

# Top bentgrasses in National Turfgrass Evaluation Program tests

Name	AZ1	GA1	GA2	IA1	IL1	IL2	KS1	KY1	KY2	MA1	MI1	MN1	MO1	MS1	NJ1	OK1	PA1	QE1	RI1	SC1	TX1	VA1	WA1	WA3	WA4	Mean '95 Rating	
*Lofts L-93	7.2	4.4	1.2	5.8	5.4	6.8	7.1	8.3	6.1	6.2	5.7	7.5	6.0	7.4	7.0	7.8	7.5	6.8	5.2	7.2	6.5	7.2	5.9	5.6	6.4	7.7	2
*Penn A-1	6.8	4.1	1.0	5.3	5.1	5.7	6.5	7.3	5.8	5.6	6.3	7.6	5.0	7.0	7.2	7.6	7.2	6.1	6.8	6.9	6.0	6.8	5.7	5.8	6.1	7.3	4
*Penn G-2	6.5	4.1	1.2	6.7	5.3	5.7	5.7	7.4	5.7	6.1	6.2	6.8	4.9	6.7	7.0	7.3	7.1	6.9	5.8	6.6	5.4	6.9	5.7	5.6	6.0	7.7	8
*Penn A-4	7.7	3.9	1.1	4.8	4.9	6.3	5.9	7.8	4.4	6.2	5.8	7.6	4.4	6.3	7.2	7.1	7.4	5.6	6.1	7.0	5.8	7.4	6.0	6.1	6.0	7.9	1
*Cato	7.2	4.4	1.1	6.0	5.0	5.8	6.0	7.6	5.1	5.9	5.4	7.6	4.8	6.6	6.7	7.2	7.2	6.0	5.7	7.1	5.7	6.9	5.4	5.8	6.0	7.4	6
*Providence	6.8	4.7	1.1	6.0	5.1	5.7	6.3	7.7	5.6	5.9	5.4	7.4	4.9	6.1	6.7	7.1	7.1	5.7	4.6	7.1	5.7	6.6	5.7	5.5	5.9	7.6	3
*Penn G-6	5.9	4.2	1.0	5.4	4.8	5.6	5.9	7.6	5.1	5.8	5.9	7.0	4.9	6.3	7.4	7.1	7.3	5.9	5.6	6.8	6.0	6.9	5.6	5.3	5.9	7.3	7
*Southshore	6.4	4.5	1.0	5.2	5.4	5.9	6.0	7.3	4.7	5.7	5.0	6.8	4.8	5.6	6.7	6.8	7.3	6.2	5.7	7.2	5.2	6.7	5.4	5.3	5.8	7.3	9
Imperial	6.3	4.0	1.0	5.9	5.0	7.0	4.7	7.0	5.0	5.7	4.8	7.0	4.8	5.3	6.0	5.8	7.3	6.0	4.8	7.0	5.2	6.1	5.5	6.0	5.6	7.6	11
Century	7.0	4.0	1.2	5.5	5.3	5.7	4.3	7.1	5.2	5.6	5.1	6.3	4.7	4.8	6.3	5.8	7.2	6.3	4.8	6.8	4.6	6.7	5.6	5.9	5.6	7.5	10
*Pennlinks	5.8	4.3	1.1	5.2	5.1	6.2	6.2	7.7	5.3	5.8	4.9	7.6	4.5	5.6	5.7	6.4	6.9	5.7	5.1	6.7	5.1	5.9	4.7	4.8	5.6	6.8	14
*Crenshaw	7.0	4.7	1.0	6.2	5.0	6.0	4.2	7.2	4.9	5.7	4.5	7.0	4.7	3.8	6.2	5.1	6.9	6.5	5.9	6.8	4.5	6.8	5.0	5.0	5.5	7.7	5
BAR WS 42102	5.4	3.5	1.1	5.8	5.0	4.6	5.5	7.6	5.4	5.8	5.6	7.0	5.0	5.3	6.0	6.6	7.1	6.3	3.3	6.6	5.0	7.0	4.8	5.0	5.5	7.4	16
*SR 1020	6.8	4.1	1.1	6.1	5.0	4.5	4.5	7.2	5.0	5.8	5.2	6.9	4.7	4.7	6.3	5.8	6.6	5.7	5.0	6.8	4.6	6.7	5.2	5.6	5.5	7.4	13
DG-P	5.6	4.2	1.1	5.3	5.0	6.8	5.6	7.3	5.3	5.5	4.6	7.4	4.8	5.0	6.0	6.2	6.9	5.1	3.5	6.9	4.9	6.4	5.1	N/A	5.5	7.0	22
LSD	0.6	0.7	0.3	1.0	0.7	1.9	0.6	0.5	0.5	0.6	0.9	0.5	1.0	0.5	0.5	0.5	0.7	0.8	0.6	0.6	0.6	0.7	0.5	0.6	0.1	0.5	

