UNOFFICIAL TRANSLATION

THAI AGRICULTURAL STANDARD

TAS 1504-2007

BABY CORN

National Bureau of Agricultural Commodity and Food Standards
Ministry of Agriculture and Cooperatives
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Sub Committee on the Elaboration of Standards for Baby Corn, Sweet Corn

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The production and export of baby corn which is an important agricultural commodity of Thailand are potentially increasing. The establishment of a standard for baby corn is significant to assist promoting and developing the merchandise standard of both quality and safety. This will create confidence of Thai baby corn to be better accepted by both domestic and international trade. The Ministry of Agriculture and Cooperatives deems it proper to establish a standard for baby corn.

The provisions of this standard are based upon the following documents:


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).
The resolution of the 2/2550 session of the National Committee on Agricultural Commodity and Food Standards dated 28 August B.E. 2550 (2007) endorsed the Thai Agricultural Commodity and Food Standard entitled Baby Corn. 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 3 April B.E. 2550 (2007), the Notification on Thai Agricultural Commodity and Food Standard entitled Baby Corn is hereby issued as voluntary standard, the details of which are attached herewith.

Notified on 20 September B.E.2550 (2007)

Mr. Theera Sutabutra
Minister of Agriculture and Cooperatives
Chairperson of the National Committee on Agricultural Commodity and Food Standards
THAI AGRICULTURAL STANDARD
BABY CORN

1 DEFINITION OF PRODUCE

This standard applies to commercial varieties of baby corn or young corn grown from *Zea mays* L., of the *Gramineae* family, separated from silk, husk, stalk and anthers, to be supplied fresh to the consumer or for processing, after preparation and packaging.

2 DEFINITION

2.1 *Baby corn* means young cob of corn that ovules are not fertilized.

2.2 *Anthers* mean floral parts that produce and store pollens.

3 PROVISIONS CONCERNING QUALITY

3.1 MINIMUM REQUIREMENTS

3.1.1 In all classes, subject to the special provisions for each class and the tolerance allowed, the cob of baby corn must be:

1. whole;
2. fresh in appearance;
3. free of rotting or deterioration such as to make them unfit for consumption;
4. clean, practically free of any visible foreign matter;
5. free of abnormal external moisture, after packing, excluding condensation following removal from cold storage;
6. free of any foreign smell and/or taste;
7. free of pests and/or damage caused by pests affecting the general appearance of the produce.

3.1.2 The cut that is made on the base of the cobs must be clean. The slight discoloration of the cut surface due to storage is acceptable.

3.1.3 The baby corn must be correctly harvested, postharvest handled, storage and transport in order to obtain quality produce in satisfactory condition at the place of destination.

3.2 CLASSIFICATION

The cobs of baby corn are classified in three classes defined below:

3.2.1 “Extra” class

The cobs of baby corn in this class must be of superior quality, well trimmed, free of husk, stalk and silk, perfectly young cob. They must be free of defects, with the exception of very
slight superficial defects, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package.

3.2.2 Class I

The cobs of baby corn in this class must be of good quality, well trimmed, free of husk and stalk. The following slight defects may be allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package:

(1) slight defects in shape and color;
(2) slight defects in irregular arrangement of undeveloped ovaries
(3) slight defects on the surface such as rubbing, scratches or other mechanical damage. The total defect area must not exceed 5% per cob;
(4) silk attached to and broken from the cob must be minimal without affecting the appearance of the baby corn supplied to consumers.

3.2.3 Class II

This class includes the cobs of baby corn which do not qualify for inclusion in the higher classes, but satisfy the minimum requirements specified in Section 3.1 above. The following defects may be allowed, provided the cobs of baby corn retain their essential characteristics as regards the quality, the keeping quality and presentation:

(1) defects in shape and color;
(2) defects in irregular arrangement of undeveloped ovaries
(3) defects on the surface due to rubbing, scratches or other mechanical damage. The total defect area must not exceed 10% per cob;
(4) silk attached to and broken from the cob must be minimal without affecting the appearance of the baby corn supplied to consumers.

4 PROVISIONS CONCERNING SIZING

Size is determined by the length of the cobs of baby corn measured from the cut at the base to the tip, in accordance with the following table:

Table 1: Size of the cob of baby corn.

<table>
<thead>
<tr>
<th>Size Code</th>
<th>Length (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&gt; 9.0 to 13.0</td>
</tr>
<tr>
<td>2</td>
<td>&gt; 7.0 to 9.0</td>
</tr>
<tr>
<td>3</td>
<td>4.0 to 7.0</td>
</tr>
</tbody>
</table>

For all sizes, the width must be 1.0 to 2.5 cm (measured at the widest part of the cob of baby corn).

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1 Ovaries are generally called khai pla in Thai.
5 PROVISIONS CONCERNING TOLERANCES

Tolerances in respect of quality and size shall be allowed in each package for produce not satisfying the requirements of the class indicated.

