Reader identifies mistake
You mentioned using Flagship (an insecticide) for grub control in your column in the March 2000 issue of Landscape Management. I thought Flagship was for greenhouse and landscape ornamental plants?

— OHIO

This question is from Dr. Harry Niemczyk from OARDC, OSU and he is right. I am sorry for the misinformation on my part. The correct name I should have mentioned is Meridian for turf use. Dr. David Cox from the Novartis Corporation, the manufacturer of both Flagship and Meridian, explained the difference. Both products have the same active ingredient and chemistry called thiomethoxam, and they are expecting the EPA registration soon. He mentioned that Meridian insecticide is for turf insect use, and Flagship is for greenhouse and landscape ornamental plants.

Managing grassy weeds
A client of ours has requested that we use Ronstar on a large, several acre property to manage grassy weeds. Recently, we have been using Pre-M. Which one should we use?

— KANSAS

Ronstar is a good herbicide designed to manage annual grassy weeds, such as crabgrass or goosegrass. This preemergent herbicide, formulated as a 2% granular in a bio-dac carrier, is labeled for use on commercial turgrasses, ornamentals and landscape areas.

Reports indicate that Ronstar will have better results managing goosegrass than crabgrass. Apply Ronstar during late winter or early spring, prior to weed seed germination. Applications made after March or April may not be fully effective.

Studies have also stated that treating half the material in one direction, then treating the other half in the opposite direction may provide better weed control. Read and follow label specifications for best results.

Lilac borers
While pruning some dying branches on an overgrown lilac bush, I found a number of insect larvae. They were about an inch long, white with a brown head. How can I get rid of them?

— PENNSYLVANIA

According to your description, the problem appears to be lilac borer. Infested branches wilt as the larvae tunnel inside and destroy the xylem (sapwood). Eventually, the larvae move to the heartwood. Larvae will be 3/4 to 1 1/2 in. long, with a brown head. The adult is a moth that resembles a wasp.

Feeding damage will weaken the branches and cause breakage. Sometimes, wood-destroying fungi, such as Polyporus sp., will form on the weakened branches.

Lilac borers overwinter in the branches, so you are doing the right thing by selectively pruning and getting rid of the dying or infested branches. To find an infestation, look over the branches for slightly swollen, cracked areas. You may also find holes in the bark and wood.

Treat the lilac with insecticides such as Dursban or Astro. Treatments can start in late April or early June depending on the region. You may need additional applications.

Borers generally establish on stressed and weakened plants. Therefore, reduce stress and improve plant health. Read and follow label specifications for best results.

Scale insects
On a client’s property, we found brown and white scale-like insects on a pachysandra. What are they?

— OHIO

It appears that the problem is a scale insect. The brown scales are female, and the whitish-colored scales are male. The females are shaped like an oyster shell and are brown. If you turn one over, you may see several eggs underneath. Males are smaller, narrower and white with ridges down the center of their backs. When they are in abundance, the lower side of a leaf may appear a whitish color.

Rake and removed dead and blighted plants to improve air circulation. Apply Horticultural Oil before new growth starts in the spring. Since oil applications do not have a long residual, the oil treatment should be followed by some contact insecticide treatment such as Malathion, Sevin or Talstar.

When applying contact insecticides, make sure that the scale eggs have hatched and the young crawlers are out. For better control, treat the plants when the second instar crawlers settle down.
Cutting sod
The 512 sod cutter, Turfco says, saves a lot of work because it is built for maneuverability, engineered to keep machine weight down and structurally designed to cut through the toughest soil conditions. A hand grip clutch control, which stops the sod cutter when the operator releases it, and operating instructions on the handlebar make it operator friendly. An optional feature is a blade for cutting tree rings. A 12-in. angled blade cuts to a 3-in. depth at the outer edge and up to zero at the inner edge.
For more information contact Turfco at 800/679-8201 or www.turfco.com / circle no. 250

Controlled-release fertilizers
Lesco's new line of controlled-release fertilizers known as Novex maximize the nitrogen best suited to growing quality turfgrass and minimize the nitrogen that is of little value. Advanced technology gives the fertilizers the ability to decrease the inefficient quick-release unreacted urea and the slow-release hot water insoluble nitrogen, while increasing the highly efficient controlled-release midrange nitrogen segments. The fertilizers are formulated as a totally homogenous, uncoated product and the particles are so small and dense they resist pickup by mowers.
For more information contact Lesco at 440/333-9250 / circle no. 251

