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MS 1075 (2012) (English): Export specification for fresh ‘mas’ bananas
Export specification for fresh ‘mas’ bananas

ICS: 67.080.10

Descriptors: fresh ‘mas’ bananas

NOTE: This MS has been reviewed by the responsible committee and confirmed that its contents are current.

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The attached amendments have been formally approved

22 March 1989

Title and subsequent clauses
Amended to read:
'................. fresh 'mas' banana

Scope, page 1
Amended to read:
'.......... banana Musa (AA Group) 'sucrier' or 'mas'

2.1.2, page 1
Rephrased as:
'Finger diameter. The widest distance measured at the centre of the middle finger of the hand'.

2.1.3, page 1
Rephrased as:
'Finger length. The length measured from the base end of the fruit finger to the apex, on the longer side'.

3.1, page 6
Amended to read:
'The fruit shall be sound, clean, smooth, well-formed and mature green'.

3.2, page 6
To insert:
'................../or' between dead and living insects.
3.6, page 6
Amended to read:
'There should be no more than 2 fingers detached from a hand.'

Table 1, page 6
Amended as follows:

<table>
<thead>
<tr>
<th>Size</th>
<th>Extra large</th>
<th>Large</th>
<th>Medium</th>
<th>Small</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dia. Length</td>
<td>Dia. Length</td>
<td>Dia. Length</td>
<td>Dia. Length</td>
</tr>
<tr>
<td></td>
<td>as</td>
<td>as</td>
<td>as</td>
<td>as</td>
</tr>
<tr>
<td>Measurement (cm)</td>
<td>per 3.0 MS</td>
<td>per 3.0 MS</td>
<td>per 3.0 MS</td>
<td>3.0</td>
</tr>
</tbody>
</table>

5.2, page 7.
Amended to read:
'There shall be two grades for banana, grade premium and grade 1'.

Table 2, page 7.
Grade 1 amended to Grade Premium
Grade 2 amended to Grade 1
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Committee representation

The Food and Agricultural Industry Standards Committee under whose supervision this Malaysian Standard was prepared, comprises representatives from the following Government Ministries, trade, commerce and manufacturer associations and scientific and professional bodies.

Federal Agricultural Marketing Authority
Federation of Malaysian Consumer Associations
Federation of Malaysian Manufacturers
Malaysian Agricultural Research and Development Institute
Ministry of Agriculture (Agriculture Department)
National Chambers of Commerce and Industry of Malaysia
Oil Palm Growers' Council of Malaysia
Rubber Producers' Council of Malaysia
Rubber Research Institute of Malaysia
Universiti Pertanian Malaysia.

The Technical Committee on Fruits - Fresh and Processed which prepared this Malaysian Standard consists of the following representatives:

Dr. Yusop Abu
(Chairman)
Enck Lim Toh Hoy
Enck Lye Tuck Thye
Enck Mohd Hashim Hassan
Enck Mahbob Hj. Md. Amin
Enck Abdullah Hassan
Enck Low Wan Kim
Enck Simon Chow
Enck Michael Gwee Kim Guan
Cik Nik Shabnam Nik Mohd Salleh
Dr. Wan Chee Keong
Cik Radziah Mohd. Daud
(Secretary)

Universiti Pertanian Malaysia
Federation of Malaysian Manufacturers
Agriculture Department
Kumpulan FIMA

Malaysian Agricultural Research and Development Institute
Federal Agricultural Marketing Authority
The Malaysia Pineapple Industry Board
The Central Board of Pineapple Packers
Ministry of Health
Universiti Pertanian Malaysia
Standards and Industrial Research Institute of Malaysia

The Panel on Fresh Fruits, set up by the Technical Committee to assist with the preparation of the Preliminary Draft Malaysian Standard, comprises the following members:

Enck Lim Tuck Thye
(Chairman)
Dr. Wan Chee Keong
Enck Abdullah Hassan
Enck Low Wan Kim
Enck Woo Roi Tang
Enck William Loh Fook Chai
Enck Tan Thim Choy
Encik See Wee Shing
Enck Yee Chee San
Encik Jimmy Tan
Cik Radziah Mohd. Daud
(Secretary)

Agriculture Department
Universiti Pertanian Malaysia
Malaysian Agricultural Research and Development Institute
Federal Agricultural Marketing Authority
Win Long Trading Co.
Ho Sow Chin & Brothers Sdn. Bhd.
CED Import-Export Sdn. Bhd.
Standards and Industrial Research Institute of Malaysia
FOREWORD

This Malaysian Standard Specification was prepared by the Technical Committee on Fruits - Fresh and Processed under the authority of the Food and Agricultural Industry Standards Committee.

The Panel on Fresh Fruits was established to prepare the preliminary draft standard.

It is necessary that this standard be drawn up because of the good market potential of fresh 'Mas' bananas ('pisang mas') both local and overseas and to ensure the competitiveness and facilitate the sale of 'pisang mas' in the export market.

With the existence of the standard on fresh 'Mas' bananas various quality control measures can be followed to ensure that the fruit can be upgraded in quality so as to meet the minimum standard quality, thereby, enhancing the image for the product particularly in overseas market.

In the preparation of this standard specification, references were made to the following:

(a) PTS 051 - 03.00 1970 Phillipines Trade Standard Specification for Bananas - (2nd Revision)
(b) Y-B-91d Bananas Fresh - Federal Specification (1965) Amendment - 2 (1966), USA
(c) Queensland Banana Grade Standards - 1964, Department of Primary Industries, Brisbane
(d) Information given by growers, exporters and various agencies involved in the industry.

