### For trees, ornamentals, and turf.

One solution versus 44 problems. Those are pretty good odds.

Especially since you can't always be sure which insects will threaten the valuable trees, turf and ornamentals you protect. And people enjoy.

This broad-spectrum control with SEVIN<sup>®</sup> carbaryl insecticide takes some of the chance out of your job.

Its versatility also lets you cut down on

### STOP! ALL PESTICIDES CAN BE HARMFUL TO HEALTH AND THE ENVIRONMENT IF MISUSED. READ THE LABEL CARE-FULLY AND USE ONLY AS DIRECTED.

the need for a large chemical inventory. Why use an array of different brands with do the job effectively with a single product? You'll enjoy less nozzle changing, chemical switching and tank flushing. All good reasons to rely on dependable SEVIN.

Use it in any of its available forms to suit your needs. Choose from wettable powders, flowables and liquid SEVIMOL® 4.

And many SEVIN formulations are compat-

ible with most commonly used fungicides, miticides and other insecticides.

With the increased awareness and concern for protecting the environment, it's nice to know that SEVIN carbaryl is biodegradable. It does not build up in the soil or in plant and animal tissue. Also, when compared with many other insecticides, SEVIN ranks low in toxicity to people, animals, birds and fish.

There's another advantage to using SEVIN in parks, golf courses and other recreational areas-even home yards and gardens. Short re-entry time. Treated areas can be re-entered as soon as the spray dries or dust settles.

| PLANTS   | INSECTS CONTROLLED  |  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|
| HERBACEOUS ANNUAL,<br>BIENNIAL AND<br>PERENNIAL PLANTS<br>such as carnation,<br>chrysanthemum, gladiolus,<br>iris, peony, zinnia, etc.   | blister beetles, boxelder bug, flea beetles,<br>Japanese beetle, June beetles, lace bugs, leaf-<br>hoppers, leafrollers, mealy bugs, plant bugs,<br>psyllids, rose aphid, thrips (exposed).   |  |  |  |  |  |  |  |
| SHRUBS, TREES AND<br>WOODY PLANTS<br>such as ash, arborvitae,<br>azalea, barberry, beech,<br>birch, boxwood, catalpa,<br>cedar, cypress, dogwood,<br>elm, euonymus, fir, ginko,<br>hackberry, hawthorn,<br>holly, honeysuckle,<br>hydrangea, juniper, lilac,<br>magnolia, maple, oak,<br>pine, redbud, rose, spruce,<br>sycamore, tulip-tree, etc. | apple aphid, bagworms, birch leaf miner, boxelder<br>bug, boxwood leaf miner, cankerworms, catalpa<br>sphinx, Cooley spruce gall aphid, Eastern spruce<br>gall aphid, elm leaf aphid, elm leaf beetle, elm<br>spanworm, eriophyd mites, gypsy moth, Japanese<br>beetle, June beetles, lace bugs, leafhoppers,<br>leaf rollers, mealy bugs, mimosa webworm, oak<br>leaf miner, orange striped oakworm, orange tortrix,<br>periodical cicada, plant bugs, puss caterpillar, rose<br>aphid, roseslug, saw flies (exposed), scale insects,<br>spruce needle miner, tent caterpillars, thorn bug,<br>thrips (exposed), webworms, willow leaf beetles,<br>yellow poptar weevil. |  |  |  |  |  |  |  |
| LAWNS, TURF  | ants, bluegrass billbug, chiggers, chinch bugs,<br>cutworms, earwigs, European chaffer, fall armyworm,<br>fleas, green June beetle, leafhoppers, millipèdes,<br>mosquitoes, sod webworm (lawn moths), ticks.  |  |  |  |  |  |  |  |

NOTE: SEVIN will injure Boston Ivy, Virginia Creeper, and Maidenhair fern.

Make a quick check of the plants and insects for which SEVIN carbaryl is registered. See how many problems it can solve for you. In all there are over 160 pests on more than 100 plants. This broad registration minimizes the problem of drift to adjacent areas.

This year, ask your pesticide supplier for SEVIN carbaryl-the insecticide with a proven performance record in fighting plant



SEVIN and SEVIMOL are registered trademarks of Union Carbide Corporation for carbaryl insecticide. Union Carbide Corporation, Agricultural Products Division, P.O. Box 1906, Salinas, CA 93901.



Double-edged knives staggered around the large 16-in. diameter solid steel rotor provide smooth, efficient cutting without an external flywheel. Easily accessible.



Telescoping discharge chute rotates to give maximum flexibility to fill dump boxes. An adjustable bonnet at end of the chute controls direction of discharge.



Feed chute folds to enclose the cutter chamber during storage or transportation. It is side hinged so it may be swung away for easy access to cutter chamber.

