



"Alexandru Ioan Cuza"
University of Iași



„Anastase Fătu”
Botanical Garden



Romanian Academy
Biological Sciences Section



Association of Botanical
Gardens of Romania



SCIENTIFIC SYMPOSIUM

In situ and *ex situ* conservation of plants diversity

IAȘI, September 22nd – September 25th 2016



“ALEXANDRU IOAN CUZA” UNIVERSITY PUBLISHING HOUSE

2016

Symposium dedicated to the anniversary of 200 years from the birth of Professor Anastasie Fătu and celebration of 160 years since the foundation of the first botanical garden from Romanian Principalities.

PRESIDENT OF HONOR

Constantin TOMA, Member of the Romanian Academy

SCIENTIFIC COMMITTEE

Paulina ANASTASIU, University of Bucharest, Faculty of Biology

Oksana BAGLEI, Department of Ecology and Biomonitoring, Chernivtsi National University, Ukraine

Toader CHIFU, “Alexandru Ioan Cuza” University of Iași, Faculty of Biology

Vasile CRISTEA, “Babeș-Bolyai” University, Cluj-Napoca, Faculty of Biology and Geology

Snežana CUPARA, University of Kragujevac, Faculty of Medical Sciences, Serbia

Simona DUNCA, “Alexandru Ioan Cuza” University of Iași, Faculty of Biology

Ecaterina FODOR, University of Oradea, Faculty of Environmental Protection

Monica HÂNCIANU, “Grigore T. Popa” University of Medicine and Pharmacy, Faculty of Pharmacy, Iași

Lăcrămioara IVĂNESCU, “Alexandru Ioan Cuza” University of Iași, Faculty of Biology

Ștefan MANIC, Grădina Botanică (Institut) a Academiei de Științe din Moldova

Anca MIRON, “Grigore T. Popa” University of Medicine and Pharmacy, Faculty of Pharmacy, Iași

Cornelia MIRCEA, “Grigore T. Popa” University of Medicine and Pharmacy, Faculty of Pharmacy, Iași

Mihai MITITIUC, “Alexandru Ioan Cuza” University of Iași, Faculty of Biology

Silvia OROIAN, University of Medicine and Pharmacy, Târgu-Mureș, Faculty of Pharmacy

Marcel PÂRVU, “Babeș-Bolyai” University, Cluj-Napoca, Faculty of Biology and Geology

Anca SÂRBU, University of Bucharest, Faculty of Biology

Ion SÎRBU, “Alexandru Ioan Cuza” University of Iași, Botanical Garden “Anastasiu Fătu”

Cosmin SICORA, Biological Research Center Jibou

Tatiana Eugenia ȘESAN, University of Bucharest, Biology Faculty, Bucharest

Cătălin TĂNASE, “Alexandru Ioan Cuza” University of Iași, Faculty of Biology

Alexandru TELEUȚĂ, Botanical Garden (Institute) of the Academy of Sciences of Moldova, Republic of Moldova

Evelyn WOLFRAM, Zurich University of Applied Sciences, Institute of Chemistry and Biotechnology, Phytopharmacy and Natural Products, Grüental, Wädenswil, Switzerland

Maria Magdalena ZAMFIRACHE, “Alexandru Ioan Cuza” University of Iași, Faculty of Biology

ORGANIZING COMMITTEE

Cătălin TĂNASE, Professor PhD., director of Botanical Garden “Anastase Fătu” Iași

Camelia IFRIM, PhD., Scientific secretary, coordinator Greenhouse Complex

Lidia ADUMITRESEI, PhD., coordinator Biologic Section

Ciprian BÎRSAN, PhD., coordinator Dendrarium Section

Ana COJOCARIU, PhD., coordinator Ornamental Section - Chrysanthemums

Iuliana GAȚU, engineer, coordinator Phytogeographic Section

Mihaela MIHALACHE, engineer, coordinator Rosarium Section

Constantin MARDARI, PhD., coordinator Romanian Flora and Vegetation Section,
Moldavia Sylvosteppe Section

Adrian OPREA, PhD., coordinator Sistematic Section


Cristiana Virginia PETRE, PhD., coordinator Useful Plants Section

Mihaela POPA, engineer, coordinator Ornamental Section

Tiberius BALAEȘ, Researcher PhD., Micropropagation and germoplasm preservation
laboratory

