

DEPARTMENT OF AGRICULTURE

No. R. 835

25 August 2000

AGRICULTURAL PRODUCT STANDARDS ACT, 1990 (ACT No. 119 OF 1990)

REGULATIONS RELATING TO THE GRADING, PACKING AND MARKING OF HONEY AND MIXTURES OF BEE PRODUCTS INTENDED FOR SALE IN THE REPUBLIC OF SOUTH AFRICA

The Minister of Agriculture has in terms of section 15 of the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990) --

- (a) made the regulations in the Schedule; and
- (b) read together with section 3(2) of the said Act, repealed the regulations published by Proclamation No. R. 69 of 16 March 1973 and Government Notice No. R. 2336 of 19 October 1979.

Definitions

1. In these regulations any word or expression to which a meaning has been assigned in the Act shall have that meaning and --

"**additive**" means a food additive as defined in the regulations made under the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972);

"**adulterants**" means any non bee product added to (natural) bee products;

"**bee products**" means products produced or harvested by honey bees or stingless bees, such as honey, beeswax, propolis and royal jelly;

"**beeswax**" means the wax produced by honeybees or stingless bees;

"**beeswax foundation**" means a sheet of pure beeswax embossed on both sides with the bases of the cells of the comb;

"**brood**" means the immature stadia of bees, i.e. eggs, larvae or pupae;

"**bulk honey**" means honey that is sold in the trade in containers of 25 kg and more;

"**business address**" means (a) an address in the Republic and includes the street or road number (if a number has been allotted), the name of the street or road and the name of the town, village or suburb and, in the case of a farm, the name of the farm and of the magisterial district in which it is situated and (b) in the case of imported honey and mixtures of bee products means the address of the producer or supplier or importer or packer or seller or distributor, provided that in the case where the supplier or importer or packer or seller or distributor is based in the Republic, the address shall be the physical address as described in (a);

"**cell**" means one single hexagonal compartment on a comb;

"**chunk honey**" means chunks of cut comb honey suspended in a medium of extracted honey;

"**clarity**" means the measure of the absence in extracted honey of all visible and entrapped air bubbles, pollen or other particulate;

"**comb**" means the cellular wax structure in which bees store honey and/or pollen;

"**comb honey**" means honey still contained in the freshly built, broodless, sealed cells of the comb;

"**consignment**" means a quantity of honey or mixtures of bee products delivered at a given time under cover of the same document;

"**creamed honey**" means crystallised extracted honey purposely processed to be of a uniformly creamy consistency and of a smooth spreadable texture;

"**crystallised honey**" means extracted honey which has crystallised to a greater or lesser extent;

"**cut comb honey**" means comb honey which has been cut into appropriate sizes and packed in suitable containers;

"**date of packing**" means the date on which the honey or mixtures of bee products were packed into the containers thereof;

"**Department**" means the National Department of Agriculture;

"**Executive Officer**" means the officer designated under section 2(1) of the Act;

"**extracted honey**" means honey after separation from the comb;

"**filtered honey**" means honey that has been passed through a filter under pressure;

"**floral honey**" ("blossom honey") means any laevorotatory honey derived essentially from the nectar of flowers;

"**HMF content**" means the quantity (mg/kg) of hydroxymethylfurfural present in honey;

"**honey**" means the sweet foodstuff derived from the nectar of flowers, sugary excretions of insects, plant juices or sugary secretions of living plant parts other than flowers, after it has been gathered, partially converted and stored in the comb by honeybees or stingless bees;

"**honey bees**" means insects of genus Apis;

"**honeydew honey**" means any dextrorotatory honey derived essentially from the sugary secretions of plant parts other than flowers or from the sugary excretions of insects on living plant parts after it has been gathered, partially converted and stored in the comb by honeybees or stingless bees;

"**honey substitute**" means any foodstuff consisting of a food substance or a mixture of substances that have been made to resemble honey;

"**impurities**" means all substances which will detract from the appearance, acceptability or edibility, or the flavour or aroma appeal of the product;

"**inspector**" means the Executive Officer or an officer under his control;

"**irradiation**" means deliberate exposure to ionising radiation and "irradiated" has a corresponding meaning;

"**liquid honey**" means honey in a liquid state;

"**lot**" means a definite quantity of honey or mixtures of bee products packed essentially under the same conditions and identifiable by an unique number or the date of packing;

"**packer**" means any person who packs bee products;

"**pollen**" means the male fertilising germ seed of flora which appears in the anthers of blooms and is sometimes collected by bees and stored as a food;

"**ppm**" means parts per million;

"**producer**" means a person who keeps bees to produce honey and/or other bee products;

