

DEJAN PLJEVLJAKUŠIĆ

Curriculum Vitae

Medicinal Plants Cultivation R&D
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Education

2007–2013 **PhD, Medicinal Plants Cultivation**, Faculty of Agriculture, University of Belgrade.
Morphological parameters, field experiment conduction, yield estimation, quality analysis (GCMS, HPLC, HPTLC), statistical analysis

1996–2002 : **Agricultural Engineer**, Faculty of Agriculture, University of Belgrade, Marker assisted selection (QTL), wheat salt tolerance, plant breeding.

Research Experience

Institute for Medicinal Plants Research "Dr. Josif Pančić"

2019 – **Senior Research Associate**.
present

2014 – 2019 **Research Associate**.

2007 – 2014 **Research Assistant**.

2003 – 2007 **Junior Researcher**.

Projects

National Projects

2004 – 2005 **BTN.2.3.9.0724.B**, Standardized dry extract of St. John's wort with increased content of hypericin, project manager Dr. Dragoja Radanovic.

2005 – 2008 **BTN 321003B**, Standardized liquid extract of cultivated gentian root (*Extractum gentianae*) intended for the pharmaceutical and food industry, project manager Dr. Dragoja Radanović.

2008 – 2010 **TR 20108**, Wild and cultivated medicinal plants of the biozone of Serbia in the function of sustainable development of hilly and mountainous regions - part one, project manager Dr. Nebojsa Menkovic.

2011 – 2019 **III 46013**, Traditional and new products from fruits of cultivated and wild fruit species and vines and by-products in processing, with special reference to indigenous varieties: chemical characterization and biological profile, project manager Dr. Katarina Shavikin.

2011 – 2019 **OI 172053**, Bioactive natural products of wild, cultivated and edible plants: determination of structures and activities, project manager Dr. Vlatka Vajs.

International Projects

2003 – 2005 **Bilateral project Serbia - Greece**, Comparative testing of methods and techniques of organic cultivation of medicinal and aromatic plants in Serbia and Greece, with the aim of optimizing the obtained biologically active substances and / or essential oils, participant.

2007 – 2009 **Joint project of the Serbian Academy of Sciences and Arts (SANU) and the Bulgarian Academy of Sciences (BAN)**, Natural products from plants and marine organisms: medicinal and ecological significance, participant.

2015 **Bilateral project Serbia - Slovenia**, Research of edible wild plants and weeds from organic plantations in Serbia and Slovenia as potential additional sources of food and herbal medicines, project manager.

2015 – 2016 **Bilateral project Serbia - China**, A new look at Serbian and Chinese species of the genus *Gentiana* and *Gentianella*: validation of traditional use in liver disease, participant.

2019 – 2021 **Bilateral project Serbia - Croatia**, Improvement of growing conditions of Mediterranean immortelle (*Helichrysum italicum* (Roth) G. Don) in order to establish standards for obtaining high-quality essential oil and its application in medical and cosmetic preparations, project manager.

2019 – 2020 **IPA II project**, Protective Observatory of the regional area of medicinal plants as a living cross-border infrastructure of sustainable tourism - PORALIST, participant.

2019 – 2021 **Science and Economy Cooperation Program**, Development of new biopesticides for seed protection - ECOPEST, project leader.

Publications

Refereed Journal Articles

2021 Marija S. Marković, Dejan S. Pljevljakušić, Biljana M. Nikolić, Dragoljub L. Miladinović, Mrdjan M. Djokić, Ljubinko B. Rakonjac, and Vesna P. Stankov Jovanović. Ethnoveterinary knowledge in Pirot County (Serbia). *South African Journal of Botany*, volume 137, pages 278–289, March 2021.

2019 Ana Kalušević, Viktor Nedović, Miomir Nikšić, Mark Shamtsyan, Katarina Šavikin, Dejan Pljevljakušić, Milan Pantić, Steva Lević, Ana Salević, and Mariia Kokina. Characterization, antioxidant and antibacterial activity of essential oils and their encapsulation into biodegradable material followed by freeze drying. *Food technology and biotechnology*, volume 57, pages 282–289, 2019.