Monica MURARIU, engineer, Computation engineering laboratory

PROGRAMME OF THE SYMPOSIUM

Hours / Days	September 22 nd 2016	September 23 rd 2016	September 24 th 2016	September 25 th 2016	
7 : 00	<p><i>Akademos Complex, "Alexandru Ioan Cuza" University of Iași</i></p> <p>Reception: 0232 210340</p> <p>Address: Păcurari Street, no. 6</p> <p>Participants Arrival and Accommodation</p>		Field trip gathering point: <i>Akademos Complex, "Alexandru Ioan Cuza" University of Iași</i>		
8 : 00		<p><i>Senate Hall</i></p> <p>Participants registration</p>			
9 : 00		<p><i>Senate Hall</i></p> <p>Constantin TOMA: <i>Welcome from the Biological Sciences Section of the Romanian Academy</i></p> <p>Anca SĂRBU: <i>Achievements and perspectives of the Association of Botanical Gardens of Romania</i></p> <p>Costin CLIT: <i>Mușata village, birth place of Anastasie Fătu. Historical marks</i></p> <p>Cătălin TĂNASE: <i>Anastasie Fătu – founder of the Botanical Garden of Iași</i></p>			
10 : 30		<p><i>Hall of Lost Footsteps</i></p> <p>Coffee-break</p>			
11 : 00		<p><i>Senate Hall</i></p> <p>Paper presentation Session</p>	<p>Botanical expedition</p> <p>Natural Reserve</p> <p>Cheile Șugăului – Munticelu</p>		Participants departure
14 : 00			<p><i>Hall of Lost Footsteps</i></p> <p>Coffee-break</p>		
15 : 00			<p><i>Hall of Lost Footsteps</i></p> <p>Poster presentation Session</p>		
16 : 00			<p><i>Senate Hall</i></p> <p>Paper presentation Session</p>		
18 : 00			<p><i>Hall of Lost Footsteps</i></p> <p>Coffee-break</p>		
18 : 30		<p>Botanical Garden – Council Hall</p> <p>Annual AGR meeting</p>	<p><i>Senate Hall</i></p> <p>Discussions and conclusions</p>		
20 : 00	<p>Botanical Garden – Greenhouse Complex</p> <p>Cocktail</p>	<p><i>Akademos Restaurant</i></p> <p>Dinner</p>			

9.00 a.m. SENATE HALL

Constantin TOMA: Welcome from the Biological Sciences Section of the Romanian Academy

Anca SÂRBU: Achievements and perspectives of the Association of Botanical Gardens of Romania

Costin CLIT: Mușata village, birth place of Anastasie Fătu. Historical Marks

Cătălin TĂNASE: Anastasie Fătu – founder of the Botanical Garden of Iași

11.00 a.m. – SENATE HALL

Paper presentation Session

MODERATORS

Prof. dr. Anca SÂRBU, Prof. dr. Tatiana Eugenia ȘESAN, Prof. dr. Vasile CRISTEA

Evelyn WOLFRAM

Hyphenation of HPTLC with bioautography and MALDI-TOF-MS as an effective tool for bioprocess and quality control of plant extracts

Oksana BAGLEI

Investigation the viability of *Saussurea* DC. genus populations in Ukrainian Carpathians

Paulina ANASTASIU

Natura 2000 habitats in the future geopark Buzău land

Silvia OROIAN, Mihaela SĂMĂRGHITAN, Sanda COȘARCĂ, Mariana HIRIȚIU, Corneliu TĂNASE

The diversity of medicinal and aromatic plants encountered in various *Natura 2000* habitats from Gurghiu Mountains

Alexandru TELEUȚĂ

National strategy and action plan for biodiversity conservation in the Republic of Moldova: achievements and prospects

Tatiana Eugenia ȘESAN, Anca SÂRBU, Daniela SMARANDACHE, Florin OANCEA, Anca OANCEA, Simona SAVIN, Agnes TOMA, Laura ȘTEFAN, Georgeta NEGRU, Gabriela VLĂȘCEANU, Marius GHIUREA, Luiza JECU, Gelu VASILESCU, Cristian Mihai POMOHACI

Botanical and phytochemical approach on *Passiflora* spp. – new nutraceutical crop in Romania

Cosmin SICORA, Lia MLADIN, Oana SICORA

Insights into plant mechanisms of adaptation to different environmental factors as way to predict responses to future changes

