

THE SESBANIA FLOWER-FEEDING WEEVIL

(*Trichapion lativentre*)

A natural enemy of

SESBANIA (*Sesbania punicea*)

in South Africa

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DESCRIPTION

The sesbania flower-feeding beetles are tiny (up to 3 mm long) and uniformly black with prominent, elongate snouts. They aggregate in large numbers on young sesbania leaves in mid summer and may move rapidly when disturbed. Their presence is usually noticeable by characteristic 'shot-holes' that the adults make as they feed on leaves of the plants.

LIFE CYCLE

Trichapion females chew tiny holes through the protruding petal at the tips of flower buds of sesbania and insert a single egg into each bud. Eggs hatch within 2-3 days and the grubs feed voraciously on the floral contents (anthers and stamens) of the buds. Development, including pupation, is completed within a few days, entirely inside the bud. Newly emerged adults chew their way out of the hollow buds and start to feed on young leaves and buds. They reach sexual maturity after a few days and start mating and laying eggs. The rapid development of *Trichapion* enables the beetles to complete several generations during summer. Adult beetles can be found on the plants throughout autumn and winter but their numbers diminish as these seasons progress.

FEEDING DAMAGE

Adults feed on both leaves and buds and stunt the growth of sesbania trees to a certain extent. The grubs cause by far the most damage as they destroy on average over 98% of the flower buds produced by sesbania plants each year. Consequently, very few seeds are produced by sesbania and its reproductive capacity is reduced substantially.

IMPACT ON SESBANIA

On its own, *Trichapion* has had little impact on the density of mature sesbania plants in South Africa. Although seedlings are much more scarce in areas where the beetles are active, there are still enough seeds produced to replenish old plants that die. The real value of *Trichapion* has been in reducing the rate of spread of sesbania and in diminishing the rate at which the plants re-colonise areas that are cleared mechanically or with herbicides. Under the correct environmental conditions, the combined presence of all three sesbania biological control agents can bring the weed under complete control. Under these conditions no other control methods should be required.



Trichapion lativentre



Sesbania blooms, *Trichapion* food



Sesbania seedlings in abundance - before *Trichapion*



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ADDITIONAL INFORMATION IS AVAILABLE. PHONE: Weedbuster Toll-free Helpline: 0800 005 376
WEBSITE: PPRI website is located via links from the Agricultural Research Council website: www.arc.agric.za

