

## Farmer Fact Sheet 35: Rats



Polynesian rat



Ship rat



Brown rat

### What are they?

Three rats: Polynesian rat, Ship rat and Brown rat. All are introduced to Solomon Islands.

### What damage do they do?

They damage crops - cocoa, coconut, maize, peanuts, pineapple, rice, root crops, and sugarcane, as well as household items. They eat stored foods, spoiling them with urine and faeces. Rats also eat insects, reptiles and young birds. Fleas on rats transmit human diseases.

### How do I identify them?

**Polynesian:** Body, up to 15 cm, pointed nose, large ears, red-brown back, white under, scaly tail, female with 8 nipples; does not burrow. **Ship:** Body, up to 20 cm, large hairless ears, grey-brown back, white under, tail one colour and longer than body, female 10 nipples; often nests in trees. **Brown:** Body, up to 40 cm, small ears, brown on back, pale grey under, tail shorter than body, female with 12 nipples; nests underground.

### How do I manage them?

#### Cultural control:

- Keep cats;
- Put aluminium bands (30 cm wide, 2.5 m from the ground) on coconut trunks;
- DO NOT leave household waste for rats to eat; good hygiene is very important.

#### Physical control:

- Use snap-traps; when first used, leave without bait for a few days, so rats get used to them. Frequently, change their position, and put them out of reach of children and pets.

#### Chemical control:

- Use warfarin (0.025-0.05%) in paraffin wax blocks tied to trees, 25-30 per ha.
- Use brodifacoum (0.005%) as ready-made pellets. READ THE LABEL or seek advice from your MAL extension officer for further advice;
- Use *Gliricidia* (the shade tree). Pound young leaves and mix with cooked rice, maize or other bait. Bacteria convert chemicals in the leaves to substances similar to brodifacoum. It is less toxic than brodifacoum, so larger amounts must be eaten. Try using the bark. Change the bait daily, and protect from pets. This has not been tested in Solomon Islands.