

5,000

6-2-59

L-148

Control Rats and Mice with

Anticoagulants

Mrs. Halland



TEXAS AGRICULTURAL EXTENSION SERVICE
J. E. Hutchison, Director, College Station, Texas

control rats and mice



Anticoagulants

TEXAS A&M UNIVERSITY
TEXAS AGRICULTURAL EXTENSION SERVICE
J. E. Hutchison, Director, College Station, Texas

Control Rats and Mice with

Anticoagulants

Prepared by

USDI Fish and Wildlife Service

Texas Agricultural Extension Service

and

Rodent & Predatory Animal Control Service

cooperating

GENERAL

This leaflet gives information on the use of anticoagulants for rat and mouse control, how they should be blended with baits, and how the baits should be exposed and handled for best results. By trade names alone, it is impossible to recognize the anticoagulants. In the table of active ingredients on the label there is a chemical name followed in parentheses by the word *Warfarin*, *Pival* or *Fumarin*. Should others be developed, their names and characteristics will be available through county agricultural agents.

Anticoagulants prevent blood from clotting and cause death from internal hemorrhages. Rats and mice must eat some of the bait every day for about 5 or 6 days or every other day for 10 days or more before the hemorrhages are fatal. No effect is noticed for the first few days but by the third or fourth day some blood stains can be seen near the baits.

Apparently no pain is connected with this action, no warning of danger, and rats and mice return again and again to feed if the bait is attractive.

FORMULAS

Anticoagulants are available in concentrate or ready-to-use form. If the concentrate is bought for blending with a dry cereal bait the general formula is 1 part concentrate to 19 parts bait. There are many formulas in use, the simplest being 19 parts of either cornmeal or rolled oats to 1 part anticoagulant. These formulas often are not well accepted; therefore, the following is recommended:

Anticoagulant - - - - - 1 cup
Salad oil - - - - - 1 cup
Confectioners sugar - - - - - 1 cup
Rolled oats - - - - - 8 cups
Yellow cornmeal - - - - - 12 cups

(Makes a little over 6 pounds of bait.)

Place the dry ingredients into a large paper sack, hold the top closed by hand and tumble back and forth for a few minutes or until well mixed. The mixed dry materials should then be placed in a pail and the oil mixed in with a spoon.

WHERE AND HOW TO PUT OUT THE BAIT

Use about 1/2 pound of bait at each station. Place baits where rats and mice are known to feed along walls inside and outside of buildings, in dark corners, under floors, in attics and under stairways. The entire premises should be baited at the same time. The bait may be placed in a shallow dish or in a small paper sack. Paper sacks should be slit open at the side so that some of the bait will spill out. This hastens feedings. Sacks should be nailed to the floor or wall to prevent rats from dragging them away.

HOW MANY BAITS TO PUT OUT

There is no hard and fast rule for the number of baits to put out. For small buildings with a few rats, 2 pounds should be enough. If there are many rats, 3 or 4 pounds may be needed. In large buildings with a few rats, 2 pounds may be enough; but if there are many rats, 5 pounds may be required before completing the job. The average for a Texas farm is about 5 pounds.

At first put out many small baits to see where the rats and mice prefer to eat and then move uneaten baits to these places. If not enough bait was made up at first, a new batch should be prepared before containers are entirely empty. Where there is a source of reinfestation from other areas, such as dump grounds or nearby infested farms, baits should be kept out at all times for new rats as they come in. Some anticoagulant baits may become weevilly or rancid. These should be replaced every 2 or 3 weeks.

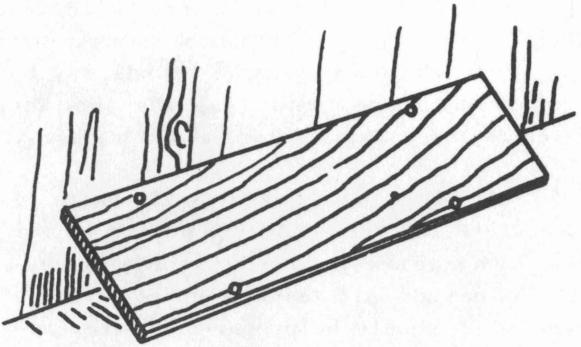
In addition to the dry form, a soluble material is available for use in a water bait. One packet is sufficient for 1 quart of water which is exposed in baby-chick water fountains or similar containers. In dry surroundings this is particularly effective. Its use in areas where freezing may occur is not recommended if glass containers are to be used. A plastic container will not break if the liquid freezes. Freezing, however, does not seem to change the effect of the anticoagulant.

MEASURING RESULTS

Results cannot always be measured by counting dead rats. When baits are no longer being eaten, when there are no fresh droppings and when no live rats or mice are seen, results are as good as can be expected from any type bait.

BAIT BOXES

Bait should be placed where only rats and mice can feed on it. The following drawing shows a simple method of protecting bait.



SAFETY PRECAUTIONS

Any animal or human can be harmed by anticoagulant bait if enough is eaten every day or so for several days. In some cases, one feeding may cause death, but the amount would have to be large before this would happen. The larger the animal, the greater the amount it would have to eat.

Take no chances. Place bait where only rats and mice can feed on it. This can be done by keeping pets, livestock and people out of the buildings where the bait is placed or by making and using a bait box similar to the one illustrated.

When humans eat anticoagulant baits they should be made to vomit by giving them a tablespoonful of salt in a glass of warm water. Call a physician at once. All anticoagulant labels or instruction leaflets give further instructions for physicians.

Cooperative Extension Work in Agriculture and Home Economics, The Texas A.&M. College System and the United States Department of Agriculture cooperating. Distributed in furtherance of the Acts of Congress of May 8, 1914, as amended, and June 30, 1914.