

# Nat'l program finishes first year of new bluegrass tests

By MARK LESLIE

**K**entucky bluegrasses, which "got a bad name because they were used in the wrong places," will make a comeback, predicted the national director of the U.S. Department of Agriculture's National Turfgrass Evaluation Program.

Kevin Morris said from his Beltsville, Md., office: "Bluegrasses went out of vogue for awhile. Tall fescues and ryegrasses were in vogue. I think bluegrasses will make a comeback."

Morris has released the first-year results of new three-year national tests on Kentucky bluegrasses under low-maintenance conditions and under medium-to-high maintenance. This is the first year bluegrasses have been tested according to type of maintenance.

He cited the adaptability of bluegrass, which can be used in a variety of situations across the United States, from athletic fields to parks to roadsides.

On golf courses, Morris said, lower-maintenance type bluegrasses could do well in the roughs and other low-maintenance areas.

"The main thing is separating out the different varieties and plant types and deciding which types would work well in which situations and environments and using those," he said.

"There are certain types, like common Kentucky bluegrass, that are not acceptable for a homeowner here in Maryland. It has too many disease problems. But it will do a pretty good job in a low-maintenance area like a roadside. It does a better job in the Midwest, where they don't have so many disease problems.

"Some types do a very good job under low-cut mowing. They are very aggressive. Using those types in that situation will work fine. But if you put them on a home lawn you will get thatch."

Morris said bluegrasses also give the option of either sodding or seeding, which can't be done with some grasses.

## IMPROVEMENTS

Bluegrasses, which are apomictic, are more difficult to improve than cross-pollinated grasses like ryegrass or tall fescues, Morris said.

"Basically 95 percent of the bluegrass plants are identical genetically. A lot of these are old varieties. Many are from the first test we did in 1980 and they're still looking pretty good," he said.

"With bluegrasses, the improvements that can be made are in specific uses, like lower maintenance and wear tolerance. It's hard to say if we have progressed in these areas because we have only one year's worth of data."

Morris said many European bluegrasses perform well in the high-maintenance test.

"European grasses tend to finer-leaved, denser, different-looking plant than American material," he said.

"That's because they do a lot of wear testing in Europe and they tend to be better at it than we are. My guess is that European plants respond better to wear than the grasses we've been using.

"On the other hand, a lot of American material is going to be better under the lower-maintenance aspect. Also, a lot of the European materials tend to have disease problems because they don't have disease pressure like we have here, espe-

## Test director predicts comeback for Kentucky bluegrass

cially on the East Coast, where we have a lot of humidity.

"They have a lot of poa annua in Europe. A lot of their grasses are lighter green because it tends to blend with poa."

Morris said seed companies also are trying to improve the seed yield of a number of varieties of bluegrasses to get a

cheaper price.

Bluegrasses that are the best for turf, he said, also "tend to not get stemmy. They don't go through much of a reproductive phase in the spring like they would if they were going to yield a lot of seed. They tend to look best in turf plots. But when you put them out in the field you don't get as much seed. So there's a

Catch-22 there.

"Finding a variety with good turf quality is the easy part. Developing it to where they can grow it and sell it economically is the tough part."



