USGA Green Section Record REGIONAL UPDATE

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Bermudagrass mites have become increasingly problematic, especially following long periods of dry weather.

STRANGERS IN A STRANGE LAND BY STEVEN KAMMERER | REGIONAL DIRECTOR, SOUTHEAST REGION

t seems there is a never-ending list of challenges for golf course superintendents – e.g., aeration timing, fertilizing, irrigation, weed control, disease management, etc. – so much so that sometimes insect control becomes an afterthought.

The most destructive insect pest of concern on southern golf courses is the mole cricket. Historically, this insect had been one of the most difficult to control. Even with multiple insecticide applications throughout the season, mole cricket damage still occurred. Fortunately, the registration of new products have helped immensely. Now, superintendents can achieve improved mole cricket control with fewer insecticide applications.

Many of the old insecticides used to control mole crickets have fallen by the wayside. As a result, some old insecticides have declined in use or have entirely lost their registration for golf course use despite their efficacy at controlling a broad range of turfgrass insect pests.

The newer insecticides can have a much narrower spectrum of activity than the old chemistries. This allows better targeting of specific problematic pests while minimizing off-target effects on some beneficial insects. For example, some new insecticides are active against only the immature stage of Lepidoptera insects – i.e., caterpillars such as army worms or sod webworms.



While improved insecticides allow superintendents to more precisely target pests, their use has also likely contributed to the resurgence of certain pests that once were seldom observed on golf courses in the Southeast.

Mites are technically not an insect. With eight legs instead of six, they are more closely related to spiders. Mites are incredibly small and difficult to see, but like insects they can be problematic even in areas like bermudagrass fairways and roughs under certain conditions. Mite damage is most severe following drought stress. The appearance of affected grass resembles severe growth regulation coupled with discoloration. Many of the organophosphate insecticides that also controlled mites or had a degree of activity as a side effect are no longer available. Conversely, many of the new insecticides have little to no effect on mites, likely contributing to their increased incidence.

Hunting billbugs are being observed more frequently, especially on bermudagrass putting greens. Their damage is slight but noticeable when infestations are severe. Billbug damage results in weakened stolons that are more susceptible to disease. Hunting billbugs produce several generations each year, making them difficult to control with just one insecticide application. Additionally, the optimal time to apply insecticides for hunting billbug control is different than the ideal timing for mole cricket and armyworm control.

Southern chinch bugs are usually confined to St. Augustine grass but have been observed causing damage to bermudagrass fairways. Like mites, southern chinch bugs are worst during hot, dry areas. They commonly appear around bunkers or along the edges of fairways and roughs. Their damage first appears as mottled, yellowing leaves that progresses to noticeable turf loss. Chinch bugs in lawns have also exhibited widespread resistance to the pyrethroid and neonicotinoid insecticide classes of chemistry, complicating insecticide control efforts.

Annual bluegrass weevils have been causing major headaches in the northern United States. Despite their name, these insect pests can also cause damage to creeping bentgrass. Annual bluegrass weevils can be imported via sod transported from infested areas, so careful inspection of all new sod is recommended prior to installation. Like southern chinch bugs, annual bluegrass weevils have exhibited resistance to several insecticide classes of chemistry.

As the 2018 season approaches, it may be valuable to re-evaluate your insect control program. Continue to practice diligent scouting and remember to modify insecticide applications and cultural practices to improve the control of challenging insect pests.



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