xcellent Mole Cricket Control

CRUSADE also provides excellent control of both the nymph and early adult stages of the mole cricket for several weeks or longer. Again, the residual of CRUSADE makes this new weapon in the arsenal of mole cricket insecticides the most cost-effective control on the market today.

At Quail Creek Country Club, a private 36-hole course in Naples, Florida, superintendent Steve Durand applied CRUSADE twice in 1991. The first application was

applied to the greens, tees, and fairways of nine holes during the third week of June. "The results in June were excellent, and the residual was outstanding," claims Durand.

As a result of the success of the first application, Durand applied CRUSADE to

all 36 holes of his course late in September. "With other products, the residual doesn't seem to be as strong," Durand says. "From the results of the first application, I wasn't hesitant to buy a second time. The decision was easy."

xtensive University Trials

Extensively tested in university experimental trials, CRUSADE provides effective control of many turf-inhabiting pests of economic importance such as chinchbugs.

The following are the results of a 1988 university trial on hairy chinchbug. Applying only 1 lb. ai/acre, CRUSADE delivered a full

98 percent control in the trial conducted in Ohio. The other control rates provided by CRUSADE during the trial are equally impressive.

University white grub trials from 1989 through 1991 in a four-state area also indicate exceptional results with CRUSADE.

	Lbs. ai/A	% Control		
Treatment		PA	OH	
CRUSADE 5G	1.0	-	98.0	
CRUSADE 5G	2.0	97.0	-	
CRUSADE 5G	4.0	98.0	-	
Mocap 5G	2.5	85.0	45.0	
Mocap 5G	5.0	93.0	83.0	
Triumph 4E	0.5	74.0	73.0	
Triumph 4E	1.0	67.0	93.0	

Treatment	White Grub Control					
		% Control				
	Lbs. ai/A	WV (1989)	NY (1989)	IN (1991)	RI (1991)	
CRUSADE 5G	4.0	100.0	83.6	100.0	96	
Dursban 4E	4.0		_	67.86	-	
Dylox 6.2GR	8.0		-	45.23	11-	
Mocap 10G	5.0	-	57.8*	100.00	-	
Oftanol 1.5G	2.0	-	0.9	-	-	
Sevin 7G	8.0	-	-	8.84	75	
Sevimol 4SC	8.0			31.95	83	
Triumph 4E	2.0	87.10		83.84**		
Turcam 2.5G	2.0	-	-	-	66	

*Mocap 5G was used for this trial

**Applied at the rate of 1.5 oz./1000 sq. ft.

ontrol in Bermudagrass As a surface and subsurface turf insecticide, CRUSADE 5G has

been developed for use on both cool and warm season grasses.

In a bermudagrass turf trial conducted at Texas A&M University, CRUSADE exhibited excellent grub control. In the trial, entomologist Robert L. Crocker, applied CRUSADE on

September 20, 1991 to an area infested with grubs in the third instar stage.

Superintendent Jim McHenry also applied CRUSADE on bermuda-

grass at The Caroline Country Club in Denton, Maryland. Due to budget restrictions and the fact that pest problems aren't always as apparent

in bermudagrass, the 1991 application was the first on the club's fairways in more than six years. McHenry, who selected CRUSADE primarily because of its granular formulation, claims he saw almost immediate results.

Since his golf course is limited on fairway irrigation, McHenry applied CRUSADE early in the morning in mid-September when rain was predicted for that day, as well as for the following day. "Within 24 hours we saw grubs coming to the surface and dying," says McHenry. "In some places, the response was as quick as four to five hours."

While it can't be guaranteed that CRUSADE will deliver the exceptionally fast results witnessed at The Caroline Country Club, it is a product that will consistently provide effective, convenient and conscientious control. CRUSADE will repeatedly deliver the control that today's golf course superintendents demand and deserve.

> And it's evident to anyone who uses CRUSADE: After years of research, testing and refinement, this new product is an efficacious and valuable tool for turf grass pest control.

> For more information, call ICI Professional Products at 1-800-759-2500.

Apply turf chemicals sparingly and according to label directions. CRUSADE 5G is not registered for use in California, Connecticut or New York. CRUSADE* 5G is a

trademark of an ICI Group Company. Dursban^a is a trade mark of DowElanco. Dylox^a is a trademark of Miles Company Mocap* and Sevimol* are trademarks of Rhône-Poulenc Ag Company. Oftanol* and Sevin* are trademarks of Lesco, Inc. Triumph* is a trademark of CIBA-GEIGY Corporation, Turcam* is a trademark of NOR-AM Chemical Company.

