

Briefs



PESTICIDE REFERRAL SERVICE READY

The Heart of America Golf Course Superintendents Association notes that the University of Missouri Extension's Pesticide Referral Service is available.

This is an information clearinghouse and directory for pesticides that might otherwise enter the waste stream.

Companies with pesticides they are not planning to use are invited to list them with the service. Likewise, companies that can make productive use of these pesticides are invited to subscribe to the service listing.

The referral service or university Extension agents won't be involved in negotiations or the actual exchange of pesticides, nor will they possess the pesticides.

For "Pesticides to Distribute" or "Subscription" forms, call the Horticulture Department at 816-373-5500 or write Karen Kerkhoff, Horticulture Specialist, 2820 S. Hwy. 291, Frontage Road, Independence, Mo. 64057.

SOD GROUP STARTS INTERNSHIP

ROLLING MEADOWS, Ill. — The American Sod Producers Association has initiated a student internship program as a way to increase awareness of career positions within the turfgrass sod production industry.

Based on information provided by student applicants, ASPA staff will advertise, keep on file and send to interested employers availability and background data.

Interested students may receive applications and further information by contacting the American Sod Producers Association, 1855-A Hicks Road, Rolling Meadows, Ill. 60008.

BEARD SHARES DROUGHT MEASURES

PALM DESERT, Calif. — Water, its scarcity and means to combat drought conditions consumed most attention at the California Golf Course Superintendents Association meeting here.

Dr. James Beard, Texas A & M University professor, offered these suggestions for those superintendents who already have had a reduction of water availability.

Raise height of cut to encourage greater root depth; modify nitrogen levels to regulate growth; adjust potassium and iron levels to increase drought resistance; cultivate turf by coring or slicing; control thatch; maximize rooting and minimize use of herbicides, especially pre-emergents; use infrequent deep irrigation; use growth regulators to reduce leaf area, thereby reducing evapotranspiration rate (ET).

Beard also discussed water requirements of shrubs versus turf. Many advocate the use of shrubs and eliminating turf areas in an effort to save water. Small trees and shrubs about six feet high will have an ET rate of three times the rate of grass. This is why grasslands are located in prairie and semi-arid zones. Trees grow naturally, in high rainfall areas.

For years, mulching around tree bases was thought to lower water requirements. Actually, a tree with bermuda grass planted underneath will use 30 percent less water than a mulched tree because of reflected light off the mulch. This light shines on the underside of the leaf and increases ET.

First-year bentgrass tests reported

USDA Evaluation Program director says reports are initial but can help supers

By Mark Leslie

The first year of nationwide testing of bentgrass varieties is complete, giving golf course superintendents initial information to form their seed-buying plans.



"If people need to make a decision this year, these test results will help. If they're looking two or three years down

the road, this will get them started," said Kevin Morris, national director of the U.S. Department of Agriculture's National Turfgrass Evaluation Program.

The USDA, which has tested fescues, ryegrasses, Bermudagrasses and bluegrasses for years, initiated bentgrass tests because "a lot more varieties are on the market," Morris said.

Seeds were planted in 1989 at sites of all climates, and Morris stressed that the seed has been in the ground only one year.

"There's value in these results but you have to be careful how you look at them. Remember, also, these results are from 1990's weather conditions," he said. "In another year or two we'll have a better indication. We usually run a test four to five years."

He added: "Down the road results might change. Fescues can move up the chart (improving their results) the longer they grow. I don't know if that will be true with the bentgrasses."

Morris said that essentially all the bentgrass varieties sold on the market are included in this test. Some others, he said, are from European companies interested in how their varieties will fare in North America.

THREE TESTS

The bentgrasses were tested on three types of soil for three conditions — "fairway/tee," "native soil - green" and "modified soil - green."

The figures in the accompanying tables represent the composite of more than a dozen ratings. Those rankings are of vigor, color, leaf texture, spring density, summer density, fall density, percent living ground cover in the summer and fall, winter color, and resistance to a variety of diseases.

