

Ivana MAKSIMOVIC

Title Prof.

Family name: Maksimovic

First name: Ivana

Sex: female

Date of birth (YYYY-MM-DD): 1968-04-02

Town of birth: Novi Sad

Country of birth: Serbia

Nationality: Serbian



Contact Details:

Organisation: Faculty of Agriculture

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Linguistic Skills:

Languages	Written	Reading	Conversation
Language 1: English	Good	Good	Fluent
Language 2: French	Average	Good	Good
Language 3: Serbian	Mother Tongue	Mother Tongue	Mother Tongue

Keywords

Plant physiology - Plant molecular biology - Abiotic stress - Drought - Plant nutrition - Photosynthesis - Plant growth - Heavy metal stress

Educational background

1995: **PhD** - University of Geneva (Switzerland)

1990: **BSc** - University of Novi Sad (Serbia)

Experience

Curriculum Vitae:

Experience if any in Peer Review, Evaluation/Validation, Impact Assessment, ...:

I was reviewer for the following journals (1 paper for each journal):

1. **Journal of Hazardous Materials** (2007)
2. **Environmental and Experimental Botany** (2007), impact factor in 2006 was 1.820
3. **Forest@** (2007)
4. **Fresenius Environmental Bulletin** (FEB) (2008)
5. **Food Research International** (2008)
6. **Environmental and Experimental Botany** (2009)
7. **Central European Journal of Biology** (2009)

I was reviewer of project proposals that were to be financed by the Ministry of Science and Technological development, project period 2008-2011.

Employment History

Current Organisation:

Job title: Full professor
Organization: University of Novi Sad, Faculty of Agriculture
Department of Field and Vegetable Crops
Address: Trg D. Obradovica 8
21000 Novi Sad
Serbia

Employment Records for the last 10 years or the last 5 positions:

Faculty of Agriculture, University of Novi Sad, Trg D. Obradovica 8, 21000 Novi Sad, Serbia. 2007 elected as full professor. From 2002 to 2007 associate professor, from 11th Dec 1995 to 2002 assistant professor

Faculty of Sciences, University of Geneva, Switzerland, Plant Biology Department, Laboratory for molecular biology of higher plants, Quai Ernest-Ansermet 30, CH-1211 Genève 4. From the 1st March 1991 until the 30th November 1995, Assistent-doctorant

Interests

Synopsis of current research interests:

Researcher in the frame of three projects financed by Ministry of Science and technological development of the Republic of Serbia, focused on: improvement of sugar beet drought tolerance, vegetable mineral nutrition and abiotic stress tolerance (especially heavy metal stresses) and forage crops abiotic stress tolerance. Mostly used techniques: growing plants under semi-controlled conditions (mostly water cultures, hydroponics), analyses of plant mineral composition (N, S, P, K, Ca, Mg, Fe, Cd, Pb, Ni, Co,...) by different methods, including AAS, measurement of stress indicators such as activity of antioxidant enzymes, concentration of free radicals and antioxidant compounds in plant tissues, determination of parameters indicating plant water status (water content, water potential, osmotic value of plant cells, transpiration, water deficiency), measurement of chlorophyll fluorescence, PCR, DNA and RNA extractions, cDNA synthesis, gene expression analyses, BAC library screening.

Former research interests (with dates):

From 1991 until 1995 work on PhD thesis, at the University of Geneva, Switzerland. The subject of the thesis was search for root hair-specific gene expression changes triggered by inoculation with compatible Rhizobium strain NGR 234. We found that as soon as 1 day after the inoculation the expression of genes coding for extensins (structural cell wall proteins) was repressed. The title of the thesis is Isolation and characterization of root-hair-specific cDNA clones of *Vigna unguiculata*. Techniques that were used are: cDNA cloning, differential screening of cDNA and genomic DNA libraries, Southern and Northern blot analyses, PCR, DNA sequencing, standard cloning techniques. From 1996 until 2007 I participated in projects focused on plant mineral nutrition and plant water regime. I also participated in the project in which the diversity of flora, including invasive weed species of Panonian region of Serbia was studied.

Additional Information:

Scientific stays abroad: In 2006 two months as participant of "Norman E. Borlaug International Agricultural Science and Technology Fellows Program", financed by USDA, USA, at the University of Michigan, in the group of Dr. Mitch McGrath, where I worked on molecular characterization of different sugar beet genotypes.

In 2005 one month at the University of Hohenheim, Germany, at the Institute for plant nutrition, in the scope of TEMPUS project JEP-18096-2003 (“Reform of Agricultural Higher Education in Serbia and Montenegro”). Most of the time I spent in the group of Prof. von Viren.

Organizational skills:

- Chairperson of XXXIV ESNA Annual Meeting, in 2004, with about 100 participants from 19 countries (ESNA is The European Society for New Methods in Agricultural Research), <http://old.mendelu.cz/~poschl/esna/novisad.htm>
- National delegate of Serbia to FESPB since 2004 (FESPB is Federation of European Societies of Plant Biology),
- Member of Division of Sciences of Matica srpska since 2002
- Member of editorial board of the journal “Proceedings for natural sciences of Matica srpska”
- Member of scientific board of INTERNATIONAL ECO-CONFERENCE since 2005
- Reviewer of the Commission for accreditation and quality testing of the Ministry of education of the Republic of Serbia

Mentorship: Mentor of one PhD thesis, defended in 2007, and of another one that is under way, and member of jury of another three.

