	5.0	5.2	4.8	6.0	7.0	9.0
8 Legendary	Velvet	4.9	5.2	4.5	5.0	7.7	9.0
9 VTP Comp	Velvet	4.3	4.3	4.4	3.7	9.0	8.3
10 Greenwich 2003	Velvet	4.1	4.6	3.6	4.0	7.3	7.7
11 VGER Bulk	Velvet	3.9	4.0	3.9	2.0	7.0	9.0
12 Greenwich 2009	Velvet	3.9	4.6	3.2	3.3	7.3	7.3
13 SR 7200	Velvet	3.2	4.2	2.3	2.3	6.3	8.3
LSD at 5% =		0.7	0.8	0.9	1.6	1.5	0.9

¹Turf quality rated on a 1 to 9 scale, where 9 = best turf quality

²Spring green-up rated on a 1 to 9 scale, where 9 = earliest spring green-up

³Localized dry spot rated on a 1 to 9 scale, where 9 = best drought resistance

⁴Dollar spot rated on a 1 to 9 scale, where 9 = best disease resistance

Table 7. Performance of creeping and colonial bentgrass cultivars and selections in a putting green trial seeded in September 2010 at North Brunswick, NJ.

Cultivar or Selection	Species	-----Turf Quality ¹ -----			Spring Green-up ² April 2012	Dollar Spot ³ May 2012	Localized Dry Spot ⁴ July 2012
		2011-2012 Avg.	2011 Avg.	2012 Avg.			
1 R10	Creeping	6.3	6.3	6.4	7.7	6.3	9.0
2 R11	Creeping	6.2	6.6	5.7	7.7	5.0	9.0
3 IS-AP 18	Creeping	6.1	6.1	6.0	7.0	5.0	8.7
4 FLE Comp	Creeping	6.0	5.7	6.4	7.3	5.7	9.0
5 R12	Creeping	6.0	5.8	6.2	8.3	5.7	7.3
6 Proclamation	Creeping	5.9	5.9	5.8	5.7	5.3	7.7
7 R6	Creeping	5.8	6.2	5.3	8.0	5.3	8.0
8 PSG RH08E1	Creeping	5.8	6.2	5.4	5.3	4.0	5.7
9 Declaration	Creeping	5.7	6.1	5.2	5.3	6.7	7.3
10 PSG RH08-38	Creeping	5.7	6.3	5.2	6.3	3.3	7.3
11 HDG Comp	Creeping	5.6	5.7	5.5	6.0	4.0	8.0
12 Focus	Creeping	5.6	5.6	5.6	5.7	4.7	7.0
13 SRP 1WM	Creeping	5.6	5.7	5.4	4.7	7.7	6.7
14 RH 931	Creeping	5.5	5.5	5.5	5.0	6.0	6.7
15 Pure Select	Creeping	5.5	6.1	4.9	6.7	3.7	8.7
16 IS-AP 16	Creeping	5.5	5.7	5.2	5.0	4.3	8.3
17 OO7	Creeping	5.3	5.6	5.1	4.7	4.3	7.7
18 GDE Comp	Creeping	5.3	5.1	5.6	4.3	5.3	7.0
19 Capri	Colonial	5.3	5.3	5.3	6.7	7.0	9.0
20 DML Comp	Colonial	5.3	5.5	5.1	7.0	6.7	9.0

Table 7. Bentgrass putting green trial, 2010 (continued).

	Cultivar or Selection	Species	-----Turf Quality ¹ -----			Spring Green-up ² April 2012	Dollar Spot ³ May 2012	Localized Dry Spot ⁴ July 2012
			2011-2012 Avg.	2011 Avg.	2012 Avg.			
	21 EDM Comp	Colonial	5.3	5.6	5.0	5.3	8.0	9.0
	22 Pin-Up	Creeping	5.3	5.6	5.0	5.0	4.3	7.3
	23 Mackenzie	Creeping	5.3	5.6	5.0	5.0	4.0	7.7
	24 Pure Distinction	Creeping	5.2	5.8	4.6	7.3	2.3	8.7
	25 IS-AP 15	Creeping	5.2	5.4	5.0	4.0	4.3	7.3
	26 CDD Comp	Colonial	5.2	5.4	5.0	7.0	5.7	9.0
	27 FMM Comp	Creeping	5.2	5.6	4.7	5.7	3.0	8.7
	28 DDL Comp	Colonial	5.1	5.2	5.0	5.0	6.3	8.7
	29 OO7/Mackenzie	Creeping	5.1	5.3	5.0	5.3	4.3	7.7
25	30 Shark	Creeping	5.1	5.6	4.5	5.0	4.0	7.7
	31 RH 081	Creeping	5.1	5.6	4.5	4.7	3.7	4.0
	32 Cobra 2	Creeping	5.1	5.4	4.8	4.0	5.0	6.0
	33 OO7/SR 1150	Creeping	5.0	5.3	4.8	4.3	4.7	8.3
	34 Authority	Creeping	5.0	5.1	4.8	5.3	5.3	7.3
	35 PSG RH08E2	Creeping	5.0	5.9	4.1	4.5	3.5	7.5
	36 SRP 1BLTR3	Creeping	4.9	5.3	4.6	5.0	4.0	6.7
	37 CMD Comp	Colonial	4.8	4.9	4.8	5.3	7.3	8.3
	38 PST-Syn-0KPC	Creeping	4.8	4.4	5.2	6.3	3.3	8.7
	39 Runner	Creeping	4.8	5.3	4.3	5.7	3.3	7.7
	40 OO7/SR 1119	Creeping	4.8	5.1	4.4	3.0	4.3	7.0
	41 Benchmark DSR	Creeping	4.7	5.0	4.5	4.7	5.0	7.3
	42 PSG RH08-935	Creeping	4.6	5.3	4.0	5.7	2.7	7.3
	43 AFM	Creeping	4.5	4.9	4.2	4.3	3.7	7.7
	44 CY-2	Creeping	4.5	4.7	4.3	5.0	5.0	7.7
	45 Independence	Creeping	4.4	5.2	3.6	4.3	2.7	8.7

(Continued)

Table 7. Bentgrass putting green trial, 2010 (continued).