Compact excavator
JCB has a new 1.5-ton mini-excavator that features a variable width undercarriage and works hydraulically from the cab. The undercarriage can be retracted to 3 ft. 2 in. for confined areas or expanded to 4 ft. 5 in. for stability. It can also straddle a trench if the need arises. A two-speed tracking feature allows for a low speed of 1.3 mph and high speed of 2.2 mph.
For more information contact JCB at 888/742-5522 or www.jcbna.com / circle no. 253

Seeder for small jobs
The T60 HydroSeeder is perfect for landscape contractors requiring a fast and economical machine for seeding smaller jobs, says Finn Corp. Designed for use by a single operator, the machine has a 500-gal. capacity and covers up to 7,200 sq. ft. per load with seed, fertilizer and mulch in a one-step process. Controls are located in two places for operator convenience, and the low profile design allows easy loading and stability during operation and transport.
For more information contact Finn Corp. at 800/543-7166 or www.finncorp.com / circle no. 254

Get an edge
For The Edge says it has come up with a trencher that can trench for sprinkler systems, drain tile, low voltage electrical lines and landscape walls. A new floating cutting head cuts up and over large underground obstructions. Cut a clean trench up to 25 ft. per minute, and watch the Trench 'N edge clean up after itself by blowing materials directly onto tarps. A single front pivot wheel offers a turning radius as tight as 18 in. With an optional adapter, the trencher can make multiple passes as wide as the user requires.
For more information contact For The Edge at continued on page 74
Now it's easy to know whether you have the best turfgrass mixtures and blends available. Just look for the Jacklin Genetics label.

The Jacklin Genetics label on the bag says you're planting turf seed varieties with:
• the industry's leading private research and breeding program behind them
• a wealth of innovation that has led the world in turfgrass development for nearly seven decades
• proven performance that combines unsurpassed color, turf quality and disease resistance with higher seed yields

You never have to wonder if the best is in the bag when the Jacklin name is on it. So ask for Jacklin Seed. And if you don't see the Jacklin Genetics label on the blends and mixes you're considering, ask "why not?"
Chipper with more pull
Bandit Industries' 280XP hydraulic feed, disc-style chipper is now equipped with a new hydraulic feed system that provides 60% more hydraulic pulling power. Also, the bottom and top feed wheels both have new knife teeth that better grip material being fed into the chipper.
For more information contact Bandit at 800/952-0178 / circle no. 258

Scat, deer!
Deer-Off deer repellent, which features a dual deterrent system formula that leaves both an odor and a taste that animals find offensive, is now available in ready-to-use spray bottles. Made from natural, biodegradable food products, the repellent contains no harmful chemicals and is safe for people, animals and the environment.
For more information contact Deer-Off at 800/333-7633 / circle no. 259

Chop those bales
The new Goossen NA 8000 18 hp bale chopper can mulch two bales of straw per minute while covering 1,000 sq. ft. per bale. An adjustable grate allows operators to control the length of cut and the rate at which the bale is consumed. Options include electric start Honda engine with recoil backup, detachable gas tank, 30' x 6' flex hose for discharge and 180° directional spout for discharge.
For more information contact Goossen at 800/228-6542 or www.goossen.com / circle no. 260

Big features for big loaders
Gehl's new Avantage mini-loaders come in compact packages but have big loader features. As narrow as 33 1/2 in., they're perfect for light construction, landscaping or lawn and turf maintenance. Featuring full-time 4-wheel drive, both the skid-steer and articulated-steering units are available with 20-hp diesel engines. Flat-faced drippless auxiliary hydraulic couplers and a continued on page 77
GREEN INDUSTRY EXPO/2000
THE NATIONAL EXPO FOR LAWN & LANDSCAPE PROFESSIONALS

YOU'RE INVITED TO THE 11TH ANNUAL GIE
November 4 - 7, 2000
Indiana Convention Center ▶ Indianapolis, Indiana

What Exhibitors Said About GIE/99:
• "The GIE has quickly become our most productive show."
• "When I come to the GIE, I know what to expect. The conferences attract the type of customer that we want to get in front of."

12 Exclusive Trade Show Hours
Outdoor Equipment Demonstration
3 Educational Conferences
300 Exhibiting Companies
6,000 plus Industry Professionals

Show Schedule
CONFERENCES
November 4 - 7, 2000

OUTDOOR EQUIPMENT DEMONSTRATION
November 5, 2000

TRADE SHOW
November 6 - 7, 2000

"The GIE has it all, we bring representatives from our company every year."
— GIE/99 Attendee

YES! I want to know more about GIE/2000.
☐ Send me information on exhibiting my products!
☐ Send me information on attending conferences & show!

