

**NOTE:** THE FOLLOWING INFORMATION IS OFFERED AS A GUIDE FOR PROSPECTIVE CHALLENGES TO MANAGING SEASHORE PASPALUM. ALL TURFGRASSES ARE SUBJECTED TO INSECT, DISEASE, AND WEED PRESSURES. PROPER MANAGEMENT IS THE KEY TO SUCCESS. YOU MUST CHECK ALL LABELS OF THE PESTICIDES TO BE USED ON THIS GRASS FOR LEGAL AND PROPER USE. MENTION OF A PARTICULAR PRODUCT IS NOT AN ENDORSEMENT OF THAT PRODUCT BUT REFLECTS WHAT IS KNOWN AT THE PRESENT TIME. ENVIRONMENTAL INTERACTIONS, INCLUDING SALINITY THAT IMPACT SPECIFIC SITES, MAY GIVE VARIABLE RESULTS IN THE USE OF SOME PRODUCTS.

## MOLE CRICKETS

Northern mole cricket (*Neocurtila hexadactyla*)

Tawny mole cricket (*Scapteriscus vicinus*)

Southern mole cricket (*Scapteriscus borellii*)

**Life cycle:** spend most of their lives underground. When soil warms in the spring and nighttime temperatures reach 60°F (15°C), tunneling and feeding increase. Eggs are laid in chambers 4-12 inches (10-30 cm) below the surface. Parents die off after mating and egg-laying. Eggs take about three weeks to develop nymphs, which tunnel to the surface and feed in the upper soil and litter. Feed and burrow at night, just below the soil surface.

**Feeding:** root feeder. Uproots the plants, causing roots to dry out.

**Management:** chemical control is best during mid-summer when crickets and nymphs are small. ROTATE MOA CHEMISTRIES.

**Potential chemical control:** imidacloprid (MERIT, MALLET, GARANT, WARRANT, ENFORCE, BENEFIT, TURFTHOR, IMIDA PRO, HAWK-I® N/O, POINTER, BOUNTY™, GRUBOUT™) applied at the beginning of egg hatch, Subsurface application of

**fipronil (CHIPCO CHOICE). Apply late in afternoon to dry turf. Doxem IG (indoxacarb + novaluron)**

**Potential topical contact chemicals:**

**chlorpyrifos (DURSBAN, INSECTICIDE III™), ethoprop (MOCAP)**

**bifenthrin (TALSTAR, FIREBIRD®, Up-Star SC, MENACE, CROSSCHECK, MAXXTHOR, PROSECT™); indoxacarb (PROVAUNT); bifenthrin + carbaryl (DUOCIDE™), acephate (PRECISE, ORTHENE, AVATAR®); pyrethroid deltamethrin (DELTAGARD, TEMPO ULTRA); clothianidin (ARENA, GUILLOTINE), bifenthrin + zeta-cypermethrin (TALSTAR XTRA), bifenthrin + zeta-cypermethrin + imidacloprid (TRIPLE CROWN T&O). Acephate + Imidacloprid (Avatar PLX).**

**Potential Systemic products: imidacloprid + bifenthrin (ALLECTUS), dinotefuran (ZYLAM/SAFARI), clothianidin (ARENA)**

**Broadcast: indoxacarb bait (ADVION), bifenthrin bait (TALSTAR), lambda-cyhalothrin (SCIMITAR)**

**Potential biological biorational control: parasitic wasp—*Larra bicolor*. Parasitic nematodes—*Steinernema scapterisci* and *Heterorhabditis bacteriophora***