Caribbean Community

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CRS 24-7 (2010) (English): Pineapples



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CARICOM REGIONAL STANDARD

Specification for grades of fresh agricultural produce

Part 7: Pineapples

CRS 24: Part 7: 2010



Caribbean Community



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Committee representation

This CARICOM Regional Standard was developed 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	Representing
Mr. Lloyd Pascal (Chairperson)	Dominica Export Import Agency (DEXIA)
Mr. Ricky Allport	Division of Agriculture, Dominica
Mr. Ryan Anselm	Plant protection and Quarantine Services, Dominica
Mr. Kent Coipel	Inter-American Institute for Cooperation on Agriculture (IICA)
Mr. Clement Ferreira	Nature's Best, Dominica
Mrs. Marcella Harris	Windward Islands Farmers Association (WINFA)
Mr. Cecil Joseph	Dominica Hucksters Association (1995) Ltd. (DHA)
Mr. Rawle Leslie	Dominica State College – Agriculture Faculty
Mr. Angus McIntyre	Windward Island Banana Development Cooperation (WIBDECO)
Dr. Gregory Robin, PhD	Caribbean Research and Development Institute (CARDI)
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Foreword

This CARICOM Regional Standard was developed to improve the regional and international market competitiveness of Pineapples and to address critical concerns relating to quality in the production, processing and packaging of Pineapples in the region.

These measures are expected to assist all stakeholders engaged in the production, packaging, distribution and sale of Pineapples in ensuring compliance with minimum requirements for Pineapples for commercial use.

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

In developing this standard reference was made to:

- a) CODEX Standard for Pineapples (CODEX STAN 182-1993, Rev 1-1999; AMD 1-2005);
- b) United States Standards for Grades of Pineapples, 1997;
- c) UNECE Standard FFV-49 concerning the marketing and commercial quality control of Pineapples, 2004;
- d) Guyana Standard, GYS 2:2005, Specifications for Pineapples;
- e) Frehfel EUROPE Marketing Standards for Pineapples (Ananas comosus L.).

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 requirements for pineapples (Ananas comosus (L.) Merr. of the Bromoeliceae family), which are to be supplied fresh to the consumer at the import and export control stage, after preparation and packaging.

This standard does not apply to pineapples for ornamental use or 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.

CODEX Alimentarius Commission, Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997)

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 fruits, such as scars or healed scratches, which detracts from its natural appearance, but will not significantly affect its shelf life

3.2

clean

free from soil and foreign matter

3.3

coloured

80 % of the fruit exhibits the colour typical of the variety at maturity

3.4

consignment

quantity of pineapples having the following common characteristics:

- a) packer;
- b) lot(s) or batch(es);
- c) variety;
- d) country of origin;
- e) type of package; and
- f) region or district, if possible

3.5

damage

any defect or combination of defects of physical or physiological causes that detracts from the edible quality such as decay, chilling injury, insect damage, open wounds, scalding, cracks or punctures which could lead to the abnormally quick deterioration of the fruit

3.6

desired size

size or weight required by the market (customer)

3.7

disease

any defect or combination of defects caused by micro-organisms

3.8

firm

not soft, spongy or noticeably wilted

3.9

free from disease

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

3.10

insect free

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

3.11

intact

not having any part removed or damaged

NOTE Removal of parts of the crown or the entire crown as permitted by the market is not considered a defect.

3.12

internal browning

dark colour change brought about by enzymatic oxidation of certain phenolic compounds present in the pineapple

3.13

mature

state of development where optimum growth characteristics of the variety are attained which ensures that produce arrives on the market in an acceptable condition and meets customer expectations in terms of flavour and texture

3.14

reducing of the crown

mechanical destruction of the apical growing point in the heart of the crown during the growth period at about two months from harvest by means of a gouge or similar instrument which leaves no visible scar at harvest and requires no special subsequent treatment

3.15

similar varietal characteristics

lot comprising fruit of the same variety (cultivar) and showing similar colour, shape and size

3.16

sound

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

3.17

trimmed

removal of dead, wilted or damaged leaves and excessive peduncle (stem) after harvest

4 Requirements

4.1 Quality

4.1.1 Minimum requirements

4.1.1.1 In all classes, subject to the special provisions for each class and the tolerances allowed, the pineapples shall be:

a) whole, complete with the crown, which may be reduced and or trimmed;

NOTE Only when explicitly so specified by a particular market outlet should the crowns be removed in their entirety.

b) fresh in appearance;

NOTE The crown, when present, should be free of wilted, dry, loose or damaged leaves.

