

Conference Program

November 23th, 2023 - Thursday

Joseph Smith Auditorium of the “Stefan cel Mare” University

09.30- Opening session
10.30

Plenary session - Joseph Smith Auditorium of the “Stefan cel Mare” University

10.30- 10.55	The response of the common oak (<i>Quercus robur</i>) and the grayish oak (<i>Quercus pedunculiflora</i>) to climate in the forest-steppe area of southeastern Romania	Popa Ionel ^{1,2} , Popa Andrei ^{1,3} , Balabasciuc Mihai ¹ <i>1 National Institute for Research and Development in Forestry ‘Marin Dracea’, Bucharest, Romania</i> <i>2 Center for Mountain Economy (CE-MONT), Vatra Dornei, Romania</i> <i>3 Faculty of Silviculture and Forest Engineering, Transilvania University of Brasov, Brasov, Romania</i>
10.55- 11.20	Socioecological Dynamics and Forest Dependent Communities’ Wellbeing: The Case of Yasuni National Park, Ecuador	Isabel Domingues ¹ , Coman Claudiu ² , Popa Bogdan ¹ <i>1 Faculty of Silviculture and Forest Engineering,</i> <i>2. Faculty of Sociology and Communication, “Transilvania” University of Braşov, Romania</i>
11.20- 11.45	Aspects regarding the contribution of the National Forest Extension and Rehabilitation Program to the sustainable development of the Republic of Moldova	Dumitru Galupa, Talmaci Ion, Florenta Gheorghe <i>National Forest Research Institute , Republic of Moldova</i>
11.45- 12.00	Conclusions	

13.00-13.15	The music of wood - the connection between the forest ecosystem, the manufacturing technology and art	<p>Mariana Domnica Stanciu¹, Florin Dinulica², Vasile Ghiorghe Gliga^{1,3}, Mihaela Campean⁴, Adriana Savin^{1,5}, Silviu Marian Nastac^{1,6}, Alina Marian Nauncef⁷</p> <p><i>1 Department of Mechanical Engineering, Transilvania University of Brasov</i> <i>2 Department of Forest Engineering, Forest Management Planning and Terrestrial Measurements, Transilvania University of Braşov,</i> <i>3 S.C. Gliga Musical Instruments S.A., Reghin, Romania;</i> <i>4 Faculty of Furniture Design and Wood Engineering, Transilvania University of Brasov,</i> <i>5 Institute of Research and Development for Technical Physics,</i> <i>6 Faculty of Engineering and Agronomy, Braila, "Dunarea de Jos" University of Galati, Romania,</i> <i>7 Faculty of Music, Transilvania University of Braşov</i></p>
13.15-13.30	Promoting renewable energies as a tool for climate change mitigation; case studies – solar energy for the cities of Leeuwarden (Netherlands) and Suceava (Romania)	Alexandra Smalberger, Anca Măciucă <i>"Ștefan cel Mare" University of Suceava, Forestry Faculty, Romania</i>
13.30-13.45	Dimensional characteristics of wood chips and their moisture content for short-rotation crops of energy willow	Cezar Scriba, Elena Camelia Musat* <i>Transilvania University of Brasov - Faculty of Silviculture and Forest Engineering, Romania</i>
13.45-14.00	Determination of the potential social and biomass production impact of forestry works adjacent to the Via Transilvanica route	Cerasela Teodorescu <i>"Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania</i>
14.00-14.15	Critical Analysis of Payments for Ecosystem Services: Case Studies in Kenya, Uganda and Tanzania	Ibrahim Osewe , Aureliu-Florin Hălălișan, Nicolae Talpă, Bogdan Popa <i>Transilvania University of Brasov - Faculty of Silviculture and Forest Engineering, Romania</i>
14.15-14.30	Analysis of the first-year students of the Forestry Faculty perceptions concerning the Romanian forests management	Catalina Oana Barbu. Liviu Nichiforel, Sergiu Andrei Horodnic <i>"Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania</i>
14.30-14.45	The Romania Forest legislation seen as a Javon's Paradox	Marian Dragoi ¹ , Dragoș Costin ¹ , Veronica Toza ² , Vasile Iosifescu ¹ , Petru Drob ² și Gabriel Dănilă ¹ <i>1 "Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania, 2 Legal consultant</i>

