

Quality of honey



Ministry of Agriculture, Fisheries and Rural Development
Food Safety and Quality Directorate

Quality of honey

Technical discussion: "Quality of honey and bee products and export requirements" Pljevlja, 11th October, 2010



Legal framework

- Livestock Act (OG 70/97, 36/98, 151/03, 132/06)
- Food Act (OG 46/07)
 - harmonised with Regulation (EC) 178/2002
 - regulates the basis for ensuring protection of human health and consumers' interest in relation to food, whilst ensuring the effective functioning of the market
 - determines the basic principles and responsibilities, scientific basis, efficient organizational arrangements and procedures to underpin decision-making in matters of food safety



Secondary legislation

- Ordinance on food hygiene (OG 99/07, 27/08, 118/09)
- Ordinance on honey (OG 93/09)
- Ordinance on quality of unifloral honey (OG 122/09)
- Ordinance on labelling, advertising and presenting of foodstuffs (OG 41/08)
- Ordinance on beekeeping and bee forage Cadastre (OG 18/08)



Ordinance on honey (OG 93/09)

Harmonised with Council Directive 2001/110/EC
relating to honey

Lays down the quality requirements for the
production and marketing of honey:

- terms, definitions and general requirements
- sensory characteristics and composition
- additional labelling requirements



Ordinance on honey (OG 93/09)

- terms, definitions

Honey is a sweet, dense, viscous, liquid or crystallised product produced by *Apis mellifera* bees from the nectar of plants or from secretions of living parts of plants or excretions of plant-sucking insects on the living parts of plants, which the bees collect, transform by combining specific substances of their own, dehydrate, store and leave in honeycombs to ripen and mature.



Ordinance on honey (OG 93/09)

- terms, definitions

The main types of honey:

a) according to origin:

- ❑ **BLOSSOM HONEY OR NECTAR HONEY**
- ❑ **HONEYDEW HONEY**

b) according to mode of production and/or presentation:

- ❑ **COMB HONEY**
- ❑ **CHUNK HONEY OR CUT COMB IN HONEY**
- ❑ **DRAINED HONEY**
- ❑ **EXTRACTED HONEY**
- ❑ **PRESSED HONEY**
- ❑ **FILTERED HONEY**

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Ordinance on honey (OG 93/09)

- sensory characteristics and composition

When placed on the market as honey or used in any product intended for human consumption, honey must meet composition criteria:

1. sugar content	
a) fructose and glucose content (sum of both)	
– blossom honey	not less than 60g/100g
– honeydew honey, blends of honeydew honey with blossom honey	not less than 45g/100g
b) sucrose content	
– in general	not more than 5g/100g
– false acacia (<i>Robinia pseudoacacia</i>), alfalfa (<i>Medicago sativa</i>), Menzies Banksia (<i>Banksia menziesii</i>), French honeysuckle (<i>Hedysarum</i> spp.), red gum (<i>Eucalyptus camadulensis</i>), leatherwood (<i>Eucryphia lucida</i> , <i>Eucryphia milligani</i>), <i>Citrus</i> spp.	not more than 10g/100g
– lavender (<i>Lavandula</i> spp.), borage (<i>Borago officinalis</i>)	not more than 15g/100g
2. Moisture content	
– in general	not more than 20%
– heather (<i>Calluna vulgaris</i>) and baker's honey in general	not more than 23%
– baker's honey from heather (<i>Calluna vulgaris</i>)	not more than 25%
3. Water-insoluble content	
– in general	not more than 0.1g/100g
– pressed honey	not more than 0.5g/100g

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Ordinance on honey (OG 93/09)