2018 Katarina Šavikin, Gordana Zdunić, Ana Alimpić, Dubravka Bigović, Dejan Pljevljakušić, and Sonja Duletić-Laušević. Biological activities of *Sorbus aucuparia* L. leaves extract. *Lekovite sirovine*, pages 22–26, 2018.

2018 Dejan Pljevljakušić, Dubravka Bigović, Teodora Janković, Slavica Jelačić, and Katarina Šavikin. Sandy everlasting (*Helichrysum arenarium* (L.) Moench): botanical, chemical and biological properties. *Frontiers in Plant Science*, volume 9, page 1123, August 2018.

2017 Katarina P. Šavikin, Gordana M. Zdunić, Dijana B. Krstić-Milošević, Helena J. Šircelj, Danijela D. Stešević, and Dejan S. Pljevljakušić. *Sorbus aucuparia* and *Sorbus aria* as a source of antioxidant phenolics, tocopherols, and pigments. *Chemistry & Biodiversity*, volume 14, page e1700329, December 2017.

2017 Katarina P. Šavikin, Dijana B. Krstić-Milošević, Nebojša R. Menković, Ivana N. Beara, Zorica O. Mrkonjić, and Dejan S. Pljevljakušić. *Crataegus orientalis* Leaves and berries: phenolic profiles, antioxidant and anti-inflammatory activity. *Natural Product Communications*, volume 12, page 1934578X1701200, February 2017.

2017 Sanja Đurđević, Stojan Milovanović, Katarina Šavikin, Mihailo Ristić, Nebojša Menković, Dejan Pljevljakušić, Slobodan Petrović, and Aleksandra Bogdanović. Improvement of supercritical CO₂ and *n*-hexane extraction of wild growing pomegranate seed oil by microwave pretreatment. *Industrial Crops and Products*, volume 104, pages 21–27, October 2017.

2017 Dejan Pljevljakusic, Mihailo Ristic, and Katarina Savikin. Screening of yarrow (*Achillea millefolium* Agg.) populations in Serbia for yield components and essential oil composition. *Lekovite sirovine*, pages 25–32, 2017.

2017 Aleksandra A. Jovanović, Verica B. Đorđević, Gordana M. Zdunić, Dejan S. Pljevljakušić, Katarina P. Šavikin, Dejan M. Gođevac, and Branko M. Bugarski. Optimization of the extraction process of polyphenols from *Thymus serpyllum* L. herb using maceration, heat- and ultrasound-assisted techniques. *Separation and Purification Technology*, volume 179, pages 369–380, May 2017.

2017 Dubravka Bigovic, Tatjana Stevic, Teodora Jankovic, Nebojsa Noveski, Dragoja Radanovic, Dejan Pljevljakusic, and Zorica Djuric. Antimicrobial activity of *Helichrysum plicatum* DC. *Hemisjska industrija*, volume 71, pages 337–342, 2017.

2017 Ana Alimpic, Katarina Šavikin, Dejan Pljevljakušić, Vlado Matevski, Petar D. Marin, Ivana Petrović, and Sonja Duletić-Laušević. Polyphenolic content and biological activities of post-distillation waste of three sage species from the Republic of Macedonia. *Agoznanje*, volume 18, page 27, November 2017.

2016 Nada Ćujić, Katarina Šavikin, Teodora Janković, Dejan Pljevljakušić, Gordana Zdunić, and Svetlana Iбриć. Optimization of polyphenols extraction from dried chokeberry using maceration as traditional technique. *Food Chemistry*, volume 194, pages 135–142, March 2016.

2016 Nada Ćujić, Kata Trifković, Branko Bugarski, Svetlana I brić, Dejan Pljevljakušić, and Katarina Šavikin. Chokeberry (*Aronia melanocarpa* L.) extract loaded in alginate and alginate/inulin system. *Industrial Crops and Products*, volume 86, pages 120–131, August 2016.

