



**中华人民共和国海关总署**

GENERAL ADMINISTRATION OF CUSTOMS, P. R. CHINA

# Provincial Pest Surveillance Coordination in People's Republic of China

**CAREC**

**Tbilisi, Georgia**

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**General Administration of Customs, P. R. China**

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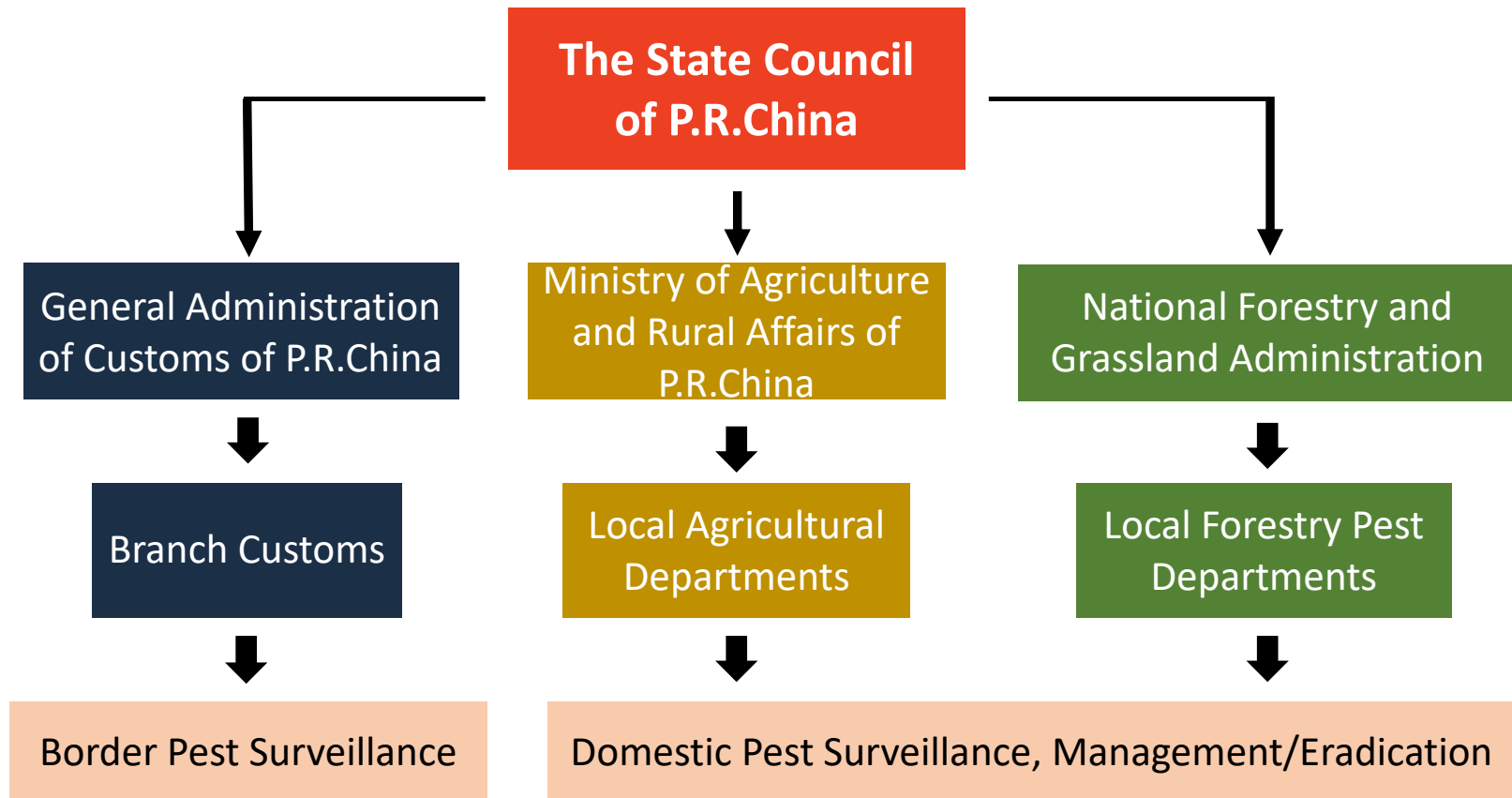
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01

