

**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
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&
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in cooperation with

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SEASONAL VARIATIONS IN THE PHYSICO-CHEMICAL QUALITY OF WELL WATER IN THE PROBISTIP AND KOCANI REGION Ankica Anastasova^{1*}, Dimitar Nakov¹, Elena Tortevska Danilov², Aleksandra Angjeleska³, Aco Kuzelov¹, Fidanka Ilieva¹

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Abstract

Groundwater quality is influenced by multiple factors, including recharge water composition, atmospheric precipitation, surface water interactions, and subsurface geochemical processes. This study aimed to assess seasonal physicochemical variations in well water quality and evaluate the effect of disinfection with peracetic acid (PAA). Water samples were collected from three wells in the Probistip region and two wells in the Kocani region. Sampling was conducted twice per season across all four seasons, both before and after PAA disinfection. Nine physicochemical parameters were analyzed: electrical conductivity (EC), pH, color, KMnO₄ consumption, NH₄, NO₂, NO₃, Fe, and Cl. Results were compared against control water quality and national legislative standards. A General Linear Model (GLM) with repeated measures was applied to assess the influence of risk factors on water quality. Physical parameters consistently fell within maximum permissible limits. Most chemical parameters were also within acceptable ranges, with the exception of NO₃ levels, which served as an indicator of organic matter oxidation. Regression analysis revealed that season and disinfection significantly affected physicochemical quality. PAA disinfection had a statistically significant effect on physical water quality ($p < 0.05$), but did not significantly alter the chemical composition of the water. These findings suggest that systematic monitoring combined with regression analysis offers a practical and efficient approach for ongoing well water quality assessment.

Key words: *physico-chemical parameters, seasonal variations, well water quality.*