



# The most versatile little diesels this side of the city limits.

International® 200 Series tractors are as much at home in the city park as they are on the farm. And with all the attachments that are available, they're every bit as versatile. Whether the job is mowing grass, throwing snow, hauling sod, or pulling a sprayer, a 200 Series tractor gives you all the power you need. And more agility than you'd ever expect.

These aren't your everyday small tractors. One quick look at the lighted instrument panel will tell you that. The tachometer and hour meter are standard equipment. So are

the live hydraulics and the 3-point hitch. No other tractor in the 15.2 to 27 PTO hp class comes close to matching all the standard features that are yours with the International 200 Series.

The 200 Series tractors are positive proof that International quality comes in all sizes. And when a tractor is as versatile and reliable as each of these, why keep it down on the farm?

Tractor	PTO HP*
234	15.2
244	18
254	21
284	27

Available in 2 WD or AWD.  
\*Manufacturer's Estimate



A real feel  
for the work you do.



**INTERNATIONAL HARVESTER**

Circle No. 123 on Reader Inquiry Card





# CRABGRASS OR GOOSEGRASS?

# CONTROL BOTH

If you think you've seen late-germinating crabgrass in your turf, you may really have been looking at a goosegrass problem.

Either way, you can solve the problem with CHIPCO® RONSTAR® herbicide.

### THE DIFFERENCE BETWEEN CRABGRASS AND GOOSEGRASS.

Goosegrass is more common than you might think. It's easily mistaken for crabgrass, especially when it's mowed.

What's the difference? Check the color first. Goosegrass is a

darker green. And it always grows in tufts. Crabgrass doesn't.

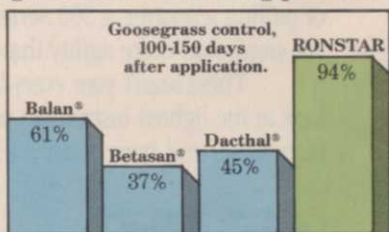
There's another important difference: goosegrass is much harder to control. Unless you use RONSTAR.

### CRABGRASS OR GOOSEGRASS... IT MAKES NO DIFFERENCE WITH RONSTAR G.

RONSTAR is the only herbicide you can count on for effective preemergent control of both crabgrass and goosegrass.

While other products will give you satisfactory performance on

crabgrass, they don't even come close to RONSTAR on goosegrass. Years of testing prove it:



Summary of 9 years of testing conducted by University Experiment Station and Rhône-Poulenc personnel.

So you have two choices. Use an ordinary crabgrass herbicide





# GOOSEGRASS OR CRABGRASS?

# WITH RONSTAR.

HERBICIDE

and hope crabgrass is your only problem.

Or play it safe and use RONSTAR this season, for excellent, season-long control of both crabgrass and goosegrass.

### **NO RAIN-OUTS, ROOT PRUNING OR PROBLEMS WITH PLANTINGS.**

RONSTAR is the most convenient herbicide for your turf care program. It won't leach, so you can fit it into your schedule earlier. It's highly selective, causing no root pruning in peren-

nial bluegrass, perennial ryegrass and bermudagrass, no harm to ornamental plantings or trees.

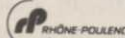
### **QUALITY CHIPCO TURF CARE IS THE "RIGHT APPROACH."**

Wherever the professionals really care for turf — and especially where both crabgrass and goosegrass are problems — word is getting around. CHIPCO RONSTAR herbicide is your best choice for effective, convenient, long-lasting control.

For more information on RONSTAR or other CHIPCO

turf care products, ask your CHIPCO distributor.

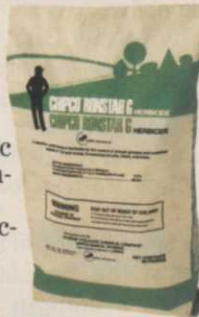
Rhône-Poulenc Inc., Agrochemical Division, Monmouth Junction, NJ 08852.