	Cultivar or Selection	Species	-----Turf Quality ¹ -----			Spring Green-up ² April 2012	Dollar Spot ³ May 2012	Localized Dry Spot ⁴ July 2012
			2011-2012 Avg.	2011 Avg.	2012 Avg.			
46	13M	Creeping	4.3	4.8	3.9	4.0	7.0	6.3
47	PSG RH08-910	Creeping	4.2	4.9	3.5	4.7	2.3	6.7
48	L-93	Creeping	4.1	4.4	3.8	3.0	6.0	7.0
49	SR 1150	Creeping	4.1	4.5	3.6	2.3	3.7	8.0
50	Crystal BlueLinks	Creeping	4.1	4.6	3.5	5.0	6.3	7.7
51	A4	Creeping	3.9	4.6	3.3	3.0	2.7	7.0
52	T-1	Creeping	3.9	4.4	3.3	4.0	4.0	8.0
53	Kingpin	Creeping	3.9	4.1	3.6	3.3	7.0	8.3
54	Penn A-1/A4	Creeping	3.9	4.3	3.4	3.0	3.3	7.0
55	BCD	Colonial	3.8	4.1	3.4	3.7	5.3	8.7
56	Memorial	Creeping	3.8	4.0	3.6	4.3	7.3	8.3
57	CTP Comp	Colonial	3.8	4.1	3.4	4.0	7.3	8.3
58	Tyee/OO7	Creeping	3.7	3.8	3.6	3.3	4.0	6.7
59	Ninety-Six Two	Creeping	3.6	4.1	3.2	3.3	2.7	7.0
60	Mackenzie/Tyee	Creeping	3.4	3.5	3.3	3.7	3.3	8.3
61	SR 1150/SR 1119	Creeping	3.3	3.6	3.0	3.3	4.3	7.0
62	Sandhill	Creeping	3.2	4.0	2.5	3.0	3.7	7.0
63	Alpha	Creeping	3.2	3.9	2.5	3.0	3.0	7.7
64	Penncross	Creeping	3.2	4.0	2.4	4.0	3.3	7.0
65	PLS	Creeping	3.2	3.7	2.7	3.0	4.0	7.7
66	PST-Syn-R0PX	Creeping	3.1	3.3	3.0	5.0	4.7	6.7
67	Putter	Creeping	3.0	3.8	2.3	3.0	2.3	7.3
68	Southshore	Creeping	3.0	3.5	2.5	2.7	2.7	6.7
69	SR 1119	Creeping	2.9	3.5	2.3	3.3	3.0	7.7
70	Brighton	Creeping	2.6	3.2	2.1	2.3	3.0	7.7

(Continued)

Table 7. Bentgrass putting green trial, 2010 (continued).

Cultivar or Selection	Species	-----Turf Quality ¹ -----			Spring Green-up ² April 2012	Dollar Spot ³ May 2012	Localized Dry Spot ⁴ July 2012
		2011-2012 Avg.	2011 Avg.	2012 Avg.			
71 Penncross	Creeping	2.5	3.3	1.7	2.0	3.0	7.3
72 Tye	Creeping	2.4	3.1	1.7	1.7	2.7	6.3
73 Providence	Creeping	1.8	1.8	1.8	3.0	4.7	6.3
LSD at 5% =		0.7	0.8	0.9	1.6	1.3	1.5

¹Turf quality rated on a 1 to 9 scale, where 9 = best turf quality

²Spring green-up rated on a 1 to 9 scale, where 9 = earliest spring green-up

³Dollar spot rated on a 1 to 9 scale, where 9 = best disease resistance

⁴Localized dry spot rated on a 1 to 9 scale, where 9 = best drought resistance

Table 8. Performance of creeping, velvet, and colonial bentgrass cultivars and selections in a fairway trial seeded in September 2010 at North Brunswick, NJ.

Cultivar or Selection	Species	-----Turf Quality ¹ -----			Dollar Spot ² 2012 Avg.	Brown Patch ³ May 2012	Dacthal Recovery ⁴ June 2012
		2011- 2012 Avg.	2011 Avg.	2012 Avg.			
1 SRP 1WM	Creeping	6.5	6.4	6.6	6.3	8.0	9.0
2 Declaration	Creeping	6.4	6.7	6.2	6.7	8.7	9.0
3 CMD Comp	Colonial	6.4	6.4	6.4	7.0	6.3	8.0
4 R10	Creeping	6.4	6.1	6.6	5.4	9.0	9.0
5 EDM Comp	Colonial	6.3	6.3	6.2	7.0	6.3	6.7
6 Focus	Creeping	6.2	5.8	6.6	5.8	9.0	9.0
7 R6	Creeping	6.2	5.9	6.5	5.0	9.0	9.0
8 GDE Comp	Creeping	6.1	5.8	6.5	6.1	8.7	9.0
9 Capri	Colonial	6.1	6.3	5.9	6.6	6.0	3.7
10 DDL Comp	Colonial	6.1	6.1	6.0	6.4	5.0	6.0
11 Pin-Up	Creeping	6.1	6.1	6.0	5.2	8.7	9.0
12 FLE Comp	Creeping	6.0	5.6	6.4	5.3	9.0	9.0
13 Proclamation	Creeping	5.9	5.9	5.9	5.4	8.3	9.0
14 R12	Creeping	5.9	5.7	6.0	5.2	8.3	9.0
15 DML Comp	Colonial	5.9	6.3	5.4	5.9	4.3	3.3
16 OO7	Creeping	5.8	6.0	5.7	5.1	8.0	9.0
17 FMM Comp	Creeping	5.7	5.3	6.1	5.2	9.0	9.0
18 HDG Comp	Creeping	5.7	5.6	5.9	4.9	8.3	9.0
19 A08-FT12	Colonial	5.7	5.2	6.0	6.2	6.3	8.7
20 CDD Comp	Colonial	5.6	5.6	5.7	6.2	4.7	5.0

Table 8. Bentgrass fairway trial, 2010 (continued).

