

# FIPRONIL

VS.

# THE MOLE CRICKETS



**You can take out these nasty critters with both new and tried-and-true insecticides. But you must constantly map and monitor their activity.**

BY LARRY AYLWARD, MANAGING EDITOR / ILLUSTRATED BY DAN ZOLA

**I**f you ask superintendent Carl Benedict, he'll tell you the Mesozoic-era monsters of *Jurassic Park* have nothing on the repulsive pests of modern golf courses — mole crickets.

"If they were big enough, mole crickets would eat you," says a half-joking Benedict, director of golf course maintenance for the Orange County National Golf Center in Orlando, Fla.

It's March in central Florida, already summerlike, and Benedict already has mole crickets on his mind. "This will be a very tough year for us with mole crickets," he predicts.

Mole crickets are to superintendents what pitcher Arizona Diamondbacks pitcher Randy Johnson is to left-handed hitters: dreaded. The insects, including the tawny mole cricket and the southern mole cricket, have been defacing southeastern U.S. golf courses for years.

Superintendents have seen what mole crickets can do — over and over. The critters dig tunnels and feed on grassroots, causing turf to dry out die.

"So much of my time and money has been spent on mole crickets . . .," Bene-

*Continued on page 52*



## Fipronil vs. the mole crickets

*Continued from page 50*

dict says. "They can do some damage."

That's not to say that mole crickets can't be controlled or defeated — and superintendents take pleasure in doing so. There are tried-and-true methods and insecticides to control mole crickets, as well as newer products and processes.

Benedict says products containing the active ingredient fipronil can be used to rid courses of mole crickets. "I've used it with wonderful results," he adds.

What's impressive about fipronil, Benedict notes, is its residual, which lasts between six months to a year. "I had a

### Managing Mole Crickets

You don't have to call in the National Guard, but this five-step process will help you control these hideous critters.

**1. Mapping.** Find out where the mole crickets are living in the spring. It's a good bet they're laying eggs in the same areas, so you have a good idea of the infested areas.

**2. Monitoring.** The tool used for monitoring is the soapy water flush, which irritates the heck out of mole crickets. It consists of a sprinkling can filled with 2 gallons of water and 2 tablespoons of lemon-scented liquid dishwashing detergent. After

the mixture is applied to the infested areas, the newly hatched nymphs will scurry to the soil surface where they can be observed.

**3. Selection.** Now it's time to pick the appropriate product to do away with the mole crickets. Consider your local or golf course's environmental policy when doing so. Also consider the characteristics of each product and the type of soil you're using it on.

**4. Timing.** As they say, it's everything. It's also the most vital factor in mole cricket management. It's crucial to time most treatments for ap-

plication about three weeks after the first major hatch. If you apply the treatment too late, you're in danger of trying to control large crickets while they're already damaging your course.

**5. Follow-up procedures.** If mole cricket infestations are severe, few products will provide the desired level of control with one application. It's a good idea to return to treated areas about two weeks after initial application and begin soapy water flushes to determine the level of control. Map the areas requiring retreatment.

SOURCE: TURFGRASS TRENDS; RICK BRANDENBURG, NORTH CAROLINA STATE UNIVERSITY



year of control on my property," Benedict adds.

Fipronil belongs to the phenylpyrazole class of insecticides and was introduced to the industry in 1996. The insecticide has ingestion and contact activity, and acts on a mole cricket's nervous system. Fipronil could be registered for use on fire ants by year's end.

The only drawback with fipronil is its price, Benedict says, although he expects it to drop in coming years. "To treat your course wall to wall with fipronil is not cost-effective," he adds.

Keep in mind, though, that a long-lasting application of fipronil can also be economical.

Tom Burton, former superintendent at Sea Island in St. Simons Island, Ga., clashed with mole crickets for 20 years and also cites fipronil as an excellent solution. He acknowledges the chemical's expense, but advises superintendents to devise a battle plan to keep costs down.

Whatever treatment you're using, especially if it's an expensive product that would be costly to use on an entire course, it makes economic sense to spot treat to save money, Burton points out. When he was superintendent at Sea Island GC, Burton and his crew would draw a map of each hole on the course. Then they would survey each hole to discover where mole cricket infestations were occurring. Then they would spot treat the areas and constantly monitor them for pest activity.

Mole crickets will mostly hunker down in the same areas on a golf course. If you found them left of the 13th green last summer, you can bet they'll be back there this spring.

Benedict says chlorpyrifos and acephate, two tried-and-true products used to control mole crickets, remain excellent products to control mole crickets. "You can get a good six to eight weeks of residual with them," he adds.

Burton mentions that bifenthrin can also provide the knock-out punch on mole crickets.

No matter what product you're using, Benedict's advice is to stay on top of mole cricket activity. Don't let them control you.

"You have to know your expectations," he says. "One mole cricket won't be a problem. But if you have 100 of them in a certain area, you have to be able to determine what your threshold level is and how much damage you can take.

"It's a never-ending battle." ■

**Whatever  
treatment you're  
using, it makes  
economic sense  
to spot treat to  
save money.**