- sensory characteristics and composition

4. Electrical conductivity	
– honey not listed below, and blends of these honeys	not more than 0.8 mS/cm
– honeydew and chestnut honey and blends of these except with those listed below	not more than 0.8 mS/cm
– exceptions: strawberry tree (<i>Arbutus unedo</i>), bell heather (<i>Erica</i> spp.), eucalyptus (<i>Eucalyptus</i> spp.), lime (<i>Tilia</i> spp.), ling heather (<i>Calluna vulgaris</i>), manuka or jelly bush (<i>Leptospermum scoparium</i>), tea tree (<i>Melaleuca</i> spp.)	
5. Free acid	
– in general	50 milli-equivalents acid per 1000 grammes
– baker's honey	not more than 80 milli-equivalents acid per 1000 grammes
6. Diastase activity and hydroxymethylfurfural content (HMF) determined after processing and blending	
a) Diastase activity (Schade scale)	
– in general, except baker's honey	not less than 8
– honeys with low natural enzyme content (e.g. citrus honeys) and an HMF content of not more than 15 mg/kg	not less than 3
b) HMF	
– in general, except baker's honey	not more than 40 mg/kg (subject to the provisions of (a), second indent)
– honeys of declared origin from regions with tropical climate and blends of these honeys	not more than 80 mg/kg

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Ordinance on honey (OG 93/09)

- additional labelling requirements

The country or countries of origin of honey shall be indicated on the label attached to the product.

If the honey originates from more than one European Union Member State or third country, the indication of the country or countries of origin may be replaced with one of the following:

- »blend of EC honeys«
- »blend of non-EC honeys«
- »blend of EC and non-EC honeys«



Ordinance honey (OG 93/09)

- additional labelling requirements

Baker's honey

- honey suitable for industrial uses or as an ingredient in other foodstuffs which are then processed

In the case of baker's honey, the words »intended for cooking only« shall appear in close proximity to the product name.



Ordinance on quality of unifloral honey (OG 122/09)

National ordinance

Unifloral honey can be designated by particular plant species if the insoluble sediment contains at least **45%** of the pollen grains of the same species.



Ordinance on quality of unifloral honey (OG 122/09)

Exceptions:

Name of plant species	Percentage of pollen grain in insoluble sediment
Sweet Chestnut (<i>Castanea sativa</i> Mill.)	85%
Rapeseed (<i>Brassica napus</i> L.), Facelia (<i>Phacelia tanacetifolia</i> Benth.)	60%
Lime (<i>Tilia</i> spp.)	25% (10%*)
Acacia (<i>Robinia pseudoacacia</i> L.) Mint (<i>Mentha</i> spp.) Ling (<i>Calluna vulgaris</i> L.) littoral ling (<i>Satureja montana</i> L.) Dandelion (<i>Taraxacum officinale</i> Weber) Rosemary (<i>Rosmarinus officinalis</i> L.)	20%
Sage (<i>Salvia officinalis</i> L.)	15% (10%*)
Bearberry (<i>Arbutus unedo</i> L.)	10%
Citrus fruits (<i>Citrus</i> spp.)	10% (5%*)
Lavender (<i>Lavandula</i> spp.)	10% (5%*)

*allowed in addition with characteristic sensory properties of honey for specific plant species (odour, taste, colour)

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Ordinance on labelling advertising and presenting of foodstuffs (OG 41/08)

Harmonised with Directive 2000/13/EC

When labelling pre-packaged food the following particulars shall be compulsory:

