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

GB/T 17980.43-2026

Replacing GB/T 17980.43-2000

**Pesticides - Guidelines for field efficacy trials - Part 43:
Herbicides against weeds in leafy vegetables**

农药 田间药效试验准则 第43部分：除草剂防治叶菜类蔬菜田杂草

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Table of Contents

- 1 Scope
- 2 Equivalent to 0.1%~2.5% of the blank control area; - Level
- 3 Equivalent to 2.6%~5% of the blank control area; - Level
- 4 Test conditions
- 5 Experimental Design and Arrangement
- 5.2 Reagents
- 5.3 Community Arrangement
- 6 Applying pesticides
- 7 Survey
- 7.1 Weed Survey
- 7.2 Crop pesticide damage survey
- 8 Equivalent to 35.1%~67.5% of the blank control area; - Level

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 43 of GB/T 17980, "Guidelines for Field Efficacy Tests of Pesticides". GB/T 17980 has 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;
- 43. Herbicide Control of Weeds in Leafy Vegetable Fields;

---Part 149: Insecticides for the Control of Red Imported Fire Ants. This document replaces GB/T 17980.43-2000 "Guidelines for Field Efficacy Testing of Pesticides (I) - Control of Weeds in Leafy Vegetable Crops by Herbicides". Compared with GB/T 17980.43-2000, the main technical changes in the draft 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 requirements for selecting the test weeds have been changed (see 4.2, 2.2 of the 2000 edition);
- c) Added provisions for test treatment (see 5.1);
- d) The requirements for test and control reagents have been changed (see 5.2, 3.1 of the 2000 edition);
- e) The requirements for cell area and repetition have been changed (see 5.3.2,

1 Scope

GB/T 17980.43-2026 is the Chinese national standard covering the trial protocol for herbicides in leafy vegetables - crops harvested within weeks of treatment and eaten whole, which makes crop safety and residue the limiting considerations rather than efficacy. 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 17980.43-2000 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 17980.43-2000. 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 trials of herbicides for controlling weeds in leafy vegetable fields. This document applies to field efficacy plot trials and safety evaluations for herbicides used to control weeds in leafy vegetable fields.

4 Test conditions

4.1 Selection of Crops and Cultivars Use locally common cultivation methods and select widely planted varieties. Seed quality should meet GB 16715.2 and GB 16715.4 standards. Requirements for field-use seeds in GB 16715.5. Record the crop species (including Chinese and Latin scientific names), cultivation type, and variety name.

4.2 Selection of weeds as test subjects The weeds in the test site should be representative, the weed density should meet the experimental requirements, and the weeds should be evenly distributed. The weed community composition should be the same as that of the test herbicide. The herbicide spectrum is consistent. Record the Chinese and Latin scientific names of various weeds.

4.3 Cultivation conditions Soil conditions (soil type, organic matter content, pH, soil moisture, fertility) and tillage practices should be uniform and consistent across all

experimental plots, and should meet the requirements of the current regulations. Agricultural practices in the field of earth science. The vegetable cultivation measures tested should conform to local production realities, and sowing (or transplanting) should be carried out according to the cultivation model specifications to ensure the sowing quantity in each plot. The number of transplanted plants, sowing depth, plant spacing, and row spacing should be consistent. Special attention should be paid to the prevention and control of diseases, pests, rodents, and birds when growing leafy vegetables. Record the main cultivation conditions of the tested vegetables, including cultivation methods and specifications, irrigation time, water volume and method, and fertilization time, type and method. Laws, etc. Record the previous crop and the herbicides used in the previous crop, and avoid selecting plots that may affect the growth of the tested vegetables or the effectiveness of the tested herbicides.

5 Experimental Design and Arrangement

5.1 Test Treatment Treatments such as experimental agents, control agents, manual weeding, and blank control should be set up.

5.2 Reagents

5.2.1 Test reagents The experimental reagent treatment included four dosages. high, medium, low, and twice the medium dose. Additional dosages may be determined based on experimental requirements in special cases. The dosage of the reagent should be specified. Text/English generic name or code, dosage form, active ingredient content, manufacturer, production date or batch number, 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 action of the control agent should be specified. The formulation and herbicidal spectrum should be the same as or similar to the test agent, and the registered dosage and application method should be used. If the test agent is a mixture, it should also be... Each active ingredient, in single-dose form, serves as a control. Specific measures may be taken 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 Different treatment plots in the experiment were arranged in a randomized block design. In special cases, comparative, in-between, or irregular arrangements may be used. Please provide an explanation.

5.3.2 Area of the community and duplication The area of each plot depends on the spacing between plants and rows of leafy vegetables, as well as the number of plants transplanted.

For vegetables transplanted or directly sown, the area per plot is 10 square meters. Each plot should be 20m^2 , with at least 50 vegetable plants per plot. For direct-seeded vegetables without thinning, each plot should be 6m^2 - 10m^2 in size and rectangular in shape. The plot should be surrounded by... Set up a protective enclosure. Number of repetitions. no less than 4 repetitions.

6 Applying pesticides

6.1 Application Method Conduct the application according to the test requirements and label instructions, and ensure that the application is appropriate for local scientific agricultural practices. Record the application methods and procedures.

6.2 Application equipment Use commonly used equipment, or select equipment according to the test requirements. When using the spray method for pesticide application, choose a sprayer with stable pressure and a fan-shaped nozzle. The sprayer is used to apply the pesticide, ensuring that the pesticide is evenly distributed throughout the entire test plot or accurately and directionally distributed to the target area. Record the amount used. Information such as equipment type and operating conditions (working pressure, nozzle type, nozzle diameter, flow rate, etc.).

6.3 Application time and frequency Follow the test requirements and label instructions. If the application time is not specifically specified on the label, it should be determined based on the test objective and the test reagent. The application of pesticides is based on their therapeutic properties. Application time is divided into.

- a) Before sowing or transplanting vegetables (with or without soil mixing);
- b) Vegetables after sowing but before emergence (with or without soil mixing);
- c) After the vegetables have emerged or been transplanted. Record the date and time of application, as well as the growth status of weeds and vegetables at the time of application (growth stage and the proportion of each type of weed, etc.).

6.4 Dosage and Water Consumption Apply the pesticide according to the test requirements and the dosage and water usage specified on the label. The dosage of the pesticide is expressed in g/hm^2 (grams per hectare) of active ingredient. Dosage is expressed in $\text{mL}/667\text{m}^2$ (milliliters per 667 square meters) or $\text{g}/667\text{m}^2$ (grams per 667 square meters), and water consumption is expressed in L/hm^2 (liters per hectare). The volume is expressed in liters per hectare ($\text{L}/667\text{m}^2$) and liters per 667 square meters ($\text{L}/667\text{m}^2$). When the water volume is not specified in the experiment, it can be determined based on the method of action of the test agent and the type of sprayer. The water consumption should be determined based on the type of pesticide and local production conditions. Accurate dosage should be ensured during pesticide application; the dosage deviation between replicates of the same treatment should not exceed [a certain value]. $\pm 5\%$. Record factors affecting efficacy, duration of action, and selectivity.