# Structure of the System



## Structure of the System



02

## Scope of Work



# Scope of Work

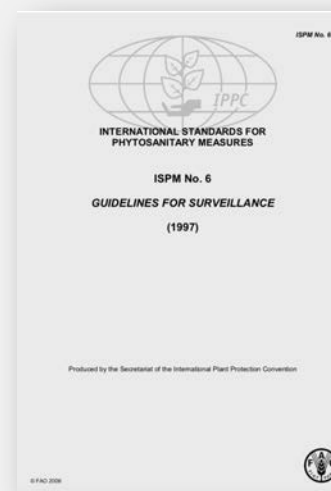
## ■ National Legislation and ISPM



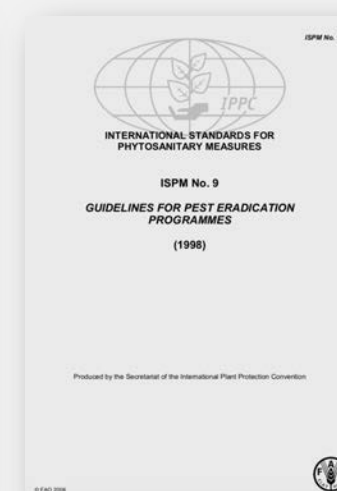
Law of P. R. China On The Entry and Exit Animal and Plant Quarantine (EEAPQ), Oct. 23rd, 1990



Regulations for the Implementation of Law of P. R. China On The Entry and Exit Animal and Plant Quarantine, Jan. 1st, 1997



ISPM No.6



ISPM No.9



# Scope of Work

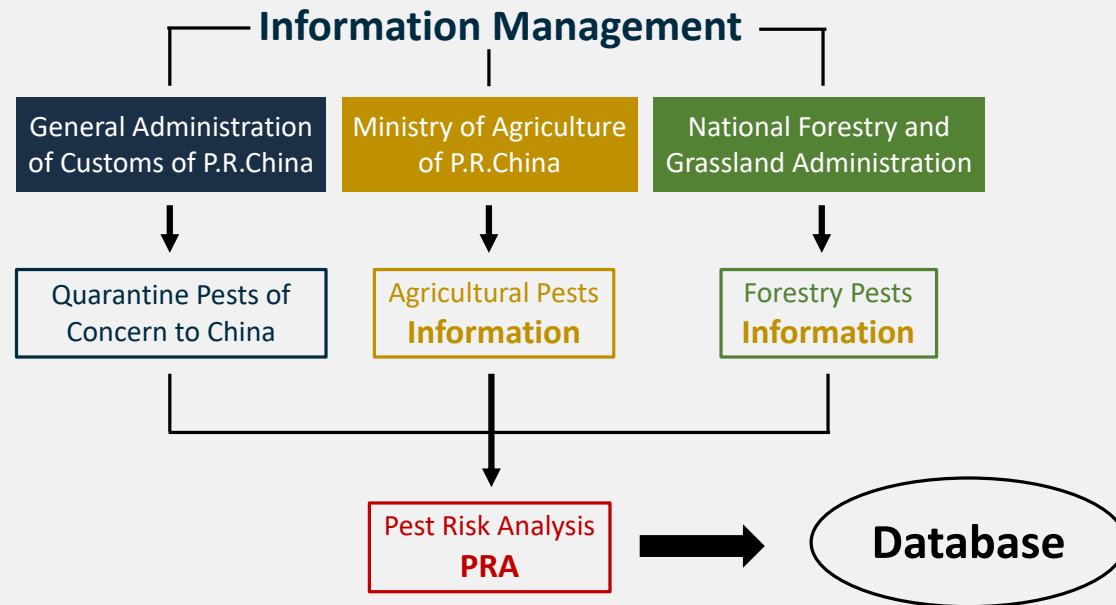
Planning a Surveillance Program and Prioritization Framework for a Regional Pest Surveillance System

