

Heilipus lauri

Introduction

The genus *Heilipus* has its origins in Central America (Woodruff, 1963). There are reports of the incidence of *Heilipus* spp. in the Caribbean – in Guyana, where Duodu (1993) recorded *H. ocellatus* on citrus and cacao, *H. clavipes* on cacao and other unnamed species feeding on cotton bolls (*Gossypium* sp.) In Suriname, van Dinther (1960) mentioned two species *H. lateralis* on *Erythrina glauca* and another species probably *unifasciatus* (Champ.) severely damaging the young flush of cacao. There are no records of *Heilipus lauri* (Boherman), the avocado seed weevil, occurring in the island states of the Caribbean. As a consequence this pest is of quarantine significance especially in the avocado-growing countries of the region.

Identity

Authority	: Boheman
Classification	
Kingdom	: Animalia
Phylum	: Arthropoda
Class	: Insecta
Order	: Coleoptera
Family	: Curculionidae
Genus	: <i>Heilipus</i>
Species	: <i>lauri</i>
Synonym	: <i>Heilipus pittieri</i> (Berber).
Common names:	Avocado seed weevil, large avocado seed weevil, Picudo de la semilla del aguacate, Charaçon de la g
Role	: Pest

Signs & Symptoms

Young fruit on the ground and mature fruit rotting on the trees are evidence of *H. lauri* damage. Pitted scars on the skin of the fruit are also signs of *H. lauri* infestation.

Morphology

FAO (1989)

The adults are elongate (12 - 15 mm long) and convex, thorax narrower than elytra. The beak is slightly longer than the thorax, and strongly curved. Wing covers are dark reddish-brown to almost black, coarsely punctured typically with yellow spots or incomplete bands.

Biology & Ecology

The adult perforates the skin of the fruit and deposits eggs in the fruit. The larva is grub-like, legless, dirty white and is 15 mm long (Fig. 1). When the larva emerges, it tunnels into the flesh of the avocado fruit and enters the seed where it feeds and undergoes all stages of

development. If the young fruit is attacked, fruit abscission occurs. If the attack takes place when the fruit is mature, it does not fall, but tends to rot due to the incidence of secondary infection caused by bacteria and fungi.

Adult insects feed on new growth (young flush), leaves and fruit.

Dispersal / vectors

Movement of infested fruit to non-infested areas in trade and commerce.

Management

Cultural control

Sanitation is the best means of control – All young and rotting fruit that fall, should be burnt or buried.

Chemical control

Orthene 75% PS 250 g/100 litres or endosulfan sprayed on fruiting avocado trees gives good control. Chemical application should be stopped 22 days before harvest.

Host Notes

The main host plant is avocado (*Persea americana*).

Distribution

H. lauri is found in Central America – Mexico, Costa Rica, Nicaragua, Guatemala, Colombia.

H. apiatus is listed as occurring in the US, Argentina, French Guiana and Guyana. (Woodruff 1963).

Bibliography

Duodu, Y.A. (1993) Agricultural Insects of Guyana. 226 pp.

FAO (1989) Plant Pest of Economic Importance reported in the region covered by the Caribbean Plant Protection Commission RLAC/90/03 – PROVEG-Z2.

Woodruff, R. E. (1963) An avocado weevil (*Heilipus apiatus* Oliv.) (Coleoptera: Curculionidae). Florida Department of Agriculture Division of Plant Industry. *Entomology Circular No. 11*, p:1.

Van Dinther, J.M.B. (1960) Insect pest of cultivated plants in Suriname. 159 pp.



Fig.1 *Heilipus lauri*
Larva on avocado fruit