Copies of the report are available from Morris at Beltsville Agricultural Research Center-West, Building 001, Room 333, Beltsville, Md. 20705.

Locations submitting data for the field trials follow, with Code name, type of soil and pH:

AL1: Auburn University, Ala., sandy loam, 4.6-5.5.
BC1: Agassiz, British Columbia, sandy clay loam, 5.6-6.0

FL1: West Palm Beach, Fla., sand, 6.6-7.0

GA1: Griffin, Ga., sand, 5.6-6.0

IL1: Carbondale, Ill., silty clay and clay, 6.1-6.5

IN1: W. Lafayette, Ind., silt loam and silt, 7.1-7.5

KS2: Wichita, Kan., sandy loam, 6.6-7.0

KY1: (for modified green): Lexington, Ky., sand, 7.1-7.5

KY1: (for fairway/tee): Lexington, Ky., silt loam and silt, 6.1-6.5

LA1: Baton Rouge, La., loamy sand, 4.6-5.5

LA2: Calhoun, La., sandy loam, 6.1-6.5

MA1: Deerfield, Mass., sand, 6.1-6.5

Fairway/Tee National Bentgrass Test

Name	IN1	KS2	KY1	NJ1	NJ3	OH1	OR4	OR5	RI1	TX1UB1	VA5	WA3	Mean
*Providence	7.1	8.4	7.8	7.3	6.5	5.9	7.5	5.3	6.0	2.8	7.3	5.4	6.4
*Forbes 89-12	7.0	8.3	7.5	6.2	5.9	6.3	6.9	6.0	5.7	3.5	6.9	5.2	6.2
*Pennncross	7.1	8.2	7.0	5.5	5.2	6.7	5.9	7.0	5.5	3.0	5.8	6.1	6.0
WVPB 89-D-15	6.6	8.0	7.3	6.7	6.2	5.9	6.3	6.3	5.7	2.7	6.6	4.4	5.3
*Penneagle	7.2	7.9	7.1	6.3	5.4	6.7	5.6	6.3	5.7	2.8	6.4	5.3	6.0
*Putter	7.0	8.1	6.8	5.8	5.9	6.3	6.9	4.7	5.6	2.3	6.4	5.6	6.0
*Normarc 101	6.9	7.9	7.0	6.4	5.4	6.2	6.1	5.0	5.4	3.5	6.3	5.1	5.9
*Cobra	6.8	7.8	7.0	6.2	5.7	6.1	5.4	6.0	5.6	2.0	6.0	5.5	5.8
*SR 1020	7.0	8.1	6.8	6.0	5.5	6.0	7.0	3.3	5.4	2.3	6.3	4.7	5.6
88.CBL	—	8.0	7.2	6.3	—	—	—	—	5.6	2.2	6.4	4.9	5.0
TAMU 88-1	6.6	7.9	6.7	4.9	—	6.1	5.3	6.0	4.9	2.5	5.1	5.0	5.4
*National	6.8	7.9	6.4	4.4	5.4	5.7	5.4	5.7	4.8	2.8	6.2	4.3	4.5
*Emerald	6.5	7.6	6.5	4.2	4.4	5.4	5.6	6.3	5.2	2.7	5.1	5.7	5.1
*Carmen	6.7	7.0	6.8	4.8	5.6	5.4	5.4	5.0	5.1	2.0	5.9	4.9	5.4
88.CBE	—	—	7.2	6.5	—	—	—	—	5.5	2.2	6.4	5.0	4.9
*Bardot	5.6	5.9	6.9	5.0	4.2	5.0	5.5	6.7	5.7	2.3	5.2	5.3	6.3
*Egmont	5.2	6.3	6.5	4.6	3.9	4.3	5.5	7.0	5.7	1.8	5.4	5.0	6.0
*Tracenta	5.6	5.6	7.2	4.8	4.1	4.2	5.1	5.0	5.4	1.3	5.4	5.3	6.2
Allure	4.8	5.1	5.9	3.7	3.6	4.1	4.7	6.3	5.3	1.3	3.7	3.9	5.9
BR 1518	4.9	5.0	5.9	3.5	2.5	4.2	2.9	6.0	4.9	1.8	3.5	2.8	4.4
LSD VALUE	0.6	0.8	0.5	0.8	0.5	1.2	0.8	2.0	0.7	1.4	0.6	1.0	0.3