- Technical Guideline for Quarantine Fruit Flies
- Technical Guideline for Quarantine Asia Gypsy Moth
- Technical Guideline for Quarantine Weeds
- Technical Guideline for Quarantine Pathogen
- Technical Guideline for Forestry Pest
- Technical Guideline for Cydia Pomonella
- Technical Guideline for Drosophila Suzukii
- .....



# Scope of Work

- Information Management: Promote the development of a regionally-compatible data system for collecting, storing and reporting pest surveillance information

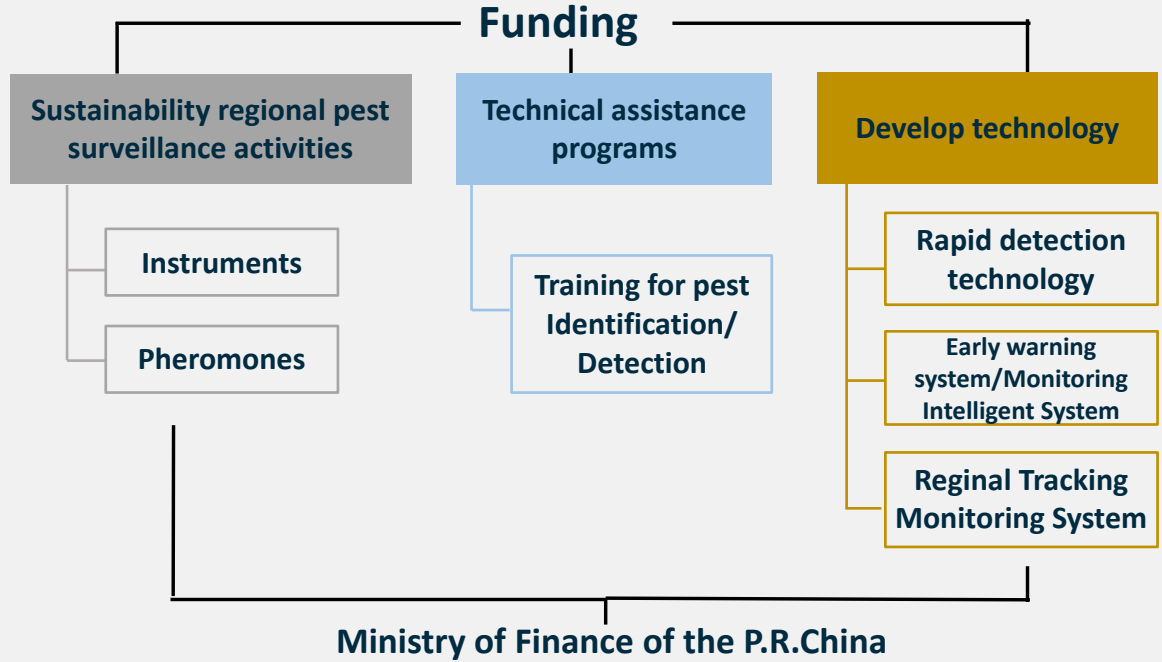






# Scope of Work

## ■ Funding and Sustainability





## 01 Responsibility of GACC

- Make guidelines for general and specific pest surveillance, based on Law of people's Republic of China on the Entry and Exit Animal and Plant Quarantine and ISPM 6;
- Managing the nationwide plant pest monitoring system;
- Organizing and coordinating surveys, investigation, evaluation, and joint examination with other institutions involved in dangerous plant pests;
- Forming management strategies and carrying out press releases;



## 02 Responsibility of Local Customs

- Located in each province or municipality;
- Response for the evaluation, investigation and joint examination of the diseases and pests;
- Collection and compilation of related information, and planning of active control strategies within the province or municipality;
- They also need to report important diseases or pests which are either region-wide or nationwide and are under monitoring;



