

Benefits of enhanced student engagement at the Faculty of Agriculture, University of Zagreb

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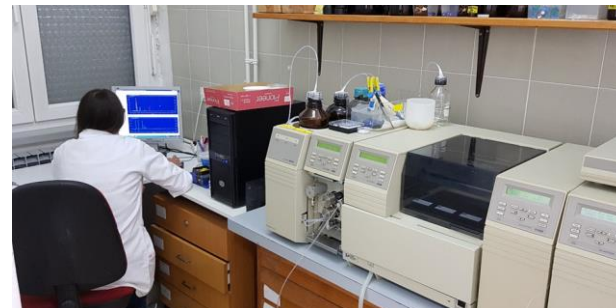


ICA-Edu Network for Innovation in
Life Sciences Higher Education
Workshop 2023



MY BACKGROUND

- MSc: Animal Nutrition and Feed Science (2021.- present)
- BSc: Animal Sciences (2017. – 2020.) with highest honor (summa cum laude)
 - Dean's Award for Diligence and Outstanding Achievements in Undergraduate Studies with an average grade of 4.79
 - Scholarship for Excellence – Faculty of Agriculture Foundation





How the journey began...

Demonstrator in Laboratory Exercise in courses Chemistry with basic biochemistry and Agriculture chemistry (2018. – 2022.)

- laboratory experience
- communication with freshmen – **tips on how to study!**
- ↑presentation and organizational skills

- new opportunities in sight?

Being part of a scientific project


- team work
 - theoretical and practical knowledge
 - encouraging creativity and innovation
 - recognition of an effort
- **Rector's award for individual scientific work** in the academic year 2020/2021 (Encapsulation and release of natural polyphenolic compounds from multi-component hydrogel microparticles“, mentor: Assoc. Prof. Marko Vinceković, PhD)




Graduate study – enhanced scientific engagement*

- improvement of presentation and communication skills – **conferences!**
- writing scientific papers
- workshops

Virtual International
Conference on Carotenoids
VICC 2022
International Carotenoid Society
April 12th, 13th, 14th



**CAROTENOID STABILITY OF MARIGOLD FLOWERS
(*Tagetes erecta* L.) DURING STORAGE IN
DIFFERENT CONDITIONS**



Sara Kolar, Dora Zurak, Veronika Gunjević, Kristina Kljak

Department of Animal Nutrition
University of Zagreb, Faculty of Agriculture

VICC 2022
2nd Virtual International Conference on Carotenoids



**CERTIFICATE OF
THE WINNER**

This is to certify that
Sara Kolar

was awarded the 2nd place
IN THE FIELD OF «FOOD SCIENCE AND TECHNOLOGIES»
in the International Competition of Student Scientific Works
«BLACK SEA SCIENCE 2023»
ORGANIZED BY
**ODESA NATIONAL UNIVERSITY OF TECHNOLOGY
ODESA, UKRAINE**



Head of the organizing committee
President of Odesa National
University of Technology
Bogdan IEGOROV

Rector of Odesa National
University of Technology
Larysa IWANCHENKOVA

Deputy head of the organizing committee
Vice-Rector of Odesa National
University of Technology
Maryna MARKAR

BSS-2023.1.19

*mentor: Assoc. Prof. Kristina Kljak, PhD

CAROTENOID STABILITY OF MARIGOLD FLOWERS (*Tagetes erecta* L.) DURING STORAGE IN DIFFERENT CONDITIONS

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Introduction: Marigold (*Tagetes erecta* L.) is an annual medicinal plant of the *Asteraceae* family, widely known as a rich natural source of carotenoids contained in its orange and yellow flowers. Marigold flowers, rich in lutein and zeaxanthin, are used in the food, pharmaceutical, and cosmetic industries, as well as a feed additive in laying hen diet to achieve the desired egg yolk color. Different postharvest processes and storage conditions (temperature, light, oxidation, acidity, and moisture) can significantly alter plants' qualitative and quantitative carotenoid composition and, consequently, their bioavailability in food and feed [1,2]. The aim of this study was to investigate the

rate of both L and TC was influenced by meal preparation and storage conditions (P<0.001; Fig. 1).

