



Apimondia Statement on “Vegan Honey”

MAY 2023

1. PURPOSE

APIMONDIA Statement on so-called “Vegan Honey” (VH) is the official position of APIMONDIA regarding these types of products that use the word “honey”.

This Statement aims to clarify concepts for authorities, traders, supermarkets, retailers, manufacturers, consumers, and other stakeholders of the honey trade chain about the definition of honey and the implications of the misuse of the name “honey”. It intends to explain all aspects to consumers, so they are not misled but rather understand the huge differences between ‘honey’ and what is called ‘vegan honey’.

APIMONDIA has a role in continually protecting apiculture globally, and always supporting the production of high quality authentic natural honey containing all the complex and unique properties provided by nature.

2. RESPONSIBILITY

The APIMONDIA Working Group on Adulteration of Bee Products * is the responsible body for the preparation of this Statement.

* Members: Norberto Garcia, Chair, APIMONDIA and Universidad Nacional del Sur – ARGENTINA; Etienne Bruneau, Co-chair, APIMONDIA and CARI – BELGIUM; Jodie Goldsworthy, Co-chair, APIMONDIA – AUSTRALIA; Stephan Schwarzingger, Co-chair, University of Bayreuth – GERMANY; Lucas Garibaldi, APIMONDIA, IRNAD and Universidad Nacional de Río Negro; Lucas Martínez, APIMONDIA and SADA ARGENTINA; Ron Phipps, APIMONDIA - U.S.A.; Rod Scarlett, Canadian Honey Council (CHC) – CANADA; Enrique Bedascarrasbure, INTA and Universidad Nacional del Centro de la Provincia de Buenos Aires – ARGENTINA; Robin Crewe, University of Pretoria- SOUTH AFRICA; and Prof. Ahmad Al Khazim Al Ghamdi, Arab Beekeeping Association – SAUDI ARABIA.

The Working Group will ensure through consultation with the leading honey scientists,

technical experts, specialist honey laboratories, or others with sufficient market and beekeeping knowledge, that the Statement is reflective of the most up-to-date information and collective thinking on the topic.

APIMONDIA Executive Council will publish this Statement on the APIMONDIA website and in other appropriate publications.

3. THE DEFINITIONS OF HONEY AND VEGANISM

The most widely accepted international standards like Codex Standard (1981), the European Honey Council Directive 2001/110/EC (European Council, 2001) and the USP Honey Identity Standard (United States Pharmacopeia, 2021), and also the Apimondia Statement on Honey Fraud (Apimondia, 2020 a) are mostly aligned regarding the definition of honey.

Codex Alimentarius (1981) specifically defines:

“Honey is the natural sweet substance produced by honey 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 with specific substances of their own, deposit, dehydrate, store and leave in the honey comb to ripen and mature.”

Veganism, on the contrary, has not been strictly defined on an international level. However, it is common understanding that veganism refers to a life style relinquishing (food) products of animal origin. Wikipedia defines: “Veganism is the practice of abstaining from the use of animal product—particularly in diet—and an associated philosophy that rejects the commodity status of animals.” (<https://en.wikipedia.org/wiki/Veganism>). Definitions published by many interest groups, such as vegan societies or animal protection organizations, are in accord with this meaning.

Considering the two definitions given it is common sense that “honey” and “vegan” exclude each other.

A survey reveals that different manufacturers make VH from ingredients like brown rice syrup, agave syrup, maple syrup, apples, cane nectar, coconut nectar, different fruit juices,

water, natural flavors, etc. (Hirsh, 2021).

While honey may not be considered as vegan since it is produced by the human keeping of bees through rational methods of production, all vegan sweeteners cannot be called “honey” since they do not meet the definition of honey (Table 1) nor its compositional criteria.

While some vegan products openly and incorrectly use the word “honey”, other similar vegan alternatives are more cautious and precise and do not use the word “honey”. A quick search of products reveals interesting name creations, that exhibit a phonetic and/or linguistic similarity to the word “honey”, which – depending on the presentation of relevant words – bear the risk of deception for the consumer.

