

EAG TALK

THE ENVIRONMENTAL AWARENESS GROUP

The agave weevil: A threat to our dagger logs

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The weevil is a form of beetle and grows approximately an inch long. It is a black-coloured insect with the scientific name *Scyphophorus acupunctatus*.

Scyphophorus acupunctatus (agave weevil) is a specialised insect, attacking plants belonging to the agavaceae and dracaceae, also known as the dagger log which bears our national flower.

It attacks sisal (*agave sisalana*) and other plants such as ornamentals (*beaucarnea*, *dasyliroton* and *yucca tuberosa*, *polianthes tuberosa*).

It is unclear what the entry pathway of this pest was into the country, however, the Plant Protection Unit received the first report of the pest in Antigua, about 10 years ago in 2011. Since then, the agave weevil has been visually identified and will be sent away for confirmation.

The insects usually choose unhealthy or old agaves to deposit their eggs. Once an agave has bloomed, it is at the end of its life cycle and these plants are especially prone to agave snout weevil infestations.



Damage caused by the agave weevil on an agave plant in Nelson's Dockyard

Through its bite, the beetle injects bacteria which cause the plant tissues to soften and liquefy. This makes it easier for the larvae and parent to eat the tissues, eventually causing the collapse of even the mightiest of

agave.

Agaves affected by this bacterium fall apart. The centre of the plant (from which tequila is made) becomes mushy and takes on a foul odour. Snout weevil damage is extensive and

soon leads to death of the plant.

Larvae and adults of this species are found in roots, lower leaves, and inside the heads.

The most obvious symptoms are leaf holes, one centimetre in diameter, and where these are observed on mature leaves, six or seven leaves on the same plant are usually also affected. The younger the leaf, the nearer the hole is to the tip.

These are the result of the weevil boring into hearts of the plants under two years old when the young leaves are still unfolded. When plants are healthy, injury does not develop further, but when growth is not sufficiently vigorous around the perforations, entrance of rot-causing organisms can occur.

These infect the central shoot, which becomes red and soft, and the plant dies. Large suckers used for planting are more liable to serious injury than bulbils, which are damaged by the weevil penetrating between the bases of the outer leaves into the bulb, or small suckers with newly cut bases, which also attract feeding.

Injury to the leaf bases are, however, the primary cause of the death of the plant in many cases, the weevil acting only as a sec-



Profile image of an adult agave weevil



Agave weevil adult



Complete destruction of the agave plant by weevil



Damage caused by agave weevil (Photos courtesy Kishma Primus-Ormond, Plant Protection Unit)

ondary pest.

Large, healthy sisal plants are sometimes attacked by the adults when the leaves are still part of the heart or central shoot. When cut, the leaves are found to have areas of brown, dried-out epidermis approxi-

mately 20cm from the base.

This causes discoloration of the fibers, but the actual damage to them is not considerable, in the absence of a high population density of these weevils.

S. acupunctatus is the most important pest of culti-

vated agaves. It is considered a pest of economic importance because it creates conditions that cause cultivated and ornamental agaves to die before they bloom or can be harvested.

If you find an insect that you suspect is the agave

weevil or if you see a dagger log with these damages, please contact the Plant Protection Unit to have the specimen identified properly. You can contact them by calling (268) 764-1255, 764-7378, 562-2776, 462-7378, 462-6776 or 462-6777.