### More than 120 years of manufacturing experience goes into every Mitts & Merrill Brush Chipper

For 30 years Mitts & Merrill Brush Chippers have been considered the standard of the industry by many buyers. That's because, over 120 years of engineering and manufacturing experience goes into each unit. This reputation for excellence has won for our Brush Chippers international recognition . . . has helped us maintain and build our market position.

And, over the years, we have modified and improved our chippers. Some of our design features and available options are given below.

For further information on the various models of M&M Brush Chippers, write: Mitts & Merrill, Inc., 109 McCoskry, Saginaw, MI 48601 or Phone 517-752-6191.

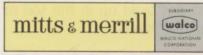
### Other standard features .

- Safety-lock pin helps prevent the accidental throw-out of knives not properly tightened.
- All steel rotor made in segments from steel plate and supported by ball bearings.
- Double-edged knives provide twice the cutting time between sharpenings.
- Easy loading is provided by the wide-angle feed chute which is free of obstructions.
- Tubular steel frame and torsion spring axle assure excellent roadability . . . rigidity.
- Integral rotor blower forces chips through discharge chute.

### **Optional features**.

"Sound Conditioning"\* to reduce noise level • Torque converter reduces shock loads on engine • Engine tachometer to determine optimum rpm • Engine hour meter for positive maintenance schedules • Electric wheel brakes for towing at highway speeds • Flasher warning lights for increased visibility • Engine side panels • Fuel gauge • Ignition cut-off switch from feed chute • Solinoid idle control at feed chute

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109 McCoskry St., Saginaw, Michigan 48601



Wholesale Nursery Growers of America, The Olympic Hotel, Seattle, Wash., July 16.

The Aquatic Plant Management Society Annual Meeting, L'hotel Sofitel, Minneapolis, Minn., July 17-20.

Garden Centers Of America, The Olympic Hotel, Seattle, Wash., July 17, 19-20.

National Association of Plant Patent Owners, The Olympic Hotel, Seattle, Wash., July 18.

National Landscape Association, The Olympic Hotel, Seattle, Wash., July 18.

Horticultural Research Institute, The Olympic Hotel, Seattle, Wash., July 19-20.

Mailorder Association of Nurserymen, The Olympic Hotel, Seattle, Wash., July 19-20.

American Sod Producers Association Annual Summer Convention & Field Days, St. Paul Radisson Hotel, St. Paul, Minn., July 20-22.

N.C. Landscape Contractors Association, Summer Meeting, Wrightsville Beach, N.C., July 22-23.

National Turf Management Clinic and Trade Show, O'Hare Inn, Chicago, Ill., July 25-26.

Penn Allied Nursery Trade Show, Hershey Motor Lodge and Convention Center, West Chocolate Ave. and University Dr., Hershey, Pa., July 26-28.

AAN Management Seminar, Callaway Gardens, Pine Mountain, Ga., Aug. 21-26.

ANN/Garden Centers of America Professional Effectiveness Program, Chase Park Plaza, St. Louis, Mo., Sept. 12-14.

Mt. Lake Right-of-Way Management Council, Sheraton Motor Lodge, Charlottesville, Va., Sept. 12-14.

AAN/Garden Centers of America Professional Effectiveness Program, Bradley Ramada Inn, Hartford, Conn., Sept. 19-21

Florida Turfgrass Annual Management Conference and Show, Sheraton Towers Hotel, Orlando, Fla., Oct. 16-19.

Professional Grounds Management Society Annual Conference, Stouffers Hotel, Greenway Plaza, Houston, Tex., Oct. 30-Nov. 3.



Bob-Cat mowers are revolutionizing the commercial and residential mowing industry. Why?

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These cats are guaranteed to live up to their mean reputations. Put them to work for you.

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Circle 125 on free information card JULY 1977/WEEDS TREES & TURF 53

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# Did somebody once believe in you?



Think about it. Would you be where you are right now professionally, financially, physically, mentally, you name it—if at some strategic point in your development there wasn't someone who "believed in you?" Somebody who came forth and said, "Hey man, you can *do* it—I *know* you can do it."

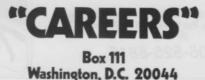
Chances are good that there was. And, as you think back you realize that it was a selfless act on his part, probably requiring only a minimum of time and energy. But look at the impact it had. On you. Because you went out and did it. And kept on doing it to get where you are today.

Right now, there is at least one person within your sphere of influence who needs his or her."believer." Needs someone to say, "Hey friend, this is one great way to go—and / believe you can get there."

You can help this individual right now by advising him or her to write to the address below. The person you believe in will then receive an audio-visual program produced by the U.S. Office of Education which expounds on the most wide-open opportunity available in the country today. Technical schools.