14.45- 15.00	Forest laws analysis in selected European countries	Liviu Nichiforel ¹ , Valeriu-Norocel Nicolescu ² <i>1 "Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania</i> <i>2 Transilvania University of Brasov - Faculty of Silviculture and Forest Engineering, Romania</i>
15.00- 15.30	Coffee break	
15.30- 15.45	PEFC - Standards for Sustainable Forest Management	Lucian Filigean <i>PEFC Romania</i>
15.45- 16.00	Perceptions of stakeholders input for FSC forest management certification from Romania	Bogdan Buliga ¹ , Liviu Nichiforel ² <i>1 Preferred by Nature</i> <i>2 "Ștefan cel Mare" University of Suceava, Forestry Faculty, Romania</i>
16.00- 16.15	A new metric to assess the deadwood presence in FSC certified forests	Ciprian Ceornea <i>"Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania</i>
16.15- 16.30	Understanding the EU Deforestation Regulation - Resources and tools for implementation	Tudor Serban, Bogdan Buliga <i>Preferred by Nature</i>
16.30- 16.45	The role of cultural ecosystem services for sustainable forest management	Ramona Scriban, Marian Drăgoi, Carmen Badaluta <i>"Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania</i>
16.45- 17.00	Analizing the possibility to RfiD utilisation in forestry in Romania	Pălie Dorin, Laura Bouriaud <i>"Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania</i>

Session: Forest Ecosystems and Climate

Room: E113

Moderator: Gabriel Duduman

13.00-13.15	Deadwood carbon dynamics over 10-years in a temperate virgin forest	Ion Cătălin Petrișan <i>Transilvania University of Brasov, Romania</i>
13.15-13.30	Mapping vegetation in the protection areas of the high voltage power lines for Ecological corridor Management	Ionut Barnoaiea ¹ , Ciprian Palaghianu ¹ , Ovidiu Iacobescu ¹ , Alina Dobresanciuc ² , Gabriel Duduman ¹ , Cezar Tomescu ¹ , Alexei Savin ¹ , Vasile-Cosmin Cosofret ¹ , Daniel Avacaritei ¹ , Iulian Danila ¹ , Georgel Mazare ¹ , Florin Clinovschi ¹ , Corneliu Pohontu ¹ , Gabriel Danila ¹ , Paul Iliescu ¹ <i>1. "Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania, 2. Delgaz Grid S.A., Romania</i>
13.30-13.45	Results of vegetation and fauna mapping in Șipote Forest, Suceava municipality	Gabriel Duduman, Cezar Tomescu, Anca Măciucă, Ionuț Barnoaiea, Ovidiu Iacobescu, Mihai-Leonard Duduman <i>"Ștefan cel Mare" University of Suceava, Forestry Faculty, Romania</i>
13.45-14.00	Mapping historically disturbed forest structure using LiDAR and spy satellites in Pecineagu watershed	Ioana Alexandra Nicolae, Mihai Daniel Niță <i>Transilvania University of Brasov, Romania</i>
14.00-14.15	Comparing the efficiency of forest mitigation strategies on carbon sequestration	Cosmin Cosofret, Olivier Bouriaud, Laura Bouriaud <i>"Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania</i>
14.15-14.30	Use of terrestrial laser scanner (TLS) to optimize tree sampling for allometric model fitting in short-rotation woody crops (SRWCs)	Iulian Dănilă, Cosmin Coșofreț, Olivier Bouriaud <i>"Ștefan cel Mare" University of Suceava, Forestry Faculty, Romania</i>
14.30-14.45	Wood density in Norway Spruce (<i>Picea abies</i> (L.) H. Karst) stand installed using different planting schemes in the north of the Eastern Carpathians	Gheorghe Ștefan ^{1,2} , Răzvan Vasile Câmpu ³ , Radu Vlad ² , Alexandra Ispravnic (Ștefan) ^{1,2} <i>1. Interdisciplinary Doctoral School, "Transylvania" University from Brasov, Romania 2. National Institute for Research and Development in Forestry 'Marin Dracea', Campulung Moldovenesc, Romania 3. Department of Forest Engineering, Forest Management Planning and Terrestrial Measurements, Faculty of Silviculture and Forest Engineering, Transilvania University of Brasov, Romania</i>