©1992. ICI Americas Inc. A business unit of ICI Americas Inc.



PUSADE 5G

Professional Products

It's that time of year: Japanese beetle time

■ Warm weather brings with it the arrival of Japanese beetles. These voracious insects begin their summer feeding frenzy in late June or early July in most cool-season areas, a practice they keep up through August. Some may even linger until late September.

Although adult Japanese beetles seem especially attracted to roses, annuals, vegetables and grapes, they can-and dofeed on more than 250 kinds of plants, according to Dr. Lee Hellman, an extension entomologist with the University of Maryland. Just one or two of the insects can virtually destroy a flower in a matter

When it comes to control, there's good news and bad news. The good news is that control methods are available: the bad news is that none of them is completely effective, Hellman says.

Although insecticides will kill Japanese beetles that eat or walk on treated leaves, they remain effective for only a few days-a week at the most. You may need to spray some ornamental plants several times during the summer to prevent serious damage caused by the beetles as they migrate from one vard to another.

The most common insecticides for use against Japanese beetles are malathion and carbaryl (Sevin). Both are effective, if applied according to label directions. They may be used on fruit trees, but may involve a pre-harvest waiting period.

"One thing to keep in mind," says Hellman, "is that carbaryl is highly toxic to honey bees. If you use it, apply it late in the evening (if possible) when the bees are less active."

> Long-term control of the beetles must focus on the larval stage. or grub, which lives in the soil and feeds on grass roots, causing approximately 95 percent of all grub-related turf dam-

"Early August is the best time to inspect lawns for larvae," savs Hellman. "By this time, most of the eggs have hatched and the larvae are 1/4 to 1/2 inch long."

Iron, nitrogen aid in moss control

Chemical control and cultural practices will slow moss on golf greens.

 Golf course superintendents are mowing greens shorter and keeping the nitrogen fertility lower than ever before to

obtain faster speeds. A consequence has been a reduction in turfgrass vigor to a point where the greens are much more prone to weed encroachment. One of the more troublesome weeds to have become a problem is

Chemical control-In early spring, moss begins earlier than bentgrass. Hydrated lime applied in late March at three to five pounds per 1000 square feet will burn back the moss during this period. Mix with a dry sand topdressing.

Goosegrass Scotts Control-a Betasan/Ronstar combination labelled for use on bentgrass greens—provided 83 per- favored by an abundance of free water.

cent control from only a single application. This product causes some discoloration, but it appears to be one of the more promising moss control products.

Siduron (Tupersan) and bentazon (Basagran) provided 53 to 74 percent control of moss. While they were not quite as effective as the Scotts product, both siduron and bentazon were safer since no injury occurred for either product.



Cultural control-While silvery thread moss will tolerate dry conditions, it is

Core cultivation, immediately followed by sand topdressing, would create a system of "vertical drains" that would facilitate a rapid removal of surface water. Moss removal was hastened where this practice was followed compared to core cultivation alone. Deep spiking was also beneficial compared to core cultivation alone.

Nitrogen and iron are the most important tools for moss control. Moss was

> eliminated over two growing seasons from plots that were 40 percent moss by increasing nitrogen rates to about 0.8 lbs. per 1000 square feet per growing month (6 lbs. N/year). Iron applications at a rate of 6 ounces per 1000 square feet per month were beneficial during the first year, especially at the higher rates of nitrogen. Minimize nitrogen's effect on green speed by careful control of water, double cutting or higher potassium levels.

-Dr. Norman Hummel, Cornell University, writing in the Northeastern GCSA's "Our Collaborator," Sept. 1990.

LAWN CARE

The key: being paid for the type of service we give, not just the products we apply

Are there better terms to use than IPM?

■ Is the acronym IPM (integrated pest management) getting a little frayed around the edges? Is it beginning to show some gray?

After all, it's been around for decades. In agricultural circles it has. Only during the 1980s has it been used by professional turf and ornamental maintainers, with any regularity anyway.

"A lot of us don't understand if IPM is doing us harm or doing us good," says Tom Smith, president and owner of Grass Roots, Inc., Lansing, Mich.

Smith, for one, thinks the philosophy of IPM is still valid (see box). In fact, he says it's one of the cornerstones of his landscape design/build/manage company.

Even so, he admits IPM is, by definition, restrictive.