03

## Pest risk Analysis Committee

- Gathering Information;
- Conducting the Pest risk Analysis;
- Make pest management list;
- Make country's border exotic pest interception database;

04

## Expertise Identification Center



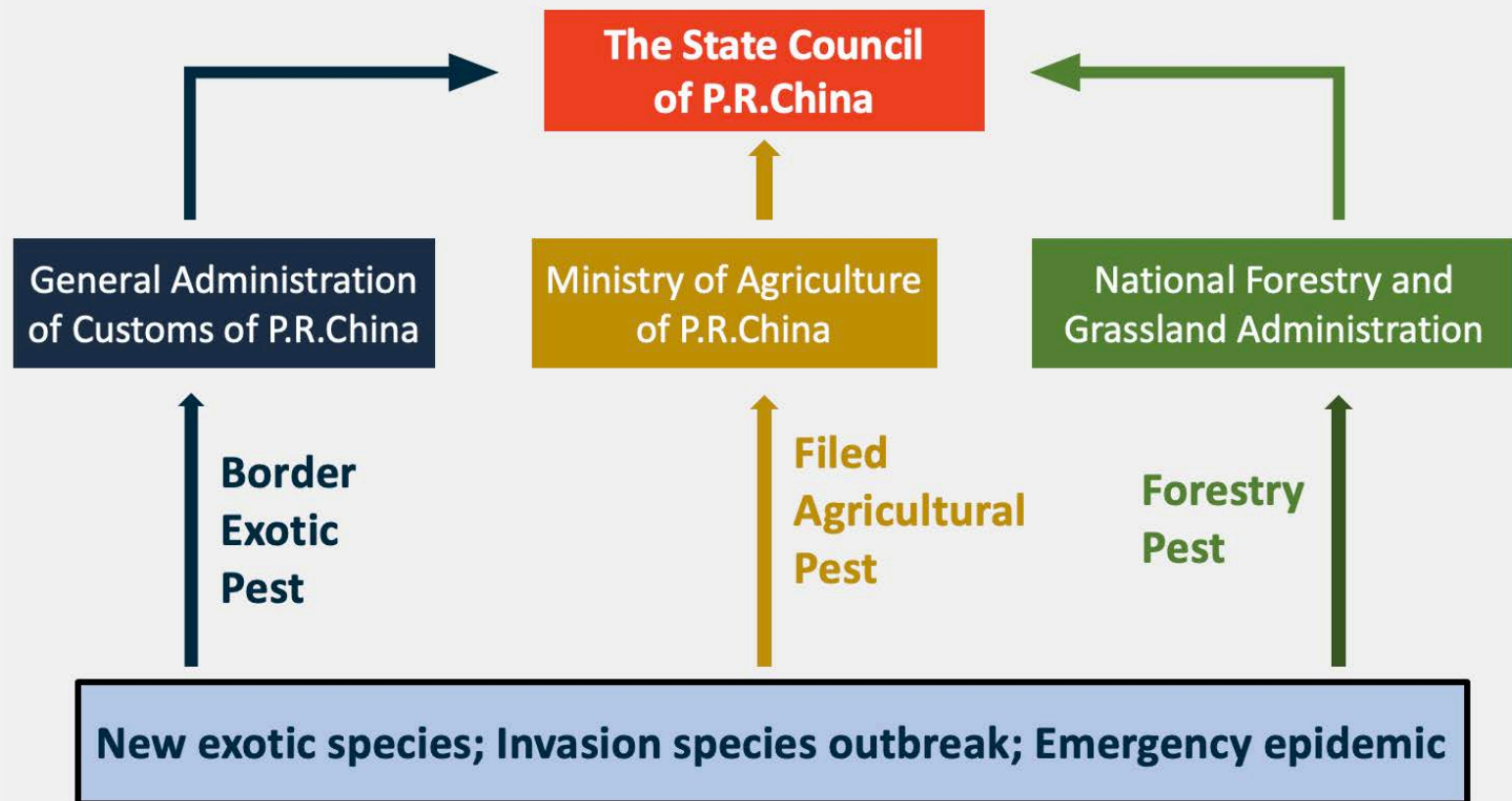
- Technical centers (laboratories) of local customs;
- Disease and pest identification;
- Keep the specimens;
- Verification of diagnostic results with other laboratories;
- Harmonizing training in pest diagnostics;

