UNOFFICIAL TRANSLATION



THAI AGRICULTURAL STANDARD

TAS 8202-2017

GOOD AGRICULTURAL PRACTICES FOR CRICKET FARM

National Bureau of Agricultural Commodity and Food Standards
Ministry of Agriculture and Cooperatives

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National Bureau of Agricultural Commodity and Food Standards Ministry of Agriculture and Cooperatives

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Ms. Korwadee Phonkliang

Cricket is a kind of insect that the Food and Agriculture Organization of the United Nations (FAO) encourages world population to increase consumption due to the fact that it is a new cheap source of protein and is locally available. According to the FAO's estimation, the world population will have increased by the year 2050 to 9 billion. Consequently, a shortage of food and feed is likely to occur. For the time being, crickets are sold fresh, frozen, or processed in forms of fried, roasted, canned, and powdered for further processing into products such as cookies, cakes and macaroni. Those products have been exported, for instance, to the European Union, China, the United States of America and Japan. Cricket is, therefore, considered as another source of income for farmers after rice cultivation or during their free time in the dry season. At present, Thailand has potential and skill for raising crickets at a commercial scale. In order to increase consumer confidence on product safety derived from crickets and to provide a guideline for cricket raising, the Agricultural Standards Committee, therefore, deems it necessary to establish the Thai Agricultural Standard on Good Agricultural Practices for Cricket Farm.

This standard is based on the following document:

Hanboonsong, Y., Jamjanya, T. and Durst, P.B. 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.



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

Whereas the Agricultural Standards Committee deems it necessary to establish an agricultural standard on Good Agricultural Practices for Cricket Farm as a voluntary standard in accordance with the Agricultural Standards Act B.E. 2551 (2008) to promote such agricultural commodity so as 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 notification shall come into force after the date of publication in the Royal Gazette.

Notified on 15 September B.E. 2560 (2017)

General

(Chatchai Sarikulya) Minister of Agriculture and Cooperatives

THAI AGRICULTURAL STANDARD GOOD AGRICULTURAL PRACTICES FOR CRICKET FARM

1. SCOPE

This Thai Agricultural Standard covers requirements of good agricultural practices for cricket farm on farm components, feed, water, management of farm, animal health, and environment, and record keeping. The aim is to produce crickets of good quality which are safe for consumers.

2. **DEFINITION**

For the purpose of this standard:

- 2.1 Cricket means an insect in the order Othoptera of the family Gryllidae. This standard covers the following crickets.
 - Ching-rit Thong Dam with the scientific name of Gryllus bimaculatus De Geer
- Ching-rit Thong Dang with the scientific names of *Teleogryllus mitratus* (Burmeister) (synonym *T. testaceus* (Walker)) and *T. Occipitalis* (Serville)
 - Ching-rit Ban with the scientific name of *Acheta domesticus* (L.)
- 2.2 Cricket farm means a place used for commercial cricket raising which covers houses, areas for feed storage and preparation , areas for carcass disposal, and area for garbage collection, etc.
- 2.3 House means a building or a roofed structure for cricket raising enclosed by a suitable material such as a net.
- 2.4 Pond means a containing structure for raising crickets such as a cement pond and a box.

3. REQUIREMENTS

Requirements for Good Agricultural Practices for Cricket Farm are as in Table 1.

Table 1 Requirements

Items	Requirements
1. Farm components	
1.1 Location	1.1.1 A cricket farm shall be located in a suitable area where there is no risk of hazardous contamination affecting cricket and consumer safety.

Items	Requirements
1.2 Farm design and layout	
	1.2.1 Farm size shall be sufficient and suitable for cricket raising without causing any impact on cricket health and environment. Cricket raising area shall be enclosed with a suitable material. 1.2.2 Farm shall be well laid out and the areas shall be appropriately and clearly separated to serve their objectives such as raising area, feed, tools and equipment storage, area for garbage collection, and residential area.
1.3 House	
	1.3.1 House shall be built with durable materials, easy to clean and maintain and well ventilated. The materials used shall not pose any harm to humans and crickets as well as be able to prevent cricket pests from entering the house.
	1.3.2 Pond shall be made of durable materials, easy to maintain and clean.
2. Farm management	
2.1 Farm management manual	2.2.1 Farm management manual shall be available containing details on important operation within farm i.e. raising system, feed and water management, cleaning and maintenance management, health management, environmental management, and record forms.
2.2 Cricket management	
	2.2.1 Good quality cricket breeds shall be selected.2.2.2 Pond shall be well prepared.
	2.2.3 Materials used for cricket shelter shall be clean and not be the disease harbourage.
	2.2.4 Utensils and materials used for laying eggs shall be clean and pose no risk of any contamination that will be harmful to crickets and consumers.
	2.2.5 Crickets harvesting for sale shall be well managed in order to prevent any contamination that will be harmful to consumers.
2.3 Feed and water management	
	2.3.1 Feed shall not be deteriorated nor pose any impact on cricket health.
	2.3.2 Source of water used on farm shall be clean and not be contaminated with any hazardous substances.

Items	Requirements
	2.3.3 Containers used for feeding shall be clean and appropriate to the number and age of crickets.2.3.4 Area for storing feed shall be able to prevent contamination and deterioration.
2.4 Personnel	
	2.4.1 Personnel who is responsible forcricket shall have knowledge and be properly trained on how to raise crickets.
	2.4.2 Personnel shall have good personal hygiene and receive annual health check ups.
2.5 Cleaning and maintenance	
	2.5.1 Cricket houses and equipment shall be clean and hygienic and be maintained in good condition, posing no risk to both crickets and workers.
	2.5.2 Chemicals, disinfectants and hazardous substances registered with the Department of Livestock Development shall be used. The instruction on the product label shall be followed.
3. Animal health	
3.1 Disease Prevention and Control	3.1.1 Preventive control and disinfection of equipment, personnel and visitors prior to entry and exit shall be in place. Record on visitor entry and exit shall be traceable.
	3.1.2 In case of disease outbreak or doubt of any disease incidence, Animal Epidemic Act and the recommendations of the Department of Livestock Development shall be followed.
3.2 Disease treatment	
	3.2.1 Disease treatment shall be under the supervision of a veterinarian in accordance with the Veterinary Professional Act B.E. 2545 and its amendments as well as requirements of Thai Agricultural Standard on Code of Practice for Control of the Use of Veterinary Drugs (TAS 9032).
4. Environment	
	4.1 Garbage, trash and cricket feces shall be disposed of or managed by an appropriate and hygienic methods to prevent any impact to environment.
	4.2 In case of discharging farm effluent to public water sources, the effluent shall be treated prior to releasing from farm.

Items	Requirements
5. Recording	
	5.1 Data on important operations of farm management affecting health, productivity and disease control shall be recorded.
	covering the following:
	5.1.1 personnel management
	5.1.2 production management such as cricket breed, production lot, farm management, feed, and yield
	5.1.3 disease control and treatments such as use of veterinary drugs and chemicals
	5.2 Record shall be kept for at least 3 years.