Tatiana SÎRBU, Irina SFECLĂ, Ion ROȘCA

The results of improvement of peony in the Republic of Moldova

Pavel PÎNZARU, Valentina CANTEMIR, Ștefan MANIC

Fitocenological study of population *Paeonia peregrina* Mill. (Paeoniaceae)

Camelia Paula ȘTEFANACHE, Constantin MARDARI, Oana BUJOR, Radu NECULA, Adrian SPAC, Ciprian BÎRSAN, Cătălin TĂNASE, Doina DĂNILĂ

Phytochemical profile of *Arnica montana* L. plants differentiated by organ type harvested from natural areas in Bistriței and Calimani Mountains

Marcel PÂRVU, Cristina MIRCEA, Oana ROȘCA-CASIAN

The effect of *Allium sativum* L. extract on the fungus *Rhodotorula mucilaginosa*

Cristiana Virginia PETRE, Ana COJOCARIU, Alin-Constantin DÎRȚU, Marius NICULAUA, Cătălin TĂNASE

Biotechnological potential of the volatile organic compounds synthesized by species of wood-rotting basidiomycetes

Ecaterina FODOR, Ovidiu HĂRUȚA

micorizante în nord vestul Transilvaniei

Quercus robur, *Q. cerris* and *Q. petraea* as hot spots of biodiversity

3.00 p.m.– HALL OF THE LOST FOOTSTEPS

Poster Presentation Session

MODERATORS

Prof. dr. Silvia OROIAN, Prof. dr. Ecaterina FODOR, Doctor habilitat Ștefan MANIC

Nadja MEIER, Samuel PETER, Gojko JOSIC, Beat MEIER, Evelyn WOLFRAM

Challenges in development of validatable LC method for free anthraquinone aglycones in herbal drugs for the european pharmacopeia (PHEur)

Cornelia MIRCEA, Oana CIOANCĂ, Cristina IANCU, Ursula STĂNESCU, Monica HÂNCIANU

Microbiological and chemical evaluation of several commercial samples of *Tiliae flos*

Snežana BRANKOVIĆ, Snežana CUPARA, Radmila GLIŠIĆ, Milun JOVANOVIĆ

Phytoaccumulation of metals in serpentinophytes from Serbia

Maria GORCEAG, Nina CIORCHINĂ

In vitro propagation of goji (*Lycium barbarum* L.) in the Republic of Moldova

Melania GHEREG, Nina CIORCHINĂ

Techniques for the conservation of the species of Amaryllidaceae family

Petronela Carmen COMĂNESCU, Eugenia NAGODĂ, Paulina ANASTASIU

Protected species at international level in the collections of the “D. Brandza” Botanic Garden

Tatiana SÎRBU, Ana DICA

The *Santolina* L. species in *ex situ* conditions

Mariana LOZINSCHII, Nina CIORCHINĂ

Blackberry collection establishment in Botanical Garden

Irina SFECLĂ

Genus *Kniphofia* Moench. – History and present

Silvia OROIAN, Corneliu TĂNASE

The scientific value of „E. I. Nyarady” collection from herbarium of Pharmaceutical Botany Department, Faculty of Pharmacy in Tîrgu Mureş

Irina IRIMIA, Attila BARTÓK

Rare plants species from Romania in the herbarium collection of “Alexandru Ioan Cuza” University of Iaşi

Iuliana GAŢU, Camelia IFRIM

Aspects concerning achenes, germination and initial stages of some species of Asteraceae family cultivated in Botanical Garden Iassy

Anișoara STRATU, Naela COSTICĂ

The influence of zinc on some physiological and morphological indicators of *Ocimum basilicum* L.

Lidia ADUMITRESEI, Lăcrămioara IVĂNESCU

Comparative aspects of foliar micromorphology from different taxa of *Pelargonium* genus collection of Botanical Garden “Anastasiu Fătu” from Iaşi

Lidia ADUMITRESEI, Irina GOSTIN

Morphological and micromorphological investigations regarding to leaves from some *Rosa* L. species with emphasis on secretory glands

Elida ROSENHECH, Andrei LOBIUC, Irina BOZ, Constantin TOMA, Maria-Magdalena ZAMFIRACHE

Morpho-anatomical aspects in some species of the *Viola* genus

Camelia IFRIM, Iuliana GAȚU

Agave genus collection in Botanical Garden Iasi

Alexandru TELEUȚĂ, Victor ȚÎȚEI

Fodder value of some leguminous plants species of the collections from Botanical Garden (Institute) of the Academy of Sciences of Moldova

