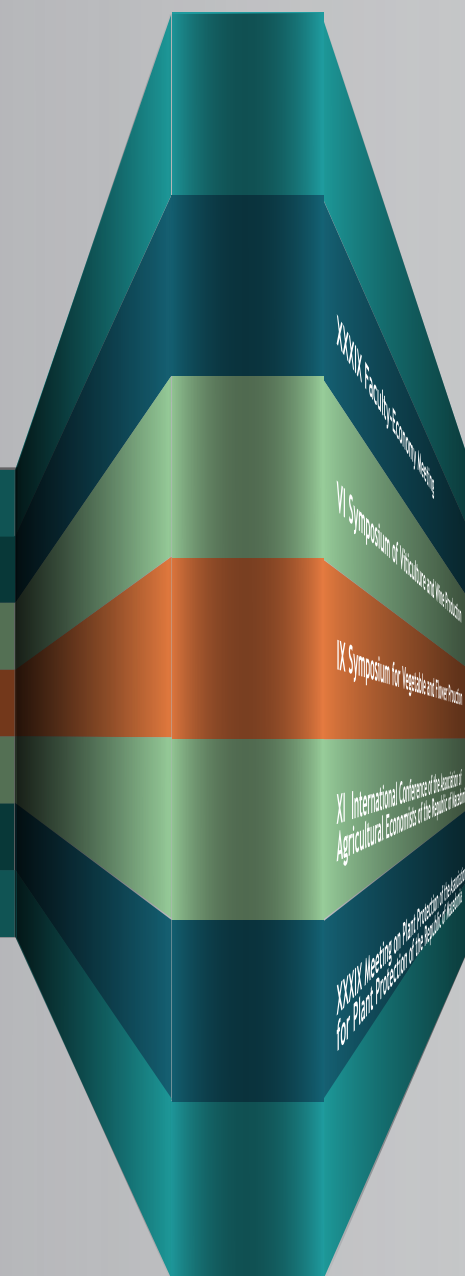


BOOK OF ABSTRACTS



3rd INTERNATIONAL SYMPOSIUM FOR
AGRICULTURE AND FOOD - ISAF 2017
18-20 October 2017,
Ohrid, Republic of Macedonia



*Ss. Cyril and Methodius
University in Skopje*



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BOOK OF ABSTRACTS

The Abstracts are arranged by the chronological order of acceptance, only technically edited according to the Guidelines for Abstracts, without additional editing of the main text. The results and writing style are presented in the original form provided by the authors.

3rd INTERNATIONAL SYMPOSIUM FOR AGRICULTURE AND FOOD

ISAF 2017

**Organized by
Faculty of Agricultural Sciences and Food-Skopje
Ss. Cyril and Methodius University in Skopje,
Republic of Macedonia**

18-20 October 2017 Ohrid, Republic of Macedonia

EVENTS COVERED BY ISAF 2017

**XXXIX FACULTY-ECONOMY MEETING
VI SYMPOSIUM OF VITICULTURE AND WINE PRODUCTION
IX SYMPOSIUM FOR VEGETABLE AND FLOWER PRODUCTION
XI INTERNATIONAL CONFERENCE OF THE ASSOCIATION OF AGRICULTURAL
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XXXIX MEETING ON PLANT PROTECTION OF THE ASSOCIATION FOR
PLANT PROTECTION OF THE REPUBLIC OF MACEDONIA**

For the occasion of its 70 years anniversary, the Faculty of Agricultural Sciences and Food - Skopje organizes a 3rd International Symposium for Agriculture and Food (ISAF 2017), offering possibility for presenting novel and fundamental advances in the field of sustainable agriculture and food production. ISAF 2017 will bring together and foster the communication among leading researchers, engineers and practitioners with an aim to share their scientific ideas and experience with all actors in the agricultural sector. The 3rd International Symposium for Agriculture and Food (ISAF 2017) is intended to gather scientists and engineers in the area of agriculture and food production with imperative to improve and strengthen the cooperation between Universities, Institutes, Agribusiness and related companies.