Modified Soil - Green National Bentgrass Test

Name	FL1	GA1	KY1	LA1	MA1	MI1	MS1	TX1	WA3	Mean
*Normarc 101	—	6.3	6.6	6.8	7.6	7.5	5.9	4.2	4.0	6.1
*SR 1020	4.9	6.0	6.2	6.2	8.1	7.2	5.7	3.9	4.7	5.9
*Putter	4.8	5.3	6.3	5.7	7.8	6.7	5.1	4.5	5.8	5.8
88.CBE	5.6	5.8	6.3	6.1	7.7	7.5	4.8	3.3	4.8	5.8
*Providence	4.0	5.8	7.4	5.7	7.2	7.7	5.7	3.3	4.8	5.7
*Pennncross	5.0	6.3	5.9	6.0	7.2	7.2	5.1	3.6	5.3	5.7
*Pennlinks	4.7	5.8	6.0	5.7	7.0	6.7	5.5	3.8	5.7	5.6
WVPB 89-D-15	5.3	5.8	5.8	6.4	6.9	6.0	5.3	3.4	5.2	5.6
88.CBL	4.3	6.2	5.9	5.5	7.2	7.5	5.5	3.1	4.8	5.6
*Cobra	3.7	5.3	6.3	6.0	7.0	7.0	5.3	4.2	4.5	5.5
TAMU 88-1	4.1	5.3	6.1	6.4	6.8	6.2	4.9	3.8	5.3	5.4
MSCB-8	4.4	6.0	5.9	6.0	6.8	6.2	5.5	3.8	4.3	5.4
*Forbes 89-12	4.3	5.5	6.2	5.9	7.0	6.0	5.2	3.4	4.7	5.3
UM 84-01	5.6	6.7	5.4	5.5	5.2	6.3	4.5	3.7	5.0	5.3
*Carmen	4.3	6.0	5.4	5.8	7.1	6.2	4.9	2.8	5.0	5.3
MSCB-6	4.1	—	6.2	5.4	5.9	6.3	5.8	3.4	4.3	5.2
*Emerald	3.2	5.7	6.2	5.4	6.3	5.5	4.0	—	4.8	5.1
*National	4.6	5.0	5.7	5.4	5.9	5.3	4.4	2.9	4.7	4.9
*Bardot	3.4	5.3	4.8	5.1	5.7	1.5	4.8	—	6.5	4.6
*Egmont	2.9	3.5	5.2	5.2	7.0	1.7	4.5	—	6.3	4.5
*Tracenta	4.3	3.8	4.2	5.3	5.0	1.2	4.3	—	6.7	4.3
ALLURE	4.0	3.7	3.0	5.0	5.3	1.2	3.9	—	6.3	4.0
BR 1518	2.2	4.3	3.8	4.3	4.8	1.0	3.9	2.8	5.3	3.6
LSD VALUE	1.4	1.0	1.5	1.5	1.1	1.3	1.4	1.7	1.1	0.5