Daniela Elena ZAVASTIN, Adriana TRIFAN, Cristina TUCHILUȘ, Cornelia MIRCEA, Ana Clara APROTOSOAI, Anca MIRON

Biodiversity conservation through the safety of nature and environmental education

Ciprian BÎRSAN, Tiberius BALAEȘ, Ovidiu COPOȚ, Constantin MARDARI, Cătălin TĂNASE

Bipartite mutualistic network between fungi and tree species in forest ecosystems from Giumalău Massif

Ovidiu COPOȚ, Ciprian BÎRSAN, Tiberius BALAEȘ, Cristiana Virginia PETRE, Constantin MARDARI, Cătălin TĂNASE

Spatial distribution of some ectomycorrhizal fungi (Russulaceae, Fungi, Basidiomycota) in forest habitats from the North-Eastern Region (Romania)

Liviu IORDAN, Tiberius BALAEȘ, Cătălin TĂNASE

Influence of the nitrogen source on the tolerance and bioremediation potential of some lignicolous basidiomycetes to elicitation by copper based fungicides

Ana COJOCARIU, Cristiana Virginia PETRE, Cătălin TĂNASE

Study of a model for the integration of Scheffer index evaluating the prediction degree of risk for relative degradation in construction wood

Tiberius BALAEȘ, Simona Isabela DUNCA, Dorina RUSU, Emil Ghiocel IOANID, Cătălin TĂNASE

The antimicrobial effect of unconventional treatments for preservation of paper

4.00 p.m. – SENATE HALL

Paper presentation Session

MODERATORS

Prof. dr. Paulina ANASTASIU, Prof. dr. Marcel PÂRVU, CSI dr. Cosmin SICORA

Gabriela VLĂSCEANU, Adriana BÎRA, Ștefan MANEA, Zoltan MAROSY

Multidisciplinary study regarding the structured water and biocompost use on medicinal plants, aromatic and spicy, in the ecological culture

Camelia Paula ȘTEFANACHE, Oana BUJOR, Radu NECULA, Nina CIOCÂRLAN, Veaceslav GHENDOV, Adrian SPAC, Adriana TRIFAN, Doina DĂNILĂ, Christoph CARLEN, Xavier SIMONNET

Assessment of phytochemical constituents of *Artemisia annua* L. species from wild populations in Republic of Moldova

Cristina-Mirela COPACI, Paul-Marian SZATMARI, Oana SICORA, Diana Maria CHENDE, Marin CĂPRAR, Roxana ȘUTEU, Cosmin SICORA

Evaluation of the DNA barcoding method in studying xerothermic flora from south-eastern part of the Sălaj County, Romania

Paul-Marian SZATMARI

Low-altitude glacial relicts – a new zoogeographic category in preserving and protecting the biodiversity in Romania

Oana ZAMFIRESCU, Toader CHIFU

Aspects of flora and vegetation from “Vânători Neamț” Natural Park

Ioan DON, Cornelia-Doinița DON

Contribution to the study of the flora of the Macea village (Arad county)

Daniel RĂDUȚOIU, Stan ION

About meadows edified by *Chrysopogon gryllus* from Oltenia region

Adrian OPREA, Ion SÂRBU, Nicolae ȘTEFAN

Astragalus pseudopurpureus in Romanian vegetation

Gabriela VLĂSCEANU

Biodiversity conservation through the safety of nature and environmental education

Constantin MARDARI, Camelia ȘTEFANACHE, Ciprian BÎRSAN, Tiberius BALAEȘ, Rareș ȘCHIOPU, Doina DĂNILĂ, Cătălin TĂNASE

Environmental drivers of the structure and density of *Arnica montana* populations in the northern region of Romanian Eastern Carpathians

Ștefan MANIC

The macromycetes of the downy oak forests from Moldova

Tiberius BALAEȘ, Cristiana Virginia PETRE, Cătălin TĂNASE

Resistance of *Trametes gibbosa* species (Basidiomycota, Fungi) to the toxic effect of some pesticides

6.30 p.m.– SENATE HALL Discussions and conclusions

MODERATORS

Prof. dr. Constantin TOMA, Conf. dr. Lăcrămioara IVĂNESCU, Prof. dr. Cătălin TĂNASE