

**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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QUALITY EVALUATION OF COLD-PRESSED EDIBLE OIL FROM PEANUT PRODUCED FROM MACEDONIAN “VIRGINIA” VARIETY Borjanka Veselinova^{1*}, Sanja Kostadinović Veličkovska², Sasa Mitrev²

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Abstract

The conventional processing of peanuts in the food industry involves mechanical pressing during which the temperature does not surpass 40°C. This process yields cold-pressed peanut oil and low-value peanut cake. Peanut seeds are a good source of protein, lipids and fatty acids. Peanut seeds contain 45–50% oil. The physicochemical characterization and quality of cold pressed peanut edible oil from the “Virginia” variety, organically produced from the region of Macedonia, were examined in this work for the first time. The fatty acid composition of the oil showed almost equal levels of oleic and linoleic acids with an abundance of 34.19±0.01 and 36.13±0.01%, respectively. The most dominant saturated fatty acid was palmitic acid with a level of 10.06±0.00%. The level of tocopherols and other vitamin-E-related compounds was in strong agreement with the antioxidant activity of the oils measured by the DPPH assay. Almost equal amounts of α and γ tocopherols indicated an antioxidant potential of 288.63±59.78 mg/L α -tocopherol. Phytosterols, as minor compounds present in the oils, can be additional antioxidants responsible for the health benefits of this oil in human nutrition. The four major phytosterols were β -sitosterol (1812.21±22.17 mg/kg oil), campesterol (320.55±17.07 mg/kg oil), Δ^5 -avenasterol (236.16±14.18 mg/kg) and stigmasterol (133.12±12.51 mg/kg oil). Induction time, Peroxide number, FFA and specific extinction (K232 and K270, values 1.82 and 0.22) gave us an indication of the oxidative stability of cold pressed peanut oil.

Key words: cold -pressed peanut oil, β -sitosterol, α -tocopherol, Induction time, Peroxide number, FFA and specific extinction

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