



## **CARICOM REGIONAL STANDARD**

### **SPECIFICATION FOR GRADES OF FRESH AGRICULTURAL PRODUCE**

#### **- BANANAS**

#### **FDCRS 24: PART 1: 201X**

**(1<sup>st</sup> Revision)**

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## Committee representation

This CARICOM Regional Standard was developed under the supervision of the CARICOM Regional **Technical Committee # 7 (RTC 7) for Agricultural Produce** (hosted by the CARICOM Member State, **Dominica**) which was at the time comprised of the following members:

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## FOREWARD

This CARICOM Regional Standard *CRS 24: Part 1: 202X, Bananas – Specification for Grades of Fresh Agricultural Produce (1st Revision)* has been developed under the authority of the CARICOM Regional Organisation for Standards and Quality (CROSQ). It was approved as a CARICOM Regional Standard by the CARICOM Council for Trade and Economic Development (COTED) at its XX Meeting in XXXX.

This standard is a revision of and supersedes CRS 24: Part 1: 2010: CARICOM Regional Standard Specification for Grades of Fresh Agriculture Produce, Part 1: Bananas.

This standard is intended to establish the minimum requirements for fresh dessert bananas. It is equivalent to NORDOM 483 1<sup>st</sup> revision *Fresh Banana (Musa sapientum, spp.) – Specifications and Classifications*.

FDCRS 24 Part 1- Bananas for Voting (07 June - 09 July, 2021)

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## 1 Scope

This standard applies to all commercial cultivars of dessert bananas obtained from the *Musa* spp., of the *Musaceae* family, in the green state and offered fresh to consumers, after they have been processed, packaged and conditioned.

This standard shall not apply to:

- a) cooking bananas;
- b) plantains; and
- c) bananas for industrial manufacturing

## 2 Normative references

The following documents are referenced and are essential for the implementation of this document. For dated references, only the edition cited shall apply. For undated references, the latest edition of the referenced document (including any amendments) shall apply.

CAC/GL 21	Codex Principles for the Establishment and Application of Microbiological Criteria for Food
CAC/MRL 1	Codex Maximum Residue Limits for Pesticides
CAC/RCP 44	Codex Recommended International Code for Packaging and Transport of Tropical Fresh Fruits and Vegetables
CAC/RCP 53	Codex Code of Hygiene Practices for Fresh Fruits and Vegetables
CODEX STAN 193	Codex General Standard for Contaminants and Toxins in Food and Feed
CRCP 5	CARICOM Regional Code of Practice for General Principles of Food Hygiene
CRS 5	CARICOM Regional Standard for Labelling of Pre-Packaged Foods
CRS 24: Part 1: 2010	CARICOM Regional Standard Specification for Grades of Fresh Agriculture Produce Part 1: Bananas

## 3 Terms and definitions

For the purpose of this standard the following terms and definitions shall apply.

### 3.1

#### **blemish**

any physical injury affecting the surface of the banana which detract from its natural appearance, but does not affect its quality such as healed scars, scab, crusting, cracks and spots

### 3.2

#### **bunch**

all the fingers and hands of the banana are intact and attached to their stalk

### 3.3

#### **bunch stalk**

the stalk that supports the banana hands

### **3.4**

#### **cluster**

a unit having no fewer than three banana fingers and no more than eight banana fingers attached to the crown

### **3.5**

#### **cultivar**

a cultivated (the act of caring for or growing plants) variety of the plant

### **3.6**

#### **crown**

the portion of the stalk that connects the fingers of a hand together

#### **3.6.1.**

##### **normal colour**

same as where the crown connects to the stalk and the cut surface of the crown should be clear latex-like

### **3.7**

#### **finger**

common name of the individual fruit

### **3.8**

#### **hand**

all fingers of the same crown are intact and attached to each other

### **3.9.**

#### **National Competent Authority**

a Ministry, State Agency or other national entity that is legally authorized to administer any requirement pertaining to agricultural produce

### **3.10**

#### **pedicel**

the tissue that connects the finger to the crown

### **3.11**

#### **pests**

both pests and diseases of bananas including rodents, birds, slugs, nematodes, insect pests such as aphids, mites, thrips, fruit fly and caterpillars; and viral, bacterial and fungal diseases

### **3.12**

#### **pistil**

female flowers attached to the blossom end of the finger

## **4 Quality**

### **4.1. Minimum requirements**

4.1.1. In all Classes, according to special provisions for each Class and the tolerances allowed, the bananas shall:

- a) be whole (taking the finger as the reference);
- b) be of firm consistency;
- c) be sound and free from rotting or damage that makes them unfit for human consumption;
- d) be practically free from damage by pests;



