

CONSUMER INSIGHTS TOWARD TO DEHYDRATED ORGANIC APPLES



Andreea Stan¹, Mihai Frîncu¹, Marian Vintilă², Liliana Bădulescu¹

¹Research Center for Studies of Food and Agricultural Products Quality, University of Agronomic Sciences and Veterinary Medicine of Bucharest, Marasti Blvd. 59, Bucharest, Romania

² Institute of Research and Development for Industrialization and Marketing of Horticultural Products, Drumul Gilaului 5N, Bucharest, Romania

Corresponding author email: andreea.stan@qlab.usamv.ro

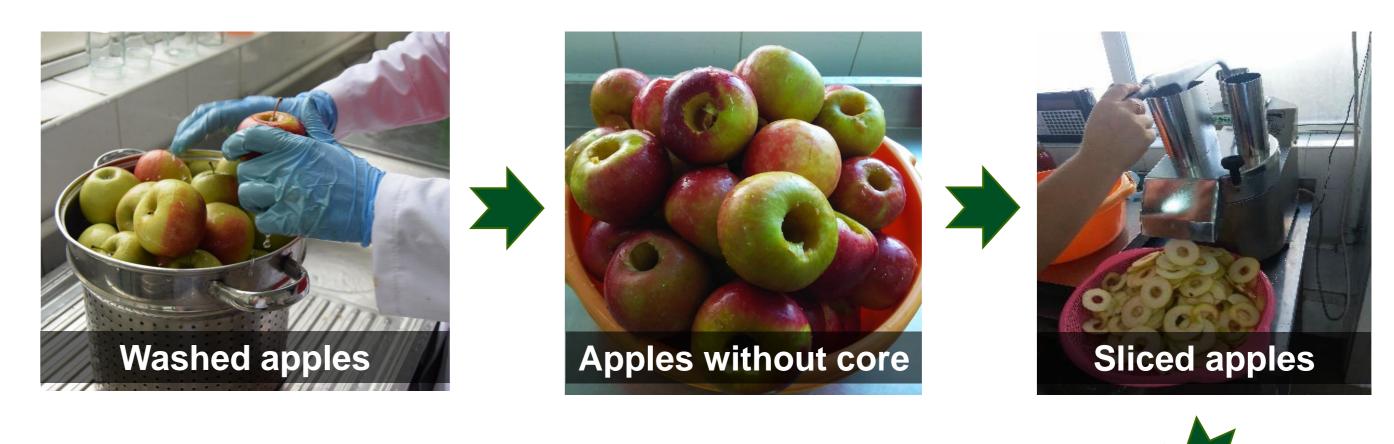
Keywords: acceptance, color, organic apples, slices, taste.

INTRODUCTION

- > Apples (Malus domestica Mill.) are considered the most consumed fruits in world (Jaeger et al., 2018) due to rich content in vitamins, minerals, and antioxidant compounds (Bezdadea-Cătuneanu et al., 2019), for their taste and accessibility.
- Lately, organic apples are preferred and generally considered to be more healthier and safer than conventional ones, and for this reason consumers are more orientated to them (Zhu et al., 2018). The size, colour, flavour, texture, and the lack of defects are important indicators and mainly determine consumers general impression of minimally processed organic apples.
- The aim of this study is to establish which drying technology of organic apples is easy accepted by consumers and how they characterize the final product.

MATERIALS AND METHODS

- > 'Rubinola', 'Topaz' and 'Gemini' were minimally processed and dehydrated at two different temperatures (35°C and 50°C)
- > Consumer general impression was based on questionnaires with 4 questions about sensorial indicators
- > Consumers general impression was determined in two tasting sessions within two scientific events.