Entitled "You Can Be More Than You Are," the program includes a record and color brochure featuring Tony Orlando and Dawn, who convey the technical school phenomenon in an unbiased and entertaining manner. They talk about *facts*. Like the fact that millions of lives have already been improved as a result of technical schools. And the fact that there are still an estimated one million challenging and rewarding technical job opportunities available in the country right now. Our TV stars even talk with *real life* "stars" who actually became much more than they were as a result of technical school training.

So give our address to someone you believe intoday. After all, you really owe it to "yourself".





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sing Council

## Effluent water

### Continued from page 48

mends not only a soil survey, but a complete water analysis as well. Local test laboratories are available for this purpose. With these data, knowing the rate of soil infiltration and the chemical contents of waste effluent, the golf course superintendent can decide upon a proper precipitation or irrigation rate. This will be less than the rate of infiltration, and low enough (or applied intermittently) so as to prevent runoff. Younger also recommends use of automatic controllers, to regulate flow rate and application time. "There are many on the market," he comments, and mentions Toro Manufacturing, Rain Bird, Royal Coach and Moody Sprinklers as typical California suppliers.

Continuing use of soil, water and plant tissue testing is recommended by Younger, to identify effects of accumulated salts, and to insure proper fertility practices for plant nutrition, color and vigor. Using the "living filter" system, all clippings should be removed, to prevent recycling of impurities from decomposition.

### Government regulations slow development

One fly in the ointment of waste water usage in general is the increasingly strict regulation by various governmental agencies. In California, the State Water Resources Board and Department of Public Health set and administer standards (through regional water quality control boards) which some users consider "too tight." This has held up reclamation. Originally scheduled to double from 1974 to 1976 in Southern California, water recovery is today almost unchanged (at only about 6 percent of over 700 M.G.D. discharged to the ocean), according to William Garber of Los Angeles City's Bureau of Sanitation.

"With the present state of knowledge," according to John N. English of EPA's Cincinnati labs, "the greatest potential health hazard appears to be that associated with trace organic materials, and the composition of the organics and their toxicity must be defined. The second most significant problem," he continues, "is that of pathogenic organisms, especially viruses, and heavy metals that contribute to the health hazard." It appears likely that standards applied to potable water recovery may not be strictly applicable or applied to golf course irrigation. 

Harold LeSieur is the principal of his own management consulting firm in Santa Maria, Calif. He holds an M.S. degree in engineering from the University of Southern California and an MBA degree from Stanford University.



56 WEEDS TREES & TURF/JULY 1977

Circle 120 on free information card

For ad on following page circle 111 on free information card .

### **CIL Sulphur Coated Urea** The Number One Controlled Release Nitrogen Fertilizer



1975 research plots at the University of Guelph, Canada, where Sulphur Coated Urea was tested against other nitrogen fertilizers, including two commonly recognized as slow release nitrogen fertilizers. CIL Sulphur Coated Urea treated grass in foreground.

### Efficient

- Release of nitrogen is controlled by moisture. Temperature and bacterial activity are not important factors.
   Excess moisture however, does not markedly speed up the release of the nitrogen.
- Soil ph does not alter pattern of release.

Background photo:

CIL Sulphur Coated Urea prills actual size.

Please send me more information about CII

Effective

 Tested on grass plots under scientifically controlled conditions, CIL Sulphur Coated Urea outperformed all conventional slow release nitrogen fertilizers tested, in both the appearance and growth of grass obtained.

Net contents 44 lb/20 kg

Sulphur Coated Urea

32-0-0

 CIL Sulphur Coated Urea releases nutrients as soon as it is applied and continues to do so evenly over 4 to 5 months. Result is more complete utilization of nitrogen applied, and no build up of nitrates in the soil.

### Economical

- High WIN; low cost per unit of nitrogen compared to other WIN sources.
- Available in bulk or in 44 lb plastic bags.

| Name     | Company                               |
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| Address  |                                       |
| City     | Professional Turf Products            |
| Only     | Canadian Industries Limited           |
| StateZip | P.O. Box 5201 London, Ontario, Canada |
|          | N6A 4L6 Telephone: (519) 672-9220     |

A dependable source of supply of quality products, in commercial quantities, from Canada's largest chemical company

**Canadian Industries Limited** 

### the "New Concept" People We revolutionize tradition with innovation.

PRINCE (0)

1977 will be the year of the greatest advancement the sod industry has ever known. Princeton is the reason. We're moving . . . bigger in every way. Moving to a bigger, brand new manufacturing plant . . . a production facility that will help us meet your overwhelming demand for Princeton Manufacturing Sod Harvesters and Nursery Equipment.

Moving into an even wider selection of revolutionary sod and nursery products.

Princeton experience and the quality of our prod-

ucts has made us the most trusted name in the Sod Harvesting and Nursery industries. Our unique technical skill has enabled us to tackle the many challenges of our industry ... finding solutions to the problems of inefficiency ... excessive, costly down-time . . . inadequate production and soaring labor costs. We did it! Now, we're doing much more!