14.45-15.00	Growth and development indices at stand level in mixed Norway spruce (<i>Picea abies</i> (L.) H. Karst) silver fir (<i>Abies alba</i> Mill.) and beech (<i>Fagus sylvatica</i> L.) stands from the north of the Eastern Carpathians	Alexandra Ispravnic (Stefan) ^{1,2} Razvan Vasile Câmpu ³ , Radu Vlad ² , Gheorghe Stefan ^{1,2} 1 Interdisciplinary Doctoral School, Transilvania University of Braşov, Romania 2 National Institute for Research and Development in Forestry "Marin Drăcea" Câmpulung Moldovenesc Research Station, Romania 3 Department of Forest Engineering, Forest Management Planning and Terrestrial Measurements, Faculty of Silviculture and Forest Engineering, Transilvania University of Brasov, Romania
15.00-15.30	Coffee break	
15.30-15.45	A systematic survey of conventional and new postural assessment methods	Gabriel Osei Forkuo Department of Forest Engineering, Forest Management Planning and Terrestrial Measurements, Faculty of Silviculture and Forest Engineering, Transilvania University of Braşov, Romania
15.45-16.00	Patterns of forest species association in sapling communities: a story of love and hate	Ciprian Palaghianu, Cosmin Coşofreţ "Ştefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania
16.00-16.15	Weeding of seedlings in forest nurseries by chemical method - case study	Georgel Constantin Mazare "Ştefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania
16.15-16.30	The specifics of the growth of beech seedlings (<i>Fagus sylvatica</i> L.) of different geographic proveniences in the "Plaiul Fagului" scientific reserve	Victor Sfeclă, Alexandru Chetrean, Irina Sfeclă Technical University of Moldova, Faculty of Agricultural, Forest and Environmental Sciences, Chisinau, Republic of Moldova
16.30-16.45	Analysing the sound speed through the wood and stability of Norway spruce trees affected by trunk rot	Gheorghe Pei ¹ , Radu Vlad ² 1. Transilvania University of Braşov, Faculty of Silviculture and Forest Engineering, Romania 2. National Institute for Research and Development in Forestry (INCDS) "Marin Drăcea" - Câmpulung Moldovenesc, Romania
16.45-17.00	The viability of beech seedlings of different geographic proveniences (<i>Fagus sylvatica</i> L.) in the conditions of the "Plaiul Fagului" scientific reserve	Victor Sfeclă ¹ , Irina Sfeclă ¹ , Nina Zdioruk ² , Nicolae Platovschii ² 1 Technical University of Moldova, Faculty of Agricultural, Forest and Environmental Sciences, Chisinau, Republic of Moldova 2 Institute of Genetics, Physiology and Plant Protection of SUM, Chisinau, Republic of Moldova

