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„95 Years Forest Research Institute – Forests Without Borders“

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sustainability, and biodiversity of roundabouts while maintaining aesthetic appeal. By adopting a strategic and holistic approach, urban planners can enhance the environmental impact of roundabouts, ensuring their integration into a cohesive and resilient urban green infrastructure network.

Keywords: roundabouts, urban green infrastructure, environmental impact, Skopje, North Macedonia

RESTORATION AND CONSERVATION OF THE TREE *QUERCUS ROBUR* L., SYN: *QUERCUS PEDUNCULATA* ERH. IN THE JOZIĆA KOLIBA SITE, SERBIA

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Within the forest complex 'Obrenovacki Zabran' there is a nature reserve of the protection level III „Jozić koliba group of pedunculate oaks". This area contains an oak tree that is over 200 years old and urgently needs measures to slow down its ageing and decay, and to preserve the attractiveness of this area. The aim of the tree's condition assessment is to analyse the state of health and the degree of damage, in order to define, on the basis of the results obtained, measures to rehabilitate the damage observed, caused by biotic and abiotic factors. The investigation included the recording of habitat-ecological conditions, dendrological parameters and the tree's state of health. Boot damage was determined on the basis of visual identification, taking samples from the boot surface and using a Presler drill inside the boot. The condition of the tree in the full cross-section area was analysed using sonic tomography. The vitality and ornamental value of the tree were determined using a modified visual tree assessment method. The examinations revealed that the tree is dying due to its age and that this process is accelerated by ecological and especially anthropogenic factors. All examinations of the tree revealed significant damage and voids spreading towards the centre of the tree. Examination of the tree by scanning using the prin-

ciple of sonic tomography shows that the rotting of the tree also extends to parts of the tree that have no visible manifestations on the bark of the tree. Based on the measurements, a tree pruning model was created at different heights, where the proportion of the healthy part of the tree is 37-67% of the total tree pruning. The proposed measures to remediate the rot in the boot, clean the cavities and fill them, and reduce the size of the crown will extend the life of this tree and allow safe use of the area near the tree. Support pillars have been designed to improve and ensure the stability of this tree.

Keywords: pedunculate oak, arboriculture, Arbotom, VTA method, Obrenovački zabran

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DENDROFLORA OF THE MONASTERIES IN SOFIYSKA MALA SVETA GORA

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The total number of the monasteries included in the Sofiyska Mala Sveta Gora is more than 70. Objects of investigation were a dozen of the most famous and visited monasteries around Sofia, with the aim to determine the indigenous and introduced tree species used for landscape purposes. Due to various reasons, the dendroflora in the predominant part of the monasteries is not preserved. No relationship between religious beliefs to forests and old trees and tree vegetation used in precincts was established. Indigenous tree species predominate. Among the introduced ones mostly used are *Pseudotsuga menziesii*, *Wellingtonia gigantea*, *Thuja* sp., *Picea pungens*.

Keywords: dendroflora, indigenous and introduced tree species, monasterie