2016 Aleksandra Jovanovic, Verica Djordjevic, Gordana Zdunic, Katarina Savikin, Dejan Pljevljakusic, and Branko Bugarski. Ultrasound-assisted extraction of polyphenols from *Thymus serpyllum* and its antioxidant activity. *Hemisjska industrija*, volume 70, pages 391–398, 2016.

2015 Branka Vinterhalter, Dijana Krstić-Milošević, Teodora Janković, Dejan Pljevljakušić, Slavica Ninković, Ann Smigocki, and Dragan Vinterhalter. *Gentiana dinarica* Beck. hairy root cultures and evaluation of factors affecting growth and xanthone production. *Plant Cell, Tissue and Organ Culture (PCTOC)*, volume 121, pages 667–679, June 2015.

2015 Zora Dajic Stevanovic, Dejan Pljevljakušić, Mihajlo Ristic, Ivan Šoštaric, Mirjana Kresovic, Ivana Simic, and Sava Vrbnièanin. Essential oil composition of *Achillea millefolium* agg. populations collected from saline habitats in Serbia. *Journal of Essential Oil Bearing Plants*, volume 18, pages 1343–1352, November 2015.

2015 Ana Alimpic Aradski, Dejan Pljevljakušić, Katarina Šavikin, Vlado Matevski, Petar Marin, and Sonja Duletić Laušević. *Salvia jurisicii* Košanin and *Salvia amplexicaulis* Lam. chemical composition of the essential oils. *Agro FOOD Indusrty Hi Tech*, volume 26, pages 64–67, September 2015.

2015 Ana Alimpic, Dejan Pljevljakušić, Katarina Šavikin, Aleksandar Knežević, Milena Ćurčić, Dragan Veličković, Tatjana Stević, Goran Petrović, Vlado Matevski, Jelena Vukojević, Snežana Marković, Petar D. Marin, and Sonja Duletić-Laušević. Composition and biological effects of *Salvia ringens* (Lamiaceae) essential oil and extracts. *Industrial Crops and Products*, volume 76, pages 702–709, December 2015.

2014 Katarina Šavikin, Gordana Zdunić, Teodora Janković, Dejan Gođevac, Tatjana Stanojković, and Dejan Pljevljakušić. Berry fruit teas: Phenolic composition and cytotoxic activity. *Food Research International*, volume 62, pages 677–683, August 2014.

2014 Katarina Šavikin, Nemanja Menković, Gordana Zdunić, Dejan Pljevljakušić, Slavica Spasić, Nevena Kardum, and Aleksandra Konić-Ristić. Dietary supplementation with polyphenol-rich chokeberry juice improves skin morphology in cellulite. *Journal of Medicinal Food*, volume 17, pages 582–587, May 2014.

2014 Boban S. Đorđević, Dejan S. Pljevljakušić, Katarina P. Šavikin, Tatjana R. Stević, and Dubravka J. Bigović. Essential oil from blackcurrant buds as chemotaxonomy marker and antimicrobial agent. *Chemistry & Biodiversity*, volume 11, pages 1228–1240, August 2014.

2014 Dejan Pljevljakušić, Teodora Janković, Slavica Jelačić, Miroslav Novaković, Nebojša Menković, Damir Beatović, and Zora Dajić-Stevanović. Morphological and chemical characterization of *Arnica montana* L. under different cultivation models. *Industrial Crops and Products*, volume 52, pages 233–244, January 2014.

2013 Boban Djordjević, Katarina Šavikin, Gordana Zdunić, Teodora Janković, Todor Vulić, Dejan Pljevljakušić, and Čedo Oparnica. Biochemical properties of the fresh and frozen black currants and juices. *Journal of Medicinal Food*, volume 16, pages 73–81, January 2013.

