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DURSBAN* brand insecticides control over a dozen major turf insect pests—including chinch bugs and sod webworms—more insect control for less money than any other turf insecticide. That's reason enough to use DURSBAN 2E or more concentrated DURSBAN M insecticides in your turf insect control program.

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DURSBAN insecticides mix easily with water. Just mix and spray. They are also available from selected custom formulators as a granule and as a dry fertilizer mixture.

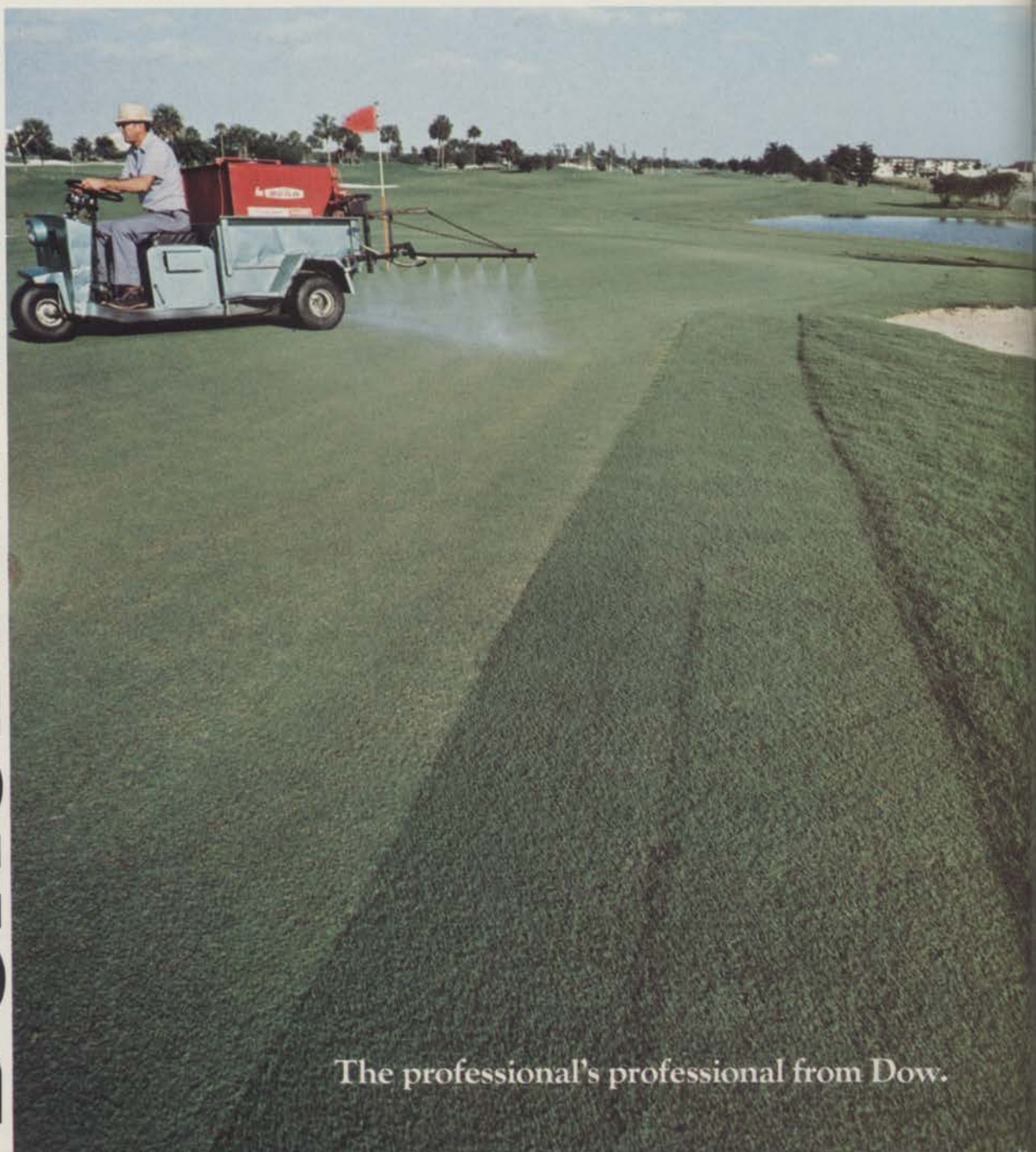
Whether it's for broad-spectrum, effective control . . . or low cost . . . make DURSBAN insecticides part of your turf program now. Just read and follow all label directions and precautions. Ag-Organics Department, Midland, Michigan 48640

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WEEDS TREES & TURF®

June 1976, Vol. 15, No. 6

12 Turf Renovation Without Tillage — Prof. Glover Triplett of the Ohio Agricultural Research and Development Center has been able to successfully renovate turf areas by spraying herbicides to kill existing vegetation.

