



Book of Abstracts



FORESTRY
Bridge to the Future



International Conference, 5–8 May, 2021, Sofia, Bulgaria

The International Scientific Conference
"Forestry: Bridge to the Future"
is financially supported by:



Ministry of
Agriculture, Food and Forestry
of Bulgaria;

Mondi LTD 



Northwestern State Forestry
Enterprise, Vraca

Andreas Stihl, Bulgaria 



North Central State Forestry
Enterprise, Gabrovo

National Association of Owners of
Non-State Forests "Gorovladeletz"



Northeastern State Forestry
Enterprise, Shumen



Southwestern State Forestry
Enterprise, Blagoevgrad



South Central State Forestry
Enterprise, Smolyan



Southeastern State Forestry
Enterprise, Sliven

The International Scientific Conference
"Forestry: Bridge to the Future"
is organizing supported by:



Editors: Marius Dimitrov, Svetoslav Anev, Stanimir Stoilov

Pre-pres: Svetoslav Anev

Cover design: Svetoslav Anev

University of Forestry, Sofia, Bulgaria

<https://ltu.bg/>

 Ysabeau Infant; Vollkorn

ISBN: 978-954-332-183-4

Book of Abstracts



FORESTRY
Bridge to the Future



International Conference, 5–8 May, 2021, Sofia, Bulgaria

Organizing Committee

Honorable Chairman: Prof. DSc. Ivan ILIEV
– Rector of the University of Forestry, Sofia,
Bulgaria

Chairman: Assoc. prof. Dr. Marius DIMITROV
– Dean of the Faculty of Forestry, University
of Forestry, Sofia, Bulgaria

Vice Chairman: Assoc. prof. Dr. Nasko ILIEV
– University of Forestry, Sofia, Bulgaria

Members from University of Forestry,
Sofia, Bulgaria:

Prof. Dr. Boyanka ZHELYAZOVA
Prof. DSc Ludmila MALINOVA
Prof. Dr. Milko MILEV
Prof. Dr. Stefan YURUKOV
Dr. Neno TRICHKOV
Dr. Krasimira PETKOVA
Dr. Georgi KOSTOV
Dr. Konstantin MARINOV
Dr. Hristo MIHAILOV
Dr. Zivko GOCHEV
Dr. Stanimir STOILOV
Dr. Svetoslav ANEV
Dr. Yavor PORYAZOV
Dr. Momchil PANAYOTOV
Dr. Toma TONCHEV
Dr. Evgeni TSAVKOV
Dr. Radka KOLEVA
Dr. Stoyan STOYANOV
Dr. Georgi ANGELOV
Dr. Nickolay TSVETANOV
Eng. Magdelina BOZHANKOVA
Eng. Petya TSAKOVA
Eng. Pavel PAVLOV

International Scientific Committee

Chair: Marius DIMITROV – University of Forestry, Sofia, Bulgaria
Vice-chair: Nasko ILIEV – University of Forestry, Sofia, Bulgaria
Secretary: Momchil PANAYOTOV – University of Forestry, Sofia, Bulgaria
Members:

Alexandar TASHEV – University of Forestry, Sofia, Bulgaria
Alexander DELKOV – Forest Research Institute – BAS, Sofia, Bulgaria
Dilyanka BEZLOVA – University of Forestry, Sofia, Bulgaria
Dmitry SCHEPASCHENKO – Mytischki Branch of Bauman Moscow State
Technical University, Russia
Elena RAFAILOVA – Executive Forest Agency, Sofia, Bulgaria
Elsa PASTOR – Polytechnic University of Catalonia, Barcelona, Spain
Georgi KOSTOV* – University of Forestry, Sofia, Bulgaria
Heinrich SPIECKER – University of Freiburg, Germany
Hristo MIHAILOV – University of Forestry, Sofia, Bulgaria
Ignacio J. DÍAZ-MAROTO – University of Santiago de Compostela, Spain
Igor DROBYSHEV – Swedish Agricultural University (SLU), Alnarp, Sweden
and University of Quebec at Abitibi-Temiscamingue (UQAT), Canada
Ioan Vasile ABRUDAN – Transilvania University of Brasov, Romania
Ivajlo VELICHKOV – Forest Research Institute, BAS, Sofia, Bulgaria
Ivan PALIGOROV – University of Forestry, Sofia, Bulgaria
Jozef VIGLASKY – Technical University in Zvolen, Slovakia
Kiril SOTIROVSKI – Faculty of Forestry, University of Skopje, Macedonia
Krešimir KRAPINEC – University in Zagreb, Croatia
Marcus LINDNER – European Forest Institute (EFI), Joensuu, Finland
Mariana DONCHEVA-BONEVA – University of Forestry, Sofia, Bulgaria
Mart-Jan SCHELHAAS* – Wageningen University and Research, Nether-
lands
Miglena ZHIYANSKI – Forest Research Institute, BAS, Sofia, Bulgaria
Milan MATARUGA – University of Banja Luka, Bosnia and Herzegovina
Milko MILEV – University of Forestry, Sofia, Bulgaria
Neno TRICHKOV – University of Forestry, Sofia, Bulgaria
Nikolai ZAFIROV – University of Forestry, Sofia, Bulgaria
Nikolina TZVETKOVA – University of Forestry, Sofia, Bulgaria
Peter BEBI – WSL, Institut für Schnee und Lawinenforschung, Switzerland
Peter KITIN – Dept. of Civil & Environmental Engineering, University of
Wisconsin-Madison/Forestry and Forest Products Research Institute, Tsu-
kuba, Japan
Peter ZHELEV – University of Forestry, Sofia, Bulgaria
Piotr PIETRZYKOWSKI – University of Agriculture, Krakow, Poland
Plamen ALEXANDROV – University of Forestry, Sofia, Bulgaria
Raffaele SPINELLI* – CNR IVALSIA, Italy
Rossitsa PETROVA – University of Forestry, Sofia, Bulgaria
Rumen TOMOV – University of Forestry, Sofia, Bulgaria
Sezgin AYAN – Faculty of Forestry, Kastamonu Universitesi, Turkey
Svetoslav ANEV – University of Forestry, Sofia, Bulgaria
Tamara SEDELNIKOVA – Sukachev Institute of Forest of the Siberian Divi-
sion of the RAS, Russia
Tsenko TSENOV – Executive Forest Agency, Ministry of Agriculture and
Food, Sofia, Bulgaria
Valentin SHALAEV – Moscow State Forest University, Russia
Valeriu-Norocel NICOLESCU* – Transilvania University of Brasov, Romania
Velibor SPALEVIC – Institute of Forestry, Montenegro
Victor BUSOV – School of Forest Resources and Environmental Science,
Michigan Technological University, USA
Viliam PICHLER – Technical University, Zvolen, Slovakia
Yaoqi ZHANG – Auburn University, Alabama, USA
Yulin TEPELIEV – University of Forestry, Sofia, Bulgaria
Note: * – key speakers



