



**THAI AGRICULTURAL STANDARD**

**TAS 9-2006**

**DRIED LONGAN FLESH  
FOR FURTHER PROCESSING**

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

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Dried longan flesh for further processing, commonly known as *dark brown dried longan flesh*, is processed agricultural product, which is abundantly produced in Thailand and is popularly consumed as longan syrup. To promote the safety of Thai dried longan flesh for further processing for the benefit of consumers protection and for export, the Ministry of Agriculture and cooperatives consider that it is appropriate to develop a standard for dried longan flesh for further processing.

This standard is developed based on the data obtained from the study conducted by the National Bureau of Agricultural Commodity and Food Standards in cooperation with Faculty of Agro-Industry of Chiang Mai University on the indicative index which is used as quality criteria, classification and size designation of dried whole longan fruit.

**Remark:**

The standard title has been revised from “Thai Agricultural Commodity and Food Standard (TACFS X-XXXX)” to “Thai Agricultural Standard (TAS X-XXXX)” in accordance with the application of the Agricultural Standards Act B.E. 2551 (2008).



**NOTIFICATION OF THE NATIONAL COMMITTEE ON  
AGRICULTURAL COMMODITY AND FOOD STANDARDS  
SUBJECT: THAI AGRICULTURAL COMMODITY AND FOOD STANDARD:  
DRIED LONGAN FLESH FOR FURTHER PROCESSING  
B.E. 2549 (2006)**

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The resolution of the 1/2549 session of the National Committee on Agricultural Commodity and Food Standards dated 8 June B.E. 2549 (2006) endorsed the Thai Agricultural Commodity and Food Standard entitled Dried Longan Flesh for Further Processing. This standard would be of benefits for quality improvement, facilitating trade and protecting consumers.

By virtue of the Cabinet Resolution on Appointment and Authorization of the National Committee on Agricultural Commodity and Food Standards dated 19 November B.E. 2545 (2002), the Notification on Thai Agricultural Commodity and Food Standard entitled Dried Longan Flesh for Further Processing is hereby issued as voluntary standard, the details of which are attached herewith.

Notified on 31 July B.E. 2549 (2006)

Khunying Sudarat Keyuraphan

Minister of Agriculture and Cooperatives

Chairperson of the National Committee on Agricultural Commodity and Food Standards

**THAI AGRICULTURAL STANDARD**  
**DRIED LONGAN FLESH FOR FURTHER PROCESSING**

**1 SCOPE**

This standard applies to dried longan flesh for further processing which is subject to heat treatment to get rid of microorganism. The product is obtained from fresh longan of *Dimocarpus longan Lour.*, of *Sapindaceae* family or from dried whole longan fruit.

**2 DEFINITIONS**

The definitions of the terms used in this standard are as follows:

2.1 *Dried longan flesh for further processing*: the product obtained from dried whole longan fruit which has been shelled and pitted or from fresh longan fruit which has been shelled, pitted and dehydrated at high temperature. The product shall be packed in a container which can prevent contamination and moisture. The obtained product shall be subject to heat treatment to get rid of microorganisms before consumption or being used as raw material in food production where removal of microorganisms by heat treatment is required.

2.2 *Water activity ( $a_w$ )*: the figure which represents free water which has effect on the growth of microorganism and change of food. Water activity is the ratio of the water vapour pressure of the product to the vapour pressure of pure water at the same temperature.

**3 QUALITY**

**3.1 GENERAL**

Dried longan flesh for further processing shall have flavour and texture characteristic to the variety.

**3.2 CHEMICAL REQUIREMENT**

Dried longan flesh for further processing shall comply with the following requirements:

- 3.2.1 Moisture content of not more 18%
- 3.2.2 Water activity not exceeding 0.6
- 3.2.3 pH not lower than 5.0.

**3.3 DEFECTS**

The number of pieces with the inclusion of foreign matters shall not exceed the following criteria.

The pieces containing foreign matters shall be separated, counted and calculated as the percentage of the total pieces.

3.3.1 Defect from the inclusion of part of longan shall not exceed 10% of the total pieces

3.3.2 Defect from the inclusion of other matters, which is not longan, shall not exceed 6% of the total pieces

#### **4 PACKAGING**

Dried longan flesh for further processing shall be packed in the container which meets the quality, safety and hygiene characteristics and can maintain the quality of the product.

#### **5 CONTAMINANTS**

The type and amount of contaminants present in the product shall comply with the relevant laws and the requirement of the Thai Agricultural Standard on Contaminants.

#### **6 PESTICIDE RESIDUES**

The type and amount of the pesticide residues present in the product shall comply with the relevant laws and the requirement of the Thai Agricultural Standard on Pesticide Residues.

#### **7 HYGIENE**

The production and handling of dried longan flesh for further processing in all steps including storage and transportation shall be in hygienic manner so as to prevent contamination which may represent a hazard to health.