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The Cover — Duckweed growth (story on page 28) consists of myriad individual plants which form a choking mass, cutting off light and oxygen and endangering fish life.

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Government News

The Noxious Weed Act of 1974 gives the Agriculture Department authority to regulate noxious weeds at port on entry. Proposed regulations announced recently enumerate seven aquatic weeds, two parasitic weeds and 13 terrestrial weeds unknown or not widely distributed in the U. S. Special permits for movement of these weeds into or through the U. S. may only be granted when rigid regulations covering shipment, storage and destruction are adhered to, the American Association of Nurserymen reports.

The aim of the federal Environmental Protection Agency "is not -- and never has been -- to 'get' pesticides," EPA administrator Russell E. Train said recently in a speech to the American Pesticide Control Officials in Washington, D. C. He recommended pesticides be found that affect only specific pests and then break down quickly once their job is done; that combinations of natural and chemical control of pests be relied on more; and that growing amounts of municipal and other wastes be utilized to replenish the soil.

Grass seed prices have been extremely depressed since at least 1974, according to Doyle Jacklin, Vaughan-Jacklin Seed Co., Spokane, Wash. He spoke earlier this year at the winter meeting of the American Sod Producers Association in Clearwater Beach, Fla. and said that at the time most prices were below the cost of production. The reasons for this were the depressed economy, low housing starts and record seed production. This, coupled with the fact that last year was a boom year for grain, soybean and vegetable crop seeds makes the situation grim for grass seed growers in some cases. Jacklin says price recovery will be slow and gradual through next year for his industry. He also said no new varieties will be planted, but some earlier plantings will come to harvest later this year.

A new agricultural safety standard from the Occupational Safety and Health Administration went into effect June 7. The new ruling deals with guarding and shielding of moving parts. It applies primarily to manufacturers, requiring a variety of guards and shields be provided after that date.

In the chlordane/heptachlor situation, the Environmental Protection Agency will pursue the recall of the products despite Velsicol Chemical Corporation's insistence the recall is illegal. The EPA answered a letter from the Chicago company by saying the recall is not mandatory, and that this is widely known in the industry. Velsicol says it is doubtful the EPA will take specific legal actions to enforce the recall, but if they should, the company will take necessary legal steps "to protect our rights."

The Justice Department has charged that Union Carbide Corp. has illegally restrained the sale of carbaryl insecticides in a civil antitrust suit filed in San Francisco. Carbaryl is marketed under the trade name Sevin. The suit alleges Union Carbide, Salinas, Calif. prohibits purchasers of carbaryl from selling it in its pure form and requires them to formulate only those carbaryl insecticides Union Carbide specifies.



PRO4 Diamond Shamrock DACONATE® 6 controls nutsedge, goosegrass and chickweed



Daconate 6 is the hot-weather, postemergence herbicide that won't harm bermudagrass, blue-grasses and zoysiagrass when used according to label directions. Controls nutsedge, crabgrass, goosegrass, bahiagrass, chickweed, barnyardgrass, wood sorrel and sandbur.

A ready-to-use liquid, Daconate 6 is a 6-lb per gallon MSMA plus surfactant. A swift, sure end to grassy problem weeds.

Diamond Shamrock Pro-4 products are

basic Turf Care weed and disease control pesticides designed to give you beautiful turf. They include DACONIL 2787® fungicide, DACTHAL®, DACAMINE® and DACONATE® 6. Each complements the other for broad-spectrum turf care.

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Members of the recently formed Industry Advisory Council of the Golf Course Superintendents Association of America met at GCSAA headquarters in Lawrence, Kan.: (from left, first row) President Richard Malpass, Portland, Ore.; Vern Worrel, Cushman-Ryan; Jim Watson, Toro; and executive director Conrad Scheetz; (second row) Vice President Ted Woehrlé, Birmingham, Mich.; George Horn, O. M. Scott & Sons; Jim Latham, Milwaukee Sewerage Commission; and Ted Smith, Smithco; (third row) Tom Haschen, Du Pont; director Lou Haines, Denver; Bob Moore, Aquatrols; director Gordon Witteveen, Toronto; and John Kinkead, National Mower.