This standard MS 1075, 'Specification for fresh 'Mas' bananas' serves as a necessary adjunct to MS 459, 'Specification for fresh bananas'.

EXPORT SPECIFICATION FOR FRESH ‘MAS’ BANANAS

1. SCOPE

1.1 This Malaysian Standard prescribes the requirements of the grades and size, maturity and packing for fresh ‘Mas’ bananas (Musa sapientum cv. ‘sucrier’ or ‘mas’).

2. DEFINITIONS

2.1 For the purpose of this standard specification, the following definitions shall apply:

2.1.1 'Mas' bananas (pisang mas'). A dwarf plant with a yellow-green stem and small hands of fruit. The fruit is generally short and stout. When ripe, the thin skin is of a golden yellow colour and the fruit has a sweet taste with a fine texture and a characteristic aroma.

2.1.2 Diameter. Means the distance measured at the centre of the finger middle from side to side.

2.1.3 Length. Means the length measured from the basal end of the fruit finger to the apex.

2.1.4 Finger. An individual banana fruit.

2.1.5 Hand. The full complement of fingers found attached to the one section of the peduncle.

2.1.6 Cluster. A sub-division of a hand, containing several fingers.

2.1.7 Detached finger. Intermediate finger which is missing in one hand or cluster. The fingers which may be missing at the end of the hand or cluster are not considered.

2.1.8 Loose finger. Finger in one hand which is loose or broken at the neck but still attached to the hand or cluster.

2.1.9 Mature. Having reached the stage of 70% to 90% full development which will ensure a proper completion of the ripening process.

2.1.10 Blemishes. Extraneously induced superficial spotting and/or pitting on the peel which will not affect the eating or transportation qualities of the fruit.

2.1.11 Blemished fruit. Fruit with more than 5% of its surface area covered with blemishes.
2.1.12 *Bruises.* Any mechanical injury that causes the peel of the individual banana to become soft and/or discoloured.

2.1.13 *Damage.* Any defect or injury which materially affects the appearance, eating, or shipping qualities of the banana.

2.1.14 *Growth cracks.* Breaks in the peel, resulting from splitting or tearing.

2.1.15 *Clean.* Free of dirt, stains, other foreign materials and odours.

2.1.16 *Off-size fruit.* Fruit failing to meet with the minimum size requirements for the market.

3. **GENERAL REQUIREMENTS**

3.1 The fruit shall be sound, clean, smooth, well-formed, mature green and shall be reasonably free from growth cracks, damage and bruises.

3.2 The fruit shall be free from disease, dead and living insects, fungal contamination and storage disorders.

3.3 The fruit shall be in hands or clusters.

3.4 The fruit in hands or clusters shall show a smooth cut from the stalk.

3.5 The fruit shall be from healthy trees.

3.6 Some markets may not accept hands or clusters with detached fingers and/or loose fingers.

4. **SIZE CLASSIFICATION**

4.1 The fruits shall be classified according to the length and diameter as shown in table 1.

<table>
<thead>
<tr>
<th>Size</th>
<th>Extra large</th>
<th>Large</th>
<th>Medium</th>
<th>Small</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement cm</td>
<td>Length</td>
<td>Diameter</td>
<td>Length</td>
<td>Diameter</td>
</tr>
<tr>
<td>more than 11.0</td>
<td>3.0 to 4.0</td>
<td>10.0 to 11.0</td>
<td>3.0 to 4.0</td>
<td>5.5 to 9.0</td>
</tr>
<tr>
<td>Acceptable level (cm)</td>
<td>10.0 to 11.0</td>
<td>above 4.0 to 9.9</td>
<td>above 4.0 to 8.4</td>
<td>above 4.0 to 7.9</td>
</tr>
</tbody>
</table>
5. **GRADE REQUIREMENTS**

5.1 Each class shall be graded according to its general appearance, quality and condition.

5.2 There shall be two grades for bananas, grade 1 and grade 2.

5.3 Bananas shall be graded in accordance with the requirements of table 2.

5.4 Bananas not graded to the minimum grade requirements set in table 2, shall be categorized as 'Unclassified bananas'.

---

**Table 2. Grades for 'Mas' bananas**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Tolerance permitted per hand or cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grade 1</td>
</tr>
<tr>
<td>Blemished fruit, as % max. by number</td>
<td>10.0</td>
</tr>
<tr>
<td>Damaged bananas, as % max. by number</td>
<td>Nil</td>
</tr>
<tr>
<td>Off-size fruit, % max. by number</td>
<td>5.0</td>
</tr>
</tbody>
</table>

---

6. **PACKING AND MARKING**

6.1 **Packaging**

6.1.1 Where packaging is necessary, bananas shall be packed in the following way:

In clusters, hands or in combinations of both, packed in containers of suitable material such as corrugated paper (or equivalent) of such minimum nett weight as agreed upon between the buyer and the seller.

6.1.2 No pack shall consist of bananas of more than one size classification and grade.

6.2 Each individual pack shall be marked to give the following information:

(a) name of the cultivar;
(b) name and address of the producer (and/or exporter);
(c) gross/nett weight in kg;
(d) size classification;
(e) grade;
(f) date of packing, if necessary.
7. SAMPLING

7.1 Sampling shall be carried out in accordance with the procedures laid down in MS 78, 'Method of sampling fresh fruits'.

8. COMPLIANCE WITH THE SPECIFICATION

8.1 When found to conform to the requirements specified in this Malaysian Standard Specification, the lot, batch or consignment from which the samples have been drawn, shall be deemed to comply with this Malaysian Standard Specification.