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# EU FOOD FRAUD NETWORK COORDINATED CASES

**Beeswax adulterated with stearin  
and paraffin**



**DG SANTE**

**Unit G5 – Alerts, Traceability and Committees**

Health and  
Food Safety



**Brussels, 20 June 2018**



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# Beeswax on the EU market

## FOOD GRADE

Beeswax - **natural wax** obtained by melting the walls of the honeycomb made by the honey bee.

Authorised food additive under Reg. (EU) 231/2012



Natural beeswax is limited and expensive – bees produce only 1 kg of wax for each 8 kg of honey.

European production of beeswax is not sufficient to cover demand.

### Mix of natural beeswaxes

- ☐ Mineral waxes  
(paraffin and microcrystalline waxes)
- ☐ Industrially-produced fatty acids  
(stearic acid, palmitic acid)
- ☐ Plant waxes  
(including Sumac wax)
- ☐ Waxes of ester type combined with mineral hydrocarbons  
(synthetic waxes)

Sales of beeswax *without indicating* that it contains other "waxes" is *misleading* and thus *illegal*.\*\*

## Animal By-Products cat. 3\*\*\*

Imported beeswax and its products must be processed; apiculture by-products are **not intended for human consumption**.

Reg. (EC) 1069/2009



\*Reg. (EU) 231/2012, laying down specifications for food additives listed in Annexes II and III to Regulation (EC) No 1333/2008 of the European Parliament and of the Council.

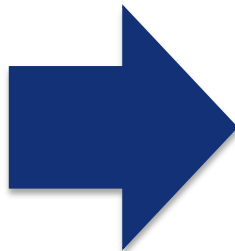
\*\*Directive 2006/114/EC concerning misleading and comparative advertising prohibits traders to conduct misleading advertising vis-à-vis other traders (B2B)



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# Potential effects of stearic and palmitic acid on Bee health

## Beeswax sheets



Paraffin



Stearin

*Adulterated embossed waxes have been incriminated in a number of brood mortality incidents in Europe: BE, DE, NL...*



# Potential effects of stearic and palmitic acid on Bee health



- Addition of 15-35% stearic acid to beeswax = Impact on brood.
- Mean larva mortality of 49-71% observed in broods where stearic acid is present.