Native Soil - Green National Bentgrass Test

Name	AL1	BC1	IL1	LA2	NJ1	NJ3	NY1	RI1	WA1	WA2	Mean
*Forbes 89-12	6.3	6.3	7.2	5.6	6.8	4.2	7.8	5.8	4.3	6.0	6.0
*Providence	5.2	6.0	6.8	5.7	7.2	4.0	7.3	6.2	4.3	5.7	5.8
WVPB 89-D-15	6.2	6.3	6.0	5.3	7.3	4.3	7.0	5.7	5.0	5.0	5.8
88.CBL	5.7	6.1	6.9	5.3	6.4	4.5	7.3	5.7	5.0	4.5	5.7
*Putter	4.3	6.0	7.3	5.4	6.0	4.1	7.0	6.1	5.0	5.8	5.7
*Pennncross	5.9	6.5	6.9	5.7	5.9	4.1	7.0	5.1	4.3	5.2	5.6
88.CBE	5.6	5.9	6.5	5.7	6.9	4.8	6.7	5.3	4.3	4.5	5.6
*Cobra	4.8	6.1	6.5	5.3	6.3	4.5	6.3	5.7	5.3	4.8	5.6
*Pennlinks	5.2	6.1	6.8	5.4	5.9	3.5	6.0	5.4	5.0	6.0	5.5
*Normarc 101	5.5	6.3	6.4	5.6	5.7	4.3	6.7	5.8	4.3	4.7	5.5
*SR 1020	4.6	6.0	6.7	4.8	6.5	3.9	6.3	5.1	5.0	4.4	5.3
*Egmont	5.8	6.0	4.5	4.8	3.8	3.9	5.3	6.0	6.0	5.0	5.1
*Bardot	5.7	6.4	4.5	5.0	4.7	3.7	6.2	4.6	5.3	5.2	5.1
*Emerald	4.8	6.3	6.9	4.3	4.4	3.9	5.8	5.1	4.7	4.7	5.1
*Tracenta	5.7	6.0	4.9	5.0	4.5	3.8	4.8	4.5	6.0	5.2	5.0
*Carmen	4.5	6.0	6.9	4.8	5.5	3.9	5.0	5.2	3.3	4.5	5.0
*National	4.9	6.1	6.5	4.3	4.4	3.5	5.5	5.7	3.7	4.5	4.9
Allure	6.1	6.2	4.7	4.9	3.0	3.1	3.8	4.7	5.3	4.7	4.7
BR 1518	5.7	5.4	4.4	5.2	2.3	2.3	4.5	4.1	5.7	2.2	4.2
LSD Value	1.0	0.3	1.1	0.7	0.7	0.8	1.2	0.7	1.2	0.9	0.3

* — Commercially available in the United States in 1991.

MI1: East Lansing, Mich., N/A, 7.1-7.5

MS1: Mississippi State, sand, 6.1-6.5

NJ1: North Brunswick, N.J., loam, 6.1-6.5

NJ3: Martinsville, N.J., N/A

NY1: Ithaca, N.Y., sandy loam, 5.6-6.0

OH2: Marysville, Ohio, silty clay loam, N/A

OR3: (for native green): Halsey, Ore., silt loam and silt, 4.6-5.5

OR3: (for fairway/tee): Halsey, Ore., sandy loam, 4.6-5.5

OR4: Corvallis, Ore., silty clay and clay, 5.6-6.0

OR5: Tangent, Ore., silt loam and silt, 6.1-6.5

RI1: (for native green): Kingston, R.I., silt loam and silt, 6.1-6.5

RI1: (for fairway/tee): Kingston, R.I., silt loam and silt, 6.1-6.5

TX1: (for modified green): Dallas, Texas, sand, 7.6-8.5

TX1: (for fairway/tee): Dallas, Texas, silty clay and clay, 7.6-8.5

UB1: Beltsville, Md., loam, 4.6-5.5

VA5: Riverbend CC, Fairfax, Va., silty clay loam, 6.1-6.5

WA1: Pullman, Wash., silt loam and silt, 6.1-6.5

WA3: (for modified green): Puyallup, Wash., sand, 5.6-6.0

WA3: (for fairway/tee): Puyallup, Wash., sandy loam, 5.6-6.0

** — Turfgrass quality ratings on 1-9 basis with 9 being ideal turf.

*** — To determine statistical differences among entries, subtract one entry's mean from another entry's mean. Statistical differences occur when this value is larger than the corresponding LSD value (LSD 0.05)