

ICS 65.100
CCS B 17



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

GB/T 17980.13-2026

Replacing GB/T 17980.13-2000

**Pesticides - Guidelines for field efficacy trials - Part 13:
Insecticides against lepidopteran larvae on crucifer vegetables**

农药 田间药效试验准则 第13部分：杀虫剂防治十字花科蔬菜的鳞翅目幼虫

Issued on: March 31, 2026

Implemented on: October 1, 2026

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

Table of Contents

1	Scope
4	Test conditions
5	Experimental Design and Arrangement
5.2	Reagents
5.3	Community Arrangement
6	Applying pesticides
7	Survey
7.1	Drug Efficacy Survey
7.3	Impacts on other organisms
7.5	Other Information
8	Methods for calculating drug efficacy
9	Results and Report Writing
13	Pesticide Control of Cruciferous Vegetables Lepidoptera larvae

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 13 of GB/T 17980, "Guidelines for Field Efficacy Testing of Pesticides". GB/T 17980 has already published the following... part.

1.Insecticide control of lepidopteran borers in rice;

2.Insecticide Control of Rice Leaf Roller;

3.Pesticide Control of Rice Leafhoppers;

13.Insecticide control of lepidopteran larvae on cruciferous vegetables;

---Part 149: Insecticides for the Control of Red Imported Fire Ants. This document supersedes GB/T 17980.13-2000 "Guidelines for Field Efficacy Testing of Pesticides (I) Insecticides for the Control of Cruciferous Vegetables". Compared with GB/T 17980.13-2000, the main technical changes in "Lepidoptera Larvae" are as follows, except for structural adjustments and editorial modifications.

a) The scope of application has been changed (see Chapter 1, Chapter 1 of the.2000 edition);

- b) The descriptions and requirements for the test subjects and crops have been revised (see 4.1, 2.1 of the 2000 edition);
- c) The description and requirements of environmental conditions have been revised (see 4.2, 2.2 of the 2000 edition);
- d) Added provisions for test treatment (see 5.1);
- e) The requirements for test and control reagents have been changed (see 5.2,

1 Scope

GB/T 17980.13-2026 is the Chinese national standard covering the field trial that supports the registration of an insecticide against caterpillars on cabbage and its relatives - the plot design, the application, the assessment of larvae and damage, and the crop safety observations. It replaces GB/T 17980.13-2000 and has been in force since 1 October 2026. It was issued on 31 March 2026 and takes effect on 1 October 2026, replacing GB/T 17980.13-2000. The document is under the responsibility of the Ministry of Agriculture and Rural Affairs. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document describes the method for field plot efficacy tests of insecticides for controlling lepidopteran larvae in cruciferous vegetables. Field plot efficacy trials and efficacy evaluations for registered herbicides used on cruciferous vegetables (Brassicaceae) and beet armyworm (*Spodoptera exigua*). He followed the guidelines for field efficacy trials on lepidopteran larvae.

4 Test conditions

4.1 Test subjects and crops The experimental subjects were cabbage caterpillars, diamondback moths, cabbage loopers, and beet armyworms. The experimental crops were cruciferous vegetables such as cabbage, cauliflower, broccoli, radish, and Chinese cabbage. Record the crop and variety names.

4.2 Environmental Conditions The experimental sites should be representative fields with moderate pest infestation. The crops, varieties, and cultivation conditions (soil) of all experimental plots should be consistent. The types, fertilization, and cultivation methods should be uniform and consistent, and conform to local scientific agricultural practices.

5 Experimental Design and Arrangement

5.1 Test Treatment The following treatments should be set up. test reagent, control reagent, and blank control.

5.2 Reagents

5.2.1 Test reagents The test reagent should be applied at least three times; in special cases, the dosage should be set according to experimental requirements. Specify the Chinese/English common name or code of the reagent. Dosage form, active ingredient content, manufacturer, production date or batch number, expiration date, etc.

