Deciding on Control of Scarab Grubs

by Jan P. Nyrop and Dan Dalthorp

Grubs, more properly the larvae of scarab beetles (Japanese beetle, European chafer and Oriental beetle), feed below the soil surface. When they are abundant, management action must be taken to avert damage to turf.

Deciding on whether a grub population warrants application of an insecticide is no simple matter, however. These insects cannot be seen without digging in the soil, and their distribution throughout a planting is rarely uniform. Nonetheless, turf managers need to assess their abundance, and should be making treatment decisions on the basis of those assessments.

Rule-based treatment decisions for scarab grub infestations on golf course fairways and other large turf plantings

Golf courses have an abundance of irrigated, well-maintained turfgrass, interspersed with ornamental plants - an ideal beetle habitat. As a consequence, they frequently have potentially damaging grub populations somewhere on the grounds.

Decisions about managing grub populations on golf courses can be made at any of three different scales. At the coarsest scale, the decision is whether to treat the whole course for grubs or not to treat any of the course. At a medium scale, individual fairways are treated on a case by case basis, which requires sampling the soil to determine which fairways harbor grubs. At the finest scale, individual grub patches within fairways are identified and treated.

Each scale has advantages and disadvantages. Each might be appropriate under certain circumstances. Which is appropriate and which is selected should depend on the past experience of grub infestation at the course, the distribution of grubs in the year in question, and on the goals and preferences of the turf manager. In most cases, regardless of the scale selected, acquiring sample information as a basis for treatment decisions is a sound investment.

Information and techniques that can help managers determine whether a scarab grub population threatens a turf planting, and how best to cope with that threat appeared in an extensive, three section article in the August 1995 issue of *TurfGrass TRENDS*. The first section gives an overview of pest management decision making and the role in this process of information on pest abundance. The second section outlines a method for determining whether a significant scarab grub problem may exist on a site, and describes it's use in evaluating residential or other small turf areas. The final section addresses the use of that method in assessing scarab grub densities on larger turf plantings such as golf courses and golf course fairways.

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References

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