

# INSECT IDENTIFICATION GUIDE

## Scouting for pests

Managers who are skillful at differentiating causes of turf damage should use those skills in a structured format known as pest scouting to provide early, site and pest specific data for making management decisions that are appropriate, accurate, and require the minimum input of material and labor needed to accomplish the goal.

**Pest scouting should be done using a defined system on a regular basis by designated personnel.**

For some managers, pest scouting can be a formalized structure that acts as the foundation for the use of data intensive Integrated Pest Management (IPM) strategies, while for others, scouting can be used as a viable alternative to traditional preventive pesticide applications based on regional or historic factors.

Either way, pest scouting should be done using a defined system on a regular basis by designated personnel. How the process is established is up to the individual preferences of the manager involved, but any successful scouting must include the following to be effective:

- ▶ accurate identification of pests involved;
- ▶ some means of quantifying numbers of pests found;
- ▶ some way of locating areas of pest involvement.

How these principles are applied for each pest species involved will vary. Some will require the use of light traps, sweep nets, hand lens, hand trowels, sod lifter, cup cutter, good observational powers, scouting during defined periods or on a weekly or biweekly basis, soap or insecticidal flushes, or written or graphed results. All three principles are required to provide managers with a consistent foundation to make the best control decision for their site, their site usage, their management style and, not the least, their operating budget.

## Tips for accurate insect identification

Historically, when broad-spectrum, season-long



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control materials where available, knowing the species of insect involved in turf damage and how the insect's life cycle facilitated their control was not particularly important, since the nature and toxicity of the materials used blurred those distinctions. Today, knowing which species of insect is present and how that insect's biology relates to the grass species managed and the sites' usage is critical for the safe use of control materials in the current climate of increased environmental awareness and responsibility.

Accurate field identification of an insect species requires the acquisition of specimens; either the immature (larval) or the adult stage, or both. In many cases, several specimens are needed for an accurate identification. Regional or local land-grant universities have cooperative extension services or entomology departments that can help with identification. If you plan to use outside experts, proper preservation of samples is very important. Store collected samples using either shellac thinner or rubbing alcohol as a preservative solution.

Do not use just the visual examples provided in this guide as the sole means of insect identification. The more closely the other factors described in this guide relate to your site, its environment, and the known species distribution, the more accurate will be your insect pest identification.

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