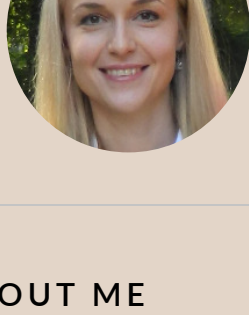


Zorica Mitić (Née Šarac)

ASSOCIATE PROFESSOR

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Višegradska 33, Niš, 18000, Serbia



ABOUT ME

Zorica Mitić (née Šarac) graduated from the Faculty of Sciences and Mathematics, University of Niš in 2007, and earned her PhD from the Faculty of Biology, University of Belgrade in 2014. She is currently employed as an Associate Professor at the Department of Biology and Ecology, Faculty of Sciences and Mathematics, University of Niš. Zorica's research interests include plant chemotaxonomy / chemophenetics, chemoeology, phytochemistry, plant morphology, systematics and applied botany, with a focus on biological activity of specialized plant metabolites. She has also acted as a Guest Editor for several Special Issues of *Forests*, an open-access, peer-reviewed scientific journal, including "Tree Traits and Chemistry," "Specialized Metabolites and Structure of Woody Plants," and "Essential Oil Composition of Forest Trees." Additionally, she has successfully participated in 11 national and one international scientific research projects.

EDUCATION

Ph.D.
Faculty of Biology,
University of
Belgrade / Belgrade,
Serbia / 2014

Doctor of Science –
Biological Sciences

SKILLS

Academic Publishing

Course Design

Research Methodology

Thesis Supervision

Literature Review

Academic Research

Grant Writing

LINKS

ORCID:
<https://orcid.org/0000-0001-9628-3882>

SCOPUS:
Scopus Author ID: 57190220784

SCOPUS:
Scopus Author ID: 55570649400

SciProfiles:
SciProfiles: 3051426

LANGUAGE

English

HOBBIES

Swimming

INTERNSHIPS

Academic visit
Hunan Agricultural
University
(HUNAU) / Hunan,
China / Nov 2023 - Dec
2023

Implementation of a
Professional Visit and
Academic Residency at the
College of Environment and
Ecology, Hunan Agricultural
University, Hunan, China

Acadademic visit
Hunan Agricultural
University
(HUNAU) / Hunan,
China / Nov 2024 - Nov
2024

Implementation of a
Professional Visit and
Academic Residency at the
College of Environment and
Ecology, Hunan Agricultural
University, Hunan, China

COURSES

Instrumental Methods in
Biology
Department of Biology
and Ecology, Faculty of
Sciences and
Mathematics, University
of Niš, Serbia / Present

Field Research in Biology
1
Department of Biology
and Ecology, Faculty of
Sciences and
Mathematics, University
of Niš, Serbia / Present

Medicinal Plants
Department of Biology
and Ecology, Faculty of
Sciences and
Mathematics, University
of Niš, Serbia / Present

Biochemical Systematics
of Plants
Department of Biology
and Ecology, Faculty of
Sciences and
Mathematics, University
of Niš, Serbia / Present

Secondary Metabolites of
a Selected Plant Taxon
Department of Biology
and Ecology, Faculty of
Sciences and
Mathematics, University
of Niš, Serbia / Present

Molecular Systematics of
Plants
Department of Biology
and Ecology, Faculty of
Sciences and
Mathematics, University
of Niš, Serbia / Present

Ethnobotany
Department of Biology
and Ecology, Faculty of
Sciences and
Mathematics, University
of Niš, Serbia / Present

Botany
Department of
Chemistry, Faculty of
Sciences and
Mathematics, University
of Niš, Serbia / Present

PERSONAL DETAILS

Date of birth
03 Oct 1982

Nationality
Serbian

DRIVING LICENSE

Driving license category
Full

WORK EXPERIENCE

Associate Professor
Department of Biology and Ecology, Faculty of Sciences and
Mathematics, University of Niš / Niš, Serbia / Dec 2020 - Present

Assistant Professor
Department of Biology and Ecology, Faculty of Sciences and
Mathematics, University of Niš / Niš, Serbia / Mar 2015

Teaching Assistant
Department of Biology and Ecology, Faculty of Sciences and
Mathematics, University of Niš / Niš, Serbia / Feb 2011

Junior Teaching Assistant
Department of Biology and Ecology, Faculty of Sciences and
Mathematics, University of Niš / Niš, Serbia / Feb 2009

PUBLICATIONS

Biological activity of essential oils of *Calocedrus decurrens* and
Cupressus arizonica on *Lymantria dispar* larvae and *Phytophthora*
root pathogens

