

**Agricultural Standard  
TAS 8202-2560**

**THAI AGRICULTURAL STANDARD  
TAS 8202-2017**

## **GOOD AGRICULTURAL PRACTICES (GAP) FOR CRICKET FARMING**

**ACFS - National Bureau of Agricultural Commodity and Food Standards  
Ministry of Agriculture and Cooperatives  
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### **Technical Committee on the Elaboration of Thai Agricultural Standards for Good Agricultural Practices for Cricket Farming**

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14. Representative of the Office of Standard Development, National Bureau of Agricultural Commodity and Food Standards Miss Kowadee Phonkliang	Member and Secretary

Crickets are one of the insects that the United Nations Food and Agriculture Organization (FAO) has encouraged people around the world to consume more because they represent a very convenient and sustainable protein source.

FAO estimates that the world's population will grow to 9 billion within the year 2050. Because of that, there will be a shortage of human food and animal feed.

Insects are already sold as food, frozen, fried, canned, or in powder.

The powder can be used to make processed food like cookies or pasta, with the chance to export these products to foreign countries, such as

The European Union (EU), China, the United States or Japan. This may be beneficial for the incomes of the farmers.

Cricket farming can complement the traditional farming activities (like rice and sugarcane) without affecting them, and can also leverage on the periods of the year when crops do not require work.

In years, Thailand has developed a solid know how in cricket farming which can now be used to make packaged products for the retail market.

In order to establish confidence in the safety of these new products. the ACFS has developed the Good Agriculture Practices for cricket farming. The GAP is a set of guidelines that cricket farmers will follow to rear in a safe, optimized, standardized way.

#### References:

Hanboonsong, Y., T. Jamjanya and P. B. Durst. 2013. *Six-legged livestock: edible insect farming, collection and marketing in Thailand*.

Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific, Bangkok: Thailand.



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**NOTIFICATION OF MINISTRY OF AGRICULTURE AND COOPERATIVES  
ON THE ESTABLISHMENT OF THAI AGRICULTURAL STANDARD:  
GOOD AGRICULTURAL PRACTICES FOR CRICKET FARMS  
UNDER THE AGRICULTURAL STANDARDS ACT B.E. 2551 (2008)**

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Whereas the Agricultural Standards Committee deems it necessary to establish an agricultural standard for Good Agricultural Practices For Cricket Farm as a general standard in accordance with the Agricultural Standards Act, B.E.2551(2008) to promote such agricultural commodity to meet its standard on quality and safety.

By virtue of Sections 5, 15 and 16 of the Agricultural Standards Act, B.E. 2551(2008) and the decision of the Agricultural Standards Committee at the Fourth Session dated 7 August B.E. 2560 (2017), the Minister of Agriculture and Cooperatives hereby issues this Notification on the Establishment of Thai Agricultural Standard: Good Agricultural Practices For Cricket Farm (TAS 8202-2017), as a voluntary standard, details of which are attached herewith.

This shall be effective from the day after the date of its publication in the Royal Gazette.

Notified on 14 September 2017

## TAS 8202-2560 Agricultural Standard

# Good Agricultural Practices (GAP) for cricket farms.

## 1. Scope

This document list the requirements for Good Agricultural Practices in the case of cricket farming, from the farm set up to the farm management, including the health of the insects, the protection of the environment, and the logging and traceability of the processes.

## 2. Definitions

2.1 Cricket is an insect that belongs to the Gryllidae Order of Orthoptera. They include:

*Gryllus bimaculatus*

*Teleogryllus mitratus*

*House Cricket* (scientifically known as *Acheta domesticus*)

2.2 The cricket farm includes the rearing pens, and the areas for storage, harvest and garbage collection.

2.3 Farm (rearing area) is represented by a construction with a roof and walls or a net all around.

2.4 Cricket are farmed in pens or pools usually made of concrete or plastic material.

## 3. REQUIREMENTS

Items and requirements of Good Agricultural Practices for Cricket Farming are shown below:

Items	Requirements
<b>1. Elements of Farm</b>	
1.1 Location	1.1.1 The farm has to be big enough for the amount of crickets and the ponds, it should be in a good space and not crowded, be in good condtion and safe from other animals.
1.2 Farm Structure and Layout	1.2.1 The area of farm is adequate and suitable for cricket farming, and does not affect health of crickets and environment. The cricket farming area shall be fenced with a durable material.