Table 1: Key points in the definition of honey by Codex Alimentarius (1981) violated by the so-called “VEGAN HONEY”.

PART OF THE DEFINITION	VIOLATION BY VH
<i>“Honey is the natural sweet substance produced by honey bees...”</i>	The definition of honey makes clear that no human intervention is required in its production. VH is a synthetic product entirely produced by humans with no intervention of bees whatsoever.
<i>“...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...”</i>	VH is produced from different types of sugars and/or syrups. VH is not produced by 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.
<i>“...which the bees collect, transform by combining with specific substances of their own...”</i>	VH is not the result of the interaction between bees and nectar or honeydew. Honey, as a result of such interaction, is a very complex food containing many particular substances, which give multiple properties to the product. In VH, no addition of specific substances from bees takes place, and the product lacks the manipulation through the bees that leads to maturation and ripening.
<i>“...deposit, dehydrate, store and leave in the honey comb to ripen and mature...”</i>	None of these activities required for the transformation of nectar/honeydew into honey by bees takes place in the production of VH.

4. LEGAL IMPLICATIONS

The legal consequences of the misuse of the word “honey” vary according to the legislation of each market. As outstanding examples, we will refer here to the two main global honey import markets: E.U. and U.S.

4.1 European Union

The European Union, through its Council Directive 2001/110/CE (European Council, 2001), defines specific rules for honey, supplementing its laws on foodstuffs of Regulation 1169/2011 (Eur-Lex, n.d.).

The Council Directive 2001/110/EC specifies the types of honey products which can be sold under given names and rules on labelling, presentation and information on origin. This Directive states that the term "honey" shall be applied only to the product defined in its Annex I, point 1, and shall be used in trade to designate that product. Annex I, point 1, defines honey as “the natural sweet substance 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 with specific substances of their own, deposit, dehydrate, store and leave in honeycombs to ripen and mature”. Furthermore, in Article 9 the marketing of products which fail to conform to this Directive, with effect from 1 August 2004, is prohibited. Also according to this Directive, products under the name “honey” shall meet the requirements set out in its Annex II.

The European Commission Regulation (EU) 2019/1715 (European Commission Regulation, 2019) defines a ‘fraud notification’ in iRASFF and thus, indicates the key elements to be considered. In this regard, agri-food fraud is “a non-compliance concerning any suspected intentional action by businesses or individuals, for the purpose of deceiving purchasers and gaining undue advantage therefrom, in violation of the rules referred to in Article 1(2) of Regulation (EU) 2017/625”. Four key operative criteria are referred to for distinguishing whether a case should be considered a "non-compliance" or "suspicion of fraud": i) violation of EU rules; ii) deception of customers - altered labels, which hide the true quality or, in worse cases, even the nature of a product- iii) undue advantage, and iv) intention.

VH clearly does not meet the definition and composition criteria of honey, missuses the name “honey” -thus violating many EU rules- and also constitutes a type of food fraud through altered labels, undue advantage, and intentionality.

4.2 The United States of America

Under section 343 of the FD&C Act, a food is misbranded unless its label bears the common or usual name of the food, if there be any (FD&C Act Section 343, n.d.). According to CFR 102.5 (CFR, n.d.), the common or usual name for a food may be established by common usage or by regulation and must accurately identify or describe, in as simple and direct terms as possible, the basic nature of the food or its characterizing properties or ingredients, and may not be “confusingly similar to the name of any other food that is not reasonably encompassed within the same name”.

The U.S. Pharmacopeia (2021) has recently published its Honey Identity Standard, which defines honey as “the natural sweet substance produced by species within the *Apis* genus 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 with specific substances of their own, deposit, dehydrate, store, and leave in the honeycomb to ripen”. The USP Honey Identity Standard also states that the term honey only applies to honey sold without addition or modification and does not apply to other finished products, even by those that use honey as an ingredient or honey that is combined with other ingredients.

