Proxol[®]80 SP_{Insecticide} Stops These Turf-Marauders Before They Start.

Sod Webworm Cutworm Armyworm White Grub









But you can stop these insect predators *before* they start with Proxol 80SP, an organophosphate insecticide which provides fast, effective control of major turf and ornamental insects. Proxol 80SP acts as both a contact and stomach insecticide for combined quick-kill and residual activity.

With rising costs of maintenance and limited budget allocations, you need a sound pest prevention program of regular applications of Proxol 80SP to coincide with periods of peak insect activity.

For free color illustrated literature including lifecycles and spraying timetables, write:



Division of The Upjohn Company Dept. 9510, Kalamazoo, Michigan 49001

Ramsey Seed, Inc. Announces the Formation of a Turfgrass and Chemical Division

To provide individualized turfgrass seed mixtures for blending to specific soil and climatic requirements. Clover seeds available with Pel-Kote rhizobia pre-inoculation. Chemicals include **Cutrine-Plus** for control of filamentous algae on the surface and Chara, Nitella, and other bottomgrowing algae; and **Weedtrine-Plus** for control of a broad range of aquatic plants and algae.

For further information, contact Larry Evans, at:

Ramsey Seed, Inc.

P.O. Box 352 · Manteca, Ca. 95336 · (209) 823-1721



PRODUCTS continued

A spray head pop-up sprinkler for turf installations has been introduced by Rain Bird Sprinkler Manufacturing Corp. Designated model 1800, the new sprinkler has a pop-up height of 2-3/16 inches to provide adequate clearance, even where a high cut is desired. When



not in use, the nozzle retracts flush with the top, which is completely closed to prevent debris from collecting around the nozzle and stem. A heavy stainless steel retract spring provides positive pop-down of the nozzle to avoid damage from mowing. A surge arrester protects units from damaging surges when the water is turned on. Built-in stem flushing action eliminates sand and debris from around the stem because of flushing that takes place each time the stem pops up.

Circle 714 on free information card

Two mowers in one is what Bunton Co. says about its self-propelled mower. One can mow and trim hard-to-get places and steep grades with this mower. Then it can be con-



verted to a rider for open areas or medium grasses. The rider attachment features instant hitch (without tools), 16-inch pneumatic tires with ball bearings and grease fittings, adjustable seat and brakes.

Circle 715 on free information card

PBI/Gordon Corp. has published a brochure on its professional turf products and distributors, designed especially for the golf course superintendent. Included is information on Dymec 50 turf fungicide, Betamec-4 pre-emergence turf herbicide, Amine 2,4-D turf herbicide, and Aqua-Zorb organic wetting agent.

Circle 716 on free information card

Revised and expanded labels for

Sevin sprayable and Sevin 50-W carbaryl insecticide have been approved by the Environmental Protection Agency, according to Union Carbide Corp. For handy reference to the information in the revised labels, a new brochure entitled *A Summary of Sevin* is available for free. The brochure has a special section on insect control for shade trees and ornamentals, and lawn insect control.

Circle 717 on free information card



Circle 125 on free information card



BAKER OFFERS SALES, RENTAL OR LEASING PLANS ON THEIR NEW B-SERIES AERIALS

Check the many features of Baker's all new B-Series Aerials. Available in 50 and 65 foot heights, totally new design cuts out chains, cables, scissors. Simplicity of action with only one cylinder and three hinge points at elbow, platform and mounting.

No complicated machinery buried inside boomnothing to dismantle for maintenance. Just regular lubrication of outside fittings will keep B-Towers going year after year.

The result-lowest total cost for any tower you can buy today. Low maintenance and less down-time make B-Series Aerials the best money savers in the business.

Baker has several of these B-Series units in their rental fleet for your short term needs or can arrange lease plans to fit your particular situation. Give us a call today (804) 358-0481 and ask for a B-Series demonstration.



BAKER EQUIPMENT ENGINEERING COMPANY 1700 Summit Avenue Richmond, Virginia 23260

Charlotte, N.C. • Pottstown, Pa. • Atlanta, Ga. Columbus, Ohio • St. Petersburg, Fla. • White Plains, N.Y.



Iowa Golf Course Superintendents Association Meeting, Carroll Country Club, May 18.

Oregon Seed Trade Association Eighth Annual Convention, Salishan Lodge, Gleneden Beach, May 18-20.

Rocky Mountain Golf Course Superintendents Association, Inverness Golf Course, Englewood, Colo., May 20.

Metropolian Golf Course Superintendents Association Meeting, Greenwich County Club, May 20.