5.2.2 Control reagent The control agent should be a registered, locally commonly used product with good efficacy and safety in actual use. The type and function of the control agent should be clearly defined. The method should be the same as or similar to that of the test drug, and the registered dosage should be used. For compound formulations, a single dose of each active ingredient should also be provided as a control drug. Special cases may be determined depending on the purpose of the experiment. Record the Chinese/English generic name, dosage form, active ingredient content, manufacturer, registration number, production date or batch number, and application rate of the control drug. Dosage, etc.

5.3 Community Arrangement

5.3.1 Layout of the community The experimental, control, and blank control plots were randomly assigned to block designs, with guard rows or isolation zones between plots. Records were kept. Neighborhood layout diagram. Special cases should be explained.

5.3.2 Area of the community and duplication Community area. 15m²–50m². Number of repetitions. at least 4 repetitions.

6 Applying pesticides

6.1 Application Method Follow the test requirements and label instructions. Application methods should be adapted to local scientific agricultural practices. Record the application methods and procedures. process.

6.2 Application equipment Select commonly used equipment, or select equipment according to the test requirements. Record the type of equipment used and the operating conditions (e.g., working pressure, nozzle type). Information such as type and nozzle diameter, etc.

6.3 Application time and frequency Follow the test requirements and label instructions. It is advisable to apply the pesticide when there is a sufficient number of young larvae (e.g., an average of 3rd instar larvae per plant). (1 to 3 heads). Record the number of applications, the date of each application, and the crop growth stage.

6.4 Dosage Administer the medication according to the test requirements and the dosage specified on the label. Record the prepared dosage and the amount of active ingredient used. The prepared dosage is usually expressed in mL/667m² (milliliters). The dosage is expressed in liters per 667 square meters (g/667m²) or g/667m² (grams per 667 square meters), while the dosage of the active ingredient is expressed in g/hm² (grams per hectare). Used for When spraying pesticides, record the amount of pesticide solution used per hectare, expressed in L/hm² (liters per hectare). Application should ensure accurate dosage and even distribution. Uniformity is required. Dosage deviation should not exceed $\pm 10\%$. If it exceeds $\pm 10\%$, it should be recorded and its impact assessed.

6.5 Chemical requirements for controlling other diseases, pests, and weeds If other pesticides are used to control pests, diseases, and weeds other than the test subjects during the experiment, those that have no effect on the test pesticides or test subjects should be selected. The reagents were used separately from the test and control reagents, and all plots were treated uniformly to minimize interference from these reagents. Extent. Record accurate information about the application of this type of medication (such as the generic name of the medication, dosage form, content of active ingredient, dosage, method of application, and application method). (Time, target of prevention and control, etc.)

7.1 Drug Efficacy Survey

7.1.1 Survey Methodology Five random sampling points were taken from each plot, and at least two infested plants were marked at each point. The number of live insects on the marked plants was then investigated. The initial insect population in each plot was not... If there are fewer than 30 individuals, record the proportion of larvae before the 3rd instar.

7.1.2 Survey Time and Frequency The initial insect population was assessed before application, and the number of live insects was assessed 1-3 days and 7-14 days after application, for a total of three assessments. For insects with slow-acting or long-lasting effects... The medication can extend the investigation period or increase the number of investigations.

7.2 Direct impacts on crops Observe whether the pesticide causes phytotoxicity to the crop. If phytotoxicity occurs, accurately describe the symptoms (such as stunting, chlorosis, deformity, etc.) and record them. The type and extent of pesticide damage should be recorded. In addition, beneficial effects on the pesticide-treated crop should also be documented. Record pesticide damage in the following ways.

a) If the pesticide damage can be counted or measured, express it in absolute values, such as plant height, plant weight, etc.

b) In other cases, the severity and frequency of phytotoxicity can be estimated using the following two methods. 1) Record the pesticide damage level for each plot according to the pesticide damage grading method in Table 1, using -, , , , , ; 2) Compare the drug-treated area