Various field studies appear to confirm this risk

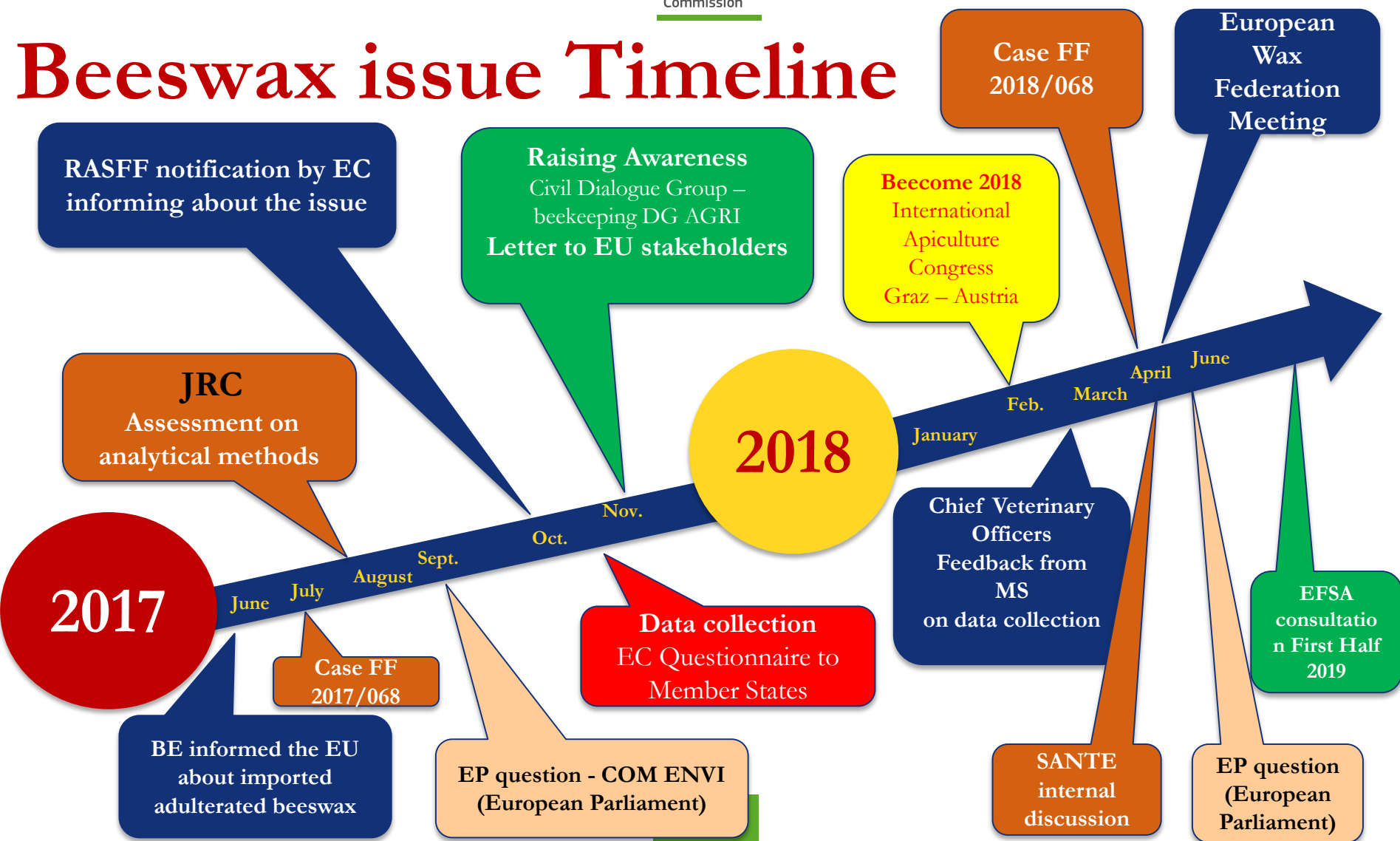
*Example: Reybroeck W.ILVO, 30 June 2017, Research Institute for agriculture, fisheries and food ILVO.vlaanderen*





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# Beeswax issue Timeline



# Follow-up

- 2 cases in the AAC-FF and 1 EU coordinated case
- 1 RASFF notification (by EC)
- 1 OFIS case (organics): pesticide residues

# Amendment of the ABP legislation\*:

Certain Member States proposed to amend ABP Commission Implementing Regulation in order to introduce definition of the beeswax.

*\*Commission Regulation (EU) No 142/2011 of 25 February 2011 implementing Regulation (EC) No 1069/2009 of the European Parliament and of the Council laying down health rules as regards animal by-products and derived products not intended for human consumption*

# Amendment of the ABP legislation

However, introduction of a new definition should be carefully assessed to prevent any unwanted trade barriers in existing trade in Beeswax which may be destined for different purposes. The foreseen amendment will be subject to intensive discussion with concerned industry sector.



## **Amendment of the ABP legislation**

Beeswax intended exclusively for use in apiculture should be always a Category 3 materials complying with specifications established for beeswax intended for the use in food and pharmaceutical industry.

Target: second half 2018

# Request to EFSA

concerning possible impacts on bees and human health  
with beeswax adulterated with stearin and paraffin.

Target: first half 2019

## Advice to operators

Strengthen vigilance and ask for contractual guarantees:

- Abnormal market price
- Certificates of authenticity, purity and quality
- Traceability (origin, batch ...)

# EU coordinated control plan?

- Data collecting (EWF, MS, ...)
- Market monitoring and trade patterns analysis
- EFSA assessment
- Priorisation