The Commercial Item Description for Honey, published by the USDA (2019) defines: “Honey is a sweet, syrupy substance produced by honey bees from the nectar of plants or from secretions of living parts of plants or excretions of plant-sucking insects on the living part of plants, which the bees collect, transform by combining with specified substances of their own, deposit, dehydrate, store, and leave in the honeycombs to ripen and mature”.

In the U.S., honey is deemed adulterated as described in accordance with Title 21 - Food and Drugs, Chapter 9 - Federal Food, Drug and Cosmetic (FD&C) Act, Subchapter IV - Food, United States Code (U.S.C.) §342. (USCODE, 2011).

In addition, through the document “Proper Labeling of Honey and Honey Products: Guidance for Industry” the U.S. FDA intends to advise the regulated industry on the proper

labeling of honey and honey products in accordance with sections 402 and 403 of the Federal Food, Drug, and Cosmetic Act (U.S. FDA, 2018).

For the U.S. FDA, accurate and consistent labeling of honey and honey products helps to ensure that honey and honey products are not adulterated or misbranded and enhances consumers' ability to make informed choices among products (U.S. FDA, 2018).

In conclusion, for the U.S. legislation, VH is then a clear case of misbranding confusingly using a name or similar name of "honey", whose definition and composition criteria are clearly defined by the United States Pharmacopeia's Honey Identity Standard (2021).

5. OTHER STATEMENTS UNFAIRLY MADE ABOUT BEEKEEPING

Webpages of companies dedicated to or related to VH also unfairly make statements about beekeeping and more specifically to the production of natural honey. For those operating in the apicultural sector, the contribution of beekeeping to development activities is quite evident, but in other contexts this may not emerge just as clearly.

It has been estimated that, in the absence of animal pollinators, including bees in a prominent role, global fruit supplies would fall by 22.9%, vegetables by 16.3% and nuts and seeds by 22.1 %. There is evidence that pollination affects not only the quantity but also the nutritional quality of crops (Garibaldi *et al.*, 2022) that coincidentally form the basis (if not the entirety) of vegetarian and vegan diets. In fact, products such as pollen are one of the best sources of plant protein (Apimondia, 2020 b).

Pollinators have an important and often overlooked role in providing medicines to support human health (Garibaldi *et al.*, 2022). Those who consider honey as a gastronomic supplement that can be fully replaced by any other sweeteners (Krosofsky, 2021b) ignore the medicinal benefits derived from the chemical properties of honey, which depend on its origin and the bees' natural processes. Honey has various beneficial biological effects (e.g., prebiotic and probiotic effects) and is an optimal food supplement for the growth and development of children (Apimondia, 2020 b).

The main justification for the production of VH is that it will end all the harm caused to bees by an industry perceived as exploitative and environmentally negative, also implying that beekeeping is based on unethical management practices (Krosofsky, 2021a).

Apimondia has already produced a concise reference publication to highlight and contextualize how beekeeping and its many activities can contribute to the achievement of the United Nations Sustainable Development Goals (Apimondia, 2020 b). In addition to those benefits, since pollinators are responsible (at least in part) for the reproduction of 90% of flowering plants (Potts et al., 2016), beekeeping helps to maintain the diversity of life on our planet. The interdependent relationship between bees and plants gives people economic reasons to conserve native habitats and the food webs they support. Thus, healthy ecosystems associated with agricultural landscapes play an important role in crop and food production (Apimondia, 2020 b). It is for all the above that bees and their products are also regarded as the best bio-indicators of the quality of the environment (INSIGNIA Consortium 2021).

Contrary to what vegan honey production means, beekeeping is increasingly moving towards sustainable management and production methods. This trend isn't unexpected, as bees need to be healthy to provide the income on which beekeepers depend. Colony management and its adaptation to different socio-environmental contexts require continuous training and evaluation processes. More and more beekeepers want to prioritize pollinator health over profits.

Another argument of VH manufacturers is the negative impact of mistakenly widespread large-scale honey extraction, whereas the activity adapts to each case and small-scale workers with simple equipment are more common than large honey extraction chains. Indeed, one of the most important contributions of beekeeping is the improvement of food security by providing a livelihood to producers without the need for large investments.