It is a great pleasure to have a publication compiling over 400 abstracts, from over 20 countries, giving an overview of the scientific interests, contemporary techniques and achievements in different areas of agricultural sciences and food research.

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Section 10.

VEGETABLE, FLOWER AND DECORATIVE PLANTS PRODUCTION

CONTENT:

COMPARATIVE TRIALS ON KAPIA TYPE PEPPER CULTIVARS Bogevska Zvezda, Popsimonova Gordana, Agic Rukie, Davitkovska Margarita	393
THE EFFECT OF FERTILISERS ON THE QUALITY OF PETUNIA X HYBRIDA „DOUBLE PIROUETTE PURPLE“ Davitkovska Margarita, Tanaskovic Vjekoslav, Bogevska Zvezda, Popsimonova Gordana, Agic Rukie, Dorbic Boris	394
THE EFFECT OF FERTILISERS ON THE QUALITY OF PETUNIA X HYBRIDA „DUVET PINK“ Davitkovska Margarita, Tanaskovic Vjekoslav, Bogevska Zvezda, Popsimonova Gordana, Agic Rukie, Dorbic Boris	395
AGRONOMIC EVALUATION OF TOMATO HYBRIDS FOR GLASS-HOUSE PRODUCTION Bogevska Zvezda, Popsimonova Gordana, Agic Rukie, Davitkovska Margarita	396
POSSIBLE DEVELOPMENTS ISSUES IN ORGANIC VEGETABLE PRODUCTION IN R. OF MACEDONIA Agic Rukie*, Popsimonova Gordana, Bogevska Zvezda, Davitkovska Margarita, Zdravkovska Marija	397
CHALLENGES FOR THE VEGETABLE SUB-SECTOR DEVELOPMENT IN THE REPUBLIC OF MACEDONIA Popsimonova Gordana, Agic Rukije, Bogevska Zvezda, Davitkovska Margarita	398
STUDY OF SEAWEED EXTRACTS AS BIO-FERTILIZER TO STIMULATE PLANT DEVELOPMENT OF LETTUCE AND TOMATO Bahcevandziev Kiril, Santos Pedro, Silva Luis Danie, Pereira Leonel	399

CYTOKININ APPLICATION ENHANCE TOMATO PLANT GROWTH PARAMETERS UNDER SALINITY STRESS CONDITIONS Todorović Vida, Svjetlana Zeljković, Borut Bosančić, Kolečka Ivana	400
SEED CHARACTERISTICS DIVERSITY IN SPONGE GOURD (<i>LUFFA AEGYPTIACA</i> MILL.) GERMPLASM FROM HATAY REGION IN TURKEY Mavi Kazım, Gündüz Kazım, Yıldırım Dilek	401
THE SEEDLING CHARACTERISTICS AND EMERGENCE PERFORMANCE OF ORNAMENTAL PEPPER GENOTYPES Mavi Kazım, Uzunoğlu Fulya, Mavi Fikriye, Güveloğlu Yağmur	402
EXAMINATION OF SOIL FERTILIZERS IN SPATHIPHYLLUM WALLISII REGEL PRODUCTION Radó-Takács Anna Veronika, Domián Ildikó, Tilly-Mándy Andrea	403
INFLUENCE OF DIFFERENT GROWTH REGULATORS ON MICROPROPAGATION OF PINK DIANTHUS (<i>DIANTHUS CHINENSIS</i> X <i>BARBATUS</i>) Velesanova Ivana, Trajkova Fidanka, Koleva Gudeva Liljana	404
RESEARCH ON FINDINGS ABOUT CULTIVATION AND USE OF ANNUAL AND BIENNIAL FLOWERING PLANT SPECIES IN THE REGION OF ŠIBENIK AND KNIN – THE REPUBLIC OF CROATIA Dorbić Boris, Crnica Kristijan, Simić Romanela, Davitkovska Margarita, Friganović Emilija, Nanjar Ljiljana, Bogevska Zvezda	405
INFLUENCE OF COMPOST MIXTURE ON THE LETTUCE YIELD AND QUALITY FORMATION Zlatareva Elena Vasileva, Marinova Svetla Marinova, Banov Martin, Kathijotes Nicholas	406
STUDY OF ENVIRONMENTAL, HABITAT AND ECOLOGY OF <i>EREMURUS SPECTABILIS</i> IN KHORASAN RAZAVI Nejadmohammad Namaghi Ali Reza, Gholizade Zahra	407
MINERAL RATIOS IN BEETROOT UNDER DIFFERENT FERTILIZATION Petek Marko, Toth Nina, Pecina Marija, Karažija Tomislav, Lazarević, Boris, Herak Ćustić Mirjana	408
THE POSSIBILITY OF IMPROVING THE PRODUCTION OF FLOWERS IN THE REPUBLIC OF SERBIA Vujosevic Ana, Popovic Sandra	409
THE EFFECT OF SUBSTRATE TYPE ON THE QUALITY OF WATERMELON SEEDLINGS Agic Rukie, Popsimonova Gordana, Bogevska Zvezda, Davitkovska Margarita, Zendeli Besnik	410
TOWARDS SUSTAINABILITY IN THE PROTECTED HORTICULTURE OF ALMERIA, ANDALUSIA, SPAIN Garcia-Garcia M. Carmen, De Cara García F.M., Gómez Vazquez J.M., Rodríguez Navarro M.E., Talavera Rubia M.F., Téllez Navarro M.M., Verdejo-Lucas S., Fernández Plaza M.	411