"**propolis**" means the resinous material usually of plant origin used by bees to insulate, waterproof and sanitise the hive or nest;

"**raw honey**" means unfiltered, unheated honey, i.e. honey which would conform to the specifications and requirements of Choice Grade liquid honey if so processed;

"**ripe honey**" means honey containing the minimum moisture content and the maximum active enzymes, sealed in the cells;

"**royal jelly**" means the secretions from the hypopharyngeal gland of the worker bee;

"**sieve size**" means the following mesh size shall be equivalent to the corresponding standard metric measurement, 35 mesh = 420 micron or 0.42 mm;

"**stingless bees**" means insects of the order Melliponinae;

"**strained honey**" means honey that has been strained through a sieve by its own weight, i.e. gravity;

"**sugar cane honey**" means honey produced from sugar cane;

"**the Act**" means the Agricultural Product Standards Act, 1990 (Act No. 119 of 1990); and

"**unheated honey**" means honey of which the temperature has not been raised above 38 degrees Celsius by the producer or the packer.

Scope of regulations

2. (1) These regulations shall apply to the grading, packing and marking of honey and mixtures of bee products intended for sale in the Republic of South Africa to which and under circumstances in which a prohibition in terms of section 3 of the Act regarding the sale of honey and mixtures of bee products apply; and

(2) all honey substitutes are specifically excluded from these regulations with the exception for the specifications of regulation 9.

Requirements for sale

3. (1) Honey and mixtures of bee products may in terms of section 3 of the Act be presented for sale if --
- (a) the honey and mixtures of bee products comply with the grade requirements referred to in regulation 5;
 - (b) the honey and mixtures of bee products comply with the standards for the grades referred to in regulation 6;
 - (c) the containers in which honey and mixtures of bee products are packed comply with the requirements for containers referred to in regulation 7;
 - (d) the containers concerned are marked in the manner prescribed in regulation 8;
 - (e) the containers concerned comply with the marking restrictions referred to in regulation 9;
 - (f) the honey and mixtures of bee products are free from impurities, additives and adulterants; and
 - (g) subject to the provisions of paragraphs (a), (b), (c), (d), (e) and (f), the honey and mixtures of bee products comply with the appropriate standards as set out in Tables 1-4 in Part II.

(2) The Executive Officer may grant written exemption, entirely or partially, to any person on such conditions as he deems necessary, from the provisions of subregulation (1).

Offences and penalties

4. Any person who contravenes or fails to comply with the provisions of these regulations shall be guilty of an offence and upon conviction be liable to a fine or imprisonment in accordance with section 11 of the Act.

**PART I
GENERAL STANDARDS AND REQUIREMENTS FOR HONEY AND MIXTURES OF BEE
PRODUCTS**

Grades of honey and mixtures of bee products

5. (1) There shall be two grades for liquid honey, creamed honey and comb honey, namely Choice Grade and Industrial Grade.

(2) There shall be one grade for chunk honey and mixtures of bee products, namely Choice Grade.

(3) Subject to the definition for raw honey there shall be no grading of raw honey.

(4) The crystallisation of liquid honey is a natural process and shall not result in the honey being down-graded.

(5) When any quality factor of the standards or specific standards for creamed or crystallised honey is in dispute, a sample shall be liquefied as described in regulation 10(3) and thereafter graded.

Standards for grades of honey

6. (1) Honey shall --

(a) be well ripened in the hive in order to contain the correct moisture content and enzyme activity; and

(b) be free from particles foreign to its composition (such as mould, insects or insect debris, sand, etc.).

(2) Honey shall not --

(a) have any foreign tastes or odours;

(b) have begun to ferment or effervesce; and

(c) have been treated in such a way that its natural enzymes are destroyed or made inactive.

(3) Any of the following relevant tests may be selected to determine the composition, quality and ripeness of honey and, if the honey does not comply with any one of these selected tests, then it shall be deemed as not complying with the standards for grades of honey:

(a) Maximum HMF content - shall not exceed 40 mg/kg.

(b) Maximum density - shall not be less than 1.40875 g at 20 degrees Celsius.

(c) Maximum ash content - shall not exceed 0.6 per cent.

(d) Maximum sucrose content - shall not exceed five per cent.