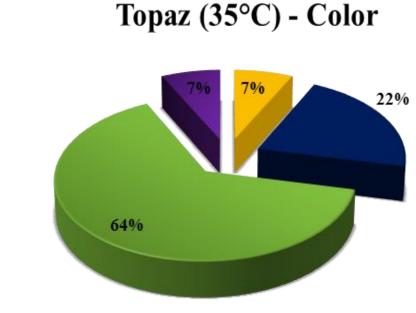






RESULTS AND DISSCUSIONS

COLOR



■unpleasant ■indifferent ■pleasant ■very pleasant

Gemini (35°C) - Color

■unpleasant ■indifferent ■ pleasant ■ very pleasant

Rubinola (35°C) - General taste

■unpleasant ■semi-pleasant ■indifferent ■pleasant ■very pleasant

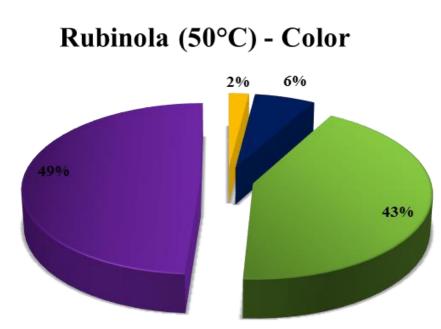
Topaz (35°C) - General taste

GENERAL TASTE

■unpleasant ■semi-pleasant ■indifferent ■pleasant ■very pleasant

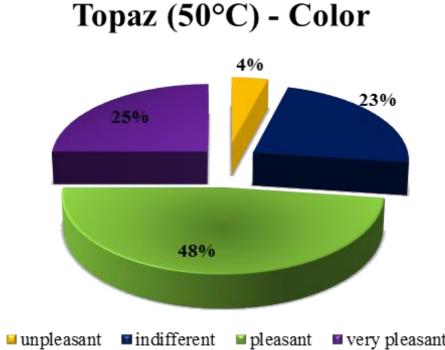
Gemini (35°C) - General taste

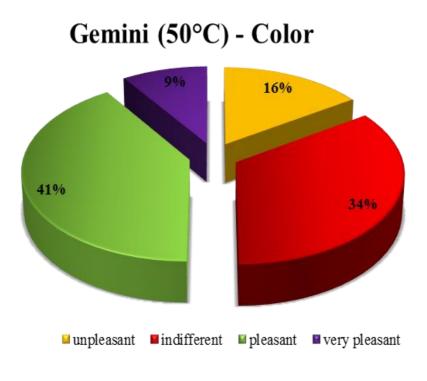
■unpleasant ■semi-pleasant ■indifferent ■pleasant ■very pleasant

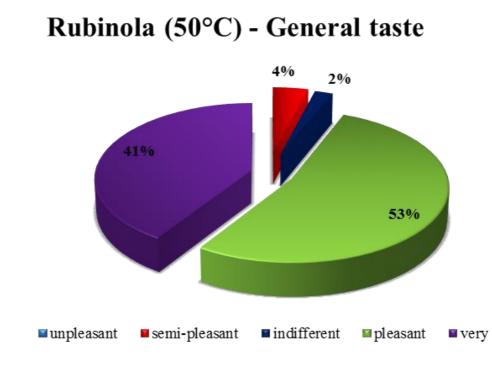


■ unpleasant ■ indifferent ■ pleasant ■ very pleasant

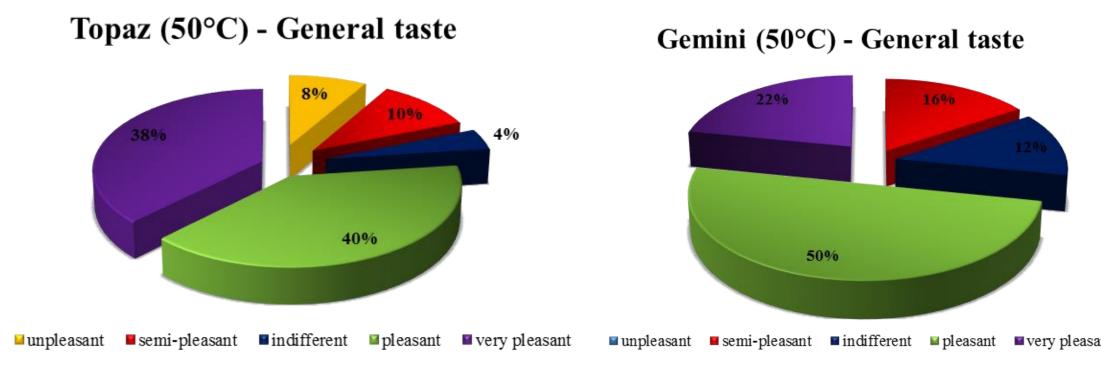
Rubinola (35°C) - Color







Topaz (50°C) - General taste



CONCLUSIONS

- > apples were evaluated by consumers with ages between 22 and 66 years old
- > the "color" was evaluated as pleasant for the 'Topaz' and 'Gemini' varieties, and very pleasant for 'Rubinola' variety
- > taste was evaluated as "pleasant" and "very pleasant" by 72% of consumers for 'Gemini' apples dehydrated at 50°C, in comparison with 36% for 'Gemini' apples dehydrated at 35°C.
- > general impression was oriented towards minimally processed organic apples dehydrated at 50°C.

ACKNOWLEDGEMENTS

This work was supported by a grant of the Romanian Ministry of Research and Innovation, CCCDI – UEFISCDI, project number PN-III-P1-1.2-PCCDI-2017-0662, within PNCDI III.

REFERENCES

- Ioana Bezdadea-Cătuneanu, Liliana Bădulescu, et al., 2019, Scientific Papers. Series B, Horticulture, LXIII, 115-122.
- Sara R. Jaeger, Lucía Antúnez, et al., 2018, Postharvest Biology and Technology, 146, 99-107. Zhanling Zhu, Zhihang Jia, et al., 2018, Journal of Cleaner Production, 201, 156-168.
- F&V Processing 2020 Third Symposium on Fruit and Vegetable Processing, France, 24-25 November, 2020