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

GB/T 15793-2026

Replacing GB/T 15793-2011

**Specification for the investigation and forecasting of the rice
leaf roller (*Cnaphalocrocis medinalis*)**

稻纵卷叶螟测报调查规范

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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 15793-2011 "Technical Specification for Monitoring and Forecasting of Rice Leaf Roller". Compared with GB/T 15793-2011, except for the structure... Aside from adjustments and editorial changes, the main technical changes are as follows:

- a) The overwintering survey methodology has been removed (see Chapter 2 of the.2011 edition);
- b) Added a severity grading index (see Chapter 4);
- c) Adult insect monitoring methods have been added, including conventional monitoring lamps, intelligent insect monitoring lamps, high-altitude monitoring lamps, and conventional pheromone/feed attractant equipment. In addition, the setup and usage instructions for automatic counting pheromone monitoring equipment; the "Investigation of Ovarian Development Progress of Adults and Female Moths" was changed to "Field..." "Chasing Moths" (see Chapter 5, Chapter 3 of the.2011 edition);
- d) The methods for investigating egg quantity, larval quantity, and leaf curling rate were changed, as were the investigation time, location, and methods (see Chapter 6). (Chapters 4 and 5 of the.2011 edition)

e) The forecasting methodology has been modified, and a generational classification method has been added (see Chapter 7, Chapter 7 of the 2011 edition);

f) The methods for data collection, aggregation, and reporting have been changed, with "Data Aggregation and Transmission" and "Survey Data Forms" renamed as "Data Collection,..." The section on "Summary and Reporting" adds data items, data summary methods, and data reporting requirements (see Chapter 8, 2011 edition). Chapter 9). 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, Nanjing Agricultural University, Chinese Academy of Tropical Agricultural Sciences, and Guangdong Provincial Department of Agriculture. Pest Early Warning and Control Center, Zhejiang Provincial Plant Protection and Quarantine Station, Guizhou Provincial Plant Protection and Quarantine Station, Fujian Provincial Plant Protection and Quarantine Station, Guangxi Plant Protection Station of Zhuang Autonomous Region and General Plant Protection Station of Anhui Province. The main drafters of this document are: Zeng Juan, Zhang Yiyang, Liu Jie, Hu Gao, Lü Baoqian, Meng Zehua, Zhong Baoyu, Dai Dejiang, Tang Jianfeng, and Huang Xiaoyan. Huang Chengyu and Wang Beibei. The release history of this document and the document it replaces is as follows:

---First published in 1995 as GB/T 15793-1995, and revised for the first time in 2011;

---This is the second revision. Rice leaf roller monitoring and forecasting standards

1. Scope This document specifies the grading indicators for the occurrence of rice leaf roller, adult monitoring, egg quantity, larval quantity, and damage investigation and forecasting. Technical requirements for reporting, data collection, aggregation, and submission. This document applies to the monitoring, early warning, and forecasting of the rice leaf roller.

3. Terms and Definitions This document does not contain any terms or definitions that need to be defined.

4. Occurrence severity grading indicators The severity of rice leaf roller infestation is classified into five levels. light infestation (Level 1), slightly light infestation (Level 2), moderate infestation (Level 3), and slightly severe infestation. (Level 4), Major Outbreak (Level 5). The number of larvae per 100 clumps is the main indicator for classifying the severity of the outbreak, with leaf curling rate as a reference indicator. See details below. Table 1.

5.1 Light-attracting monitoring

5.1.1 Monitoring Time The observation period begins 10 days before the first appearance of adults in the earliest year the insects were seen in the local area, and ends 10 days after

the last appearance of adults in the usual year.

5.1.2 Setup Requirements

5.1.2.1 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.

5.1.2.2 High-altitude monitoring light In areas where conditions permit, a high-altitude monitoring light can be installed in areas with severe infestations of migratory pests such as the rice leaf roller or in areas where a large number of insects are attracted. Performance and parameter requirements should comply with the relevant provisions of NY/T 4182-2022. When setting up, choose a rural rooftop or elevated platform away from towns and cities. It should be placed in a relatively open area, or installed in a pest and disease observation field, with no tall buildings or high-power light sources within a 500m radius.

5.1.3 Survey Methodology The number of adult rice leaf rollers under the lamp was surveyed and counted daily, and the survey results were recorded in Table A.1 of Appendix A.

5.2 Sexual/Food Inducement Monitoring

5.2.1 Monitoring Time Same as 5.1.1.

5.2.2 Setting up the location In areas prone to recurrence, there is one plot of each of the main cultivar types with different growth stages and three growth characteristics (good, medium, and poor), with a plot area greater than 667m².

5.2.3 Setup Requirements

5.2.3.1 Conventional monitoring equipment At least three conventional pheromone or food attractant monitoring devices should be placed in each field, and their performance and parameter requirements should comply with the relevant provisions of NY/T 4182-2022. The placement of sex attractants should be in an equilateral triangle, while food attractants should be placed in a straight line, with a spacing of at least 50 meters between devices. Before the rice reaches the jointing stage, the devices should be positioned above the rice canopy. The rice seedlings should be placed at a height of 10-20cm, after the rice has reached the jointing stage, with the bottom of the device close to the rice canopy. Replace the seedlings regularly.

5.2.3.2 Automatic counting and monitoring equipment for sexual prey Performance and parameter requirements should comply with the relevant provisions of NY/T 4182. At least one device should be placed at each monitoring point, installed along the edge of the field. Replace the lure core regularly.

5.2.4 Survey Methods During peak emergence, the number of adult insects in conventional traps was monitored daily; at other times, the number was monitored three times a week. When investigating the feeding tether monitoring equipment, samples were collected. No fewer than 20 female moths were collected and brought back to the laboratory for ovarian examination. Ovarian classification is shown in Appendix B. The survey results were recorded in Tables A.2 and A.3.

5.3 Driving moths in the field

5.3.1 Survey Period From the time when moths are first seen under lights or in the field until the rice heads are fully open.

5.3.2 Survey Methodology Select one field each for the main cultivar type with different growth stages and three growth characteristics (good, medium, and poor). Hold a 2m long bamboo pole and walk slowly against the wind along the field ridge. Slowly move the upper part of the rice stalks (before the mid-tillering stage of rice, simultaneously survey the surrounding weeds), record the number of moths that take flight, and conduct the survey once every 7 days. At the same time, collect... At least 20 female moths were taken back to the laboratory for ovarian examination. The results were recorded in Table A.4 and Appendix C, Table C.1.

6 Survey of egg quantity, larval quantity, and leaf curling rate

6.1 Survey Period After rice transplanting, until the rice reaches the milk stage, egg and larval populations should be surveyed every 7 days; leaf curling rate should be surveyed once the damage is largely determined across generations. One more time will be held.

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 conditions.

6.3 Survey Methodology