Florida Nurserymen and Growers Association Meeting, Thunderbird Hotel, Jacksonville, May 20-22.

International Society of Arboriculture, Western Chapter, Meeting, Hyatt Regency Hotel, San Jose, Calif., May 23-26.

California Association of Nurserymen, Refresher Course, California State Polytechnic College, San Luis Obispo, June 1-3.

International Marketing Conference sponsored by The Fertilizer Institute, The Greenbrier, White Sulphur Springs, W. Va., June 6-9.

Indiana Golf Course Superintendents Association Meeting, Valle Vista, June 8.

Hawaii Association of Nurserymen Conference and Trade Show, Hilton Hawaiian Village, Honolulu, June 9-11.

Southern California Golf Course Superintendents Association Sprinkler Irrigation Conference, Lake Arrowhead, June 11-13.

National Arborist Association First Management Seminar, O'Hare Hilton, Chicago, June 15-16.

Arizona Landscape Contractors Association Annual Meeting, Mountain Shadows, Scottsdale, June 16-20.

Metropolitan Golf Course Superintendents Association Meeting, Pelham Country Club, June 17.

Rutgers Turfgrass Research Field Day, Adelphia Research Center, Adelphia, N.J., June 23.

Golf Course Builders Association Meeting, Fresno and Del Monte Lodge, Monterey, Calif., June 24-27.

Illinois State Nurserymen's Association Summer Conference and Annual Membership Meeting, Marriott Lincolnshire Resort, Lincolnshire, Ill., June 28-29.

American Association of Nurserymen Annual Convention, Sheraton-Boston Hotel, July 10-14.

76th Annual Meeting of the American Society of Landscape Architects, Hotel de Coronado, San Diego, Calif., July 11-14.

Aquatic Plant Management Society Annual Meeting, Pier 66, Fort Lauderdale, Fla., July 11-14.

Indiana Golf Course Superintendents Association Meeting, Tippecanoe Lake Country Club, July 13.

Rocky Mountain Golf Course Superintendents Association Meeting, Los Verdes Golf Course, July 15.

Midwest Association of Golf Course Superintendents Meeting, Exmoor Country Club, July 19.

American Sod Producers Association Summer Convention and Field Days, Treadway Inn, Newport Harbor, R.I., July 21-23.

American Association of Nurserymen 21st Management Seminar, Colorado State University, Fort Collins, July 25-30.

The Fertilizer Institute Trade Fair, Cincinnati Exposition Center, July 26-28.

Penn Allied Nursery Trade Show, Hershey Motor Lodge Convention Center, Hershey, Pa., July 27-29.

University of Massachusetts Third Annual Turf Field Day, South Deerfield Turf Station, South Deerfield, July 28.

Tennessee Golf Course Superintendents Association Meeting, Crockett Springs National Golf Course, Brentwood, August 2.

Ohio Turfgrass Field Day, Columbus, August 5.

International Society of Arboriculture Annual Meeting, Stouffer's Riverfront Towers, St. Louis, Mo., August 8-12.

Professional Grounds Maintenance Society Annual Meeting, Greenfield Village, Dearborn, Mich., August 9-13.

Georgia Golf Course Superintendents Association Educational Program and Business Meeting, Northwood Golf and Country Club, Lawrenceville, August 9-10.

Erosion Control Symposium for Erosion Control Contractors, Denver, August 9-10.

Symposium on Reclamation of Drastically Disturbed Lands, Ohio Agricultural Research and Development Center, Wooster, Ohio, August 9-12.

Indiana Golf Course Superintendents Association Meeting, Prestwick Golf Club, August 10.

Plant Growth Regulator Working Group, Baton Rouge, La., August 11-14.

Rocky Mountain Golf Course Superintendents Split Meeting, Colorado City, Cheyenne, Glenwood Springs, August 19.

Rhode Island Turfgrass Field Day, Turfgrass Research Farm, University of Rhode Island, Kingston, R.I., August 25.

International Symposium on Biological Control of Weeds, University of Florida, Gainesville, August 30-Sept. 2.

Pacific Horticultural Trade Show, Anaheim Convention Center, California, Sept. 11-13.

Fourth Arkansas Turfgrass Field Day and Conference, Country Club of Little Rock, Sept. 14-15.

Turf and Landscape Day, Ohio Agricultural Research and Development Center, Wooster, Sept. 14.

Indiana Golf Course Superintendents Association Meeting, Westbrook Elks, Sept. 21.

The Fertilizer Institute International Fertilizer Conference, Waldorf-Astoria Hotel, New York, Sept. 19-22. Farwest Nursery Show, Memorial Coliseum, Portland, Ore., Sept. 22-24.

