



**UN FOOD  
CONFERENCE**  
University of Belgrade  
**210<sup>th</sup> Anniversary**  
OCTOBER 5-6 2018

**PROGRAM  
I  
ZBORNIK RADOVA**

*Programme  
&  
Book of Abstracts*

Beograd, 5 i 6 oktobar 2018  
Belgrade, Octobre 5-6, 2018

CIP-Kategorizacija u publikaciji  
Narodna biblioteka Srbije, Beograd

Univerzitet u Beogradu  
UNIFOOD CONFERENCE (2018; Beograd)  
Program; i zbornik radova= Programme; & Book of Abstracts/  
Beograd, 5 i 6 oktobar 2018 = Belgrade, Octobre 5-6 2018  
[organizator] Univerzitet u Beogradu; [organized by] University of Belgrade  
[urednici, editors Marina Soković, Živoslav Tešić] Beograd, Univerzitet u Beogradu

Radovi na srp i engl. jeziku – Tekst ćir i lat- Tiraž

ISBN 978-86-7522-060-2

UNIFOOD Konferencija, Beograd, 5-6 oktobar 2018  
PROGRAM I ZBORNIK RADOVA

UNIFOOD Conference, Belgrade Octobre 5-6 2018  
Programme and Book of Abstracts

**Izdaje / Published by**

**Univerzitet u Beogradu / University of Belgrade**

Studentski trg 1, 11000 Beograd

Tel/fax ; [www.bg.ac.rs](http://www.bg.ac.rs), email

**Za izdavača / For Publisher**

**Vladimir Bumbaširević, rektor**

**Urednici / Editors**

**Marina Soković**

**Živoslav Tešić**

**Dizajn korica i kompjuterska obrada teksta / Cover Design Layout**

**Tomislav Tosti**

**Tiraž / Circulation**

ISBN 978-86-7522-060-2



## Ruj – magično drvo

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*Cotinus coggygria* Scop., je biljna vrsta iz familije Anacardiaceae, čije se brojne vrste koriste u ishrani i tradicionalnoj medicini za lečenje raznih bolesti. *C. coggygria* poznata kao “dimno drvo”, a u našim krajevima poznata kao ruj ili rujevina, je ukrasna biljka u obliku žbuna ili drveta i široko je korišćena u narodnoj medicini. Lišće i drvo ruja su korišćeni u XV veku za bojenje tkanina, a u novije vreme za bojenje jakih alkoholnih pića, rakija. Hemijski sastav ove biljne vrste je detaljno proučavan, kako isparljive komponente etarskih ulja lišća, tako i hemijski sastav ekstrakata lišća i drveta. Ekstrakti ruja i čista jedinjenja pokazala su antioksidativnu, antifungalnu, antivirusnu, hepatoprotektivnu i antiinflamatornu aktivnost, a etarska ulja antibakterijsku i antifungalnu. Etarsko ulje lišća ruja uglavnom sadrži monoterpeneske ugljovodonike, a glavne komponente su limonen, (*Z*) i (*E*)- $\beta$ -ocimen,  $\alpha$ -pinen i terpinolen. Ulje je pokazalo značajnu antimikrobnu aktivnost posebno ka gram pozitivnim bakterijama i na mikromicetu *Candida albicans*. U ekstraktima lišća i drveta ruja mogu se naći nekoliko tipova jedinjenja – flavoni, fenolne kiseline, triterpeni i dr. Iz metilen-hloridno/metanolnog ekstrakta drveta ruja izolovano je najviše flavonoidnih (poznatih) jedinjenja sa karakterističnim skeletom, ali i dva nova sekundarna metabolita, jedan auron i jedan auronolignan koji predstavlja novu potklasu flavonolignana.

## Ruj – magic tree

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*Cotinus coggygria* Scop. is a species of the family Anacardiaceae with numerous species used in nutrition and traditional folk medicine for the treatment of several human diseases. *C. coggygria* commonly known as “smoke tree”, is an ornamental plant often used in traditional medicine. Leaves and bark were used in XV century for coloring textile and recently, for coloring strong alcoholic drinks - rakija. Chemical composition of this species was investigated in details, volatiles from the essential oils obtained from leaves as well as extracts of leaves and heartwood of this plant. Extracts and isolated compounds exhibited numerous activities namely antioxidative, antibacterial, antifungal, antiviral, anticancer, hepatoprotective and anti-inflammatory activities, while essential oils exhibited antibacterial and antifungal activities. Essential oil obtained from leaves possess mostly monoterpenes and major constituents are limonene, (*Z*) and (*E*)- $\beta$ -ocimene,  $\alpha$ -pinene and terpinolene. Essential oil exhibited significant antimicrobial activity against Gram positive bacteria and towards *Candida albicans* from fungi. In the extracts of leaves and heartwood of *C. coggygria* few types of compounds was found – flavones, phenolic acids, triterpenes, etc. From the methylene chloride/methanol extract of *C. coggygria* heartwood the most isolated compounds were flavones (known) with characteristic skeleton, but also two new secondary metabolites, one auron and one auronolignan representing new subclass of flavonolignans.