



This is an English translation of a Hebrew immediate report that was published on March 13, 2022 (Ref No.: 2022-01-028975) (hereafter: the “**Hebrew Version**”). This English version is only for convenience purposes. This is not an official translation and has no binding force. Whilst reasonable care and skill have been exercised in the preparation hereof, no translation can ever perfectly reflect the Hebrew Version. In the event of any discrepancy between the Hebrew Version and this translation, the Hebrew Version shall prevail.

BEEIO HONEY LTD
(the “**Company**”)

March 14, 2022

To:
Israel Securities Authority
www.isa.gov.il

To:
Tel Aviv Stock Exchange Ltd .
www.tase.co.il

Dear Sirs and Madams,

Re: Beeio Honey Technologies Ltd. (Subsidiary) has Filed a Patent Application for Methods for the Production of Cultured Low Glycemic Index Honey

The Company is honored to update that further to its immediate report as of August 12, 2021 (Ref No. 2021-01-064468), in which the Company notified its shareholders that it has started researching the production of cultivated honey from “stingless” bees, Beeio Honey Technologies Ltd., a wholly-owned subsidiary (the “**Subsidiary**”), has filed a provisional patent application (the “**Patent Application**”) in the USA for:

Methods and Systems for Producing Emulated Low Glycemic Index Honey

The purpose of the method described in the Patent Application is the development of a new, additional process in the Subsidiary for the production of cultured low glycemic index honey. The inspiration for this development comes from the rare honey naturally produced by “stingless” bees, concurrently with its existing developments and research channels involving the production of cultured honey similar in composition to the more common honey produced by stinging honeybees (*Apis*). Development of such process, to the extent that the Subsidiary succeeds in its development, will allow the Subsidiary to produce cultured honey with low glycemic index as a future product of the Company, which the Company believes may have substantial industrial value.

“Stingless” bee honey is an expensive honey that contains a rare type of sugar that is not found as a major ingredient in any other food, it has a lower glycemic index compared to regular



honey and is considered healthier.^{1,2} The glycemic index ranks foods according to their effect on blood sugar levels, so that food that breaks down quickly and sharply raises the blood sugar level gets a high value, and food that breaks down slowly and moderately raises the blood sugar level gets a low value. The glycemic index helps maintain a proper and balanced diet and is of particular importance for people with diabetes who need to maintain stable sugar levels and avoid sharp rises and falls.^{3,4} It is also of great value for people who want to watch their weight because foods with a high glycemic index are metabolized rapidly and the feeling of hunger quickly returns⁵.

The Company estimates that this technological development will involve the following advantages:

- a. The health-related advantage – as detailed above, published research⁶ shows that honey from “stingless” bees has a low glycemic index and is rich with trehalulose, which is a significant health-related nutrient.^{7,8} The Company’s ability to produce such honey in its laboratories, according to its estimations, constitutes technological progress with future commercialization potential.
- b. The quantitative advantage – the ability to produce commercial quantities of this rare honey which is produced naturally by bees in very small quantities may position the Company, according to the media and online publications, as a pioneer in the field of honey production of this type. It should be noted that the honey production capacity of “stingless bees” is significantly smaller (1-5 kg per year) compared to the honey production capacity of the honeybee (about 35 kg per year) and, therefore, this honey is more expensive.⁹ The production of cultured “stingless” bee honey by the Company will be, in the Company’s opinion, continuous, cheaper, on-demand, and will not be seasonal dependent.
- c. The qualitative advantage – using the production method developed by the Company, the produced honey will not contain residues of pesticides, toxins, and antibiotics.

¹ Fletcher, Mary T.; Hungerford, Natasha L.; Webber, Dennis; Carpinelli de Jesus, Matheus; Zhang, Jiali; Stone, Isobella S. J.; Blanchfield, Joanne T.; Zawawi, Norhasnida (2020-07-22). "Stingless bee honey, a novel source of trehalulose: a biologically active disaccharide with health benefits". *Scientific Reports*. **10** (1): 12128.

² Pimentel, T. C., Rosset, M., de Sousa, J. M. B., de Oliveira, L. I. G., Mafaldo, I. M., Pintado, M. M. E., de Souza, E. L., & Magnani, M. (2021). Stingless bee honey: An overview of health benefits and main market challenges. *Journal of Food Biochemistry*, 00, e13883. <https://doi.org/10.1111/jfbc.13883>

³ Sakurai M, Nakamura K, Miura K, Takamura T, Yoshita K, Morikawa Y, Ishizaki M, Kido T, Naruse Y, Suwazono Y, Kaneko S, Sasaki S, Nakagawa H. Dietary glycemic index and risk of type 2 diabetes mellitus in middle-aged Japanese men. *Metabolism*. 2012;61:47–55.

⁴ Yalçın, T., Al, A., & Rakıcıoğlu, N. (2017). The effects of meal glycemic load on blood glucose levels of adults with different body mass indexes. *Indian journal of endocrinology and metabolism*, 21(1), 71–75. <https://doi.org/10.4103/2230-8210.195995>.

⁵ Roberts SB. High-glycemic index foods, hunger, and obesity: is there a connection? *Nutr Rev*. 2000 Jun; 58(6): 169-9. Doi: 10.1111/j.1753-4887.2000.Tb01855.x.PMID: 10885323.

⁶ See footnote 1.

⁷ Layt, Stuart (2020-07-23). "Scientists say native stingless bee honey hits the sweet spot". *Brisbane Times*.

⁸ Ives, James (2020-07-23) "Science identifies rare, healthy sugar in native stingless bee honey" *News Medical Life Science*.

⁹ Suelen Ávila, Márcia Regina Beux, Rosemary Hoffmann Ribani, Rui Carlos Zambiasi, Stingless bee honey: Quality parameters, bioactive compounds, health-promotion properties and modification detection strategies, *Trends in Food Science & Technology*, Volume 81, 2018, Pages 37-50, ISSN 0924-2244, <https://doi.org/10.1016/j.tifs.2018.09.002>.



- d. The commercial potential – the Company estimates that cultured low glycemic value honey may be used as raw material in the honey production industry and in other industries, such as the cosmetics industry, pharma, and more.

The Company estimates that the acceptance of the requested Patent Application may provide to the Company and the Subsidiary further protection to its intellectual property, coupled with five other patent applications of the Subsidiary, of which three are provisional applications and have been filed in the USA and two are international patent applications (PCT). These and other applications, if such are filed by the Company and/or the Subsidiary, are part of the Company's long-term strategic plan to produce a substantial technological advantage in its field by protecting its intellectual property.

The information mentioned in this notice is “Forward-Looking Statement” as defined in The Securities Law, 5728-1968, based on the information known to the Company as of this date, and on estimates and predictions which their realization depends, among others, on factors that are outside of the Company's control. To be noted, the Company is a research and development company and as such, its estimations might be realized differently, if at all, given that the Company's research is preliminary and precedential.

Sincerely,
OFIR DVASH, CEO
BEEIO HONEY LTD