2012 Dejan Pljevljakušić, Dragana Rančić, Mihailo Ristić, Ljubodrag Vujisić, Dragoja Radanović, and Zora Dajić-Stevanović. Rhizome and root yield of the cultivated *Arnica montana* L., chemical composition and histochemical localization of essential oil. *Industrial Crops and Products*, volume 39, pages 177–189, September 2012.

2012 S. Pavlovic, D. Pljevljakusic, M. Starovic, S. Stojanovic, and D. Josic. First report of 16SrIII-B phytoplasma subgroup associated with virescence of *Arnica montana* in Serbia. *Plant Disease*, volume 96, pages 1691–1691, November 2012.

2012 Marija Jug-Dujaković, Mihailo Ristić, Dejan Pljevljakušić, Zora Dajić-Stevanović, Zlatko Liber, Katarina Hančević, Tomislav Radić, and Zlatko Šatović. High diversity of indigenous populations of Dalmatian sage (*Salvia officinalis* L.) in essential-oil composition. *Chemistry & Biodiversity*, volume 9, pages 2309–2323, October 2012.

2012 Teodora Janković, Gordana Zdunić, Ivana Beara, Kristina Balog, Dejan Pljevljakušić, Danijela Stešević, and Katarina Šavikin. Comparative study of some polyphenols in *Plantago* species. *Biochemical Systematics and Ecology*, volume 42, pages 69–74, June 2012.

2011 Dejan Pljevljakušić, Katarina Šavikin, Teodora Janković, Gordana Zdunić, Mihailo Ristić, Dejan Godjevac, and Aleksandra Konić-Ristić. Chemical properties of the cultivated *Sideritis raeseri* Boiss. & Heldr. subsp. *raeseri*. *Food Chemistry*, volume 124, pages 226–233, January 2011.

2005 S. A. Quarrie, A. Steed, C. Calestani, A. Semikhodskii, C. Lebreton, C. Chinoy, N. Steele, D. Pljevljakusic, and et. al. A high-density genetic map of hexaploid wheat (*Triticum aestivum* L.) from the cross Chinese Spring × SQ1 and its use to compare QTLs for grain yield across a range of environments. *Theoretical and Applied Genetics*, volume 110, pages 865–880, March 2005.

Book Chapters

2016 **Zdunić Gordana, Šavikin Katarina, Pljevljakušić Dejan and Djordjević Boban**, Black (*Ribes nigrum* L.) and red currant (*Ribes rubrum* L.) cultivars., In *Nutritional Composition of Fruit Cultivars*, (Ed. Preedy, V.R.), Academic Press, pages 101–126..

2015 **Dajic Stevanovic Zora and Pljevljakusic Dejan**, Challenges and Decision Making in Cultivation of Medicinal and Aromatic Plants., In *Medicinal and Aromatic Plants of the World, Vol. 1* (Ed. Ákos Máthé), Springer Science+Business Media Dordrecht, pages 145-164..

Training & Seminars

2015 **Medical crop science and modern pharmaceutical industry** at the **Saint-Petersburg Chemical Pharmaceutical Academy**, FAO Regional Office for Europe and Central Asia, Saint-Petersburg, Russia.

2014 **Seminar on Tea International Trade and Industrialization for Asia and European Countries in 2014** at the **Zhangzhou College of Science & Technology**, Zhangzhou, China.

2002 **International Symposium and Training Course on Theoretical and Practical Aspects of Molecular Breeding in Cereals (UNESCO)** Martonvasar, Hungary.

2001 **Visiting Researcher** at **Crop Genetic Department, John Innes Center**, Norwich, England.

Skills

Languages English

Programming R, Python, Visual Basic

Languages

Web HTML, Shiny, WordPress, OJS

Technologies

Database MySQL

Text Editors LaTeX

Other Excel, Photoshop, Illustrator, SPSS, Statistica

Interests

Sports Rugby, Rowing

Hobby Hiking, Macro photography of medicinal plants