

## Introduction

- Insects as food or edible insects are insect species used for human consumption, whole or as an ingredient in processed food products.
- Insects are nutrient efficient compared to other meat sources.
- Thailand has the largest cricket rearing sector in the Southeast Asia.
- The objective of this study was the investigation of the current state of the cricket sector in Thailand.



Fig.1 Interviewing and collecting information by using questionnaires during 2017-2019

## Methods

- This research was carried out during 2017-2019 by using questionnaires to get information from 150 farmers, and reviewing of publications (Fig.1).
- 150 farmers were visited for recording on species cricket, address, temperature, humidity, size and number of pond, life cycle, weight of cricket yield, problem of cricket rearing, and price/kg of cricket yield (Fig.1).
- To record, analyze data and report results of this survey.

## Results

- Three cricket species (Fig.2) rearing in Thailand:
  1. House cricket (*Acheta domestica* L.) (15%)
  2. Two-spotted cricket (*Gryllus bimaculatus* De Geer) (80%)
  3. Ground cricket (*Teleogryllus mitratus* (Burmeister, 1838) (5%)
- The main species in the export market is the house cricket.
- The local market is two-spotted cricket.

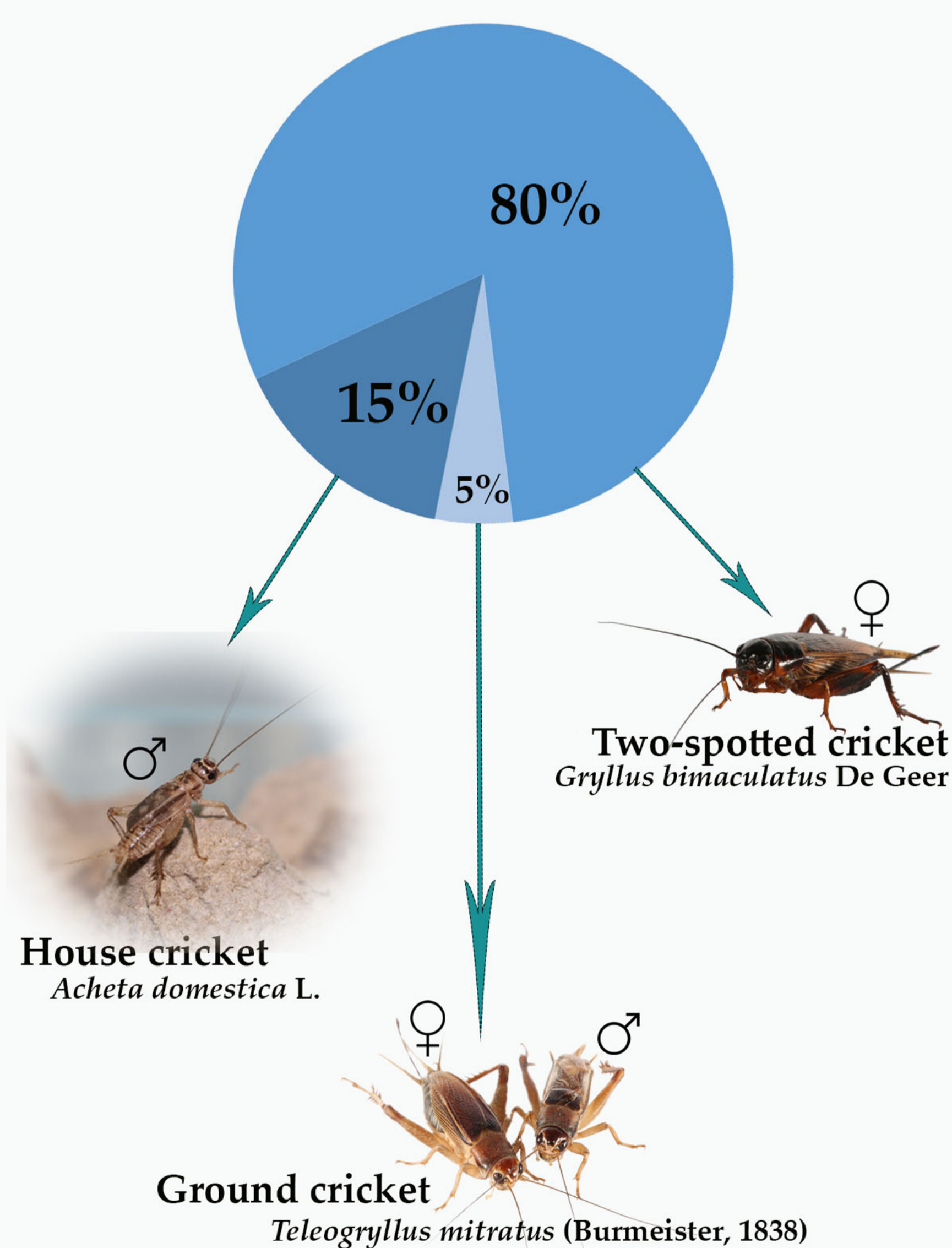


Fig.2 Three cricket species rearing in Thailand

## Highlights

- The most commercial cricket is the two-spotted cricket (*Gryllus bimaculatus* De Geer) (80%).
- The cricket farms are about 20,000 farms mainly in the northeast provinces.
- The farm value of cricket yield is about 37.36 million € in 2019.
- The largest challenges, according to cricket farmers surveyed, are cricket feed, the cricket variety and products development.

