



# *Federation of Malaysia*



## **EDICT OF GOVERNMENT**



In order to promote public education and public safety, equal justice for all, a better informed citizenry, the rule of law, world trade and world peace, this legal document is hereby made available on a noncommercial basis, as it is the right of all humans to know and speak the laws that govern them.

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



BLANK PAGE





# MALAYSIAN STANDARD

MS 1075:1987,  
Including AMD. 1:1989  
(CONFIRMED:2012)

## 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

© Copyright 2012

DEPARTMENT OF STANDARDS MALAYSIA



## DEVELOPMENT OF MALAYSIAN STANDARDS

The **Department of Standards Malaysia (STANDARDS MALAYSIA)** is the national standards and accreditation body of Malaysia.

The main function of STANDARDS MALAYSIA is to foster and promote standards, standardisation and accreditation as a means of advancing the national economy, promoting industrial efficiency and development, benefiting the health and safety of the public, protecting the consumers, facilitating domestic and international trade and furthering international cooperation in relation to standards and standardisation.

Malaysian Standards (MS) are developed through consensus by committees which comprise balanced representation of producers, users, consumers and others with relevant interests, as may be appropriate to the subject at hand. To the greatest extent possible, Malaysian Standards are aligned to or are adoption of international standards. Approval of a standard as a Malaysian Standard is governed by the Standards of Malaysia Act 1996 [Act 549]. Malaysian Standards are reviewed periodically. The use of Malaysian Standards is voluntary except in so far as they are made mandatory by regulatory authorities by means of regulations, local by-laws or any other similar ways.

For the purposes of Malaysian Standards, the following definitions apply:

**Revision:** A process where existing Malaysian Standard is reviewed and updated which resulted in the publication of a new edition of the Malaysian Standard.

**Confirmed MS:** A Malaysian Standard that has been reviewed by the responsible committee and confirmed that its contents are current.

**Amendment:** A process where a provision(s) of existing Malaysian Standard is altered. The changes are indicated in an amendment page which is incorporated into the existing Malaysian Standard. Amendments can be of technical and/or editorial nature.

**Technical corrigendum:** A corrected reprint of the current edition which is issued to correct either a technical error or ambiguity in a Malaysian Standard inadvertently introduced either in drafting or in printing and which could lead to incorrect or unsafe application of the publication.

NOTE: Technical corrigenda are not to correct errors which can be assumed to have no consequences in the application of the MS, for example minor printing errors.

STANDARDS MALAYSIA has appointed **SIRIM Berhad** as the agent to develop, distribute and sell Malaysian Standards.

For further information on Malaysian Standards, please contact:

**Department of Standards Malaysia**  
Ministry of Science, Technology and Innovation  
Level 1 & 2, Block 2300, Century Square  
Jalan Usahawan  
63000 Cyberjaya  
Selangor Darul Ehsan  
MALAYSIA

Tel: 60 3 8318 0002  
Fax: 60 3 8319 3131  
<http://www.standardsmalaysia.gov.my>  
E-mail: [central@standardsmalaysia.gov.my](mailto:central@standardsmalaysia.gov.my)

OR **SIRIM Berhad**  
(Company No. 367474 - V)  
1, Persiaran Dato' Menteri  
Section 2, P. O. Box 7035  
40700 Shah Alam  
Selangor Darul Ehsan  
MALAYSIA

Tel: 60 3 5544 6000  
Fax: 60 3 5510 8095  
<http://www.sirim.my>  
E-mail: [msonline@sirim.my](mailto:msonline@sirim.my)

STANDARDS AND INDUSTRIAL RESEARCH INSTITUTE OF MALAYSIA

MS 1075 : 1987

EXPORT SPECIFICATION FOR FRESH 'MAS' BANANA

The attached amendments have been formally approved

22 March 1989

Amd. 1

---

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 basal 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 :

Size	Extra large		Large		Medium		Small	
	Length	Dia- meter	Length	Dia- meter	Length	Dia- meter	Length	Dia- meter
Measurement (cm)	as per MS	above 3.0	as per MS	as per MS	as per MS	2.5 to 3.0	7.0 to 8.4	Not less 2.0

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

## CONTENTS

		Page
	Committee representation	3
	Foreword	4
1	Scope	5
2	Definitions	5
3	General requirements	6
4	Size classification	6
5	Grade requirements	7
6	Packing and marking	7
7	Sampling	8
8	Compliance with the specification	8
Tables		
1	Size classification	6
2	Grades for 'Mas' bananas	7

## 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)  
Encik Lim Toh Hoy  
Encik Lye Tuck Thye  
Encik Mohd Hashim Hassan  
Encik Mahbob Hj. Md. Amin  
Encik Abdullah Hassan  
Encik Low Wan Kim  
Encik Simon Chow  
Encik 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 Malayasin 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:

Encik Lim Tuck Thye  
(Chairman)  
Dr. Wan Chee Keong  
Encik Abdullah Hassan  
Encik Low Wan Kim  
Encik Woo Hoi Yuen  
Encik William Loh Fook Chai  
Encik Tan Thim Choy  
Encik Joe Doraisamy  
Encik 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  
Woo Hoi Yuen & Co. Sdn. Bhd.  
Jern Jia Implex Sdn. Bhd.  
Win Long Trading Co.  
Ho Sow Chin & Brothers Sdn. Bhd.  
Geakco 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 1. Size classification

Size	Extra large		Large		Medium		Small	
Measurement cm	Length	Diameter	Length	Diameter	Length	Diameter	Length	Diameter
	more than 11.0	3.0 to 4.0	10.0 to 11.0	3.0 to 4.0	8.5 to 9.9	3.0 to 4.0	8.0 to 8.4	3.0 to 4.0
Acceptable level (cm)	10.0 and above	above 4.0	8.5 to 9.9	above 4.0	8.0 to 8.4	above 4.0	6.0 to 7.9	above 4.0

## 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

Factor	Tolerance permitted per hand or cluster	
	Grade 1	Grade 2
Blemished fruit, as % max. by number	10.0	15.0
Damaged bananas, as % max. by number	Nil	5.0
Off-size fruit, % max. by number	5.0	10.0

## 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.