NEW CROPS TO PROMOTE DIVERSIFICATION OF VEGETABLE PRODUCTION IN GREENHOUSES OF ALMERÍA (SPAIN)	
García-García M. Carmen, Font R., Del Río-Celestino, M., Gómez Pedro	412
EFFECTS OF FOLIAR FERTILIZING ON THE YIELD OF PAPPERS GROWN IN PROTECTED SPACES IN STRUMICA REGION	
Stojanova Marina, Najdenovska Olga, Karakashova Ljubica, Babamovska-Milenkovska Frosina ..	413
CHARACTERISATION AND EVALUATION OF PEPPER LANDRACES AS ETHNO-BIOLOGICAL HERITAGE FROM SOUTH SERBIA	
Zoran S. Ilić, Žarko Kevrešan, Jasna Mastilović, Lana Zorić, Alena Tomšik, Miona Belović, Mladenka Pestorić, Dunja Karanović, Jadranka Luković	414
DIFFERENT SOILLESS CULTURE SYSTEMS AND THEIR MANAGEMENT	
Y. Tüzel, A. Gül, İ.H. Tüzel, G.B. Öztekin	415

**INFLUENCE OF DIFFERENT GROWTH REGULATORS ON
MICROPROPAGATION OF PINK DIANTHUS (*DIANTHUS CHINENSIS* X
BARBATUS)**

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Abstract

Approximately 156 ornamental species are cultivated via tissue culture in different commercial laboratories worldwide. *In vitro* plant culture is one of the key tools in plant biotechnology that utilizes the totipotency of plant cells. Pink dianthus (*Dianthus chinensis* x *barbatus*) is an important ornamental plant which are grown on balconies, in flower gardens, parks and other during summer period. In this research the influence of different concentrations and combinations of growth regulators on meristem buds and cotyledons from pink dianthus as starting explants was studied: A - MS + 2 mg/l BA + 0,1 mg/l IAA + 0,1 mg/l GA3; B - MS + 2 mg/l BA + 0,1 mg/l NAA; C - MS + 2mg/l BA and D - MS + 5 mg/l BA + 5 mg/l NAA. The meristem buds cultivated on MS medium supplemented with certain growth regulators developed merely shoots. All combinations of growth regulators under this study resulted in development of roots from shoots in pink dianthus. The newly regenerants were acclimatized with their transfer to sterile mix of perlite and peat (1:1) in high moisture conditions.

Keywords: pink dianthus, *in vitro*, growth regulators, meristem, cotyledon, shoots, rooting.