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

GB/T 15794-2026

Replacing GB/T 15794-2009

**Specification for the investigation and forecasting of rice
planthoppers**

稻飞虱测报调查规范

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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 replaces GB/T 15794-2009 "Specification for Rice Planthopper Monitoring and Survey". Compared with GB/T 15794-2009, the main differences are in the structural adjustments. Aside from editorial changes, the main technical changes are as follows:

- a) The terms "overwintering", "overwintering area", "free-growing rice with shattered grains", "ratoon rice", "young larvae", "old larvae", and "peak period of adult insects in the field" were deleted. Terms and definitions for "peak day", "peak oviposition", "peak nymphal stage", "outbreak rate", "outbreak area" and "outbreak area percentage" (see.2009) Versions 2.1~2.6, 2.8~2.12);
- b) The overwintering survey methodology has been removed (see Chapter 3 of the.2009 edition);
- c) The severity grading criteria have been revised, and grading criteria for white-backed planthoppers and brown planthoppers have been added (see Chapter 4,.2009 edition, 10.2);
- d) The light trap monitoring method was changed; the incandescent light trap monitoring method was removed, and conventional monitoring lamps, intelligent insect monitoring lamps, and others were added. Monitoring methods for high-altitude weather forecast lights (see Chapter 5, Chapter 4 of the.2009 edition);
- e) The methods for surveying field insect populations have been changed, including "systematic survey of field insect populations," "systematic survey of field egg populations,"

"general survey of field insect infestations," and "damage." The "Current Situation Survey" has been merged into the "Systematic and Field Survey," and related content has been streamlined (see Chapter 6, Chapter 5 of the.2009 edition). Chapter 9);

f) The main predator survey method has been removed (see Chapter 8 of the.2009 edition);

g) Added forecasting and prediction methods (see Chapter 7);

h) The data collection, summarization, and reporting methods have been changed, replacing "organization, reporting, and archiving of monitoring and forecasting data" with "data collection, summarization, and reporting." The document includes a section on "Reporting" and adds methods and requirements for data collection, summarization, and reporting (see Chapter 8, Chapter 10 of the.2009 edition). Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the Ministry of Agriculture and Rural Affairs of the People's Republic of China. This document was drafted by: National Agricultural Technology Extension Service Center, China National Rice Research Institute, Nanjing Agricultural University, and Nanjing University of Information Science and Technology. Agricultural and Rural Affairs Department of Sichuan Province Plant Protection Station, Guangdong Provincial Agricultural Pest Early Warning and Control Center, Chongqing Seed Station, Jiangxi Provincial Department of Agriculture and Rural Affairs Industrial Development Service Center. The main drafters of this document are: Zeng Juan, Zhang Yiyang, Liu Jie, Fu Qiang, Hu Gao, Wu Qiulin, Yang Qingpo, Bian Yue, Zhang Mei, Huang Dechao, and Wang Zele. Shi Weitao. The release history of this document and the document it replaces is as follows:

---First published in.1995 as GB/T 15794-1995, and revised for the first time in.2009;

---This is the second revision. Rice planthopper monitoring and survey guidelines

1 Scope

GB/T 15794-2026 is the Chinese national standard covering monitoring rice planthoppers - the light traps and field counts, the migration that brings them into China on the monsoon airflow each year, and the forecast that tells a province when to act. It replaces GB/T 15794-2009 and has been in force since 1 October 2026, with the rice stem borer standard GB/T 15792-2026. It was issued on 31 March 2026 and takes effect on 1 October 2026, replacing GB/T 15794-2009. 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 defines the terminology and definitions for rice planthopper monitoring and forecasting, specifies the grading indicators for occurrence severity, and describes

light-attracting monitoring, systems, and... Methods such as field surveys, forecasting, and information reporting. This document applies to the monitoring and surveying of rice planthoppers.

4. Occurrence severity grading indicators Based on the weighted average number of insects per 100 clumps, the grading is divided into 5 levels according to Table 1.

