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DURSBAN effectiveness has been thoroughly researched and confirmed in decades of testing at leading

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Dow's partnership with lawn care professionals and golf course managers goes far beyond supplying advanced products. We also conduct many types of market and product research, and share the results for your benefit. We produce helpful training materials for applicators, operators and others. In cooperation with the PLCAA, we have prepared materials to answer frequently asked consumer questions concerning the effect of chemicals on the environment.

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*Trademark of The Dow Chemical Company

WEEDS TREES & TURF

The Magazine of Landscape and Golf Course Management Since 1962

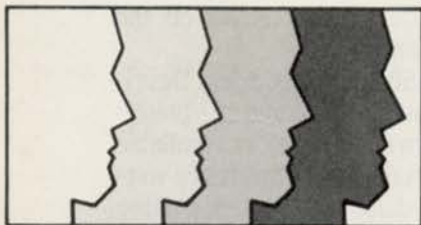


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Rated First for quality . . . density . . . wear and shade tolerance. Rated high in disease resistance. Performs under heat and drought conditions. Recovers well after severe flooding. Drought resistant. Requires less fertilizer to maintain good health. Can be mowed down to 1/2 inch in height. (In shade, maintain at 2 inches.) Strong deep rhizome structure aids fast recovery from injury.

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Mowing Height:	As low as 1/2" in direct sun; 2" in shade.
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Disease Resistance:	Superior
Weed Resistance:	High density restricts weed encroachment.
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go with the PROs."**

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Circle No. 142 on Reader Inquiry Card

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An enclosed steering system and tight 26-inch turning radius deliver superb maneuverability.

Visit your John Deere dealer today . . . and get a little something to take your mind off the heat. The new 16-hp liquid-cooled 330 Diesel.

For the name of the dealer nearest you, call 800-447-9126 toll free (800-322-6796 in Illinois). Or write John Deere, Dept. 76, Moline, IL 61265.

Circle No. 228 on Reader Inquiry Card



Nothing Runs Like a Deere[®]



by the Editorial Staff, *Weeds Trees & Turf* magazine

Cutting down on toxic waste

Toxic waste can be reduced significantly, say Battelle Memorial Institute scientists, by modifying manufacturing and handling processes. A group of four scientists studying waste generation recently reported that with certain changes, "Waste can be reduced, recycled and reused, or eliminated in attractive and cost-effective means. The group concentrated on manufacturing processes.

Meanwhile, the Environmental Protection Agency is concentrating on the most commonly used pesticides for detoxification of rinsates. EPA is exploring mandatory recycling of pesticide containers. Reusable bulk containers are being tried by some larger distributors and users of landscape pesticides. See Government Update in this issue.

Drought spotlights wetting agents

Drought conditions impacted an unusually large portion of the U.S. this spring and summer causing a resurgence in interest in wetting agents.

Mallinckrodt's Bill Rhymes blames soil conditions and hard water for inefficient water use in U.S. landscapes and golf courses. "When a soil or other growing medium wets slowly or nonuniformly, it is due to the physical properties of the soil as well as the water. Hydrophobic organic components of soil and a preponderance of capillary pore space combine to restrict the rate of water movement into such soils. Water's high surface tension, due to strong cohesive forces, restricts movement into capillary pore space. These same characteristics delay water movement out of the soil causing localized wet spots."

The solution to both dry and wet spots, Rhymes claims, is to increase the rate of water movement by providing a link between hydrophobic soil and hydrophilic water. He claims the link is a wetting agent.

Rhymes offers these guidelines for buying wetting agents. 1) Don't buy water. Check the percent active ingredient. 2) Select one with a history of success, ranked consistently high in university tests. 3) Wetting agents must be well watered in (liquid) or uniformly mixed with the soil (granular). Wetting agent left on the plant surface can be phytotoxic.

Rhymes says wetting agents also improve drainage, reduce runoff, and eliminate dew for several days following application.

U.S. firms arrange European ties

Uncertainty over currency exchange rates is causing U.S. corporations to establish direct links with European companies. Du Pont recently agreed to acquire Amonn Fitochimica of Italy to direct market agrichemicals in key European markets. Jacobsen Manufacturing recently signed a direct marketing agreement with a British distributor to eliminate one step of distribution. The net result will be a more international market for U.S. and European products and better prices.

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Subdue works both on contact and systemically.

Subdue fights Pythium blight and damping-off—as well as downy mildew (yellow tuft)—in two ways. On contact, Subdue destroys

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Subdue's systemic action means longer, more effective residual

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Before Pythium weather strikes, subdue it. Use Subdue in a preventive maintenance control program. And get a good night's sleep.

