

thereby affecting yield considerably. It hoards grains in its burrows upto 6 kgs. Occasionally it attack poultry. It is an important plague carrier too. In godowns besides waste and contamination, it adds filth also. Droppings are scattered and oval shaped.

Habits: It is an expert in digging burrows with characteristic mounds of soil, which hide the opening of burrows hence the name - mole rat. It is an excellent swimmer, often living in bunds; it swims to damage even flooded fields of paddy. Being mainly nocturnal, it prefers to stay in burrows during daytime. Burrows have never been noticed inside warehouses or stores.

5. Larger bandicoot, The Bandicoot, *Bandicota indica*

Nature of damage: It makes big burrows, which weaken the foundation of walls, river bunds, railway tracks etc. It damages crops by cutting tillers/ leaves thus reducing yield drastically. It hoards grain in burrows. In stores, it mainly depends on cereals and other grains. Droppings are scattered and spindle shaped.

Habits: It is the biggest rat found in thickly populated areas and markets of grain stockists and also on the periphery of villages. It is less attracted towards flesh or meat and is mainly grain feeders. Besides burrowing underground tunnels it is expert in gnawing furniture and doors by powerful chisel shaped incisors. The grunting noise of this rodent is typical.

DETECTION OF RODENT INFESTATION

Visual sighting and typical noise, rat burrows, rat droppings and urine marks, feet or tail marks on dusty floors, greasy marks left by rats, gnawed articles (torn bags and spilled grains etc. or damaged doors and windows), pet excitement and disappearance of bait.

RODENT CONTROL: The following methods can be adopted for rodent control.

I. NON-CHEMICAL

1. Physical methods

a. *Rat proofing:* While constructing new godowns, care should be taken to construct them rat proof. The characteristics of an ideal godown are as follows: Godowns should be away from habitation. Should be on high plinth. Water accumulation in the nearby places should be avoided. Pucca masonry cement concrete structures are preferable. No tree or branches of the tree should hang over the godowns roof. All windows ventilators, gutters, drains should be fitted with 24 gauge ¼" (0.6 cm) expanded metal mesh. Manholes should be properly covered. Doors must be closely fitted. Clearance between doors and floors, should not exceed ¼ " (0.6 cm). Must have 3' (90 cms) deep pucca foundations. Doors should be equipped with 9" (25 cms) metal sheet lining at the bottom. Platform stairs in front of godowns should not be allowed overnight. Platform should have 12" (30.5 cm) projection in an inversed L shaped manner. All the walls and floors should be plastered smooth with cement. Any rat hole observed must be closed with cement. If the hole is big enough, it should be filled with glass pieces. Automatic door closers help in banning rat entry. Regular inspection and sanitation of godowns is a must for effective rat control.