



# **Experience in establishing pest-free status**

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# Outline

- Introduction
- Confirmation of pest free status of Khapra beetles (*Trogoderma granarium* (Everts))
- Confirmation of pest free status of Guava fruit fly (*Bactrocera correcta*)
- Pest Free Area (PFA) – The Red Imported Fire Ant (RIFA)



# Introduction

● Area: 36,194 square kilometers

● Population: 23 million

● Agricultural population: 1.15 million (5%)



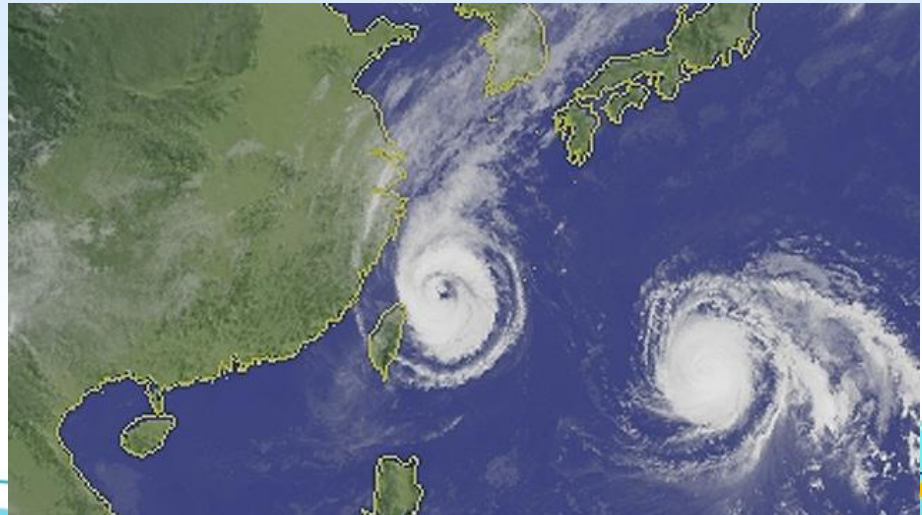
# Introduction

- About 395 km long vertically and about 144 km in width with a total land area of around 36,000 square kilometers (about 14,400 square miles).
- 70% of the island are mountainous areas.
- Endowed with steep mountain ranges; therefore, great altitude differences occur throughout the island.
- Average cultivation area: 1.02 ha



# Introduction

- Because of the various landscapes, there are some pests such as Oriental Fruit Flies and etc.
- Moreover, many typhoons, earthquakes occur each year, the development of agriculture is not easy.
- Different stages of development:  
from asparagus and banana to orchid and ornamental fish



# Confirmation of pest free status of Khapra beetles (*Trogoderma granarium* (Everts))

- Khapra beetles are quarantine pests which occurred and were recorded.
- Rice exported to China is required to be fumigated by phosphine ( $\text{PH}_3$ ).



