

# Faculty of Biology Annual Scientific Meeting

23-25 October 2014, Iași, Romania



„ALEXANDRU IOAN CUZA“ UNIVERSITY of IASI

## BIODIVERSITY CONSERVATION IN CONTEXT OF SUSTAINABLE DEVELOPMENT

and the satellite events:

The Students Scientific Session  
Biodiversity without borders Symposium



Organizer:



FACULTY OF BIOLOGY

„ALEXANDRU IOAN CUZA“  
UNIVERSITY OF IAȘI

In partnership with:



„ANASTASIE FĂTU“ BOTANICAL GARDEN,  
„ALEXANDRU IOAN CUZA“  
UNIVERSITY OF IAȘI, ROMANIA



INSTITUTE OF ZOOLOGY,  
ACADEMY OF SCIENCES OF MOLDOVA,  
CHIȘINAU, REPUBLIC OF MOLDOVA

<http://www.bio.uaic.ro/sesiune/2014/index.html>

## SECTION OF PLANT BIOLOGY

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### ORAL PRESENTATIONS

HALL B467: 11<sup>30</sup> – 13<sup>30</sup>; 16<sup>00</sup> – 19<sup>00</sup>

#### MODERATORS:

Prof. univ.dr. Vasile CRISTEA

Conf. univ. dr. Culiță SÎRBU

#### Book presentation

Maria-Magdalena ZAMFIRACHE

MARIUS-NICUȘOR GRIGORE, LĂCRĂMIOARA IVĂNESCU, CONSTANTIN TOMA, 2014, **HALOPHYTES: AN INTEGRATIVE ANATOMICAL STUDY**, SPRINGER CHAM HEIDELBERG NEW YORK DORDRECHT LONDON, 548 PP., ISBN: 978-3-319-05728-6

#### Culiță SÎRBU

ASPECTS OF THE BOTANICAL OPERA OF THE PROFESSOR VALERIU ZANOSCHI

#### Tiberius BALAEȘ, Cătălin TĂNASE

NUTRITIONAL ADAPTATION OF SOME BASIDIOMYCETE SPECIES FOR BIOCONTROL OF NEMATODES

#### Cristiana Virginia PETRE, Cătălin TĂNASE

ANTIFUNGAL ACTIVITY OF SOME LIGNICOLOUS BASIDIOMYCETE SPECIES AGAINST THE PATHOGEN *SCLEROTINIA SCLEROTIORUM* (LIB.) DE BARY

#### Camelia Paula ȘTEFANACHE, Cătălin TĂNASE, Evelyn WOLFRAM, Doina DĂNILĂ

IN VITRO AND IN SITU COMPARATIVE STUDY ON THE BIOPRODUCTIVITY OF *ARNICAE FOLIUM ET CAULIS* FROM THE NORTHERN AREA OF THE ROMANIAN EASTERN CARPATHIANS

#### Toma STOLERU, Maria-Magdalena ZAMFIRACHE

AN INTRODUCTION TO IMAGE-BASED PHENOTYPING METHODS FOR ANALYZING GROWTH AND DEVELOPMENT IN PLANTS

#### Eugenia NAGODĂ, Petronela COMĂNESCU, Paulina ANASTASIU

PRELIMINARY STUDIES OF ALIEN FLORA IN BUCHAREST AND SURROUNDING AREAS

Constantin MARDARI, Cătălin TĂNASE  
SUBCONTINENTAL DRY GRASSLANDS VEGETATION (FESTUCETALIA  
VALESIAEAE) IN THE NORTH-EASTERN REGION OF MOLDOVA (ROMANIA) – A  
NUMERICAL APPROACH

Loredana SOLCAN, Mihaela DANU, Irina IRIMIA, George BODI  
POSSIBLE USES AND SIGNIFICANCE IN CUCUTENI CULTURE OF TWO  
SPECIES OF BORAGINACEAE FAMILY

• Raluca A. CRISTACHE, Ion SANDU, Viorica VASILACHE  
THE AUTHENTICATION OF A VIOLIN BY IDENTIFYING THE WOOD SPECIES

#### POSTERS

CENTRAL HALL, 1<sup>ST</sup> FLOOR: 15<sup>30</sup> – 16<sup>00</sup>

• Antonia-Maria MĂRGINEANU, Imola MOLNÁR, Elena RAKOSY-TICAN  
TRICHOMES TYPES ANALYSIS AND THEIR DENSITY IN PARENTAL SPECIES  
*SOLANUM TUBEROSUM* AND *S. CHACOENSE* AND THEIR DERIVED SOMATIC  
HYBRIDS

