Caribbean Community

EDICT OF GOVERNMENT

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CRS 18 (2010) (English): Honey

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CARICOM REGIONAL STANDARD

Specification for honey

CRS 18: 2011

Caribbean Community

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ATTACHMENT PAGE FOR CRS AMENDMENT SHEETS

Committee representation

This CARICOM Regional Standard was developed under the supervision of the Regional Technical Committee (RTC 3) for Foods by Sub-Committee D – Honey, (hosted by the CARICOM Member State, Jamaica) which at the time comprised the following members:

Members	Representing
Mr. Roy C. Murray **(Chairperson)**	Jamaica Federation of Commercial Apiculturists and Royale Honey Enterprises
Mr. Winston Ashley	All Island Bee Farmers Association
Mr. Ajani Blake	Bureau of Standards Jamaica
Ms. Sharon Dobson-Smith	S Products Limited
Ms. Blossom Evans	Blossom's Honey
Dr. Omri Evans	Evans & Company Limited
Ms. Lorna Gooden	Rural Agricultural Development Authority
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Ms. Joycelene McFarlane	Exotic Products Jamaica Limited
Mrs. Vonetta Nurse-Thompson	Bureau of Standards Jamaica
Mr. Karl Riettie	All Island Bee Farmers Association
Mr. Richard Rowe	Consumer Affairs Commission, Jamaica
Ms. Erica Wright	Virginia Dare Jamaica Limited
Mr. Hugh Smith **(Technical Secretary)**	Ministry of Agriculture, Apiculture Unit, Jamaica

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Foreword

For several years, traders and consumers have raised concerns about the quality of honey on the market. More recently they have been joined by commercial bee farmers and manufacturers who use the commodity. There is also a growing international demand for standards, especially to satisfy increasingly stringent requirements for export. This regional standard was developed in an effort to:

a) specify and harmonize quality requirements for honey;

b) ensure adequate and hygienic production; and

c) ensure acceptable product quality and safety for human consumption.

It was approved by the Council for Trade and Economic Development (COTED) on 3-4 May 2011.

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

a) CODEX STAN 12-1981, Rev. 1 (1987) Codex Standard for Honey;

b) BNS 35: 1978 Barbados National Standard for honey;

c) European Union Council Directive 2001/110/EC, of 20 December, 2001, relating to honey;

d) European Union Commission Decision, of 12 August 2002, implementing Council Directive 96/23/EC concerning the performance of analytical methods and implementing the results;

e) Draft Jamaican Standard Specification for Honey.

Acknowledgement

In developing this standard, four consultation meetings were held in Jamaica – in Kingston, Mandeville, Montego Bay and Portland. The committee acknowledges the contributions of the many beekeepers and other persons who participated in these consultations. The final document was greatly informed by the proceedings of these meetings.

1 Scope

This standard prescribes the requirements for honey produced by the honeybees *Apis mellifera* and *Meliponini sp*. It specifies three grades of honey with requirements for production, handling, packaging, labelling, analytic sampling and testing of honey that is intended or offered for sale in the Caribbean Community. This standard takes into account the management of equipment and storage conditions of honey, and requirements for hygienic production that assures the safety of food for human consumption.

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 STAN 12, Codex Standard for Honey

CARICOM Regional Standard, CRS 5, Specification for Labelling of pre-packaged food

CARICOM Regional Code of Practice, CRCP 5, General principles of food hygiene

3 Terms and definitions

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

3.1
blending
mixing of two or more honeys from different floral sources or geographical areas in order to obtain a desired quality such as colour, flavour, and or viscosity

3.2
brood
egg, larva and pupa stages in the life of bees

3.3
chunk honey
liquid honey in which one or more pieces of honey combs, with mostly sealed cells, has been substantially submerged

3.4
comb honey
honey that is stored by bees in the cells of freshly built broodless combs

NOTE Comb honey is sold in sealed whole combs or sections of such combs.

3.5
creamed honey
homogenised granulated honey

NOTE Creamed honey may be sold for use as spreads.