Contact: ____________________________
Title: ____________________________
Company: ________________________
Address: __________________________
City/State/Zip: ______________________
Phone: (________) ___________ Fax: (________)

Clip and send to:
GIE, 1000 Johnson Ferry Rd., NE, Suite C-135, Marietta, GA 30068-2112
Phone: 770/973-2019
Fax: 770/578-6071

Visit GIE at www.gieonline.com

Circle No. 156 on Reader Inquiry Card
PARAGON is a new release that has just now been entered into the new 1999 National Perennial Ryegrass Trial. Pre-N.T.E.P. testing at various Universities across the U.S. has already shown PARAGON to be a contender for the title of one of the best new varieties to come along in years!

PARAGON has one of the darkest -- green leaf colors of any Perennial Ryegrass available in the market today. In the University of Florida's 1998-99 Overseeding trials, they found "Overseeded grasses on the putting green that had the darkest green foliage, which averaged 8.5, included Brightstar II and PARAGON." Pretty impressive when you consider the scale only goes to 9!

PARAGON is also setting new standards for fine leaf texture and disease resistance. This new variety will produce a very dense turf that can be mowed as short as .19" for putting greens or at 1/2 inch in Fairways. Its high level of beneficial endophytes adds resistance to many turf pests.

Be sure and specify this new PARAGON of turfgrass performance for all your Perennial Ryegrass needs.
products

continued from page 74
quick-attach system make attachment changes quick and easy. Attachments include buckets, pallet forks, earth augers, trenchers, hydraulic hammers and mower decks.
For more information contact Gehl at 414/334-9461 or www.gehl.com / circle no. 261

Compact dozers
Two new models of compact dozers from Komatsu, the D21A-7 and D21P-7, feature operating weights from 8,710 lbs. to 9,220 lbs., making them the easiest dozers to transport to a job site. Additional features include hydroshft transmission with single lever steering, 40-hp engines, Pressure Proportional Control (PPC) joystick and 6-way power-angle tilt blade also with a PPC joystick. The hydroshft transmission with planetary gears is hydraulically controlled and force lubricated. The 6-way PAT blade movement is controlled by a single PPC joystick. Pushing a button on the hydraulic control lever switches tilt to angle control.
For more information contact Komatsu at 847/837-2447 or www.komatsuutility.com / circle no. 263

Efficient & flexible spraying
Delavan Spray Technologies' roller pumps are designed for the flexibility needs of horticultural spraying and pest control. Pump flow range is 6.5 to 46 gpm; maximum pressure rating is 300 psi. Pumps may be used with gas or electric motors or 1 3/4-in. or 1 3/8-in. PTO drives. Also offered is a 12 VDC four-roller pump/motor package that delivers 6.8 gpm at 40 psi.
For more information contact Delavan at 800/621-9357 / circle no. 262

No washing away here
Rohm and Haas Co. has a new formulation of Fore fungicide called Fore Rainshield which drastically improves Fore's ability to resist wash-off due to heavy rains or irrigation. Rohm and Haas says it is much easier to mix than other Mancozeb formulations, suspends more readily in the spray tank and leaves a lot less residue inside the spray tank. It is available in two forms: as an 80% wettable powder or in 1.5-lb. water soluble pouches.
For more information call 215/504-9215 or www.rohmhaas.com / circle no. 264

Buy Lawn Equipment And Parts Factory Direct.

AERATOR • BED EDGER • LAWN OVERSEEDER • SOD CUTTER

Turfco quality, service and speed.
No middle-man margins and no middle-man delays.
Even parts come overnight.
Save Hundreds $$$
2-Year Warranty
90 Day Same As Cash
(800)679-8201 or turfco.com

$2,125.  $999.  $1,725.  $1,580.
Sod Cutter  Edge-R-Rite  Lawn Overseeder  Aerator

Circle 145
TurfGrass Trends delivers . . .

. . . practical turfgrass management information you can use today, from the #1 research digest for turf managers. Begin your subscription right here, and see what you've been missing! Each issue is written by field experts, and includes leading-edge research and timely information for practical, proven answers to your turfgrass challenges.

- disease management
- nutrients
- insect management
- genetic improvement
- irrigation
- weed management
- so much more in every issue!

"...helpful and informative. I believe this is a very valuable publication, especially as we all work to protect the environment."

Dr. Terrance P. Riordan
Turfgrass Plant Breeder
University of Nebraska

☐ Yes! Begin my subscription to TURFGRASS TRENDS

U.S. & CANADA

6 Months $96
1 Year $180

ALL OTHER COUNTRIES

$210 (1 Year)

Payable in U.S. funds drawn on a U.S. bank.
Back issues available at $15 each, prepaid.