Professionally maintaining landscapes involves *a lot more* than pest control. "Sometimes our programs focus on pest management. We do it at the exclusion of good turf management," he says.

Are there better terms than IPM? Smith trotted out TEMP (Turfgrass Environmental Management Program), a term favored by Dr. Frank Rossi of Michigan State. Other professionals prefer PHC (Plant Health Care), and still others CLM (for Comprehensive Landscape Management) or CTM (Comprehensive Turfgrass Management).

Any, if practiced, can justifiably be used as a marketing tool, says Smith. By using IPM—or any of its cousins—a turf-grass/landscape professional demonstrates that it takes specialized knowledge to nurture and maintain healthy and beautiful turfgrass and landscapes.

Semantics aside, Smith says he believes the industry sometimes sends the wrong message to its customers—that it expects to get paid only when it applies a product in conjunction with its services.

"How many other professionals will come out to your house, provide you with a management plan and not charge you for it?" asks Smith.

(Smith spoke about IPM at the Michigan Turf Conference last January.)

- Ron Hall



Smith says green industry shouldn't push products over good service.

THE FOUR COMPONENTS OF IPM:

- 1. Initial inspection of lawn or landscape.
- 2. Development of a management plan for a particular site.
- 3. Monitor and treat the site based on the plan.
- 4. Evaluate and modify the plan.

ELSEWHERE

Tree, turf show hits Cleveland airwaves, p. 85 Mike Bailey works around the weather, p. 86 The four P's of training, p. 88

AWN CAREINBUSTRY

Cleveland audience wakes up to new upbeat tree & turf program

This green industry duo 'puts its money where its mouth is' on a radio program devoted to good advice and good fun.

Turn the dial of your AM radio to 1300 WERE Cleveland at 8 a.m. Saturdays to listen to a different kind of call-in garden show.

You'll be among the 10,000-plus listeners tuning into the shenanigans of Lauren Lanphear and Phil Fogarty in their weekly 1 1/2-hour tree-and-turf radio program, The Root of the Matter.

There's no question they're enjoying themselves, but the fun stuff is rationed out with larger doses of "how-to" advice on lawns, shrubs and trees. That's what listeners now expect from the two, not that they don't appreciate the duo's light-hearted approach to the subject matter. The program's rising viewer ratings show conclusively that they do.

"After all, the program's on at 8 a.m. Saturdays. If we want people to listen, we'd better be entertaining," insists Lanphear.

Lanphear, representing the Forest City Tree Protection Co., is the tree expert; Fogarty, from Crowley Lawn Service, is the program's resident lawn and ornamental guru. And—more often than not—Fogarty is a willing although sometimes unsuspecting straight man to Lanphear's good-natured wit.

The two try to make the call-in show entertaining even if they can't always make it humorous.

For example, when Lanphear took listeners on a weekly radio tour identifying different historic trees in Cleveland—those present when Moses Cleaveland founded the city in 1796—telephone calls to the station flooded in.

Many people asked for a list of the historic trees, while others suggested trees in their neighborhoods that Lanphear might add to the list.

(Cleveland, for many years was known as *The Forest City*, a nickname promoted by Leonard Case, a Cleveland mayor in the 1850s. The Forest City Tree Protection Co. was founded by Lanphear's grandfather in 1910.)

Then there are Fogarty's turf trivia quizzes, and Lanphear's "Arbor Jeopardy" segment.

Fogarty and Lanphear began their unusual radio partnership in June 1991, starting a 27-week run that ended in November. This past February, they kicked off a 39-week run for the 1992 growing season.

The two men "broker" the 1 1/2 hours of radio air time. They must come up with the money and material to make it work. They're helped by several sponsors, but admit they could use a couple more. Some of costs of the show come from their own pockets, they admit.

"I don't think either one of us ever saw it as a money-making deal," claims Lanphear. But they'd sure like to break even.

Typically, the two men alternate Saturday mornings at the radio station. The one that's not at the station will, sometime during the other's broadcast, telephone into the program for some chat and to answer some questions. Occasionally, both men will do a show together.

Local and even national guest experts are common. For example, Rod Tyler of Kurtz Brothers, a Cleveland-area company, is to talk about composting, while researchers like Dr. Wendell Mullison and



Loren Lanphear took WERE listeners on a tour of historic trees.

Dr. Tom Watschke all will be fielding questions from listeners sometime yet this spring.

"We can do it through a telephone hook-up," explains Fogarty. "They can talk to our callers. It sounds just like they're here in the studio."

