The Chipco[®] Line. It's growing like grass.

Now you can have a matched set of Chipco herbicides, fungicides, and micro nutrients in your turf maintenance bag. Chipco provides virtually everything you need to keep turf free of troublesome weeds and diseases and promote a good looking, perfectly playable course.

Ask your Chipco distributor about new Chipco[®] 26019 that outperforms other fungicides with half the number of sprays . . . and Chipco[®] Ronstar[®] G that controls crabgrass, goosegrass and poa annua up to 120 days with one early application. And ask him about the advantages of buying everything you need from the entire quality line of Chipco turf products.

HIPCO BUCT

Rhône-Poulenc Chemical Company, Agrochemical Division, Monmouth Junction, New Jersey 08852.



It's Powerful ... Safe ... Versatile!

Princeton's mighty "Piggyback" has solved many of the problems that have always plagued heavy-duty, field quality material handlers. The remarkable "Piggyback" is light...strong...fast...durable...**AND** completely stable on the job!

The Piggyback will lift and load up to 4500 lbs. at a time ... turn quickly in its own length ... navigate curbs, logs, and other obstacles with ease...trudge through gravel, sand and mud, but float over normal soil...and then load itself onto your truck for a piggyback ride home at the end of the day.

How is it Possible?

The Princeton "Piggyback" provides an extremely low ratio of weight to carrying capacity...with complete stability. Stability is achieved by carrying the load weight between the drive wheels instead of in front, as with other fork lifts, and by special hydraulic stabilizer legs. Load is lifted to truck bed height, then rolled over truck bed by a horizontal carriage.

Heavy-duty high torque wheel motors allow the "Piggyback" to operate on steep grades or in adverse ground conditions and to drive easily over normal loading area obstructions while fully loaded.

The Piggyback's 28 h.p. Murphy 2-cylinder diesel provides superior power for all adverse operating conditions.



Loaded for Piggyback ride home.

For additional information or demonstration, write, or call collect:

Rodger Osborne, Sales Manager 955 W. Walnut St., Canal Winchester, Ohio 43110 (614) 837-9096





Midwest conference accents turf research

"Research and its Applications" will be the theme of the Midwest Regional Turf Conference, scheduled for March 3-5 at the Stewart Center, Purdue University, W. Lafayette, IN.

Monday's general sessions will deal with research and results on nitrogen, fertilization programs, and roots and their functions.

On Tuesday, the program will be divided into topics for private golf, public golf, and lawn care. Some of the golf discussion will concern turf maintenance and energy conservation, sands, rootzones, preemergence and postemergence, and seed supplies. Subjects under the lawn care session include pesticide analysis, promoting and advertising, turf disease and control, and regulation of fertilizer sold.

'Adelphi' bluegrass gets Canada license

Agriculture Canada has granted a license for the Kentucky bluegrass variety 'Adelphi' on recommendations by researchers in Nova Scotia, Ontario, and Western Canada.

'Adelphi' has been chosen by the U.S. Plant Variety Protection Office of the USDA as a standard for dark green color to which all bluegrasses applying for plant protection in the future are compared for color classification. The seed has been found to be very plump (about 1,300,000 seeds per pound) which may account for its vigorous establishment.

J. & L. Adikes, Inc. of Jamaica, NY, under agreement with Rutgers University, own marketing and patent rights on 'Adelphi' and have appointed Rothwell Seeds Limited of Lindsay, Ontario, exclusive distributors in Canada.

New bermudagrass looks promising

Graduate students at Virginia Polytechnic Institute & State University, Blacksburg, are currently conducting studies with a new bermudagrass variety that could soon be commercially available for use on golf course fairways, athletic fields, and in general turf areas.

Among the characteristics observed of this strain, called VPI C-1, are its outstanding vigor and attractive medium-green color. It forms a tight sod that tends to remain weed free and appears to tolerate traffic well.

It survived the severe winters of 1976-77 and 1977-78 at Blacksburg when most of the bermudagrasses in other trial plots were killed.

82

No mixing, no burning, no hassle.

FOLIAN

Introducing FOLIAN[®].. the easy-touse liquid fertilizer that's safe and effective on any kind of turf.

FOLIAN is a complete fertilizer. Its special formulation of N-P-K, sulfur and iron gets nutrients directly into grass tissue. And FOLIAN will not cause tip burn when used as directed.

Convenient to use

FOLIAN is the only turf-builder you'll ever need. It saves you time because there's no mixing or agitation required before using FOLIAN. And FOLIAN can be applied in more concentrated form than most other liquids. As a result, you can service more lawns per truckload with fewer wasted man-hours.