Suggestions for Pay Wage For Summer Help Given

How much do you pay your summer help? Larry Bunn, superintendent at Blue Hill Country Club in Massachusetts did an informal poll recently; here are his results:

The low starting salary was \$2.30 an hour to a high of \$3 an hour. The average starting pay for summer help was \$2.60 an hour. Pay for summer help who returned each year or experienced help ranged from a low of \$2.75 to a high of \$3.30 an hour. Their average pay was about \$3 an hour.

Hopkins Chemical Acquires Allied Pesticide Department

Crown Chemicals, St. Louis-based pesticide manufacturer and distributor, has announced the acquisition of Allied Chemical Corp.'s pesticide department by Hopkins Agricultural Chemical Co., Crown's parent company.

Crown now offers, as additions to its line of herbicides and spray adjuvants, the Urox family of monuron-TCA and bromacil soil sterilants and Plyac spreader-sticker.

Sod Producers Convention July 21-23 in Rhode Island

The American Sod Producers Association will meet July 21-23 in Newport, Rhode Island for its annual summer convention and field days. The Treadway Inn is headquarters hotel.

Chairman of the event is Chris Beasley of Tuckahoe Turf Farms, Canton, Mass. The format will follow previous years, with commercial displays and an open house Wednesday night July 21 in the exhibit area of the Treadway, as well as a free continental breakfast in the area Thursday morning for all participants.

The same morning, the business of the Association will be conducted and the afternoon of Thursday and all day Friday will be spent in the field.

please turn page

Radko Is National Director Of USGA Green Section

Alexander M. Radko has been appointed a national director of the United States Golf Association Green Section.

He will head up a scientific team of agronomists in bringing the soundest turf management counseling possible to USGA member clubs. A number of new activities are being planned for the turfgrass service of the Section and Radko also plans to devote additional time to turfgrass research projects sponsored by the organization. He has been with the USGA since 1947 and served as the eastern director for 22 years.

Maryland Turf Association Publishes Sod Directory

The Maryland Turfgrass Association and the Maryland Department of Agriculture have released the first edition of a *Pick Up Your Own Sod* directory.

The directory lists 39 Maryland sod growers who sell to customers on a direct basis. This new sod sales

program outlined in the book is new to most of the growers this year.

The directory includes information on types of sod and has complete installation instructions. Persons wishing a copy should send one 13-cent stamp and their address to: *Pick Up Your Own Sod*, Maryland Department of Agriculture, Parole Plaza Office Building, Annapolis, Md. 21401

Course Maintenance Costs Up Nine Percent in 1975

Golf course maintenance costs for 100 selected clubs with 2,124 holes of golf were 9.3 percent greater in 1975 than in 1974, and net golf expenses showed an overall advance of 8.9 percent, according to a recent study released by Harris, Kerr, Forster and Company, certified public accountants.

On a per-hole basis the 1975 maintenance costs averaged \$7,962. Payroll and related costs averages \$5,318 (67 percent); all other expenses averaged \$2,644. The results were reported in the National Golf Foundation April Golf Market Report.

It's good! Pick it up.



It's better than good—it's great! USS Vertagreen Tee-Green Technical Turf Food is designed and formulated specifically for proper fertilization of golf course tees, greens, and aprons. It has an analysis of 16-4-8, and half of the available nitrogen is from urea-formaldehyde.

And here's another thing that

makes it great—the uniform particle size* assures an even spreadability. This means the granules will work their way down through the grass evenly, before your mower picks them up. Also, uniform particle size provides for a more consistent feeding.

When you consider that USS

Vertagreen Tee-Green Technical Turf Food also contains guaranteed amounts of important secondary and micro-nutrients, you'll see it all adds up to a premium product. See your Vertagreen distributor, and he'll tell you how you can pick it up—it's good!

*Screen sizing: 90% Minus 10 Plus 20 Mesh U.S. Sieve



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Yellow Pages.) His specialized knowledge and experience will help you in designing your system, and make all the difference when it comes to protecting your turf investment.

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Herbicide Facility Expansion Announced by Monsanto

Monsanto Co., St. Louis, Mo., has announced a multi-million dollar expansion of its Roundup herbicide production facilities in Luling, La. The expansion, expected to be onstream early next year, will double capacity of the initial herbicide production unit in Luling which became operational early this year.

