

ICS 65.020.01

CCS B 15



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

GB/T 15800-2026

Replacing GB/T 15800-2009

**Specification for the investigation and forecasting of the cotton
bollworm**

棉铃虫测报调查规范

Issued on: March 31, 2026

Implemented on: October 1, 2026

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

- 1 Scope
- 5 Survey of overwintering population
- 6 Adult monitoring
 - 6.2 Light-attracting monitoring
 - 6.3 Monitoring through sexual or dietary inducements
- 7 Larval Systematic Investigation
- 8 Field survey of larvae
- 9 Forecasting

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 15800-2009 "Specification for Monitoring and Forecasting of Cotton Bollworm". Compared with GB/T 15800-2009, the main differences are structural adjustments. Aside from editorial changes, the main technical changes are as follows:

- a) The term and definition of "generation of occurrence" have been added (see Chapter 3);
- b) Added grading indicators for the occurrence of bollworm in wheat, cotton, peanuts, soybeans, and corn (see Chapter 4);
- c) Added "Lighting Fixture Type", "Installation Requirements", "Monitoring Method", "Monitoring Tools", and "Installation Location" (see Chapter 6);
- d) The timing and methodology of the "Grand Field Census" were changed (see Chapter 8, Chapter 7 of the 2009 edition);
- e) Added content related to "forecasting and prediction" and "data reporting" (see Chapters 9 and 10). 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, Institute of Plant Protection, Chinese Academy of Agricultural Sciences, and Xinjiang Uygur Autonomous Region. District Plant Protection and Quarantine Station, Hebei Provincial Plant Protection and Quarantine Station, Xinjiang Production and Construction Corps Agricultural Technology Extension

Station, Shanxi Provincial Plant Protection Station Quarantine Center, Shandong Provincial Agricultural Technology Extension Center, Jilin Provincial Agricultural Technology Extension Station, Inner Mongolia Autonomous Region Plant Protection and Quarantine Center, Ningxia Hui Autonomous Region The General Station for Agricultural Technology Extension of the Autonomous Region and the Plant Protection and Quarantine Station of Henan Province. The main drafters of this document are. Liu Jie, Lu Yanhui, Zeng Juan, Yang Long, Meng Zehua, Zhang Yiyang, Lu Yi, Wei Xinzhen, Ren Chenrong, Liu Li, and Ma Jiangfeng. Yin Xiangjie, Zhu Junsheng, Yang Lili, Zhao Sumei, Ma Jing, Xu Yongwei. The release history of this document and the document it replaces is as follows:

---First published as GB/T 15800-1995 in.1995, and revised for the first time in.2009;

---This is the second revision. Cotton bollworm monitoring and forecasting guidelines

1 Scope

GB/T 15800-2026 is the Chinese national standard covering monitoring the cotton bollworm - a pest that attacks cotton, maize, tomato and much else, tracked by light and pheromone traps and by egg and larval counts across several generations a season. It replaces GB/T 15800-2009 and has been in force since 1 October 2026, with the resistance evaluation standard GB/T 22101.1-2026. It was issued on 31 March 2026 and takes effect on 1 October 2026, replacing GB/T 15800-2009. 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.

Requirements include larval system surveys, larval field surveys, and forecasting. This document applies to cotton bollworm monitoring and surveys.

4.Occurrence severity grading indicators The severity of occurrence is categorized into five levels. mild (Level 1), moderate (Level 2), moderate (Level 3), severe (Level 4), and major (Level 5). Level 5, classified according to the indicators in Table 1.

5 Survey of overwintering population

5.1 Survey period The number of overwintering pupae was surveyed in October-November and the number of pupae after winter was surveyed in March of the following year.

5.2 Survey Crops The last generation of cotton bollworms in the area mainly hosts crops such as cotton, corn, wheat, soybeans, and peanuts.

