European Parliament
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Committee on Petitions

30.11.2018

NOTICE TO MEMBERS

Subject: Petition No 0432/2016 by Zoltán Tóth (Hungarian) on stopping the commercial sale of honey products manipulated by macro-reticulated synthetic resin, which endanger the health of European consumers

1. Summary of petition

The petitioner is a bio farmer and committed to healthy nutrition. He is asking for urgent action to withdraw from the shelves of supermarkets and to stop at the borders of the European Union honey products which have been treated (mixed) with macro-reticulated synthetic resin in order to conceal the honey's geographical origin or to modify its colour and other parameters in order to make it compliant with the current (and in the petitioner's opinion not sufficient) EU quality requirements. The petitioner explains that during the process of filtering out the macro-reticulated synthetic resin the material emits its minuscule particles into the honey which inevitably pollute the product, even organic honeys that European consumers consider and buy as healthy. Furthermore styrene copolymer and divinylbenzene granules, also present alongside with the resin in the products, are mutagen and carcinogen substances listed and regulated in the Commission Regulation (EU) 2015/174 of 5 February 2015 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food. The petitioner urges that adequate EU financing be made available in order to facilitate for sample tests to be executed at the EU borders on honey products to be imported into the EU and random checks be carried out in European supermarkets followed-up by laboratory examinations, in order to detect the above substances and withdraw affected products from consumers reach without delay.

2. Admissibility

Declared admissible on 15 September 2016. Information requested from Commission under Rule 216(6).

3. Commission reply, received on 31 May 2017

The Commission was not aware of this potentially fraudulent activity until now.

In his correspondence dated 13 April 2016 and in the additional information dated 4 February 2017, the petitioner expresses his concerns about the commercial sale of honey and beeswax products manipulated by macro-reticulated synthetic resin, which could endanger the health of European consumers and bee colonies.

As the Commission suspects a fraudulent activity, this issue requires further examination and analysis by several Commission services.

The Commission adopted in 2015 a Recommendation for an EU coordinated control plan[1] to assess the prevalence on the market of honey adulterated with sugars and honeys mislabelled with regard to their botanical source or geographical origin. The non-compliances detected by the Member States were mostly related to the declaration of the botanical source (7%) and to adulteration with sugar (6%). Non-compliances related to the declaration of the geographical origin were less frequent (2%). Some non-compliances relating to the botanical source are probably unintentional and result from bees foraging a wide variety of plants despite the hives being located very close to the plant species identified as the botanical source.

In response to the petitioner's specific questions on the ion-exchange resin use in honey and beeswax from the EU and non-EU countries of origin, the Commission highlights the constant improvements and checks relating to honey and bee products on the EU market. As the petitioner knows, there is no recommended method of analysis to detect residues of possible use of the ion-exchange resin filtration.

The petition indicates that styrene copolymers cross-linked with divinylbenzene may be used in this context. The petitioner specifically refers to the substance authorised with food contact material (FCM) number 859 under Commission Regulation (EU) 2015/174[2]. Indeed, while ion-exchange resins are covered in Annex I to Regulation (EC) No 1935/2004[3] on food contact materials, there is presently no specific Union legislation or national legislation that specifically regulates these resins. The substance with FCM number 859 is only authorised for use in certain plastic materials, and not as an ion-exchange resin. On the basis of the authorisation, it cannot be considered safe for use as an ion-exchange resin in contact with any food.

As regards the petitioner's concerns with respect to the weakening of European bee colonies, the Commission sponsors several research projects to shed light on the principal factors influencing bee health and into the losses in managed honey bee colonies and other pollinators in Europe. Moreover, surveillance measures are taken in the EU to improve methodology, to obtain reliable data (*i.e.* collected or verified by officials of the competent authorities) on the extent of the colony mortality and on the prevalence of the most important pathogens in the visited apiaries.

1 C(2015) 1558 final: http://ec.europa.eu/food/sites/food/files/safety/docs/official-controls_food-fraud_fish_recom-2015-1558_act-annexes_en.pdf
2 http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R0174&from=EN
3 http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:02004R1935-20090807

To respond to the petitioner's proposal to take immediate measures to detect honey manipulated with absorbent ion exchange resin and to prevent the placement of such products on the EU market, the Commission assures that it will investigate and highlight the topic to extend the study on styrene and benzene derivatives in beeswax and honey products. The Commission has contacted the European beekeeping sector to request more information about the matter.

