

BRIEFS



BORAX ON WARPATH

CINCINNATI, Ohio — Turfgrass as well as agronomic issues will be addressed at the annual meetings here of the American Society of Agronomy, Crop Science Society of America and Soil Science Society of America, Nov. 7-12. For instance, research out of Iowa State University shows that 20 Mule Team Borax is the weapon to use against ground ivy, known as creeping Charlie, the scourge of mature, shaded turf areas. The meetings will be held at the Cincinnati Convention Center. More information is available from the societies at 677 South Segoe Road, Madison, Wis. 53711; 608-273-8080.

AGRISCIENCE, BIOTECHNOLOGY STUDIED

MADISON, Wis. — The U.S. Department of Education has awarded a \$456,780 grant to the National FFA Foundation to partially fund a study entitled Voluntary National Skills



Standards for Competency in Agriscience/Biotechnology. The 18-

month study, to be matched by the education, industrial and labor communities, will determine the skills employees will need in agriscience/biotechnology occupations. The goal is to develop voluntary educational standards in these fields which will lead to a better-prepared workforce.

TGIF LISTING ARCHITECTS

TGIF (Turfgrass Information File), the industry's largest single source of turfgrass information, has created a new listing containing members of the American Society of Golf Course Architects (ASGCA). Information from TGIF is available in hard copy or via a modem, and can be searched by author name, subject, etc. For additional information about TGIF, or the architects' directory, contact Nancy Donati, Medinah Country Club, Medinah Road, Medinah, Ill. 60157-9653; 708-773-1700, ext. 254, or Peter Cookingham.

RECYCLING PESTICIDE CONTAINERS

COLUMBUS, Ohio — Ohio State University instituted a pesticide container recycling program at its Turfgrass Research Field Day here Aug. 17. Superintendents could drop off their clean, empty pesticide containers, which Grower Service Co. will grind, granulating them for further processing. Eventually, they will be made into new containers or be put to other safe uses. The program was supported by OSU Extension, the Ohio Department of Agriculture and Ohio AgriBusiness Association.

Are the seasons getting longer?

Superintendents in the transition zones say 'Yes'

By MARK LESLIE

Playing seasons are getting longer in some areas of the country, causing turfgrass damage of which many superintendents are not even aware.

"We have no winters," superintendent Russell Bateman said matter-of-factly of the five Baltimore Municipal Golf Courses.

"On Thanksgiving weekend at the end of November if you have days anywhere near 50 degrees, this place is packed," said Bill Neus of the semi-private Hobbits Glen Golf Course in Baltimore, president of the Mid-Atlantic Association of Golf Course Superintendents. "When I got into this business, after Labor Day



'Ten years ago we had 40,000 rounds a year. Now we're at 55,000.'

— Bill Neus

play just died. That's not even part of the equation any more.

"Ten years ago we had 40,000 rounds a year. Now we're at 55,000. On a mild winter weekend day we'll do 150 to 200

rounds of golf. And public courses will do more."

Play has gradually gone deeper into the winter and started earlier in the spring. The resulting problems are many.

"One major problem is that damage caused by winter play doesn't show until the heat stress of summer, and many superintendents don't associate it with using the course in the winter," said Jim Snow, national director of the U.S. Golf

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Stone gets personal

Honors tests grasses in pursuit of the best

By PETER BLAIS

COOLTEWAH, Tenn. — Under stressful conditions in southeastern Tennessee, many new bentgrass varieties far outperform Pennncross, according to a Chattanooga-area superintendent conducting his own scientific field trials.

"You couldn't twist my arm far enough to make me seed a new course with Pennncross," said David Stone, head superintendent at The Honors Course.

Stone's assertion is based on two years of rigorous testing at his own facility. Stone's studies, in fact, remind United States Golf Association agronomist Pat O'Brien of the days when course managers routinely maintained their own test nurseries. There they grew many vegetatively propagated varieties of bentgrass to determine which performed best in their specific locale.

That practice started to disappear in the late 1950s with the appearance of Pennncross, the Green Section's Southeastern Region turf expert said. Released in 1955, Pennncross soon became the preferred bentgrass seed for golf course greens.

"It's the leading creeping bentgrass in the world today," said Tee-2-Green President Bill Rose, whose company produces Pennncross. "In some climates it's still the best."

With the abundance of new bentgrass varieties introduced in

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Yount honored in Florida

The Florida Turfgrass Association (FTGA) has honored Executive Director Bob Yount, center, with its Wreath of Grass Award, given annually to a member who demonstrates commitment and hard work toward the association's goals. Charles Campbell of DowElanco Specialty Products presented the award, citing Yount's integrity and accomplishments over the years. The head of the FTGA since 1988, Yount was chairman of the 1987 Nestle Invitational Golf Tournament, general chairman of the 1991 USGA Junior Amateur Championship, and the board of directors for the Butler Chain of Lakes Conservation Association from 1982-84. Yount is flanked by his wife Phyllis and son Bobby Jr.

USGA reports on nationwide university research

Turfgrass safer than farmland, research studies confirm

By MARK LESLIE

Major university studies around the country are verifying the belief that turfgrass is a vast improvement to agricultural land in pesticide and fertilizer leaching, and researchers are even comparing differences between grasses in runoff studies.

