THE CHROMOLAENA LEAF-FEEDING MOTHS

(Pareuchaetes insulata and Pareuchaetes pseudoinsulata)

A natural enemy of

TRIFFID WEED (Chromolaena

odorata) in South Africa

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DESCRIPTION

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Adults are moths with pale yellow wings, a yellow body with black dots along the back, and black eyes and feelers. They are about 20 mm in length, and when stationary fold their wings back over their bodies. They are active only at night. After hatching, the tiny (2 mm) larvae/caterpillars are pale grey. They develop characteristic black and red stripes after 1 week. They become increasingly hairy and reach maximum size (about 25 mm) 2-3 weeks later.

LIFE CYCLE

Adults live for at least five days and lay groups of up to 80 pale yellow, round eggs on the undersides of chromolaena leaves. The eggs hatch after 1 week and the caterpillars eat the leaves. The young caterpillars remain on the plants but older ones usually move down to the ground during the day, only coming up to feed on plants at night. When fully grown, after about 4 weeks, the caterpillar pupates on the ground (forms a hard brown shell, inside which it turns into an adult). The moth emerges after 8-10 days. The moths do not feed, but only mate and lay eggs.

FEEDING DAMAGE

Very young caterpillars feed in groups, skeletonising the leaf, whereas slightly older caterpillars feed separately, creating holes in the leaf. The latter damage can however be easily confused with similar feeding damage by indigenous *Zonocerus* grasshoppers. Look for caterpillars and/or frass (droppings) to determine whether the damage is attributable to *Pareuchaetes*. Large caterpillars eat characteristic "U" shaped areas of the leaf from between the main veins, but at high densities, they consume entire leaves, and occasionally feed on the surfaces of stems. Heavy feeding by caterpillars often causes yellowing of the regrowth.

IMPACT ON CHROMOLAENA

At high densities of *Pareuchaetes*, entire plants are defoliated. Although some regrowth often occurs, there is a substantial reduction in plant height and density, and occasional dieback. Other plant species are then able to establish in the gaps that have been created. At lower densities the resultant reduction in growth rate will reduce the cost of follow-up clearing operations.

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Pareuchaetes moths



Pareuchaetes eggs



Late instar Pareuchaetes larvae



Damage to triffid leaves caused by larvae

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