

2nd SCIENTIFIC CONFERENCE

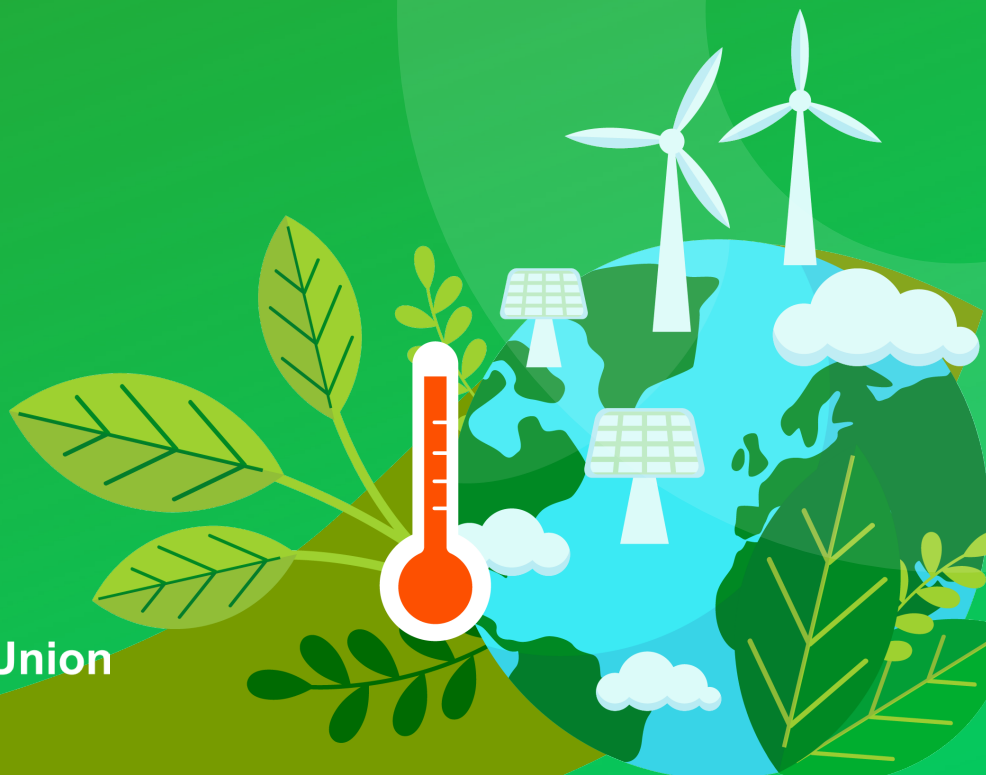
**FOR CRITICAL ENVIRONMENTAL ISSUES OF
THE WESTERN BALKAN COUNTRIES**

BOOK OF ABSTRACTS

October 28th to 30th, 2021, Faculty of Agriculture, Goce Delčev University, Štip,
Republic of North Macedonia



Funded by
the European Union



“2nd Scientific conference for **CRITICAL ENVIRONMENTAL ISSUES OF THE WESTERN BALKAN COUNTRIES**”

October 28th to 30th, 2021, Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia



“2nd scientific conference for
CRITICAL ENVIRONMENTAL ISSUES
OF THE WESTERN BALKAN COUNTRIES”

BOOK OF ABSTRACTS

October 28th to 30th, 2021, Faculty of Agriculture,
Goce Delčev University, Štip, Republic of North Macedonia

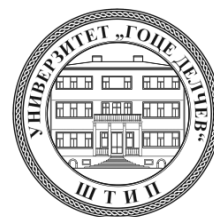


“2nd Scientific conference for CRITICAL ENVIRONMENTAL ISSUES OF THE WESTERN BALKAN COUNTRIES”

October 28th to 30th, 2021, Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia

“2nd Scientific conference for **CRITICAL ENVIRONMENTAL ISSUES OF THE WESTERN BALKAN COUNTRIES**”

October 28th to 30th, 2021, Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia



ORGANIZERS:

Goce Delčev University, Faculty of Agriculture, Štip,
Republic of North Macedonia

WBAA-Western Balkan Alumni Association

The conference is organized and financed within the project titled “Extracting Green-COVID effects for generating clean technologies and successful youth transition awareness for the climate change and sustainable development of the Western Balkan countries”, **project number 2021030, financed by Western Balkans Alumni Association.**

“2nd Scientific conference for CRITICAL ENVIRONMENTAL ISSUES OF THE WESTERN BALKAN COUNTRIES”

October 28th to 30th, 2021, Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia

WELCOME

On behalf of the project coordinators of

“Extracting Green-COVID effects for generating clean technologies and successful youth transition awareness for the climate change and sustainable development of the Western Balkan countries”

Project number 2021030

financed by Western Balkans Alumni Association

The project involves networking of students and scientific researchers from Western Balkan countries for creating dataset base of the latest chemi-metric approaches for environmental pollution/protection and ecological effects as well. Even the environmental pollution is a global problem, the latest research indicate that the Western Balkan countries are significantly affect with the environmental pollution. Furthermore, the Western Balkan countries still deals with the problem of poor population awareness for environmental protection. Therefore, this project idea is to unite knowledge from Western Balkan countries and share with youth from this region, increasing the environmental protection awareness within students. Therefore, the students will have the main role in lunching the environmentally friendly aspects for creating novel chemi-metric models in environmental sciences. The beneficiary effect for the Western Balkan students will be creating long-term valuable and sustainable correlations.