## **RONSTAR** **SPREAD THE WORD.**

Please read label carefully, and use only as directed.

Circle No. 150 on Reader Inquiry Card



## UPDATE

### ALCA offers marketing help

The Associated Landscape Contractors of America has developed a new marketing package designed specifically for the exterior maintenance contractor. The package allows maintenance contractors to take advantage of two types of professional selling tools to enhance his business and services. Three mailers are available, designed to look like greeting cards and with a place to insert a business card. They are priced as low as 20 cents each.

The second part of the marketing package includes a brochure that can be sent as a follow-up to those who respond to the mailers or to those who have otherwise expressed an interest in maintenance services. Color photographs will depict results that are possible by using a professional landscape manager. It will also offer ideas on how to select a professional maintenance contractor, and the advantages of using professional rather than in-house maintenance. In addition to presenting the marketing concept, the brochure has been designed to include specific services offered by the individual maintenance contractor. A pocket in the back of the brochure can hold company literature, required bid information and a business card. For more information, contact ALCA, 1750 Old Meadow Road, McLean, VA 22102 (703) 821-8611.

### CLCA honors 45 for outstanding work

Forty-five Trophy Awards in 21 residential and commercial categories were presented by the California Landscape Contractors Association to landscape professionals throughout California for the most outstanding work of 1982.

Winners in the 27th Annual Trophy Awards are:

The Sweepstakes Award, the highest honor presented by the CLCA for excellence in landscaping went to Art Torres Landscaping, Inc. of Encinitas for the Chantemar models in San Diego. Project was designed by Land Concern, Ltd. of Santa Ana.

The President's Trophy, presented for the best residential landscaping project of the year — Zierden Waterfalls of Sacramento for the Beneto residence in Carmichael. Designer was Dennis Tromburg of Sacramento.

For the entry judged best in all commercial categories, the Jere Driscoll Award went to Cagwin & Dorward of San Rafael for Santa Rosa Plaza in Santa Rosa. It was designed by Lawrence Reed Moline of Santa Monica.

The Excelsior Award, which recognizes special talent in any category by a new CLCA member, was won by Friesen Landscape of Fresno for the Arnst residence in Kingsburg. Tim Friesen was the designer.

The Judges Award, which salutes the best residential landscaping under \$25,000 went to Cal-Tropic Landscape, Inc. of Rancho Palos Verdes for the Cooper residence in Rolling Hills Estates.

For the use of unique methods or materials and/or special artistic effects, the Special Effects Award was given to Pacific Water Art of Mountain View for Orchard Technology Park in San Jose. The job was designed by Singer & Hodges of Oakland.

The Ben Slade Memorial Award for best overall landscape maintenance was presented to M.C. Landscape Care of Reseda for the Bellfield residence in Encino. Designer was Warner Ristau of Granada Hills.

*Continued on page 84*

cultural engineer Rome H. Mickelson at the USDA's Agricultural Research Service, Central Great Plains Research Station, Akron, CO. Mickelson measured growth differences two years after trees were planted and average heights of trees in the study were from 10 to 20 inches.

"The rubber mulch, placed to prevent runoff, improves water use efficiency by reducing water evaporation from the soil surface and preventing growth of undesirable vegetation," says Mickelson.

After two years of growth, trees and shrubs with the rubber mulch were not significantly influenced by the addition of one, three, five or seven gallons of water per week per tree supplied with the drip irrigation system. Without the mulch, the addition of water increased tree growth 40 percent compared with non-irrigated trees.

## HORTICULTURE

### HRI book stresses nurseryman's viewpoint

A new publication from the Horticultural Research Institute can benefit everyone in the industry, according to its reviewer, Ray Brush, director of technical services of the American Association of Nurserymen.

"A Research Summary of the Census of Horticultural Specialties" details industry trends and gives an analytical review of nursery and floral industry statistics from 1949 to 1979.

