13 (2) December 2022: 83-87

n on the Flora of Southeastern Serbia and Neighboring Regions

# In memoriam Professor Sonja Duletić-Laušević (1962-2021)

Original Article



University of Belgrade, Faculty of Biology, Institute of Botany and Botanical Garden "Jevremovac", Studenski trg 16, 11000 Belgrade, Serbia simicana@bio.bg.ac.rs (corresponding author)

Ana Z. Alimpić Aradski

University of Belgrade, Faculty of Biology, Institute of Botany and Botanical Garden "Jevremovac", Studenski trg 16, 11000 Belgrade, Serbia



Professor Sonja Duletić-Laušević suddenly passed away on December 18, 2021, leaving a large void behind. Her passing left us in disbelief and sadness. As a full professor at the University of Belgrade, Faculty of Biology, she made great contributions both as a teacher and scientist.

Sonja N. Duletić-Laušević was born on February 14, 1962, in Belgrade where she finished primary school and gymnasium. She enrolled in the Department of Biology of the Faculty of Science and Mathematics, University of Belgrade, and graduated in 1986 in the group of General Biology. She received a Master's degree at the University of Belgrade - Faculty of Biology in 1990 defending the thesis entitled: "Investigation of the production of T-2 toxin and its effect on *rec* mutants of *Escherichia coli*". In 1995, she defended her doctoral thesis with the title "Comparative anatomical analysis of the vascular system of the genus *Helianthus* L. genotypes" at the University of Belgrade - Faculty of Biology.

Her first job was at the Department of Plant Physiology (Mycology Laboratory) of the Institute for Biological Research "Siniša Stanković" in Belgrade (1987-1988) where she was a junior assistant. In 1989 she was employed as a teaching assistant at the Chair of Plant Morphology and Systematics, Institute of Botany, University of Belgrade - Faculty of Biology. She was promoted to Assistant Professor in 1997, Associate Professor in 2005, and Full Professor in 2019 at the Chair of Plant Morphology and Systematics, at the Faculty of Biology.

She participated in the preparation and realization of practical and theoretical courses organized by the Chair of Plant Morphology and Systematics at all study levels. She taught the Morphology of Plants and General Botany course to numerous generations. In recent years, she has been teaching Anatomy and Morphology of Plants and Botany at the undergraduate level. She is a co-author of numerous textbooks and practicums. She is the co-author of the digital content Visual Dictionary of Plant Anatomy and Morphology.

She was the mentor of three doctoral dissertations and a member of nine defense comissions, as well as numerous master's, and diploma theses. Her scientific opus includes over 230 bibliographic units,

over 730 citations, and an h-index of 16.

She worked in a specific scientific field of Morphology, phytochemistry, and systematics of plants and extensively carried out anatomical, histochemical, and micromorphological analyses of plants. She placed special emphasis on the analysis of plant organs of representatives of the Lamiaceae family. Special focus of her research was glandular trichomes as the main secretory structures synthesizing diverse bioactive compounds. She was also involved in phytochemical and biological activity research on plants. At the same time, she worked in the field of mycology and collaborates with a group coordinated by professor Jelena Vukujević.

professor Solomon Wasser. Apart from the scientific research work that takes place at the Faculty of Biology, she continued work with colleagues from mycology and collaborated with many colleagues from our or other institutions.

She was a member of several scientific associartions: Serbian Biological Society and Serbian Society for Microscopy; Serbian Chemical Society; International Sunflower Association; OPTIMA; AMAPSEEC. Also, she was a member of the editorial board of the international scientific journal Botanica Serbica.

She served as a reviewer of many scientific journals and student books and was a committee member for many teaching and scientific promotion.



Professor Sonja with the members of mycology research group (December 2009, Institute of Botany and Botanical Garden "Jevremovac"

Since the beginning of her career, she has been engaged in numerous national and international projects. As part of the international project "Higher Education Reform in Biological Sciences", TEMPUS JEP 40094 (2006-2009), dedicated to the reform of study programs at the Faculty of Biology, she stayed at the Universities of Turin and Nice in December 2006. In 2004, she stayed at the University of Haifa (Israel) in cooperation with

In addition, she was working on the popularization of Botany and was co-author of Botany for kids which is translated into Spanish, Chinese, and Turkish languages, and after that as a longtime editor of textbook editions of the publishing house Creative Center.

We will remember her as an enthusiastic scientist and teacher, a careful person who enjoyed in work with young scientists and students. We worked



Professor Sonja with the closest collaborators (September 2014, University of Belgrade)

with her, discussed, made and achieved goals. She suggested to the future generation that "The challenge is to be a botanist and know that you belong to the few who feel at home among plants". This sentence represents Sonja's thinking and we will keep her in our memory for a long time.

# **Bibliography**

### **Books** and practicums

Vukojević, J., Duletić-Laušević, S. 2004: Patogene gljive povrća i voća u Srbiji. *NNK International*, Beograd. ISBN 86-83635-30-9.

