

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



**3rd INTERNATIONAL MEETING
AGRISCIENCE & PRACTICE
(ASP 2023)**

BOOK OF ABSTRACTS

19-20th April 2023

Stip, Republic of North Macedonia

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**3rd INTERNATIONAL MEETING AGRISCIENCE & PRACTICE
ASP 2023**

Organized by

**FACULTY OF AGRICULTURE
GOCE DELCEV UNIVERSITY - STIP, REPUBLIC OF NORTH MACEDONIA
19-20 April 2023, Stip, Republic of North Macedonia**

Faculty of Agriculture organizes the 3rd International Meeting Agriscience & Practice (ASP 2023), giving an opportunity to the participants for presentation and discussion of original scientific and practical results in different fields of agriculture.

The 3rd International Meeting Agriscience & Practice (ASP 2023) is organized with an intention to bring together all agricultural stakeholders for sharing their knowledge, experience and obstacles. One of the main aims is to link research and field work in agricultural sector in the country and broader, giving it an international dimension.

The main goal of the Meeting was to connect and promote scientific achievements and practical knowledge presented in different thematic areas.

The scientific and applicative presentations are conducted in sections: 1. Agricultural economics, 2. Plant biotechnology, 3. Plant production, 4. Plant protection, 5. Quality control and food safety, 6. Soil science and hydrology 7. Viticulture, enology and fruit production, with a possibility for oral or poster presentation. Nevertheless, the needs of the agricultural sector entail organization of panel discussions, where invited speakers and panelists have a possibility to share their experience with the Meeting participants.

Dear colleagues, let's again gather together in one place with one joint idea - to combine agricultural science and practice with a purpose to share information, knowledge, experiences and solutions to exceed the problems. The main objective of this Meeting is successful establishment of continuous and valid communication and collaboration among scientific, research and practical activities in agriculture sector in our country, neighboring countries and broader international level. We will achieve the main goal of the Meeting as well as our common objective only by virtue of synergic connections on which we have been working intensively in the past years.

Every science has its significance and value in the given social context, but agricultural production has a special place of vital significance.

“Only one who knows the way of food movement, from field to table, really respects it”.

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

Prof. d-r Emilija Arsov

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&
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***Acidovorax citrulli*- CAUSING BACTERIAL FRUIT BLOTCH OF WATERMELON FRUITS IN STRUMICA REGION Sasa Mitrev¹, Emilija Arsov^{1*}**

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Abstract

During August 2019/20, fruit blotch symptoms on mature watermelon fruits caused by *Acidovorax citrulli*, for the first time were observed in the village of Mokrievio, Strumica region, on the Bibo and Olakala watermelon varieties. *Acidovorax citrulli* is the causal agent of bacterial fruit blotch (BFB) of cucurbit plants. In recent years, the disease has been spread to many parts of the world, mainly via the inadvertent distribution of contaminated commercial seeds. So far, *A. citrulli* has already been reported in the Europe EPPO region, such as Turkey, Israel, Greece, Hungary, Italy, and Serbia, but in these reported countries, *A. citrulli* is under very careful control, and hygiene measures have already been taken. *A. citrulli* has been added to the EPPO A1 List version 2022-09 (https://www.eppo.int/ACTIVITIES/plant_quarantine/A1_list).

Because of the costly lawsuits filed by growers against seed companies and the lack of efficient management methods, BFB represents a serious threat to the cucurbit industry, primarily to watermelons and melons. Despite the economic importance of the disease, little is known about the basic aspects of *A. citrulli* pathogenesis. In our research, for the first time, on the basis of the fruit symptoms, pathogenicity on watermelon young fruit and seedlings, results of biochemical tests, ELISA test, and Real-time PCR analyses compared with positive controls, the pathogen was identified as *Acidovorax citrulli*.

In the investigation field, from where watermelon fruits were collected, significant economic losses (up to 70%) were diagnosed. Considering the fact that this pathogen is on the EPPO A1 List, we already informed our Ministry of Agriculture, and it is very important to implement eradication measures to prevent further spread of this bacterium across the region.

Key words: *fruit blotch symptoms, mature watermelon fruit, biochemical tests, PCR analyses.*

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