Session: Forest Assessment, Modelling, Forest Management Room: E109

Moderator: Cătălin Constantin Roibu

13.00-13.15	Exploring the effect of long-term natural disturbance dynamics on contemporary lichen communities	Rhiannon Gloor ¹ , Marek Svitok ² , Martin Mikoláš ^{1,3} , Jeňýk Hofmeister ¹ , Ondřej Vostárek ¹ , Daniel Kozák ¹ , Lucie Zemanová ¹ , Miroslav Svoboda ¹ <i>1Department of Forest Ecology, Faculty of Forestry and Wood Sciences, Czech University of Life Sciences Prague, Praha 6 – Suchbát, Czech Republic</i> <i>2Faculty of Ecology and Environmental Sciences, Technical University in Zvolen, Slovakia</i> <i>3PRALES, Odtrnovie 563, 013 22 Rosina, Slovakia</i>
13.15-13.30	Particularities in beech and oak responses to climate at the easternmost sites of their distribution in Europe.	Catalin-Constantin Roibu ¹ , Andrei Mursa ¹ , Ciprian Palaghianu ¹ , Marian-Ionut Stirbu ¹ , Mihai Gabriel Cotos ¹ , Cosmin Andriescu ¹ , Ana-Maria Cretan ² , Victor Sfecla ^{1,3} <i>(1) Forest Biometrics Laboratory- Faculty of Forestry, "Stefan cel Mare" University of Suceava, Romania (2) Transilvania University of Brasov, Romania (3) Technical University of Moldova, Republic of Moldova</i>
13.30-13.45	Outstanding structural attributes of primary spruce forests shape regional species distribution of various taxa	Matej Ferenčík <i>Czech University of Life Sciences Prague, Faculty of Forestry and Wood Sciences, Department of Forest Ecology, Czech Republic</i>
13.45-14.00	Optimal distribution of sample trees in developing allometric biomass models	Ioan Dutca <i>1.Transilvania University of Brasov, Romania;</i> <i>2.Buckinghamshire New University</i>
14.00-14.15	The vulnerability of some juvenile fir provenances (<i>Abies alba</i> Mill.) to damage caused by late frosts, evidenced by frost rings	Anca Botezatu, Anca-Ionela Semeniuc Fecioru, Maria Teodosiu <i>National Institute for Research and Development in Forestry "Marin Drăcea" Câmpulung Moldovenesc, Romania</i>
14.15-14.30	Maple resonance wood: structural and acoustic requirements	Florin Dinulică ¹ , Mariana Domnica Stanciu ¹ , Cătălin Constantin Roibu ² , Cristian Hiciu ¹ , Daniel Constantin Șandor ¹ , Marian Știrbu ² , Andrei Mursa ² <i>1Transilvania University of Brasov, Romania,</i> <i>2"Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania</i>

14.30-14.45	Deadwood and saproxylic beetles in the Sinca Old-Growth Forest	Gabriela Isaia ¹ , Mihai-Leonard Duduman ² , Ionuț-Marian Dragomir ¹ , Ion Cătălin Petrișan ¹ <i>1Transilvania University of Brasov, Faculty of Silviculture and Forest Engineering, Romania</i> <i>2"Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania</i>
14.45-15.00	Bark and wood boring beetles in relation with the new episodes of oak decline in North-East of Romania	Daniela Lupaștean ¹ , Constantin Ciornei ² , Florin Botezatu ³ , Mihai-Leonard Duduman ¹ <i>1"Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania, 2independent researcher, 3Ingka Investments Forest District, Romania</i>
15.00-15.30	Coffee break	
15.30-15.45	Leaf morphological traits distinguish between Cuban native species of mahagoni and the Hondurian mahagony.	Liuder Isidoro Rodríguez Coca, Elena Ciocirlan, Alexandru Lucian Curtu <i>Faculty of Silviculture and Forest Engineering, Transilvania University of Brasov, Romania</i>
15.45-16.00	Comparison between atmospheric depositions recorded at the Rarau experimental plot at different altitudes	Amelia Buculei ¹ , Carmen Iacoban ¹ , Ștefan Leca ² <i>1. National Institute for Research and Development in Forestry "Marin Drăcea", Câmpulung Moldovenesc, 2. National Institute for Research and Development in Forestry "Marin Drăcea", Voluntari, România</i>
16.00-16.15	Effects of industrial activity and air pollution on European beech trees in Transylvania, Romania	Cosmin Ilie Cuciurean ^{1,2} , Cristian Gheorghe Sidor ¹ , Ionel Popa ^{1,3} <i>(1) National Research and Development Institute in Forestry "Marin Drăcea", Romania, (2) Doctoral School of Engineering Sciences, "Ștefan cel Mare" University from Suceava, Romania, (3) Center of Mountain Economy -INCE - CE-MONT Vatra Dornei, Romania</i>
16.15-16.30	Co-exposure effects of polypropilene and ketoprofen treatments on zebrafish behavior	Ionuț-Alexandru Chelaru ^{1,2} , Alexandra Savucă ^{1,2} , Alin Stelian Ciobîcă ^{3,4,5} , Dorel Ureche ⁶ , Mircea Nicușor Nicoară ^{1,3} <i>1 Doctoral School of Geosciences, Faculty of Geography and Geology, "Alexandru Ioan Cuza" University of Iași,</i>

