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Monitoring technical rule for Schistocerca gregaria

沙漠蝗监测技术规程

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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 is required.

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.

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Technical Protocols for Desert Locust Monitoring

1 Scope

This document establishes the Desert Locust monitoring procedures, specifies the instruments and equipment used for monitoring, the main reagents, the scope of survey and monitoring, and the format of the report.

Requirements describe the investigation and monitoring methods, risk level assessment methods and data recording methods during implementation.

This document is applicable to the monitoring of the occurrence of desert locust populations in areas suitable for its habitat.

2 Normative references

This document has no normative references.

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Prediction of potential geographical distribution

By collating information such as pest biology, distribution data of the areas where pests have occurred, and climate and environmental data, the potential habitat of pests can be predicted. Area and suitability.

Note. Various adaptability prediction models have been widely used, including CLIMEX model, geographic information system (GIS), maximum entropy algorithm model (MaxEnt), etc.

3.2 potential geographical distribution

Areas suitable for the growth and development of desert locusts.

Note. Suitable habitats have the same or similar ecological environment, where locusts can form a certain population size and may cause harm.

3.3 observation site

A sample area established for long-term surveys to systematically monitor the biology and ecology of locusts in a certain area.

Note. The observation plots can represent the locust occurrence, natural environmental conditions, grassland productivity and average utilization level in the region.

3.4 Scanning sampling method

The operator walks against the wind in a straight line or broken line at a normal pace, and uses a standard sweep net to sweep and catch vegetation closely. Each 100 nets back and forth is recorded as one Unit, a method for statistically analyzing the types, numbers, ages and other related data of locusts in the net.

3.5 Pheromone

Secreted from the secretory glands of an insect individual and excreted outside the body, it can affect the behavior, development, and reproduction of other individuals of the same or different species. of chemical substances.

Note. Pheromones generally include sex pheromones, aggregation pheromones, alarm pheromones, marking pheromones and tracer pheromones.

3.6 trap

An instrument that uses the insect's attraction to pheromones to lure and capture insects.