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

GB/T 28976-2012

Detection and identification of strawberry latent ringspot virus

草莓潜隐环斑病毒检疫鉴定方法

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Quarantine;
Standardization Administration of the PRC**

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard by the National Standardization Technical Committee of Plant Quarantine (SAC/TC271) and focal points. This standard was drafted. People's Republic of China Shanghai Entry-Exit Inspection and Quarantine Bureau, Ningbo Entry-Exit Inspection and Quarantine of People's Republic of China Bureau, People's Republic of China Jiangsu Entry-Exit Inspection and Quarantine Bureau. The main drafters of this standard. Yang Cuiyun at Chui, Wen Weigang, Zheng Jianzhong, India Liping, Li Bin. Strawberry latent ringspot virus quarantine and identification methods

1 Scope

China's national method for the quarantine detection and identification of strawberry latent ringspot virus. It specifies the detection and identification methods for the virus, and it applies to the quarantine of plant material including vegetative propagation material, seeds and seedlings. Strawberry latent ringspot virus is named after the crop it was first found in and is one of the least host-specific plant viruses in quarantine. It infects strawberry, raspberry, cherry, peach, plum, grapevine, rose, elder, celery and a long list of ornamentals and weeds, and in most of them it produces no symptom at all - which is what the word latent in its name records. That combination is the quarantine problem in a sentence: a virus that infects a great many of the plants moved as propagation material, and that gives no sign of being present in most of them. It is transmitted by nematodes in the soil and, in several hosts, through seed, so an infected planting establishes a reservoir that outlives the crop. Where it does produce symptoms the damage is serious - decline and death in strawberry and in stone fruit - and by then it is in the soil. Detection therefore cannot rely on inspection, and the standard specifies the laboratory methods instead: serological detection, immunosorbent electron microscopy following the entry-exit procedure for plant virus immune electron microscopy, and molecular confirmation, together with the sampling of a consignment of planting material and the interpretation of the results. Issued on 31

December 2012 and in force since 1 June 2013.

This standard specifies the Strawberry latent ringspot virus, quarantine and identification methods. This standard applies to plant material, including vegetative propagation material, seeds and seedlings in quarantine and identification of strawberry latent ringspot virus.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document. SN/T 1840 plant virus immune electron microscopy method SN/T 2122 entry and exit quarantine of plants and plant products sampled

3 Strawberry latent ringspot virus basic information

Chinese name. Strawberry latent ringspot virus Name. strawberrylatentringspotvirus
Abbreviation. SLRSV Taxonomic position. Secoviridae Division, Wenzhou Satsuma dwarf virus genus (Sadwavirus) For additional information, see Appendix Strawberry latent ringspot virus A.

4 Principle of the method

Virion morphology, damage symptoms, serological properties and molecular characterization is the main basis for quarantine and identification of the virus, mining By DAS-ELISA, RT-PCR, real-time fluorescence RT-PCR, immune electron microscopy and differential host reactions and other methods to identify and quarantine. 5 equipment, facilities, equipment and reagents

5.1 Equipment Microplate reader, PCR, real-time PCR instrument, clean benches, electronic scales (sense of volume 0.001g), electrophoresis, electrophoresis tank, into the gel Imaging systems, transmission electron microscope, water bath, high-speed refrigerated centrifuge, ultra-low temperature freezer (-80 °C), autoclaves, ice maker, microwave Furnace, a vortex.

5.2 Facilities Plant quarantine nursery.

5.3 Appliances Adjustable micropipette (2μL, 10μL, 100μL, 200μL, 1000μL) and the corresponding RNase-free tips, RNase-off Heart tube, PCR tubes, mortar, sample bags, labels, tweezers, magnifying glass and the like.

5.4 Reagents

5.4.1 Unless otherwise stated, all test reagents were analytical grade or biochemical reagents.