A clear solution of the highest quality, FOLIAN won't settle out in your tanks. It's compatible with most pesticides, too.

Greens lawns fast

Because of its patented formulation and foliar activity, FOLIAN greens up turf quickly—faster than dry fertilizers or suspensions. And at the recommended rates, FOLIAN supplies enough residual fertilizer in the soil to keep grass green and healthy for many weeks.

Good for your business

Your customers will love the results

FOLIAN gives. And you'll appreciate FOLIAN's convenience.

Best of all, FOLIAN makes your lawn care service more valuable. It means repeat business from satisfied customers and greater confidence in you.

Give FOLIAN a try and discover how it can mean more green for both of you.

To find out more about how to get started using FOLIAN, call toll-free 800-228-2178 Omaha, Neb., 800-446-1841/800-446-1845 Hopewell, Va. or write Allied Chemical Corporation,

or write Allied Chemical Corporation, Dept. AG, Box 2120, Houston, TX 77001.

Circle **110** on free information card



FOLIAN complete liquid fertilizer.

PRODUCTS

Piggyback material handler by Princeton Manufacturing Co. will lift and load 4,500 pounds of sod, trees, and other nursery materials. It



carries the load weight between the drive wheels instead of in front to give stability. It provides a low ratio of weight to carrying capacity, and is designed to lift itself off the ground behind any suitable truck for easy, efficient transport. A two-cylinder diesel engine and hydrostatic wheel motors and wheel torque hubs power the machine through all adverse conditions — in mud, sand and gravel; over curbs, logs, and other obstacles; and on steep grades.

Circle 709 on free information card

The RCS-4 row crop sprayer applies liquid chemicals to control weeds and grasses in row crops and sod beds. It spot sprays for application only in infested areas, saving fuel and herbicides. High flotation tires and light weight reduce soil compaction. Twin chemical tanks hold 110 gallons, which can be pumped by either a high-capacity centrifugal pump or a 7-roller pump. Its 48-inch ground clearance is useful for nearly all row crops during the full spraying season. The Hustler Corp. machine has a 20-foot, three-section, spring-loaded boom for multiple height adjustment for the particular crop. The combina-



tion hydrostatic/differential transmission controls speed (tops is 12 mph) and permits smooth operation at low speeds for wick bar applications.

Circle 704 on free information card

The HT 20 Bolens diesel tractor offers the power of a twin-cylinder 19.9-horsepower cast iron diesel engine along with the easy operation of hydrostatic drive with treadle foot



Mow smoothly and pick up clippings in one pass! The rugged, versatile Lawn Genie thatches lawns, verti-cuts greens, tees and fairways, sweeps leaves, wades through high weeds and empties easily from the tractor. It's the pick-up mower that cleans, mows and sweeps.

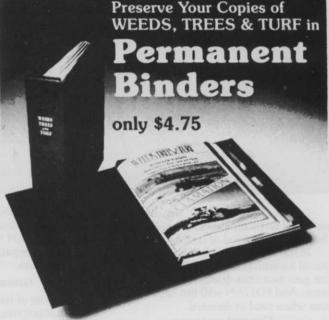


36", 60", 72" cutting widths -

with or without loading hopper.



Mathews Company BOX 70, CRYSTAL LAKE, IL 60014, PHONE: 815-459-2210 Circle 154 on free information card



Custom-made binder easily holds entire year's copies of WTT magazine. Green binder with gold embossed logo protects your magazines and gives your library a neat appearance. Magazines can be inserted as they are received. Annual index in December issue makes it easy to find information you need quickly . . . Send check or money order to:

9800 Detroit Ave. Cleveland, Ohio 44102 (Add \$1.25 per Binder Shipping Chg.) Allow 6-8 Weeks Delivery.

If you use Chipco Ronstar G in April, this won't happen in August.



Crabgrass. It can come back to haunt you! A number of golf courses found out during an unusually wet summer last year. After 60 to 90 days, smack in the middle of the golfing season, they found themselves with a horrendous crabgrass problem all over again. Even though they were using a leading herbicide.

It wouldn't have happened with preemergent Chipco Ronstar G herbicide. It's that simple. One application of Chipco Ronstar G in early

spring controls crabgrass in perennial bluegrass, bermudagrass, perennial ryegrass and St. Augustine grass turf for up to 120 days. And it controls goosegrass, annual bluegrass and five other nuisance weeds at the same time. So, while Chipco Ronstar G may cost a little more, the 120 day control is worth every penny, and more.

For more information, see your Chipco distributor or Rhône-Poulenc representative. Rhône-Poulenc Chemical Co. Agrochemical Division, Monmouth Junction, New Jersey 08852.



