

**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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(ASP 2026)

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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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BOOK OF ABSTRACTS
SECTION: PLANT SCIENCES

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SECTION: FOOD SCIENCE AND NUTRITION

CHANGES OF ANTIOXIDANT POTENTIAL OF COLD-PRESSED EDIBLE OILS FROM SUNFLOWER AND SESAME DURING STORAGE Borjanka Veselinova¹, Sanja Kostadinović Veličkowska², Sasa Mitrev²

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Abstract

Cold pressed edible oil consumption has risen worldwide due to its health benefits over the refined oils. However, these oils have a tendency to be oxidized by temperature, light and oxygen resulting in unpleasantness and formation of toxic materials. The main object of our study was the changes of antioxidant activity of sunflower and sesame oil after 2 months storage in dark glass bottles. The antioxidant activity was determined by measuring the inhibition of conjugated diene hydroperoxides arising from linolenic acid oxidation. For the DPPH assay, the antioxidant activities of the oils were expressed as percentage of decolorization of a solution of the stable radical DPPH (2,2-diphenyl-1-picrylhydrazyl radical) at 517nm. The Trolox equivalent antioxidant assay (TEAC) employed in this study gives a measure of the antioxidant activity of methanol extracts against ABTS (2,20-azino-bis(3-ethylbenzothiazole-6-sulphonic acid radical). The oxidation of sunflower oil was the most evident by application of DPPH radical assay. The antioxidant potential of sunflower oil was decreased by more than four times while antioxidant potential of sesame seed oil was almost half which can be lined to decreased activity of vitamin-E-active compounds. Hb assay in human blood indicated higher instability of sesame seed oil and the same tendency was noticed for TEAC assay. From the results presented in this work we can conclude that DPPH assay is strongly dependent on the amounts of tocopherols, while TEAC assay is more dependent to polyphenols and lignans which are dominant in cold- pressed sesame seed oil.

Key words: *cold -pressed sunflower oil, cold -pressed sesame oil, antioxidant potential, DPPH, TEAC, haemoglobin assay, effect of storage time.*

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