

ICS 65.020
CCS B 65

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

LY/T 3104-2019

**Technical regulations for control of *Eucryptorrhynchus
scrobiculatus* (Motschulsky) and *E. brandti* (Harold)**

沟眶象和臭椿沟眶象防治技术规程

(English Translation)

Issued on: October 23, 2019

Implemented on: April 1, 2020

Issued by: State Forestry and Grassland Administration

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard is proposed by Beijing Forestry University.

This standard is under the jurisdiction of the National Forestry Pest Control Standardization Technical Committee (SAC/TC 522).

This standard was drafted. Beijing Forestry University, Ningxia Hui Autonomous Region Forest Pest Control and Quarantine Station, National Forestry and Grassland Bureau Forest and Grassland Diseases and Pest Control Station, Lingwu City Forest Tree Quarantine Station, Ningxia Hui Autonomous Region Forest Tree Quarantine Station.

1 Scope

This standard regulates the orbital elephant *Eucryptorrhynchus scrobiculatus* (Motschulsky) and *E. brandti* (Harold) insect survey and monitoring, control technology and control effect inspection.

This standard applies to the monitoring and prevention of *ulcus orbital* and *Ailanthus odorata*.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this article Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB 12475 Anti-toxic regulations for storage, transportation, and use of pesticides GB/T 15776 Afforestation Technical Regulations GB/T 15782 General design code for afforestation LY/T 1961 Technical Regulations LY/T 2108 Technical regulation of *Monochamus alternatus* LY/T 2648 Guidelines for the safe use of forest chemicals

3 Terms and definitions

The following terms and definitions apply to this document.

Groove orbital *Eucryptorrhynchus scrobiculatus* (Motschulsky) and *E. brandti* (Harold) the genus *Coleoptera* is a family of *Eucryptorrhynchus*, which specifically harms *Ailanthus altissima* (Mill.) Swingle.

Boring borer pests, often mixed, ditch borer elephants harm the roots with larva drill borer, *Ailanthus odorifera* borer elephants harm cadres with larva borer bores, and adults are at risk Harm the above-ground part of *Ailanthus altissima*, causing the tree to weaken and even die. For a comparison of the morphological and biological characteristics of the two insect states, see Appendix A.

Trunk trap devices

It is made of a specific material, a fixed catch net and elastic band.

Device for measuring trapped orbital elephantia and *Ailanthus odorata* orbital elephant.

Food attractants

The sweet and sour liquid is made by adding a certain proportion of fruit-scented substances, which can attract a large number of attractants of gorge orbital adults.

4.1 Line inspection

According to the distribution of *Ailanthus altissima* in different places, the investigation route is selected, and the adult emergence period (Ningxia May ~ June) and before wintering (Ningxia September ~ (October), check the farmland forest network, the forest belt on both sides of the highway, the forest belt along the river canal, the green belt of the street and village, and the forest to investigate whether *Ailanthus altissima*. There are phenomena such as weak growth or death, feathering pores, and flowing glue.

4.2.1 Setting Standard Ground

In the groove orbital and *Ailanthus odorata* orbital occurrence area, a standard plot of land is set for every 6.67 hm² forest or 33.33 hm² farmland forest network;

Set a standard land every 1000 m to 2000 m in the forest belt on both sides of the road, the forest belt along the river canal, the street and the village green belt. Standard land There should be no less than 200 strains of *Ailanthus altissima*.

4.2.2 Investigation methods

In the forest, single or double diagonal lines or "Z" -shaped trees were used to randomly sample 30 samples of trees.

One plant was selected every 5 to 10 plants, and 30 tree-like trees were selected for investigation. Key statistics. sulcus orbitalis and sulcus on tree trunk and base of tree trunk Number of adult orbital elephants; if necessary, anatomy of trunk and tree roots was performed to count the number of larvae of orbital elephants and *Ailanthus odoratum*. Fill the survey results into the "ditch Standard Survey Records and Statistical Tables of Orbital Elephant and *Ailanthus odorata* Orbital Elephant ". For related tables, see Appendix B.

4.3 Monitoring of skirt capture devices

For monitoring methods, see Appendix C.

4.4.1 Degree of occurrence

According to the rate of worms, the occurrence degree of the orbital sulcus and *Ailanthus odoratum* was divided into three levels. light, medium and heavy. See Table 1 for the grading standards.

Table 1 Criterion of occurrence of orbital sulcus or *Ailanthus odorata*

Statistical unit

Degree of occurrence Light to heavy Insect strain rate /% < 5 >=5 ~ <=30> 30

4.4.2 Disaster Criteria

Insect strain rate is over 30%.

5.1 Quarantine measures

Do a good job of the daily investigation and prevention of *Ailanthus altissima* seedling breeding bases, destroy the seedlings in a timely manner, and it is strictly forbidden to bring the seedlings out of the nursery. Strictly adjusted Check the cadres and roots of seedlings with a DBH greater than 5 cm, and find the seedlings with insects, destroy them in time, and transport them after confirming that they pass.

5.2.1 Creating mixed forests

When planting, plan to create mixed forests with multiple tree species, avoid creating pure *Ailanthus altissima* forests, or transform and replant existing pure *Ailanthus altissima* forests to form mixed forests.

For specific technologies, refer to the regulations of GB/T 15776 and GB/T 15782.

5.2.2 Clearing dead trees

Unified in late autumn and early winter. Before the cleanup, investigators investigate the damage in detail, mark dead wood, and uniformly harvest. Post harvest Harm wood should be piled away from *Ailanthus altissima* forest land, and measures such as smashing or incineration or fumigation should be taken in time to eliminate the harm.

5.3.1 Skirt capture device capture

In the adult emergence period (May to October), the trunk-bundled skirt-type capture device was used to block and capture the ditch orbital elephant and *Ailanthus* ditch orbital elephant.

See Appendix D for the operation method.

5.3.2 Manual capture

At the peak of adult worms (May-July), the grooving orbiting elephants and *Ailanthus* groping were captured artificially around the base of the trunk and on the trunk.

5.4 Attractant control

Adult emergence period (May-October), a large number of adult ditch orbital elephants are trapped by food source attractants. For the density and method of trap setting, see Appendix D.