Lanphear and Fogarty both admit that their motives for doing the program are—in addition to dispensing helpful information about landscapes/lawns and the green industry—business-based.

"It's a great way to give your company name credibility," says Fogarty. "And you immediately become the expert."

Adds Lanphear, "Our goal is to build our name recognition within the community."

Fogarty feels green industry business

owners in other communities can develop equally successful shows.

"We (industry) could gain control of that hour every Saturday morning and talk about water quality as it relates to turfgrass, and talk about the benefits arising from the correct use of pesticides in lots of different markets," he says.





Phil Fogarty says the radio station's ratings rose for the Saturday morning tree & turf program.

Everybody talks about the weather; Bailey's doing something about it

Mike Bailey, owner of Super Lawns of Gaithersburg, seeks ways to work with weather, rather than against it.

 The newspapers are soggy. Some are in yards while others are on driveways.

It's obvious to Mike Bailey, driving to his office in Montgomery County, Md., just north of Washington D.C., that many of the newspapers were delivered *after* residents returned home from work, *before* the rain.

Every copy of the newspaper is wrapped with a printed advertisement—a wet advertisement—for Mike Bailey's lawn care company, Super Lawns of Gaithersburg Inc.

"Even if I get just a percent or two response, we can close enough sales to make it worthwhile. But, now I think we're looking at a percent of a percent," he says with a touch—just a touch—of disappointment.

Even from the cozy fabric seat behind the wheel of his shiny gray GMC sport truck, Mike can't see any good coming from wasted advertising dollars. A lawn care business can go broke hoping for ideal weather, he knows.

Rather than wait for perfect conditions, Bailey, 35, a man of medium build with smoky blue eyes and, seemingly, inexhaustible energy, this past winter immersed himself in two weather-related business projects; this in addition to running the lawn care franchise he bought 14 years ago.

Weather station—On one hand, Bailey is putting the finishing touches on computer software for a portable weather monitoring system he will, later this season, begin offering to other lawn/landscape professionals.

The model weather station, located in the yard behind his headquarters, is tied into his personal computer. At a keystroke, the station displays the barometric pressure, wind speed/direction, rainfall (daily and cumulative), air/soil temperatures, etc. Bailey's technicians access this information through the two-way radios in their service (pick-up) trucks. They record the data on the back of every service ticket.

Says Bailey, "This is the direction lawn care is going."

Increasingly, regulations require professional applicators to tailor and adjust growing seeding and sodding activities.

The heart of this service is a custombuilt, wooden, crate-sized unit, a meticulously engineered collection of hoses and valves, controlled by a computerized, elec-

tion service to improve his company's

lously engineered collection of hoses and valves, controlled by a computerized, electronic timer. The company is building eight or 10 of these units, each about the size and weight of a full box of groceries. These irrigation devices will allow Super Lawns of Gaithersburg to keep clients' turfgrass green and alive, even in summer's heat.

Last summer's localized drought again demonstrated the importance of being able to work through unfavorable conditions,

says Bailey. His company, in its full-service programs, says it will do all it can to keep clients' lawns attractive.

"Last summer we had to fess up. We had to deliver on our promises. And we had to do it at no extra cost to our customers," says Bailey.

That translated into a record-breaking season of aeration and seeding, mostly turf-type tall fescues. (Bailey, who has established turf plots adjacent to both his office and home, is particularly impressed with the continued performance of certain hard fescues for shady problem areas.)

Indeed, Super Lawns' full-service program (the so-called Super Program) is what, Bailey feels, sets

his company apart. It includes seeding, aeration, rolling, weed/insect controls, organic-based fertilizers—as many visits as it takes.

Bailey admits that 1991, mired as it was in recession, wasn't strong. He says his company grew. Barely.

This season, providing Mother Nature cooperates even moderately well, should be stronger, he's says.

"People aren't going to pave over their lawns," says Bailey.

— Ron Hall



Mike Bailey says the two-way radios he installed in every service truck have paid for themselves many times over.

their treatment programs to meet specific environmental conditions. They'll need more accurate and immediate local weather data, believes Bailey.

From a practical standpoint, charting and recording local weather conditions helps lawn pros better target weed, insect and disease controls, as well as improve irrigation efficiency, he says.

Portable irrigation—The other service he's initiating will, he's hoping, bring financial returns yet this season. It's an automated, portable, above-ground irriga-

ORTHENE will keep unwanted pests off your turf.

