International Scientific Conference

„95 Years Forest Research Institute – Forests Without Borders“

19-21 October 2023

BOOK OF ABSTRACTS

Co – organizers:

Union of Scientists in Bulgaria

Financial support:

Northwest State Enterprise, Southwest State Enterprise, South-Central State Enterprise, North-Central State Enterprise, Southeast State Enterprise, Northeast State Enterprise, Bulgarian Academy of Sciences, Bulgarian National Science Fund

Sofia • 2023

International Scientific Conference
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19-21 October 2023, Sofia, Bulgaria

Editors: Prof. Dr. Margarita Georgieva,
Corr. Memb. DSc. Georgi Georgiev

ISBN 978-619-7228-08-3 (PRINT)
ISBN 978-619-7228-09-0 (pdf)

DEDRAX Printing House
1463 Sofia, 1 Bulgaria Sq.

Acknowledgements: *This work has been carried out in the framework of the National Science Program 'Environmental Protection and Reduction of Risks of Adverse Events and Natural Disasters', approved by the Resolution of the Council of Ministers № 577/17.08.2018 and supported by the Ministry of Education and Science (MES) of Bulgaria (Agreement № D01-271/09.12.2022).*

ASSESSING THE HEALTH STATUS OF WOODY PLANTS OF THE URBAN FOREST IN ORDER TO APPRAISE THE RISK TO THE USE OF SPACE

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A visual identification of tree species and an assessment of health status were carried out over the entire area of the urban forest. The presence of entomological and phytopathological diseases was determined through a detailed assessment. Carpophores of decay fungi belonging to the genera *Ganoderma*, *Pleurotus* and *Phellinus* and *Schizophyllum commune* Fr. (1815), were detected. These fungi cause the destruction of trees, which can lead to boot breakage. These fungi cause stem rot and severe damage in forests. On maple trees, the fungus *Rhytisma acerinum* (Pers.) Fr. 1818, causes chlorotic spots on the leaves in spring, which turn black in summer (tar spots on the leaves) and lead to premature leaf fall and continuously weaken the tree's vitality. This paves the way for other pests and diseases. All deciduous tree species have been found to be heavily infested by the widespread polyphagous species *Metcalfa pruinosa* (Say, 1830), which is often found in urban areas and causes a heavy secretion of honeydew. Sooty dew fungus is a fungal disease that grows on plants and other surfaces covered with honeydew, a sticky substance produced by this insect. After successive attacks, the assimilation functions decrease and the plants be-

come physiologically weakened. There are also a large number of leaf miners: *Tischeria ekebladella* (Bjerkander, 1795) and *Phyllonorycter robiniella* (Clemens, 1859), as well as galls of the family Cynipidae and Cecidomydae. Numerous exit holes of bark beetles (Coleoptera:Scolytinae) were observed on the felled pines. Tumours and, less frequently, bacterial tumours were found on various species. Of the abiotic factors causing damage to the trees, ice fractures, frost cracks and bark cracks due to drought were observed. Numerous mechanical injuries were recorded as a result of human activity. The assessment of the current situation leads to the conclusion that the entire area is in a very poor state of health. Due to lack of maintenance and a number of abiotic and biotic factors, the overall health of the entire complex has been compromised. In the interest of the safety of all users, it is necessary to rehabilitate the area and reforest it in accordance with the biology of the species.

Keywords: rot fungi, urban forests, forest health, tree vitality, insect pests

Acknowledgements: *This study was carried out within the framework of the Agreement on the implementation and financing of scientific research NIO in 2022, financed by the Ministry of Science, Technological Development and Innovation of the Republic of Serbia, no. 451-03-47/2023-01/ 200027*

CHANGES IN THE AMOUNT OF PHENOLS, FLAVONOIDS AND PH OF THE LEAVES OF *QUERCUS* SPP. ATTACKED BY *CORYTHUCHA ARCUATA*

Boryana Katinova

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Plants can produce a variety of secondary metabolites (phenols and flavonoids) that help the regulation of various physiological functions during growth and development. They are also involved in plant defence mechanisms against abiotic and biotic stress factors. The amount of phe-