	Cultivar or Selection	Species	-----Turf Quality ¹ -----			Dollar Spot ² 2012 Avg.	Brown Patch ³ May 2012	Dacthal Recovery ⁴ June 2012
			2011- 2012 Avg.	2011 Avg.	2012 Avg.			
	21 IS-AC 4	Velvet	5.6	4.8	6.4	7.5	9.0	9.0
	22 Authority	Creeping	5.6	5.3	5.8	5.8	8.0	9.0
	23 RH 931	Creeping	5.5	5.3	5.7	5.3	8.0	9.0
	24 AFM	Creeping	5.5	5.4	5.7	5.5	8.7	9.0
	25 Villa	Velvet	5.5	4.9	6.1	6.7	8.0	9.0
	26 PSG 7NBC	Colonial	5.5	6.3	4.8	5.1	4.0	3.0
	27 R11	Creeping	5.5	5.6	5.4	4.4	8.7	9.0
	28 OO7/Mackenzie	Creeping	5.5	5.8	5.2	4.2	8.0	9.0
	29 IS-AC 5	Velvet	5.5	5.0	5.9	5.9	9.0	9.0
29	30 Shark	Creeping	5.4	5.6	5.3	4.6	9.0	9.0
	31 SRP 1BLTR3	Creeping	5.3	5.2	5.4	4.8	8.0	9.0
	32 Pure Select	Creeping	5.3	5.1	5.5	5.2	8.7	9.0
	33 OO7/SR 1119	Creeping	5.2	5.1	5.4	5.2	8.7	9.0
	34 Crystal BlueLinks	Creeping	5.2	5.2	5.1	5.3	8.7	9.0
	35 CTP Comp	Colonial	5.1	5.3	4.8	6.5	3.0	5.0
	36 Mackenzie	Creeping	5.0	5.0	5.0	3.9	7.7	9.0
	37 13M	Creeping	5.0	5.5	4.5	6.2	8.5	9.0
	38 Benchmark DSR	Creeping	5.0	4.9	4.9	5.2	8.0	9.0
	39 SR 1150	Creeping	4.9	4.9	4.8	5.4	7.7	9.0
	40 Revere	Colonial	4.8	5.1	4.6	6.4	5.7	4.0
	41 RH 081	Creeping	4.8	5.5	4.2	4.0	7.3	9.0
	42 Pure Distinction	Creeping	4.7	5.0	4.5	2.7	9.0	9.0
	43 Memorial	Creeping	4.7	4.7	4.8	6.7	7.7	9.0
	44 OO7/SR 1150	Creeping	4.7	4.9	4.5	4.4	8.0	9.0
	45 SR 1150/SR 1119	Creeping	4.7	5.0	4.3	5.1	7.0	9.0

(Continued)

Table 8. Bentgrass fairway trial, 2010 (continued).

	Cultivar or Selection	Species	-----Turf Quality ¹ -----			Dollar Spot ² 2012 Avg.	Brown Patch ³ May 2012	Dacthal Recovery ⁴ June 2012
			2011- 2012 Avg.	2011 Avg.	2012 Avg.			
	46 Glory	Colonial	4.7	4.6	4.8	5.9	5.3	6.3
	47 Tyee/OO7	Creeping	4.7	4.7	4.6	4.7	8.3	9.0
	48 IS-AT 10	Colonial	4.6	4.9	4.3	6.1	5.3	2.3
	49 T-1	Creeping	4.6	4.8	4.4	5.6	8.0	9.0
	50 Alister	Colonial	4.5	4.9	4.1	5.0	4.7	5.0
	51 Greentime	Colonial	4.4	5.0	3.9	6.1	6.0	2.0
	52 BCD	Colonial	4.4	5.2	3.6	5.1	4.0	3.0
	53 Kingpin	Creeping	4.4	4.4	4.4	5.8	7.7	9.0
	54 SCBF 1	Colonial	4.3	4.2	4.4	6.2	4.5	5.7
30	55 Sandhill	Creeping	4.3	4.2	4.3	5.7	7.7	9.0
	56 Independence	Creeping	4.2	4.4	4.0	3.5	8.7	9.0
	57 Tiger 2	Colonial	4.2	4.6	3.8	5.9	5.7	3.7
	58 L-93	Creeping	4.2	4.1	4.2	6.2	7.3	9.0
	59 Putter	Creeping	4.1	4.4	3.8	4.5	8.0	9.0
	60 Alpha	Creeping	4.1	4.3	3.9	5.0	8.3	9.0
	61 Ninety-Six Two	Creeping	4.0	4.3	3.7	3.5	8.0	9.0
	62 SCBF 2	Colonial	4.0	3.9	4.1	6.1	6.3	4.3
	63 Mackenzie/Tyee	Creeping	4.0	4.2	3.8	3.9	7.7	9.0
	64 PLS	Creeping	3.9	4.1	3.7	4.2	8.0	9.0
	65 Syn-9EFR	Colonial	3.9	4.2	3.5	6.0	3.3	4.0
	66 Southshore	Creeping	3.9	4.0	3.8	4.8	8.0	9.0
	67 SR 1119	Creeping	3.7	3.7	3.8	4.7	8.0	9.0
	68 SR 7150	Colonial	3.5	4.0	2.9	5.2	5.0	2.5
	69 Brighton	Creeping	3.3	3.5	3.1	4.4	7.0	9.0
	70 SCBF 3	Colonial	3.3	3.3	3.4	5.7	7.5	4.0

(Continued)

Table 8. Bentgrass fairway trial, 2010 (continued).

Cultivar or Selection	Species	-----Turf Quality ¹ -----			Dollar Spot ² 2012 Avg.	Brown Patch ³ May 2012	Dacthal Recovery ⁴ June 2012
		2011- 2012 Avg.	2011 Avg.	2012 Avg.			
71 SR 7100	Colonial	3.1	3.1	3.1	5.6	5.0	4.3
72 Penncross	Creeping	2.8	3.3	2.3	4.4	7.3	9.0
73 Tye	Creeping	2.8	3.0	2.6	4.0	7.0	9.0
74 Providence	Creeping	2.5	2.3	2.7	6.0	7.7	9.0
LSD at 5% =		0.6	0.8	0.8	1.0	1.3	1.6

¹Turf quality rated on a 1 to 9 scale, where 9 = best turf quality

²Dollar spot rated on a 1 to 9 scale, where 9 = best disease resistance. Data is an average of three rating dates.