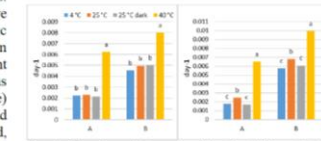


Fig. 1. The degradation rate of lutein (left) and total carotenoids (right) during storage of marigold flowers in

Review article

Journal of Central European Agriculture, 2022, 23(2), p.290-298

DOI: [10.5513/JCEA01/23.2.3504](https://doi.org/10.5513/JCEA01/23.2.3504)

THE END RESULT

10 scientific publications
(2018. – 2022.)

The effect of maize crop cutting height and the maturity at harvest on maize silage chemical composition and fermentation quality in silo

Utjecaj visine košnje i zrelosti usjeva kukuruza za siliranje na kemijski sastav kukuruzne silaže i kvalitetu fermentacije u silosu

Sara KOLAR¹, Marina VRANIĆ² (✉), Lucija BOŽIĆ¹, Krešimir BOŠNJAK²

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Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Food Bioscience

journal homepage: www.elsevier.com/locate/foodbioscience



Applicability of alginate-based composite microspheres loaded with aqueous extract of *Stevia rebaudiana* Bertoni leaves in food and pharmaceutical products

Sara Kolar, Slaven Jurić, Marijan Marijan, Kristina Vlahoviček-Kahlina, Marko Vinceković*

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Non-scientific activities

STUDENT TUTELAGE SYSTEM

- student tutor – >2nd year –
**adjustment of freshmen to
academic life**

BENEFITS:

- advices about exams
- learning materials
- engagement students in Faculty activities (sports, student associations etc.)
- promoting the Faculty



Evaluation / recognition of Student Engagement activities

- written in **diploma supplement**
- acquired competences (croatian and english language)

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6.1

ADDITIONAL INFORMATION

additional information 2019, Award for diligence and outstanding achievements in studies 2018/2019, 2019/2020. Tutelage System, Student Support Center and Career Counselling. University of Zagreb Faculty of Agriculture. Acquired key competences: clear expression, creating new social contacts and friendships, finding, evaluation and processing of new information and knowledge, communication and exchange of information through online communication and networks.

2018/2019, 2019/2020. Demonstrator in Laboratory Exercise at courses Chemistry with basic biochemistry and Agriculture chemistry. University of Zagreb Faculty of Agriculture. Acquired key competences: presentation and organizational skills, creativity and innovation, networking and creating contacts. Other acquired competences: competence for laboratory work, providing chemical analysis and ability to implement the new knowledge in practice.