- e) be practically free from bruising damage;
- f) be practically free from any pests affecting the physical characteristics of the produce;
- g) be clean and practically free from any visible foreign substance;
- h) be practically free from malformations or abnormal curvature of the fingers;
- i) be free from any foreign odour and/or taste;
- j) have the pistils removed;
- k) have the pedicel and crown intact, not bent or with mechanical damage, or desiccated or with symptoms of stress;
- l) be free from damage caused by excessive temperatures; and
- m) be free from abnormal external moisture, with the exception of condensation following removal from cold storage, and bananas packaged in modified atmosphere.

**4.1.2** In addition, clusters and hands shall include the following:

- a) sufficient portion of the crown in normal colour, sound and free from contamination by pests and pesticide residues; and
- b) clean cut crown, not torn or have pointed edges and without fragments of the stalk.

**4.1.3** The development and condition of the bananas shall be such to enable them to:

- a) achieve the appropriate stage of physiological maturity, according with the particular characteristics of the cultivar;
- b) withstand the handling and transport; and
- c) arrive at the place of destination in a suitable condition that will allow them to ripen satisfactorily.

## **5 Classification**

Banana quality shall be classified as Class "Extra", Class I and Class II.

### **5.1 Class "Extra"**

Bananas in this category shall be of superior quality and have the characteristics of the cultivar. The fingers shall not have defects, except very mild superficial defects that do not affect the general physical characteristics of the produce, its quality, keeping quality, and presentation in the package.

### **5.2 Class I**

**5.2.1** Bananas in this category shall be of good quality and have the characteristics of the cultivar. The following mild defects are allowed, as long as they do not affect the general physical characteristics of the produce, its quality, keeping quality, and presentation in the package:

- a) mild defects of shape and colour; and
- b) mild defects of the skin caused by rubbing and other superficial defects, not exceeding 2 cm<sup>2</sup> (0.31 in<sup>2</sup>) of the total surface area.

5.2.2 In any case, the defects shall not affect the pulp (edible part) of the finger.

### 5.3 Class II

5.3.1 This category shall comprise bananas that do not qualify for inclusion in the higher Classes, however satisfy the minimum requirements of Section 1. The following defects shall be allowed as long as the bananas preserve their essential characteristics of quality, keeping quality, and presentation in the package:

- a) defects of shape and colour, as long as the produce maintains normal banana characteristics; and
- b) defects of the skin caused by scratching, blemishes, rubbing and other superficial defects not exceeding 4 cm<sup>2</sup> of the total surface area.

5.3.2 In any case, the defects shall not affect the pulp of the finger.

### 5.4 Classification of cultivars

5.4.1 Cultivars of Bananas are classified in accordance to Table 1

**Table 1 - List of Dessert Banana Groups, Sub-Groups & Cultivars**

Groups	Sub-Groups	Principal Cultivars
AA	Sweet-fig	Sweet-Fig, Pisang Mas, Amas Date, Bocadillo
AB	Ney Poovan	Ney Poovan, Safet Velchi
AAA	Cavendish	Dwarf Cavendish, Giant Cavendish, Lacatan, Poyo (Robusta), Williams, Dwarf Giant, Americani, Valery, Arvis
	Gros Michel	Gros Michel, Highgate
	Pink Fig	Pink Fig, Green Pink Fig
	Ibota	
AAB	Apple Fig	Apple Fig, Silk
	Pome (prata)	Pacovan, Prata Ana
	Mysore	Mysore, Pisa

## 6 Size

6.1 For the purpose of sizing banana of the Gros Michel and Cavendish sub-groups:

- a) the length shall be determined by measuring along the outer curvature of the finger, from the blossom end (tip of the banana) to the base of the pedicel at the stalk end (end closest to the crown); and
- b) the diameter shall be determined by measuring the thickness of the cross-wise section between the lateral faces of the finger.

6.2 The reference finger for measuring length and diameter:

- a) for clusters, it shall be the finger next to the cut section of the hand, on the exterior row of the cluster; and
- b) for hands, it shall be the middle finger of the exterior row of the hand.

6.3 The minimum length shall be no less than 14.0 cm (5.51 in) and the minimum diameter shall be no less than 2.7 cm (1.06 in).

## 7 Tolerances

### 7.1. Quality Tolerance

Produce that do not meet the requirements of a specific Class shall be allowed certain quality and size tolerances.

