

ICS 65.020.20

CCS B 16



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

GB/T 46948-2025

**General principles for the evaluation of detection methods for
plant pathogenic microorganisms**

植物病原微生物检测方法评价通则

Issued on: December 31, 2025

Implemented on: July 1, 2026

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

Table of Contents

- 1 Scope
- 2 Normative references
- 3 Terms and Definitions

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. 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 National Technical Committee on Standardization of Plant Quarantine (SAC/TC271). This document was drafted by: China National Academy of Quality Inspection and Testing, Sanya Biosafety Center of China Academy of Inspection and Quarantine, and the Ministry of Agriculture and Rural Affairs. Development Center, National Food and Strategic Reserves Administration Academy of Sciences, and Institute of Biology, China Academy of Testing Technology. The main drafters of this document are: Tian Qian, Zhao Wenjun, Cai Lulu, Fu Wei, Xu Han, Liu Zhao, and Zhou Lihua. General Rules for Evaluation of Detection Methods for Plant Pathogenic Microorganisms

1 Scope

GB/T 46948-2025 is the Chinese national standard covering judging whether a plant pathogen detection method is fit for use - its analytical sensitivity and specificity, its repeatability between operators and laboratories, its robustness and the reference material needed to establish any of it. First edition, with the phytosanitary standards of this batch. It was issued on 31 December 2025 and has been in force since 1 July 2026, as a first edition. The document is under the responsibility of the Standardization Administration of China. This page is published from the official record of the 2025 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 specifies the evaluation requirements and evaluation report for qualitative molecular detection methods for plant pathogenic microorganisms before commercialization, and establishes the evaluation process. The preface describes the evaluation method. This document applies to the performance evaluation of qualitative molecular detection methods for plant pathogenic microorganisms before their

commercialization.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 27025 General requirements for the competence of testing and calibration laboratories

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Reference method Classic experimental methods recommended by authoritative international or domestic organizations for detecting one or more plant pathogenic microorganisms.

Note. This document mainly refers to international, regional, national, or industry-specific methods that have been rigorously verified and are generally accepted.

3.2 Specificity The ability to accurately and specifically measure target microorganisms, that is, the ability to distinguish target microorganisms from other non-target microorganisms.

Note. This includes inclusiveness and exclusivity.

3.3 Inclusivity It can accurately measure the ability of different individuals within a target microbial community.

3.4 Exclusivity The ability to accurately distinguish between target organisms and non-target microorganisms, that is, the ability to avoid interference from non-target microorganisms.

3.5 Sensitivity The minimum amount of a target in a sample that can be accurately detected.

Note. This refers to the minimum detection limit.

3.6 repeatability In the same laboratory, by the same operator using the same equipment, following the same testing methods, the same test subject is subjected to mutual testing within a short period of time. The degree of consistency between independent test results under independently conducted testing conditions.