³Brown patch rated on a 1 to 9 scale, where 9 = best disease resistance

⁴Recovery from Dacthal injury rated on a 1 to 9 scale, where 9 = best recovery from herbicide damage

Table 9. Performance of velvet bentgrass cultivars and selections in a putting green trial seeded in September 2011 at North Brunswick, NJ.

Cultivar or Selection	Species	Turf Quality ¹ 2012 Avg.	Dollar Spot ² 2012 Avg.	Turf Establishment ³ Oct. 2011	Root Pythium ⁴ Oct. 2011	Spring Green-up ⁵ April 2012	Brown Patch ⁶ Aug. 2012
1 PSG 7PC2	Velvet	6.6	8.8	3.3	6.7	4.7	8.7
2 ESV Comp	Velvet	6.3	8.9	2.3	7.7	3.7	9.0
3 Legendary	Velvet	6.3	8.6	4.0	5.7	5.0	8.7
4 PST-Syn-VH9	Velvet	5.9	8.8	3.0	6.7	5.0	8.0
5 Villa	Velvet	5.9	9.0	4.7	4.3	6.0	7.3
6 CDS Comp	Velvet	5.6	8.9	3.0	8.3	3.7	8.0
7 SR 7200	Velvet	5.2	9.0	3.7	3.0	4.7	6.0
8 Greenwich	Velvet	4.9	8.3	3.0	5.3	5.0	7.7
LSD at 5% =		0.8	1.5	1.5	2.1	1.5	2.0

¹Turf quality rated on a 1 to 9 scale, where 9 = best turf quality

²Dollar spot rated on a 1 to 9 scale, where 9 = best disease resistance. Data is an average of three ratings.

³Turf establishment rated on a 1 to 9 scale, where 9 = quickest establishment of turf canopy

⁴Root Pythium disease rated on a 1 to 9 scale, where 9 = best disease resistance

⁵Spring green-up rated on a 1 to 9 scale, where 9 = earliest spring green-up

⁶Brown patch rated on a 1 to 9 scale, where 9 = best disease resistance

Table 10. Performance of creeping and colonial bentgrass cultivars and selections in a putting green trial seeded in September 2011 at North Brunswick, NJ.

Cultivar or Selection	Species	Turf Quality ¹ 2012 Avg.	Dollar Spot ² 2012 Avg.	Turf Establishment ³ Oct. 2011	Root Pythium ⁴ Oct. 2011	Spring Green-up ⁵ April 2012	Brown Patch ⁶ Aug. 2012
1 PST-ORPA Bulk	Creeping	6.6	5.0	5.7	4.7	7.0	7.7
2 PPG-AP 102	Creeping	6.5	7.1	6.0	5.7	6.7	6.3
3 CMC Comp	Creeping	6.5	6.7	3.7	7.0	6.3	6.7
4 Shark	Creeping	6.4	6.3	6.3	6.0	6.0	5.3
5 Pure Select	Creeping	6.4	6.0	5.7	4.7	6.3	6.3
6 EBC Comp	Creeping	6.3	6.3	4.0	8.0	7.3	6.3
7 LUC Comp	Creeping	6.3	6.1	4.0	7.7	7.3	7.3
8 AP-18	Creeping	6.3	6.7	6.3	5.0	7.3	5.7
9 PCM Comp	Creeping	6.2	6.3	4.7	7.3	6.0	6.3
10 PSG 1VAH10	Creeping	6.1	5.3	5.3	5.0	6.7	7.7
11 Luminary	Creeping	6.1	5.8	5.3	6.0	7.3	8.3
12 PSG RHN37	Creeping	6.0	4.2	5.7	6.3	5.0	4.3
13 PSG RHN42	Creeping	6.0	5.5	5.7	5.7	5.3	5.0
14 PSG RHN48	Creeping	6.0	4.2	5.3	4.3	6.3	7.3
15 PSG 1RJM	Creeping	5.9	4.2	5.3	5.7	5.0	7.0
16 FDC Comp	Colonial	5.9	8.7	4.3	6.3	5.3	6.0
17 HDG-10 Comp	Creeping	5.9	6.6	4.3	7.3	5.7	5.7
18 Pure Distinction	Creeping	5.9	5.8	4.7	4.7	7.0	6.0
19 RH931SLT	Creeping	5.9	5.4	5.3	4.3	4.3	6.0
20 PSG 1RHTAV3	Creeping	5.8	4.1	5.3	6.3	4.7	6.3

33

(Continued)

Table 10. Bentgrass putting green trial, 2011 (continued).

	Cultivar or Selection	Species	Turf Quality ¹ 2012 Avg.	Dollar Spot ² 2012 Avg.	Turf Establishment ³ Oct. 2011	Root Pythium ⁴ Oct. 2011	Spring Green-up ⁵ April 2012	Brown Patch ⁶ Aug. 2012
	21 OO7	Creeping	5.8	5.9	6.7	5.3	5.3	4.7
	22 PSG RH128M	Creeping	5.7	4.3	6.0	6.0	4.3	6.0
	23 CEM Comp	Colonial	5.7	8.6	3.7	7.0	7.3	6.0
	24 V-8	Creeping	5.6	6.2	6.7	5.7	6.0	4.0
	25 Barracuda	Creeping	5.6	5.6	6.0	4.3	6.3	5.7
	26 CED Comp	Colonial	5.6	8.6	4.7	8.0	7.3	5.3
	27 SRP 1RH93	Creeping	5.6	6.3	4.3	5.3	6.0	5.0
	28 PSG 1RHTV	Creeping	5.5	3.8	5.0	4.3	4.7	6.0
	29 PSG RHN411	Creeping	5.5	5.3	5.3	5.3	4.7	4.0
34	30 Authority	Creeping	5.5	6.8	6.3	5.0	6.3	4.7
	31 PSG RHN316	Creeping	5.5	5.1	5.3	5.7	5.0	5.7
	32 PSG 1RIL	Creeping	5.5	4.8	7.3	5.3	5.3	4.0
	33 Proclamation	Creeping	5.4	6.9	5.7	5.0	6.3	4.3
	34 SRP 1WM	Creeping	5.4	6.9	4.0	5.3	6.0	4.7
	35 CMD Comp	Creeping	5.4	8.6	3.7	8.0	5.7	5.3
	36 PSG RHN12	Creeping	5.4	5.5	5.0	5.3	5.3	3.7
	37 PSG 1VAH1	Creeping	5.3	3.5	6.0	4.3	6.3	7.3
	38 PSG 10SLT	Creeping	5.3	6.3	5.3	4.3	4.7	4.3
	39 Independence	Creeping	5.2	4.6	6.3	4.3	5.7	5.3
	40 PSG 1RHT33	Creeping	5.2	4.5	5.7	6.0	5.0	5.0
	41 FMM Comp	Creeping	5.2	4.4	3.7	7.3	7.0	5.3
	42 PinUp	Creeping	5.1	4.8	4.7	5.3	5.7	4.0
	43 SR 1119+Tyee	Creeping	5.1	5.0	6.3	7.0	5.7	3.3
	44 Cobra 2	Creeping	5.1	7.1	5.3	6.3	4.0	3.0
	45 PSG SLTZM2	Creeping	5.1	4.8	4.3	5.3	4.0	2.7