Petković, B., Merkulov, Lj., Duletić-Laušević, S. 2005: Anatomija biljaka sa praktikumom. *NNK International*, Beograd. ISBN 86-907471-1-7.

Petković, B., Merkulov, Lj., Duletić-Laušević, S. 2005: Morfologija biljaka sa praktikumom. *NNK International*, Beograd. ISBN 86-907471-2-5.

Duletić-Laušević, S., Janošević, D. 2008: Botanika, edicija Saznaj i probaj, Kreativni centar, Belgrade.

Petković, B., Duletić-Laušević, S. (2001): Praktikum iz anatomije i morfologije biljaka. *NNK International*, Beograd. ISBN 86-83635-06-6. (14)

Duletić-Laušević, S., Janaćković, P., Džamić, A., Veljić, M., Grujić, S., Rajčević, N. 2019: Praktikum iz botanike. *Biološki fakultet Univerziteta u Beogradu*, Beograd. ISBN: 978-86-7078-153-5.

Petković, B., Merkulov, Lj., Duletić-Laušević, S. 2012: Anatomija i morfologija biljaka sa praktikumom. *Biološki fakultet Univerziteta u Beogradu*. ISBN 978-86-7078-084-2.

Duletić-Laušević, S., Janaćković, P., Grujić-Jovanović, S., Marin, M., Džamić, A., Rajčević, N., Gradojević, J. (2009): Vizuelni rečnik anatomije i morfologije biljaka. *Biološki fakultet Univerziteta u Beogradu*. Digitalni sadržaj.

### Chapters in Monographs

Vukojević, J., Muntañola-Cvetković, M., Duletić-Laušević, S. 2002: Diaporthe/Phomopsis helianthi, the sunflower pathogen: twenty years of research. In: Environment and Crop Production (Dris, R., Jain, S. M., Khan, I. A. (eds.), CRC Press, Taylor & Francis Group. Pp. 99-110. ISBN: 9781578082575.

- Duletić-Laušević, S, Vukojević, J., Soković, M. 2005: Fungi as causative agents of diseases of vegetables and fruits. In: Crops, Growth, Quality & Biotechnology. Dris, R. (ed.) *WFL Publisher Science and Technology*. Pp. 405-424. ISBN: 952-91-8601-0.
- Vukojević, J., Duletić-Laušević, S., Glamočlija, J. 2005: Pathogenic fungi of vegetables and Rosaceae fruits. In: Crops, Growth, Quality & Biotechnology. Dris, R. (ed.) *WFL Publisher Science and Technology*. Pp. 425-448. ISBN: 952-91-8601-0.
- Alimpić Aradski, A., Oalđe, M., Duletić-Laušević, S. 2021: *Salvia officinalis*: Traditional medicinal plant with novel therapeutical perspectives. In: *Salvia officinalis*: Production, Cultivation and Uses, Cameron Ashton (ed.). *Nova Science Publishers*, New York, USA. Pp. 1-72. ISBN: 978-1-53619-531-6.

## Selected papers

- Marin, P., Sajdl, V., Kapor, S., Tatić, B., Petković, B., Duletić, S. 1992: Fatty acids of the Stachyoideae. *Biochemical Systematics and Ecology*, 20(4): 389-392.
- Marin, P.D., Petković, B., Duletić, S. 1994: Nutlet sculpturing of selected *Teucrium* species (Lamiaceae): a character of taxonomic significance. *Plant Systematics and Evolution*, 192: 199-214.
- Marin, M., Koko, V., Duletić-Laušević, S., Marin, P.D., Rančić, D., Dajić Stevanović Z. 2006: Glandular trichomes on the leaves of *Rosmarinus officinalis*: Morphology, stereology and histochemistry. *South African Journal of Botany*, 72: 378-382.
- Stajić, M., Persky, L., Hadar, Y., Friesem, D., Duletić-Laušević, S., Wasser, S., Nevo, E. 2006: Effect of copper and manganese ions on activities of laccase and peroxidases in three *Pleurotus* species grown on agricultural wastes. *Applied Biochemistry and Biotechnology* 128(1): 87-96.
- Marin M., Koko, V., Duletić-Laušević, S., Marin, P.D. 2008: Micromorphology of trichomes of *Thymus malyi* (Lamiaceae). *Journal of Microscopy*, 232(3): 406-409.
- Stajić, M., Vukojević, J., Duletić-Laušević, S. 2009: Biology of *Pleurotus eryngii* and role in biotechnological processes: a review. *Critical Reviews in Biotechnology*, 29(1): 55-66.
- Stajić, M., Kukavica, B., Vukojević, J. Simonić, J., Veljović-Jovanović, S., Duletić-Laušević, S. 2010: Wheat straw conversion by enzymatic system of