#### 7.1.1 Class "Extra"

Five percent (5 %) by number or weight of bananas not satisfying the requirements of this Class but meeting the requirements of Class I, or in exceptional cases, coming within the tolerances of that Class.

#### 7.1.2 Class I

Ten percent (10 %) by number or weight of bananas not satisfying the requirements of this Class but meeting the requirements of Class II, or in exceptional cases, coming within the tolerances of that Class.

#### 7.1.3 Class II

Ten percent (10 %) by number or weight of bananas not satisfying the requirements of this Class or the minimum requirements, with the exception of produces affected by rotting, notable imperfections or any other type of damage that make them unfit for human consumption.

### 7.2 Size Tolerances

All Classes shall allow 10 % by number and weight of bananas not satisfying the size requirements but coming within the size immediately above or below to those indicated in Section 6.

## 8 Requirements for presentation

### 8.1 Uniformity

The contents of each package shall be uniform and contain only bananas of the same origin, quality, size and cultivar. The visible part of the contents in the package shall be representative of its entire contents.

### 8.2 Packaging

8.2.1 Bananas shall be packaged such that:

- a) the packaging shall properly protect the produce;
- b) the materials inside the package shall be new, clean and of a nature so as to avoid any internal or external damage to the produce;
- c) the use of paper or seals with commercial instructions shall be allowed as long as the printing or labelling is with non-toxic ink or adhesives;
- d) the packages shall be compliant with *CAC/RCP 44 - Codex Recommended International Code for Packaging and Transport of Tropical Fresh Fruits and Vegetables*;
- e) the packages shall be free of foreign matter;
- f) the packages shall meet the quality, hygiene, air circulation, and resistance characteristics necessary for ensuring the appropriate management, handling, transport and preservation of bananas; and
- g) the packages shall be free from any foreign odour or substance.

## **8.3 Presentation**

**8.3.1** Bananas shall be presented as clusters or as single fingers. There shall be no mixing of single fingers together with clusters in the same package.

**8.3.2** The package shall contain no more than one three-finger cluster per row, having the same characteristics of the other bananas in the package.

## **9 Marking or labelling requirements**

### **9.1 General**

The requirements established in *CRS 5 - CARICOM Regional Standard for Labelling of Pre-Packaged Foods*, shall apply.

### **9.2 Consumer Packages**

If the produce is not visible from the outside, each package shall be labelled with the name of the produce.

NOTE The name of the cultivar is optional.

### **9.3 Non-Retail Packages**

**9.3.1** Each package shall have the following particulars in writing, grouped on the same side, marked in a legible and indelible way; and visible from the outside or in the documents accompanying the shipment:

#### **9.3.1.1 Identification**

- a) name and address of the exporter, packager and or shipper;
- b) the Identification Code is optional.

#### **9.3.1.2 Nature of the Produce**

- a) name of the produce if the content is not visible from the exterior;
- b) the name of the cultivar or commercial type is optional.

#### **9.3.1.3 Country of Origin**

- a) name of the country of origin;
- b) the local name of the place, production district or region within the country is optional.

#### **9.3.1.4 Commercial Specifications**

- a) name of the Class
- b) bananas in fingers (if applicable)
- c) net weight is optional.

### **9.3.1.5 Official Inspection Mark**

This mark is optional and shall be awarded by the National Competent Authority of the country of origin.

## **10 Contaminants**

### **10.1 Heavy metals**

Bananas shall comply with the maximum levels for heavy metals established by the latest edition of *CODEX STAN 193 - Codex General Standard for Contaminants and Toxins in Food and Feed*.

### **10.2 Pesticides residues**

Bananas shall comply with the maximum levels for pesticides residue established by the latest edition of *CAC/MRL 1 - Maximum Residue Limits for Pesticides*.

## **11 Hygiene and sanitation**

**11.1** It is recommended that the produce covered in this Standard be prepared and handled in conformity with the requirements of the latest edition of *CRS 5 - CARICOM Regional Standard Code of Practice for Food Hygiene* and *CAC/RCP 53 - Codex Code of Hygienic Practice for Fresh Fruits and Vegetables*.

**11.2** The produce shall comply with any microbiological criteria established in conformity with the *CAC/GL 21-1997- Codex Principles for the Establishment and Application of Microbiological Criteria for Foods*.

**11.3** When tested using the appropriate testing and sampling methods, the produce shall:

- a) be free from any microorganisms in amounts that may represent a health risk;
- b) be free from any parasites that may represent a health risk; and
- c) be free from any substance generated by a microorganism that may represent a health risk.

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