

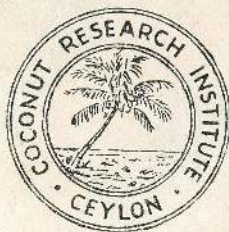
COCONUT CATERPILLAR



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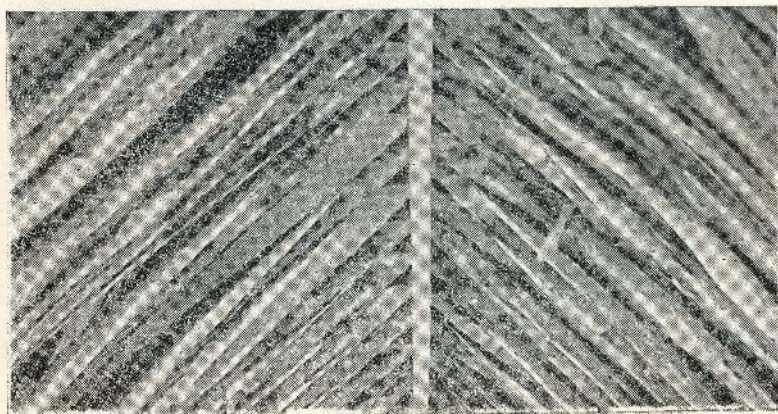
NATURE OF DAMAGE

● There are several kinds of caterpillars that can damage leaves of coconut palms: among them, the commonly called "Coconut Caterpillar" is one of the dangerous pests. Its entomological term is *Nephantis serinopa*.

● Coconut Caterpillars eat the underside of the green leaves. Consequently, the remaining upper surface turns brown and dries off. Generally, only the lower leaves in the crown of the coconut palm are attacked. When several leaves are damaged, the palm looks as if it is scorched by fire. Under favourable conditions, the pest can spread to several acres in a coconut plantation.

IDENTIFICATION

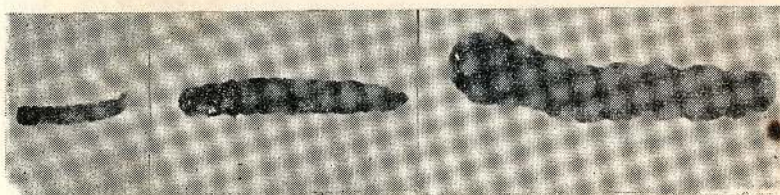
● If an infested leaf is cut down from the palm and examined, the caterpillars may be seen on the underside of the leaflets. When the caterpillars are fully grown they make galleries from the chewed-up fibre. Inside these galleries they live under protection.



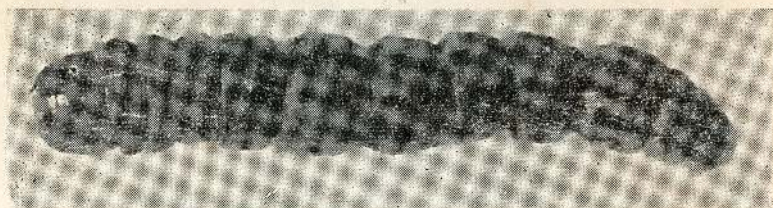
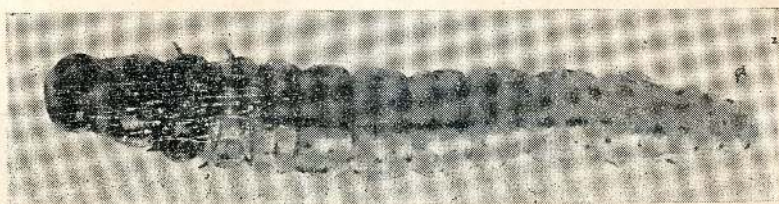
Underside of Infested Frond

☞ These caterpillars, when young, have a creamy-white body and a black head. As they feed they grow bigger. They shed their skins from time to time and pass from one stage (instar) to another.

During the latter stages the larvae feed voraciously and it is then that the maximum damage is done. The caterpillar takes about 50 days to mature, after which it forms a cocoon. It is only during the caterpillar stage that the damage to the leaf is done.



Young Caterpillars



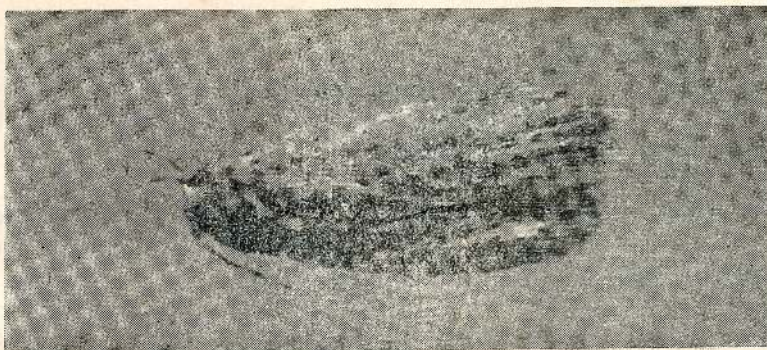
Mature Caterpillars



Cocoon (Pupa)

● Cocoons may be found in the galleries. Inside the cocoon the caterpillar becomes a pupa. In this stage it will undergo a complete transformation. A moth will emerge out of the cocoon in 9 to 12 days.

● The moth is ash grey in colour and about $\frac{1}{2}$ inch long. It rests flat with wings folded. The male is smaller than the female. The female can lay as many as 300 eggs. When disturbed, the moths may be seen to take a short flight after which they soon settle down.



Moth

DISTRIBUTION

● The insect has appeared in large numbers in Batticaloa, Kurunegala, Chilaw and Negombo districts. A heavy population in one location leads to a pest outbreak and may occur usually during the dry seasons. In other coconut growing districts the insect may be present in small populations, where the economic damage caused is negligible; but even in those areas the insect can multiply under favourable conditions.

EXTENT OF DAMAGE

Whole plantations can get affected. The pest spreads to neighbouring plantations as their numbers increase. Tall palms, young palms as well as seedlings can be attacked.

CONTROL

● *Vigilance.* Estate managers are advised to watch for the appearance of this pest, especially during prolonged periods of drought. Special watch must be kept in those areas where the pest is known to have appeared before.

● *Cultural Treatment.* If the extent of damage is small, further spread of the pest, can be arrested by cutting the affected fronds and burning them.

Night fires should be lit at dusk so that the moths are attracted to them and destroyed thereby.

● *Biological Control.* The pest can be controlled by liberating parasites that destroy the caterpillars or pupae (cocoons). Two of these parasites are bred at the Coconut Research Institute. They become available for field release, from time to time.

● *Information to C.R.I.* Immediately an infestation is observed it should be brought to the notice of the Coconut Research Institute, Lunuwila. Suitable control measures will be recommended.

● *Chemical Control.* When the supply of parasites runs short of demand, the spraying of a chemical has to be resorted to when outbreaks of the pest occur. In such an event, the C.R.I. will handle the spraying

operations. The estate management is required to supply the labour, carts etc. The cost of the chemical and fuel for the sprayer engine has to be borne by the estate management.

● The very heavily infested fronds should be cut and burnt prior to spraying.

LEGISLATION

The Coconut Caterpillar is a declared pest under the Plant Protection Ordinance. This legislation enforces the cutting and burning of infested coconut fronds.

Crop Protection Division, 17th September, 1959.

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