

Don Short, Ph.D., recommends insecticides and baits for mole crickets. BIOTECHNOLOGY

It's mole crickets vs. biology

Florida researchers have unleashed the natural enemies of mole crickets in what may be an inexpensive, ecologically-sound answer to controlling the pests.

Mole crickets, which do \$30 million damage to private and commercial property in Florida per year, are now forced to square off against a nematode and parasitic wasp—both natural pests of the crickets in South America. Arrangements have been made with researchers there to provide samples and data.

"At the present time, insecticides and baits are the best way of controlling mole crickets," says Don Short, Ph.D., an entomologist with the Institute of Food and Agricultural Sciences at the University of Florida. However, because of Florida's diverse climate, no one solution will work everywhere in the state.

The nematode research is nearest to completion; final testing will take place this spring. Nematologist Grover Smart, Ph.D., is trying to determine the best method of introducing the nematode into the environment.

He is testing two methods: incorporating nematodes instead of poison into mole cricket bait, and injecting nematodes directly into the ground with a water injection system.

The main problem with the

nematode is keeping it in a moist environment long enough to ensure contact with the mole crickets. Smart is trying to create a moister bait solution to prolong the nematode's life from 24 hours to 48 hours.

Fred Bennett, Ph.D., a graduate research professor and entomologist, has been working with the parasitic wasps, in particular the Larra species. "We hope to get additional strains and species of Larra and any other information on mole crickets," he says. "Release will not happen until we are certain that the organisms won't adversely affect the environment."

ORGANIZATIONS

Landscapers being catered to more

Two professional organizations have realized the value of landscape contractors to their markets.

The Irrigation Association has developed several new programs specifically for landscape irrigation contractors, one of which is a substantial dues discount to new contractor members.

The Irrigation Association also held a successful two-day seminar just prior to its International Irrigation Exposition & Technical Conference.

WEEDS Timing is essential

in herbicide application Since maintaining healthy turf is the best way to achieve a weed-free lawn, proper mowing, fertilization and irrigation remain the most important elements in a weed management program. If, however, you're planning to apply pre-emergence herbicides to

control annual grass weeds in St. Augustinegrass and centipedegrass, several considerations need to be noted, says weed control specialist Bill Lewis, Ph.D., of the North Carolina Extension Service.

These herbicides must be applied before the weed seed germinates. "The ideal time to apply pre-emergence herbicides for crabgrass control is by the time the dogwoods are in full bloom," says Lewis. "And unless rain falls soon after application, irrigation should be applied."

For improved control of goosegrass, benefin + oryzalin, oryzalin, napropamide, or pendimethalin should be selected, notes Lewis. Extended control can often be achieved with two applications eight weeks apart, using the minimum label rate or ½ the maximum rate each time.

Atrazine and simazine have both pre-emergence and post-emergence effectiveness against many annual broadleaf weeds and Poa annua, though neither will give you seasonal control of crabgrass when applied as a pre-emergent in the spring. Lewis suggests October to early January treatments for chickweed, henbit, hop clover, corn speedwell, parsleypiert, spurweed and other winter annual broadleaf weeds. He says you can successfully treat annual bluegrass that has already appeared with postemergence applications.

For more information about IA programs for landscape contractors, write its headquarters at 1911 North Fort Myer Dr., Suite 1009, Arlington, VA 22209.

Also, the American Sod Producers Association has opened its membership to landscape architects and contractors. A new class, termed "Affiliated," will permit "any firm or individual who is neither producing turfgrass sod, nor a product for use on a turfgrass sod farm" to qualify.

Applications for membership may be obtained by calling (312) 705-9898 or writing the ASPA at 1855-A Hicks Rd., Rolling Meadows, IL 60008.

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SHORT CUTS

A PERFECT SAMPLE..... The best test results start with the most well prepared turf sample, **Gary Simone**, Ph.D., reminded attendees at a Florida Turfgrass Association workshop recently. That means the sample is taken before fungicides are applied from the margin of the problem area where you can find both diseased and healthy turf. Also, supply three or four plugs from any one area. "Doing this will make the search for fungal matter easier and faster," he said.

BETTER FUNGICIDE APPLICATION..... is what you'll get by reading Maximizing the Effectiveness of Fungicides, according to its publisher, Milliken Chemical Co. The 12-page booklet, prepared in cooperation with **Houston Couch**, Ph.D., of VPI-SU, addresses the issues of nozzle selection, water usage, the effect of delayed application, rainfall and watering, among other topics. You can get a copy by calling Milliken at (800) 845-8502 or by contacting your local Blazon distributor.