Nevertheless, until the detection method becomes available, the irrevocable proof of fraudulent activities in connection with these products are the official investigations performed by the competent authorities of the Member States, which are also responsible for the enforcement of Regulation (EC) No 1935/2004.

The Commission thanks the petitioner for his continued focus on the European honey sector and welcomes any further input.

4. REV I Commission reply, received on 31 January 2018

The Commission is aware of the issues with adulterated beeswax intended for use in apiculture. Since this problem was reported only recently, the available information is very limited and there is a need for further data collection in order to determine the size of the problem.

The Commission signalled the problem of potential public health risk related to adulterated beeswax to Member States during a meeting of the expert groups on Food Fraud and Administrative Assistance in October 2017 as well as via RASFF news 17.844. The Member States have been asked for possible feedback on this matter in order to help to establish the scale of the problem, possible information on risk, analytical methods, results and any other findings regarding the composition of beeswax.

With respect to controls of imported honey, in accordance with EU legislation (Council Directive 97/78/EC[1] and Commission Decision 94/360/EC[2]) consignments of honey are subject to veterinary checks at the EU borders with the following frequencies: 100% checks on documents accompanying the consignments,, 100% identity checks, and 50% physical checks for honey and up to 10% for beeswax. When a consignment is selected for physical check, it is up to the Member States whether or not to sample the consignment, according to their national monitoring plan.

When border inspection posts (BIPs) detect serious or repeated infringements with the EU import requirements, a programme of re-enforced checks is applicable on the products coming from the concerned establishment: detention of consignment at the BIP, sampling, laboratory testing and release after the laboratory test results are received. These re-enforced checks are applicable to the next ten consignments coming from the same origin. These

1 Council Directive 97/78/EC of 18 December 1997 laying down the principles governing the organisation of veterinary checks on products entering the Community from third countries, O.J.

2 **Commission Decision** 94/360/EC **of 20 May 1994 on the reduced frequency of physical checks of consignments of certain products to be implemented from third countries, under Council Directive 90/675/EEC** - OJ L 158, 25.6.1994, p. 41–45.

measures are applied and monitored through the Trade Control and Expert System (TRACES). If unfavourable results for the same hazard continue to be identified, the re-enforced checks programme is maintained *i.e.* all consignments from this establishment are subject to official sampling and testing and DG Health and Food Safety officially requests the competent authorities of the third country to take corrective actions.

If additional information (e.g. laboratory test results, Commission audit of the third country official control system) reveals that these products constitute a serious risk to human health and that the measures outlined above are not sufficient to address this risk, the Commission will consider proposing emergency measures which may include requirements for compulsory sampling and testing of all consignments imported into the EU from the exporting third countries concerned.

Currently, the BIPs have the legal power to take appropriate measures when non-compliant consignments are detected. The BIPs must reject non-compliant consignments *i.e.* re-dispatch them to the country of origin, destroy them or apply special treatment ensuring that the feed or food is brought into line with the requirements of EU law.

As regards the lack of agreed analytical methods to detect and quantify adulterants in beeswax, the Joint Research Centre has been asked to verify the existing possibilities. Modern chromatographic methods exist to detect adulterated beeswax. While they could be used for official controls, it is necessary to determine first the composition of beeswax and set decision criteria for assessing its purity.

Regarding the petitioner's questions about sampling methods, both Member States' and non-EU countries' competent authority officials take honey samples for residue monitoring directly from bee hives or from honey drums at establishments processing honey. Samples of imported honey are also taken at the border inspection posts of the Member States. Honey is tested for a wide range of residues of a) pharmacologically active substances *e.g.* antibiotics, b) contaminants *e.g.* heavy metals, and c) pesticides.

Residues:

EU Maximum Residue Limits (MRLs) in honey are listed in Regulation (EU) No 37/2010[1] for residues of pharmacologically active substances and in Regulation (EC) No 396/2005[2] for residues of pesticides.

In addition to the official residue monitoring programmes implemented by Member States and non-EU countries, many food business operators, in particular of the main honey-importing Member States have their own pre-import residue testing programmes in place, and require exporting establishments in non-EU countries to send honey samples to selected European laboratories for analysis.