(Continued)

Table 10. Bentgrass putting green trial, 2011 (continued).

	Cultivar or Selection	Species	Turf Quality ¹ 2012 Avg.	Dollar Spot ² 2012 Avg.	Turf Establishment ³ Oct. 2011	Root Pythium ⁴ Oct. 2011	Spring Green-up ⁵ April 2012	Brown Patch ⁶ Aug. 2012
	46 SRP 1WM+OO7	Creeping	5.1	6.8	6.3	7.0	5.7	3.0
	47 A1/A4	Creeping	5.0	5.9	6.0	5.3	5.0	3.3
	48 Declaration	Creeping	4.9	7.5	6.0	5.7	6.3	2.7
	49 SR 1150+OO7	Creeping	4.9	5.6	5.7	5.3	3.7	4.0
	50 Penn A-4	Creeping	4.9	5.4	6.7	5.7	4.3	3.7
	51 Mackenzie+Tyee+OO7	Creeping	4.9	5.6	6.7	5.3	5.7	4.3
	52 Benchmark DSR	Creeping	4.9	6.0	5.0	5.0	4.3	3.3
	53 PSG SLTzM1	Creeping	4.8	3.4	5.7	5.7	5.0	3.0
	54 Penn A-1	Creeping	4.8	6.4	5.7	5.3	5.3	3.0
35	55 GMCSLT	Creeping	4.8	6.8	5.3	4.7	5.7	3.3
	56 13M	Creeping	4.8	6.8	5.7	4.3	5.7	4.0
	57 Penneagle II	Creeping	4.8	5.6	6.0	4.0	6.7	3.7
	58 Mackenzie+SR 1150+OO7	Creeping	4.7	5.8	6.7	3.7	5.0	3.3
	59 Tyee	Creeping	4.7	5.3	6.0	5.7	4.3	4.0
	60 PSG SLTzM3	Creeping	4.7	4.2	4.3	5.0	4.3	4.3
	61 PSG 1B158	Creeping	4.7	6.1	5.3	5.3	5.0	5.3
	62 T-1	Creeping	4.6	6.0	5.3	4.3	3.7	4.0
	63 SRP 1WM+Mackenzie	Creeping	4.6	5.9	5.7	5.3	5.3	4.3
	64 SRP 1WM+Tyee	Creeping	4.5	5.1	5.7	5.0	5.7	4.0
	65 Ninety-Six Two	Creeping	4.5	4.1	5.7	4.7	5.7	3.3
	66 SR 1150	Creeping	4.4	5.6	5.3	5.7	4.3	3.3
	67 A08-FT12	Colonial	4.3	8.2	5.0	7.0	6.0	4.3
	68 PSG 1RIE	Creeping	4.3	5.6	5.3	6.3	4.7	3.3
	69 Crystal BlueLinks	Creeping	4.2	5.6	7.0	4.7	4.3	3.3
	70 Mackenzie	Creeping	4.1	5.2	4.7	5.0	3.7	4.3

(Continued)

Table 10. Bentgrass putting green trial, 2011 (continued).

	Cultivar or Selection	Species	Turf Quality ¹ 2012 Avg.	Dollar Spot ² 2012 Avg.	Turf Establishment ³ Oct. 2011	Root Pythium ⁴ Oct. 2011	Spring Green-up ⁵ April 2012	Brown Patch ⁶ Aug. 2012
	71 Mackenzie+SR 1150	Creeping	4.0	5.5	5.7	4.3	4.7	3.0
	72 Kingpin	Creeping	4.0	6.1	5.3	5.7	5.7	4.0
	73 MacSLT	Creeping	4.0	5.6	5.3	4.7	4.3	3.3
	74 Putter	Creeping	3.9	5.9	6.0	5.0	3.3	2.7
	75 PSG 7CL3	Creeping	3.9	7.9	4.0	5.3	7.0	6.7
	76 PSG 7CL33	Creeping	3.9	8.1	4.7	5.3	7.7	3.7
	77 Alpha	Creeping	3.9	6.0	6.3	4.0	4.0	2.3
	78 PSG 7CL6	Creeping	3.8	8.3	3.5	5.0	6.5	4.0
	79 Crenshaw	Creeping	3.8	4.1	4.7	5.0	4.3	2.0
36	80 Memorial	Creeping	3.7	7.7	5.0	4.3	4.0	3.0
	81 L-93	Creeping	3.7	5.4	6.0	5.0	3.3	2.3
	82 Imperial	Creeping	3.6	4.0	5.3	3.7	5.3	3.3
	83 EBM	Colonial	3.6	8.2	5.7	5.7	5.3	4.7
	84 SR 1119	Creeping	3.6	5.3	5.7	4.0	4.3	2.3
	85 Southshore	Creeping	3.5	5.3	6.0	3.3	4.0	2.7
	86 Capri	Colonial	3.5	8.2	5.0	3.7	6.7	5.3
	87 Pennlinks II	Creeping	3.5	6.7	5.7	4.3	4.3	3.0
	88 Penn G-2	Creeping	3.5	4.8	1.0	9.0	3.7	4.7
	89 Penncross	Creeping	3.4	5.9	7.3	5.3	5.7	3.7
	90 SandSLT	Creeping	3.4	5.7	6.0	5.3	5.0	2.3
	91 ProvSLT	Creeping	3.2	4.8	5.7	6.0	4.3	2.3
	92 Brighton	Creeping	3.1	5.8	5.7	4.3	4.0	3.3
	93 BCD	Colonial	3.0	8.0	4.0	6.3	6.0	5.0
	94 Sandhill	Creeping	2.9	5.9	1.0	9.0	3.3	5.0
	95 Century	Creeping	2.9	4.2	1.0	9.0	3.0	3.7

(Continued)

Table 10. Bentgrass putting green trial, 2011 (continued).