"This publication is written from a nurseryman's point of view and gives all segments of the industry a pulse of what's going on," Brush said. Even though certain sections, such as the statistics on production, will have a more immediate effect, in this case on producers, they still have definite bearing on the landscape and retail segments of the industry, according to Brush.

"The statistics would be helpful in these two segments in planning ahead," he says.

Future production and market planning are two areas the book's author, David E. Stump, retired president of the Jackson & Perkins Co. of Medford, OR, addresses.

In the first section, the study begins with a summary of the data. Then, through tables and narrative, the second section provides the details regarding the sales of horticultural commodities which have proven popular

*Continued on page 16*



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## UPDATE

### Reagan highlights agriculture, education in State of Union

President Reagan emphasized the needs of the U.S. educational system and agribusiness during his third State of the Union Address in January. The Green Industry stands to benefit from any program designed to help agriculture or education, especially math and science training highlighted by Reagan in his address.

Reagan clearly sees retraining as part of economic recovery. He wants to encourage growth industries and industries with export potential. Agriculture and high technology industries should be receiving national support according to Reagan.

The President also reemphasized Federalism, the return of government functions to the states. Unemployment has caused states to cut back on many programs because of falling income tax revenues. But Reagan claimed "America is on the mend . . . but recovery won't come in a short, sharp spurt."

Subsidization of math and science education and an income tax deduction for college savings were two of Reagan's four points to help education. Since he stressed agriculture in addition to science, an increase in Federal funding to Land Grant Universities for agricultural programs could result. Horticulture and agronomy could benefit from such funding.

### AAN lobbyist Donahue recovers from minor stroke

Leo Donahue, government affairs director for the American Association of Nurserymen, suffered a minor stroke during the Kentucky Nurserymen's Association Meeting in Louisville in January. He was transferred to Bethesda Naval Hospital and doctors report they expect a nearly complete recovery. Ray Brush, director of the National Landscape Association, said they expect Donahue back at his desk within the next few weeks.

### Research to net new labels

Five representatives of the interregional research project #4 (IR-4) recently met at the AAN office to update AAN and the Society of American Florists staff on research under way to obtain data for registering pesticides for nursery and florist uses. Drs. Guest and Biehn (IR-4 headquarters), Rutgers University, Powell (Plant Pathology, Ohio State University), Lindquist, (Entomology, Ohio Agricultural Research Center), and Frank (Weed Control Research USDA-ARS) responded to added AAN/SAF requests for registration needs and said that most had been anticipated and research has already begun.

### Migrant worker act signed

The Migrant and Seasonal Agricultural Worker Protection Act was signed into law by President Reagan in January. The Act repeals the Farm Labor Contractor Act which put unnecessary paperwork and enforcement requirements on employers of seasonal and migrant labor. AAN lobbied for the repeal of the Farm Labor Contractor Act with other organizations.

over the past 30 years, including potted flowering plants, cut flowers, unfinished stock, cultivated greens, bedding plants, foliage plants, sod, bulbs, corms or rhizomes, cultivated mushrooms, nursery products and vegetable and flower seeds.

"Throughout the book, the author concentrates on basic, fundamental information that would benefit anyone in the industry," Brush says.

The book outlines developing profit-boosting strategies for nursery businesses as well as informative educational material for educators and students.

"A Research Summary of the Census of Horticultural Specialties" is available for \$10 per copy (\$7.50 for educators and students) from the Horticultural Research Institute, 230 Southern Building, Washington, D.C. 20005. The book is free on request to HRI contributors.

## GOLF

### Columbia Car names new executive

Donald V. Conway has joined Columbia Car Corporation as executive vice president. Conway was formerly executive vice president of Rayovac Corporation in Madison, WI. Columbia's president and Chief Executive Officer Joseph Noll said Conway would share responsibilities for all the firm's operations.

"With Columbia Car's plans for developing new products and new markets, we will look to Don to direct this expansion," Noll said.