03

## Emergency response



# The Emergency command system





- In an emergency of pest outbreak, they are able to coordinate and communicate with Local Customs' department to cooperate and competent authorities in implementing relevant measures and tasks of emergency or coordinated control.





## Emergency treatment of the epidemic

Information report, epidemic analysis and notification, early warning

1. Reporting: Subordinate Customs->Direct Customs->General Administration of Customs, report it step by step, timely and effective.
2. Analysis and confirmation: Suspected major epidemic situation ->Designated laboratories to identify or detect review.
3. Early warning:
  - Class I (Class A): Emergency preventive measures when major animal or plant epidemics occur outside the country.
  - Class II (Class B): Emergency preventive measures in the event of major animal or plant epidemics in the territory.
  - Class III (Class C): Emergency prevention measures for major animal and plant epidemics found in entry-exit inspection and quarantine work.



## The emergency response

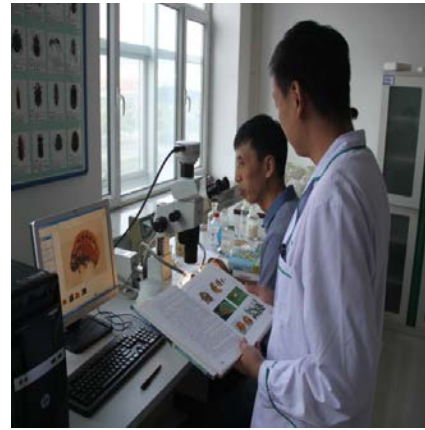
1. Plan initiation: When class III (class C) epidemic warnings occurs, the General Administration of Customs or the direct customs will initiate an emergency plan according to the situation.
2. Disposal implementation: When major animal (plant) disease epidemics are discovered during the implementation of pest monitoring, emergency control measures should be taken.
3. Termination of action: For the major epidemic situation found by the inspection and quarantine work, by taking relevant emergency measures and confirming that the epidemic situation has been eliminated after investigation and monitoring, the Command Center of the General Administration or the relevant Customs Command Center will issue a notification about the lifting of major animal and plant epidemics, termination of the implementation of the plan



Eradicated infected plant



infected plant



Identification invasion species



Quarantine Treatment with Pesticides



## Strengthen public awareness and improve monitoring network

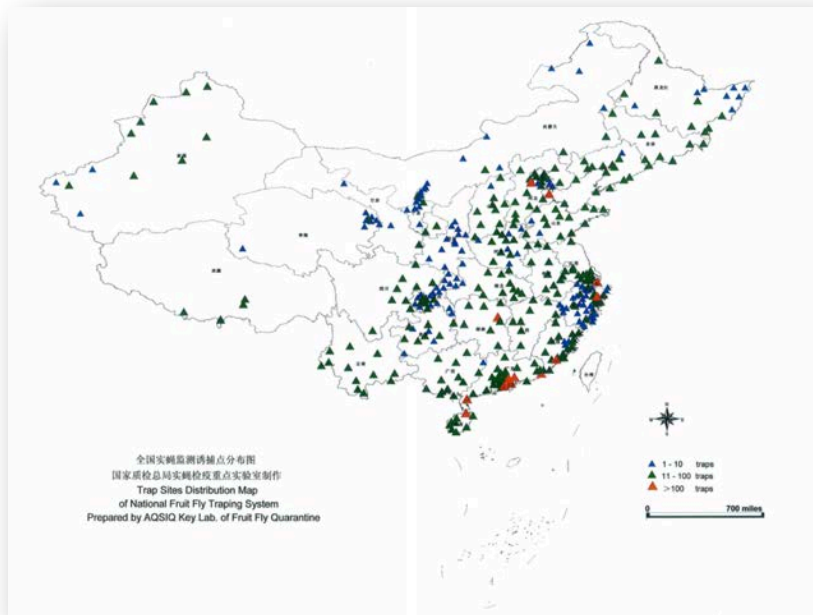
Public awareness, public education, and public participation are the internal driving forces for the improvement of the system. With the continuous advancement of the national biosafety publicity work, the public security awareness has been continuously improved, and the national biosafety monitoring system has been continuously improved. Everyone is united, everyone's participation is the future development direction of the national biosafety monitoring.



