University of Nebraska - Lincoln
DigitalCommons@University of Nebraska - Lincoln

Historical Materials from University of Nebraska-Lincoln Extension

Extension

2-1940

EC1517 Rat Control on the Farm

O. S. Bare

D. B. Whelan

Follow this and additional works at: http://digitalcommons.unl.edu/extensionhist

Bare, O. S. and Whelan, D. B., "EC1517 Rat Control on the Farm" (1940). *Historical Materials from University of Nebraska-Lincoln Extension*. 2641.
http://digitalcommons.unl.edu/extensionhist/2641

This Article is brought to you for free and open access by the Extension at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Historical Materials from University of Nebraska-Lincoln Extension by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

S
85
E7
#
1517
c.1

Discard

Issued
Feb.
1940.

Nebraska
COOPERATIVE EXTENSION WORK
IN AGRICULTURE AND HOME ECONOMICS
U. of N. Agr. College & U. S. Dept. of Agr. Cooperating
W. H. Brokaw, Director, Lincoln

Extension
Circular
1517

RAT CONTROL ON THE FARM

1. Try to remove all rat shelter. All new buildings should be built rat-proof, and older buildings should be made as nearly rat-proof as possible. Trash and brush piles, dumps, and other shelters should be eliminated.

2. Cut off their food supplies. In some instances this is only partly possible, but most granaries and corn cribs can be rat-proofed and most other food supplies made inaccessible. Wherever food supplies and shelter are available rat control is difficult and even a successful control campaign gives only temporary relief because of reinfestation.

Use of Poison Baits and Gases - After shelters and food supplies have been eliminated or greatly reduced, excellent control can be secured by correct use of poison baits and gases. Successful use of poison baits depends largely upon finding out what bait materials are taken most readily and then furnishing such a plentiful supply of these poisoned baits that every rat may get a full feed the first time poisoned baits are put out. Rats that survive the first poisoning usually refuse to touch new baits for several weeks.

Bait Materials - Unseasoned, freshly ground raw meat is one of the best bait materials. Ground fresh fish, canned salmon, and sardines or mackerel canned in oil are very good. Of the cereal baits, oatmeal and cornmeal moistened with milk seem to be most relished. As a general rule, rats having a plentiful supply of grain foods prefer meat or fish baits, and those having meat or other animal foods available prefer cereals. Where rats have both meat and cereals available, fruit baits such as over-ripe bananas or slices of apple often are eaten greedily. Bait preference can be ascertained only by prebaiting once or twice with several unpoisoned baits, as suggested in the preceding paragraph.

Red Squill - Red squill is a very effective rat poison and is to be preferred because it is so much safer than any of the other common poisons. While not actually non-poisonous, red squill baits seldom will be eaten in injurious amounts by children, pets, livestock, or poultry. When eaten in injurious amounts by anything other than rats, mice or other rodents, they usually merely cause vomiting without dangerious after effects. Nevertheless, careless exposure of any kind of poison should be avoided. Red squill comes either in powder or liquid form. The powder is more commonly used and keeps better.

In using red squill, mix one ounce with a little water to form a thin, smooth paste, and add to one pound of ground meat, fish, or cereal. Mix thoroughly, and if cereal is used, add enough sweet milk to make a thick mush. For use with fruit baits, sift the red squill powder over the sliced or crushed fruit and stir or shake well as the powder is applied. An ounce of red squill powder is sufficient for three average-sized bananas or a similar quantity of apple, cantaloup or tomato.

Distributing Baits - A teaspoonful of poisoned bait is sufficient to kill a rat. An excellent way to use red squill baits is to wrap teaspoonful doses in small squares of newspaper and distribute them liberally in places that rats are known to frequent. Unwrapped baits also may be placed in teaspoonful doses on boards, newspapers, floors, or other suitable surfaces where the rats will find them. Baits should be put out fresh in the evening, and uneaten baits should be collected and destroyed the next morning. Stale baits usually are unattractive and worthless.

21375dg-8/41

Barium Carbonate - Barium carbonate is a cheap, effective, and slow-acting rat poison, and has the advantages of being odorless and tasteless. However, it is poisonous to anything that eats it, and consequently must be used with extreme care, and kept out of reach of children, pets, livestock, and poultry. Usually red squill is to be preferred for general use. Barium carbonate is particularly useful in poisoning rats that have survived a red squill poisoning campaign and refuse to eat red squill bait. Barium carbonate baits may be prepared the same as red squill baits, using, however, one part by weight of barium carbonate to six parts of bait material. Distribute same as red squill baits.

Antidote for Barium Carbonate - Give an emetic of mustard or salt dissolved in warm water, or induce vomiting by tickling the back of the throat with the finger. Follow with a liberal dose of epsom salts.

Other Poisons - Strychnine, phosphorus, thallium sulphate, and white arsenic have been used as rat poisons, but all of them are very violent and dangerous poisons. Use of such dangerous poisons had best be left to professional rat exterminators. Red squill and barium carbonate are much to be preferred, because so much safer.

Fumigation with Gases - Fumigation of rat burrows and other harbors is an effective and practical means of rat control where the gases can be confined in sufficient concentration and used without endangering other animals or human beings. However, their use is attended with more or less danger and their usefulness is definitely limited.

Calcium Cyanide - Calcium cyanide comes in the form of a gray powder that, when exposed to air containing moisture, gives off deadly hydrocyanic-acid gas. On the farm it may be used under buildings with fairly tight floors, in rubbish piles, in burrows in open fields, and in fairly tight buildings from which all farm livestock, poultry, pets, and human beings have been excluded, but never in occupied buildings. Under favorable conditions it may be used fairly satisfactorily to destroy rats in cribs of corn.

It can best be used by means of a foot pump or duster that blows the dust through a flexible hose into the rat harbors. In corn cribs it is usually necessary to drive a length of gas pipe well into the corn, and blow the cyanide dust through it. The amount that must be used depends largely on how well the gas can be confined

Caution - The gas given off by calcium cyanide is so deadly that inhaling even small amounts is very dangerous. The operator must use it only in the open air, and carefully avoid inhaling any of it. The powder also must be kept out of sores, cuts, and other skin abrasions. All animals must be removed from buildings in or under which it is to be used, and must be kept out for several hours. Partly used cans of the powder should be stored in outbuildings unoccupied by animals, as a leaky can will give out dangerous quantities of gas.

Exhaust Gases - Carbon monoxide gas from the exhaust of a tractor, automobile, or truck is often used to kill rats under buildings or in other locations where fumes can be confined. It is safer than cyanide, but also slower and less effective. If inhaled in large quantities it is dangerous, and there is also a fire hazard attached to its use, through burning carbon being blown from the exhaust. The gas is blown into the rat harbors through a piece of hose attached to the exhaust In using this method, the carburetor should be adjusted to give a rich mixture that will cause a smoky exhaust, high in poisonous carbon monoxide gas. All animals should be taken out of buildings under which it is to be used.

(Prepared by O. S. Bare and D. B. Wholan, Extension Entomologists)

21375nb