Picture from CABI



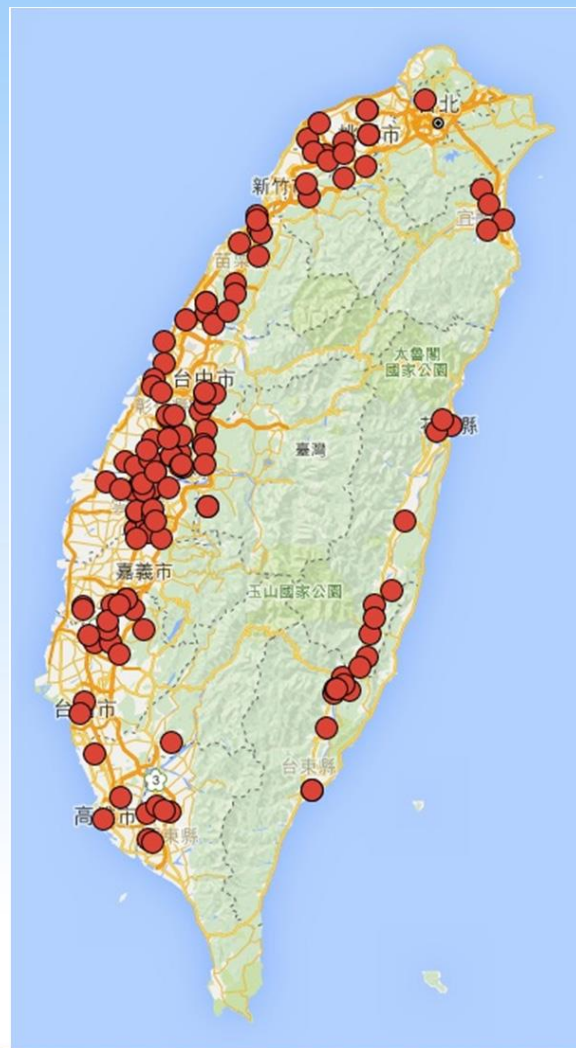
# Confirmation of pest free status of Khapra beetles (*Trogoderma granarium* (Everts))

- Conducted several comprehensive detection surveys starting from 1990, and the obtained results confirm that the **pests are absent**.
- In order to be regarded **as pest free area** of the pests and to request China to exempt the quarantine treatment based on **ISPM 4**, a **systemic detection survey** is necessary.
- **ISPM4**
  - *“The establishment and use of a PFA by an NPPO provides for the export of plants, plant products and other regulated articles from the country in which the area is situated (exporting country) to another country (importing country) without the need for application of additional phytosanitary measures when certain requirements are met.”*



# Confirmation of pest free status of Khapra beetles (*Trogoderma granarium* (Everts))

- The detection survey was done from Oct. 2012 to Dec. 2015 (3 years and 3 months).
- Conducted at the 58 rice mills which exported to China, 48 local rice warehouses, 30 importation rice warehouses, 2 cereal importation warehouses and 2 harbor warehouses (a total of 140 places).





## Confirmation of pest free status of Khapra beetles (*Trogoderma granarium* (Everts))

- The Centre for Biosciences and Agriculture International (CABI) has marked the pest status as “absent (formerly present)” in 2016 upon our request.
- Our authority is requesting that China exempt the quarantine treatment of our rice.



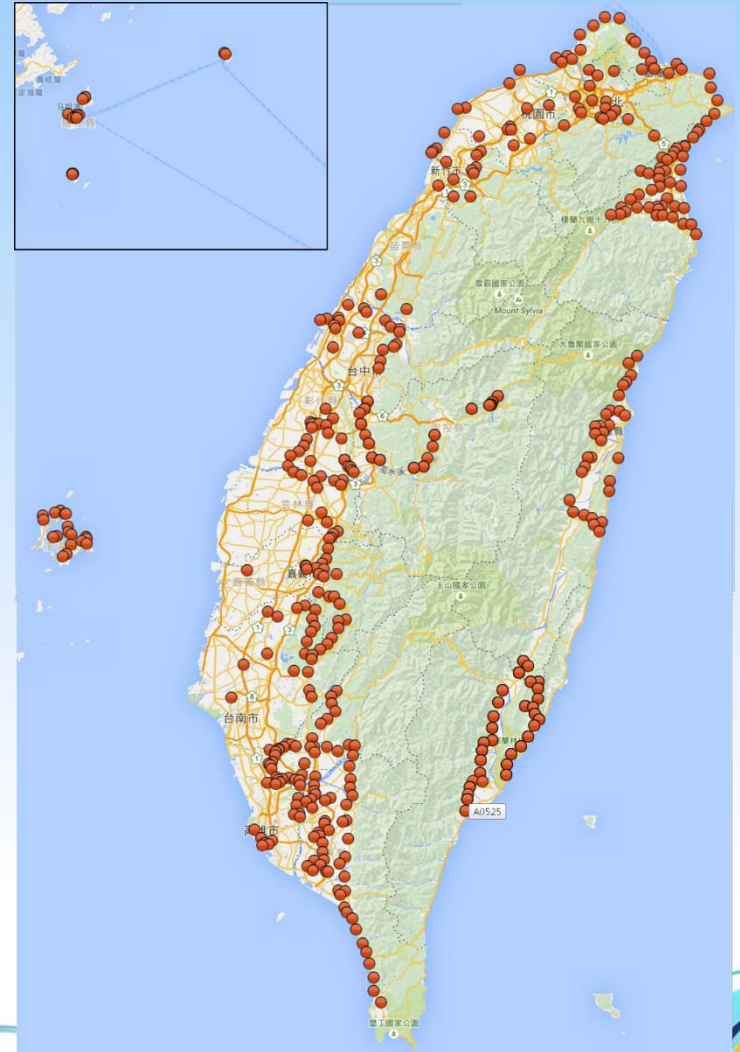
# Confirmation of pest free status of Guava fruit fly (*Bactrocera correcta*)

