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EXTENT OF CANNIBALISM IN DIFFERENT RODENT SPECIES UNDER CAPTIVITY

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Most of the rodent are herbivores but occasionally feed upon insects and other animal food (Prakash and Mathur 1987). It is also an established fact that cannibalism do occur in small mammals (Prakash 1964; Ghosh 1970). The main cause of cannibalism is recorded to be the shortage of food etc. but in the present study the rodents were found to eat their off-springs while breeding in laboratory conditions at Barapani and Shillong in Meghalaya.

The experiments were conducted at Barapani and Shillong from 1985 to 1989 to breed the rodents in cages. Single pair of each species (adults) was released in a cage (size 70 cm length x 35cm width x 30 cm height) and as such ten cages were kept for the study on each species. The rodent species were *Rattus nitidus nitidus, Rattus norvegicus* (Wild), Rattus *norvegicus* (albino), *Bandicota bengalensis* and *Mus musculus.* The experiments were carried out from March to October when they were in active breeding period. These cages were equipped with a small wooden box which was placed in a corner of cage with cotton to provide place to give births to young ones. Food and water was provided *ad libitum* in two aluminium trays in other corner of the cage. The number of litters were counted daily after birth to observe cannibalism.

It was found that on an average *Rattus nitidus nitidus* were eaten their young ones to the extent of 97.44% (range 84.50- 100 %), *Rattus norvegicus* (wild) 92.31 % (range 84.75-100%), Rattus norvegicus (albino) 88.23% (range 78.79-1 00%), *Bandicota bengalensis* 96.20 % (range 90.90- 100%) and *Mus musculus* 96.55 % (range 91.27 to 1 00 %) (Table-1). Most of the cannibalism was found within 3 days of birth to young ones, though 21 days old sub adults were also eaten by rodents. The few offsprings could be saved when they were taken out from their parents cage after one month. It was also observed in case of all the above species except in *Mus musculus* that when adults were kept together, they were found to fight and kill the rat and eaten away. In the present study, the cannibalism percentage was found to be very high which may be due to the cold weather of Shillong and Barapani which may initiate the animals to fight to get warm space in the cage. Gupta and Agrawal (1 968) and Jain (1984) also reported the cannibalism in rodents and found that young ones were especially victimized. These views supports the above results of the present study.

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Tabel 1. Extent of cannibalism in different rodent species (Average of five years)

Rodent species	Total no. of Litters/ten pairs (range)	No. of litters eaten	Age of litters at the time of eaten away in days (Maximum cannibalism)	Cannibalism (%)	Remarks
Rattus nitidus nitidus	78 (4 – 12)	76	0 – 16 (0 – 3)	97.44	2 Survived
Rattus norvegicus (Wild)	65 (3 – 9)	60	0 –20 (0 – 2)	92.31	5 Survived
Rattus norvegicus (Albino)	85	75	0 – 21	88.23	10 Survived
Bandicota Bengalenis	79 (4 – 9)	76	0 – 20 (0-3)	96.20	3 Survived
Mus musculus	58 (3 – 7)	56	0 – 17 (0 –2)	96.55	2 Survived