## Insect Food Consumption: Assessing Levels of Acceptance and Adoption - Abstract

Stylianos Kartakis<sup>1</sup>, Christina Kleisiari<sup>2</sup>, Georgios Kleftodimos<sup>1</sup> and George Vlontzos<sup>2</sup>

<sup>1</sup> University of Montpellier, Mediterranean Agronomic Institute of Montpellier (CIHEAM-IAMM), 3191 Rte de Mende, 34090, Montpellier, France

<sup>2</sup> University of Thessaly, Department of Agriculture, Crop Production and Rural Environment, School of Agricultural Sciences, Fitokou str., 38446, Volos, Greece

## Summary

Even though insect-based food has already been integrated as part of their diet within a significant percentage of the world's population, that was not the case in Western countries until recently. Insects have been emphasized not only as an alternative source of protein with the potential to replace traditional meat products designated for human consumption but also for improving their feed-conversion and resource (water, land) efficiency, making these types of food a promising way to counteract numerous upcoming global food challenges. Insectbased food represents a niche market in the EU since it is a rather new trend for European food habits. The absence of a completely formulated and appropriate legal framework impedes the mass production of insects, their derivatives, and therefore the development of this market. However, according to the EU's legislation (No. 2015/2283), edible insects have been added to the "Novel Foods" category, and so their production and their trade have started, but only in specific European countries, such as Belgium, the Netherlands, Denmark, Germany, Austria, Sweden, and Finland. It is expected that the rest of the European countries will follow this path in the foreseeable future and more consumers will become aware of the opportunities and benefits provided by insect-based food, not thoroughly for direct human consumption, but also as a protein-rich animal feed. In most European countries though, the edible insect market is imminent, yet not present, so the consumers' existing knowledge and attitudes towards the forthcoming market of edible insects were studied.

This survey tries to assess consumers' attitudes and beliefs towards insect food. Therefore, a questionnaire has been created and 302 active Greek consumers participated, divided into 4 age groups (18 - 50+ years old). The results of this research indicated that the vast majority of the respondents (more than 70%) are not familiar with insect-based food and its benefits, but a significant percentage of them are willing to try and learn more about these types of food. consumer profiles derived from Principal Component Analysis (PCA) of the sample are in agreement with the existing literature, referring to the fact that a positive attitude towards insect-based food is following the existing knowledge on the particular topic. Although this observed tendency of "neophilia" to taste and discover more about edible insects, does not signify the participants' willingness to buy these types of food and incorporate them into their diet. It is quite interesting to be mentioned the unwillingness of the consumers to pay a higher or even the same price for an insect-based product, compared to the price of its conventionally produced equivalent, contrasting with the fact that the production cost of an insect-related food product is still relatively high in Europe since this market is in an early stage.

## Keywords

Entomophagy, Insects, Consumer behavior, Health Belief Model, Agriculture

EMAIL: stelios.kartakis@hotmail.com (A. 1); chkleisiari@uth.gr (A. 2); kleftodimos@iamm.fr (A. 3); gvlontzos@uth.gr (A. 4) ORCID: 0000-0002-0814-2842 (A. 2); 0000-0003-2134-3582 (A. 3); 0000-0002-0735-2274 (A. 4)



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Proceedings of HAICTA 2022, September 22-25, 2022, Athens, Greece

CEUR Workshop Proceedings (CEUR-WS.org)