We are proud of the reputation that Princeton has earned. We are grateful for your trust and acceptance. We will continue to live up to this trust.



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Want free information on products and services advertised and featured in this issue? Use this card. Circle the numbers on which you want information and mail today.

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| 241     | 242   | 243       | 244     | 245        | 246 | 247 | 248 | 249     | 250        | 700        | 701        | 702        | 703        | 704        | 705 | 706     | 707        | 708        | 70 |
| 221     | 222   | 223       | 224     | 225        | 226 | 227 | 228 | 229     | 230        | 231        | 232        | 233        | 234        | 235        | 236 | 237     | 238        | 239        | 24 |
| 181 201 | 182   | 183       | 184 204 | 185<br>205 | 186 | 187 | 188 | 189 209 | 190<br>210 | 191<br>211 | 192<br>212 | 193<br>213 | 194<br>214 | 195<br>215 | 196 | 197 217 | 198<br>218 | 199<br>219 | 20 |
| 161     | 162   | 163       | 164     | 165        | 166 | 167 | 168 | 169     | 170        | 171        | 172        | 173        | 174        | 175        | 176 | 177     | 178        | 179        | 18 |
| 141     | 142   | 143       | 144     | 145        | 146 | 147 | 148 | 149     | 150        | 151        | 152        | 153        | 154        | 155        | 156 | 157     | 158        | 159        | 16 |
| 121     | 122   | 123       | 124     | 125        | 126 | 127 | 128 | 129     | 130        | 131        | 132        | 133        | 134        | 135        | 136 | 137     | 138        | 139        | 14 |
| 101     | 102   | 103       | 104     | 105        | 106 | 107 | 108 | 109     | 110        | 111        |            | 113        | 114        | 115        | 116 | 117     | 118        | 119        | 12 |

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  - C. Railroad
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- 4. 
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- 5. Golf Courses
- 6. Cemeteries
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- 9. Hospitals, Nursing Homes, Schools, Colleges and Universities (Grounds maintenance personnel only)
- 10. Athletic Fields
- 11. C Race Tracks

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Hustler Turf Products at Excel Industries, Inc. has added two regional sales managers. William "Pat" Patton will be responsible for covering sales in a 15-state Central USA region. He has been sales and marketing manager for Deines Corp. for the past two years. Jack Parker will cover a similar region in the Western U.S. He moves to Excel from the Hesston Lawn Equipment Division.

Howard Cooper has been named marketing research manager of the Turf Products Division, Jacobsen Manufacturing Co. He will be responsible for marketing analysis and forecasts, including field studies for new turf product developments. Cooper holds an MBA degree from the University of Michigan. Ann Arbor.

Great Lakes Biochemical Co., Inc. has announced two new salesmen. Bob Rothacker will cover California, Oregon, Washington, Arizona, Nevada, Idaho and Utah upon the retirement of Bob Flowers. Rothacker has been manager of the institutional industrial division of Drackett Products Co. for the past 10 years. Doyle W. Head will cover Ohio, Kentucky, Indiana, Michigan, West Virginia and Western Pennsylvania. He has over 13 years of experience in sales, plus university courses and seminars on business administration and sales management.

**Richard J. Dittoe** has been named domestic sales manager of the Turf Products division, Jacobsen Manufacturing Co. He will be responsible for North American and government sales, advertising and sales promotion, sales training and demonstrations, and customer order service.

Herb Cole has been promoted to area manager for the Northern

Midwest region of Lakeshore Equipment and Supply Co. Formerly a sales representative in the northwest Ohio-southwest Michigan area, Cole has been with Lakeshore over 14 years. William "Butch" Cauthen has been promoted to field product manager at Thompson-Hayward Chemical Co. He will be responsible for sales, training and determining product lines for pest control and fumigation products. He has been with Thompson-Hayward for 8 years and has been a pesticide sales representative in Birmingham, Ala.



### PRECISION HYDRAULIC CONTROL



Ford hydraulic lift system offers precision control for landscaping and soil preparation. Equipment responds smoothly and accurately with fine increments of adjustment. With 8.5 gpm hydraulic pump, you get fast, positive action for remote hydraulics, side-mounted cutterbar mowers, utility loaders and other equipment. Count on your Ford tractor and equipment dealer for sales and service. He's listed in the Yellow Pages under "Tractor Dealers".



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Versatile twin-lever control system allows three types of response: 1. Position control. 2. Draft control. 3. Position and draft control working together to limit maximum depth of equipment in widely varying soil conditions.

**8.5-gpm pump** and twin-lever hydraulic control are standard on Ford 32- 52 PTO horsepower allpurpose tractors; optional on other Ford 3-cylinder tractors (except orchard, vineyard).