## Top 25 Kentucky bluegrasses in medium- to high-maintenance tests

Name	CO1	IA1	ID2	IL2	KY1	NJ1	NJ2	NJ3	OH1	ON1	OR2	OR9	RI1	UB1	VA1	VA2	WA1	Mean
*Midnight	8.0	7.1	7.9	5.3	6.7	6.7	8.3	6.6	6.7	4.9	4.7	5.7	4.0	7.7	4.9	4.6	5.4	6.2
*Unique	9.0	6.8	6.4	5.2	6.4	6.3	7.6	6.7	6.3	5.7	6.3	6.3	4.9	7.1	4.3	5.0	4.7	6.2
*Glade	9.0	7.4	7.5	5.1	6.8	5.4	7.5	5.2	7.0	6.1	5.6	4.5	4.3	7.6	4.3	4.7	6.9	6.2
*Ram-1	8.0	7.8	7.3	6.3	5.3	6.0	6.0	5.7	7.3	5.6	5.2	5.2	4.5	7.0	5.3	4.7	7.0	6.1
BA 77-279	9.0	7.3	7.7	4.5	5.5	5.6	7.5	5.7	5.8	5.3	6.7	6.0	4.0	7.4	4.9	5.0	5.8	6.1
*Washington	8.3	7.1	5.9	5.3	5.5	5.7	6.1	6.5	6.7	5.6	6.0	6.1	4.3	6.9	5.1	4.2	6.8	6.0
*Dawn	8.3	7.3	7.0	5.7	6.5	6.2	6.0	5.3	7.2	5.5	5.0	5.5	4.3	6.8	4.8	4.0	6.6	6.0
PST-UD-10	8.0	7.4	6.5	5.7	5.7	6.8	7.0	5.3	6.0	4.9	5.0	5.9	4.9	7.0	4.7	4.9	6.0	6.0
*1757	7.7	7.1	6.4	6.2	6.5	6.2	6.0	5.5	6.7	4.6	5.3	5.7	4.8	6.9	5.3	4.5	6.2	6.0
*Suffolk	8.0	6.8	6.3	5.6	6.2	5.9	6.1	5.5	7.3	5.7	5.3	5.6	5.1	6.6	4.8	4.2	6.3	6.0
*Julia	9.0	6.4	7.3	5.6	5.9	5.9	5.3	5.0	7.0	5.4	5.7	6.5	3.5	7.0	4.9	4.3	6.4	6.0
*Banff	8.7	6.6	6.2	6.1	6.6	6.3	6.1	5.3	6.8	5.8	4.6	5.1	4.3	6.7	5.1	4.2	6.6	6.0
WW AG 508	8.7	7.2	8.1	3.7	5.5	4.9	6.4	6.3	6.7	5.2	6.1	6.3	3.9	7.6	4.9	4.1	5.6	5.9
PST-B8-106	8.7	6.8	7.3	5.0	5.4	5.5	6.0	4.8	6.0	5.1	6.4	6.2	4.8	6.9	5.3	5.1	5.8	5.9
*Estate	8.7	7.0	6.4	5.8	6.0	5.2	5.5	5.3	7.0	5.0	6.0	5.7	4.7	6.4	5.0	5.2	5.9	5.9
*Trenton	8.0	7.1	6.3	5.9	6.8	5.9	6.1	5.3	6.2	5.6	5.0	5.7	4.6	6.8	4.9	4.3	6.0	5.9
*Alpine	9.0	6.9	7.3	4.3	4.3	5.0	7.2	5.8	6.3	6.1	6.5	5.8	4.3	7.2	4.5	4.6	5.6	5.9
*Coventry	8.7	6.3	7.2	5.0	6.5	5.1	5.9	5.3	6.7	5.0	5.8	5.3	4.4	7.0	4.7	4.9	6.4	5.9
*Haga	8.0	6.7	5.9	5.7	6.4	5.5	6.3	5.5	7.0	5.4	5.1	5.7	5.3	6.8	4.5	4.1	6.3	5.9
*Eclipse	8.3	6.7	5.9	4.7	6.9	5.9	6.5	5.7	6.2	5.1	5.1	5.9	4.5	7.3	5.0	4.9	5.7	5.9
Preakness(602)	8.7	7.2	6.5	5.1	6.0	6.3	6.3	5.8	6.3	4.9	4.1	5.4	4.8	7.0	5.4	4.5	5.7	5.9
PST-A84-803	8.7	7.1	5.6	4.9	5.3	6.3	7.0	5.8	6.5	5.8	5.2	6.0	4.3	7.0	4.5	4.5	5.4	5.9
PST-UB-12	7.7	6.8	6.7	5.3	6.0	5.8	5.3	5.2	6.8	5.6	5.0	6.1	5.0	6.6	4.9	4.8	6.3	5.9
*Georgetown	8.0	6.6	6.3	5.5	6.0	5.8	6.6	5.7	6.5	5.4	4.9	5.7	4.9	6.9	4.4	4.1	6.6	5.9
Bar VB 895	8.7	7.2	6.3	5.6	6.8	5.8	5.6	5.8	6.7	5.4	5.3	5.3	4.1	6.8	5.1	3.7	5.7	5.9
<b>LSD Value</b>	<b>1.2</b>	<b>0.8</b>	<b>1.1</b>	<b>1.3</b>	<b>1.0</b>	<b>1.0</b>	<b>0.9</b>	<b>1.0</b>	<b>1.1</b>	<b>1.4</b>	<b>1.1</b>	<b>0.5</b>	<b>1.4</b>	<b>0.5</b>	<b>0.9</b>	<b>0.7</b>	<b>1.2</b>	<b>0.3</b>

\* — Commercially available in the United States in 1992.

