## Assessing Consumption Patterns of PGI Kato Neurokopi Potatoes - Abstract

Elie Abou Nader<sup>1,2</sup>, Christina Kleisiari<sup>1</sup>, Stylianos Kartakis<sup>1,2</sup>, Georgios Kleftodimos<sup>1,2</sup>, Ioannis Moutsinas<sup>1,3</sup>, Evagelia Lampiri<sup>1</sup>, George Vlontzos<sup>1</sup>, Christos Athanassiou<sup>1</sup> and Thanasis Korakis<sup>3</sup>

<sup>1</sup> University of Thessaly, Department of Agriculture, Crop Production and Rural Environment, School of Agricultural Sciences, Fitokou str., 38446, Volos, Greece

<sup>2</sup> University of Montpellier, Mediterranean Agronomic Institute of Montpellier (CIHEAM-IAMM), 3191 Rte de Mende, 34090, Montpellier, France

<sup>3</sup> University of Thessaly, Department of Electrical and Computer Engineering, Argonafton & Filellinon, 38221, Volos, Greece

## Summary

Competitiveness in the field of fresh agricultural products is constantly increasing, driven by consumers' increasing awareness on environmental protection and food safety. The cooperative producing Nevrokopi potato Protected Geographical Indication (PGI) product has realized this necessity, being determined to face it. For this reason, the IoPotato project, aims to develop and apply a precision farming protocol, focusing on crop protection and irrigation. Thus, a digital monitoring system has been set up, utilizing remote sensing technology, providing by this way the ability to develop a decision support tool for optimizing pest control and irrigation.

This survey focuses on assessing consumer beliefs on the utility and acceptance of precision farming systems, focusing also on the aforementioned deliverable of this project. The main objective is to highlight factors related to the consumption of Kato Nevrokopi PGI potato, as well as their correlation with the participants' socio-economic characteristics. Furthermore, it is evaluated the perspective to pay a premium or not for purchasing it when it is produced under a precision farming protocol.

A three- part questionnaire was developed and distributed on a national level in Greece, based on the Theory of Planned Behavior (TPB) and Health Belief Model (HBM). The merged approach of these methodologies allowed us to clarify parameters preventing further increase of sales of Nevrokopi potato. Results showed a strong link, between locally produced products and PGI foods with application of successful environmental protection practices. Furthermore, consumers strongly believe that by using Nevrokopi potato, they support local economy and domestic development. It turns out that people with higher education as well as young consumers are more aware of the value of locally produced agricultural products, while they are very interested in adopting practices leading to the production of better quality and safe products. The realistic and sustainable improvement of the product's value chain will substantially improve its image on both national and international level.

## Keywords

Consumer behavior, Potatoes, PGI products, Principal Component Analysis, Agriculture

ORCID: 0000-0002-0814-2842 (A. 1); 0000-0002-0814-2842 (A. 2); 0000-0003-2134-3582 (A. 4); 0000-0001-8693-6229 (A. 5); 0000-0001-8142-0880 (A. 6); 0000-0002-0735-2274 (A. 7); 0000-0001-6578-4019 (A. 8); 0000-0003-0162-335X (A. 9)



<sup>© 2022</sup> Copyright for this paper by its authors. Use permitted under Creative Commons License Attribution 4.0 International (CC BY 4.0).

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

EMAIL: elieabounader98@gmail.com (A. 1); chkleisiari@uth.gr (A. 2); stelios.kartakis@hotmail.com (A. 3);

giorgoskleftodimos@gmail.com (A. 4); moutsinasg@gmail.com (A. 5); elampiri@uth.gr (A. 6); gvlontzos@uth.gr (A. 7); athanassiou@uth.gr (A. 8); korakis@uth.gr (A. 9)

CEUR Workshop Proceedings (CEUR-WS.org)

## Acknowledgements

This research is part of the project «IoPotato» (Project code: AM@P7-0073655) that is cofunded by Greece and European Union by the Action «Investment Plans of Innovation» in Central Macedonia under the framework of the Operational Program «Central Macedonia 2014-2020».