The U.S. Golf Association Green Section's newly released annual Environmental Research Summary notes these findings along with many others in its review of USGA-funded research projects. The booklet reports results after the second year of the three-year studies.

Objectives of the overall project are to understand the effect of turfgrass pest management and fertilization on water quality and the environment; evaluate valid alternative methods of pest control to be used in integrated turf management systems; and determine

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Environmental findings widespread, report says

From staff reports

Ten years and \$5 million after it was undertaken, new and better grasses that survive on less water and lower maintenance have been developed through the Turfgrass Research Program initiated in 1982 by the U.S. Golf Association (USGA) Green Section and Golf Course Superintendents

Association of America. So the USGA Executive Committee has committed its support for another five years, according to Jim Snow, Green Section national director.

Some 40 research projects improved knowledge about water-use rates of various turfgrasses and how these grasses react to moisture stress; introduced new grasses that use less water and pesticides; and forwarded understanding of maintenance practices.

Snow said: "Through the efforts of the individual turfgrass scientists and their support staff, many significant

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Advances made in turfgrasses

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the human, biological and environmental factors that golf courses influence.

From scrutiny of nitrogen and phosphorus compounds to pesticides, the news was good for the golf industry.

A wide-ranging study at the Michigan State University found "turf systems are much more efficient users of nitrogen compared to agricultural systems."

Washington State University scientists reported that in one study "despite the relatively high percentages of nitrogen leached, the leachate concentrations never exceeded 10 mg L-1."

University of Nebraska and Iowa State University examinations of four pesticides in stands of Kentucky bluegrass showed an "apparent increase in degradation rate for these compounds in the turfgrass system compared to degradation rates for the same compounds in agricultural systems."

University of Florida experiments conducted on

chlorpyrifos, isazophos and isophenphos found no compounds in significant amounts within leachate samples.

Meanwhile, University of Georgia investigators said their research "suggests that turf systems are much more efficient at reducing soluble pesticide leaching compared to agricultural systems."

Yet they recommended that application of nitrogen or pesticides to unamended, coarse sandy soils should be avoided. Modification of these sands with peat or other organic material will serve as a very effective means of

reducing subsurface loss of pesticides and nutrients.

The report said the greatest percent of subsurface loss of nitrogen was observed for the sand and sand/peat mixtures of soil compared to loamy-sand, sandy-loam or silt-loam soils.

"Addition of the peat to sand significantly reduced the amount of nitrogen loss through subsurface leaching compared to sand alone," the report said.

Among other findings:

- Researchers are establishing composts that suppress *Pythium* and *Typhula incarnata* diseases. "In field studies, some composts

are as effective as standard fungicides in suppressing *Pythium* root rot and *Typhula* blight on creeping bentgrass putting greens."

More than 100 strains of actinomycetes are being evaluated for disease-suppressive properties

- Runoff of nitrogen on sloped fairway plots occurred more quickly and with greater peak flow from the ryegrass than creeping bentgrass.

- No significant difference was noted for leaching of the soluble and insoluble 2,4-D compounds under either field or greenhouse lysimeters.

- Scientists are isolating "beneficial" microorganisms that are antagonists of disease-causing microorganisms as alternatives to chemicals.

The 23-page summary is available from the USGA Green Section, Golf House, Far Hills, N.J. 07931.

FROM THE LEADER BOARD TO THE DRAWING BOARD

"Palmer's Aviara course is a masterpiece of beauty and function! It truly is, as *Golf Magazine* says, 'One of the ten best new resort courses in the U.S.'"

Larry Clemens
Vice President
General Manager
Hillman Properties

PALMER COURSE DESIGN COMPANY
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Environmental report aired

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accomplishments were made. Water management, and our knowledge about how much water golf turf species use, have greatly improved. New bentgrasses, Bermudagrasses and buffalograsses already have been released to sod and seed producers and are making their way onto golf courses."

In his summary of the 10-year results, Snow reported:

- Improved greenhouse techniques were developed for making nutritional comparisons among new turfgrasses.

- Clipping removal from creeping bentgrass/poa annua fairways was found to favor bentgrass competitiveness.

- Hollow tine cultivation ranked equal to or higher than solid tine cultivation. Both reduced soil compaction.

- Promising zoysiagrass and bentgrass selections with good salt tolerance were identified, but buffalograss proved very sensitive to salt.

- Tifway Bermudagrass fared better than Meyer zoysiagrass and centipedegrass when compared in both moderate and high water usages and in periods of severe moisture stress.

- Screening techniques were developed for resistance to *pythium* blight and root rot, brown patch, dollar spot, spring dead spot, summer patch and necrotic ring spot pathogens.

- A monoclonal antibody test was developed for rapidly diagnosing the presence of necrotic ring spot and spring dead spot pathogens in turf.

- Some 30 new fungal endophytes which may impart insect resistance were isolated from turfgrasses.

- Biologically active materials called pheromones were isolated from mole crickets to either attract or repel crickets under golf course conditions.