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

GB/T 17980.17-2026

Replacing GB/T 17980.17-2000

**Pesticides - Guidelines for field efficacy trials - Part 17:
Acaricides against spider mites on beans and vegetables**

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

1.Insecticide Control of Lepidoptera Boring Pests in Rice;

2.Insecticide Control of Rice Leaf Roller;

3.Pesticide Control of Rice Leafhoppers;

17.Acaricides for the Control of Spider Mites on Legumes and Vegetables;

---Part 149: Insecticides for the Control of Red Imported Fire Ants. This document replaces GB/T 17980.17-2000 "Guidelines for Field Efficacy Testing of Pesticides (I) Acaricides for the Control of Legumes and Vegetable Leaves". Compared with GB/T 17980.17-2000, the main technical changes in "Mites" 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 17980.17-2026 is the Chinese national standard covering the trial protocol for mite control in vegetables - counting mites and eggs on the undersides of leaves, and separating the effect on the pest from the effect on the predators that were holding it down. 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 or disease and of the crop, and the analysis of the result. It replaces GB/T 17980.17-2000 and has been in force since 1 September 2026. It was issued on 27 February 2026 and has been in force since 1 September 2026, replacing GB/T 17980.17-2000. 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 methods for field plot efficacy trials of acaricides for controlling spider mites on legumes and vegetables. For the evaluation of efficacy, field efficacy trials of other vegetable spider mites should be conducted in accordance with the same guidelines.

4 Test conditions

4.1 Test subjects and crops The test subjects were spider mites such as *Tetranychus cinnabarinus*, *Tetranychus* two-spotted, and *Tetranychus truncatula*. The experimental crops were broad-leaved vegetables such as legumes, cucurbits, and solanaceous vegetables. Record the crop and variety names.

4.2 Test Conditions The experimental sites should be representative fields with moderate spider mite infestation. The crop varieties and cultivation conditions (soil type) of all experimental plots should be consistent. The planting method (type, fertilizer, tillage and row 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 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, with a minimum of 8m² of protected land. 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 Conduct the test according to the requirements and label instructions. It is best to do so at the early stage of spider mite infestation, when approximately 10% of the leaves have an average of 3 to 10 active mites per leaf. Apply pesticides at the appropriate times. Record the number of applications, the date of each

application, and the crop's 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 as per 667 square meters (g/667m²) or g/667m² (grams per 667 square meters), and the effective ingredient dosage is expressed as g/hm² (grams per hectare). For spraying When applying pesticides by fog, record the amount of pesticide solution used per hectare, expressed in L/hm² (liters per hectare). Ensure accurate dosage and uniform distribution during application. 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 Twenty mite-infested leaves were marked in each area, and the number of active mites on the marked leaves was investigated.

7.1.2 Survey Time and Frequency Before medication, the initial mite population is assessed; after medication, the number of active mites is assessed at 1-3 days, 7 days, and 14 days. For medications with slow action or long duration of effect, the duration of action can be extended. Extend the investigation period or increase the number of investigations.

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 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 counted or measured, express it in absolute values, such as plant height.

b) In other cases, the frequency and severity 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.