Mole crickets

Damage turf by burrowing, tunneling and eating grass roots when populations are high. Most active during spring and summer, evidenced by dead and dry patches in the lawn.

Mole cricket (Gryllotalpa spp)

Adult mole crickets are brown in colour, up to 40mm long, with short spade-like front legs adapted to burrowing and digging. Antenna are shorter than the head. They have wings and do fly at night, but mole crickets spend much of their life in permanent burrows up to one metre deep in the soil. Female adults lay clusters of eggs in underground chambers where they incubate the eggs and protect emerging nymphs. Wingless nymphs hatch in October, moulting over several months to reach adult in February to April.

Changa mole cricket (Scapteriscus didactylus)

A large olive-brown coloured insect with a voracious appetite introduced around 1984 from Latin America. 30mm long, it has two digging claws on its front leg, instead of four claws of all native species, and this can be used to distinguish it. Initially it was only evident around Newcastle, NSW, but has since invaded Maitland and Cessnock. Its ideal climate range suggests that it will spread through northern NSW and Queensland. Females are prolific breeders that lay up to 10 batches of 450 eggs in a season. Changa mole crickets are not very mobile, but adults or eggs can be transported in nursery pots and other horticultural products. They are winged and are attracted to light when they fly at night.

Black field cricket (Teleogryllus commodus)

Adult field crickets are dark brown to black in colour, about 25mm long, wings folded flat on back and with thin fore legs and powerful hind legs. Antennae are as long as the body. Female adults lay eggs in the soil during autumn. These hatch in summer and the newly emerged juveniles live in cracks in the soil. The crickets feed vigorously during summer and autumn, especially on lush growth after autumn rains. The insects are nocturnal, hop vigorously and chirp at night.

Control:

Because crickets are underground living insects, any pesticide must be incorporated into the soil by thorough irrigation, usually equivalent to 20 mm of rainfall. Failure to control soil insects is usually due to lack of penetration of the pesticide into the soil zone where the larvae are feeding.

<table>
<thead>
<tr>
<th>Active constituent</th>
<th>Trade name</th>
<th>Rate / 100m²</th>
<th>Critical comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorpyrifos</td>
<td>Agchem Lawn Beetle Bombs</td>
<td>400g</td>
<td>Sprinkle granule evenly over the area to be treated. Apply by using a spreader or mix with fertiliser or topdressing. Irrigate thoroughly after application</td>
</tr>
<tr>
<td></td>
<td>CRC GrassGard</td>
<td>170ml</td>
<td></td>
</tr>
<tr>
<td>Diazinon</td>
<td>Campbell Pennside</td>
<td>200ml</td>
<td>Harmful to bees. Mow turf before application to remove flowers. Irrigate immediately after treatment with equivalent of 20mm rainfall</td>
</tr>
<tr>
<td></td>
<td>Grass Grub Killer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

REFERENCE:

ATRI. Disease, insect & weed control in turf. Australian Turfgrass Research Institute, Concord West, NSW.
HAWKES N, 1998. Turf pests and diseases in South Australia. Torrens Valley Institute of TAFE
University of Florida, 1998. West Indian Mole Cricket. Institute of Food and Agricultural Sciences

IMPORTANT NOTE: All users of pesticides must note that the material provided in this guide is intended only as a source of information and advice. The rates and instructions on the product label should always be checked before use, and followed exactly. ALMA Inc accepts no responsibility for any loss or damage howsoever caused arising out of the application of any product referred to.