5 Light-attracting monitoring

5.1 Monitoring Time The observation period begins 10 days before the first appearance of adults in the earliest years observed locally, and ends 10 days after the last appearance of adults in most years. The observation period lasts from

18.00 to the following day.

06.00 Lights on for monitoring.

5.2 Setup Requirements

5.2.1 Conventional or intelligent monitoring lights In areas where adults are present year-round, install one conventional or intelligent monitoring lamp. The performance and parameter requirements of the lamp should comply with NY/T 4182- According to the relevant regulations of 2022, when setting up a facility, a location with an open view should be chosen, free from tall buildings or trees that may obstruct the view, and at a distance from interfering light sources such as streetlights. For distances over 200m, the bottom of the light tube should be 1.5m vertically from the ground surface. The light tubes should be replaced annually.

5.2.2 High-altitude monitoring lights In areas where conditions permit, one high-altitude monitoring light can be installed in areas with severe infestations of migratory pests such as rice planthoppers or in areas where a large number of insects are attracted. The light's performance... The parameter requirements should comply with the relevant provisions of NY/T 4182-2022. When setting up, a location such as a rooftop or elevated platform in the countryside away from towns should be selected. It should be placed in an open area or within a pest and disease observation field, where there are no tall buildings or high-power light sources within a 500m radius.

5.3 Survey Methodology When installing conventional or high-altitude monitoring lights, the number of planthoppers attracted should be recorded daily, and the species of white-backed planthoppers, brown planthoppers, and gray planthoppers should be distinguished. When the total weight of the attracted insects exceeds 100g, spread the collected adult insects evenly on a porcelain plate and divide them into four equal parts using the "cross-cutting method," such as 1/4... If the number of planthoppers still exceeds 100g, continue dividing the insects into equal portions until one-quarter of the planthoppers weigh less than 100g, then classify and count them again. Multiply the number of

planthoppers of each type by 4n (n... The total number of traps for each category is calculated by dividing the trap into equal parts. Weather conditions at the time the lights were turned on were also recorded. Results are recorded in Table B.1 of Appendix B.

6 System and Field Survey

6.1 Survey period After the initial peak period observed under the lights, surveys were conducted every 7 days.

6.2 Survey Location

6.2.1 System Field Based on rice variety (japonica rice, indica rice, hybrid rice, etc.), rice cultivation type (early rice, mid-season rice, single-season late rice, double-season late rice, etc.), cultivation methods, fertilizer... For water management, select at least three representative paddy fields. No pesticides should be used during the entire rice growing season.

6.2.2 Daejeon Select at least 20 plots of land of different types, including different rice varieties, rice cultivation methods, and field management practices.

6.3 Survey Methodology

6.3.1 Egg quantity survey Parallel skip sampling was used, with two clusters sampled at each point, and 10-20 clusters were investigated. The number of eggs was assessed according to Table A.2, and the number of effective eggs was recorded. The results are recorded in Tables B.2, B.3 and Appendix C, Table C.1.

6.3.2 Insect Population Survey Parallel skip sampling was used, with two clumps sampled at each point, and 10-20 clumps were investigated. The sampling method was employed, using 33cm x 45cm white clay trays. Use a light or gray enamel dish as a carrier, moisten the inner wall of the dish with water, and when checking for insects, gently insert the dish into the rice row, with the lower edge close to the base of the rice stalk on the water surface, and quickly tap it. Take three consecutive photos of the lower and middle parts of the plant, counting once at each point. Refer to Tables A.1 and A.3 to classify and count the number of adult and nymph planthoppers of each type, as well as the number of winged adults. The percentage of older nymphs was also recorded. After each counting and inspection, the white enamel plate was cleaned before the next inspection. Results were recorded in Tables B.2 and B.3. Table C.1.

6.3.3 Hazard Investigation A large-scale visual inspection method was used to record the number and area of fields with "over-penetration" within the survey area, converting the net "over-penetration" area to calculate the proportion. Percentage of fields and area surveyed. Record the results in Table B.3.