Industrial Crops & Products

Bioactivity of *Chamaecyparis lawsoniana* (A. Murray) Parl. and
Thuja plicata Donn ex D. Don essential oils on *Lymantria dispar*
(Linnaeus, 1758) (Lepidoptera: Erebidae) larvae and *Phytophthora*
de Bary 1876 root pathogens

Industrial Crops & Products

Essential oils of *Pinus halepensis* and *P. heldreichii*: Chemical
composition, antimicrobial and insect larvicidal activity

Industrial Crops & Products

Terpene composition and morpho-anatomical properties of *Picea*
omorika needles from Bosnia and Herzegovina

Forests

Diversity of needle terpenes among *Pinus* taxa

Forests

Morpho-anatomical characteristics and volatile profiles of *Pinus*
nigra J.F.Arnold from the Balkan Peninsula and Southern
Carpathians

Forests

Autochthonous conifers of family Pinaceae in Europe: broad review
of morpho-anatomical and phytochemical properties of needles and
genetic investigations

Forests

Biological activities of *Chamaecyparis lawsoniana* (A.Murray bis)
Parl. and *Thuja plicata* Donn ex D.Don essential oils: toxicity,
genotoxicity, antigenotoxicity, and antimicrobial activity

Forests

Geographic differentiation of *Abies alba*, *A. x borisii-regis*, and *A.*
cephalonica populations at the Balkan Peninsula based on needle
morpho-anatomy

Trees - Structure and Function

Needle volatiles as chemophenetic markers in differentiation of
natural populations of *Abies alba*, *A. x borisii-regis*, and *A.*
cephalonica

Phytochemistry

Essential oil variability in the genetically depauperate
Mediterranean pine *Pinus pinea* L.

Chemistry & Biodiversity

Variability of qualitative morpho-anatomical characteristics of
needles in *Abies alba* Mill., *A. cephalonica* Loud., and *A. borisii-*
regis Mattf.

Botany Letters

Jevtović S., Tošić S.B., Mrmošanin J.M., Mitić Z.S., Đukić M.G.,
Stojanović G.S. (2025) Headspace volatiles, macro- and
microelements of the root and leaf of the *Hylotelephium* H. Ohba
species, hybrids and cultivars as variables for their differentiation

Chemistry & Biodiversity

Cuticular wax variability of *Abies alba*, *A. x borisii-regis* and *A.*
cephalonica from the Balkans: chemophenetic and ecological
aspects

Chemistry & Biodiversity

Essential oils of three Balkan *Abies* species: chemical profiles,
antimicrobial activity and toxicity toward *Artemia salina* and
Drosophila melanogaster.

Chemistry & Biodiversity

Chemical composition, antimicrobial and toxicological evaluation of
the essential oils of five *Achillea* species

Journal of Essential Oil-Bearing Plants

Diversity of nonacosan-10-ol and n-alkanes among 12 *Pinus* taxa

Plant Biosystems

Essential oils of six *Achillea* species: chemical profiles,
antimicrobial potential and toxicity toward crustaceans

Chemistry & Biodiversity

Pseudotsuga menziesii (Pinaceae): volatile profiles, antimicrobial
activity and toxicological evaluation of its essential oil

Chemistry & Biodiversity

Variation of needle volatiles in native populations of *Pinus mugo* –
evidence from multivariate statistical analysis

Plant Biosystems

Epicuticular waxes provide insights into phytochemical
differentiation of natural populations of *Pinus mugo* Turra sensu
stricto.

Chemistry & Biodiversity

Chemotaxonomic considerations of the n-alkane composition in
Pinus heldreichii, *P. nigra* and *P. peuce*

Chemistry & Biodiversity

Morphological variability of *Tragopogon pterodes* Pančić ex
Petrović achenes: taxonomic evaluation of heterocarpy

Plant Biosystems

Terpenes are useful markers in differentiation of natural
populations of relict pines *Pinus heldreichii*, *P. nigra* and *P. peuce*

Chemistry & Biodiversity

Needle terpenes as chemotaxonomic markers in *Pinus*: subsections
Pinus and *Pinaster*

Chemistry & Biodiversity

Volatile profiles of the orpines roots: *Hylotelephium telephium* (L.)
H. Ohba, *H. maximum* (L.) Holub and *H. spectabile* (Boreau) H.
Ohba x *telephium* (L.) H. Ohba

