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

GB/T 23620-2009

**Guidelines for the quarantine surveillance of *Leptinotarsa
decemlineata***

马铃薯甲虫疫情监测规程

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Foreword

The Standard Appendix A, Appendix B, Appendix C, Appendix D and Appendix E is an informative annex. This standard by the National Standardization Technical Committee on plant quarantine and centralized. This standard was drafted. National Agricultural Technology Extension Service Center, Xinjiang Uygur Autonomous Region Plant Protection Station. The main drafters of this standard. Wang Fuxiang, Zhao Shan, Introduction for Made Cheng, Liu Hui, Guo Chao, Zhao Jiantong. Potato beetle epidemic monitoring procedures

1 Scope

China's national guidelines for the quarantine surveillance of the Colorado potato beetle, *Leptinotarsa decemlineata*. It specifies the survey area and timing, the survey methods, the sampling, the identification and the recording and reporting for monitoring this pest. The Colorado potato beetle is the classic example of an insect that became a global pest by being moved. It fed originally on a wild solanaceous plant in the American southwest, encountered the cultivated potato when agriculture reached it in the nineteenth century, and spread across North America, then Europe, then Asia, arriving in Xinjiang in the 1990s and moving eastward since. Both the adult and the larva feed on the foliage and they will defoliate a crop completely, which for a potato is total loss because the tuber is fed by the leaves. What makes it so difficult is not the feeding but the biology: it has an extraordinary capacity to develop insecticide resistance, having done so against essentially every class of insecticide used on it, and it overwinters as an adult deep in the soil, so a population survives a bad season underground and reappears. Once established in a region it cannot be eradicated. So surveillance is aimed at finding it early and at defining the boundary of

the infested area, which is what quarantine restrictions on the movement of tubers and machinery rest on. The standard sets the survey area relative to the known distribution and to the potato-growing regions, the timing against the beetle's life cycle - the overwintered adults emerging, the egg masses, the larvae, the summer generation - the visual survey method and the sampling intensity, the identification of a beetle whose markings are distinctive but which has look-alikes, and the reporting. Issued on 27 April 2009 and in force since 1 October 2009.

This standard applies to surveillance potato beetle.

2 Terms and definitions

The following terms and definitions apply to this standard.

2.1 It did not occur near the edge region of the Colorado potato beetle occur.

2.2 Determining the presence or absence of a region of the Colorado potato beetle generated by official organizations, and the degree of hazard occurrence.

2.3 Under natural conditions, feeding and potato beetles can breed plants thereon.

3 Development of monitoring plan

Collection of local potato beetle and its host of health-related information and collation, analysis, development of monitoring programs.

4 Monitoring area

4.1 generation region Focus on monitoring the outbreak occurred and representative plots Fringe. Dynamic and tendency to spread the main monitoring potato beetle occur.

4.2 District has not occurred Focus on monitoring risk areas, such as. Zeng regional epidemic, traffic along the Colorado potato beetle host plants distribution occurred from fat epidemic Its host plants and other regulated products distribution center for raw areas and the like.

5 Monitors plant

Potatoes, eggplant, tomato and wild host henbane, *Solanum rostratum* like.

6 Monitoring period

Growing potato beetle host plants.

7 Monitoring Supplies

Loupe, continuous zoom stereo microscope, mining tools, tweezers, finger-shaped tube, sample bags, labels, insect pin, sieve (mesh diameter 0.5cm), ethanol (95%), glacial acetic acid (99%), formaldehyde (40%), sucrose and distilled water.

8.1 District has not occurred

8.1.1 Interview Survey Potatoes and other host plants to farmers, agricultural workers and agricultural dealers and other related personnel letter of inquiry related to the potato beetle

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