STORING PESTICIDES...... Your pesticide storage area should be a separate facility that is large enough to store your complete inventory, have a concrete floor with curved sides to contain spills, and shelves to keep material off the floor and provide better air circulation, according to Norman Nesheim, Ph.D. Nesheim is a pesticide information coordinator for the Institute of Food and Agricultural Sciences at the University of Florida, Gainesville. He adds that the facility should be far removed from streams or ponds and that the addition of an exhaust fan is a good idea, but not yet law. "I also strongly urge that you date all your containers when you receive them. We often consider using a stored pesticide but sometimes forget whether it's still potent."

SIMPLY OUTSTANDING..... best describes Tecumseh's OVRM 40 overhead valve, according to Popular Science magazine. Editors there selected the valve as one of the 100 outstanding developments of 1988.

WATER CONSERVATION..... must become a higher priority with landscapers, says **G.L. Horst** and **N.B. Dunning**, Texas A&M University. They claim that landscapers waste 50 percent of the water they use. "We could do with 50 percent less if we regulated properly," says Horst, adding the fact that we need to be more particular about the grasses we introduce to the environment. Among the biggest "water spending" grasses he listed, St. Augustinegrass was the worst, followed closely by tall fescue, perennial ryegrass, Kentucky bluegrass, then buffalograss, zoysiagrass, strawberry clover and common Bermudagrass.

TIDBITS...A report in a recent Fortune magazine states that the landscaping industry will benefit from recent corporate restructuring. The realignment, the report says, has caused companies to eliminate entire divisions, resulting in companies seeking outside help for such things as landscaping.

A recent Roper poll discovered that the percentage of people who value having a lawn and yard has dropped to 52 percent of the population compared to 62 percent in 1976. Newsfrom page 11 LANDSCAPING

Californian pushes xeriscaping in paper

Christopher Budway of Simi Valley, Calif., recently appeared in the Riverside Enterprise advocating xeriscaping for his fellow southern Californians.

"We want to put the message out that there are ways of landscaping without wasting water," Budway told *Enterprise* reporter Rhonda Alberty-Nowak.

Budway, who works at Agronomic Associates, told the reporter that half his business is in xeriscaping. He recently won first place in xeriscape design at the Ventura County Fair, and has become somewhat of a specialist in the low-water-use type landscape.

"I see xeriscape as 1990s landscaping. Everybody is concerned about the shortage of water," Budway noted in the newspaper.

Xeriscaping—use of hardscape elements like boulders, fountains, gazebos and spas—is particularly popular in southern California, parts of the desert Southwest and the Denver, Colo. area.

BUSINESS

Hiring managers: an acquired skill

Having trouble promoting from within? Can't seem to find the right person to become a manager? Mike Hiller has some answers for you.

"You've got to raise the overall management awareness of potential managers," Hiller told registrants at the Landscape Expo in Nashville. "Start sharing information. Start getting them up to speed on things that are going on in-house so they have an appreciation of it."

Hiller, a consultant with All-Green Management Associates of Columbus, Ohio, listed qualities of good managers. Among them: organization, leadership, initiative, working with

others, the ability to prioritize, communications skills, honesty and integrity, as well as the ability to train, paperwork skills and responsibility.

"We also need to get a handle on some of the intangibles," Hiller says.





things like you do all the time."

Hiller suggests letting crew members handle some managerial "tasks" for a specified period, be it a week, two weeks or a month. "Put them in the manager's shoes for a while. If they are successful, you might have a managerial candidate. If not, it's not a big thing."

Interviewing for managerial jobs is a critical phase of finding the right person, Hiller believes.

"Ask all the standard questions, but you have to give them hypothetical situations to see how they handle them. Give them crisis situations that you've thought out ahead of time. Get creative, so you can discover the interviewee's talents. But always paint it real."

INSECTS

Florida chinch bug population is rising

Virtually every county in Florida has chinch bugs killing St. Augustinegrass, according to Philip Busey, Ph.D., a turfgrass breeder for the University of Florida, IFAS, at Fort Lauderdale.

In 1985, a new population of the southern chinch bug was discovered that killed Floratam. Called PDP

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(Polyploid Damaging Population), the pests are especially threatening since Floratam was once believed to be the only cultivar of St. Augustinegrass resistant to them.

In order to get a handle on the size of the infestation, Busey and fellow researcher Bonnie L. Coy obtained survey responses from 62 Florida counties and 22 sod farms. They found that most respondents (87 percent) reported chinch bug damage to St. Augustinegrass turf.

Statewide, the established turf area in St. Augustinegrass was 42 percent, with urban counties reporting a slightly higher percentage. County agents rated PDP chinch bugs the major insect of the grass, while sod producers said they were slightly less important than caterpillars.

"The Floratam-killing chinch bug is causing problems throughout the state, but the size of damaged areas so far appears to be small," says Busey, adding that overall, Floratam fared much better than other St. Augustinegrass cultivars.

