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

GB/T 17980.6-2026

Replacing GB/T 17980.6-2000

**Pesticides - Guidelines for field efficacy trials - Part 6:
Insecticides against corn borer**

农药 田间药效试验准则 第6部分：杀虫剂防治玉米螟

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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 6 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; ...
- 6. Pesticide Control of Corn Borer; ...

---Part 149: Insecticides for the Control of Red Imported Fire Ants. This document supersedes GB/T 17980.6-2000 "Guidelines for Field Efficacy Tests of Pesticides (I) Insecticides for the Control of Corn Borers", and is consistent with... Compared with GB/T 17980.6-2000, apart from structural adjustments and editorial changes, the main technical changes are as follows:

- 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 17980.6-2026 is the Chinese national standard covering the trial protocol for corn borer control - the timing against the egg hatch and the assessment of tunnelling in the stalk, which is what the yield loss actually comes from. The GB/T 17980 series is what a pesticide registration in China rests on: it fixes the plot design and replication, the application rate and timing, the assessment of the pest and of the crop, and the analysis of the result. It replaces GB/T 17980.6-2000 and has been in force since 1 September 2026, one of the parts of the series revised together. It was issued on 27 February 2026 and has been in force since 1 September 2026, replacing GB/T 17980.6-2000. 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 conducting field plot efficacy tests of insecticides for controlling corn borers. The registration of *ianubialis* (a type of herbicide) requires field plot efficacy trials and efficacy evaluations. Field efficacy trials for other crops, such as corn borers, should be conducted in accordance with this procedure.

4 Test conditions

4.1 Test subjects and crops The test subject was the corn borer. The experimental crop should be corn or sorghum, preferably a locally grown variety susceptible to corn borer damage. Record the crop and variety names.

4.2 Environmental Conditions The experimental sites should be representative, located in areas where corn borers occur annually and cause significant damage. The crop varieties and cultivation conditions of all experimental plots should be... The conditions (soil type, fertilizer, tillage, and plant spacing) should be uniform and consistent, and conform to local scientific agricultural practices.

5 Experimental Design and Arrangement

5.1 Test Treatment Test reagents, control reagents, and blank controls should be included.

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 information of the control drug. Dosage, etc.

5.3 Community Arrangement

5.3.1 Layout of the community The experimental, control, and blank control treatments were randomized in block design, with protection rows or isolation zones (at least) between cells. (Two rows of corn or sorghum). Record the plot arrangement. Special cases should be explained.

5.3.2 Area of the community and duplication The area of the plot should be at least 50m² (at least 6 rows of corn or sorghum, each row at least 10m). Number of repetitions. at least 4 repetitions.

6 Applying pesticides

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

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 nozzle diameter, etc.

6.3 Application time and frequency Conduct the experiment according to the test requirements and label instructions. It is advisable to apply the pesticide during the peak hatching period of corn borer eggs. Record the number of applications, the date of each

application, and the application method. The reproductive period of plants.

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 test plots were homogenized to minimize interference from these reagents. To a lesser extent. Record accurate information about the application of this type of medication (such as the generic name of the medication, dosage form, active ingredient content, dosage, method of application, and administration). (Using time, target of prevention, etc.).

7.1 Drug Efficacy Survey

7.1.1 Survey Methodology At least 50 plants should be surveyed in each area, and the total number of plants surveyed and the number of plants damaged should be recorded. The number of live insects inside the damaged plants should also be examined.

7.1.2 Survey Time and Frequency When the symptoms of damage from the modern corn borer are obvious, a survey is usually conducted once 15 to 20 days after the application of pesticides.

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 severity of pesticide damage should be recorded. In addition, the beneficial effects of the pesticide on the crop should also be documented. Record pesticide damage in the following ways.

a) If the damage from pesticides can be measured or calculated, express it in absolute values, such as plant height.

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 with the blank control area to evaluate the percentage of phytotoxicity.