

# THE ACACIA SEED WEEVILS

(*Melanterius species*)

Natural enemies for some Australian ACACIA species (WATTLES) and STINK BEAN (*Paraserianthes lophantha*) in South Africa.

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## DESCRIPTION

The weevils are small (3-5mm long), brown or black beetles with long snouts. The small grub-like larvae (young) are only found inside developing seeds.

## LIFE CYCLE

The weevils have only one generation per year which coincides with the time of annual seed maturation. Depending on the species, adults can be found between September and November when they feed on the developing seeds. Mating and egg laying also occurs during this period. The female weevils chew small holes through the walls of the developing wattle seed pods and lay eggs singly on the young seeds.

The newly hatched larvae burrow into and feed on the seeds. When fully developed (4-6 weeks after hatching) they chew their way out of the pods and drop to the ground. Here they pupate within fragile cocoons made from the soil around them.

Fully developed adult weevils emerge from the soil 6-8 weeks later (December - March). The adults remain inactive for most of the cooler months until the start of the breeding season in spring. They shelter on their host plant or on other plants in the vicinity, generally in crevices under bark occasionally emerging to feed on the buds, flowers or young leaves of their preferred Acacia species.

## FEEDING DAMAGE

Adult feeding damage is seen on both the developing and mature seed pods as a small hole above the middle of a seed. The seed below is damaged and undeveloped. Seeds that have had larvae within them are usually hollowed out, with a small round exit hole at one end. This hole is visible on the pod wall

## IMPACT ON ACACIA SPECIES AND STINK BEAN

Since these insects are seed-feeders, the appearance of the trees is not affected. However levels of seed-damage may reach 100%. Any reduction in seed viability will reduce the rate of spread of the weed and its ability to re-grow after it has been cleared by conventional methods.

## SEED WEEVIL SPECIES CURRENTLY BEING DISTRIBUTED FOR THE BIOLOGICAL CONTROL OF AUSTRALIAN ACACIAS AND STINK BEAN

| WEED SPECIES ATTACKED                          | <i>Melanterius</i> SPECIES | DISTRIBUTION TIME    |
|--|----------------------------|----------------------|
| Black wattle, ( <i>Acacia. nearnsii</i> )      | <i>M. maculatus</i>        | September - October  |
| Blackwood, ( <i>A. melanoxylon</i> )           | <i>M. acaciae</i>          | September - November |
| Long-leaf wattle, ( <i>A. longifolia</i> )     | <i>M. ventralis</i>        | September - October  |
| Rooikrans, ( <i>A. cyclops</i> )               | <i>M. servulus</i>         | September - November |
| Stink bean ( <i>Paraserianthes lophantha</i> ) | <i>M. servulus</i>         | September - November |



*Melanterius weevil*



Feeding damage by *Melanterius* larvae (note holes in seeds)



*Melanterius* larval exit holes on acacia seedpods



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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](http://www.arc.agric.za)