## Results

- The cricket farms are about 20,000 farms mainly in the northeast provinces (such as Kalasin, Khon Kaen, Maha Sarakham, Nakhon Phanom, Nakhon Ratchasima, Roi Et and Ubon Ratchathani) follow by central provinces (such as Lopburi, Nakhon Sawan, Suphan Buri), north provinces (such as Chiang Mai, Nan, Phitsanulok and Sukhothai), east provinces (such as Chanthaburi and Sa Kaeo) and south province (such as Surat Thani) (Fig.3).



Fig.3 Location of the cricket farms recording in 17 provinces, Thailand

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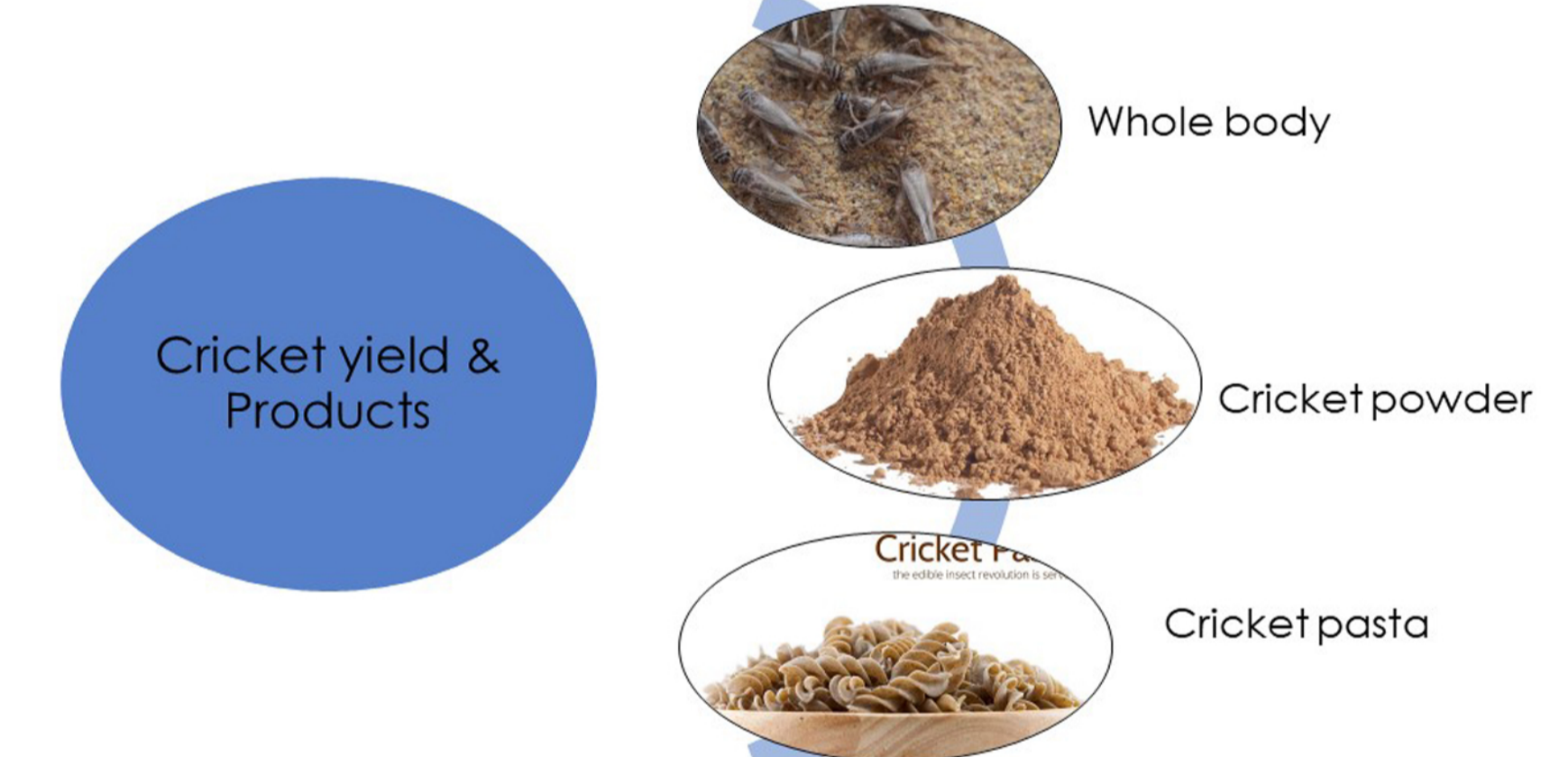


Fig.4 Cricket yield and products from farms in Thailand

- The farm value of cricket yield is about 37.36 million € in 2019. The price of cricket powder export is about 40-50 € per kilogram (Fig.4).
- The key factors of cricket production are feed, water, temperature (35-38°C), relative humidity (60%), density of cricket population (7,255 adults/m<sup>3</sup>), and sanitary farm and good health of farmer.