- The Centre for Biosciences and Agriculture International (CABI) and the European and Mediterranean Plant Protection Organization (EPPO) quoted the paper published by Wen-Gang, Lu in 2010 stating that the pests occurred.
- After reviewing the paper and the resource quoted by the paper, we confirmed that the information in the paper is not correct.



# Confirmation of pest free status of Guava fruit fly (*Bactrocera correcta*)

- Conducted comprehensive surveillance starting from 1989 to present at 490 places including harbors, production areas, agricultural distribution centers and markets.
- McPhail traps with Methyl Eugenol were used as detection tools.



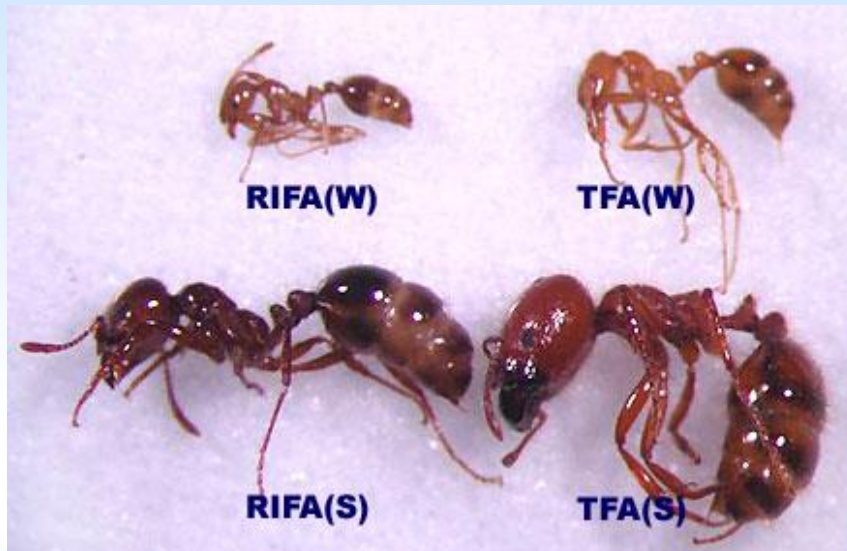
## Confirmation of pest free status of Guava fruit fly (*Bactrocera correcta*)

- CABI corrected its database and marked the status of the pest as “absent, invalid record” based on our surveillance data and application.
- After the correction of CABI, Japan accepted that the quarantine or control information of the pest do not need to be provided when applying for the market access by our authority.