\* Available on the market in 1996.  
 The following are conditions at the sites of the bentgrass national tests, including, in order, location, soil texture, soil pH, nitrogen applied (in pounds per 1,000 square feet) and mowing height (in inches). All sites were irrigated only to prevent stress, except GA2, which was watered only during severe stress:  
 AZ1 — Tucson, Ariz., sand, 7.6-8.5, 5.1-6.0, 0-5.  
 GA1 — Griffin, Ga. (high soil pH), sandy clay loam, 5.6-6.0, 3.1-4.0, 0.6-1.0.  
 GA2 — Griffin, Ga. (low soil pH), sandy clay loam, 5.6-6.0, 3.1-4.0, 0.6-1.0, only during severe stress.  
 IA1 — Ames, Iowa, silty clay loam, 7.1-7.5, 3.1-4.0, 0-5.  
 IL1 — Urbana, Ill., silt loam and silt, N/A, 3.1-4.0, 0-5.  
 IL2 — Carbondale, Ill., silty clay loam, 6.1-6.5, 4.1-5.0, 0-5.  
 KS1 — Manhattan, Kan., sand, 7.6-8.5, 3.1-4.0, 0-5.  
 KY1 — Lexington, Ky., sand, 7.1-7.5, 4.1-5.0, 0-5.  
 KY2 — Lexington (Griffin Gate GC), sand, 7.1-7.5, 4.1-5.0, 0-5.  
 MA1 — Amherst, Mass., loam, 6.1-6.5, 4.1-5.0, 0-5.  
 MI1 — East Lansing, Mich., sand, 7.1-7.5, N/A, 0-5.

MN1 — St. Paul, Minn., silty clay loam, 7.6-8.5, 5.1-6.0, 0-5.  
 MO1 — Columbia (traffic), Mo., sand, 6.6-7.0, 5.1-6.0, 0-5.  
 MO2 — Columbia, Mo., (no traffic), silt loam and silt, 6.1-6.5, 1.1-2.0, 0.1562.  
 NJ1 — North Brunswick, N.J., sandy loam, 5.6-6.0, 4.1-5.0, 0-5.  
 OK1 — Stillwater, Okla., sand, 6.6-7.10, 8.1+, 0-5.  
 PA1 — University Park, Pa., loamy sand, 6.1-6.5, 2.1-3.0, 0-5.  
 QE1 — Quebec, N/A.  
 RI1 — Kingston, silt loam and silt, 6.6-7.0, 4.1-5.0, 0-5.  
 SC1 — Florence, S.C., sandy loam, 6.1-6.5, 4.1-5.0, 0-5.  
 TX1 — Dallas, Texas, loamy sand, 6.1-6.5, 7.1-8.0, 0-5.  
 VA1 — Blacksburg, Va., sand, 5.6-6.0, 5.1-6.0, 0-5.  
 WA1 — Pullman, Wash., silt loam and silt, 5.6-6.0, 5.1-6.0, 0-5.  
 WA3 — Puyallup, Wash., (native soil), sandy loam, 5.6-6.0, 5.1-6.0, 0-5.  
 WA4 — Puyallup, sand, 6.1-6.5, 7.1-8.0, 0-5.

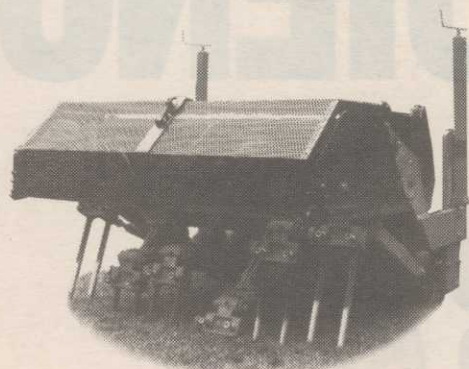
## Strides continue in bent breeding

By MARK LESLIE

BELTSVILLE, Md. — Despite its minute sales in the overall turfgrass picture, bentgrass continues to be the trigger on the gun for seed company and university researchers hoping to make their name premiere among golf courses. "Only 1 million pounds [of seed] is sold worldwide annually, but having bentgrass expands your entire produce line," said Kevin Morris, national director of the National Turfgrass Evaluation Program headquartered here. "You have a product to deliver quality and don't have to de-