- c) sound;
- d) clean;
- e) free from internal browning;
- f) free from damage caused by pests;
- g) free from pests affecting the general appearance of the produce;
- h) free from pronounced blemishes, in particular unhealed cuts, bruising, scorching, holes, cracks (healed or not);
- i) free from damage caused by low or high temperatures;
- j) free of abnormal external moisture; and
- k) free of any foreign smell and or taste.

4.1.1.2 When a peduncle is present, it shall be no longer than 2.0 cm long and the cut shall be transversal, straight and clean.

NOTE Pineapples exported with the stem intact in response to a special market demand are excluded from this requirement.

4.1.1.3 The development and condition of the pineapples shall enable them to:

- a) withstand transport and handling; and
- b) arrive in satisfactory condition at the place of destination.

4.1.2 Maturity requirements

4.1.2.1 Pineapples shall have attained an appropriate degree of development and ripeness in accordance with criteria proper to the variety and the area in which they are grown, prior to being offered for sale.

4.1.2.2 The total soluble solids content of the fruit shall be at least 12 [°]Brix. For the determination of Brix degrees, a sample of the juice representative of all the fruit shall be taken.

4.1.3 Classification

Pineapples shall be classified as Class I, Class II or Class III.

4.1.3.1 Class 1

Pineapples in this class shall:

- a) be of superior quality;
- b) be characteristic of the variety and or commercial type;
- c) be fresh in appearance and firm, with well-developed eyes;
- d) be free from defects, with the exception of very slight superficial defects, provided that these do not detract from the general appearance of the produce, the quality, the keeping quality and presentation in the package; and
- e) have a crown that is simple and straight with no side-shoots and not exceeding 150 % of the length of the fruit.

4.1.3.2 Class II

- **4.1.3.2.1** Pineapples in this class shall:
- a) be of good quality;
- b) be characteristic of the variety and or commercial type; and
- c) be fresh in appearance and firm, with well-developed eyes.

NOTE Slight defects in shape, colouring (sun-scorch included) and skin texture (scratches, scrapes and blemishes) may be allowed, provided these do not affect the general appearance of the produce, the quality, the keeping quality and presentation in the package. The defects must not, in any case, affect the pulp of the fruit.

4.1.3.2.2 The crown shall be simple or double and straight or slightly curved, with no side-shoots and should not exceed 150 % of the length of the fruit. The maximum inclination of the crown should not exceed 30° from the longitudinal axis of the fruit.

4.1.4 Class III

This class includes pineapples that do not qualify for inclusion in Class I and Class II.

4.1.4.1 The following defects shall be permitted, provided the pineapples retain their essential characteristics as regards the quality, the keeping quality and presentation:

- a) defects in shape;
- b) defects in colouring, including sun-scorch; and
- c) skin defects not exceeding 8 % of the total surface area.
- NOTE Skin defects include scratches, scars, scrapes, bruises and blemishes
- **4.1.4.2** The defects shall not affect the pulp of the fruit.
- **4.1.4.3** The crown may be single or double, and straight or curved, with no side-shoots.

4.1.5 Classification by surface colouring

Colour criteria of the fruit shall be:

- a) C0: totally green surface;
- b) C1: yellow/orange on ¼ of the fruit surface;
- c) C2: yellow/orange on ½ of the fruit surface;
- d) C3: yellow/orange on 2/3 of the fruit surface; and
- e) C4: totally yellow/orange fruit.

4.2 Tolerances

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

4.2.1 Quality tolerance

4.2.1.1 Class I

Not more than 5 % by number or weight of pineapples not satisfying the requirements of this class, but meeting those of Class II or, conforming to the tolerances allowed for class II.

4.2.1.2 Class II

Not more than 10 % by number or weight of pineapples not satisfying the requirements of this class, but meeting those of class III or, exceptionally, conforming to the tolerances allowed for class III.