6.2

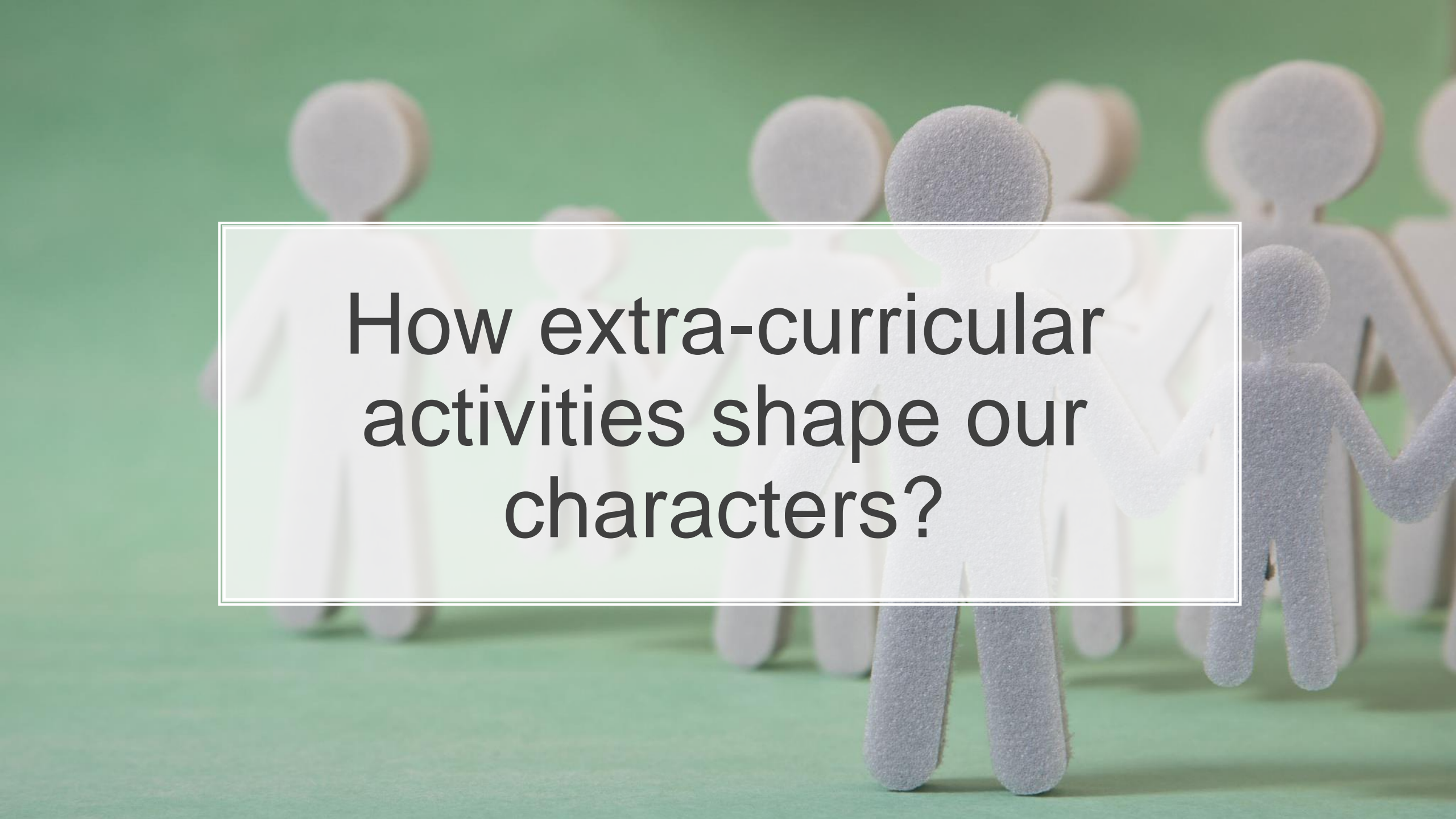
further information sources Republic of Croatia, Ministry of science and education (<http://www.mzo.gov.hr>) ; University of Zagreb (<http://www.unizg.hr>); University of Zagreb Faculty of Agriculture (<http://www.agr.hr>)

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CERTIFICATION OF THE SUPPLEMENT

7.1 place and date	7.2 name and signature	7.3 capacity	7.4 official stamp or seal
Zagreb, 14 September 2020	Full Professor Zoran Crgić, PhD 	Dean	

Example of the Student Engagement activities written in the diploma supplement

A row of paper cutouts of people holding hands, with a central white box containing text. The cutouts are in shades of white and grey, set against a green background. The text is centered within the white box.

**How extra-curricular
activities shape our
characters?**

- 
- The background of the slide features a soft, golden-hued sky with a faint silhouette of a mountain range. In the foreground, three dark silhouettes of people are standing on a rocky peak, their arms raised in a gesture of triumph or celebration. The overall mood is one of achievement and success.
- **theoretical and practical knowledge**
 - **team work**
 - **perseverance and patience**
 - **organizational and presentation skills**
 - **dealing with a failure**
 - **great impact of a mentor**

Conclusions

✓ diploma supplement – recognition of student engagement

- certified university courses?
- involving students in scientific projects?

**THANK YOU FOR
YOUR
ATTENTION!**