04

## The Pest Surveillance In China

# Pest surveillance: Quarantine Fruit Flies



- National wide surveillance sites
- *Ceratitis capitata*: 5439 sites
- *Bactrocera dorsalis*: 3928 sites
- *Bactrocera cucurbitae*: 2301 sites
- *Anastrepha* spp. : 2402 sites



# Pest surveillance: Quarantine Fruit Flies



- **Monitoring area:** The monitoring is of quarantine fruit flies should include, quarantine supervision areas such as **entry ports, fruit distribution centers and wholesale markets, fruit and vegetable export bases and their related sites, and the surrounding areas mentioned above for the corresponding location**
- **Monitoring time:** From April to November every year
- When the average temperature exceeds 15 ° C, monitoring is required;
- When the average temperature is lower than 10 ° C, no monitoring required;
- When the average temperature is between 10 ° C and 15 ° C, the monitoring is carried out as appropriate.



# Pest surveillance: Quarantine Fruit Flies and lure



Trimed lure (TML)



*Ceratitis capitata*



Methyl Eugenol(Me)



*Bactrocera cucurbitae*



Cue lure (Cue)

*Bactrocera dorsalis*



Protein bait (PB)



*Anastrepha* spp.



# Pest surveillance: Quarantine Fruit Flies



Lures	dose	Time interval	Maintenance method
TML	1 piece	1 month	Renew the lure and replace the sticky fly paper
ME	3 mL ~ 4 mL	Added after 1 month, replaced after 2 months	When adding, add 2 mL to 3 mL of the corresponding attractant, and replace the cotton mass after using 2 pieces.
CUE	3 mL ~ 4 mL	Ibid.	Ibid.
PB	600mL ~ 650mL water and 6 proteins	Half of a month	After washing, add about 600mL ~ 650mL of water and put 6 proteins.

# Pest surveillance: Quarantine Fruit Flies



- **Monitoring sites selection**
- The primary host plant with mature fruit is the primary choice for the trap suspension point. **In some monitoring areas, if there is no primary host, a secondary host should be chosen.** If there is no fruit fly host plant, choose a plant that provides shelter or food for the fruit fly adult. When monitoring point selection, the following two factors should also be considered:
  - (1) The impact of farming operations (such as the use of pesticides) on the trapping effect of fruit flies should be avoided.
  - (2) Fruit entry port. If there is no host plant available, the monitoring point should be selected in the surrounding area of the port
- **Trap reset**
- The traps suspension point should be adjusted as the maturity of the host fruit changes, i.e. the trap must be reset in a planned manner



# Pest surveillance: Quarantine Fruit Flies



- Information keep according to the ISPM No.6, contains
  - - scientific name of pest and Bayer code if available
  - - family/order
  - - scientific name of host and Bayer code if available, and plant part affected or means of collection
  - - locality, e.g. location codes, addresses, coordinates
  - - date of collection and name of collector
  - - date of identification and name of identifier
  - - date of verification and name of verifier
  - - references, if any
  - - additional information, e.g. nature of host relationship, infestation status, growth stage of plant affected, or found only in greenhouses.