Richard J. Mahoney, corporate vice president and managing director of Monsanto Agricultural Products Co., said the increase in the herbicide production capacity is being made to meet anticipated heavy demand. "Its introduction earlier this year for major crop use in the United States and Canada is expected to greatly accelerate demand," Mahoney told WEEDS TREES & TURF.

Landscaping Adds Dollars To Home Property Value

The presence of trees around a house may enhance the value of that property by as much as 20 percent, with an average increase of five to 10 percent. This can translate to a \$3,000 to \$7,000 jump in the home's selling price.

So says Dr. Brain R. Payne, United States Forest Service environmental researcher at the University of Massachusetts, Amherst, one of the scheduled speakers at New Horizons' Day to be held during the 101st Annual Convention and Exhibit of the American Association of Nurserymen July 10-14 at the Sheraton-Boston.

Dr. Payne has done considerable research on the subject and has found landscaping around a house appears to have a tangible effect on its marketability.

Bronze Birch Borer Control By Spraying in Early June

Wilting or crown diebacks are signs of the bronze birch borer at work. If your birch trees showed these symptoms last year, spray in early June to control the pest this year.

"The bronze birch borer adult is

a small, dark, metallic beetle," says Jim Liebherr, Michigan State University entomologist. "The adults emerge from infested trees in early June and lay their eggs. When the larvae hatch, they bore into twigs and branches and feed there. It is this boring that causes the damage."

To be sure the wilting is caused by the bronze birch borer, examine the wilted branches. Rusty or reddish brown trails on the bark just below the wilted part are sure signs the pest is present.

Once the larvae are under the bark, you cannot touch them with insecticides, Liebherr points out, so your best chance to control the pest is in June when the adult beetles emerge.

Begin controlling the bronze birch borer by pruning out dead limbs and branches in May. Burn or haul away these branches — they may be sheltering the insect.

Following all label directions, spray bark and branches with a lindane spray about June 7 and again 10 to 14 days later. This treatment will help control the adult beetles and prevent egg laying on your tree.

Healthy trees are less likely to be attacked by the beetle than unhealthy ones, Liebherr notes. To minimize the danger of borer damage, water and fertilize birch trees to keep them growing vigorously, Liebherr advises.

Chemical and Turf Division Established by Ramsey Seed

A new chemical and turfgrass division has been formed by Ramsey Seed, Inc., Manteca, Calif., to provide turf seed mixtures and chemical algae and herbicide control for golf courses, parks and other landscape projects.

Larry Evans will serve as manager of this new division, according to President W. H. Ramsey. Evans has directed chemical product sales for Ramsey Seed for the past four years, including Curtrine for aquatic algae control.

Ramsey Seed is one of California's processors and wholesale distributors of a broad line of grass and clover seeds for landscape and agriculture planting. Its products include such widely used landscape

seed varieties as Blando Brome, Annual Clovers, Lana Vetch, and turf-grass seeds.

The new division will provide seed mixes of these and other varieties to individual specifications, and will assist project managers in developing blends that best fit local soil and climatic conditions.

Seeds in these mixes can be coated with Pel-Kote, if desired. This Pel-Kote process places amounts of specific strains of rhizobia around clover seeds, to assure proper inoculation with nitrogen-fixing bacteria. It also places a nutritive coating around both clover and grass seeds, to improve germination and seedling vigor by creating an optimum micro-environment around individual seeds.

The division's Cutrine-Plus is a highly effective chemical that controls chara, nitella, and other algae that grow on the bottom; also, filamentous algae that grow on the surface. It both controls and restores the beauty and usefulness of water in ponds and reservoirs.

Weedtrine-Plus is effective in controlling a broad range of aquatic plants and algae.

Slide-Cassette Presentation Developed by Sod Producers

The American Sod Producers Association board of trustees has authorized production of a slide-cassette presentation to be utilized by members as a promotional tool.

The project is now well underway with initial script and slide designations already reviewed by the board. The presentation is being developed by Lew Cole Enterprises of Grand Island, Neb., which has had wide experience in the audiovisual field and has produced a number of similar promotional presentations for major manufacturers and business groups.

Upon completion of the project, the five-minute presentation will be made available in sets to the individual members for use with their particular customers and points out the value of sodding, including aesthetic, economic and the practical aspects related to the use of sod in a variety of ways.

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to prove it.**