The project has regional focus, networking six universities from the Western Balkan countries (students and scientific experts and professors). Furthermore, this project has a national focus for the students from three state universities from North Macedonia (students from Goce Delčev University in Štip, Ss. Ss. Cyril and Methodius University in Skopje and University in Tetovo and St. Kliment Ohridski University - Bitola). Even the environmental pollution is a global problem, the latest research indicate that the Western Balkan countries are significantly affected with the pollution, pointing strongly on heavy metal industry, uncontrolled xenobiotic introduction in the different parts of the environment, electronic waste disposal etc. Furthermore, the Western Balkan countries still deals with the problem of poor population awareness for environmental protection. Therefore, this project will involve regional and national students and scientific researches in order to provide novel chemi-metric methodology and beneficial environmental protection methods.

The project intends to involve three national and five regional universities (WBAA members). Each regional university will participate with one scientific expert (university professor) and two students (WBAA member). Three national universities (Ss. Cyril and Methodius University in Skopje, State University in Tetovo and St. Kliment Ohridski University - Bitola) will participate with one scientific expert and three students. Goce Delčev University will participate with scientific experts, young researchers and students. Participants from North Macedonia, Albania, Kosovo, Serbia, Bosnia and Hercegovina and Montenegro shall collaborate for the benefit of the whole region for several critical environmental issues.

Overall objective: Use of universities' expertise in creation new valuable, suitable and accurate chemimetric models for predicting and measuring the contamination level in different parts of the environment (air, soil, water, plant food). Creating a regional scale of experience for determining the anomalous parts of the environment. Proposing new ideas for national and regional strategies for environmental protection. Promoting new ideas for Inter-university cooperation. Creating sustainable University network for continuous cooperation in the field of environmental monitoring, pollution and protection (both, for students and researchers).

Assoc. Prof. Biljana Balabanova

Kiril Jordanov

“2nd Scientific conference for CRITICAL ENVIRONMENTAL ISSUES OF THE WESTERN BALKAN COUNTRIES”

October 28th to 30th, 2021, Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia



About the Western Balkans Alumni Association (WBAA)

The Western Balkans Alumni Association (WBAA) is a regional network of students and alumni from the Western Balkan region (Albania, Bosnia and Herzegovina, Kosovo*, North Macedonia, Montenegro, Serbia) who have spent part of their studies in one of Erasmus+ programmed countries. These exchanges were mostly funded by the European Commission. WBAA is neutral, unbiased and nonpartisan in the existing political discourse.

WBAA is supported and funded by the European Commission.

WBAA Mission:

- Advocating modernization and improvement of higher education quality in the region;
- Empowering young people of the Western Balkans on their academic and career development towards successful employment;
- Strengthening regional exchange, collaboration and integration;
- Supporting region's efforts towards European integration;

Web page:

<https://www.western-balkans-alumni.eu/>

FB page: <https://www.facebook.com/WesternBalkansAlumniAssociation/>

Instagram: @wbaassociation

e-mail: info@western-balkans-alumni.eu

“2nd Scientific conference for CRITICAL ENVIRONMENTAL ISSUES OF THE WESTERN BALKAN COUNTRIES”

October 28th to 30th, 2021, Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia

SCIENTIFIC COMMITTEE MEMBERS

President:

Biljana Balabanova - Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia

Members:

Panvera Lazo - University of Tirana, Department of Chemistry, Tirana, Albania.

Musaj Pacarizi - University of Pristina, Department of Chemistry, Pristina, Kosovo.

Jovica Vasin - Institute of Field and Vegetable Crops, Laboratory for Soil and Agroecology, Novi Sad, Serbia.

Jordana Ninkov - Institute of Field and Vegetable Crops, Laboratory for Soil and Agroecology, Novi Sad, Serbia.

Radomir Ljupkovich - Department of Chemistry, Faculty of Science and Mathematics, University of Niš, Serbia.

Alen Mujčinović - University of Sarajevo, Faculty of Agricultural and Food Sciences, Sarajevo, Bosna and Hercegovina.

Goran Skataric - University of Montenegro, Podgorica, Montenegro.

Trajče Stafilov - Faculty of Natural Sciences and Mathematics, Institute of Chemistry, Ss. Kiril and Methodius, Skopje, Republic of North Macedonia.