Cultivar or Selection	Species	Turf Quality ¹ 2012 Avg.	Dollar Spot ² 2012 Avg.	Turf Establishment ³ Oct. 2011	Root Pythium ⁴ Oct. 2011	Spring Green-up ⁵ April 2012	Brown Patch ⁶ Aug. 2012
96 Tiger 2	Colonial	2.8	8.0	5.7	5.0	4.7	4.3
97 Alister	Colonial	2.6	7.6	3.7	7.7	5.0	4.0
98 Providence	Creeping	2.4	6.6	1.0	9.0	2.7	3.7
LSD at 5% =		0.8	1.5	1.5	2.1	1.5	2.0

¹Turf quality rated on a 1 to 9 scale, where 9 = best turf quality

²Dollar spot rated on a 1 to 9 scale, where 9 = best disease resistance. Data is an average of three ratings.

³Turf establishment rated on a 1 to 9 scale, where 9 = quickest establishment of turf canopy

⁴Root Pythium disease rated on a 1 to 9 scale, where 9 = best disease resistance

⁵Spring green-up rated on a 1 to 9 scale, where 9 = earliest spring green-up

⁶Brown patch rated on a 1 to 9 scale, where 9 = best disease resistance

Table 11. Performance of creeping and colonial bentgrass cultivars and selections in a fairway trial seeded in September 2011 at North Brunswick, NJ.

Cultivar or Selection	Species	Turf Quality ¹ 2012 Avg.	Turf Establishment ² Oct. 2011	Spring Green-up ³ April 2012	Dacthal Damage ⁴ 2012 Avg.	Dacthal Recovery ⁵ June 2012	Dollar Spot ⁶ Oct. 2012
1 LUC Comp	Creeping	7.6	4.3	7.0	8.8	9.0	6.7
2 EBC Comp	Creeping	7.6	4.7	8.0	7.5	9.0	8.7
3 CMC Comp	Creeping	7.6	4.7	7.0	8.5	9.0	8.7
4 PCM Comp	Creeping	7.5	5.0	8.7	8.5	9.0	6.7
5 PPG-AP 102	Creeping	7.1	6.3	7.7	8.0	9.0	6.3
6 FDC Comp	Colonial	6.9	4.0	7.0	7.8	8.0	9.0
7 AP-18	Creeping	6.9	6.3	8.0	8.0	9.0	7.0
8 Luminary	Creeping	6.9	6.3	7.0	8.3	9.0	7.0
9 Proclamation	Creeping	6.8	6.7	6.0	7.2	9.0	7.7
10 PinUp	Creeping	6.5	7.7	5.7	6.7	9.0	6.7
11 Barracuda	Creeping	6.5	6.0	6.7	6.8	9.0	7.3
12 CED Comp	Colonial	6.4	4.7	5.7	6.8	6.3	8.0
13 Shark	Creeping	6.3	6.7	6.3	7.0	9.0	5.7
14 GMCSLT	Creeping	6.3	7.0	7.3	6.3	9.0	6.7
15 Authority	Creeping	6.2	6.3	5.7	5.8	9.0	7.0
16 HDG-10 Comp	Creeping	6.1	4.3	6.3	6.2	9.0	5.7
17 SRP 1WM	Creeping	6.0	5.7	7.0	5.3	9.0	8.0
18 PSG 1RHTAV3	Creeping	5.9	6.0	5.3	6.7	9.0	3.7
19 PSG 1RJM1	Creeping	5.7	6.0	4.3	6.8	9.0	4.0
20 CMD Comp	Colonial	5.7	4.0	5.0	6.0	5.3	8.3

Table 11. Bentgrass fairway trial, 2011 (continued).

	Cultivar or Selection	Species	Turf Quality ¹ 2012 Avg.	Turf Establishment ² Oct. 2011	Spring Green-up ³ April 2012	Dacthal Damage ⁴ 2012 Avg.	Dacthal Recovery ⁵ June 2012	Dollar Spot ⁶ Oct. 2012
	21 Declaration	Creeping	5.6	7.3	6.3	6.7	9.0	7.7
	22 PSG 1RHTV	Creeping	5.6	6.0	4.3	6.7	9.0	2.7
	23 PSG 1RHT33	Creeping	5.5	5.7	5.7	6.7	9.0	3.3
	24 OO7	Creeping	5.5	6.0	5.7	5.5	9.0	6.3
	25 PSG SLTZM1	Creeping	5.4	5.3	5.0	6.5	9.0	3.7
	26 SRP 1RH93	Creeping	5.4	5.3	4.7	4.8	9.0	6.0
	27 Independence	Creeping	5.4	7.0	5.3	6.8	9.0	5.3
	28 A08-FT12	Colonial	5.3	6.0	6.3	6.0	6.0	8.7
	29 PSG RH128M	Creeping	5.3	6.3	5.7	4.5	9.0	4.7
39	30 V-8	Creeping	5.3	6.3	5.7	5.5	9.0	6.3
	31 RH93SLT	Creeping	5.3	5.7	4.0	5.2	9.0	6.3
	32 CEM Comp	Colonial	5.2	5.3	6.3	6.0	4.7	8.3
	33 Benchmark DSR	Creeping	5.2	6.7	5.3	6.0	9.0	7.0
	34 PSG SLTZM3	Creeping	5.2	6.0	5.0	6.2	9.0	6.0
	35 PSG 1RILE	Creeping	5.2	7.3	5.7	7.0	9.0	5.0
	36 FMM Comp	Creeping	5.2	3.7	5.3	6.3	9.0	6.7
	37 Cobra 2	Creeping	5.2	6.3	5.3	5.2	9.0	6.3
	38 PSG 107SLT	Creeping	5.1	6.7	6.3	5.3	9.0	5.7
	39 SRP 1WM+Mackenzie	Creeping	5.1	5.7	6.7	4.7	9.0	7.3
	40 PSG 1RIL	Creeping	5.1	7.0	5.0	7.3	9.0	3.0
	41 Mackenzie+SR 1150+OO7	Creeping	5.0	6.7	5.7	4.3	9.0	6.7
	42 SR 1150+OO7	Creeping	4.8	6.3	5.7	4.7	9.0	6.7
	43 SRP 1WM+OO7	Creeping	4.8	5.7	5.0	4.0	9.0	6.7
	44 SRP 1WM+Tyee	Creeping	4.6	5.7	5.0	4.7	9.0	6.7
	45 13M	Creeping	4.4	7.3	6.0	5.0	9.0	8.0