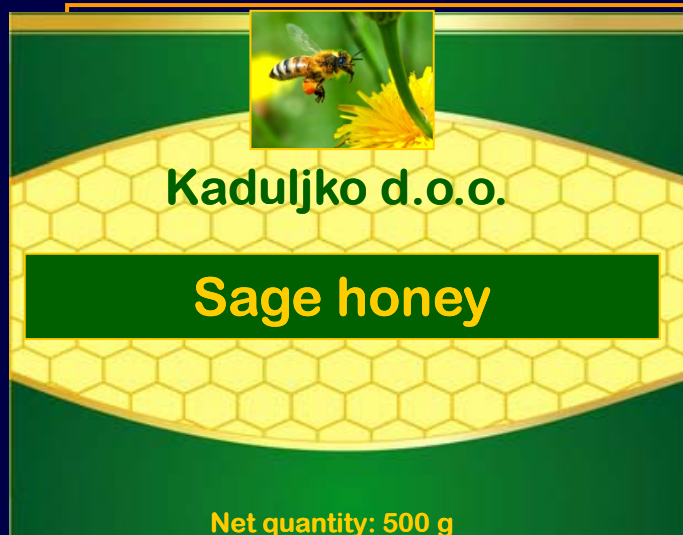
1. Name under which the product is sold
2. Net quantity or the filling quantity
3. Durability
4. Storage conditions or conditions of use, where necessary, or if they can affect durability



Ordinance on labelling advertising and presenting of foodstuffs (OG 41/08)

5. Name and address of the manufacturer, packager or seller, registered in the Republic of Croatia
6. Particulars about the place of origin
7. Instructions for use, where necessary, to enable appropriate use
8. Lot or batch





Kaduljko d.o.o.

Sage honey

Net quantity: 500 g

Country of origin

Instructions for use and storage condition

Lot or batch



Sage honey

Net quantity: 500 g

Best before end: 02/2011.

Packer: Kaduljko d.o.o.,
Zagrebačka 25, 10 000
Zagreb, Croatia

Country of origin: Croatia

At lower temperatures honey can
crystallize. Heating at temperatures up
to 45° C again becomes liquid.
Keep in dry and cool place

L02152009

HR 7568

Quality of honey

Name under which the product is sold

The net quantity

Durability

The name and address of the FBO

Approval No.



Official controls

According to the Food Act, the official control is carried out:

- at the import: by the border veterinary inspection
- at the level of primary production and associated operations: by veterinary inspection and by livestock inspection from MAFRD
- at the level of production and processing: by the veterinary inspection and by quality inspection from MAFRD
- at the level of retail: by the sanitary inspection from MHSW and by inspectors from State Inspectorate



Laboratories on quality of honey

Official laboratories have to be accredited according to HRN EN ISO 17 025

- 4 authorised laboratories



Ordinance on beekeeping and bee forage Cadastre (OG 18/08)

- lays down the conditions for location of apiary, the way of bees relocation, housing conditions and the exploitation of bees, bee protection, establishment and management of the cadastre of bee forage, developing and implementing of forage order, exploitation of bee forage in the bee forage order...



