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

GB/T 17980.10-2026

Replacing GB/T 17980.10-2000

**Pesticides - Guidelines for field efficacy trials - Part 10:
Insecticides against pear psylla**

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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 10 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;

10.Insecticide Control of Pear Psyllids;

---Part 149: Insecticides for the Control of Red Imported Fire Ants. This document replaces GB/T 17980.10-2000 "Guidelines for Field Efficacy Testing of Pesticides (I) Insecticides for the Control of Pear Psyllids", and is consistent with... Compared with GB/T 17980.10-2000, 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 requirements for test subjects and crops have been changed (see 4.1, 2.1 of the 2000 edition);
- c) The environmental conditions requirements have been changed (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 17980.10-2026 is the Chinese national standard covering the trial protocol against pear psylla - an insect that is difficult to reach in the honeydew it produces, and that has developed resistance to most of what has been used on it. 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, so that trials run by different institutes can be compared. It replaces GB/T 17980.10-2000 and has been in force since 1 September 2026, one of six 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 17980.10-2000. 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 pear psyllids. This document applies to field plot efficacy trials and efficacy evaluations for the registration of insecticides for controlling pear psyllachinensis. The price and efficacy of other pear psyllids in field trials should be followed.

4 Test conditions

4.1 Test subjects and crops The test subject was the pear psyllid. The experimental crop is the pear tree, and it is advisable to select a locally cultivated variety. Record the variety name.

4.2 Environmental Conditions The experimental sites should be selected from representative orchards with moderate to severe pear psyllid infestation. The crop varieties and cultivation conditions of all experimental plots should be... The conditions (such as soil type, fertilizer and water, tree age, and row 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 plots were arranged in a randomized block design, with protection 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 Area of the community. 3 to 5 trees. 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 test according to the requirements and label instructions. It is advisable to apply the pesticide during the initial peak hatching period of pear psyllid eggs (around 30% hatching rate). Record the number of applications. Number of applications, date of each application, and crop growth period.

6.4 Dosage Administer the medication according to the test requirements and the dosage specified on the label. Record the dosage of the active ingredient, usually expressed in mg/kg (milligrams per kilogram). For use When spraying, record the dilution ratio and the amount of pesticide solution used per hectare, expressed in L/hm² (liters per hectare). Ensure proper spraying. Ensure accurate dosage and uniform distribution of medication. 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, content of the active ingredient, dosage, method of application, and administration). (Using time, target of prevention, etc.).

7.1 Drug Efficacy Survey

7.1.1 Survey Methodology At least two trees were surveyed in each area. One branch was fixed at five different locations on each tree. Nymphs on 10 leaves were marked on each branch. Before applying the medication, the number of nymphs in each area should be no less than 50.

7.1.2 Survey Time and Frequency Investigate the initial insect population before applying the pesticide, and conduct investigations again at 5, 10, and 15 days after application.

7.2 Direct impact 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 crop should also be documented. Record pesticide damage in the following ways.

- a) If pesticide damage can be counted or measured, express it in absolute values, such as leaf drop rate.
- 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.

7.3 Impacts on other organisms

7.3.1 Impact on other pests and diseases Observe and record the effects of the pesticide on other pests and diseases in the test area, including both beneficial and harmful effects.