☐ My payment enclosed. (Make checks payable to TURFGRASS TRENDS.)
☐ Please Bill Me
☐ Charge my subscription to: ☐ VISA ☐ MasterCard ☐ American Express

Signature __________________________ Date __________
Account # __________________________ Exp. Date __________
Billing Address __________________________
City __________________________ State __________ Zip/Postal Code __________

Fax completed form with credit card information to 218-723-9417 or 9437, or mail coupon with your payment to TURFGRASS TRENDS, 131 West First Street, Duluth, MN 55802-2065.

Charges will appear on your credit card statement as Advanstar Communications Inc., which publishes and distributes this magazine.

Name (please print) __________________________
Title __________________________
Business __________________________
Address __________________________
City __________________________ State __________ Zip/Postal Code __________
Country __________________________
Internet/E-Mail Address __________________________
Fill in oval as shown: •

1. My primary business at this location is: (fill in ONE only)

- Landscape Contractors (installation and maintenance)
- Lawn Care Service Companies
- Custom Chemical Applicators
- Tree Service Companies/Arborists
- Landscape Architects
- Land Reclamation and Erosion Control
- Irrigation Contractors
- Other Contractors/Service Companies (please specify)

INSTITUTIONAL FACILITIES
- Schools, Colleges, Universities
- Industrial or Office Parks/Plants
- Shopping Centers, Plaza or Malls
- Private/Public Estates or Museums
- Condominiums/Apartments/Housing Developments/Hotels/Resorts
- Cemeteries/Memorial Gardens
- Hospitals/Health Care Institutions
- Military Installations or Prisons
- Airports
- Multiple Government/Municipal Facilities
- Other Groundcare (please specify)

SUPPLIERS AND CONSULTANTS
- Extension Agents/Consultants for Horticulture
- Seed Growers, Turf Seed Growers & Nurseries
- Dealers, Distributors, Formulators & Brokers
- Manufacturers
- Other (please specify)

2. Which of the following best describes your title? (fill in ONE only)
- Executive/Administrator - President, Owner, Partner, Director, General Manager
- Chairman of the Board, Purchasing Agent, Director of Physical Plant
- Manager/Superintendent - Arborist, Architect, Landscape/Grounds Manager, Superintendent, Foreman, Supervisor
- Government Official - Government Commissioner, Agent, Other Government Official
- Horticulturist - Consultant, Agronomist, Pilot, Instructor, Researcher
- Other (please specify)

3. SERVICES PERFORMED (fill in ALL that apply)
- Mowing
- Turf Fertilization
- Turf Insect Control
- Tree Care
- Irrigation Services
- Irrigation Services
- Landscape Design
- Pond/Lake Care
- Landscape Design
- Snow Removal
- Other

4a. Do you specify, purchase or influence the selection of landscape products?
- A Yes
- B No

4b. If yes, check which products you buy or specify: (fill in ALL that apply)
- Mowing
- Turf Fertilization
- Turf Insect Control
- Turf Disease Control
- Landscape Design
- Ornamental Care
- Turf Aeration
- Sprinkler Systems
- Snow Removal Equipment
- Turfweed Control
- Other (please specify)

5. Do you have Internet Access?
- A Yes
- B No

5a. If so, how often do you use it?
- A Daily
- B Weekly
- C Monthly
- D Occasionally

E-MAIL ADDRESS

This card is void after July 15, 2000

Receive FREE information on products and services advertised in this issue.

BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO 950 PITTSFIELD MA
POSTAGE WILL BE PAID BY ADDRESSEE

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES
Receive FREE information on products and services advertised in this issue.

BUSINESS REPLY MAIL
FIRST-CLASS MAIL  PERMIT NO 950  PITTSFIELD MA
POSTAGE WILL BE PAID BY ADDRESSEE

MANAGEMENT
ADVANSTAR COMMUNICATIONS INC
PO BOX 5054
PITTSFIELD MA 01203-9697

I would like to receive (continue receiving) LANDSCAPE MANAGEMENT free each month: O Yes  O no

Signature: __________________________ Date: __________________________

3. SERVICES PERFORMED (fill in ALL that apply)

40 O A Mowing 45 O F Turf Fertilization
41 O B Turf Insect Control 46 O G Turf Disease Control
42 O C Tree Care 47 O H Ornamental Care
43 O D Turf Aeration 48 O I Landscape Design
44 O E Irrigation Services 49 O J Turf Weed Control

4a. Do you specify, purchase or influence the selection of landscape products? 73 O Yes  78 O No

4b. If yes, check which products you buy or specify: (fill in ALL that apply)

5. Do you have Internet Access?  77 O A Yes  78 O B No

6a. If so, how often do you use it?  79 O A Daily  80 O B Weekly  81 O C Monthly  82 O D Occasionally

AN ADVANSTAR PUBLICATION ©2000 Advanstar Communications Inc. All rights reserved.