(Continued)

Table 11. Bentgrass fairway trial, 2011 (continued).

	Cultivar or Selection	Species	Turf Quality ¹ 2012 Avg.	Turf Establishment ² Oct. 2011	Spring Green-up ³ April 2012	Dacthal Damage ⁴ 2012 Avg.	Dacthal Recovery ⁵ June 2012	Dollar Spot ⁶ Oct. 2012
	46 Imperial	Creeping	4.3	6.0	3.7	5.0	9.0	5.3
	47 PSG SLTZM2	Creeping	4.3	6.0	3.7	5.5	9.0	6.3
	48 SR 1119+Tyee+OO7	Creeping	4.3	6.7	4.7	4.2	9.0	7.3
	49 EBM	Colonial	4.3	6.3	5.3	4.2	3.0	8.3
	50 L-93	Creeping	4.3	6.0	5.3	4.5	9.0	8.0
	51 T-1	Creeping	4.3	6.3	4.7	5.0	9.0	6.0
	52 Mackenzie+Tyee+OO7	Creeping	4.2	6.0	4.0	4.3	9.0	6.3
	53 PST-0HFN Bulk	Colonial	4.2	3.0	3.0	4.8	7.5	8.0
	54 Tyee	Creeping	4.1	5.7	4.3	5.0	9.0	5.3
40	55 PSG 1B158	Creeping	4.1	6.0	5.7	4.2	9.0	4.7
	56 PST-0HME Bulk	Colonial	4.1	2.3	3.3	5.8	9.0	7.3
	57 Mackenzie+SR 1150	Creeping	4.0	5.3	5.7	4.0	9.0	6.7
	58 MacSLT	Creeping	3.9	6.3	4.0	3.7	9.0	6.7
	59 Putter	Creeping	3.9	6.0	4.0	5.3	9.0	5.7
	60 Ninety-Six Two	Creeping	3.9	6.3	4.3	4.0	9.0	4.7
	61 Kingpin	Creeping	3.8	6.7	3.7	4.7	9.0	6.3
	62 PSG NBC	Colonial	3.8	5.7	5.7	2.7	1.3	8.3
	63 Southshore	Creeping	3.8	6.0	3.7	4.8	9.0	4.3
	64 SR 1150	Creeping	3.8	5.7	6.0	3.8	9.0	5.3
	65 Crenshaw	Creeping	3.6	6.7	4.3	3.8	9.0	5.0
	66 Mackenzie	Creeping	3.6	4.7	5.3	4.8	9.0	6.0
	67 SR 1119	Creeping	3.5	5.7	5.0	3.5	9.0	6.7
	68 Capri	Colonial	3.4	6.7	5.0	3.0	2.0	8.7
	69 Alpha	Creeping	3.4	6.3	4.0	4.8	9.0	6.0
	70 Memorial	Creeping	3.3	7.3	4.7	3.7	9.0	7.7

(Continued)

Table 11. Bentgrass fairway trial, 2011 (continued).

Cultivar or Selection	Species	Turf Quality ¹ 2012 Avg.	Turf Establishment ² Oct. 2011	Spring Green-up ³ April 2012	Dacthal Damage ⁴ 2012 Avg.	Dacthal Recovery ⁵ June 2012	Dollar Spot ⁶ Oct. 2012
71 PPG-AT 101	Colonial	3.2	6.3	4.7	2.3	1.3	8.3
72 Brighton	Creeping	3.0	6.3	4.7	3.8	9.0	7.3
73 BCD	Colonial	2.9	4.7	5.0	2.7	1.0	8.3
74 Penn G-2	Creeping	2.9	1.0	3.3	5.8	9.0	7.0
75 SandSLT	Creeping	2.7	6.3	4.7	4.2	9.0	8.3
76 ProvSLT	Creeping	2.7	7.0	3.3	2.8	9.0	6.7
77 SR 7100	Colonial	2.7	2.0	4.0	3.2	3.0	8.3
78 Century	Creeping	2.7	1.0	3.0	5.8	9.0	6.3
79 Alister	Colonial	2.5	5.0	3.3	1.8	1.0	8.0
80 SR 7150	Colonial	2.5	3.3	4.3	1.2	1.7	8.7
81 Tiger 2	Colonial	2.4	6.7	4.0	1.3	1.7	8.3
82 Providence	Creeping	2.1	1.0	3.0	4.7	9.0	6.7
83 PSG 7DB	Dryland	2.0	6.7	2.3	1.0	1.0	8.0
84 Sandhill	Creeping	1.8	1.0	3.0	4.7	9.0	6.0
LSD at 5% =		0.8	1.2	1.6	1.3	0.5	1.6

¹Turf quality rated on a 1 to 9 scale, where 9 = best turf quality

²Turf establishment rated on a 1 to 9 scale, where 9 = quickest establishment of turf canopy

³Spring green-up rated on a 1 to 9 scale, where 9 = earliest spring green-up

⁴Injury due to Dacthal rated on a 1 to 9 scale, where 9 = best resistance to herbicide damage. Data is an average of two ratings.

