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

GB/T 45589-2025

Detection and identification of Tobamovirus fructirugosum

番茄褐色皱果病毒检疫鉴定方法

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Foreword

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

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, Beijing Academy of Agricultural and Forestry Sciences, Fuzhou Customs Technical Center, Guangzhou Customs Technical Center Center, Institute of Plant Protection, Chinese Academy of Agricultural Sciences, and Shandong Agricultural University.

The main drafters of this document are: Zhang Yongjiang, Qiu Yanhong, Zhao Zhenxing, Shen Jianguo, Feng Lixia, Zhou Xueping, Li Xiangdong, Dong Zheng, and Yang Xiuling.

Quarantine and identification method of tomato brown wrinkled fruit virus

1 Scope

This document describes serological and molecular methods for the detection of tomato brown crinkle fruit virus.

This document applies to the quarantine identification of tomato brown wrinkled fruit virus.

2 Normative references

GB/T 6682

3 Terms and definitions

There are no terms or definitions that require definition in this document.

4 Tomato brown fruit virus classification information

Chinese name. Tomato brown wrinkled fruit virus Abbreviation. ToBRFV Taxonomic status. Martelivirales, Virgaviridae, Tobacco mosaic virus (Tobamovirus).

Additional information on Tomato Brown Fruit Virus is provided in Appendix A.

5 Principles of the method

The serological characteristics and genomic characteristics of tomato brown wrinkle virus are the basis for quarantine identification of the virus.

And dual real-time fluorescence RT-PCR detection method; through the effective combination of these methods, it is determined whether the sample carries tomato brown wrinkle virus.

6.1 Reagents

Unless otherwise specified, all reagents are of analytical grade and the test water should comply with the relevant provisions of Grade 3 water in GB/T 6682.

DAS-ELISA reagents should comply with B.1 in Appendix B.

The colloidal gold immunochromatographic test strip reagents shall comply with C.1 in Appendix C.