- (e) Maximum reducing sugar content - shall not be less than 65 per cent in floral honey or 60 per cent in honeydew honey.
- (f) Fructose : glucose ratio - shall not be less than 1.0:1.
- (g) Diastase activity - shall be present and shall show a DN value not lower than DN 4 on the Gothe-Scale.
- (h) Lund-test - a precipitate of not less than 0.6 cm³ shall be obtained within 24 hours.
- (i) Direct and immediate specific rotation - of an aqueous solution containing 26 g of floral honey in a total volume of 100 ml, shall be not less laevorotatory than minus 10 at 20 degrees Celsius.
- (j) Maximum acid content shall not be higher than 40 milli-equivalents acid per kg.
- (k) Amylo- and erythro-dextrine - test for their presence shall be negative.
- (l) Prolin - at least 200 mg per kg shall be present.
- (m) Amylase content - shall not be below 8 ppm.
- (n) Invertase content - shall not be below 4 ppm.
- (o) Moisture content - shall not exceed 20 per cent.
- (p) Water insoluble solids content in the liquid honey portion - shall not be more than 0.1 per cent
- (q) The difference between the stable isotope ratio delta 13C (‰) of the honey and the stable isotope ratio of its protein content shall not be less than 0.0.

Requirements for containers

7. A container containing honey or mixtures of bee products shall --
- (a) be made from material that --
 - (i) is suitable for this purpose;
 - (ii) will protect the contents thereof from contamination; and
 - (iii) will not contaminate the contents thereof in any way;
 - (b) be so strong that it will not be damaged or deformed during normal storage, handling and transport practices;
 - (c) be intact; and
 - (d) be closed properly in a manner permitted by the nature thereof.

Marking requirements

8. (1) Subject to the provisions of these regulations, the required marking requirements shall appear in letters not less than 1 mm in height on any container containing honey or mixtures of bee products.
- (2) Any container containing honey or mixtures of bee products, shall be clearly and legibly marked with the following particulars:

- (a) The name of the product in letters at least 4 mm high: Provided that a true reflection of the kind of honey contained therein, such as creamed or chunk, the floral or plant source such as sunflower, buckwheat, honeydew, or any other similar description such as the geographical or topographical origin in letters of at least 4 mm high, may be used additionally.
- (b) The name and business address of the producer or packer or seller of such a product.
- (c) The country of origin of the contents.
- (d) The grade of the contents in letters at least 2 mm high.
- (e) When containing raw honey, with the words "raw" or "unprocessed" in letters at least 2 mm high.
- (f) When containing sugar cane honey in any proportion, as containing sugar cane honey.
- (g) When containing mixtures of bee products, with the proportions of bee products contained therein.
- (h) The date of packing.
- (i) Lot identification in such a way that the producer, packer or seller whose name and address appears on the container, could identify or assist in identifying the premises where a product is finally combined as well as the lot: Provided that the date of packing can be used for lot identification, where applicable.
- (j) The word "irradiated" or "radurised" in letters at least 3 mm high in the vicinity of the name of the product, when the contents consist totally or partially of honey that has been subjected to irradiation: Provided that the indication of the radura symbol is optional.
- (k) The net mass in accordance with the Trade Metrology Act, 1973 (Act No. 77 of 1973) as applied by the SABS.

(3) Any container containing honey or mixtures of bee products which is sold in bulk other than retail, shall be exempted from the marking requirements if the container is accompanied by relevant trade documents reflecting all particulars required by these regulations, with the following exceptions:

- (a) The name and business address of the producer or packer or seller of such honey shall appear on the container.
- (b) The grade of the contents may be omitted from the trade documents if such honey has not been graded.
- (c) Lot identification of a container in such a way that the producer, packer or seller whose name and address appears on the container, could identify or assist in identifying the premises where a product is finally combined as well as the lot.
 - (d) (i) The word "irradiated" or "radurised"; and
 - (ii) the country of origin of the contents shall appear in letters at least 3 mm high on containers, the contents of which consist totally or partially of honey that has been subjected to irradiation: Provided that the indication of the radura symbol is optional.

(4) Labels on containers containing honey or mixtures of bee products shall be clean, neat and shall be securely pasted thereon and shall not be pasted over other labels, unless as an additional label referring to the same product in the same container.

Restricted particulars on containers

9. (1) No wording, illustration or other means of expression which constitutes a misrepresentation or which, directly or by implication, may create a misleading impression of the contents, shall appear on any container containing honey or mixtures of bee products.

(2) (a) The word "honey" or any representation thereof may not appear anywhere on any honey substitute, its label or packaging; and

(b) should a honey substitute contain any honey, then the word "honey" shall only appear within the list of ingredients of such honey substitute.

(3) Except for honey and mixtures of bee products, no other product may have its label, packaging, trade name, trade mark or pictorial illustrations, so designed as to imply that honey is a main ingredient.