	1.2.2 There is a good farm layout and allocation of space shall be designed suitable for its objective such as areas for cricket farming, feed storage, tools storage, garbage and waste, and residence.
1.3 House	<p>1.3.1 House shall be built with durable material, easy to clean and maintain. It should have good ventilation and prevent too much sun and rain with adequate protection for both people and crickets, and can protect cricket predators.</p> <p>1.3.2 Pond for raising cricket must be made of concrete or durable material and easy to clean and maintain.</p>
<b>2. Farm Management</b>	
2.1 Farm Operation Manual	A detailed farm operation manual that outlines the key operation information shall be provided such as farming system, feed and water management, cleaning and maintenance, cricket health maintenance, environment maintenance, and record should be kept within the farm.
2.2 Cricket Management	<p>2.2.1 Selected only the quality cricket.</p> <p>2.2.2 There is preparation of farming pond.</p> <p>2.2.3 Applied clean and non-pathogenic materials for hiding of cricket.</p> <p>2.2.4 Container and material for containing cricket's egg must be cleaned often and pose no risk of contamination to either crickets or consumers.</p> <p>2.2.5 Storage system for trade must be safe with no contamination for consumers.</p>
2.3 Water and feed Management for Cricket	<p>2.3.1 Cricket seed must be in good quality and show expiration date.</p> <p>2.3.2 The water used in the farm must be clean and contamination free.</p>



	<p>2.3.3 Water and feeding container must be clean and suitable for amount and age of crickets.</p> <p>2.3.4 Feed storage must be clean, dry, breathable and safe from other animals.</p>
2.4 Personnel	<p>2.4.1 Personnel should be well trained and be able to continue training and should be able to work in all areas.</p> <p>2.4.2 Personnel shall have a good personal hygiene and annual health check-up.</p>
2.5 Cleaning and Maintenance	<p>2.5.1 House and equipment must be clean and hygienic. Maintenance of the house and equipment to be in good condition and safe for crickets and operators.</p> <p>2.5.2 Only chemicals, disinfectants, or hazardous substances registered with The Department of Livestock are used and all instructions on the product label to be followed</p>
<b>3. Animal Health</b> 3.1 Disease Prevention and control	<p>3.1.1 People and equipment must be sterilized before entering and leaving the farm, including recording record of third parties entering and leaving the farm.</p> <p>3.1.2 In case of outbreak or suspected epidemic, the law's advice on animal epidemics and the recommendations of the Department of Livestock Development must be applied.</p>
3.2 Animal Therapy	<p>3.2.1 Animal therapy must be under the supervision of a veterinarian by complying with the law on the veterinary profession and the amendment, and the Requirements in Thai Agricultural Standard TAS 9032 On the Code of Practice for Control of the Use of Veterinary Drugs.</p>
<b>4. Environment</b>	<p>4.1 Dispose or manage garbage, waste, and cricket droppings by the appropriate and hygienic method to</p>

	<p>avoid the environmental impact.</p> <p>4.2 In case of discharging wastewater into public water, the wastewater must be properly treated before releasing it.</p>
<b>5. Documentation and records</b>	<p>5.1 Performance on the important processes of farm management that affect health, productivity and disease control shall be recorded. The details cover as follows:</p> <p>5.1.1 Information about personnel management;</p> <p>5.1.2 Information on production management such as type data, production models, farm management, feed, and products;</p> <p>5.1.3 Information on prevention and control of diseases such as use of drugs and chemicals.</p> <p>5.3 Records shall be kept for at least 3 years.</p>