Flavour and Fragrance Journal

Epidermal structures and composition of epicuticular waxes of
Sedum album sensu lato (Crassulaceae) in Balkan Peninsula

Plant Biosystems

Geographically related variation in epicuticular wax traits of *Pinus*
nigra populations from Southern Carpathians and Central Balkans –
taxonomic considerations

Chemistry & Biodiversity

Genetic patterns in *Pinus nigra* from the central Balkans inferred
from plastid and mitochondrial data

Silva Fennica

Biological activity of *Pinus nigra* terpenes – evaluation of FtsZ
inhibition by selected compounds as contribution to their
antimicrobial activity

Computers in Biology and Medicine

Chemotaxonomic significance of the terpene composition in
natural populations of *Pinus nigra* J.F. Arnold from Serbia

Chemistry & Biodiversity

Composition of n-alkanes in natural populations of *Pinus nigra*
from Serbia – chemotaxonomic implications

Chemistry & Biodiversity

Microelements variability in needles of natural populations of *Picea*
omorika

Šumarski list

Dietary exposure to essential oils of selected *Pinus* and *Abies*
species leads to morphological changes in *Drosophila melanogaster*
wings

Archives of Biological Sciences

The chemical composition of essential oil and headspace volatiles
of Balkan endemic taxon *Achillea x vandasii* Velen

Natural Product Communications

Structural changes in needle epicuticular waxes of Balkan *Abies*
species in relation to natural weathering

Iheringia, Série Botânica, Porto Alegre

Evaluation of an inductively coupled plasma–atomic emission
spectrometry (ICP-AES) method for the determination of macro and
microelements in *Trifolium* L. species

Analytical Letters

n-Alkanes variability in natural populations of *Picea omorika*
(Pančić) Purk. from Bosnia and Herzegovina

Biochemical Systematics and Ecology

Terpene relationships among some soft and hard pine species

Botanica Serbica

Headspace volatiles isolated from twigs of *Picea omorika* from
Serbia

Archives of Biological Sciences

Population diversity of n-alkanes in the needle cuticular wax of
relicts *Pinus heldreichii* and *P. peuce* from the Scardo-Pindic
mountains

Macedonian Journal of Chemistry and Chemical Engineering

Nonacosan-10-ol and n-alkanes in needles of *Pinus halepensis*

Natural Product Communications

Nonacosan-10-ol and n-alkanes in leaves of *Pinus pinaster*

Natural Product Communications

Chemical composition and distribution of the headspace volatiles
in commercial culinary herbs and spices: chemometric approach

Journal of the Serbian Chemical Society

Variability of needle morpho-anatomy of natural *Pinus heldreichii*
populations from Scardo-pindic mountains

Genetika (Beograd)

Diversity of needle n-alkanes, primary alcohols and diterpenes in
Balkan and Carpathian native populations of *Pinus nigra* J.F. Arnold

Biochemical Systematics and Ecology

Relationships among some pines from subgenera *Pinus* and *Strobus*
revealed by nuclear EST-microsatellites

Genetika

First insights into micromorphology of needle epicuticular waxes of
south-eastern european *Pinus nigra* J.F. Arnold populations

Iheringia, Série Botânica, Porto Alegre

Cross-species amplification of nuclear EST-microsatellites
developed for other *Pinus* species in *Pinus nigra*

Genetika

Pharmacological activity of sesquiterpene lactones

Biotechnology & Biotechnological Equipme

Diversity of *Picea omorika* (Pančić) Purk. populations based on
morpho-anatomical needle traits and bioclimatic parameters

South-East European Forestry

Morphological variability and differentiation of selected *Achillea*
species (sections *Achillea* sensu lato and *Anthemoideae*) from
Serbia

Biologica Nyssana

Variability of headspace volatiles in native population of *Abies x*
borisii-regis from the central Rhodopes

Biologica Nyssana

Evaluation of wing morphology changes in *Drosophila melanogaster*
treated with *Pseudotsuga menziesii* (Pinaceae) essential oil

Biologica Nyssana

Application of canonical discriminant analysis in differentiation of
natural populations of *Pinus nigra* in Serbia based on terpene
composition

Biologica Nyssana

In vitro DNA protective potential of *Chamaecyparis lawsoniana*
(A.Murray bis) Parl. and *Thuja plicata* Donn ex D.Don essential oils.

9th International Electronic Conference on Medicinal Chemistry,
Proceedings, Basel, Switzerland

Essential oil composition of one-year-old Bosnian pine needles

International conference Reforestation Challenges, Proceedings,
Belgrade, Serbia