5.3 Survey Methodology Using a diagonal five-point sampling method, taking into account both the edges and the middle of the field, the total area for all types of crops should be no less than 20m², and the pupal digging depth should be no less than 15cm. Count the

number of pupae and convert it to the pupae quantity per 667 m

2. Record the results in Table A.1 of Appendix A.

6 Adult monitoring

6.1 Monitoring Equipment The monitoring equipment shall comply with the requirements of NY/T 3253-2018 and NY/T 4182-2022.

6.2 Light-attracting monitoring

6.2.1 Monitoring Tools The selection of lighting fixtures should be based on local testing conditions, and the selection range includes the following three categories.

- a) Conventional monitoring lights;
- b) Intelligent monitoring light;
- c) High-altitude monitoring light.

6.2.2 Monitoring Time April 1 to September 30.

6.2.3 Setup Requirements Conventional and intelligent monitoring lights should be installed in areas with large-scale cotton, wheat, corn, soybean, or peanut cultivation. High-altitude monitoring lights should... Install the light source in local migration corridors or areas with high insect populations year-round, at a height of 1.5m above the ground and at least 100m away from interfering light sources such as streetlights. (Annually) Replace the light bulbs regularly.

6.2.4 Monitoring Methods The number of adult insects under the lamp is counted daily and recorded according to Table A.2.

6.3 Monitoring through sexual or dietary inducements

6.3.1 Monitoring Tools Based on local testing conditions, sex sedation devices should be selected, falling into the following three categories.

- a) Conventional sex pheromone monitoring equipment;
- b) Conventional food-attracting monitoring equipment;
- c) Automatic counting and monitoring equipment for sexual predators.

6.3.2 Monitoring Time April 1 to September 30.

6.3.3 Setup Requirements Select fields with an area greater than 667m², or fields where insects were first observed that year, and set up pheromone or predator trap traps. Place 3 traps evenly in each field. The setup method should comply with the provisions of NY/T 3253-2018 and NY/T 4182-2022. Daily checks and records should be kept of the number of

adult insects attracted. The survey results should be recorded in Table A.3 or Table A.4.

7 Larval Systematic Investigation

7.1 Systematic Investigation of First Generation Larvae A Class I wheat field with an area greater than 667 m² that was not treated with pesticides was selected as the systematic survey field. Surveys were conducted every 7 days from April to May, with data collected each time. 100 ears of wheat were sampled at 5 points to check the number of larvae, and the number of larvae per square meter was calculated. The results were recorded in Table A.5.

7.2 Systematic investigation of second to fourth generation larvae One representative field each of cotton, corn, wheat, soybean, and peanut fields that were not treated with pesticides was selected as the systematic survey field, with a total area of at least [amount missing]. Sampling was conducted at 5 random points per field for the second to fourth generation larvae, with 10 plants surveyed at each point, for a total of 50 plants surveyed. During the period of infestation, samples were collected every 7 days. Each investigation is conducted, and the results are recorded in Table A.5.

8 Field survey of larvae

8.1 Field survey of first-generation larvae When the system investigation indicates that the larvae have entered the peak period of damage, a general survey is conducted. Five wheat fields of various types are randomly selected each time, and five samples are taken from each field. At each sample point... Investigate the number of bollworm larvae on 1 m² of wheat. Record the data according to Table A.5.

8.2 Field survey of second to fourth generation larvae When the larvae reach their peak infestation stage, a general survey should be conducted. Representative cotton, corn, wheat, and soybean fields should be selected. Three peanut fields were surveyed using the same method as the larval system survey. The survey results were recorded in Table A.5.

9 Forecasting

9.1 Long-term forecast Based on the wintering incidence in the overwintering area and long-term climate forecasts from meteorological departments, combined with historical data, a comprehensive analysis is conducted to determine the long-term trend of the following year's occurrence. predict.

9.2 Medium- and Short-Term Forecasts Based on surveys of adult insects under light, pheromone traps, food traps, and field eggs of each generation, combined with the life cycle of each insect stage, the larval emergence time was estimated, and this was combined with... Based on the weather conditions, a comprehensive analysis will be conducted to make a short-term forecast for the next 10 days and a medium-term forecast