

## Burrowing Habits of the Soft-Furred Field Rat (*Rattus meltada* Gray)

P Ramesh\*

Department of Entomology, College of Agriculture, Rajendranagar, Hyderabad-500 030 India

The soft-furred field rat, *Rattus meltada* Gray is one of the most important rodent pests of crops in Andhra Pradesh. This species is mostly seen in irrigated fields, in bunds, in hedges and grasslands. It feeds on the succulent plants, stems, grains and rhizomes of grasses. To achieve a rational and economic control of this rat species, knowledge of their burrowing pattern is essential. As no information is available on the burrowing pattern of *R. meltada* in Andhra Pradesh, the present study is thus undertaken.

This study was carried out at the Agricultural College Farm, Rajendranagar, Hyderabad, The study involved a careful excavation of 75 burrows. The excavation of burrows was done at three times of the years; 25 burrows during the second week of

November 1988, 23 burrows during the second week of March 1989 and 27 burrows during the last and first weeks of June and July 1989. The excavation of burrows was done with "Khurpi" without disturbing the tunnel. The excavation of tunnels was followed for their full length. The length, vertical depth and the diameter of the openings were recorded.

A large number of burrows (45) had single opening, followed by those having two (20), three (9) or four (1) openings (Table 1) The length of the burrows ranged from 25 to 130 cm (i.e. linear length). The depth of the burrows ranged from 10-11 cm. The diameter of the burrow tunnel was roughly circular in cross section, its diameter ranged from 4.5-11.5 cm. The tunnel of the burrows

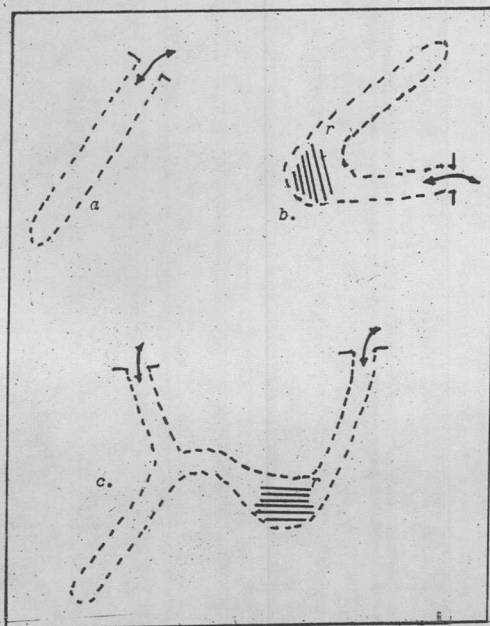


Fig 1 Burrowing pattern of *R. meltada*, straight and short burrow with single opening (a), bent burrow with single opening (b), truncated burrows with two openings (c), and resting place (r).

\*CSIR Complex, Palampur-176 062

did not had constant diameter, but enlarged sometimes into a chamber like structures (Fig. 1). These chambers might have served as resting places, while rat is inside the burrows. None of the excavated burrows were found to harbour any stored food materials. A number of commensals were found in many of the burrows : these include isopodes, ants, beetles and spiders. As this study was done in all the major seasons of the year it may be safely concluded that the burrows don't serve for food storage, but as a shelter for the rats

The burrows of *R.meltada* varied in their pattern. Most of them were either bent or truncated with single or two openings. In some other cases the tunnel was very short with single opening. In these

short tunnels, rats sought shelter only for brief periods of damage, when they were out for feeding. Similar behaviour was observed in case of *Resokia indica* Gray (Ramesh 1986).

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#### References

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