- Ganoderma lucidum. Bioresources 5(4): 2362-2373.
- Ćilerdžić, J., Stajić, M., Vukojević, J., Duletić-Laušević, S., Knežević A. 2011: Potential of *Trametes hirsuta* to produce ligninolytic enzymes during degradation of agricultural residues. *Bioresources*, 6(3): 2885-2895.
- Stajić, M., Vukojević, J., Knežević, A., Duletić-Laušević, S., Milovanović, I. 2013: Antioxidant protective effects of mushroom metabolites. *Current Topics in Medicinal Chemistry*, 13(21): 2660-2676.
- Al Sheef, N.B., Duletić-Laušević, S., Janošević, D., Budimir, S., Marin, M., Alimpić, A., Giweli, A.A.M., Marin, P.D. 2013: Micromorphology and ultrastructure of trichomes of Libyan *Salvia fruticosa* Mill. *Archives of Biological Sciences*, 65(1): 239-248.
- Alimpić, A., Pljevljakušić, D., Šavikin, K., Knežević, A., Ćurčić, M., Veličković, D., Stević, T., Petrović, G., Matevski, V., Vukojević, J., Marković, S., Marin, P. D., Duletić-Laušević, S. 2015: Composition and biological effects of Salvia ringens (Lamiaceae) essential oil and extracts. Industrial Crops and Products. 76: 702-709.
- Alimpić, A., Knežević, A., Milutinović, M., Stević, T., Šavikin, K., Stajić, M., Marković, S., Marin, P.D., Matevski, V., Duletić-Laušević, S. 2017: Biological activities and chemical composition of *Salvia amplexicaulis* Lam. extracts. *Industrial Crops and Products*. 105: 1-9.
- Alimpić, A., Knežević, A., Šavikin, K., Ćurčić, M., Veličković, D., Stević, T., Matevski, V., Stajić, M., Marković, S., Marin, P.D., Duletić-Laušević, S. 2017: Composition and biological activities of different extracts of *Salvia jurisicii*, a rare and endemic Macedonian species. *Plant Biosystems*, 151(6): 1002-1011.
- Živković, J. Č., Barreira, J. C. M., Šavikin, K., Alimpić, A., Stojković, D., Dias, M. I., Santos-Buelga, C., Duletić-Laušević, S., Ferreira, I. C. F. R. 2017: Chemical profiling and assessment of antineurodegenerative and antioxidant properties of *Veronica teucrium* L. and *Veronica jacquinii* Baumg. *Chemistry and Biodiversity*, 14(8): 1-11.
- Šavikin, K., Živković J., Alimpić, A., Zdunić, G., Janković, T., Duletić-Laušević, S., Menković, N. 2018: Activity guided fractionation of pomegranate extract and its antioxidant, antidiabetic and antineurodegenerative properties. *Industrial Crops and Products*. 113: 142-149.
- Ćilerdžić, J. L., Sofrenić, I.V., Tešević, V. V.,

- Brčeski, I. D., Duletić-Laušević, S. N., Vukojević. J. B., Stajić, M. M. 2018: Neuroprotective potential and chemical profile of alternatively cultivated *Ganoderma lucidum* basidiocarps. *Chemistry and Biodiversity*, 15(5): e1800036.
- Duletić-Laušević, S. Alimpić Aradski, A., Šavikin, K., Knežević, A. Milutinović, M., Stević, T., Vukojević, J., Marković, S., Marin, P. D. 2018: Composition and biological activities of Libyan Salvia fruticosa Mill. and S. lanigera Poir. extracts. South African Journal of Botany, 117: 101-109.
- Savić, A., Jarić, S., Dajić Stevanović, Z., Duletić-Laušević, S. 2019: Ethnobotanical survey and traditional use of local pear varieties (*Pyrus communis* L.) in Polimlje, Southwest Serbia. *Genetic Resources and Crop Evolution*, 66(3): 589-609.
- Alimpić Aradski, A., Janošević, D., Pećinar, I., Budimir, S., Dajić Stevanović, Z., Matevski, V., Marin, P.D., Duletić-Laušević, S. 2021: Micromorphological and anatomical characteristics

- of Salvia amplexicaulis Lam., S. jurisicii Košanin and S. ringens Sibth. & Sm. (Lamiaceae). Plant Biosystems, 155(1): 92-108.
- Oalđe, M., Kolarević, S., Živković, J., Alimpić Aradski, A., Marić, J. J., Kolarević, M. K., Đorđević, J., Marin, P. D., Šavikin, K., Vuković-Gačić, B., Duletić-Laušević, S. 2021: A comprehensive assessment of the chemical composition, antioxidant, genoprotective and antigenotoxic activities of Lamiaceae species using different experimental models *in vitro*. Food and Function, 12: 3233-3245.
- Oalđe Pavlović, M., Kolarević, S., Đorđević, J., Jovanović Marić, J., Lunić, T., Mandić, M., Kračun Kolarević, M., Živković, J., Alimpić Aradski, A., Marin, P. D., Šavikin, K., Vuković-Gačić, B., Božić Nedeljković, B., Duletić-Laušević, S. 2021: A study of phytochemistry, genoprotective activity, and antitumor effects of extracts of the selected Lamiaceae species. *Plants*, 10(11): 2306.