3.6
crystallisation
naturally occurring process in which a portion of the sugars in honey settle out of the solution, into a hard or semi-solid mass

NOTE Also known as granulation.

3.7
crystallised honey
honey that has undergone crystallisation

NOTE Also known as granulated honey.

3.8
drained honey
honey that is obtained by draining decapped broodless combs

3.9
draining
separation of honey by gravity, through a strainer, from combs that have been crushed or broken up

3.10
extracted honey
honey that is obtained by centrifuging decapped broodless combs

3.11
extracting
removal of honey from whole combs by centrifuging in a honey extractor

3.12
filtered honey
honey processed by filtration to remove extraneous solids and pollen grains

3.13
filtering
removal of undesirable particles from honey, by any means, that could also result in significant removal of pollen

3.14
honey
natural sweet substance produced by certain species of honey bees, including *Apis mellifera*, and stingless bees from the nectar of plants, other secretions of living parts of plants or the excretions of plant-sucking insects , which bees collect, transform by combining with specific substances of their own, deposit, dehydrate, store and leave in the honey comb to ripen and mature

3.15
honeydew honey
honey that is produced when bees collect the sweet, sticky excretions of aphids and other plant sucking insects

NOTE Honeydew honey may also be produced from the exudates of plants.

3.16
hydroxymethylfurfural (HMF)
aldehyde that is produced as a result of the breakdown of fructose in the presence of an acid in honey

NOTE HMF is triggered by the dehydration and or heating of honey.

3.17
liquid honey
honey in the fluid state after it has been removed from the comb

3.18
monofloral honey
honey that is made predominantly from the nectar of flowers of a single species of plant

3.19
multifloral honey
honey that is made from the nectar of flowers of more than one species of plant

NOTE Also known as polyfloral honey.

3.20
organic honey
honey produced, processed and packaged under conditions that effectively eliminate synthetic chemicals and substances that do not occur naturally

3.21
pfund colour grader
device used to measure the colour of honey

3.22
pressed honey
honey that is obtained by pressing or squeezing broodless combs

3.23
primary production method
method used to remove liquid honey from the combs including extracting, draining, straining and pressing

3.24
secondary production method
method applied after the honey has been removed from the combs including blending, filtering, and heating

3.25
seeding
addition of a small amount of crystallized honey larger volume of honey in order to speed up or otherwise control the crystallization or granulation process

3.26
stingless bee honey
honey that is produced entirely by the indigenous 'stingless bee' of the *Melipona sp*. and *Trigona sp*

3.27
strained honey
honey that has been passed through a mesh to remove undesirable particles without significant removal of pollen, minerals or valuable enzymes

NOTE Undesirable particles include pieces of beeswax and bits of propolis.

3.28
sugarcane honey
honey that is produced when bees collect the sap from cut sugarcane stumps

4 Description

4.1 Honey is a pure natural product to which no other substance has been added. It is generally yellowish to light tan in colour but may be pale to colourless dark amber or even greenish. Honey always darkens as it ages.

4.2 The plant source(s) of the nectar from which it is made is the major factor that influences the characteristics of honey. Hence, like colour, there are considerable differences in viscosity, aroma and secondary flavours such as bitterness or tartness.

4.3 In its natural state, honey is a sweet, sticky and highly variable liquid. However, if kept long enough, it will eventually granulate and often gets quite hard. This is a natural process that is accelerated when honey is stored under cool conditions. The rate at which crystalisation occurs depends on the ratio of the sugars in the honey and that too is related to the source of the nectar from which the honey is made.

5 General requirements

5.1 Production and hygiene requirements

5.1.1 Honey shall be prepared and handled in accordance with the appropriate sections of CARICOM Regional Code of Practice, CRCP 5 General Principles of Food Hygiene.

5.1.2 The owners and managers of bee hives shall use pesticides in hives and apiaries in accordance with the recommendations of the competent national authority.

5.1.3 Processing and packaging of honey shall be done in vermin-free and sanitary facilities.

5.1.4 Handlers of honey shall maintain appropriate food-handling practices.

5.1.5 Honey shall not be exposed to high temperatures which destroys the naturally occurring enzymes. Honey shall not be heated to a temperature greater than 60 °C

5.2 Storage

5.2.1 Honey shall be adequately stored at ambient temperature. If kept outdoors, it shall be kept in a shaded area, away from exposure to direct sunlight.

