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COCONUT RESEARCH INSTITUTE



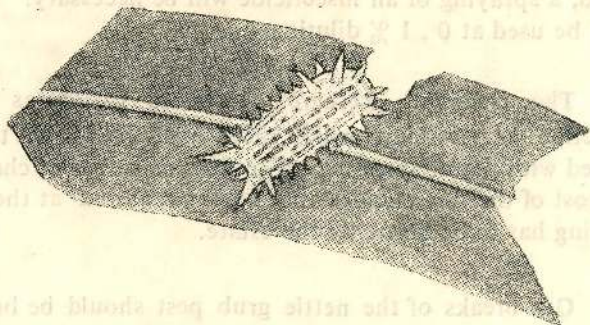
Leaflet No. 40

NETTLE GRUB, LOCUST, BAG WORM, PESTS OF THE COCONUT PALM.

THE NETTLE GRUB PEST (*Parasa lepida*)

IDENTIFICATION

The Nettle grub is a caterpillar that feeds on leaves of the coconut palm. A young caterpillar is pale yellow in colour, with spines on its body. As they grow up, stripes which are olive green in colour, distinctly, appear on the body. The caterpillars shed their skins (moult) several times as they grow further into a stage when they look bright green in colour and the stripes on the body appear olive green or purplish blue. The spines protrude sharply and are capable, of a venomous sting. When well grown they feed heavily. The fully developed caterpillar is about $1\frac{1}{4}$ inch long.



The nettle grub caterpillar

When fully grown, the caterpillar stops feeding and builds a hemispherical cocoon, brown in colour. Inside it, it undergoes a complete transformation and emerges as a moth.

The moth has a head, brown in colour at the center and pale green on the sides. The wings are reddish brown and light green at the distal ends. The wing span is about $1\frac{1}{2}$ inches.

When large numbers of the caterpillars infest leaves, their droppings could be seen on the ground, under the foliage on which they feed.

DAMAGE

The caterpillars may feed on the entire leaf, leaving only the ekels. Generally, the older leaves are first attacked.

LIFE CYCLE

Moths lay eggs which are not easily visible. The eggs hatch out to produce the caterpillars that in turn become moths inside the cocoons. The caterpillar period is 50 - 70 days. The life period in the cocoon is about 50 days. At this stage, the insect is able to survive periods of drought.

CONTROL

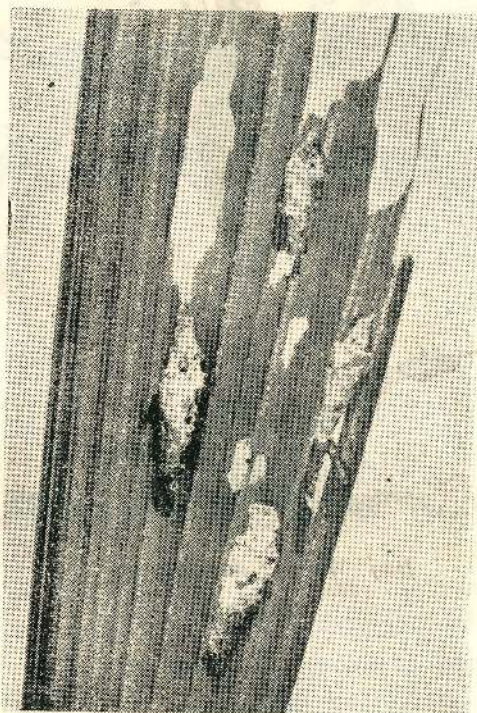
If the pest is detected when their numbers are few, the infested fronds should be cut and burnt. If the pest gets wide spread, a spraying of an insecticide will be necessary. D. D. T, could be used at 0.1 % dilution.

The Coconut Research Institute maintains a Crop Protection Service Unit which helps planters to get tall palms sprayed with power sprayers. The Service is free of charge but the cost of the insecticides and labour required at the time of spraying has to be borne by the estate.

Out-breaks of the nettle grub pest should be brought to the notice of the C. R. I., for a spraying of the infested palms.

BAG WORM

(*Psyche albipes*)



Bag worms feeding on a leaf

IDENTIFICATION

The bag worm is a caterpillar (larva) whose adult is a moth. The larva is within a bag like enclosure with which it moves as it gets about feeding on leaves. The insect passes through several of its stages inside its case. The male moth emerges out; it is brown in colour.



Bag Worm damage on a seedling

DAMAGE

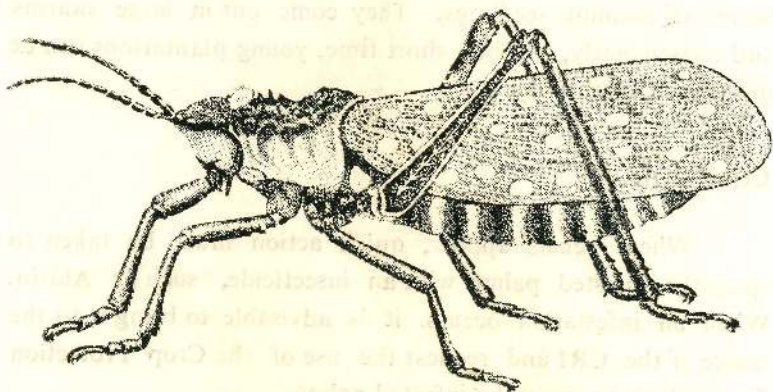
The characteristic damage on leaf is seen as punctures few or numerous in proportion to their numbers present. These punctures are the result of the bag worms feeding on the foliage. The insect can be a pest of considerable importance in seedlings or young palms.

CONTROL

On seedlings, if their numbers are few, they could be hand picked. When the infestation is large, the pest could be brought under control by spraying a DDT insecticide at 0.1 % dilution.

LOCUSTS

(*Aularchis miliaris*)



A locust

IDENTIFICATION

The locust is a large insect, very much like a grasshopper. The wings have yellow spots in the locusts that are a pest on coconut palms, in this country. They would be found in large numbers as they invade plantations in swarms. In young locusts, the wings are undeveloped and they move about hopping. At that stage, they are known as 'hoppers'. They can be seen clustered in large numbers on leaves of palms.

LIFE CYCLE

Locusts lay eggs in the soil. It would take about four months for the eggs to hatch out and produce 'hoppers' that will emerge from the ground. Soon they find leafy plants to feed upon. As they become fully grown, they develop the wings. Only one brood is produced for a year.

DAMAGE

As locusts are voracious feeders, they feed heavily on leaves of coconut seedlings. They come out in large swarms and consequently, within a short time, young plantations can be devastated extensively.

CONTROL

When locusts appear, quick action must be taken to spray the infested palms with an insecticide, such as Aldrin. When an infestation occurs, it is advisable to bring it to the notice of the CRI and request the use of the Crop Protection Service Unit to spray the infested palms.

Locusts, usually, migrate into coconut plantations that are very weedy, from neighbouring jungle land. The pest takes shelter among the weeds. Hence, rank growth of weeds should not be permitted in plantations where the pest is likely to appear.