

LABORATORY CHOICE FEEDING TESTS ON SINGLY-CAGED WILD HOUSE MICE, (*MUS MUSCULUS DOMESTICUS* L.).

J. T. DE JONGE

Ministry of Housing, Spatial Planning and the Environment, P.O.Box 350, 6700 AJ Wageningen

When effective results of house mice control actions are required, they must accept the applied bait. In the laboratory of the Department of Pest Control in Wageningen tests with different kinds of bait were carried out, in order to determine which bait is preferred by the house mouse. From tests carried out in the past we know that dehusked oats is a well accepted bait. Small seeds, like for instance canaryseed, are preferred by house mice in comparison to dehusked oats. In most cases rodenticides with active ingredients like bromadiolone, difenacoum or difethialon were eaten by house mice to an acceptable level, compared to dehusked oats. Miscellaneous seeds mixed with a bromadiolone concentrate and a bait consisting of dehusked oats mixed with bromadiolone concentrate, were taken up equally well.

Tests were carried out with 5 male and 5 female, singly-caged wild house mice. They were stationed in the cages during 5 days, to get accustomed to the new situation. During that period the mice were fed with pelleted laboratory rodent food. During the next 2 days the uptake of food by the individual animals was measured, in order to check the health situation of the mice. In sequence, during 4 days the mice were offered the choice between two kinds of bait. The uptake of both baits was measured every day at the same time. Of these uptakes the percentages were calculated.

The results were as shown below.

Unpoisoned bait compared to dehusked oats:

bait A	bait B	uptake A	uptake B
English wheatflour	dehusked oats	62.7 %	37.3 %
white canaryseed	dehusked oats	86.2 %	13.8 %
dehusked oats	birdseed (winterfood)	64.6 %	35.4 %
miscellaneous seeds	dehusked oats	74.9 %	25.1 %

English wheatflour compared to canaryseed:

bait A	bait B	uptake A	uptake B
canaryseed	English wheatflour	87.4 %	12.6 %

Rodenticide compared to dehusked oats:

bait A	bait B	uptake A	uptake B
dehusked oats	pellets with difenacoum	65.9 %	34.1 %
dehusked oats	pellets with brodifacoum	91.3 %	8.7 %
dehusked oats	oats and corn with chole-calciferol	99.1 %	0.9 %
dehusked oats	dehusked oats with difethialon	71.8 %	28.2 %
dehusked oats	wax block with difenacoum	70.6 %	29.4 %
dehusked oats	dehusked oats with bromadiolone	59.0 %	41.0 %
dehusked oats	wax block with bromadiolone	79.5 %	20.5 %
dehusked oats	miscellaneous seeds with bromadiolone	83.1 %	16.9 %

Dehusked oats with bromadiolone compared to miscellaneous seeds with bromadiolone:

bait A	bait B	uptake A	uptake B
dehusked oats with bromadiolone	miscellaneous seeds with bromadiolone	50.0 %	50.0 %