5.2.2 Honey shall be stored in containers which are not likely to impair its taste, chemical characteristics or render it harmful to health.

5.2.3 Storage containers shall be air-tight to prevent the honey from losing flavour, absorbing moisture and or to reduce the risk of fermentation.

5.3 Forms of honey

5.3.1 General

Honey shall be presented for sale to the general public in any of the following forms:

a) liquid honey;

b) comb honey;

c) chunk honey; or

d) crystallised honey.

5.3.2 Liquid honey

Liquid honey offered for sale and intended for human consumption shall satisfy the following conditions:

a) it shall be free of any objectionable flavour or taint absorbed from foreign matter during the production, processing and storage of the product;

b) on visual inspection, it shall be free from air bubbles (which cause a cloudy appearance) and foreign material, including mould, dirt, scum, insect, insect parts and other extraneous matter;

c) it shall not contain pieces of beeswax, fragments of bees, clumps of pollen grains or hive debris; unless this condition is required by a particular market;

d) the colour of the product shall be uniform throughout when packaged for the retail trade; and

e) depending on its moisture content and the ambient temperature, its consistency shall vary from very fluid to highly viscous.

NOTE Requirements for Industrial honey are specified in 6.4.

5.3.3 Comb honey

5.3.3.1 Honeycomb that is sold as comb honey shall either:

a) be entirely built by honeybees;

b) constructed by honeybees on comb foundation that is made solely of beeswax; or

c) built by the honeybees, in honeycomb "sections" that are made for that purpose.

5.3.3.2 Comb honey shall have at least 95% of sealed cells of honey and shall either be:

a) a whole comb as it is taken from the hive; or

b) a single piece cut from a whole comb or a honeycomb "section".

5.3.4 Chunk honey

Chunk honey shall comply with the following requirements:

a) it shall be sold in a jar, tub or other wide-mouth container made of material that allows the consumer to clearly see its contents; and

b) the honeycomb shall occupy at least a third of the volume of the container.

5.3.5 Crystallised honey

If crystallised honey was produced by any unnatural process, including seeding this shall be clearly indicated.

5.4 Packaging requirements

5.4.1 All containers in which honey is packaged shall be clean, dry, sanitary and of food grade quality.

5.4.2 The containers shall be filled under sanitary conditions.

5.4.3 Equipment used to fill containers and package honey shall be maintained and operated under hygienic and sanitary conditions.

5.4.4 Packaging procedures shall minimize moisture absorption and prevent leakage.

5.4.5 Packaging materials which do not alter the taste or chemical characteristics of honey or make it harmful to health shall be used.

5.4.6 All packages shall have safety seals.

5.4.7 The container in which honey is offered for sale to the general public shall not have any other product label.

5.5 Labelling and traceability requirements

In addition to the requirements outlined in CARICOM Regional Standard CRS 5 Specification for Labelling of pre-packaged food, the following specific provisions shall apply:

a) the name of the product shall be 'Honey'. This word shall appear on the principal display panel;

b) the form of the product, as outlined in 5.3.3 to 5.3.5, shall also be clearly indicated, on the principal display panel;

c) the product shall be designated according to a particular floral or plant source, in accordance with the requirements of 6.2, only if the predominant part of the product originated from that source;

d) the product shall be designated by the name of a particular place such as a district, a geographical region such as a parish, or an ecological zone such as a mountain or wetland area, only if it was produced at the place or wholly within the region or zone. Designation, if applicable, shall be in accordance with the requirements of 6;

NOTE For liquid honey, the label may indicate the predominant method(s) of production. See 3.23 and 3.24;

e) if the honey was produced by the indigenous stingless bee (*Meliponini sp*), the words 'Stingless Bee Honey' shall be clearly displayed on the label;

f) the net contents shall be clearly stated on the label, in metric weight (g or kg);

g) a batch number or code number shall be indicated on the label or on the container; and

h) the country of origin declared on the package shall be the country where the hives from which the honey originated is kept.

