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## ACCEPTANCE AND RELATIVE INTAKE OF DIFFERENT FOODS BY TWO SPECIES OF RATS, RATTUS RATTUS LINN. AND BANDIGOTA BENGALENSIS GRAY. IN KERALA

Rats eat a variety of foods of both plants and animal origin. Apart from availability, factors like energy value, water contents, special physiological effects and flavour also govern the feeding habits of rats (Barnett and Prakash, 1975). The foods available in the different regions will vary in these attributes. It is advantageous to know the local food preferences to enable choice of appropriate bait bases for their rodenticidal control. The present paper reports results of food preference trials conducted at the College of Agriculture, Vellayani, Kerala State, with the two major rat pests viz. Rattus rattus and Bandicota bengalensis.

The rats required for the experiment were trapped from the field. Five animals of each species of approximately the same size and age were kept in captivity individually for a period of one month in cages of size $60 \times 40 \times 30 \mathrm{~cm}$

## Table 1

Mean quantities of different food materials eaten by two species of rats over 22 days ( $\mathrm{g} / \mathbf{1 0 0 g}$ body weight)

| Food material | R. rattus | B. bengalensis |
| :--- | :---: | :---: |
| Fresh tapioca | 5.09 | 2.94 |
| Rice flour | 1.65 | 2.20 |
| Paddy grains | 1.38 | 0.78 |
| Wheat flour | 1.06 | 3.64 |
| Dried fish | 0.74 | 0.80 |
| Sweet potato | 0.73 | - |
| Coconut oil cake | 0.21 | - |
| Polished rice | - | 1.23 |
| Whole wheat | - | 0.40 |
| Total | 10.86 | 11.99 |

for making them used to the caged conditions. Weighed quantities of the different food materials (see Table) were supplied together to the rats in separate flat plastic
containers in the morning and allowed to feed till the next morning. The food materials consumed were found out by weighments. Feeding was continued in this way for 22 days. Water was supplied to each rat in the cage. Results are given in Table 1. It may be seen that $R$. rattus prefers fresh tapioca for feeding to cereals.

The daily intake under the caged conditions in this species is 10.86 $\mathrm{g} / 100 \mathrm{~g}$ body weight or per rat (on an average $R$. rattus weighs 99.4 g ). In the case of $B$. bengalensis the animal prefers wheat flour the most, closely followed by fresh tapioca and rice flour. The daily in take by this rat is $11.99 \mathrm{~g} / 100 \mathrm{~g}$ body weight i.e. 13.17 g per rat per day (average weight of the rat is 109.8 g ).

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## REFERENCE

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