⁵Recovery from Dacthal injury rated on a 1 to 9 scale, where 9 = best recovery from herbicide damage

⁶Dollar spot rated on a 1 to 9 scale, where 9 = best disease resistance. Data is an average of three ratings.

Table 12. Maintenance practices performed in 2012 on bentgrass trials at North Brunswick, NJ.

Table	Test	Fertility ¹	Mowing Height (inches)	Cultivation/Top Dress	Fungicides	Insecticides	Herbicides
1	2008 Greens, NTEP	1.85 (N); 28 fl oz Micro-green; 0.283 lb P ₂ O ₅ ; 0.117 lb K ₂ O; 3.99 oz FeSO ₄	0.110	April–Aug./Oct./Nov.–top dressed July/Aug.–Tricure AD (wetting agent)	April–Emerald May–Daconil Ultrex June–Daconil Ultrex/Signature; Heritage TL; Emerald July–Daconil Ultrex/Endorse; Signature/Daconil Ultrex	June–Acelepryn (grubs)	June/July–Acclaim Extra (post-emergence weeds)
42	2 2008 Fairway, NTEP	2.05 (N)	0.375	May–Oct.–Tricure AD (wetting agent) Oct.–aerated (solid)	April–Emerald May–Daconil Ultrex June–Daconil Ultrex/Signature; Curalan EG; Heritage TL; Emerald July–Daconil Ultrex/Signature; Segway Aug.–Daconil Ultrex/Affirm WDG; Daconil Ultrex Sept.–Daconil Ultrex/Chipco 26GT; Daconil Ultrex	none	April–Dacthal Flo (pre-emergence weeds)

(Continued)

Table 12. Bentgrass maintenance practices, 2012 (continued).

Table	Test	Fertility ¹	Mowing Height (inches)	Cultivation/Top Dress	Fungicides	Insecticides	Herbicides
3	2008 Fairway	1.95 (N)	0.375	May–Aug.–Tricure AD (wetting agent)	April–Emerald May–Daconil Ultrex June–Curalan EG; Heritage TL; Emerald; Prostar July–Segway; Heritage TL; Curalan EG	none	April–Dacthal Flo (pre-emergence weeds)
4	2009 Greens	2.55 (N); 24 fl oz Micro-green; 0.208 lb P ₂ O ₅ ; 0.217 lb K ₂ O; 5.32 oz FeSO ₄	0.110	April–May/Aug./ Oct.–Nov.–top-dressed June–Oct.–Tricure AD (wetting agent)	April–Bayleton Flo Sept.–Prostar; Daconil Ultrex; Emerald Oct.–Daconil Ultrex	June–Acelepryn (grubs)	June–Acclaim Extra (post-emergence weeds)

Table 12. Bentgrass maintenance practices, 2012 (continued).

Table	Test	Fertility ¹	Mowing Height (inches)	Cultivation/Top Dress	Fungicides	Insecticides	Herbicides
5	2009 Fairway	1.76 (N)	0.375	May–July–Tricure AD (wetting agent)	April–Emerald May–Daconil Ultrex June–Curalan EG; Emerald; Heritage TL; Prostar July–Segway; Curalan EG; Heritage TL; Emerald; Signature/Daconil Ultrex	none	April–Dacthal Flo (pre-emergence weeds)
44	6 2010 Greens, Velvet	1.88 (N); 28 fl oz Micro-green; 0.233 lb P ₂ O ₅ ; 3.99 oz FeSO ₄	0.110	April–Aug./Oct.–Nov.–top dressed July–Aug.–Tricure AD (wetting agent)	June–Emerald July–Curalan EG; Emerald	July–Acelepryn (grubs)	July–Acclaim Extra (post-emergence weeds)
7	2010 Greens, Creeping and Colonial	1.88 (N); 28 fl oz Micro-green; 0.233 lb P ₂ O ₅ ; 3.99 oz FeSO ₄	0.110	April–Aug./Oct.–Nov.–top dressed July–Aug.–Tricure AD (wetting agent)	June–Emerald July–Curalan EG; Emerald	July–Acelepryn (grubs)	July–Acclaim Extra (post-emergence weeds)

(Continued)

Table 12. Bentgrass maintenance practices, 2012 (continued).

Table	Test	Fertility ¹	Mowing Height (inches)	Cultivation/Top Dress	Fungicides	Insecticides	Herbicides
8	2010 Fairway	2.58 (N)	0.375	July–Aug.–Tricure AD (wetting agent) Oct.–aerated (solid)	Sept.–Emerald	none	April–Dacthal Flo (pre-emergence weeds)
9	2011 Greens, Velvet	4.22 (N); 20 fl oz Micro-green; 0.058 lb P ₂ O ₅ ; 0.167 lb K ₂ O; 3.99 oz FeSO ₄	0.125 (as of July 1)	April–Aug./Oct.–Nov.–top dressed Oct.–aerated (solid)	May–Daconil Ultrex June–Curalan EG Nov.–Daconil Ultrex	July–Acelepryn (grubs)	April–Dacthal Flo (pre-emergence weeds); Weedar 64/Banvel/Lontrel (post-emergence weeds)
10	2011 Greens, Creeping and Colonial	4.22 (N); 20 fl oz Micro-green; 0.058 lb P ₂ O ₅ ; 0.167 lb K ₂ O; 3.99 oz FeSO ₄	0.125 (as of July 1)	April–Aug./Oct.–Nov.–top dressed Oct.–aerated (solid)	May–Daconil Ultrex June–Curalan EG Nov.–Daconil Ultrex	July–Acelepryn (grubs)	April–Dacthal Flo (pre-emergence weeds); Weedar 64/Banvel/Lontrel (post-emergence weeds)
11	2011 Fairway	3.98 (N); 1.33 oz FeSO ₄	0.375	April–top dressed June–Aug.–Tricure AD (wetting agent) Oct.–aerated (solid)	June–Signature; Prostar July–Segway Aug.–Disarm	July–Acelepryn (grubs)	April–Dacthal Flo (pre-emergence weeds); Weedar 64/Banvel/Lontrel (post-emergence weeds)

¹Annual nitrogen applied (lb/1000 ft²). Additional fertilizers as noted (per 1000 ft²)