Northern California Turfgrass Council Turf and Landscape Irrigation Seminar, Asilomar Conference Grounds, Pacific Grove, Calif., Oct. 1-3.

Midwest Association of Golf Course Superintendents Meeting, Butler National Golf Club, Oct. 4.

The Fertilizer Institute International Fertilizer Conference, The Fairmont, New Orleans, La., Oct. 6-8.

NEW! AQUAPROBE



Sub-Soil Moisture Tester AQUAPROBE takes the guesswork out of soil moisture testing. Scientifically measures moisture at depths from 2 to 26 inches. No digging; no fixed point of measurement. Amazingly light-weight, portable and easy to use. Aquaprobe is low in cost, too. Write: HOWARD S. CRANE, INC. Oneida, N.Y. 13421

Circle 103 on free information card

FREE catalog of grounds care equipment



Full-color catalog shows the full line of Gravely lawn and garden tractors with accessories for mowing, grounds maintenance, gardening, snow removal, and more. Unique tractors feature all-gear transmission that

Popular Science called "probably the world's most rugged small gear-type tractor drive."



MAY 1976/WEEDS TREES & TURF 45

Portable Power For Hyd. Tools





Causco Power/Pack

The Causco Power/Pack makes it easy, economical to use hydraulic chain saws, circular saws, pruners, paving breakers, tamps -- anywhere! Write today for full details on this low-cost power source for low-maintenance, labor saving hydraulic tools.

Causco ING.

P. O. Box 1921 Independence, MO 64055

(816) 254-9850

Circle 132 on free information card 46 WEEDS TREES & TURF/MAY 1976

NEWS from page 8

Pennsylvania Turf Council Gives \$16,000 to Penn State

The Pennsylvania Turfgrass Council has given \$16,000 in grants to turfgrass programs at Penn State University in University Park, Pa.

The Council recently presented \$11,000 to Dr. James L. Starling, head of the agronomy department. These funds have two purposes — \$6,000 is earmarked for a Ph.D. graduate assistantship for David Wehner, and \$5,000 is to be used for renovation of the soil modification area at the Joseph Valentine Research Center.

Also, Dr. Herb Cole has accepted a check for \$5,000 from the Council on behalf of the Department of Plant Pathology at Penn State. The funds will be used to help defray the costs associated with analyzing the diseases affecting the plant samples sent to the diagnostic lab.

Borer Control Research Conducted in St. Louis

Dr. John Severson, a biologist for the St. Louis University Department of Arts and Science, has done research to prove that borers can successfully be controlled in municipal street trees with a minimum cost and effort.

His research to perfect an improved technique of controlling insects was prompted by recent regulations of the federal Environmental Protection Agency regarding uses of certain insecticides in municipal tree spraying programs, that have hampered use of blowermist sprayers, it was reported by Robert J. Stoffel in *Trees*.

In a cooperative research venture with the St. Louis Community Development Agency, Dr. Severson treated a boulevard planting of Modesto ash infested with lilac tree borer. The insects hatch in May and June and feast on the cambium layer throughout the summer. The tree is soon completely pruned of top growth by the insect girdling the limbs.

A systemic insecticide was dissolved in a nutrient solution containing iron chelate and injected into the root zone. A specially designed patented drill/injector was used to go rapidly through the concrete and adjacent soil without interference of roots and rocks. The drill/injector is attached to a self-contained unit with regulating control tanks. Various concentrations of systemic insecticides were used with some being dissolved only in water. Watersoluble syes were used as indicators.

Results showed rapid translocation of the systemic insecticide into the woody tissue and leaves. Dead insect larvae were found in their tunnels containing the dye.

please turn page



Connecticut Landscape Contractors Association officers are: (from left) Albert Glazier III, secretary; Dana Hinman, treasurer; William Butler, vice president; and James Cunningham Jr., president.

Don't kill it. Control it.



MAINTAIN effectively slows the growth rate of grass, shrubs and trees. That means less mowing, trimming, edging and pruning. And that means you'll be cutting down on maintenance costs.

Just about everything MAINTAIN touches grows slower. (How much slower depends on the kind of weather and greenery you've got.)

Your maintenance people won't have to go out on a limb, either. MAINTAIN can be sprayed where machinery can't go. Up steep slopes, around guard rails, along fences.

Besides keeping a green thing from



Circle 109 on free information card

Without

getting out of hand, MAINTAIN practically puts a stop to pesky broadleaf weeds.

In your business, nature running wild can increase the chance of fire or damage. So you can spend a lot of money on maintenance, use a soil sterilant to eliminate vegetation, or use a growth retardant to control nature and keep things green.