Trying to control a broad range of tough turf pests like mole crickets, fireants, fleas, chinch bugs and the worm complex is no day at the beach. That's why you should use ORTHENE.*

ORTHENE kills both on contact and with long-lasting systemic action, and

can be applied to lawns, ornamentals, shrubs, even trees. You can also combine ORTHENE with many miticides and fungicides for more effective pest and disease control with just one application.

ORTHENE is waterproof within 24 hours, and its chemical structure allows it to break down quickly, eliminating the threat of harmful buildup in the soil.

Throw a party your toughest turf pests will never recover from, with ORTHENE Turf, Tree and Ornamental Spray.

ORTHENE®

Turf, Tree & Ornamental Spray

For safety, always read and follow label directions. © 1992 Valent U.S.A. Corp.







WARWAN SECTATRE SANDOUS SERVICES

Lawn care PR: an active spring

■ The Professional Lawn Care Association of America (PLCAA) will be getting a report on the success of its spring public relations campaign soon.

PLCAA, through a committee headed by Bob Tracinski, and the support of Tracinski's employer, Deere & Co., distributed a "Grasscycling" public service announcement (PSA) to 250 television stations on March 9. Another 200 TV stations received PLCAA's National Lawn Care

Month (April) message on March 23. All were professionally produced.

Tracinski said the first of five spring radio PSAs was sent to 2,000 radio stations in March also. Different radio announcements will continue through April and May. They were sent to the stations via satellite.

DowElanco, Monsanto and Sandoz are helping PLCAA put together five radio PSAs for the summer. Meanwhile, Tracinski says, three additional radio PSAs are being developed for fall 1992.

Also, about 3,000 publications along with 1,330 garden communicators received PLCAA's spring press kit.

Tracinski says the PSAs—which contain positive information about professional lawn service and helpful tips to homeowners—are generally welcomed by the media. And, the cost to PLCAA's budget is negligible.

The four 'P's' of training

Michigan is one of the latest states to require training for lawn applicators. More states will likely implement certification and testing requirements.

Industry expects this to happen in spite of a national lawn care technician training program which has been in the planning stage these past two years.

The challenge, says Tim Doppel, Atwood Lawn Care of Sterling Heights, Mich., is for lawn care company owners and managers to develop *responsible* training programs.

"Welcome to the 1990s. You're not only in the lawn care business, you're in the training business," he told about 200 turf managers at the annual Michigan Turfgrass Conference.

Doppel offered the Michigan audience these four "P's" of a training program:

• People. Train to the level of your audience, says Doppel. Most training programs will probably have trainees with dif-

ferent education and experience levels. More experienced personnel will be more receptive to new information, whereas new hires know little about the industry.

- Planning. Provide trainees with an agenda, then stick to the agenda, Doppel says. "You can't do a good job of training your people if you throw your training program together the night before." Likewise, he adds, trainees should be given an opportunity to prepare for training.
- Practice. Good trainers practice what they're going to say and do, maybe in front of a mirror, maybe with a spouse as an audience. They do this before getting in front of trainees.
- Place. Have a suitable and comfortable location for training. If you don't have facilities at your business, consider renting space at a nearby hotel.

"You provide training fairly inexpensively," says Doppel. "It tells everybody that what you're doing is important. It tells



Doppel: Plan your training program.

your employees that they're going to get something out of the training program."

Some time-tested Doppel communication techniques: break technical and semitechnical subjects into easy-to-understand chunks of information, from 20 to 40 minutes each; tell anecdotes and relate your own real-life experiences as they relate to the subject; provide periodic breaks.

Equally important: treat trainees with respect. "Your employees are every bit as important as any other people you talk to," says Doppel. "They're your link with your customers.

B&G'S NEW KP-4

Strap on the comfortable, lightweight KP-4 Knapsack Sprayer and enjoy the convenience and mobility it affords. Designed for a multitude of uses, the KP-4 is tough enough for *all* sprayable solutions.

Easy to use with the lever-operated high pressure continuous action pump. Only minimal effort is required to maintain effective spraying pressures. The generous 4 gal. high density polyethylene tank allows for an extended application period.

For more information about the KP-4 Knapsack Sprayer or to inquire about all your spraying needs, call **1-800-544-8811**.