pend on someone else. That helps your marketing staff." To that end, major bentgrass research efforts are unabated as seed companies and universities work to produce the finest putting surfaces. This year's NTEP results show a juxtapositioning in the top bentgrass cultivars from the previous year's test. "Normally, you don't see a lot of flip-flopping [in the rankings] with bentgrasses," Morris said. "Bents can flip-flop over time if some disease comes along

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# Seed companies act to maximize purity in quality control

By MARK LESLIE

Seed companies are taking measures to reduce the threat of *Poa trivialis* contamination in shipments of bluegrass and bentgrass, pulling out of certain areas of central Washington, increasing the size of their seed tests, reducing seed-lot sizes and designating bagging areas as strictly bentgrass.

All the action stems from reported increases in the amount of *Poa trivialis* seeds in bentgrass and bluegrass seed-lot tests.

"Cross-contamination is

bound to happen. These [seed farms and seed-bagging operations] aren't sterile environments," said Chuck Hutton of O.M. Scott's St. Louis office.

Saying the seed industry polices itself to ward off contamination, Seed Research of Oregon's (SRO) Skip Lynch said: "Only a criminal is going to sell you bad seed. There are federal criminal laws."

The Oregon state Department of Agriculture "recently effected a control order in northeast Oregon and quarantined Umatilla

and Morrow counties so *Poa trivialis* won't become a problem in other production areas," said Commodity Inspection Division Field Operations Manager Dennis Isaacson.

A control order had previously existed in Union County, he said, adding: "There are still large regions in the state where it is approved for growth. This control order sets aside these counties as *Poa trivialis*-free so other grasses can be grown without the threat of contamination."

Seed companies are responding by requesting more stringent tests on some seeds.

"The last couple of years there has been a higher incidence of customers — probably between 5 and 10 percent more — asking us to test more seed than the standard," said Roger Danielson, director of Oregon State University's seed laboratory, which does Oregon's testing for blue-tag and sod-quality seed. "The commercial labs are also testing bigger amounts of seed." Whereas 10-gram tests are

done on Kentucky bluegrass for blue-tag certification, Danielson said 25-gram examinations, the standard for sod-quality testing, "are fairly common."

Seed companies have taken various actions to deal with the problem. For its part, SRO:

- Is pulling "as many acres as we can every year out of the central Oregon area and moving that production to the Willamette Valley," Lynch said.

- Has its bentgrass seed tested in lot sizes of 10,000 pounds instead of the 55,000 maximum.

- Has tightened up its tests, performing a 5-gram crop and weed-free check on top of the 2.5-gram noxious weed search done on bentgrass and is labeling the seed as "greens quality."

- Has made gold-tag (or sod-quality) certification available as a "special-request item."

At Scott, Hutton said:

- The bentgrass is mixed and bagged in "a completely different facility."

- A platinum-tag certification has been added, taking certification "to a new level."

"All blue tag is, is a statement of genetic purity," said Lynch. "It is not a statement of seed purity. And there is a fine line there. You can certify the worst variety in the world and have it blue-tagged. It could have whatever the upper level of allowable weeds is."

"It's like stating a Taurus is a Taurus," Hutton added. "It doesn't mean there's an engine under the hood."

"Nobody can guarantee there will be no weeds in their seed," Hutton said. "But we are trying to give you the largest view we can [with larger gram tests]."

Platinum-tag tests, he said, are done on 2.5 grams for the purity test as well as the crop and weed search. "The crop area is the most important part for turf management," Hutton said. "That's where all the problems will be hiding."

All the measures the seed companies are taking, Hutton said, are "to protect the owner, and everybody, really. The only person unprotected is the contractor, who has to pay more for it."



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## Supers as buyers

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in an area never before exposed to it, or if thatch becomes a problem.

"Do some have thatch problems? Yes, of course they do. Do some have disease problems? Yes. Are there going to be problems in golf course situations where they are dethatching all the time? Probably not. But people need to know there may be problems."

Also, Morris said that while most test plots across the country are maintained like a green — aerated and dethatched, "it's not like a golf course green. There's no traffic on them... Basically, we're trying to categorize these varieties and determine their strengths and weaknesses."