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# COCONUT RESEARCH INSTITUTE



Leaflet No. 29

## RATS

## BATS, BANDICOOTS AND PORCUPINES

### PESTS ON COCONUT

Those pests of the coconut palms which occasionally cause damage and not of serious consequence are classified as minor pests. Among them rats, bats, bandicoots and porcupines are commonly known. Being less important to the more heavily damaging major pests, they have, received less attention in their study and control. The actual loss caused by these pests have not been properly estimated as yet. Perhaps, the damage done by rats and bats may be heavier than what is generally accepted it to be, at present.

### RATS

#### (a) BEARING PALMS

Rats are a pest on bearing palms when they attack tender coconuts. They climb up the tree to reach the fruits and may even find habitation in nests built in the crown of the palm. Two methods of control can be adopted.

### (i) Tree Banding

Tree banding is practicable when a few trees have to be protected. A metal band, preferably an aluminium sheet, or galvanized zinc sheet is fixed round the trunk of the tree. The slippery surface of the sheet prevents rats from climbing over it. When tying up the sheet with wire, the wire should not be wound up spirally from bottom to top, as the rats could then get a foot hold on the wire (for the correct procedure see illustration).

A banded tree should be isolated to prevent rats crossing over fronds that touch neighbouring trees, buildings, etc. The isolation is effected by cutting short such fronds, in such positions. If a number of trees have to be banded, the whole group could be isolated by cutting necessary fronds on palms at the perimeter.

Prior to banding, the crowns of palms should be cleared of nests and rats if present.

### (ii) Poisons

The use of poisons to kill rats is well known. They are placed with baits on the crowns of trees. Repeated baiting is necessary to obtain results. There are a number of rat poisons available in Firms dealing with agricultural chemicals. The method of use can be obtained from the suppliers.

### (iii) Destruction of breeding grounds

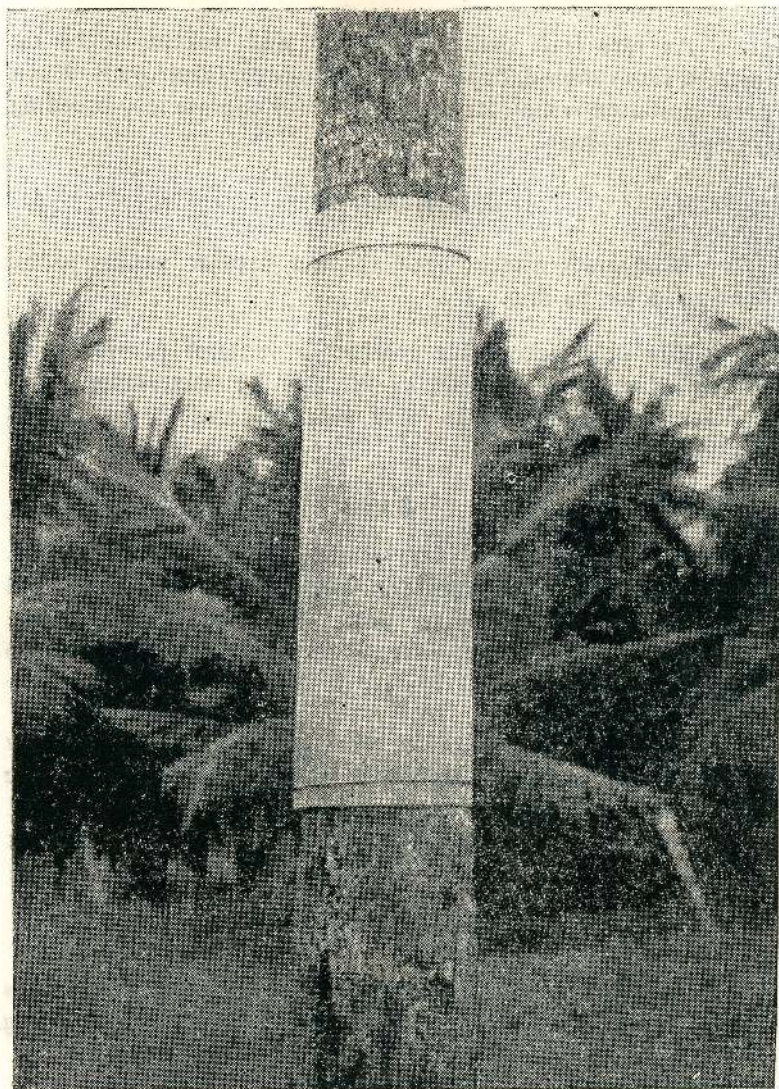
Rats take shelter and breed in lands that are weedy and unkept. Therefore, it is necessary to keep the land free from weeds, stumps of trees, logs and plant debris.

### (b) SEEDLINGS

Rats are also a pest on seedlings, in the nursery or when they are transplanted in the field. Large cavities are formed in the 'stem' near the seednut as the rats feed on the tender bud region. Plants succumb to the attack.



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trees should be laid to achieve effective control. In numerous  
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shooting them down with shotguns.

#### ***A banded tree***

Poisoned baits could be used but a large number of them should be laid to achieve effective control. In nurseries this method of control is practicable.

As rats find shelter in weedy and unkept lands, rat infested fields should, be weeded, and logs etc. destroyed. When good sanitation is maintained, the rats will migrate into breeding grounds, elsewhere.

### **BANDICOOTS**

Bandicoots attack, seedlings in a manner similar to the damage done by rats.

The only practicable method of control possible is to prevent them from breeding in the land by maintaining estate sanitation. Poisoned baits may be considered, if the land is heavily infested.

### **BATS**

Bats can be a pest on coconut palms when they feed on tender coconuts. They roost on large trees, in colonies and visit coconut palms at night time. In certain localities, the visits are regular. The loss of nuts can be heavy but no reliable estimate of actual loss is yet available.

No experimental work has been done as yet to study bats and their control. Hence the only method that could be suggested is to shoot them down with a shot gun. Several shots may scare them and prevent revisits even for a short period.

### **PORCUPINES**

In young plantations neighbouring jungles, porcupines can be a pest on seedlings. They attack the plant by feeding on the 'stem'. Attacked plants may succumb to the damage.

A study of its control has not been done. The only information available is protection by means of fences and shooting them down with the shot gun.