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A photograph of a house at night. The house has a dark exterior with a prominent white gable roof. A central window is brightly lit from within, showing a person in a white shirt looking out. The house has a balcony with a railing in the foreground. The overall scene is dark, with the light from the window providing the main source of illumination.

**HOW TO AVOID SLEEPLESS NIGHTS
DURING PYTHIUM WEATHER.**

SUBDUE

Circle No. 274 on Reader Inquiry Card

Seed shortages likely; prices could go up

The pendulum swings both ways. That's what seed producers in the Pacific Northwest are finding out this year as over-production of past years has caught up with the industry and shortages are predicted.

"Two years ago, we were crying in our beer about over-production of Kentucky bluegrass," says Bob Peterson of E.F. Burlingham and Sons, Forest Grove, OR. "Now, the acreage is down, so I would anticipate a tight situation this year."

Kent Wiley of Pickseed West, Tangent, OR, says that his company is virtually sold out of all its proprietaries. "The worst disaster is in Kentucky bluegrasses," Wiley notes. "Last winter, the ground froze before green-up, and the grass stayed in a burn state. Production is off about two-thirds in the Peluce area south of Spokane. We're figuring all the bluegrasses together will go down from 40 to 30 million pounds."

Adds Mike Robinson of Seed Research, Albany, OR, "Most of the bluegrasses are sold out. And I think the bentgrasses will be very tight for another year, especially since Emerald is out of production now."

"There's also a short supply of perennial ryegrass because the demand is way up. Old crops have been com-



Bill Rose of Turf Seed, Hubbard OR, explains some of the research being conducted by Pure Seed Testing during the company's third annual field day earlier this summer. Nearly 300 people turned out for the event.

pletely sold out in some varieties."

Even though Doyle Jacklin of Jacklin Seed, Post Falls, ID, is expecting a good crop of proprietary bluegrasses, he sees prices going up.

"This hot, dry weather has affected common Kentucky bluegrass," Jacklin says. "Since all our accounts are keyed

on the availability of common varieties, proprietaries will also go up in most cases—even though we have a pretty fair crop of proprietary Kentucky bluegrass looking at us."

(Editor's note: WEEDS TREES & TURF will publish its annual Seed Harvest Report in the October issue.)

WATER

Summer rains welcome to Fla. Green Industry

The mid-June arrival of rain was met with open arms by nurserymen, landscapers, golf course superintendents—just about everyone involved with turf or plantlife along Florida's gulf coast. The beginning of the rains hopefully gives relief from an extended drought and the severe water use restrictions it spawned.

The Florida drought, which began in August 1984, affected more than 3 million people in the 16 counties of the Southwest Florida Water Management District. SFWMD spokesman Bob Bryant cautions, however, "we're not out of the woods yet. What we need is an entire summer of significant rainfall."

Bryant says his district's ground water supply was 15 to 20 inches below normal prior to the coming of rain. "The evaporation and transpiration losses were phenomenal," he tells **WEEDS TREES & TURF**. Record

high temperatures late this spring aggravated the problem.

Although some irrigation was allowed for newly installed sod and landscaping, the watering of established residential lawns was restricted to early mornings just twice weekly. Violators faced fines of \$500.

Florida Green Industry spokesmen tell **WT&T** the drought "hurt business." Says John Blaser, operator of Blaser's Landscape Contractors, Tallahassee, FL, "When people can't plant and water, they won't buy plants."

Marvin Gross of Marvin's Garden & Landscape Service, Sarasota, says "the Green Industry just about stopped because of the drought and the restrictions."

Elsewhere, the driest March-May period in 96 years of record keeping took the Tennessee Valley into summer with a 10 inch rainfall deficit.

"There has been no curtailment in use of water so far," says a spokesman for the TVA, "but it could cause us some problems late in the summer."

TREES

Budworms plague trees in Colorado

The Denver Post reports budworms are killing thousands of trees across Colorado in what foresters are calling one of the most severe and prolonged infestations of the century.

The budworms which kill Douglas firs and some spruces by feasting on their needles, infest three million acres and have killed more than 60 percent of the trees in some remote areas of the Front Range, according to the U.S. Forest Service.

Because of monetary considerations, the Forest Service is letting the infestation "run its course." Some unhealthy trees have been removed.

Budworms appear in droves about once a decade. But only twice this century have foresters recorded a budworm infestation lasting longer than five years. The current attack has proved especially troubling because it began in 1974 and doesn't appear to be abating, says the Forest Service.