SEED-FEEDING MESQUITE BEETLES

(Algarobius prosopis and Neltumius arizonensis)

A natural enemy of

MESQUITE (*Prosopis* species)

in South Africa

DOSSIERS ON BIOLOGICAL CONTROL AGENTS AVAILABLE TO AID ALIEN PLANT CONTROL

DESCRIPTION

These are small beetles (up to 5 mm in length). Algarobius is a uniform fawn colour with elytra (hardened fore wings) that are darker than the rest of the body. Neltumius has a mottled black and white patchwork pattern over its entire body. The beetles are distinctive because the abdomen extends beyond the elytra. Their presence is easily noticeable by the occurrence of neat round holes in the mature seed pods of prosopis, both on the trees and on the ground.

LIFE CYCLE

Grubs of both species develop in mature seeds within mesquite seed pods. Eggs of Neltumius are glued singly on the surface of the pods and shells may remain in place for several months after the eggs have hatched. Algarobius eggs are laid in cracks and blemishes on the seed pods. Each grub enters and entirely destroys a single mesquite seed during its development. Pupation occurs within the hollowed out seed and adults emerge through distinctive holes on the surface of the pods.

FEEDING DAMAGE

Only the seeds of mesquite within the seed pods are damaged by the beetles. The seed pods and vegetative parts of the plants are not affected.

IMPACT ON MESQUITE

Although up to 95% of seeds produced by mesquite can be destroyed by these seed-beetles, they are probably having very little impact on the dynamics of mesquite invasions because seed pods are eaten by livestock and game before the beetles can utilise and destroy many of the seeds. As a result seed destruction by the beetles seldom reaches very high levels. Most seeds are ingested and pass through the gut of animals undamaged. Once dispersed in the veld, seeds are no longer suitable as a food source for the beetles.









Symptoms of beetle damage: adult emergence holes in pods



Neltumius arizonensis

Author: J.H. HOFFMANN, Zoology Department, University of Cape Town, Rondebosch 7701

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

