



BAHAMAS NATIONAL STANDARD

SPECIFICATION FOR GRADES OF FRESH AGRICULTURAL PRODUCE

PART 5: MANGOES

FBNS CRS 24: PART 5: 2010

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AMENDMENTS ISSUED SINCE PUBLICATION

AMENDMENT NO.	DATE OF ISSUE	TYPE OF AMENDMENT	NO. OF TEXT AFFECTED	TEXT OF AMENDMENT

BBSQ Foreword

This draft national standard is identical to Caribbean Regional Organisation of Standards and Quality CRS 24: PART 5: 2010. The national committee responsible for reviewing this standard is Technical Committee 15 Food and Food Products. The standard contains the requirements relevant for The Bahamas.

BBSQ Committee Representation

This Bahamas National Standard was adopted as a national standard under the supervision of the National Technical Committee for Food and Food Products (NTC 15) hosted by The Bahamas Bureau of Standards and Quality which at the time comprised of the following members:

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Dr. Patricia Johnson	Bahamas Food Safety Authority
Ms. Shania Smith	Department of Environmental Health Services
Ms. Destinae Munroe	Department of Environmental Health Services
Ms. Kristen Brochu	University of the Bahamas
Ms. Kellie Rolle	Bahamas Food Safety Authority
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Ms. Raquel Turnquest	Bahamas Department of Education
Ms. Theresa Dorsett	Office of the Auditor General
Ms. Mona Nixon	Bahamas Agricultural and Industrial Corporation
Mr. Joshua Symonette	Independent
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Ms. Yvette R. Charlton	Presidential Suites
Ms. Marissa Stubbs	Consumer
Ms. Micah Carey	Quiose Wines
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Ms. Felistar Butler	Bahamas Food Safety Authority

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Ms. Patrice Adderley	We Buy Sell
Ms. Tamara Munroe	Independent
Mr. Peter Bethell	Police
Mr. Owen Coakley	Princess Margaret Hospital
Ms. Camelta Barnes	Ministry of Health and Wellness
Ms. Michelle Bowleg	Cryshelle's tasty tingz & Cryshelle's Infused Drinks
Mr. Tony Smith	Andros Crab Farm
Ms. Charo Morley	Bahamas Chamber of Commerce
Ms. Tonjia Burrows	Bahamas Agricultural and Industrial Corporation
Ms. Kimberly Trowers	Bahamas Agricultural Health & Food Safety Authority
Ms. Melvern E. Symonette	Public Hospitals Authority – Princess Margaret Hospital
Ms. Camille Stephen	Princess Margaret Hospital
Ms. Joyanne Thompson	University of The Bahamas
Mr. Owen Coakley	Princess Margaret Hospital
Ms. Denise Worrell	Naturally Bahamian
Mr. Long Water	Long Bay Enterprises T/A Out Island Water Company
Mr. Andre Newbold	Royal Bahamas Defense Force
Officer Ingraham	Royal Bahamas Defense Force
Mr. Troy Smith	Andros Crab Forum
Ms. Ethuce Cooper	Ministry of Social Services
Dr. Cherita Moxey	Ministry of Health and Wellness
Ms. Nastazia Hepburn	Ministry of Health and Wellness
Mr. Delmon Rolle	Ministry of Agriculture
Ms. Tiara Stubbs	Ministry of Finance
Ms. Avis Richardson	Food Safety Testing Laboratory
Mr. Elvis Bullard	Royal Bahamas Defense Force

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ATTACHMENT PAGE FOR CRS AMENDMENT SHEETS

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Committee representation

This CARICOM Regional Standard was prepared under the supervision of the Regional Technical Committee for Agricultural Commodities (RTC 19), (hosted by the CARICOM Member State, Dominica), which at the time comprised the following members:

Members

Mr. Lloyd Pascal (**Chairperson**)

Mr. Ricky Allport

Mr. Ryan Anselm

Mr. Peter Dominique

Mr. Clement Ferreira

Mr. Cecil Joseph

Mr. Rawle Leslie

Mr. Angus McIntyre

Dr. Gregory Robin, PhD

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Mr. Delroy Williams

Dr. Nadia Pacquette – Anselm (**Technical Secretary**)

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Division of Agriculture, Dominica

Plant protection and Quarantine Services,
Dominica

Parry W. Bellot & Co. Ltd

Nature's Best, Dominica

Dominica Hucksters Association (1995) Ltd.
(DHA)

Dominica State College – Agriculture Faculty

Windward Island Banana Development
Cooperation (WIBDECO)

Caribbean Research and Development
Institute (CARDI)

Inter-American Institute for Cooperation on
Agriculture (IICA)

National Association of Youth in Agriculture
(NAYA)

Dominica Bureau of Standards

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Foreword

This CARICOM Regional Standard was developed in an effort to:

- a) avoid misunderstanding and confusion among those involved in the marketing chain;
- b) provide an objective basis for relating price to quality;
- c) encourage better selection, packaging and presentation of produce as a means of obtaining greater income overall; and
- d) assist exporters and their countries in meeting export market requirements and thereby enhancing their reputation and market position.

