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Army worm—a pest of kikuyu lawns

Adapted from a QDPI fact sheet - http://www2.dpi.qld.gov.au/beef/3299.html

Growing a decent lawn has been pretty tough in most areas over the last few years but this year at least most lawns have been pretty green. Army worms typically cause damage between December and March each year, especially in Kikuyu lawns. Army worms are the little creatures pictured above that feed naturally enough in great armies on Kikuyu especially. Army worm are the larval stage of a moth that is about 40mm across its wings. It is perfectly normal to have some in the lawn, which you would not normally even really notice. The problem comes where you have major infestations.

Description of insect

Adult

Males have variable white and dark markings on the forewings, but these are more subdued in the female. The hindwings are a pale, shining white colour. When at rest, the wings of the insect are invariably folded in an inverted V over the abdomen.

Immature stages

The eggs are deposited by mated females in clusters that they cover with buff-coloured, hair-like scales from the tip of the abdomen. The larvae pass through seven development stages or instars, each being larger than the previous one. A growth stage is completed by a moulting or shedding of the complete larval skin and head capsule to allow an increase in size to the next instar. Each skin is fixed in size soon after moulting. Small larvae are initially cream coloured at emergence. They attain a greenish colour after feeding. As the larvae pass through the various instars they develop thin longitudinal white stripes on the sides and top of the body and the head capsule changes from black to brown in colour. Towards maturity, characteristic black triangular marks become prominent. In the final instar, these triangles are a dominant feature of larval colouration, being super-imposed on a background of brownish dorsal and lateral bands.

Fully-grown larvae up to 45 mm in length and 7 mm in width have an inflated sausage-like appearance with the body width being much greater than that of the head capsule. The larvae pupate in chambers they construct in the soil. They are deep brown in colour and measure about 15 mm in length and 5 mm in width. Eggs hatch in 2 to 3 days at 27°C and the whole lifecycle from egg to adult can take as little as a month. The larval stage may take as little as 2 to 3 weeks.

Complete loss of grass due to lawn armyworm.

Control methods

To control these pests in the home garden you could elect to use one of a number of insecticides that are registered for use on army worms.
One of the safer of these is to use a biological control agent – Dipel. This is a natural bacteria that infect the insect and cause death. The alternative is do nothing other than provide any extra water and some fertiliser to the lawn to help it naturally repair itself over the coming weeks.

Chemical

As the lawn armyworm feeds at night spraying in the late afternoon may be more beneficial than pesticide applications earlier in the day. Consult with your local nursery for currently registered products.

Cultural

The caterpillars feed only on the softer above ground parts of grasses and the roots and growing points are undamaged. Therefore liberal applications of nitrogen fertiliser and water to lawns and pastures will often assist plant recovery after the armyworms have left or been controlled. Predators include frogs, cane toads, birds, larger wasps and various species of sucking bugs.