Circle 127 on free information card



Limb Lopper's lightweight, powerful hydraulic tools get the job done faster and with less effort. Shade tree pruner handles up to 2-inch branches, has insulated extension. Powerful pole chain saw for up to 10-inch wood, has insulated extensions. Circle saw with 9-inch blade for high speed cuts has 30-degree angle head. Insulated extensions and chip guard available. Hand chain saw, beautifully balanced, smooth, quiet operation. Available in 12, 16 and 18-inch bar models.

Combine Limb Lopper high efficiency tools with your existing system – digger-derrick, bucket truck, other mobile equipment or portable power pack. Write or call today for further information.



Circle 115 on free information card

One reason Durwood Rorie sells so many industrial air cleaners overseas is because he saw the potential. Another is because he used our services.



Durwood G. Rorie, Jr., President, United Air Specialists, Inc., Cincinnati, Ohio.

May we provide some for you?

Write: Secretary of Commerce U.S. Department of Commerce Industry and Trade Administration, BED-21 Washington, D.C. 20230.



Products

from page 84

control. A two-spool "power-lift" hydraulic attachment lift allows the operator to perform two operations at once off a shaft driven PTO for



front, center, and rear mount attachments. The massive two-speed rear axle and differential are built to handle a variety of heavy jobs. FMC Corp., Outdoor Power Equipment Div., makes it.

Circle 703 on free information card

The Swinger line of loaders features five models ranging from the 110 with an SAE operating capacity of 1,175 pounds to the 320 with an SAE capacity of 3,012 pounds. All models feature 20 degree front-rear frame



oscillation and fourwheel hydrostatic drive for safe, stable work over rough terrain with full loads. Total 80 degree articulated steering permits easy maneuverability in tight quarters. Dynamic Industries, Inc. makes the loaders.

Circle 708 on free information card

A forklift attachment for the W4 wheel loader, made by the Davis Div., J I Case Co., holds 1,135 kilograms (2,500 pounds) and lifts to

May 1979/\$1 25 1 II TIT the bronson concern. DON'T CUTOUT QUALITY Ponland Oregon 97201 222-3546 area 503 O IT RIGHT WITH STANLEY. WI H STANLEY. Quality, by our stand-ard, is something which goes a lot further than making tools. To Stanley, it means: a full line of tree trimmers for every job; the best warranty in the busi-nees; complete parts backup; and dis-tributors to help you anywhere in the country. It's also the efficiency, safety and dependability of hy-draulic power. We don't trim on anything so that you're able to do your trimming fas-ter. Stanley Hydraulic Tools: saft 0.S.E. Naef Road, Milwaukie. Oregon 97222 Phone (503) 659-5660. Telex 360771. Write or call. 21 August 1979 Mr. Dick Gore National Advertising Sales Manager Marvest Publishing Company 3019 Maple Center One Building Atlanta, Georgia 30305 Atlanta, Georgia 30305 Dear Dick: I'm writing to express our appreciation to your publication for our client Stanley hydraulic Tools. for our client Stanley Hydraulic Tooustanding Periods Effective 15 February of this year, our 1/3 page Baw and the company's (771 in elevtrimming tools had drawn next closest number of inquiries were drawn by a drawn by constant of the publications. In fact, the spread (528)! Needless to say, we're impressed, and grateful, and part of Stanley Hydraulic's total promotional program. Best regards Ingrid Louiselle Media Director IL/hs cc: Mr. Bob Mierow STANLEY Circle 148 on free information card 771 inquiries MAY 1979/WEEDS TREES & TURF 65 in eleven months. Average reader inquiries per display ad placed in WT&T for years shown. This Stanley one-third page in Actual represents Weeds Trees & Turf pulled 26% gain 1976-1977 84.7 "more inquiries than any other 71.8 publication . . . Even more than 62.6 a four-color spread elsewhere" -Ingrid Louiselle, the bronson concern Buyers who track advertising performance know Weeds Trees & Turf magazine is highly productive ... and we think productivity is a mighty important testimonial for media decisions. 1976 1977 1978 Come grow with us. With

Products from page 86

3.7 meters (144 inches). It is ideal for moving sod and a wide range of landscape jobs. A rugged five mainbearing, liquid-cooled, 35-horsepower diesel engine powers it.

Articulated design and a centerpivot steering joint permit 70 degree



articulation, allowing the front and rear wheels to always follow the same track. Combined with hydrostatic drive for variable travel speed and hydraulic power steering, the W4 easily maneuvers in confined areas or rough terrain. It attains speeds to 4.4 mph for work and 12.7 mph for transport. A hand lever selects forward/neutral/reverse, and a pedal controls speed and power.