This standard was approved by the Twenty-ninth Council for Trade and Economic Development (COTED) on 8-9 February 2010.

In the development of this standard, assistance was derived from the following:

- a) CODEX STAN 184-1993, CODEX Standard for Mangoes;
- b) Guyana Standard, GYS 26:2005, Specification for Mangoes;
- c) UNECE Standard, FFV-45 concerning the marketing and commercial quality control of Mangoes, 1988, Revised 1991.

NOTE During the development of this standard, the CARICOM Regional Code of Practice for Food Hygiene was still under development.

1 Scope

This Standard specifies the quality requirements for commercial varieties of mangoes grown from *Mangifera indica* L., of the *Anacardiaceae* family, to be supplied fresh to the consumer after preparation and packaging.

This standard does not apply to mangoes for industrial processing.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CARICOM Regional Code of Practice for Food Hygiene

CODEX Alimentarius Commission, CAC/RCP 44, Code of Practice for packaging and transport of tropical fresh fruits and vegetables

3 Terms and definitions

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

3.1

blemish

any physical injury affecting the surface of the fruit, such as scars or scratches, which detracts from its natural appearance, but will not significantly affect its shelf life

3.2

clean

free from loose or adhering soil and all foreign matter

3.3

damaged

defect or combination of defects which materially detract from the appearance or edible quality of the fruit such as bruises, cuts, insect damage, or damage caused by physiological disorder

3.4

firm

not soft or noticeably wilted and skin not swollen

3.5

free from disease

free from any visible evidence of moulds, fungal and bacterial rots, spots or any symptoms of viral infection

3.6

insect free

no signs of insects at any stage of development present on or in the fruit or in the package

3.7

lot

two or more mangoes whether or not packaged, but sold as one distinct and separate group

3.8

mature

stage of development where optimum growth characteristics of the variety are attained that will ensure the proper completion of the ripening process

3.9

properly trimmed

stalk is intact and not more than 6 mm (1/4 inch) long

3.10

similar varietal characteristics

flesh, skin and flesh colour, odour, shape and size typical of the variety

3.11

sound

produce not affected by rotting or deterioration which makes it unfit for consumption

3.12

well formed

shape is characteristic of the variety and is symmetrical without irregularities in shape

4 Requirements

4.1 Quality

4.1.1 Minimum requirements

4.1.1.1 Mangoes shall meet or exceed the following minimum requirements subject to the special provisions of 4.1.2 and 4.2:

- a) intact;
- b) firm;
- c) fresh in appearance;
- d) sound;
- e) clean;
- f) free from black necrotic stains or trails which extend under the skin;
- g) free from marked bruising;
- h) free from pests and damage caused by pests;
- i) free from damage caused by low/high temperature;
- j) free from abnormal external moisture, excluding condensation following withdrawal from cold storage;
- k) free of any foreign smell and or taste;
- l) sufficiently developed and display satisfactory ripeness;
- m) a peduncle no longer than 1 cm (when present);
- n) mature;
- o) of similar maturity stages; and
- p) of the same variety.

4.1.1.2 Mangoes shall be sufficiently developed, displaying satisfactory ripeness.

4.1.1.3 Mangoes shall be carefully picked at the stage of physiological development so as to enable them to:

- a) ensure a continuation of the ripening process and reach the appropriate degree of ripeness corresponding to the varietal characteristics;
- b) withstand transportation and handling; and
- c) arrive in satisfactory condition at the place of destination

NOTE In relation to the evolution of maturing, the colour may vary according to variety.

4.1.2 Classifications

Mangoes shall be classified as Classes I, II and III.

4.1.2.1 Class 1

Mangoes in this class shall meet the following requirements:

- a) be of superior quality;
- b) shape and colouring characteristic of the variety; and
- c) free of defects, with the exception of very slight superficial defects provided these do not affect their general appearance, quality, keeping quality and presentation in the package

4.1.2.2 Class II

Mangoes in this class shall meet the following requirements:

- a) be of good quality;
- b) be characteristic of the variety; and
- c) contain slight defects as follows, provided they 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
 - 2) slight defects of the skin due to rubbing or sunburn, suberized stains due to resin exudation (elongated trails included) and healed bruises not exceeding 5 cm².