Naturally, it makes more sense to use MAINTAIN.

Contact your U.S. Borax distributor or your nearest U.S. Borax office.

California: 3075 Wilshire Blvd., Los Angeles 90010 Georgia: 296 Interstate N. Parkway, Atlanta 30339 Illinois: 1700 E. Sherwin Ave., Des Plaines 60018 New Jersey: 60 Craig Road, Montvale 07645 Canada: 234 Eglinton Ave., E., Toronto, Ont. M4P lk5

high powered right-of-way clearing.



the KERSHAW KLEARWAY

Hills to 30 degrees. Trees to eight inches. The Klearway, powered by a Caterpillar[®]3208 diesel, provides the fastest and most economical clearing available. And with the agility and operating ease of a lawn mower. Full frame articulation and hydrostatic drive allow it to hug the terrain -- any terrain. Frontmounted fly-wheel cutters provide "down to earth" cutting and complete mulching. Big. Tough. Economical. The Klearway is another dependable Kershaw machine backed by more than 25 years of engineering excellence. Arrange a demo or check out our newly released film and see it in action.



Circle 122 on free information card 48 WEEDS TREES & TURF/MAY 1976

NEWS continued

Baron Kentucky Bluegrass Wins Toronto Fair Award

Baron Kentucky bluegrass was awarded first prize recently at the Toronto Royal Agricultural Winter Fair. The sample was entered by Oseco Ltd., Ontario, Canadian distributor for Lofts Pedigreed Seed, Inc., Bound Brook, N.J.

The sample was grown at Pugh Seed Farms in Shedd, Ore. The fair is Canada's largest agricultural fair and seed show and attracts many different seed variety entries from all parts of the world.

Use Dormant Oil Sprays To Control Aphids, Scale

If aphids, scale insects or spider mites were a major problem in your landscape plants last year, get a head start on control this year by using formant oil sprays in spring. According to Jim Liebherr, extension entomologist at Michigan State University, dormant oil sprays kill overwintering insects and eggs by suffocating them.

"Aphids overwinter as eggs," he told WEEDS TREES & TURF. "Some types of scale — oystershell and euonymus scale — are in the egg stage during winter, and others such as juniper scale — are nearly full-grown. Spider mites usually overwinter as fertile females hidden in cracks and crevices. Oil sprays applied to twigs and branches coat the eggs, insects or hiding places and suffocate the pests."

Oil sprays are used in spring before plant growth begins. That is why they are called dormant sprays, he said. Use them if you had heavy aphid problems last year or if you can see large populations of scale insects on plants, he said. For best results, spray on a sunny, windless morning in spring when the temperature is above 45 degrees.

"Oil sprays are not all-purpose sprays," he cautions. "They will not control all your insect problems, and they should not be used on certain plants. Sugar maple, Japanese maple, birch, beech, walnut, hickory and butternut may be burned by oil sprays. Do not use oil sprays on blue spruce either — it will remove the bloom." He said if you cannot use dormant oil sprays to control aphids and scale in spring, insecticide sprays can be used through summer. The best time to spray depends on the insect. "If your problem is scale insects, you must control them while they are in the immature, active stage," he said. "When they become older, they stop moving around and develop a waxy upper covering. At that stage, they are almost impervious to insecticides."

He said if the problem is spider mites, they can be controlled by spraying leaf surfaces anytime from spring through fall with kelthane or tedion. Aphids can be controlled during summer with insecticide sprays of malathion of diazinon.



Siemens

New Course Builders' Head Is Siemens of California

Nick A. Siemens is 1976 president of the Golf Course Builders of America.

A former school teacher, he entered the contracting business 24 years ago and has built many golf courses along the West Coast and as far east as Kansas. He is president of Siemens' Contracting, Inc., Fresno, Calif. He succeeded Frank A. Underwood of Bowie, Texas.

please turn page





Broad spectrum Daconil 2787 fungicide controls nearly all of the fungus diseases found on golf greens, tees and fairways, as well as many ornamentals.

And now it is available in convenient flowable or wettable powder form.

Excellent turf tolerance permits use right on through the hot, summer months. Used successfully on over 25 species of grass... established turf or new seedings. Daconil 2787 is highly effective against *Helminthosporium* in the spring and fall.

DACONIL 2787° pours it to nine fungus diseases

For professional turf care over your entire golf course, follow the Diamond Shamrock Pro-4 system: Daconil 2787 fungicide, DACTHAL[®] preemergence herbicide, DACAMINE[®] and DACONATE 6[®] postemergence herbicides. You'll see beautiful results.

