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Circle No. 154 on Reader Inquiry Card
Trimmer makers see trend toward gas, blades over line

by Bruce F. Shank, executive editor, and Kevin Cooney, assistant editor

One-wheel design and Briggs and Stratton engine, shown above, make the Byho edger rugged and fast. At right, rotocut blade on Stihl FS 65 can replace nylon line for tough weeds.

Handlebar and 40 cc engine give commercial strength to Echo's 400 AE, above left. Hoffco's GT160T is popular with homeowners trading up to commercial type trimmers.

Strictly a professional tool in the beginning, the power trimmer drifted away from the professional to the consumer market with the use of nylon line. Today, trimmer manufacturers are re-focusing on the needs of the professional landscape manager.

Those needs appear to be longer-lasting, smoother running engines and blades instead of nylon line, according to manufacturers interviewed by Weeds Trees & Turf in March.

Despite the increased professional use of chemical trim with products such as Roundup, manufacturers report trimmer sales have grown. "Our sales to the professional market were strong during the recession," says Clampco's Stephen Nathan. "Landscape contractors tend to deal with middle to upper income homeowners and commercial accounts that are less affected by recession. We've also seen increased capital spending by golf course superintendents."

"The total market increased nearly 25 percent last year," says Rich McGuire of Stihl. "The market isn't anywhere near saturated yet. People are trading up and using the trimmers for more jobs. The lawn edger on wheels is almost a thing of the past."

The typical homeowner does not use chemical trim products, depending mainly on electric, and increasingly, gasoline-powered trimmers. Carol Smith of Hoffco claims professional chemical trim has not made a dent in their business. "Maybe a certain percentage of the market will go to chemical trim, but we don't think it is going to hurt us. We spend a lot of time in development and research, always trying a different carburetor, clutch design, or our patented flexible shaft."

"The basic concept is not going to change," says Echo's Tom Boscher. "You're always going to have a device to turn a head, whether it is a nylon monofilament line or saw blade for brush cutters."

"Contract landscapers tried out the string trimmers, and I think they found they are not as durable as a blade trimmer or edger," Nathan points out. Golf course superintendents have tried chemical trim and growth regulators more than Clampco's other customers.

Weedeater's Phil Hayes says gasoline trimmers are the fastest growing area of his company's business. "We've got a couple of innovations this year, including removable heads and fuel injection starting," Hayes says. "We continued on page 86"
STIHL’S THE ONE.

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THERE'S NO GRASS GROWING UNDER THEIR FEET.
They apologize for not always being in when you call, but great stories are found in the field, not in the office. These pros know the only way to really cover the green industry is to get out and be a part of it. From turf test plots in Oregon to the corridors of our Nation's Capital, they're following leads, surveying markets and interviewing the landscape professionals who make our industry hum. Then they use their years of experience to pull it all together, analyze it and present it to you in a crisp, easy-to-read and easy-to-use style. That way, you have the information you need to do your job better, faster and more effectively.

The next time you want to know something in the green industry, give them a call. If you can't reach them at the office, don't worry. They'll read you in the pages of WEEDS TREES & TURF.

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INSIDE

TURF INSECT STRATEGY
Dr. Harry Niemczyk, leading U.S. turf entomologist, covers insect vulnerability, control season-by-season, and the latest on products and turf insect resistance.

FIRE ANTS SPREAD WESTWARD
A group of experts report the imported red fire ant, now in eleven southern states, is heading toward California and Arizona. Control tips are provided.

LANDSCAPE INSECT STRATEGY
Dr. R.E. Partyka, director of ChemLawn Tree and Shrub, gives season-by-season control for the major pests of ornamentals and trees.

DIRECTORY OF INSECTICIDES AND MANUFACTURERS
Use the convenient circle number system to find out more about specific insecticides for turf and landscape.
by Dr. Harry Niemczyk

This second annual edition of the INSECT CONTROL GUIDE has been updated to reflect infestations of importance and new product developments. The basic text of the turf section is authored by Dr. Harry Niemczyk, professor of turfgrass entomology, Ohio State University, Wooster. The landscape section is by Dr. Robert Partyka, Director of Horticulture, ChemLawn Tree and Shrub, Columbus, OH. Additional thanks to Oregon State University, Ricks Pluenneke of Ft. Worth, TX, Mobay Chemical Corp., Ortho Division of Chevron, and Dr. Reed Funk of Rutgers University, NJ.

Substantial progress has been made in identifying varieties of cool- and warm-season turfgrasses that show resistance or at least tolerance to feeding by insect pests, such as the chinchbug, billbug, and sod webworm. The recent discovery by Dr. Reed Funk of Rutgers University that a species of fungus (called an endophyte), growing within certain ryegrass and tall fescue plants somehow imparts resistance to feeding by certain insects, holds much promise for the future.

While research on alternatives and supplemental means of controlling damage to turfgrass by insect pests is making rapid progress, insecticides remain the primary means of control in 1984.

New insecticides
Ciba Geigy expected EPA registration for its Triumph insecticide in 1983. Submitted for registration in 1982, Triumph has now been reviewed by EPA and approval is now expected during the spring or early summer.

When registered, a 4E formulation will be available for professional turf applicators.

Research data on Triumph has shown effectiveness on a broad range of turf pests; including grubs, mole crickets, chinchbugs, billbugs, sod webworms, and cutworms. The label rate is expected to be 2 lb. AI/acre for grubs and mole crickets and 1 lb. AI/acre for surface insects.

The rapid effect of this insecticide against grubs and mole crickets, plus the fact that it moves readily through thatch, are its greatest benefits. It is not a long residual product.

Ortho Division of Chevron expects a turf label soon for Orthene (acephate). Pests on label include armyworm, sod webworm, leafhopper, and Greenbug.

Keys to control
The key to successful use of these materials requires knowing the seasonal occurrence of all life stages of each pest common to your area. This information, together with the known length of the residual of the proposed insecticide, are then fitted together to achieve control. Detailed knowledge of pest(s) and pesticides are and will continue to be essential.

The purpose of this guide is to point out some major pests to look for in 1984, when their vulnerable stages occur, and some insecticides that may be used to affect control during these times. No endorsement of named products is intended nor is criticism implied for those not mentioned.

LATE WINTER (March)
Chinchbug and Billbug—Both of these insects overwinter as adults in the thatch, but some move to sheltered sites near buildings or other protected locations. On warm days, the insects begin moving about.

When summer damage from chinchbug and/or bluegrass billbug is expected, summer infestations can be prevented with an application of liquid or granular Dursban® (chlorpyrifos, 1 lb. AI/acre) or Diazinon (2.5 lb. AI/acre) made as soon as these insects be-
Damage to Penncross bentgrass greens caused by *Ataenius spretulus* at Laurel View Country Club, Hamden, CT.

**Mole Cricket**—The biology of mole crickets varies considerably with the species and is still under study in many areas. Generally, these insects overwinter as adults deep in the soil, however some overwinter as nymphs. Feeding activity resumes in March. Both adults and nymphs feed at night near the surface on turf roots, organic matter and other insects. During the day, mole crickets return to permanent burrows.

In years when feeding of overwintered mole crickets resumes earlier than normal, Oftanol® (2 lbs. AI/acre) has been used with some success. Generally, such applications are better made during May.

**Black Turfgrass Ataenius**—This golf course pest overwinters as an adult in the soil under debris in roughs or other protected areas. A few may be seen flying about on warm afternoons in early March. Usually this activity begins when crocus starts blooming and inten...