• Corneliu TĂNASE, Irina BOZ, Valentin I. POPA  
HISTO-ANATOMICAL ASPECTS IN MAIZE (*ZEA MAYS* L.) SEEDLINGS  
DEVELOPING ON DEUTERIUM DEPLETED WATER INFLUENCE

Mihaela Aurelia IVAN, Marius Nicusor GRIGORE, Lăcrămioara OPRICĂ, Maria-  
Magdalena ZAMFIRACHE  
NON-ENZYMATIC ANTIOXIDANTS CONTENT IN SEVERAL SPECIES  
COLLECTED FROM SALT MARSHES FROM DOBROGEA

• Eduard Marius NEGULICI, Daniela Anca LAZĂR, Gențiana Mihaela Iulia  
PREDAN  
THE INFLUENCE OF THE METEOROLOGICAL FACTORS ON TEN ROSE  
CULTIVARS FROM THE ROSE COLLECTION OF "DIMITRIE BRANDZA" BOTANIC  
GARDEN OF BUCHAREST

• Cristina BUCȘĂ, Andrei LOBIUC, Maria-Magdalena ZAMFIRACHE  
CONTRIBUTIONS ON THE PHYSIOLOGY OF FIVE SPONTANEOUS *ROSA* L.  
TAXA

Vasile Răzvan FILIMON, Liliana ROTARU, Roxana FILIMON  
DETERMINATION OF THE POLYPHENOLOXIDASE ACTIVITY IN  
RELATIONSHIP TO TOTAL PHENOLIC AND ANTHOCYANIN CONTENT OF SOME  
ROMANIAN VINE VARIETIES (*VITIS VINIFERA* L.) FOR TABLE GRAPES



## SUBCONTINENTAL DRY GRASSLANDS VEGETATION (FESTUCETALIA VALESIIACAE) IN THE NORTH-EASTERN REGION OF MOLDOVA (ROMANIA) – A NUMERICAL APPROACH

CONSTANTIN MARDARI<sup>1</sup>, CĂTĂLIN TĂNASE<sup>2</sup>

<sup>1</sup>"Alexandru Ioan Cuza" University of Iași, "Anastase Fătu" Botanical Garden, Iași, Romania

<sup>2</sup>"Alexandru Ioan Cuza" University of Iași, Faculty of Biology, Iași, Romania

The North-Eastern region of Moldova is well known for the significant areas of dry grasslands including very rich in species vegetal communities, many of them rare or threatened species. As their classification has been realized only following the classic method specific to the Central European School for vegetation study, we realized a numerical classification in order to see if it is consistent with the previous ones, based on the Flexible  $\beta$  algorithm and Bray-Curtis distance. Complementary, an ordination technique (detrended correspondence analysis) based only on vegetation data was used to detect gradients in the floristic composition and to confirm the hierarchical clustering. The diagnostic species analysis has as result the identification of the species significantly related to the hierarchical clusters and, consequently, to the vegetal associations. Thus, in the Festucetalia valesiaca (Festuco-Brometea) dry grasslands vegetation, eleven vegetal communities were distinguished and characterized (communities of *Festuca valesiaca*, *Poa angustifolia*, *Artemisia austriaca* and *Poa bulbosa*, *Dichanthium ischaemum*, *Stipa capillata*, *Festuca rupicola*, *Chrysopogon grillus*, *Agropyron cristatum* subsp. *pectinatum*, *Calamagrostis epigeios* and *Stipa lessingiana*).

## POSSIBLE USES AND SIGNIFICANCE IN CUCUTENI CULTURE OF TWO SPECIES OF BORAGINACEAE FAMILY

LOREDANA SOLCAN<sup>1</sup>, MIHAELA DANU<sup>2</sup>, IRINA IRIMIA<sup>2</sup>, GEORGE BODI<sup>3</sup>

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Our paper aims at presenting and discussing the discovery of *Lithospermum officinale* L. and *Buglossoides purpureoerulea* (L.) I. M. Johnston seeds deposits from three Cucuteni (Vth - IVth millennia CAL. B.C.) sites: Izvoare – Piatra Neamț (Neamț County), Poduri – Dealul Ghindaru (Bacău County), Frumușica (Neamț County). Current uses of the two species make use of their anti-inflammatory, contraceptive or anti-toxic properties. However, an in-depth contextual analysis of the various discovery contexts belonging to the Cucuteni culture, leading to a differentiation between the known deposits, allows us to explore different meanings of this category of archaeological finds, such as display of social status or involvement in magical/healing rituals.

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