

## Southerners Battle Myriad Pests

Here's an overview of what they face – and how they treat them

BY WILL HUDSON

**W**hile superintendents throughout the country have to deal with insect problems on a regular basis, those of us in warm-season areas, particularly in the Southern and South-eastern states, may have more (and more severe) pest problems than our counterparts in other areas.

Mild weather and a longer growing season extend the playing season for golfers who enjoy the grass and for bugs that eat it alike. Some of these pests are unique to warmer areas; others just feed longer or have more generations per year. All can do serious damage to the grass and to the budgets of those that manage fine turf.

Mole crickets are easily the most serious pests of turf-grass, particularly on golf courses, in the coastal plain region of the South and Southeast. Introduced from South America about 100 years ago, they now infest turf from North Carolina to Florida and west to Texas. There are isolated populations in Arizona as well. They damage turf directly by feeding on the grass and indirectly by their extensive tunneling in the top inch or so of the soil. This damages the grass by clipping the roots and also loosens the surface layer of soil, leading to increased susceptibility to drought and reduced tolerance to traffic.

Heavy infestations can completely destroy the grass over large areas, even entire fairways, in a single season. Traditional programs for mole cricket control involved repeated applications of insecticides throughout the season (April-October in most Southern states and year-round in Florida) at a cost that could exceed \$1,000 per hole, with results that were often unsatisfactory. This situation has improved over the last few years with the introduction of insecticides containing fipronil. Although the cost is still high — more than \$200 an acre — a single application usually provides satisfactory control.

One advantage of the newer fipronil products is that they also control another serious problem for golf courses, the fire ant. This is also a South American import, but its range is considerably wider than the mole cricket. Intro-



duced early in the 20th century at the port of Mobile, Ala., fire ants now infest all or most of North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana and Arkansas, as well as parts of Tennessee and Texas. There are isolated infestations in Arizona and California, which have been treated aggressively in eradication programs.

Fire ants do not damage the grass, but their mounds affect play and can damage mowers and other machinery. They have a fondness for irrigation controller boxes and other electrical housing. They are aggressive when disturbed and deliver a painful bite and sting that can be life-threatening for sensitive individuals. Ridding a course of these pests is a high priority for most superintendents.

In addition to fipronil products, fire ants can be managed effectively with a two-step program of bait application every six months and individual mound treatments to eliminate existing colonies. A variety of baits are available, some of which carry a guarantee of “no mounds” if used according to the label directions. At a cost of \$30 or less, this is a considerably cheaper option if mole crickets are not a problem.

Billbugs are perhaps the most widespread and least noticed of Southern turf pests. Most common in warm-season grasses is the hunting billbug, which is also found in cool-season grasses well up into southern New England. They are widespread in the south from the mid-Atlantic states around to the eastern part of Texas. Feeding by adults and larvae causes a gradual, progressive weakening and thinning of turf that can be mistaken for symptoms of disease, compaction, poor fertility and other problems. Adults can be flushed from the grass with soapy water, but larvae are more difficult to find. All stages can be found most of the year in the Deep South, although activity slows or stops during the coldest part of winter. Control can be problematic, requiring repeated applications of contact insecticides to kill adults and/or applications of imidacloprid to control larvae.

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*Hudson is a professor of entomology at the University of Georgia.*