"Considering the newness of the PDP chinch bug, and its unknown future course, timely and effective



Chinch bug infestations in home lawns cause the turf to turn brown and quickly deteriorate.

pesticide treatment would be the most prudent short-term line of defense, followed, hopefully soon, by resistant cultivars," he says.

RESEARCH

Coring, wetting agents battle dry spots

Just because researchers haven't figured out what causes localized dry spots doesn't mean there aren't steps you can take to control them, says Karl Dannenberger, professor at The Ohio State University.

Circumstantial evidence suggests that a fungal hyphae that coats sand particles is the culprit, but the fungus has yet to be isolated. Researchers do know that localized dry spots can be associated with hydrophobic thatch and hydrophilic soil, hydrophilic thatch and hydrophobic soil, and thatch and soil that are both hydrophobic.

One of the most effective management practices recommended by Dannenberger is coring. "We've found that, in the soil profiles of localized dry spots, the thatch is hydrophobic and the soil hydrophilic or vice versa," he notes, "Therefore you need to break one of them down. The frequency of coring might be why some people have problems and some don't."

Dannenberger suggests that everyone should be coring at least once a year. Turf managers with localized dry spot problems should be coring at least twice a year, he says.

Dannenberger also recommends syringing the spots to reduce its canopy temperature. Syringing won't eliminate your dry spot problem but may prevent it from becoming worse. Also, using wetting agents will effectively reduce the spots' severity.

"Preventative applications give the best results but curative applications can also be effective," says Dannenberger. The wetting agents should be thoroughly watered into the turf to prevent the possibility of leaf burn caused by these compounds.

"More than anything else, you can't get away from getting out there and watering these areas by hand," adds Dannenberger.

CORRECTION

ICI inadvertently left out of Buyers Guide

ICI Americas was inadvertently left

out of the LANDSCAPE MANAGEMENT Buyers Guide in the September issue.

ICI produces and markets Betasan, Fusilade, Devrinol and Eptam herbicides, Imidan insecticide, Captan fungicide and Vapam soil fumigant.

ICI Americas is the producer of agricultural products. The company is located in Wilmington, DE 19897. Phone is (302) 575-3000.

Existing copies of of the Buyers Guide should be changed to reflect these products.

RESEARCH

Ultra-slow-release N source is studied

A University of Dayton researcher is working on a time-release fertilizer that could make fertilizing a once-ayear project.

Richard P. Chartoff, Ph.D., a professor of engineering materials, is trying to develop a coating similar to those used by drug companies on capsules. Chartoff was originally approached with the idea by Marysville, Ohio-based O.M. Scott & Sons, a major manufacturer of fertilizers. The company is providing Chartoff with \$56,000 for a feasibility study.



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The tricky part is to find an appropriate plastic coating and discover a way to get it on the surface of a urea fertilizer granule, either by spray or a chemical reaction that forms the plastic.

Aside from saving time, one of the chief benefits of this product is a decrease in water contamination through runoff because the fertilizer would be used up as it is released.

Though efforts are geared mainly toward fertilizer now, the future may hold similar encapsulation technology for pesticides, especially if environmental concerns continue to rise.

LEGISLATION

PLCAA devises action plan

The Professional Lawn Care Association of America is forming a strategic planning committee to address a wide array of legislative, regulatory and environmental issues facing the green industry in 1989.

During the association's ninth annual conference in New Orleans, La., Russell Frith and Jim Wilkinson, Ph.D., outlined an 11-point action plan. The plan includes increased lobbying efforts on the federal level and additional legal counsel in environmental and regulatory law. Frith is PLCAA president and Wilkinson is director of regulatory and environmental affairs.

"These issues are spreading to all parts of the country." Wilkinson told members, "and it's just a matter of time before they're nationwide. We want to act now to make these regulations as reasonable and workable as possible."

Issues now facing much of the lawn care industry include sign posting requirements; notification of neighborhoods prior to product applications; groundwater and surface run-off concerns; revised worker protection standards and additional requirements in employee certification and training.

Wilkinson said PLCAA was literally taken by surprise by much of the recent activity by the EPA, DOT and OSHA, and realized increased lobbying efforts were needed.

"We want to expand our role to become the primary spokesperson for the industry at the federal level," said Wilkinson. "We will soon establish a council for lawn care information to encourage the user industry to share its expertise with the federal agencies. That way, we can sit down on a regular basis with the EPA and work on the issues, using our knowledge to answer their various safety concerns."

Noted Frith: "We will also be structuring a stronger and more effective governmental and industrial relations committee whose primary responsibility will be to recommend standards, policies and position statements on regulatory and environmental issues to the PLCAA board of directors."

But despite PLCAA's willingness to work toward compromise, they are also fighting back, especially on the issue of local government control.