# Pest surveillance: Quarantine Fruit Flies



- Emergency response
- When new occurrences of pests or specific surveys outbreak
- If it is confirmed as a quarantine fruit fly epidemic, the reporting procedures shall be implemented, follow by the
- *Emergency Disposal Plan for Major Plant Diseases in Entry and Exit* (National Quality Inspection (2006) No. 134)

# Pest surveillance: Quarantine Fruit Flies



**Table 3 Surveillance and Inspection Records**

Lures	Lures Renew	Method	Note
TML	Half a Month	Inspect and Collect the Specimen and Laboratory Identify	
Me			
Cue			
PB			

**Table 5 Inspection and Maintain Records**

Trap code	Date of Inspection	The number of Fruit fly	Lure addition/renew	Survey Sites	Name of Inspector

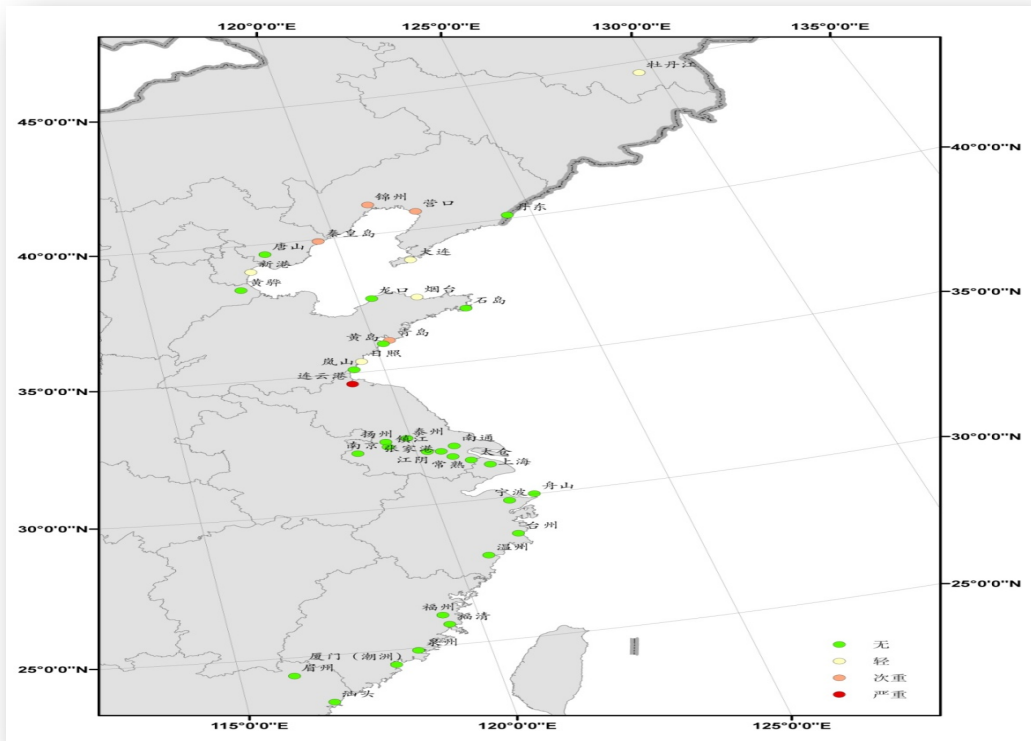
**Table 6 Identification record**

Code					
Date of Collection					
Date of Identification					
Result	Scientific Name				
	Number				
Name of identifier					
Name of Verifier					
Specimen Preservation					

# Pest surveillance: Quarantine Fruit Flies



# Pest surveillance: AISA GYPSY MOTH



- There are 300 surveillance sites in the nationwide except the north of china.
- From April to October every year



# Pest surveillance: AISA GYPSY MOTH



## Pest surveillance: Quarantine forestry pest



## Pest surveillance: Quarantine weed monitoring





# Pest surveillance: Quarantine plant pathogen monitoring





# Thanks for your attention

## Q & A ?

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