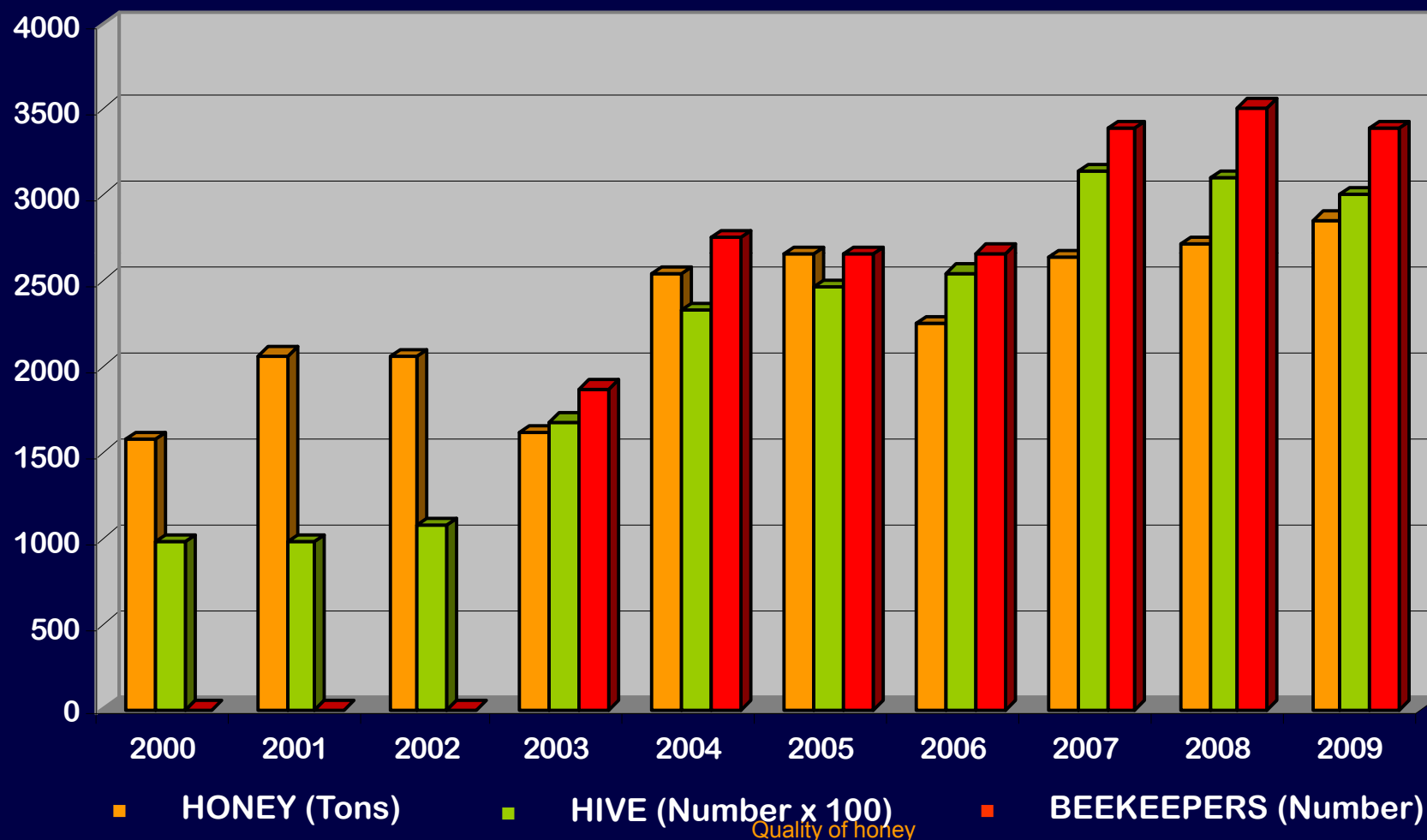
Situation in the beekeeping sector in Croatia

Situation in the beekeeping sector:

- 5966 beekeepers with 7484 apiaries are recorded during the period from January 2010 to 31 July 2010