B&GP.O. BOX 130, PLUMSTEADVILLE, PA 18949



Chemical resistant and heavy duty construction features include:

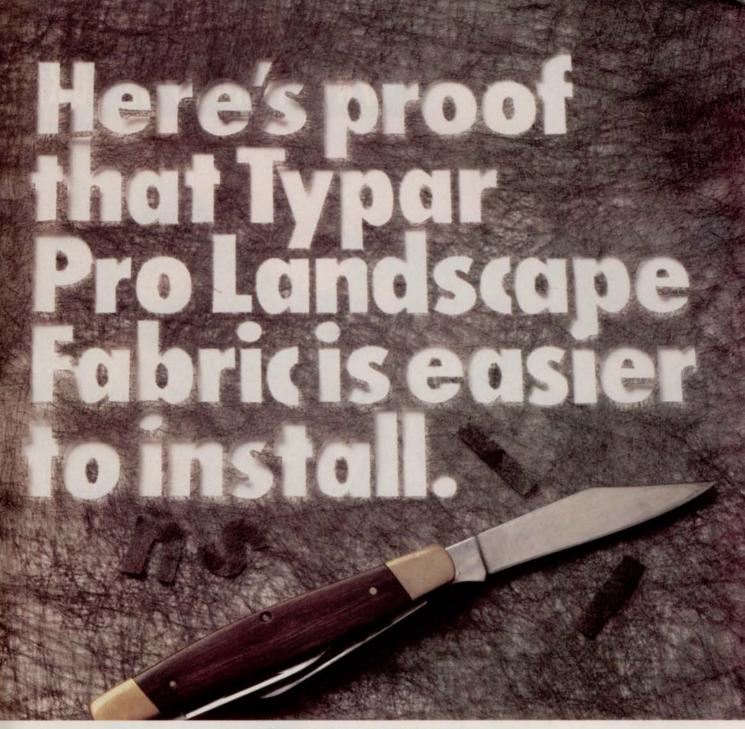
- All soft parts, gaskets and seals, superior quality.
- Unit converts for right or left hand operation.
 - High pressure piston pump up to 90 psi, 48 in. hose.
 - Discharge valve with screen and lock-on clip.
 - 18 in. angled extension with pin to cone spray pattern tip.



OPTIONS

• Brass extensions.

Fan spray pattern tips, brass and poly.



We cut this piece of Typar® Pro landscape Fabric to show what you can't do with the others.

Like cut quick slits for plants to pass through. Or fast curves that follow landscaped contours.

Typar is easily cut, lightweight and less bulky. So it's faster and cheaper for you to install.

And it's surprisingly tougher. With rugged polypropylene fibers that resist tearing, even under stones, gravel, patios and sidewalks. Typar is also porous, so air, water and nutrients can pass right through. Your landscaping projects



look healthy as well as handsome.

So save time and labor while you control weeds, drainage, soil erosion, and heaving of walks and patios.

Get Typar Pro Landscape Fabric. And start cutting corners the easy way.



FOR PROFESSIONALS

EREEMAY



Each year, fire ants spread further across the South, stinging millions of people. And professional Lawn Care Operators have seen the pain they cause to humans and pets and the damage to valuable lawns, plants and property.

KILLS THE QUEEN. KILLS THE MOUND.

There are many fire ant products on the market. But the only way to REALLY get rid of fire ants is to kill the queen. Because only the queen produces more fire ants. So, when the queen dies, the mound dies.

And now, more and more professionals are protecting their customers' plants, ornamentals and lawns with AMDRO® insecticide fire ant killer. Because only

AMDRO is specifically formulated to kill the queen.

HIGHLY EFFECTIVE BAIT FORMULATION

Fire ants treat AMDRO as food. They find it when they are foraging, carry it back to their mound, and feed it to ALL the ants in the mound...including the queen. Once the bait kills the queen, the whole mound dies in a matter of days.

FOR BROADCAST OR SPOT TREATMENT

Nothing is as effective or easy to use as AMDRO. Just apply straight from the package. There's no mixing, no watering in, no dust, no mess. And unlike some other mound treatments, AMDRO has no offen-

sive odor. For established mounds, simply sprinkle AMDRO insecticide around the base of each mound, according to package directions. (Do not apply directly to the top of the mound.)

BAITS

FUMIGATE

Or, you may use a hand-held applicator or vehicle-mounted Herd GT-77 spreader to broadcast AMDRO® over large areas to control existing mounds, as well as small, unseen mounds, and reduce the risk of reinfestation. Broadcast rates are only 1 to 11/2 pounds per acre for total control.

USE WITHOUT WORRYING

AMDRO® insecticide contains an exclusive patented biodegradable ingredient, hydramethylnon, incorporated into a highly