		<p>2 Doctoral School of Biology, Faculty of Biology, "Alexandru Ioan Cuza" University of Iași,</p> <p>3 Department of Biology, Faculty of Biology, "Alexandru Ioan Cuza" University of Iași,</p> <p>4 Academy of Romanian Scientists</p> <p>5 Center of Biomedical Research, Romanian Academy, Iași,</p> <p>6 Faculty of Sciences, Department of Biology, Ecology and Environmental Protection, University "Vasile Alecsandri", Bacau, Romania</p>
16.30-16.45	The study of the evolution of natural regeneration in the territories located outside the Adancata forest area	<p>Savin Alexei, Voloșciuc Florentin-Nicolae, Cucu Cornel-Constantin</p> <p>"Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania</p>
16.45-17.00	The structure of the forest fund of the Strășeni Silviculture Enterprise depending on the natural conditions	<p>Grati Vladislav^{1,2}, Bunduc Tatiana³, Bejan Iurie³</p> <p>1. Moldova State University, 2. Faculty of Forestry, "Ștefan cel Mare" University of Suceava, 3. Moldova State University, Institute of Ecology and Geography</p>
17.00-17.15	Comparative analysis of altitude accuracy for forest roads, using methods based on total stations and lidar	<p>Bogdan Popovici</p> <p>"Ștefan cel Mare" University of Suceava, Forestry Faculty, Suceava, Romania</p>

Poster Session 17.00-18.30 Lobby E – Building

Moderator: Mihai-Leonard Duduman

5 min	Freshwater Fish Communities As An Indicator Of Pesticide Pollution	Corneliu Mihaita Pohontu <i>Ștefan cel Mare University of Suceava, Romania</i>
5 min	Results-based payments in the agricultural sector, with the possibility of application in the forestry sector	Teodorescu Cerasela <i>Ștefan cel Mare University of Suceava, Romania</i>
5 min	Ichthyofauna from the Casin river basin in 2023	Teodora-Ramona Popa, Camelia Ureche, Dorel Ureche <i>Universitatea "Vasile Alecsandri" din Bacău, Romania</i>
5 min	The study of the interaction between environmental policy and forestry policy with applicability to protected natural areas	Mariana Croitor <i>Ștefan cel Mare University of Suceava, Romania</i>
5 min	Forestry 4.0: How is the fourth technological advancement affecting the forestry sector?	Iulian Dănilă, Ciprian Palaghianu <i>Ștefan cel Mare University of Suceava, Romania</i>
5 min	The response of larch seedlings from different Romanian provenances to low temperatures	Alina M. Truța ¹ , Iulia Arion ¹ , Irina M. Morar ^{1*} , Steluta M. Sîngeorzan ¹ , Catalina Dan ² , Roxana D. Stoian-Dod ² , Liviu Holonec ¹ <i>1 University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Faculty of Forestry and Cadastre, Romania; 2 University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Faculty of Horticulture and Business in Rural Development, Romania;</i>
5 min	Analysis of the main characteristics and germination capacity of fir seeds under various abiotic stress conditions	Irina M. Morar ¹ , Alina M. Truta ^{1*} , Roxana D. Stoian-Dod ² , Catalina Dan ² <i>1 University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Faculty of Forestry and Cadastre, Romania; 2 University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Faculty of Horticulture and Business in Rural Development, Romania</i>