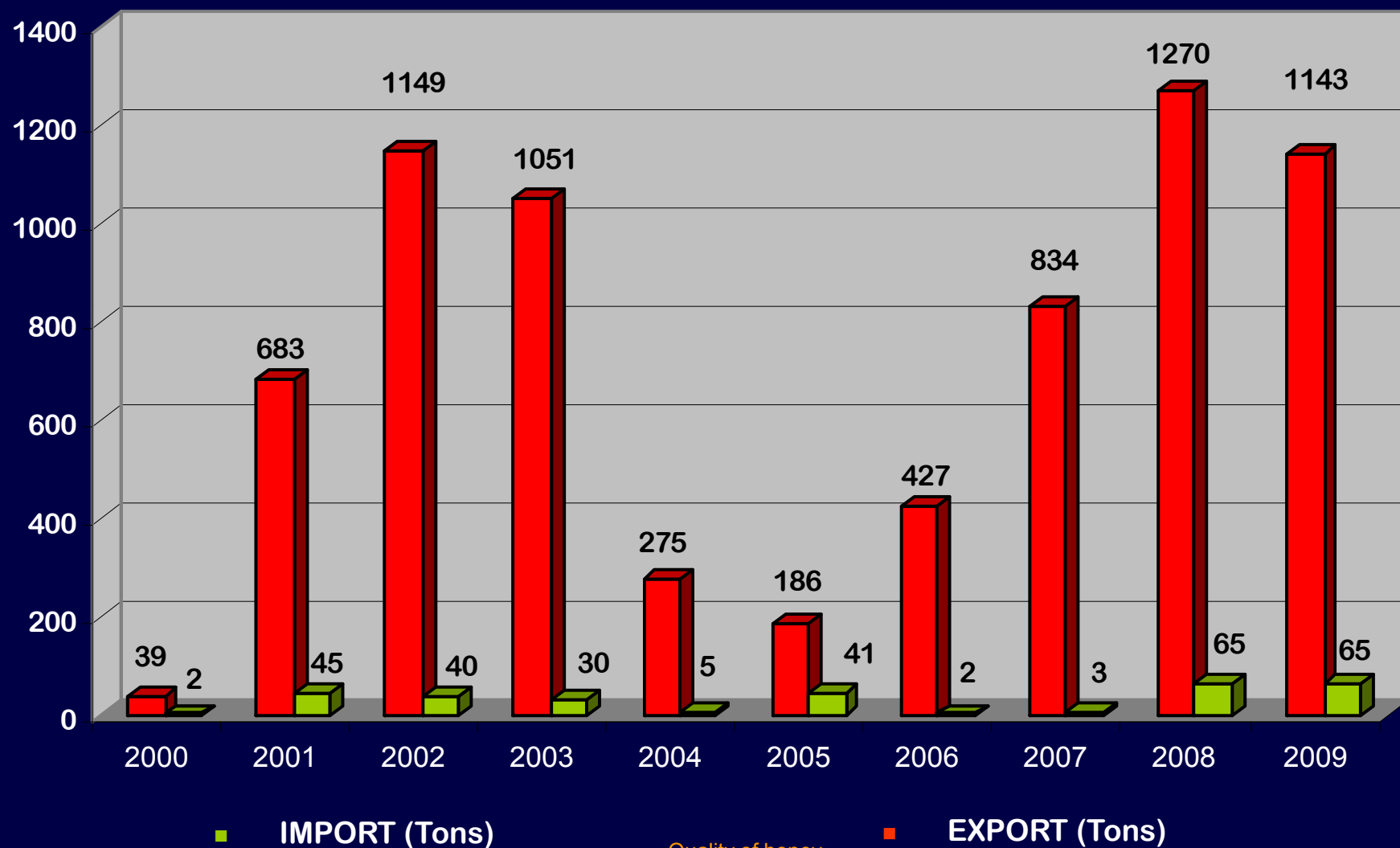
Production of honey in Croatia



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Export/Import of honey in Croatia



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Export/Import of honey

Export and import of honey in the period from January to July 2010

	EXPORT		IMPORT	
	Honey packaging up to 25 kg	Honey packaging over 25 kg	Honey packaging up to 25 kg	Honey packaging over 25 kg
Country	Quantity in tons (T)	Quantity in tons (T)	Quantity in tons (T)	Quantity in tons (T)
Germany		156,3	2,3	17
Bosnia and Hercegovina	98		3,8	
Serbia	12,4			
Italy	7,6		1,0	
Slovenia				
Kosovo	3,2			
Switzerland	2,5			
China	1,8			20
Austria		1,2		0,6
Total	126	165	7	37

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Requirements for export/import of honey

- Originates from approved establishment
- Accomplished requirements prescribed by Veterinary certificate (import to Croatia, export to EU or other countries)
- Fulfilment of quality requirements



Links related to honey that you may find useful:

- <http://www.mps.hr/>
- <http://www.pcela.hr/>
- <http://www.pcelarstvo.hr/>
- <http://www.pcelinjak.com>



Thank you for your attention !

**Ministry of Agriculture, Fisheries and Rural
Development**

Food Safety and Quality Directorate

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