4.2.1.3 Class III

Not more than 10 % by number or weight of pineapples satisfying neither the requirements of this class nor the minimum requirements

4.2.2 Sizing tolerance

Size shall be determined by weight, subject to variety and market preferences. Pineapples within a package may vary in weight by not more than 10 % above or below the average individual fruit weight for the package.

4.3 Presentation

4.3.1 Packaging

4.3.1.1 Pineapples shall be packed in such a way as to protect the produce.

4.3.1.2 The packing material used shall be new, clean and of a quality such as to avoid causing any external or internal damage to the produce.

NOTE The use of materials, particularly of paper or stamps bearing trade specifications is allowed, provided non-toxic ink or glue was used for the printing or labelling.

4.3.1.3 Stickers individually affixed on the produce shall be such that, when removed, leaves neither visible traces of glue nor skin defects.

4.3.1.4 The containers shall meet the quality, hygiene, ventilation and resistance characteristics to ensure suitable handling, shipping and preserving of the pineapples. Packages shall be free of all foreign matter and offensive odour.

4.3.1.5 Pineapples shall be presented either horizontally or vertically in the package, with crowns uppermost.

4.3.2 Uniformity

The contents of each package shall be uniform with respect to origin, variety, commercial type, quality and size. For Class I, colour and ripeness should be uniform. The visible part of the contents of the package must be representative of the entire content.

4.3.3 Labelling

4.3.3.1 Each package shall bear the following particulars, in letters grouped on the same side, legibly and indelibly marked and visible from the outside (either printed on the package itself or on a label secured to the package):

- a) name and address of exporter, packer and or dispatcher;
- b) name and address of consignee;
- c) name of produce including variety and or commercial type;
- d) net weight of package as kg (lb) or size (size code or average weight in g) and number of fruits;

- e) country of origin and Producer's Code per package;
- NOTE For the purposes of this Standard, this includes recycled material of food grade quality.
- f) information regarding the absence of the crown; and
- g) date of packaging.
- **4.3.3.2** In addition, labels may include the following optional information:
- a) post harvest treatments;
- EXAMPLE waxing or fungicide use
- b) storage and ripening temperature requirements;
- b) district where grown if possible; and
- c) official Inspection Mark.

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

5 Contaminants

5.1.1 Heavy metals and pesticide residues

5.1.1.1 All pesticides used pre or post harvest shall be registered and approved for use in accordance with the requirements of the national regulations of the exporting and importing countries.

5.1.1.2 Pineapples shall comply with those maximum levels for heavy metals as well as maximum pesticide residue limits established by the CODEX Alimentarius Commission for this commodity.

6 Hygiene and sanitation

6.1 Pineapples covered by the provisions of this standard shall be prepared and handled in accordance with the appropriate sections of the latest edition of International and CARICOM Regional Codes of Practice and other CODEX texts and CRS which are relevant to this commodity.

6.2 Pineapples shall comply with microbiological criteria established in accordance with the principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997)

6.3 Pineapples shall comply with Sanitary and Phyto-Sanitary (SPS) requirements of the importing and exporting countries.

End of document



CARICOM REGIONAL ORGANISATION FOR STANDARDS AND QUALITY

The CARICOM Regional Organisation for Standards and Quality (CROSQ) was created as an Inter-Governmental Organisation by the signing of an agreement among fourteen Member States of the Caribbean Community (CARICOM). CROSQ is the regional centre for promoting efficiency and competitive production in goods and services, through the process of standardization and the verification of quality. It is the successor to the Caribbean Common Market Standards Council (CCMSC), and supports the CARICOM mandate in the expansion of intra-regional and extra-regional trade in goods and services.

CROSQ is mandated to represent the interest of the region in international and hemispheric standards work, to promote the harmonization of metrology systems and standards, and to increase the pace of development of regional standards for the sustainable production of goods and services in the CARICOM Single Market and Economy (CSME), and the enhancement of social and economic development.

CROSQ VISION:

The premier CARICOM organisation for the development and promotion of an Internationally Recognised Regional Quality Infrastructure; and for international and regional harmonized CARICOM Metrology, Standards, Inspection, Testing and Quality Infrastructure

CROSQ MISSION:

The promotion and development of standards and standards related activities to facilitate international competitiveness and the sustainable production of goods and services within the CARICOM Single Market and Economy (CSME) for the enhancement of social and economic development



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