Arianit Reka – State Tetovo Universty, Tetovo, Republic of North Macedonia.

Katerina Bacheva Andonovska – Research Center for Environment and Materials, Macedonian Academy of Sciences and Arts, Skopje, Republic of North Macedonia.

Valentina Pelivanoska - University St. Climent Ohridski - Bitola, Scientific Tobacco Institute, Prilep, Republic of North Macedonia.

Biljana Jordanoska Shishkoska- University St. Climent Ohridski - Bitola, Scientific Tobacco Institute, Prilep, Republic of North Macedonia.

Ljupčo Mihajlov - Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia.

Emilija Arsov - Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia.

Violeta Ivanova Petropulos - Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia.

Sanja Kostadinovik-Velickovska - Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia.

Fidanka Trajkova - Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia

Biljana Kovacevik - Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia

Natalija Markova-Ruzdik - Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia

Liljana Koleva Gudeva - Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia.

Violeta Stefanova - Faculty of Natural and Technical Sciences, Goce Delčev University, Štip, Republic of North Macedonia.

Afrodita Zendelska - Faculty of Natural and Technical Sciences, Goce Delčev University, Štip, Republic of North Macedonia.

Marija Hadzi-Nikolova - Faculty of Natural and Technical Sciences, Goce Delčev University, Štip, Republic of North Macedonia.

ORGANIZING COMMITTEE MEMBERS

Kiril Jordanov, BEc, Team Member of Western Balkans Alumni Association and advisor of public procurement, Štip, Republic of North Macedonia

Sanja Stefanova, MSc, Board Member of Western Balkans Alumni Association and International Relations Officer at Goce Delčev University, Štip, Republic of North Macedonia

Biljana Balabanova, Associate Professor at Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia

“2nd Scientific conference for CRITICAL ENVIRONMENTAL ISSUES OF THE WESTERN BALKAN COUNTRIES”

October 28th to 30th, 2021, Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia

P18

DEVELOPMENT OF *BOTRYTIS CINEREA* UNDER REDUCTION OF PESTICIDES TREATMENTS IN MACEDONIAN VITICULTURE PRODUCTION

Gligor Bojkov, Emilija Arsov Saša Mitrev

Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia

e-mail: gligorbojkov@yahoo.com

Abstract

The amount of pesticide residues in food items found in fresh fruit, such as grapes throughout the World is a highly documented problem. The necrotrophic fungi as it is gray mold or *Botryotinia fuckeliana* (de Bary) Whetzel (syn. *Sclerotinia fuckeliana* (de Bary) Fuckel) (anamorph *B. cinerea* Pers.), according to taxonomic characteristics, belongs to the genus *Botryotinia* (family *Sclerotiniaceae*) feed on dead host cells and cause necrosis by secreting toxins and cell wall-degrading enzymes (CWDEs), on the grapes (*V. vinifera subsp. sativa*) and other fresh products. *B. cinerea* causes an increase in the number of chemical treatments just before harvest and calls into question the environmental and health value of the product. Therefore, an attempt was made to create a forecasting model for *Botrytis* which is based on the relationship between relative humidity and the temperature in the vine canopy, and the aim was to create a graph where the curve will represent the tendency of *B. cinerea* to develop. The forecasting model for *Botrytis* was applied at the white varieties Smederevka and Zilavka and based on the data obtained was made ANOVA statistical test which proves the reliability of the model. On the localities, Smilica and Sopot, Kavadarci, Republic of Macedonia, are the experimental fields that were observed for three consecutive years (2017 till 2019). The aim of this research was to predict the development of *B. cinerea* and accordingly to reduce using of pesticides just before grape harvest.

Keywords: pesticide residues, *B. cinerea*, forecasting model for botrytis, ANOVA statistical test

“2nd Scientific conference for CRITICAL ENVIRONMENTAL ISSUES OF THE WESTERN BALKAN COUNTRIES”

October 28th to 30th, 2021, Faculty of Agriculture, Goce Delčev University, Štip, Republic of North Macedonia

Издавач:

Универзитет “Гоце Делчев“, Земјоделски факултет, Штип, Република Северна
Македонија

Печати:

Рapid ДООЕЛ – Штип

Тираж:

70 примероци

CIP - Каталогизација во публикација

Национална и универзитетска библиотека "Св. Климент Охридски", Скопје

502/504(497-15)(062)(084.3)

SCIENTIFIC conference for Critical environmental issues of the Western Balkan countries
(2; 2021; Štip)

Book of abstracts / 2nd scientific conference for Critical environmental issues of the
Western Balkan countries, October 28th to 30th, 2021. - Štip : Goce Delčev University -
Štip, 2021. - XVII, 66 стр. : илустр. ; 25 см

ISBN 978-608-244-826-8

а) Животна средина -- Заштита -- Западен Балкан -- Собири -- Апстракти

COBISS.MK-ID 55284485



Funded by
the European Union



ISBN 978-608-244-826-8