Circle 706 on free information card

High torque and fuel efficiency have been added to the HF-15 mowing tractor from the Jacobsen Div. of Textron Inc. The tractor now comes with a 236 CID Perkins diesel engine that generates 192 foot pounds of tor-

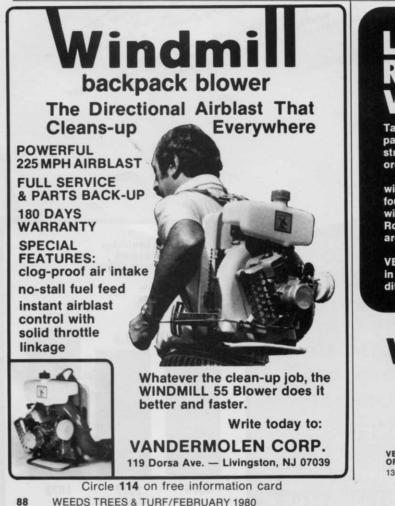


que at 1,350 rpm. Horsepower is now 78 compared to 65 previously. Fuel consumption remains the same. A huskier gearbox drive, PTO shaft and U-joint, and clutch have been added along with revised instruments and mowing controls, air cleaners, and exhaust system. This out-front mowing tractor has hydraulically driven reels which allows for reel rotation at a consistent rate, independent of the rotation of mower wheels.

Circle 713 on free information card

A tough, compact grader from Hefty Tractor Co. does a variety of jobs and saves fuel, manpower, and maintenance costs. It has a short turning radius, power steering, and turning brakes for good maneuverability. Blades lift high for clearance and trailer loading. Blades and controls are positioned for operator command.

A blade between the wheels pushes from the solid rear frame mount. Blade angles, lifts, and tilts to either side hydraulically for finish Continues on page 93



Lawn Smooth, Rock Tough

Talk about versatile! The Vemco Flail Mower keeps parks, and other large lawn areas smooth and streak-free. It also cuts rocky, trashy areas where ordinary mowers cannot go.

Standard Series mowers, with 42", 48" and 60" widths, have many construction features usually found only on heavy-duty models. Heavy Duty Series, with 60", 72" and 84" widths are tougher yet. Rock Dodger blades swing free in all directions, are practically immune to breakage.

We urge you to compare a **VEMCO** with any other mower in its class. You'll see the difference and like it.



1331 23rd Street, Racine, WI 53403 . Telephone 414/634-6050 Circle 148 on free information card

THE NEW, 4 BILLION YEAR-OLD LAWNCARE DISCOVERY.



Micro-Munch puts life back into lawns with billions of microorganisms to loosen and aerify the soil, and turn compacted mat & thatch into rich humus.

ful insecticides and machinery that compacted and literally "squeezed" the life out of the soil. All this has led to unhealthy, weakrooted, problem lawns with thick, unnatural mat and thatch.

To solve the problem, the scientists at Agro-Chem took a long look backward, and developed Micro-Munch as part of their famous Green Magic Lawncare System. Micro-Munch is the first product that actually restores the natural organisms necessary for healthy, lush, diseaseresistant turf.

Micro-Munch reduces maintenance costs.

By restoring nature's balance, sprayapplied Micro-Munch can actually

MICRO-MUNCH. A GIANT STEP BACKWARD.

In the beginning, the earth's soil was filled with natural organisms that quickly decomposed organic debris and promoted deep-rooted, healthy vegetation. But over the years, man has destroyed much of this'natural balance with over-fertilization.

harm-

lower your maintenance costs by reducing the need for fertilizing, watering and pesticide application. And Micro-Munch will eliminate the need for Power Raking and frequent reseeding and resodding.

Micro-Munch works fast and is easy to apply.

Once applied, Micro-Munch's balanced soil diet goes right to work , naturally decomposing harmful accumulated mat and thatch-up to ¾" within 9 to 12 weeks – turning it into nutritious humus. And Micro-Munch sprays on quickly, for noticeable results in weeks.

New Turf Begins With a Phone Cali. Or A Stamp.

To find out how Micro-Munch can work to restore lush new life to your grounds, and actually reduce maintenance costs, return the attached coupon. Or for faster service, call us collect. Micro-Munch. It's an idea who's time has come.

> CALL MR. THOMAS GREENE, COLLECT 312-455-6900

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Actually TTS ABOUT TIME. AGROCHEM, INC. Where the grass is always greener. 11150 W. Addison, Franklin Park, Illinois 60131 Name Company Address City State Zip

Phone _____ My turf is _____ Sq. Ft., or _____ acres

□ I'm interested in becoming a Micro-Munch distributor or dealer. Large Quantity Discounts Available.

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