Various national and international organizations are actively promoting good beekeeping practices. Apimondia (2020 a) actively promotes production processes that allow bees to perform their functions, rejecting any method that artificially speeds up the process and, at the same time, identifies illegal methods of production and claims for more rigorous, complete, and formal traceability protocols throughout the supply chain.

These initiatives are paving the way for a safer and fairer honey market, which will act as an incentive to promote sustainable beekeeping and provide access to the many ecosystem services that bees provide.

6. CONCLUSION

VH manufacturers mislead and deceive consumers by purposely and incorrectly using the word “honey” or similar names on the label of a product that does not meet the definition nor the compositional criteria of honey as described in the mainly accepted international standards and rules. This violation cheats consumers and endangers beekeeping, food security, and planet’s biodiversity.

REFERENCES

- Apimondia, 2020 a. Apimondia Statement on Honey Fraud. Available at: www.apimondia.org.
- Apimondia, 2020 b. Beekeeping contributes to achieve the Sustainable Development Goals. Available at: www.apimondia.org.
- Codex Alimentarius, 1981. Standard for Honey. Available at: http://www.codexalimentarius.org/download/standards/310/cxs_012e.pdf.
- CFR, n.d., General Principles. Available from: <https://www.ecfr.gov/current/title-21/chapter-I/subchapter-B/part-102/subpart-A/section-102.5>.
- European Commission Regulation, 2019. Agri-Food fraud: What does it mean? Available at: https://food.ec.europa.eu/safety/agri-food-fraud/food-fraud-what-does-it-mean_en.
- European Council, 2021. European Honey Council Directive 2001/110/EC. *Official Journal of the European Communities* 12.1.2002 L10/47-52.

- Eur-Lex, n.d. Labelling of Foodstuffs. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM:co0019>.
- FD&C Act Section 343, n.d. Misbranded Food. Available at: <https://www.govinfo.gov/content/pkg/USCODE-2011-title21/html/USCODE-2011-title21-chap9-subchapIV-sec343.htm>.
- Garibaldi, L., D. Gomez Carella, D. Nabaes Jodar, M. Smith, T. Timberlake and S. Myers, 2022. Exploring connections between pollinator health and human health. Available at: <https://royalsocietypublishing.org/>.
- Hirsh, S., 2021. The Sweetest Vegan Honey Brands and Recipes. Available at: <https://www.greenmatters.com/p/vegan-honey-brands>.
- INSIGNIA Consortium 2021. Guideline for Apicultural citizen science to apply the honey bee colony for bio-monitoring of the environment. Available at: <https://wikis.ec.europa.eu/pages/viewpage.action?pageId=36702461>.
- Krosfky, A., 2021a. A Major Buzzkill: Why the Honey Industry Isn't Great for the Environment. Available at: <https://www.greenmatters.com/p/how-honey-industry-affects-environment>.
- Krosfky, A., 2021b. Why Do Bees Make Honey? Hint: It's Not for Our Benefit. Available at: <https://www.greenmatters.com/p/why-bees-make-honey>.
- Potts, S., V. Imperatriz-Fonseca, H. Ngo, J. Biesmeijer, T. Breeze, L. Dicks, and L. Garibaldi (eds). 2016. Summary for policymakers of the assessment report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services on pollinators, pollination and food production. Bonn, Germany, Secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). 36 pages.
- United States Pharmacopeia, 2021. Honey Identity Standard. Available by subscription at: <https://www.foodchemicalscodex.org/fcc-forum>.
- USDA, 2019. Commercial Item Description. Honey. Available at: https://www.ams.usda.gov/sites/default/files/media/AA20380_Honey.pdf

- USCODE, 2011. Adulterated Food. Available at:
<https://www.gpo.gov/fdsys/granule/USCODE-2011-title21/USCODE-2011-title21-chap9-subchapIV-sec342>).
- U.S. FDA, 2018. Proper Labeling of Honey and Honey Products: Guidance for Industry. Available at: <http://www.fda.gov/FoodGuidances>.