## Medium-high maintenance sites

Locations submitting data for the medium-high maintenance test sites follow, with code name and a description of the soil texture, nitrogen, mowing height and irrigation practiced:

- CO1: Fort Collins; silty clay loam; 4.1-5.0; 2.6-3.0; to prevent stress.
- IA1: Ames; sandy clay loam; 3.1-4.0; 2.1-2.5; to prevent stress.
- ID2: Post Falls; sandy loam; 4.1-5.0; 1.1-1.5; to prevent stress.
- IL2: Carbondale; silty clay and clay; 3.1-4.0; 1.1-1.5; to prevent stress.
- KY1: Lexington; silt loam and silt; 2.1-3.0; 1.6-2.0; no irrigation.
- NJ1: North Brunswick; loam; 4.1-5.0; 1.1-1.5; to prevent stress.

- NJ2: Adelphia; loam; 4.1-5.0; 1.1-1.5; to prevent stress.
- NJ3: Martinsville; N/A; N/A; 1.1-1.5; to prevent stress.
- OH1: Marysville; silty clay loam; 4.1-5.0; 1.6-2.0; only during severe stress.
- ON1: Richmond Hill, Ontario; silty clay and clay; N/A; 1.1-1.5; N/A.
- OR2: Hubbard (30-40% shade); silt loam and silt; 4.1-5.0; 2.1-2.5; to prevent stress.
- OR9: Summary of data from Halsey, Hubbard and Gervais; N/A; N/A; N/A.
- RI1: Kingston; silt loam and silt; 3.1-4.0; 1.1-1.5; to prevent stress.
- UB1: Beltsville, Md.; silt loam and silt; 3.1-4.0; 2.1-2.5; to prevent stress.
- VA1: Blacksburg; silt loam and silt; 3.1-4.0; 2.1-2.5; only during severe stress.
- VA2: Haymarket; silt loam and silt; 2.1-3.0; 2.6-3.0; no irrigation.
- WA1: Pullman; silt loam and silt; 3.1-4.0; 1.6-2.0; to prevent stress.