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1 Commission Regulation (EU) No 37/2010 of 22 December 2009 on pharmacologically active substances and their classification regarding maximum residue limits in foodstuffs of animal origin, OJ L 15, 20.1.2010, p. 1–72.

2 Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC, OJ L 70, 16.3.2005, p. 1–16.

a) Pesticide residues:

The Commission sets Maximum Residue Levels (MRLs) for pesticides in honey in line with Regulation (EC) No 396/2005. Article 18 of that Regulation describes the requirements for compliance with the MRLs. It is the responsibility of Member States to enforce these residue levels via their annual monitoring programs as well as to prevent the use of illegal pesticides.

b) Residues of veterinary medicinal products:

Directive 96/23/EC[1] lays down the requirement for the Member States to monitor residues of veterinary medicinal products (VMPs) in honey. Honey from third countries may only be imported into the EU if the third country is listed in the Annex to Decision 2011/163/EU[2], which is subject to the submission and approval of a control plan, which is equivalent to the requirements of national control plans for VMPs of EU Member States. In addition, Decision 2007/275/EC[3] includes honey in the list of products subject to controls at border inspection posts. In case residues of VMPs are identified at levels above the MRLs established under Regulation (EU) No 37/2010, it is up to the Member States' competent authorities to take appropriate enforcement actions. Directive 96/23/EC and Regulation (EU) 2017/625[4] specify the measures to be taken in the case of non-compliance, such as the recall, withdrawal, removal and destruction of goods.

In the EU, VMPs intended for use in food producing animals have to be scientifically evaluated according to human food safety requirements (Regulation (EC) No 470/2009[5]). VMPs for bees may only contain substances for which EU MRLs in honey were established. These limits are listed in Regulation (EU) No 37/2010; for some substances (*e.g.* amitraz and coumaphos) an MRL has been established, whilst for others the above-mentioned evaluation demonstrated that no MRL was required to protect food safety (*e.g.* flumethrin, oxalic acid and tau fluvalinate). Products that have not been assessed as safe according to these requirements may neither be authorised nor used otherwise for food production animals.

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1 **Council Directive 96/23/EC of 29 April 1996 on measures to monitor certain substances and residues thereof in live animals and animal products and repealing Directives 85/358/EEC and 86/469/EEC and Decisions 89/187/EEC and 91/664/EEC,** OJ L 125, 23.5.1996, p. 10–32.

2 **Commission Decision 2011/163/EU of 16 March 2011 on the approval of plans submitted by third countries in accordance with Article 29 of Council Directive 96/23/EC,** OJ L 70, 17.3.2011, p. 40–46.

3 **Commission Decision 2007/275/EC of 17 April 2007 concerning lists of animals and products to be subject to controls at border inspection posts under Council Directives 91/496/EEC and 97/78/EC,** OJ L 116, 4.5.2007, p. 9–33.

4 **Regulation (EU) 2017/625 of the European Parliament and of the Council of 15 March 2017 on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products, amending Regulations (EC) No 999/2001, (EC) No 396/2005, (EC) No 1069/2009, (EC) No 1107/2009, (EU) No 1151/2012, (EU) No 652/2014, (EU) 2016/429 and (EU) 2016/2031 of the European Parliament and of the Council, Council Regulations (EC) No 1/2005 and (EC) No 1099/2009 and Council Directives 98/58/EC, 1999/74/EC, 2007/43/EC, 2008/119/EC and 2008/120/EC, and repealing Regulations (EC) No 854/2004 and (EC) No 882/2004 of the European Parliament and of the Council, Council Directives 89/608/EEC, 89/662/EEC, 90/425/EEC, 91/496/EEC, 96/23/EC, 96/93/EC and 97/78/EC and Council Decision 92/438/EEC (Official Controls Regulation),** OJ L 95, 7.4.2017, p. 1–142.

5 **Regulation (EC) No 470/2009 of the European Parliament and of the Council of 6 May 2009 laying down Community procedures for the establishment of residue limits of pharmacologically active substances in foodstuffs of animal origin, repealing Council Regulation (EEC) No 2377/90 and amending Directive 2001/82/EC of the European Parliament and of the Council and Regulation (EC) No 726/2004 of the European Parliament and of the Council,** OJ L 152, 16.6.2009, p. 11–22.