Contact your turf chemicals supplier, or write the Diamond Shamrock sales office nearest you.

Diamond Shamrock

AGRICULTURAL CHEMICALS DIVISION

SALES OFFICES: • 1100 Superior Ave., Cleveland, Ohio 44114 • 1401 W. Paces Ferry Rd. NW, Atlanta, Georgia 30327 • 1006 Main St., Houston, Texas 77002 • Commerce Plaza Building, 2015 Spring Rd., Oak Brook, Illinois 60521 • 617 Veterans Blvd., Redwood City, California 94063



Ice cubes and penguins. That's what most folks thought Alaska had to offer back in 1867 when Secretary of State Seward suggested we purchase it.

But thanks to thousands of Americans who invested in U.S. securities, we had the down payment on hand. So we bought what was to become our fiftieth state.

Then came the furs. The fish. The forest products. And finally, the gold. By 1900, Alaska's natural resources had repaid many times the original purchase price.

Yep, Americans invested in their country, and it really paid off. And it still does today. To you

and your country. Just sign up for the Payroll

Savings Plan at work. Then, a little is set aside from each paycheck to buy Bonds. Automatically. And what could be easier than that?

So buy U.S. Savings Bonds. They're a warm place for your cold cash.

Now E Bonds pay 6% interest when held to maturity of 5 years (4½% the first year). Interest is not subject to state or local income taxes, and federal tax may be deferred until redemption.



NEWS continued

New Pesticide Periodical Now Available for Free

A new periodical from Waters Associates, entitled *Pesticide Notes*, covers all aspects of pesticide analysis. Assays of fungicides, herbicide metabolities and insect growth regulators are discussed along with an inexpensive clean-up procedure in the first issue.

Detailed case studies of successful analyses are offered to the interested reader. For a free subscription to this newsletter, write Waters Associates, Inc., Maple Street, Milford, Mass. 01757.

Ohio's Lakeshore Equipment Honors Three Top Salesmen

Lakeshore Equipment and Supply, Elyria, Ohio, honored three of its top salesmen at its recent annual awards dinner.

First in sales was Art Wick, who covers northeastern Pennsylvania, and has been with the company since 1971. Second in sales was Herb Cole, who covers northwestern Ohio and eastern Michigan and has been with the company since 1963. Third in sales was Larry Crittenden, who covers northeastern Ohio and western New York, and has been with the company since 1972.

New Sprinkler Test Facility Operated by Johns-Manville

A new test facility which accurately measures the performance of irrigation products is now in operation in the Fresno, Calif. plant of Johns-Manville, Denver, Colo.

Douglas A. Bruce, manager of product development for the company's Ag-Turf Division, describes the precipitation testing equipment as accurate to one hundredth of an inch. Tests results in a profile or graphic illustration of how a sprinkler head distributes water. Performance is electronically measured, and a visual read-out is produced. Flow rate is measured with an accuracy of 0.5 percent of demand.

Purpose of the new facility, according to the division's marketing management, is two-fold. Its initial purpose is to insure that irrigation industry customers get equipment performance in line with specifications. Beyond this, the company plans to develop programs that will permit analysis of an irrigation customer's needs, taking into account such basic variables as climate, soils and type of turf. This will permit Johns-Manville to determine and recommend optimum designs for proposed irrigation systems.

BASF Reports Record Year, Basagran Sales Up Sharply

Basf Wyandotte Corp., Parsippany, N.J., reported record sales and earnings for 1975. The company said sales of inorganic chemicals as well as the newly introduced Basagran herbicide increased sharply.

Sales totalled \$589.8 million, a gain of 14 percent compared to \$517.4 million in 1974 sales.

Environmental Industries Buys Western Landscape

Environmental Industries Inc., SanDiego Calif. said an agreement in principle has been reached to acquire Western Landscape and Interstate Landscape, San Diego, according to Burton Sperber, Environmental president.

Western Landscape has been providing its services to the residential market in San Diego for over 12 years and is believed to be one of the largest companies of its kind in the industry. They offer their clients a total package including not only landscaping and sprinklers but such other items as patios, swimming pools, paddle and tennis courts and putting greens.

Interstate Landscape has provided landscape services for commercial, industrial and public works developments in San Diego for over six years. Environmental will merge this operation with Valley Crest Landscape, its whollyowned subsidiary with offices throughout California, as well as in Denver, Colo. and Seattle, Wash.

Management of Western Landscape headed by Robert Weiland and Charles Barranco will continue and the company will be operated as a wholly owned subsidiary of Environmental Industries, Inc.