

Brittany, SR 5100 best of fine fescues

Brittany and SR 5100 were top-scoring cultivars in 1995 in the National Turfgrass Evaluation Programs's fineleaf fescue test. Both are hard fescues, Brittany from Lesco and SR 5100 from Seed Research of Oregon.

The mean score for both cultivars was 5.5.

Actually, the high scorer in the test was PST-44D, an experimental cultivar from Turf-Seed, which averaged 5.6 across 23 locations in the United States.

Fifty-nine cultivars, including 36 that are commercially-

available, were scored. LSD for mean scores was 0.2.

Within 0.1 LSD of 5.5 were Discovery, Treasure, Tiffany, Bridgeport and SR 3100.

Tops among creeping red fescue cultivars was Shademaster II, while Discovery was best among the hard fescues.

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NTEP survives; industry thanked

The National Turfgrass Evaluation Program will receive a 10 percent increase in federal government funding for Fiscal Year 1997, according to national program coordinator Kevin Morris.

Money available through the U.S. Department of Agriculture's Agricultural Research Service (USDA-ARS) increases from \$50,000 this year to \$55,000 next year. This news came on the heels of a threat to completely close down funding of the NTEP earlier this year.

"As a result of the overwhelming response from the turfgrass industry, the money was included in the USDA appropriations legislation by the appropriate Congressional subcommittees and signed by the President," says Morris.

"The NTEP wishes to thank all those who wrote or called the USDA and/or their Congressional representa-

tives," he further notes. "The USDA-ARS received more letters and calls about this one issue than any other in recent history. Your efforts did not go unnoticed!"

The NTEP said in a press release that it acknowledges the efforts and contributions of the Golf Course Superintendents Association of America (GCSAA), the Turfgrass Producers International (TPA) and the Georgia Agribusiness Council, which used their resources to emphasize the importance of the NTEP to key Congressmen.

The NTEP is a turfgrass research program that tracks the regional adaptability of existing, new and experimental turfgrass cultivars. Individuals and organizations can subscribe to the NTEP for less than \$50 per year. For more information, call the NTEP at (301) 504-5125.

TOP SCORES BY TEST SITE

(Commercially-available cultivars)

Griffin, Ga. (high soil pH):	SR 3100 (5.4), Aurora with endophyte (5.2), Osprey (5.1)
Griffin, Ga. (low pH):	SR 5100 (3.6)
Urbana, Ill.:	SR 3100 (6.4), Tiffany (6.3)
Carbondale, Ill. (full sun):	Brittany (5.6) SR 5100 (5.4), Tiffany (5.3)
Ames, Iowa:	Discovery (6.1), Treasure (6.1), Victory (6.1)
Manhattan, Kans.:	Shademaster II (6.9), Brittany (6.7), Tiffany (6.3)
Lexington, Ky.:	Shademaster II (7.7), Jasper (7.4)
Baton Rouge, La.:	SR 5100 (4.4)
Orono, Me.:	Discovery (7.8), Darwin (7.6), Ecostar (7.4), Scaldis (7.4)
Beltsville, Md.:	SR 3100 (7.5), Reliant II (7.5), Nordic (7.5)
Silver Spring, Md. (dense shade):	Discovery (5.8), Osprey (5.7)
Sharpsburg, Md.:	Brittany (6.2), Sandpiper (6.1)
Amherst, Mass.:	Quatro (6.0), Discovery (5.2)
East Lansing, Mich.:	Rondo (6.1), Flyer II (6.0)
Columbia, Mo.:	Shademaster II (4.9)
North Brunswick, N.J.:	Shademaster II (6.9), Tiffany (6.7), Discovery (6.6)
Adelphia, N.J.:	Discovery (6.3), SR 3100 (5.7), Seabreeze (5.6)
Columbus, Ohio:	Nordic (7.6), Spartan (7.6), Discovery (7.5), Reliant II (7.5)
Stillwater, Okla.:	SR 5100 (4.5)
University Park, Pa.:	SR 3100 (7.7), Discovery (7.6), Reliant II (7.3)
Kingston, R.I.:	SR 3100 (6.3), Opsrey (5.9)
Blacksburg, Va.:	SR 5100 (5.3), Brittany (5.2), Tiffany (5.2)
Pullman, Wash.:	Brittany (6.4), Tiffany (6.4)

'Brownfields', a new opportunity?

Certain plants can remove heavy metals from contaminated industrial soils. Is this a valuable new service that the green industry can supply? There's \$2 billion in federal funds to clean up these 'brownfields.'

by JAMES E. GUYETTE / Contributing Editor

Landscape contractors seeking other revenue streams can investigate the possibility of cleaning up abandoned industrial sites. The green industry can help in this new field because selected plants can absorb lead and other heavy metals from contaminated soils.

These polluted areas, "brownfields," were once home to heavy duty manufacturing operations. They're a blight on the landscape and a bane to urban planners throughout the United States. It's impossible to attract new development to these sites because of concerns over what lies beneath them.

"We think a significant number of these sites can be treated using metal-accumulating plants," says Dr. Burt Ensley, president and chief executive officer at Phytotech, Monmouth Junction, N.J. "We expect to see this growing into a large market within the next two years."

Dozens of plant species can be used, including mustard plants, sunflowers, Alpine pennycress, brassica and Indian mustard. The company recently presented a scientific paper on the project at a hazardous waste conference in Birmingham, Ala.

"The results show the Indian mustard plant's effectiveness in extracting lead from contaminated soil in our recent field trials at an abandoned industrial site in Trenton," says Phytotech's Dr. Michael Blaylock.

"The results of our studies clearly show the potential of using green plants to clean up soil and water contaminated with heavy metals. It should enable us to develop an efficient, cost-effective and environmentally compatible approach to address the brownfields problem throughout the U.S."

There is more to the program than just sowing seeds, says Ensley. His company will be sharing the patented technology with interested green industry operations. "There is a large amount of knowledge in this," he points out. "I could send you our best seeds tomorrow and you wouldn't be able to remove lead with them," he explains. "We will provide the landscape industry with the *experts* to show them how."

Known as phytoremediation, the process uses specially se-

lected plants to remove heavy metal contaminants from the soil and concentrate them in the stalks and leaves which can easily be harvested and destroyed, thereby removing the threat to the environment.

"Phytoremediation offers us a way to reclaim many of our urban sites lost to toxic contamination and turn them back into an integral part of the community and local economy," Blaylock says.

The impact of the project, which began in 1989, had been eagerly awaited by community leaders, academic researchers and public officials. "We're very excited about the results that Phytotech has achieved," says Karen Waldron, brownfields coordinator at Trenton's department of housing and development. "This demonstration is a successful example of cooperation between private industry, local community and civic officials, and it can serve as a model for other brownfield sites," she adds.

So far, \$1.4 billion has been spent on brownfield cleanups,



and Ensley predicts that \$500 million can be applied to using plant materials rather than concentrating efforts on actually removing the soil.

"We have commercial applications for this," he says, pointing out that President Clinton recently called for a \$2 billion effort to clean up brownfields, and that he challenged American businesses to reclaim blighted industrial sites like the one in Trenton.

"There's a number of plants that can do this," Ensley stresses. "Our intention is to show people how to do this."

For more information: Phytotech, 1 Deer Park Dr., Suite I, Monmouth Junction, NJ 08852; phone (908) 438-0900; fax (908) 438-1209.

Using plants at this Trenton site, Phytotech reports that approximately 70 percent of the treated area has been cleaned to the New Jersey regulatory limit of 400 parts per million of contaminants in one growing season.