NOTE Scattered rusty lenticels and a yellowing of green varieties (due to exposure to direct sunlight, not exceeding 40 % of the surface of the fruit, excluding necrotic stains) are also allowed.

4.1.2.3 Class III

Mangoes in this class satisfy the minimum requirements specified in 4.1.1. The following defects may be allowed provided the mangoes retain their essential characteristics with regards to the quality, the keeping quality and presentation:

- a) defects in shape; and
- b) defects of skin due to rubbing or sunburn suberized stains due to resin exudation (elongated trails included) and healed bruises not exceeding 7 cm².

NOTE Scattered rusty lenticels and a yellowing of green varieties (due to exposure to direct sunlight, not exceeding 40 % of the surface of the fruit, excluding necrotic stains) are also allowed.

4.2 Tolerances

Each class shall be allowed a degree of tolerance with respect to quality and size in each package for mangoes not satisfying the requirements of the class indicated.

4.2.1 Quality tolerances

4.2.1.1 Class I

5 % by number or weight of mangoes not satisfying the requirements of this class but meeting those of Class II or, exceptionally, coming within the tolerances of that class.

4.2.1.2 Class II

10 % by number or weight of mangoes not satisfying the requirements of this class but meeting those of Class III or, exceptionally, coming within the tolerances of that class.

4.2.1.3 Class III

10 % by number or weight of mangoes satisfying neither the requirements of this class nor the minimum requirements, with the exception of fruit affected by rotting, marked bruising or any other deterioration rendering it unfit for human consumption.

4.3 Size

Size is determined by the market requirements and should be specific to the variety.

5 Presentation

5.1 Uniformity

5.1.1 The contents of each package shall be uniform and contain only mangoes of the same origin, variety, quality and size.

5.1.2 The visible part of the contents of the package shall be representative of the entire contents.

5.2 Packaging

5.2.1 Mangoes shall be packed in such a way as to adequately protect the produce.

5.2.2 The materials used inside the package shall be new, clean and of a quality such as to avoid causing any external or internal damage to the produce.

NOTE 1 For the purposes of this standard, new material includes recycled material of food-grade quality.

NOTE 2 The use of materials and particularly paper or stamps bearing trade specifications is allowed provided the printing or labelling has been done with non-toxic ink or glue.

5.2.3 Packages shall be free of all foreign matter.

5.2.4 Mangoes shall be packed in each container in compliance with the latest edition of CAC/RCP 44, Code of Practice for packaging and transport of tropical fresh fruits and vegetables.

5.3 Labelling

Each package of mangoes shall bear the following particulars, in letters grouped on the same side, legibly and indelibly marked, and visible from the outside:

- a) identification (name and address of the Packer and or Dispatcher);
- b) nature of the produce as follows:
 - 1) "Mangoes" if the contents are not visible from the outside; and
 - 2) name of the variety;
- c) country of origin; and

NOTE District where grown or national, regional or local place name is optional.

- d) commercial specifications as follows:
 - 1) class;
 - 2) size expressed as minimum and maximum weight;
 - 3) number of fruit; and
 - 4) batch number.

NOTE 1 Size code for commercial specifications is optional.

NOTE 2 Official control mark is optional.

NOTE 3 The use of red or orange should be avoided since these colours are used in the labelling of dangerous goods.

6 Contaminants

6.1 Heavy metals

Mangoes shall comply with those maximum levels for heavy metals established by the CODEX Alimentarius Commission for this commodity.

6.2 Pesticide residues

Mangoes shall comply with those maximum residue limits established by the CODEX Alimentarius Commission for this commodity.

7 Hygiene and sanitation

7.1 It is recommended that the produce covered by the provisions of this standard be prepared and handled in conjunction with the appropriate clauses of the latest edition of the CARICOM Regional Code of Practice for Food Hygiene or other international Codes of Practice which are relevant to this commodity.

7.2 In keeping with good manufacturing practice, the product shall be free from objectionable matter.

7.3 When tested by approved methods of sampling and examination, the product shall:

- a) be free from microorganisms in amounts which may represent a hazard to health;
- b) be free from pests which may represent a hazard to health; and
- c) not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

6.4 Mangoes shall comply with Sanitary and Phyto-sanitary requirements of both the importing and exporting countries.

End of document

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