5 min	The effect of rewilding of beech-dominated temperate forest ecosystems on carbon stocks and biodiversity indicators	Markuljaková K., Kozák D., Mikoláš M., Ferencík M., Frankovič M., Dúhová D., Svoboda M. <i>Faculty of Forestry and Wood Sciences, Czech University of Life Sciences Prague, Kamýcká 129, 165 21 Praha 6 – Suchbát, Czech Republic</i>
5 min	Evaluation and monitoring of comparative trials of half-sib provenances of beech (<i>Fagus sylvatica</i> L.) installed in two forest districts Demacusa and Vidra	Alina Todirică, Maria Teodosiu, Cristiana Ciuvăţ, Ecaterina Apostol <i>National Institute for Research and Development in Forestry "Marin Drăcea", Romania</i>
5 min	Survey's and questionnaires for forestry research. Tools for the present.	Andrei Apăfăian ¹ , Cristian Mihai Enescu ² , Vlad Crişan ¹ <i>1"Marin Drăcea" National Institute for Research and Development in Forestry, Braşov, Romania, 2 Department of Soil Sciences, University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania</i>
5 min	Phytosanitary status of pedunculate oak crops in Voivodeni forest nursery, Reghin Forestry District, Mureş County Forest Administration, in the period 2021-2023	Mircea Ioan Varga ¹ , Ioan Tău ^{1,2*} , Florin Alexandru Rebrean ¹ , Mircea Moldovan ² , <i>1University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca Faculty of Forestry and Land Surveying, 2"Marin Drăcea" National Institute for Research and Development in Forestry Cluj, Romania</i>
5 min	Empirical Procedure For Estimating The Effect On The Peak Discharge Of Torrent Control Works	Ioan Ciornei <i>Ştefan cel Mare University of Suceava, Romania</i>
5 min	Floristic notes of the "Dobruşa" landscape reserve of the Republic of Moldova	Victor Sfecă ¹ , Pavel Pînzaru ² <i>1 State University of Moldova, Chişinău, Republic of Moldova, 2 "Alexandru Ciubotaru" National Botanical Garden (Institute), SUM, Chişinău, Republic of Moldova</i>
5 min	Aspects regarding the identification of forest genetic resources of cvercines in the North area of the Republic of Moldova	Gheorghe Florenţă ^{2,1} , Valeriu Caisin ^{3,1} , Aliona Miron ¹ , Veronica Florenţă ^{2,1} <i>1 National Botanical Garden (Institute) "Alexandru Ciubotaru" of the State University of Moldova 2 Forest Research and Management Institute, Chisinau, Republic of Moldova 3 Agency "Moldsilva"</i>

5 min	Issues of assessing carbon stocks in the biomass and soil of grasslands in Orhei National Park	<p><i>Ion Talmaci^{1,2}, Aliona Miron¹, Alexandru Galupa^{1,2}, Erii Prosi^{1,2}, Ghenadie Cojocaru^{1,2}, Ala Mardari^{1,2}, Ludmila Talmaci¹</i></p> <p><i>1Grădina Botanică Națională (Institut)</i> <i>„Alexandru Ciubotaru” a Universității de Stat din Moldova</i></p> <p><i>2Institutul de Cercetări și Amenajări Silvice</i></p>
5 min	Aspects regarding the estimation of carbon from the biomass of forest trees in the Southern Area of the Republic of Moldova	<p><i>Ion Talmaci^{1,2}, Erii Prosi^{1,2}, Alexandru Galupa^{1,2}, Ghenadie Cojocaru^{1,2}, Ala Mardari^{1,2}, Aliona Miron¹, Ludmila Talmaci¹, Alexandru Varzari^{1,2}</i></p> <p><i>1Grădina Botanică Națională (Institut)</i> <i>„Alexandru Ciubotaru” a Universității de Stat din Moldova</i></p> <p><i>2Institutul de Cercetări și Amenajări Silvice</i></p>
5 min	Species <i>Orchis Purpurea</i> HUDS. in the grasslands of the Orhei National Park	<p><i>Aliona Miron¹, Alexandru Galupa^{1,2}, Ghenadie Cojocaru^{1,2}</i></p> <p><i>1“Alexandru Ciubotaru” National Botanical Garden (Institute) of the State University of Moldova,</i> <i>Chisinau, Republic of Moldova</i></p> <p><i>2Forest Research and Management Institute,</i> <i>Chisinau, Republic of Moldova</i></p>