#### **8 LABELLING**

##### **8.1 CONSUMER PACKAGES**

Each package shall be visibly and legibly labelled, at least, with the following information. The information shall be not be fake or deceptive.

- (1) Name of the product “Dried longan flesh for further processing” or “Dark brown dried longan flesh”
- (2) Main ingredients in percentage of weight
- (3) Food additives, if any, according to the relevant legal provision
- (4) Class
- (5) Net content in g or kg
- (6) Name and address of the manufacturer or packer for local product. Name and address of importer in case of imported product
- (7) Country of origin
- (8) Lot or lot code
- (9) Date of manufacture, expiration date or date of minimum durability (best before)



(10) Instruction for use or storage, e.g. storage at the temperature of 2°C -10°C will keep the original colour and prolong the shelf life

(11) The labelling shall be in Thai. For the product to be exported, labeling can be in foreign language

## 8.2 NON-RETAIL CONTAINERS

Each package shall bear the information consisting, at least, of the name of the [product “Dried longan flesh for further processing” or “Dark brown dried longan flesh”, the name and address of the manufacturer or packer for local product or name and address of importer in case of imported product, date of manufacture, expiration date or date of minimum durability, food additives (if any) and instruction for storage. This information may appear in the document accompanying the goods or in the label or on the package. However, identification of lot and name and address of the manufacturer or packer, if already declared explicitly in the document accompanying the goods, can be represented by a code mark.

## 9 SAMPLING

Sampling shall be carried out in accordance with the relevant legal provision and the requirements of the Thai Agricultural Standard on Sampling.

## 10 ANALYSIS

Analysis is given in the following Table 1 (use references of the latest edition).

**Table 1 Analysis**

<b>Provision</b>	<b>Method</b>	<b>Principle</b>
1. General quality (3.1)	Visual inspection and sensory analysis	Subjective measurement
2. Moisture (3.2.1)	AOAC 934.06 or equivalent	Gravimetry
3. Water activity (3.2.2)	Water activity meter	$a_w$ -Value Analyzer
4. pH (3.2.4)	AOAC 970.21 or equivalent	Electrometry
5. Defects(3.3)	Visual inspection by counting the pieces with foreign matters which have been separated, expressed as percentage of the total pieces	Subjective measurement
6. Net weight (8.1)	Weighing	Gravimetry

## ANNEX A

## SAMPLING

Annex A gives sampling of dried longan flesh for further processing for convenience of use.

**A.1 DEFINITIONS**

The following definitions applies:

A.1.1. *Lot* means product of the same origin, manufactured with the same process, packed in the same type of package, delivered or sold in the same transaction so as to obtain the product with uniform quality and characteristics.

A.1.2. *Sampling plan* means

- (1) Primary sampling plan
- (2) Secondary sampling plan

**A.2 PRIMARY SAMPLING PLAN**

Sampling by random on dried longan flesh for further processing of the same lot in accordance with the sample size given in Table A.1 or A.2 for inspection of container, marking and labelling and net weight.

**Table A.1 Primary sampling plan for container of 10 kg and over**

<b>Lot size</b> (Number of container unit)	<b>Primary sample size</b> (Number of container unit)
Less than and including 100	3
101 to 500	8
501 to 2,500	13
More than 2,500	min 18

**Table A.2 Primary sampling plan for containers smaller than 10 kg**

<b>Lot size</b> (Number of container unit)	<b>Primary sample size</b> (Number of container unit)
Less than and including 500	8
501 to 3,200	13
3201 to 35,000	14
More than 35,000	min 25

### A.3 SECONDARY SAMPLING PLAN

Sample shall be taken for laboratory analysis from the primary sample as follows:

A.3.1. Sampling and acceptance for physical analysis consisting of general quality and defect

Sample shall be drawn randomly from the primary sample and placed in a tightly sealed container, 500 g from each sample. Inspection shall be carried out according to clauses 3.1 and 3.3. The lot shall be considered complying with 3.1 and 3.3 provided that the defects found do not exceed the acceptance number given in Table A.3.

**Table A.3 Sampling plan and acceptance for physical test of dried longan flesh for further processing**

(3.1, 3.3)

<b>Primary sample size</b> (Number of container unit)	<b>Secondary sample size</b> (Number of container unit)	<b>Acceptance number</b> (Number of container unit)
3	1	0
8	3	0
13	8	1
18	13	2
min 25	min 20	3

A.3.2. Sampling and acceptance for chemical test (moisture, water activity and pH)

Sample shall be drawn equally from primary sample to obtain a total weight of 300 g for chemical analysis. The lot shall be deemed to be acceptable if it complies with the requirement of 3.2.

**ANNEX B****UNIT**

The units and symbols used in this standard and the units recognized by the International System of Units (*le Système International d'Unités*) or SI are as follows:

<b>Measurement</b>	<b>Unit</b>	<b>Symbols</b>
Mass	gram	g
Mass	kilogram	kg
Temperature	degree celsius	°C