Selected Publications:

Luković J, **Maksimović I**, Zorić L, Nagl N, Perčić M, Polić D, Marina Putnik-Delić M (2009) Histological characteristics of sugar beet leaves potentially linked to drought tolerance. *Industrial Crops and Products* 30: 281-286.

Stoparić G, **Maksimović I** (2008) The effect of cytokinins on the concentration of hydroxyl radicals and the intensity of lipid peroxidation in nitrogen deficient wheat. *Cereal Res. Comm.* 36: 601-608.

Brdar M, **Maksimović I**, Kobiljski B, Kraljević-Balalić M (2008) Traits related with boron toxicity tolerance in wheat (*Triticum aestivum* L.). In: Mihailovic, Dragutin; Miloradov, Mirjana Vojinovic (eds) *Environmental, Health And Humanity Issues In The Down Danubian Region: Multidisciplinary Approaches, Proceedings of the 9th International Symposium on Interdisciplinary Regional Research* ISBN10: 9812834397, ISBN13: 9789812834393 Pub. Date: 11/9/2008, World Scientific Pub Co Inc

Perčić M, **Maksimović I**, Krstić L, Luković J. (2008) Effect of short-term water deficiency on vascular tissue of petiole and leaf lamina of sugar beet. In: Mihailovic, Dragutin; Miloradov, Mirjana Vojinovic (eds) *Environmental, Health And Humanity Issues In The Down Danubian Region: Multidisciplinary Approaches, Proceedings of the 9th International Symposium on Interdisciplinary Regional Research* ISBN10: 9812834397, ISBN13: 9789812834393 Pub. Date: 11/9/2008, World Scientific Pub Co Inc

Maksimović I, Kastori R, Krstić L, Luković J (2007) Steady presence of Cd and Ni affects root anatomy, accumulation and distribution of essential ions in maize seedlings. *Biol. Plant.* 51: 589-592.

Kastori R, Kádár I, **Maksimović I** (2007) Translocation of heavy metals and Sr and Ba from vegetative parts to seeds of some crops. *The 14th Symposium on Analytical and Environmental Problems.* 24. September, Szeged, Hungary, ISBN 978-963-87720-0-8, p. 121-125.

Kastori R, Kádár I, **Maksimović I** (2006) Remobilization of Mo, Se and Zn from seed of triticale during seedling growth. *Proceedings of the International Symposium on Trace Elements in the Food Chain.* Budapest, May 25-27, p. 271-275.

Perčić M, **Maksimović I**, Putnik-Delić M, Nagl N, Kovacev L (2005) The Effect of Water Deficiency on Some Characteristics of Sugar Beet Leaves. 7th International Symposium "Young people and multidisciplinary research", 22.-23. septembar, Resita, Romania, Proceedings published on CD, paper No. B 33, 5 pages

Maksimović I, Petrović, N, Kastori R, Sekulić P (2004) Accumulation and distribution of some elements in sunflower and amaranth grown in the presence of Cd. XXXIV Annual meeting of ESNA (European Society for New Methods in Agricultural Research), 29 August - 2 September 2004, Faculty of Agriculture, Novi Sad, Serbia and Montenegro, p. 388-392.

Maksimović I, Kastori R, Petrović N, Kovačev L, Sklenar P (2003) The effect of water potential on accumulation of some essential elements in sugarbeet leaves (*Beta vulgaris* ssp. *vulgaris*). Proceedings for Natural Sciences, Matica Srpska Novi Sad, 104: 39-50.

Petrović N, **Arsenijević-Maksimović I**, Kastori R (2002) Heavy metals – uptake, tolerance mechanisms and phytoremediation in rhizosphere. In: Plant Physiology in the New Millennium, Quarrie SA, Krstić B, Janjić V (eds). Yugoslav Society of Plant Physiology and Agricultural Research Institute Serbia, Belgrade, p. 41-48.

Arsenijević-Maksimović I, Jelić M, Lomović S, Kastori R (2001) Genetic and Physiological bases of plant tolerance to high concentrations of heavy metals and aluminium. In: Quarrie SA, Janjić V, Atanassov A, Knežević D, Stojanović S (eds.) Genetics and Breeding of Small Grains. ARI Serbia, Belgrade, p. 377-405.

Panković D, Plesničar M, **Arsenijević-Maksimović I**, Petrović N, Sakač Z, Kastori R (2000) Effects of nitrogen nutrition on photosynthesis in Cd-treated sunflower plants. Ann. Bot. 86: 841-847.

Kastori R, Plesničar M, **Arsenijević-Maksimović I**, Petrović N, Panković D, Sakač Z (2000) Photosynthesis, chlorophyll fluorescence and water relations in young sugar beet plants as affected by different sulfur supply. J. Plant Nutr. 23: 1037-1049.

Kastori R, Plesničar M, Sakač Z, Panković D, **Arsenijević-Maksimović I** (1998) Effect of excess lead on sunflower growth and photosynthesis. J. Plant Nutr. 21: 75-78.

Arsenijević-Maksimović I, Broughton WJ, Krause A (1997) Rhizobia modulate root-hair-specific expression of extensin genes. Mol. Plant-Microbe Interact. 10: 95-101.

Arsenijević-Maksimović I, Broughton WJ, Krause A (1997) VuTED2 of *Vigna unguiculata* (Accession No. Yo8624) is a homologue to a putative marker gene for differentiation (PGR97-006). Plant Physiol. 113: 306.

Arsenijević-Maksimović I, Broughton WJ, Krause A (1995) Three different cDNAs (Accession No. X86029, X86030 and X86028) encoding extensin-like proteins from *Vigna unguiculata* root hairs. Plant Physiol. 109: 338.