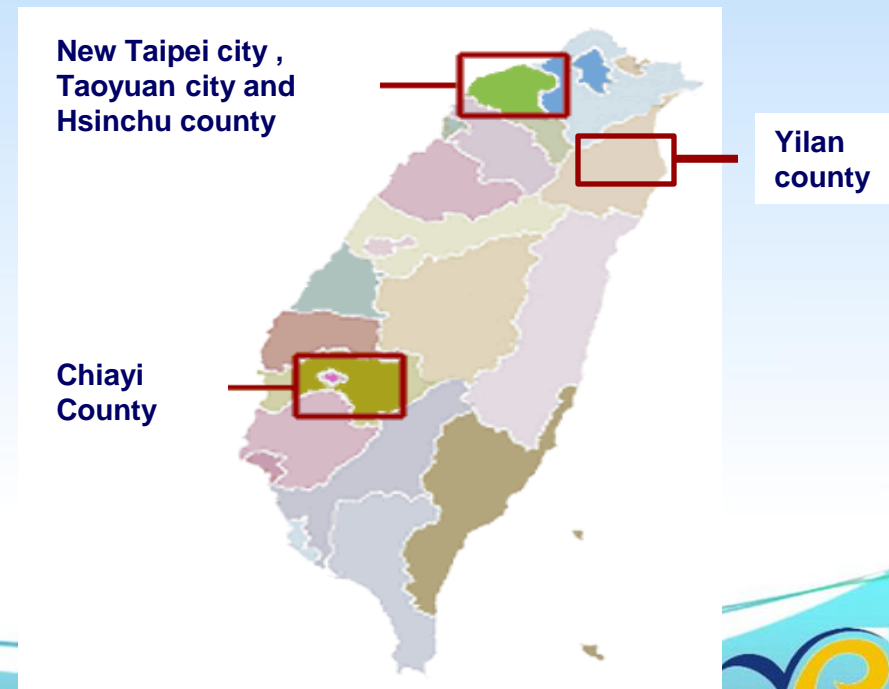


# Pest Free Area (PFA) – The Red Imported Fire Ant (RIFA)

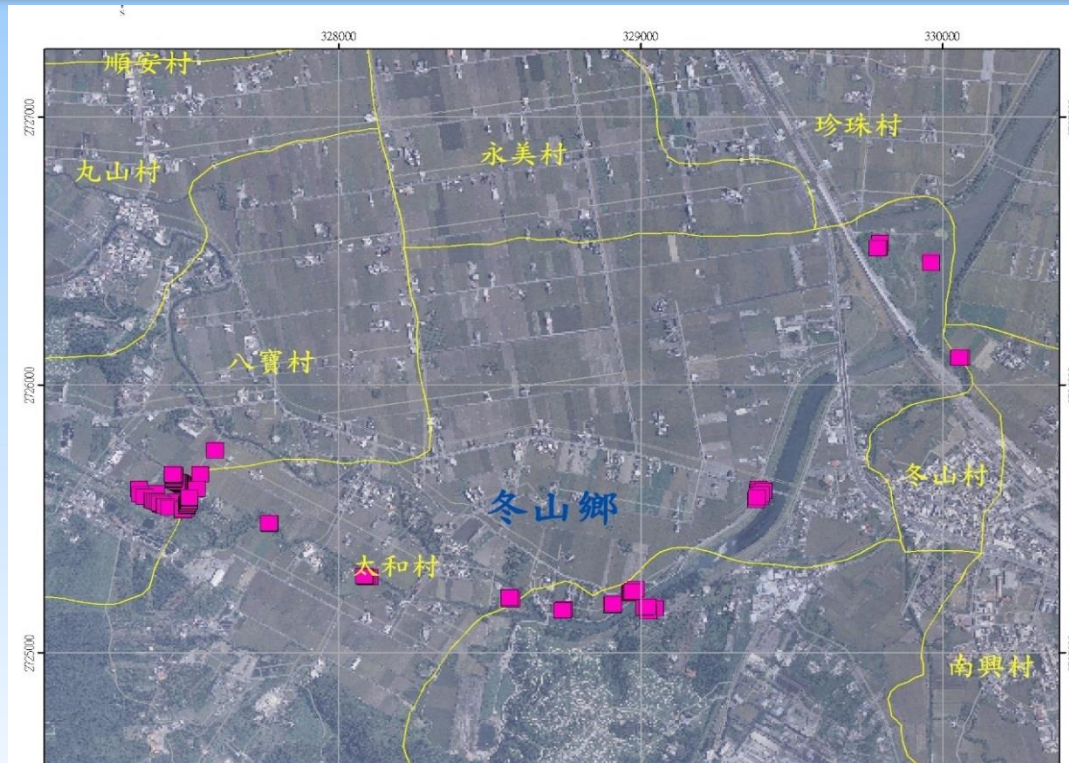
- The RIFA was first reported in 2003.
- The RIFA was subsequently found to have invaded some areas.