(4) Except for the trade name, radura symbol, pictorial illustrations, logo or registered mark, marking requirements prescribed in regulation 8, additional marking requirements allowed by regulation 11, information in respect of crystallisation and the liquefaction of crystallised honey and chemical composition or nutritive value, no other name, mark, description, advertisement, or claim as to the qualitative properties or otherwise of honey, shall appear on the container of honey or mixtures of bee products, on its lid, cap or stopper, or on the label or any leaflet, however attached to the container, unless directly relevant to the marketing or production of the product, and scientifically and factually verifiable.

Inspection and handling of samples

10. (1) An inspector may in any consignment of honey or mixtures of bee products open as many containers and inspect the contents thereof and remove samples of such contents for the purpose of further inspection or analysis, as he may deem necessary, for which he must issue a receipt.

(2) An inspector shall satisfy himself that the samples so extracted are representative of the product in the consignment concerned.

(3) Samples of honey and the honey in mixtures of bee products shall be prepared as follows for analysis:

(a) In the case of non-heat sensitive tests --

(i) if free from crystallisation, mix thoroughly by stirring;

(ii) if crystallised, place closed container in a water-bath without submerging and heat for 30 minutes at 60 degrees Celsius, then if necessary heat at 65 degrees Celsius until liquefied. Occasional stirring during heating is essential. Mix thoroughly and cool rapidly to room temperature as soon as sample liquefies;

(iii) if still in comb, separate from comb by carefully crushing the comb and straining the honey through sieve of 35 mesh. If portions of comb or beeswax pass through sieve, heat sample to 40 degrees Celsius in a water bath and strain through cheese cloth in a hot water funnel; and

(iv) if honey is granulated in the comb, heat at 65 degrees Celsius until beeswax is liquefied, cool and remove beeswax, then stir.

- (b) In the case of heat sensitive tests --
- (i) samples are prepared without heating;
 - (ii) if free from crystallisation, mix thoroughly by stirring; and
 - (iii) if still in comb, separate from the comb by carefully crushing the comb and straining the honey through a sieve of 35 mesh.

Additional requirements

11. Subject to the provisions of these regulations, honey and mixtures of bee products, and any other foodstuff containing honey and/or bee products shall --

- (a) comply with the applicable requirements prescribed by the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972), as applied by the Department of Health; and
- (b) in the case of imported products, comply with the conditions as stipulated by the prescribed permit issued in terms of the Agricultural Pests Act, 1983 (Act No. 36 of 1983), as applied by the Department.

**PART II
SPECIFIC STANDARDS FOR HONEY AND MIXTURES OF BEE PRODUCTS**

Table 1: Liquid Honey and Creamed Honey

Quality Factor	Choice Grade	Industrial Grade
(a) Colour and clarity	Uniform in colour and clear or, for creamed honey, uniform and creamy	*
(b) Taste	A taste typical of that of honey derived from the predominant source or sources. It shall be well ripened and free from any foreign taint or objectionable aroma or flavour, such as is caused by overheating, smoke or other unnatural taints	As for Choice Grade
(c) Visible insoluble particles	Free from visible particles which at 55 degrees Celsius will not pass through a sieve of 35 mesh	*

* Not to Choice Grade specifications in one or more respects.

Table 2: Comb Honey

Quality Factor	Choice Grade	Industrial Grade
(a) Appearance	Shall be undamaged and uniform	*
(b) Beeswax foundation (if used)	The comb shall be drawn out on light mass beeswax foundation	*
(c) Cells containing pollen	Not more than 25 per cent	*

(d)	Uncapped cells	At least 85 per cent of the cells must be capped	*
(e)	Cells containing brood	None	None
(f)	Cells in which brood has been reared/brown or black cells	None	*
(g)	Taste	A taste typical of that of honey derived from the predominant source or sources. It shall be well ripened and free from any foreign taint or objectionable aroma or flavour, such as is caused by over-heating, smoke or other unnatural taints	As for Choice Grade

* Not to Choice Grade specifications in one or more respects.

Table 3: Chunk Honey

Quality Factor		Choice Grade
(a)	Appearance of comb	The chunks of comb honey shall be suspended in liquid honey and at least 85 per cent of the cells of the comb must be capped
(b)	Chunk of comb	Choice Grade comb honey shall be used
(c)	Added liquid honey to produce the nett mass	Choice Grade liquid honey shall be used to completely immerse the piece of comb
(d)	Taste	A taste typical of that of honey derived from the predominant source or sources. It shall be well ripened and free from any foreign taint or objectionable aroma or flavour, such as is caused by over-heating, smoke or other unnatural taints

Table 4: Mixtures of Bee Products

Quality Factor		Choice Grade
(a)	Added honey	Choice Grade honey shall be used