Rules on the authorisation, distribution and use of VMPs are provided in EU legislation, primarily in Directive 2001/82/EC[1]. Animal products for human consumption can only derive from animals with proven records of treatment with authorised VMPs. The enforcement of these rules is the responsibility of the competent authorities in the Member States. The Commission carries out audits, inspections and various non-audit activities in the Member States to ensure that EU legislation is properly implemented and enforced.

One of the main objectives of the Commission proposal for a new Regulation on VMPs is to increase their availability, in particular for minor species. The proposal provides specific incentives for the development of VMPs for bees (through an extended period of protection of technical documentation and a clear legal basis for simplified authorisation of products for minor species – including bees) and other measures to increase the availability of VMPs [*e.g.* a fixed timeframe for the approval of clinical trials, the possibility of granting a centralised (EU-level) marketing authorisation for all types of VMPs, removal of the 5-year renewal requirement, etc.]. It also foresees the establishment of an EU database of VMPs which should collate information on marketing authorisations granted in the EU, thus enhancing overall transparency and facilitating the flow of information between authorities.

Organic farming:

With regard to the potential fraudulent use of decontaminated beeswax with resin in organic farming, the use of non-organic beeswax is already strictly regulated by Council Regulation (EC) No 834/2007[2] and Commission Regulation (EC) No 889/2008[3]. Under Article 44(b) of Commission Regulation (EC) No 889/2008, non-organic beeswax may be used only in the case of new installations or during the conversion period where beeswax from organic beekeeping is not available on the market, where it is proven to be free of contamination by substances not authorised for organic production and provided it comes from the wax cap. Moreover, the use of decontaminated beeswax with resin technology in organic beekeeping would be contrary to the objectives and overall principles for organic production laid down in Articles 3 and 4 of Council Regulation (EC) No 834/2007.

5. REV II Commission reply, received on 30 November 2018

Following the additional information sent by the petitioner in September 2018, the Commission would like to provide some additional observations.

Contamination of honey with neonicotinoids

The EU regulatory system for pesticides is extremely robust and ensures that substances

1 **Directive 2001/82/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to veterinary medicinal products,** OJ L 311, 28.11.2001, p. 1–66.
2 **Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91,** OJ L 189, 20.7.2007, p. 1–23.
3 **Commission Regulation (EC) No 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control ,** OJ L 250, 18.9.2008, p.1–84.

undergo a rigorous scientific assessment before any decision is taken on whether they can be approved or not. Substances are only approved when it has been demonstrated that under realistic conditions of use there are no unacceptable effects on human or animal health, or the environment, including bees.

In 2013, the Commission severely restricted the placing on the market and the use of plant protection products, and treated seeds containing the three neonicotinoids imidacloprid, clothianidin and thiametoxam[1]. Further restrictions for these three active substances were adopted in 2018 to completely ban their outdoor uses[2]. Only the use in permanent greenhouses remains.

The study by Mitchell *et al.* started to collect samples of honey in 2012, that is to say before the abovementioned restrictions on the use of neonicotinoids in the EU were in place. With the current restrictions, honeybees will in principle no longer be exposed to residues of the restricted substances in nectar or pollen. Furthermore, the LogPow values of all neonicotinoids in the EU is lower than 3, indicating that these substances are not lipophilic. It is therefore considered unlikely that residues in honey could occur via exposure to beeswax contaminated with neonicotinoids.

Resin technology

The use of resin technology to remove residues remains speculative. While there are scientific publications on the efficiency of the resin technology to remove residues, there is no reliable information if and to which extent the resin technology would be used in practice. Although such technology would be subject to Regulation (EC) No 1935/2004[3] on food contact materials, it is the responsibility of the competent authorities of the Member States to act on contamination with *e.g.* benzene and styrene, possibly originating from the use of such technologies. The Commission has so far not been notified through the Rapid Alert System for Food and Feed that such contamination has been found in practice.

[1] Commission Implementing Regulation (EU) No 485/2013 of 24 May 2013 amending Implementing Regulation (EU) No 540/2011, as regards the conditions of approval of the active substances clothianidin, thiamethoxam and imidacloprid, and prohibiting the use and sale of seeds treated with plant protection products containing those active substances, OJ L 139, 25.5.2013, p. 12–26.

[2] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2018:132:TOC

[3] Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/EEC, OJ L 338, 13.11.2004, p. 4–17.