Picture from <http://www.fireant.tw/>



# PFA Withdrawal and Reinstatement - Yilan County



In 2015, the RIFA was found to have invaded some areas of Yilan County.

1:12,000

0 500 1,000 Meters

圖例

■ 冬山鄉紅火蟻發生點



# Withdrawal and Reinstatement - Yilan County

## ● Phytosanitary measure

### ● Official Control

- Bait treatment
- Individual mound treatment

● **Regulatory Action** : Restriction on the movement of plant, plant products and soil.

● **Survey** : at least 6 months.

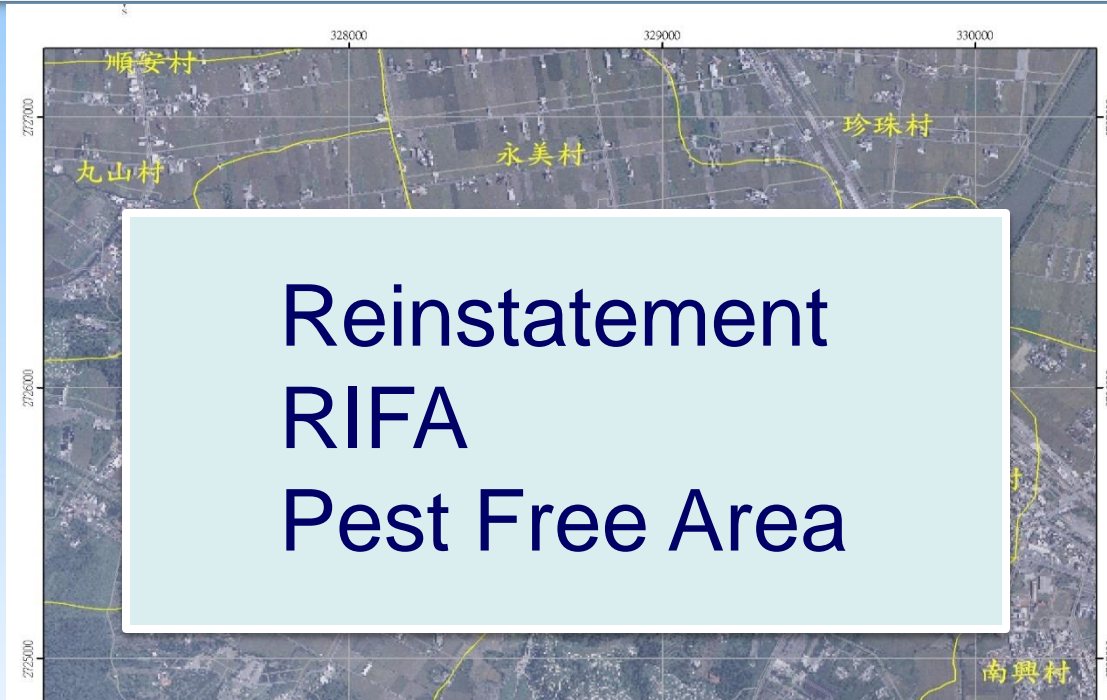
Individual mound treatment



Survey by  
baited traps



# Withdrawal and Reinstatement - Yilan County



In 2016.12.

Reinstatement of the PFA.

1:12,000  
0 500 1,000 Meters

圖例







# Thank You For Your Attention

