TURFAXTM

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JB Comments

Solving Mole Problems in Turf

When asked questions about solving mole problems on lawns over the past 44 years I have suggested using an insecticide to control the food source which results in the moles moving to more favorable feeding sites. There is a lack of research concerning this approach. Mole activity can result in a major disfiguring of the lawn due to numerous mounds, which then smother the grass causing 8 to 14 inch (20–35 cm) diameter dead patches.

I became a victim of a serious mole problem at my northwest lower-Michigan residence. Initially, I tried to ignore them, but the damage became more and more serious over two years. Visible aboveground turf damage from white grubs or root-feeding insect activities was never observed. A single application of an insecticide was made annually for two consecutive years, which resulted in the elimination of mole damage within the lawn. During the third year, the insecticide application was skipped, resulting in a reoccurrence of mole damage on the lawn. Subsequently, an insecticide has been applied annually at the labeled rate, and appropriate timing in relation to the life cycle of the grubs. This program has continued to eliminate the mole problem. For the past few years the moles have decimated the neighbor's lawn. Approximately twice a year there will be one to two mole mound probes made into my lawn, but the moles then return to the neighbors lawn where the food supply is favorable for their activities. Obviously, this specific experience involving a relatively severe mole population with allied disfiguration and loss of turf has been solved by this procedure. These findings were not based on replicated plots but were replicated over eight years.

Ask Dr. Beard

- **Q.** Does a rotary or a reel mower provide a better cut on turfs?
- A. Unquestionably, a properly adjusted and sharpened reel mower provides a far superior quality of cut of grass leaf blades than does a rotary mower. This was documented in a six-year study at four cutting heights conducted on a Kentucky bluegrass (Poa pratensis) turf by this author. There was a semi-brown appearance on the turf after mowing with a reel mower, especially when the leaf extension rate was rapid. In contrast, during veryslow growth periods, the visible differential effect was more minimal. The reason for this is that the reel mower has a fixed bedknife against which the reel pushes the grass leaf blades, thereby causing a more scissors-like cutting action. This contrasts with the rotary mower, which cuts by impact that creates a significant area of damage back from the cut end of grass leaves. This results in leaf tip browning, which affects the turf appearance to varying degrees. Another significant observation during the 6-year study was a 65% increase in disease occurrence on the rotary cut turfs versus the reel cut turfs. The more extensive wound area on the rotary cut turfs provided a greater opportunity for germinating spores of pathogens to invade the plant, thereby resulting is increased disease problems.

Ask Dr. Beard: TURFAX

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