5.1 QUALITY TOLERANCES

5.1.1 Extra Class

Five percent by number or weight of cobs of baby corn not satisfying the requirements of the class, but meeting those of Class I or, exceptionally, coming within the tolerance of that Class.

5.1.2 Class I

Ten percent by number or weight of cobs of baby corn not satisfying the requirements of the class, but meeting those of class II or, exceptionally, coming within the tolerance of that Class.

In the case of the cobs of baby corn with incompletely removed husk and stalk, only 5 percent by number or weight of 0.5 cm long of the husk and stalk is allowed. However, the total quality tolerance does not exceed 10 percent by number or weight.

5.1.3 Class II

Ten percent by number or weight of cobs of baby corn satisfying neither the requirements of the class nor the minimum requirements, with the exception of produce affected by rotting or any other deterioration render it unfit for consumption.

In the case of the cobs of baby corn with incompletely removed husk and stalk, only 5 percent by number or weight of 0.5 cm long of the husk and stalk is allowed. However, the total quality tolerance does not exceed 10 percent by number or weight.

5.2 SIZE TOLERANCES

For “Extra class”, 5 percent; and for the other classes 10 percent; by number or weight of cobs of baby corn not satisfying the requirements as regards sizing, but falling within the class immediately above or below those indicated.

6 PROVISIONS CONCERNING PRESENTATION

6.1 UNIFORMITY

The contents of each package must be contain only the cobs of baby corn of the same origin, and be uniform in quality and size. The visible part of the content of the package must be representative of the entire contents.

6.2 PACKAGING

The cobs of baby corn must be packed in such a way as to protect the produce properly. The material used inside the packages must be clean, new including reusable material of food grade quality and of a quality such as to avoid causing any external or internal damage to the produce.
6.2.1 Description of Containers
The containers must meet the quality, hygiene, ventilation and resistance characteristics to ensure suitable handling, shipping and storage of the baby corn. The containers must be free of all foreign matter and smell.

7 MARKING OR LABELLING

7.1 CONSUMER PACKAGES
Each package shall bear the following particulars, legibly marked, and without false or deceptive information.

(1) Nature of the Produce
If the produce is not visible from the outside, each package shall be labeled with the name of the produce “Baby Corn”.

(2) Net weight in grams or kilograms

(3) Distributor information
Name and address of the producer or packer produced or distributor or head office of producer in the country. Name and address of importer for imported baby corn.

(4) Origin of produce
Country of origin, except it is produced for domestic distribution.

(5) Date of packing

(6) Language
Label of produce must be in Thai Language. Produce label for export can be in any language.

7.2 NON-RETAIL CONTAINERS
Each package must bear the following particulars, in the documents accompanying the shipment, in the label or on package, with legibly, indelibly marked and without false or deceptive information.

(1) Nature of Produce
If the produce is not visible from the outside, each package shall be labeled with the name of the produce “Baby Corn”.

(2) Class;

(3) Size, if the produce is classified size (optional)

(4) Net weight in grams or kilograms

(5) Date of packing

(6) Distributor information
Name and address of the producer or packer produced or distributor or head office of producer in the country. Name and address of importer for imported baby corn.

(7) Origin of produce
Country of origin, except it is produced for domestic distribution.
(8) Language
Label of produce must be in Thai Language. Produce label for export can be in any language.

7.3 OFFICIAL INSPECTION MARK OR CERTIFICATION MARK
Comply with the provisions and condition of the inspection or certification agency recognized by Ministry of Agriculture and Cooperatives of Thailand.

8 CONTAMINANTS
Comply with the provisions of relevant regulations and the Thai Agricultural Standard on Contaminant.

9 PESTICIDE RESIDUES
Comply with the provisions of relevant regulations and the Thai Agricultural Standard on Pesticide Residues.

10 HYGIENE
Harvesting, various steps of the baby corn handling including harvesting, storage, packing and transportation must be hygienically carried out in order to prevent any contaminations which will create hazard to the consumer.

11 METHODS OF ANALYSIS AND SAMPLING
Comply with the provisions of relevant regulations and the Thai Agricultural Standard on Methods of Analysis and Sampling.
ANNEX A

THE COBS OF BABY CORN ILLUSTRATION

Fig. A.1: Whole the cobs of baby corn.

Fig. A.2: Abnormal cob of baby corn (toad skin) due to fertilized ovules.
Fig. A.3: Ovary linings are separated (not acceptable).

Fig. A.4: Very thin baby corn (not acceptable).

Fig. A.5: Bottle with neck like baby corn (not acceptable).
Fig. A.6: Various defects of the cobs of baby corn (not acceptable).

Source: Fig. A.3 and A.4 provided by Mrs.Wilaiwan Promkum, Chai Nat Field Crops Research Center, Department of Agriculture.
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:

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Unit</th>
<th>Symbols</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>centimeter</td>
<td>cm</td>
</tr>
</tbody>
</table>