## Top 17 Kentucky bluegrass varieties in nat'l low-maintenance tests

Name	CO1	DC1	IA1	ID3	IL2	KS2	MO3	NJ1	NJ2	OH1	OR1	PA1	RI1	UB1	VA6	WA1	Mean
* Midnight	8.0	2.4	4.9	7.2	3.9	6.9	7.8	6.9	6.7	6.1	5.4	3.7	2.4	7.3	5.8	5.9	5.7
* Barmax	9.0	3.8	6.1	7.0	5.7	4.9	6.1	5.1	4.7	7.3	5.4	4.7	3.0	6.3	6.3	5.1	5.7
* Ram-1	7.0	2.8	5.9	7.1	4.3	5.6	6.9	5.6	6.2	7.2	4.4	4.3	3.2	6.2	5.8	5.7	5.5
* Cobalt	8.0	4.0	4.6	6.6	3.9	6.9	6.9	5.6	5.9	6.1	5.5	4.0	2.6	6.5	5.2	5.7	5.5
Bar VB 7037	8.7	3.4	5.8	7.3	4.4	5.9	5.8	4.6	5.0	6.2	5.4	5.0	3.3	6.7	5.2	5.2	5.5
* Sophia	8.7	2.9	5.8	7.0	3.8	6.3	6.4	5.4	5.8	6.2	4.1	3.8	3.3	7.3	5.1	5.7	5.5
* Merit	8.3	3.3	5.3	6.4	4.3	6.3	6.5	5.2	6.0	6.4	4.9	4.0	2.6	6.7	5.3	5.3	5.4
PST-C-303	8.3	3.4	5.6	6.4	4.0	6.7	6.7	4.8	4.9	6.8	5.8	4.8	3.0	6.0	5.3	4.3	5.4
* Bartilia	9.0	2.2	4.1	7.7	3.9	5.3	6.5	5.2	6.1	6.6	6.1	4.0	2.7	6.7	6.0	5.0	5.4
* Fortuna	7.7	3.1	4.8	7.3	3.3	6.4	6.8	5.5	5.7	6.2	5.3	4.7	2.7	6.8	5.1	5.2	5.4
Bar VB 895	8.3	3.9	5.8	6.5	4.1	6.5	6.4	5.2	4.8	6.6	3.7	4.8	3.4	5.5	6.0	5.1	5.4
* Livingston	8.0	3.6	5.3	5.7	5.0	6.1	6.2	5.3	5.6	6.0	5.7	4.2	2.9	6.3	5.6	5.1	5.4
ISI-21	7.7	4.9	5.7	6.3	4.5	6.3	6.0	4.7	4.5	6.8	3.1	4.3	3.2	5.9	6.9	5.3	5.4
* Crest	8.0	3.3	5.3	5.9	4.1	6.0	6.7	5.8	5.9	5.8	4.9	4.7	2.9	6.3	5.0	5.6	5.4
Bar VB 1169	8.0	4.1	4.9	7.1	5.0	5.7	6.5	4.4	5.1	5.9	5.8	4.5	2.3	6.3	5.1	5.3	5.4
* Opal	8.3	3.5	5.7	7.6	5.5	4.7	6.8	4.5	5.4	6.2	4.0	4.3	2.7	6.7	5.3	4.6	5.4
PST-C-391	8.0	5.1	5.7	6.5	4.3	6.3	6.2	4.4	5.0	6.3	5.2	3.7	2.8	6.1	5.8	4.4	5.4
<b>LSD Value</b>	<b>1.1</b>	<b>1.0</b>	<b>1.0</b>	<b>0.9</b>	<b>1.6</b>	<b>1.1</b>	<b>0.8</b>	<b>0.9</b>	<b>0.7</b>	<b>0.9</b>	<b>0.8</b>	<b>1.0</b>	<b>0.7</b>	<b>1.0</b>	<b>1.0</b>	<b>1.4</b>	<b>0.3</b>

\* — Commercially available in the United States in 1992.

## Low-maintenance test sites

Locations submitting data for the low-maintenance test sites follow, with code name and a description of the soil texture, nitrogen, mowing height and irrigation practiced:

- CO1: Fort Collins; silty clay loam; 4.1-5.0; 2.6-3.0; to prevent stress.
- DC1: Washington Monument grounds; N/A; 1.1-2.0; 2.1-2.5; only during severe stress.
- IA1: Ames; sandy clay loam; 0.0-1.0; 2.1-2.5; no irrigation.
- ID3: Rathdrum; sandy loam; 3.1-4.0; 1.1-1.5; only during severe stress.
- IL2: Carbondale; silty clay and clay; 0.0-1.0; 2.1-2.5; no irrigation.
- KS2: Wichita; sandy loam; 1.1-2.0; 2.1-2.5; only during severe stress.

- MO3: St. Louis; silty clay loam; 1.1-2.0; 2.6-3.0; only during severe stress.
- NJ1: North Brunswick; loam; 0.0-1.0; 2.1-2.5; no irrigation.
- NJ2: Pittstown; silt loam and silt; 0.0-1.0; 2.1-2.5; no irrigation.
- OH1: Marysville; silty clay loam; 1.1-2.0; 1.6-2.0; only during severe stress.
- OR1: Hubbard; silty loam and silt; 1.1-2.0; 1.6-2.0; no irrigation.
- OR3: Halsey; silt loam and silt; 1.1-2.0; 1.6-2.0; no irrigation.
- PA1: University Park (mowed four times); silt loam and silt; 0.0-1.0; 3.6-4.0; no irrigation.
- RI1: Kingston; silt loam and silt; 1.1-2.0; 1.6-2.0; only during severe stress.
- UB1: Beltsville, Md.; silt loam and silt; 0.0-1.0; 2.1-2.5; no irrigation.
- VA6: Norton; sandy clay; 1.1-2.0; 2.6-3.0; no irrigation.
- WA1: Pullman; silt loam and silt; 1.1-2.0; 1.6-2.0; only during severe stress.