Bobinac, M.¹
Andrašev, S.²
Šušić, N.³
Bauer-Živković, A.⁴
Kabiljo, M.⁵

SOME ELEMENTS OF ECOLOGICAL ADAPTABILITY OF TREE-OF-HEAVEN (*AILANTHUS ALTISSIMA* /MILL./SWINGLE) TO A HABITAT OF TURKEY OAK AND OAK OF VIRGIL (*QUERCETUM CERRIDIS-VIRGILIANAE* B. JOVANOVIĆ & VUKIĆEVIĆ 1977)

*corresponding author: martin.bobinac@sfb.bg.ac.rs

¹ University of Belgrade, Faculty of Forestry, Kneza Višeslava 1, 11030 Belgrade

² University of Novi Sad, Institute of Lowland Forestry and Environment, Antona Čehova 13d, 21000, Novi Sad

³ University of Belgrade, Institute for Multidisciplinary Research, Kneza Višeslava 1, 11030 Belgrade, P.O. Box 33

⁴ Public Enterprise „Vojvodinašume“, Preradovićevo 2, 21131 Petrovaradin

⁵ Milan Kabiljo, Institute of Forestry, Kneza Višeslava 3, 11030, Belgrade

Tree-of-Heaven (*Ailanthus altissima* /Mill./Swingle) is exotic, rapid-growing tree species that intensively colonises stands of other tree species and urban areas in its surrounding due to its high adaptability, early maturation and ability to produce large amounts of seed every year. Presence of *A. altissima* in the stand structure is an important factor of stand degradation and is related to rapid growth of the species, and consequently dominant position in the structure of native tree species stands. Today, *A. altissima* is one of the most invasive exotic tree species in Serbia.

The invasion of *A. altissima* calls for new silvicultural approaches that should not only stop the invasion in the area, but also to reduce the presence of *A. altissima* in the stand structure to a more sustainable, non-invasive silvicultural system in the transitional period. In this respect, the knowledge about the elements of ecological adaptability of *A. altissima* to different habitats is important.

Some elements of ecological adaptability of *A. altissima* were analyzed on a habitat of Turkey oak and Oak of Virgil (*Quercetum cerridis-virgilianae* B. Jovanović & Vukićević, 1977.) on loess and marl bedrock in the lower hills of Fruška Gora mountain (Serbia) where *A. altissima* colonized young stands. The research was conducted in a stand 17 years old on two permanent sample plots on eastern aspect and slope of 15° that are located on different landforms — the first plot was on a foothill (130 m a.s.l.) that is on the border with pedunculate oak and European hornbeam forest (*Ass. Carpinio betuli-Quercetum roboris* (Anić 59) Rauš 1971) and the second plot in the shoulder close to the summit (170 m a.s.l.) that is a typical habitat of Turkey oak and Oak of Virgil.

The mean and dominant heights and diameters of *A. altissima* differ between the plots in the foothill and the shoulder of the hillslope. This indicates to different ecological adaptability of *A. altissima* to this habitat.

Keywords: colonized stands; ecological adaptability; non-invasive silvicultural system; Tree-of-Heaven