NOTE Information on crystallization of honey and nutritional facts is optional.

6 Grades of (liquid) honey

6.1 General

One of the following grades shall be clearly indicated on the label of every container of liquid honey that is offered for sale:

a) Grade A1 Honey;

b) Grade A2 Honey;

c) Honeydew Honey or Grade B1 Honey; or

d) Industrial Honey or Grade B2 Honey.

6.2 Grade A1 honey

6.2.1 The designations 'Grade A1 honey' may include blended honeys.

6.2.2 Grade A1 honey shall comply with the analytical requirements outlined in Table 1.

Table 1 — Analytical requirements for Grade A1 and A2 honey

Characteristic	Requirements
Colour	Pale or colourless to dark amber
Sugar content (a) Fructose plus glucose	Not less than 60 %
(b) Sucrose (apparent)	Not more than 5 %
Water content	Not more than 20 %
Water-insoluble content	0.1 % - 0.3 %
Electrical conductivity	Not more than 0.8 mS/cm
Free acids	Not more than 50 milli-equivalents acid per 1000 grams
Diastase activity	Not be less than 8.0 Schade Units
HMF	Not more than 80 mg/kg

6.3 Grade A2 honey

6.3.1 General

The designations 'Grade A2 Honey' shall be strictly reserved for the following types of honey that comply with the analytical requirements in Table 1:

a) honey from a named geographic source or ecological zone;

b) monofloral honey;

c) organic honey; or

d) stingless bee honey.

6.3.2 Honey from a named geographical source or ecological zone

Honey shall only be named after a place or an area if the apiary or apiaries from which it is produced are located:

a) within 1.0 km of the named place;

b) entirely within the named and clearly delimited geographic area; or

c) entirely within a defined ecological zone.

6.4 Honeydew honey or Grade B1 honey

Grade B1 honey shall comply with the analytical requirements outlined in Table 2.

Table 2 —Analytical requirements for Grade B1 honey

Characteristic	Requirements
Colour	Pale or colourless to dark amber
Sugar content (a) Fructose plus glucose	Not less than 45 %

Characteristic	Requirements
(b) Sucrose (apparent)	Not more than 5 %
Water content	Not more than 20 %
Water-insoluble content	0.1 % - 0.3 %
Electrical conductivity	Not more than 0.8 mS/cm
Free acids	Not more than 50 milli-equivalents acid per 1000 grams
Diastase activity	Not be less than 8.0 Schade Units
HMF	Not more than 80 mg/kg

6.5 Grade B2 honey (industrial honey)

6.5.1 The designations 'Industrial Honey' or 'Grade B2 Honey' shall be assigned to honey that is fit for human consumption but deviates from the requirements for Grade A1, Grade A2 and Grade B1 honey. Such deviations shall not include the presence of chemical or biological contaminants. They shall only be the result of one or more properties, arising purely from the source of the honey, the manner in which it was handled or its age.

6.5.2 Whenever Industrial (Grade B2) honey is offered for sale on the retail market, the reason(s) for its designation as such, as well as any applicable warning or precautionary statement shall be prominently indicated on the label or elsewhere on the container.

EXAMPLE "The yeast content of this product is high and it may foam when the container is opened"

7 Analytical requirements and testing of honey

7.1 All honey that is offered for sale in CARICOM shall satisfy the descriptive and analytical criteria that are established for at least one of the three grades, as outlined in 5.

7.2 Methods of test shall be carried out in accordance with CODEX Stan 12 Codex Standard for Honey.

7.3 Honey shall not contain chemical residues which exceed the tolerable limit that is set for any chemical or group of chemical substances. These chemicals and tolerances shall be determined by the responsible national government agency or regulatory body.

7.4 Packers or bottlers of liquid, chunk and creamed honey shall retain at least one sample of each batch, for testing by the relevant authorities.

7.5 For liquid honey, the minimum sample size shall be 30 g.

7.7 The sample(s) with the relevant batch number or code affixed shall not be disposed of before the best-before-date for the batch.

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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