"We plan to develop generic legal briefs to challenge local regulation and take legal action in the name of PLCAA, if it is found to be in the best interest of the lawn care application industry," said Frith. Wilkinson added that in Maine, Missouri and Wisconsin, the authority of local governments has been struck down. However, "other local governments are continuing to enact all kinds of legislation, and it's time we flexed our muscles and stood firm." Frith said an increase in the association's dues structure would most likely be enacted to finance the increased federal activity, but that many of the industry's larger companies have indicated they would accept higher dues if it resulted in less regulation.



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LETTERS

To the editor:

This is a letter that is long overdue! For the last four years, I have worked for the Town of Raymond Parks and Recreation and have received your magazine. The stories and articles over the years have really helped me give this community some of the best facilities in southern Alberta. Hats off to your

staff for all the great work.

I must also thank you for an article that you did over a year ago on "Boardwalk and Baseball." I look after four ball diamonds, three soccer fields and four parks. I especially wanted to learn more about keeping up the baseball fields. So after your article, I took a chance, wrote a letter to "Boardwalk and



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Baseball" asking if I might come down and work on their complex. After a few months, I received a phone call from Mr. Paul Shaw, who made arrangements for me to work there. So this spring, I took a month's holi-

day and went down to Florida where I had the opportunity of working the Kansas City Royals' spring training with George Toma. His help and knowledge made it a great trip. I must also mention Mike Hurd, who was running the complex. For a young man, his knowledge of the grass industry was outstanding; his work and dedication to his fields were a model for me to follow. He was even good enough to let me stay at his place. And work we did, from 7 a.m. until 8 or 10 p.m.-with lots of hands-on experience. All in all, I have to give great thanks to all the staff who treated me so well.

All of this because of your article, which has now shown me how big the grass industry is. And there are some great people like George, Mike, Ed and Paul who are willing to help a fellow groundskeeper.

So, gentlemen, a great big thanks! Please keep up the good work. I really look forward to receiving one of the best magazines around (even over Outdoor Life), LANDSCAPE MANAGE-MENT.

> **Dwight Hudson** Town of Raymond Alberta, Canada

To the editor:

I have just perused the October issue, and was especially interested in the feature you did on seed availability. One thing is certain, and that is every year this feature becomes more interesting and complex.

I did notice in the last paragraph of your article a slight inaccuracy which I wanted to correct. That is, since 1987, Turf Merchants (TMI) has marketed the first-ever dwarf tall fescue blend under the trademark "Turfmates-the World's First Elite Dwarf Turf-Type Tall Fescue Blend." This blend includes Wrangler and Trailblazer, and in 1989 will feature "Bonsai" dwarf tall fescue.

Thank you for your continued support of TMI and the grass seed industry.

Steve Tubbs Turf Merchants Tangent, Ore.

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PEOPLE

After 30 years of service, Jack Wick has retired as executive director of the California Association of Nurservmen (CAN).

Wick was honored recently during CAN's 78th annual convention on Cornado Island near San Diego.

Jack Wick Day was proclaimed, and a banquet was held in his honor, attended by more than 300 people.

Wick began his CAN career in 1958 as assistant executive secretary. He be-

came the 78-year old association's fourth executive director in 1969.

Among Wick's most notable accomplishments were his efforts to help form the nation's first retail nursery employees accreditation program. In the 19 Jack Wick



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years since the program's inception, 35 states have used it as a model for their own programs.

The award has been initiated to recognize industry members who perpetuate the goals of quality customer service, work to upgrade the status of the nursery industry, and establish the nurseryman as an expert in the field of gardening.

Wick will continue to serve CAN as a part-time regulatory consultant. His successor is Elaine Thompson, a CAN employee for 14 years.

In other CAN news, the association elected new state officers and associate member directors during its recent convention.

Jan Groot is CAN's new president. Groot has been an active association member for more than 25 years, serving as chairman of several committees.

Jack Christensen was named president elect; Bob Ludekens was named treasurer; and Hugh Atkinson was named new associate member director

Purcell Industries has acquired Malamine Chemicals, Inc.'s controlled release technologies development program.

John H. Detrick has been named manager of product and market development. In this new position, Detrick will continue to experiment with polymer coated urea.

Detrick joined MCI in 1983 and formed MCI AgSystems, where he managed the marketing and technical development of a number of fertilizer and herbicides.

Richard Underwood has been elected president of the Arizona Landscape Contractors' Association (ALCA).

Other new ALCA officers include Douglas Jones, president-elect; Robert Underwood, vice president/ treasurer and Cal Crozier, secretary.





R. Underwood

Kim Baenisch

Bruce K. Wilson, president of Environmental Care, Inc., presented Kim Baenisch with his companys' 1987-1988 \$1,000 Scholarship Award. Baenisch is an architecture graduate student at Cornell University. LM