

ICS 65.100
CCS B 17



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 13917.7-2026

Replacing GB/T 13917.7-2009

**Laboratory efficacy test methods and criteria for public health
insecticides for pesticide registration - Part 7: Baits**

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Issued on: April 30, 2026

Implemented on: November 1, 2026

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting. This document is Part 7 of GB/T 13917 "Indoor Efficacy Tests and Evaluation of Sanitary Insecticides for Pesticide Registration". GB/T 13917 The following sections have been released.

1. Spraying formulations;

4. Mosquito Coils;

5. Electric Mosquito Repellent Mats;

6. Electric Mosquito Repellent Liquid;

8. Powders and Pencils;

10. Simulated Scene This document replaces GB/T 13917.7-2009 "Indoor Efficacy Testing and Evaluation of Sanitary Insecticides for Pesticide Registration - Part

7. Bait" Compared with GB/T 13917.7-2009, the main technical changes in the "Agent" are as follows, except for structural adjustments and editorial modifications.

a) Added terms and definitions for "bait," "sensitive strains," and "mortality rate" (see Chapter 3);

b) The requirements for test materials have been changed (see Chapter 4, Chapter 2 of the 2009 edition);

c) The test conditions were changed (see 6.1,

4.1 in the 2009 edition);

d) Added criteria for determining death (see 6.2);

4 Test materials

4.1 Test reagents Set the dosage of the test reagent according to the experimental requirements. Specify the Chinese/English common name or code of the reagent, dosage form, active ingredient content, and production details. Company, production date or batch number, etc.

4.2 Test Target

4.2.1 Flies Houseflies (*Musca domestica*) were reared according to the method in NY/T 1964.1 for sensitive strains. Test insects were selected on days 3-4 after emergence. Adult insects weighing (20.0 ± 2.0) mg/female and (16.0 ± 1.6) mg/male, with half females and half males.

4.2.2 Cockroaches German cockroaches (*Blattella germanica*) were reared according to the method in NY/T 1964.4, and 10-day-old test insects were selected. Adult insects aged 20 days, weighing (100.0 ± 10.0) mg/female (non-podded) and (50.0 ± 5.0) mg/male, with half females and half males.

4.2.3 Ants The Yellow House Ant (*Monomorium pharaonis*), worker ants raised in the laboratory.

5 Instruments and Equipment

5.1 Box assembly The box assembly is shown in Figure 1. A glass box (B) is mounted on a support (E). A small door (C) is located at the lower corner of one side of the box. There is also an insect-proof hole (F) above, which can be sealed with a rubber plug, and another side is a large door (D).

5.2 Petri dish Inner diameter 90mm.

5.3 Enamelled Square Plate White, 400mmx300mmx40mm.

6 Test Methods

6.1 Test Conditions Temperature. $(26 \pm 2)^{\circ}\text{C}$. Relative humidity. $(60 \pm 10)\%$.

6.2 Criteria for Determining Death Death. The insect does not react when lightly touched with a sharp instrument.

6.3 Test Procedure

6.3.1 Flies A square box apparatus (5.1) was used. The test bait and fly feed were placed

diagonally on the bottom of the square box, while a cotton ball soaked in water was placed in the center. In a petri dish and sealed square box, 50 test insects are placed through the insect release hole (F), and the number of dead test insects is recorded after 24 hours. The test should be repeated at least three times. Repeat the experiment and set up a blank control group fed with normal feed. The experimental apparatus should be cleaned at the end of each experiment.

6.3.2 Cockroaches A square box apparatus (5.1) was used. Thirty cockroaches were placed into the sealed square box apparatus through the release hole (F), and the release hole was sealed tightly. The test insects were allowed to recover to normal. After the activity, place the test bait in one corner of the box, place cockroach food in the opposite corner, and place a petri dish containing water-soaked cotton balls in the center. Observe the mortality of the test insects daily. The mortality rate should be recorded, and dead test insects should be removed and counted. Observation should continue until the 12th day after feeding. The test should be repeated at least three times, with normal conditions included. A blank control group fed with feed. The experimental apparatus should be cleaned after each experiment.

6.3.3 Ants An enamel square dish (5.3) was used. A band of 95% ethanol and talc (1.1) suspension was applied to the upper edge of the inner wall of the enamel square dish opening. The mixture was left to stand for a while. After the alcohol has completely evaporated, 100 worker ants were placed in the dish. Once the ants resumed normal activity, the test ants were placed diagonally across the enamel square dish, approximately 50 mm from the edge. The bait and ant feed were placed in a petri dish with a cotton ball soaked in water in the center. Ant mortality was observed daily, and dead ants were removed and counted. Continue observation until day 7 after feeding. The test should be repeated at least three times, with a blank control group fed with normal feed. At the end of each trial, [further details should be provided]. Cleaning test apparatus.

7. Calculation The mortality rate and corrected mortality rate were calculated using formulas (1) and (2), and the results were rounded to two decimal places. The mean of the experimental data was used as statistical data. The mortality rate in the blank control group is < 5%, no correction is needed; the mortality rate in the blank control group is 5%-20%, correction should be performed; the mortality rate in the blank control group is >20%. The experiment is invalid.

7 Bait

1. Scope This document describes the indoor efficacy testing methods and evaluation of test results for pesticide registration baits. This document applies to the use of insect growth regulator (IGR) baits for poisoning flies, cockroaches, and ants during pesticide registration. Drug efficacy determination and evaluation.

8 Evaluation Indicators

8.1 Flies If the mortality rate or corrected mortality rate of the test insects is $\geq 90.00\%$ within 24 hours, the tested product is qualified.

8.2 Cockroaches If the mortality rate or corrected mortality rate of the test insects after 12 days is $\geq 90.00\%$, the tested product is qualified.

8.3 Ants If the mortality rate or corrected mortality rate of the test insects after 7 days is $\geq 90.00\%$, the tested product is qualified.

9 Results and Report Writing

Based on the statistical results, an analysis and evaluation were conducted, and an experimental report was prepared, including detailed information on the test reagents, the selection of target materials, and the environment. Condition control, experimental treatment, replication and investigation methods, statistical analysis of results, etc., and list the raw data.