

ICS 65.020.20

CCS B 16



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

GB/T 45585-2025

**Detection and identification of *Diaporthe caulivora* (Athow & Caldwell) Santos, Vrandecic & Phillips and *Diaporthe aspalathi*
E. Jansen, Castl. & Crous**

大豆茎溃疡病菌检疫鉴定方法

Issued on: April 25, 2025

Implemented on: November 1, 2025

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

Table of Contents

Foreword

1 Scope

2 Normative references

3 Terms and definitions

3.1 Recombinase polymerase amplification

4 Basic information about pathogens

5 Principles of the method

Foreword

This document was drafted in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents".

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is proposed and coordinated by the National Technical Committee on Plant Quarantine Standardization (SAC/TC271).

This document was drafted by: China Institute of Inspection and Quarantine, Hangzhou Customs Technical Center, Huangpu Customs Technical Center, Nanjing Customs Animal and Plant and Food Inspection Center, Simao Customs Comprehensive Technical Service Center, Ningbo Inspection and Quarantine Science and Technology Research Institute, and Wuhan Customs Technical Center.

The main drafters of this document are: Wu Pinshan, Lei Rong, Chen Wujian, Zhang Haipeng, Li Bin, Zhou Jian, Sun Xiwen, Yang Li, Duan Weijun, Huali, and Wang Zhenhua.

Quarantine and Identification Methods for Soybean Stem Canker Pathogen

1 Scope

This document describes the isolation, culture, morphological identification and molecular biological detection methods of soybean northern stem canker pathogen and soybean southern stem canker pathogen.

This document applies to the quarantine identification and monitoring of soybean stem canker pathogens in soybean seeds and soybean plants.

2 Normative references

GB/T 6682

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Recombinase polymerase amplification

A nucleic acid amplification technology in which multiple enzymes such as recombinase, single-stranded DNA binding protein (SSB) and strand-displacing DNA polymerase work together at a constant temperature between 37°C and 42°C to amplify DNA at a constant temperature.

4 Basic information about pathogens

Bacteria), Diaportheaspathi E.Jansen, Castl.

English name: soybean stem canker.

Classification. Fungi, Ascomycota, Sordariomycetes, Di- aporthales), Diaporthaceae, Diaporthe Nits., asexual stage is Phomopsis (Phomopsis spp.).

5 Principles of the method

Based on the disease symptoms, morphological characteristics and molecular biological characteristics of the isolated bacteria, conventional PCR, real-time fluorescence PCR and The principle of recombinase polymerase amplification (RPA) of specific fragments is used to conduct comprehensive quarantine identification of pathogens.