Columbia Car, a golf car manufacturer, has new manufacturing facilities in Deerfield, WI. Columbia Management bought the golf car division of the Harley-Davidson Corporation in Milwaukee and moved the manufacturing operation from Pennsylvania to Deerfield.

## HORTICULTURE

### Amfac names Kemp to director's post

John W. Kemp of San Francisco has been named director of strategic planning for Amfac, Inc.'s Horticulture Group.

Previously, Kemp, 40, had been manager of strategic planning for Xerox Corporation in Greenwich, CT. In his new position, Kemp will be re-

*Continued on page 19*



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sponsible for planning and new business development. He holds an MBA from Harvard University's Graduate School of Business Administration and a BS degree from Michigan State University.

Amfac's Horticulture Group includes wholesale nursery, mail order seed and tropical fruit products operations. Amfac, Inc., is a diversified, NYSE-listed company with principal activities in horticulture, wholesale distribution, food processing, hotels and resorts, retail and Hawaiian sugar and land. Revenues in 1981 were \$2.1 billion.

**IRRIGATION**

**Hodas assumes Irrigation presidency**

Ernie Hodas of Century Supply Corporation, Madison Heights, MI, has assumed the presidency of The Irrigation Association. He was named at the Association's 33rd Annual Convention held recently in Walt Disney World, FL. Hodas is president of Century, which distributes irrigation

equipment for both the turf/landscape and agricultural markets. Hodas becomes the 25th president of the 43-year-old organization.

Claude C. Laval III, has been named president-elect for 1983. He is president of the Claude Laval Corporation, Fresno, CA, and will automatically assume the presidency in 1983. Other positions filled were:

-Charles S. Putnam, vice president; of Weather-matic Sprinkler Division of Telsco Industries of Dallas, TX.

-Raymon A. York, treasurer; he is president of Ewing Irrigation Products of San Leandro, CA.

-Elected as directors for three-year terms are Orlando DiRienzo, Manager of Irrigation Sales for Paige Electric Corporation of Union, NJ; John Riddering, president of Agrifim Irrigation Inc. of Fresno, CA; and Lonny Summers, president of Irrigation Systems of Texas Inc.

Next year the Irrigation Association will combine its convention activities with the Agri-Turf Irrigation Exposition and Conference, scheduled for Dec. 4-7 1983 in Denver, CO.

The Irrigation Association is a world-wide organization of more than 900 members, representing manufac-

turers, distributors, contractors, consultants and university and government personnel interested in all phases of irrigation for agriculture and the landscape.

**CHEMICALS**

**Granular Oxamyl is registered**

According to Dr. Richard Lindquist, Extension Entomologist at the Ohio Agricultural Research and Development Center, another new insecticide, Oxamyl 10 percent granular, has recently received registration. This is the same active ingredient contained in Vydate, only in granular form.

Oxamyl is registered for use in greenhouses for control of many insect pests, including fungus gnats (adults and larvae) leafminers, mealy bugs, mites, scales, thrips, whitefly and nematodes. The host plant list is extensive and growers should see the label for specifics.

The registration application techniques include pre-plant soil incorporation, post plant soil application, fol-

*Continued on page 20*

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Oxamyl is distributed and sold by the Pratt-Gabriel Division, Miller Chemical and Fertilizer Corporation, Hanover, PA 17331.

TURF

**Sewage sludge used as fertilizer**

According to C. Edward Clapp, USDA research chemist and Donald B. White, University of Minnesota Professor of Horticultural Science, fertilizing turf grasses with sewage sludge provides a way to use valuable waste material and avoid the potential hazard of trace metal contamination of food crops.

Working on experimental grass plots near the University of Minnesota, St. Paul, over a six year period, Clapp and White applied digested sewage sludge in liquid and dry form and compared the results with grass plots treated with commercial ammonium nitrate fertilizer each year.

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