

**Goce Delcev University – Stip
Faculty of Agriculture**



**5th INTERNATIONAL MEETING
AGRISCIENCE & PRACTICE
(ASP 2026)**

BOOK OF ABSTRACTS

**16 APRIL 2026
Stip, Republic of North Macedonia**

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**5th INTERNATIONAL MEETING AGRISCIENCE & PRACTICE
ASP 2026**

**Organized by
FACULTY OF AGRICULTURE
GOCE DELCEV UNIVERSITY, STIP, REPUBLIC OF NORTH MACEDONIA
16 April 2026, Stip, Republic of North Macedonia**

The Faculty of Agriculture is organizing the 5th International Meeting *Agriscience & Practice (ASP 2026)*, providing participants with the opportunity to present and discuss original scientific and practical results in various fields of agriculture.

The 5th International Meeting *Agriscience & Practice (ASP 2026)* brings together agricultural stakeholders to share their knowledge, experience, and challenges. Its main goal is to connect research and fieldwork in the agricultural sector, both nationally and beyond, giving it an international dimension.

Over the past years, we have been fully committed to building exactly these kinds of bridges—bridges between science and practice, between institutions and producers, and between experience and innovation. Moreover, we strive to build bridges that transcend borders and connect us with the region and the world.

Scientific and applied presentations will be organized into the following sections:

1. Agricultural Economics
2. Animal Sciences
3. Plant Sciences
4. Food Science and Nutrition
5. Soil Science and Environment
6. Enology

Poster presentations will also be available. In addition, in response to the needs of the agricultural sector, panel discussions will be organized, where invited speakers and panelists will have the opportunity to share their experience with meeting participants.

Dear colleagues, partners, and friends, let us once again gather in one place, united by a common idea—to bring together agricultural science and practice in order to share information, knowledge, experiences, and solutions to overcome existing challenges. The main objective of this meeting is the successful establishment of continuous and meaningful communication and collaboration among scientific, research, and practical activities in the agricultural sector at the national, regional, and international levels. We will achieve this goal, as well as our shared objectives, through the synergy we have been actively building over the past years.

Every scientific field has its significance and value within a given social context, but agricultural production holds a particularly vital place.

Our shared task is not only to improve production, but also to strengthen the importance and dignity of agriculture in society. Above all, we must inspire young people to recognize their potential right here, because faculties and universities exist first and foremost for them—the younger generation. They are our future, but also our most important connection to society.

With great joyfulness we thank you for active participation in the Meeting

Prof. Emilija Arsov, PhD
Dean of Faculty of Agriculture
&
Chair of the Organizing Committee

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FATTY ACID PROFILE OF 16 COLD-PRESSED SUNFLOWER OILS FROM THE REGION OF NORTH MACEDONIA Sanja Kostadinović Veličkowska^{1*}, Saša Mitrev¹

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Abstract

Virgin oils are very popular foodstuff as 100% natural oils produced only with cold pressing without any step of refining. Edible oils produced in this way usually had higher concentrations of antioxidant compounds such tocopherols, carotenoids and chlorophylls and stronger impact on human health in comparison to refined oils. Traditional Balkan cuisine, as well as the other cuisines of South-East European countries, includes sunflower oil as the most used cold-pressed and refined oil for cooking and frying. Abundance of oleic and linoleic acids divide the sunflower oils into two types: high oleic sunflower oils with percentage of oleic acid around 50%. and high linoleic sunflower oils with abundance of linoleic acid higher than 80%. Hence, the main object of this study is fatty acid composition of 16 cold-pressed sunflower oils produced from the region of North Macedonia. Sunflower oils 1 and 10 had the lowest percentage of palmitic acid (3.90%) and the highest percentage had the sunflower oil 3 (7.10 %). Also, sunflower oil 1 and 10 are high- oleic oils with abundance of 83.35% and 81.82% respectively. The abundance of stearic acid in all 16 samples of sunflower oils was in the range between 4.38% and 6.30%. Behenic acid was present in percentages less than 1% in all 16 samples of sunflower oils. All other samples belong to the high linolenic type of oils with percentage of linolenic acid between 52.32 and 65.61%.

Key words: *cold -pressed sunflower oil, fatty acid methyl esters, saturated fatty acids, unsaturated fatty acids, oleic acid, linoleic acid and α -linolenic acid.*

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