



## Curriculum Vitae

### **Personal Information:**

**Name:** Brigitta TÓTH Dr.

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**Gender:** Female

**Email:** btoth@agr.unideb.hu

**Languages:** Hungarian & English

### **Education:**

- 2009 - 2012: Kálmán Kerpely Doctoral (PhD) School of Crop Sciences, Horticultural and Regional Sciences, University of Debrecen  
Topic of examination: Plant physiological examination of industrial by-products and wastes
- 2012 : M.Sc. in Agricultural Engineer, University of Debrecen, Centre of Agricultural and Applied Economic Sciences, 4032 Debrecen, Böszörményi str. 138. Hungary  
Agricultural Engineer
- 2010 - : Microbiology, Lóránd Eötvös University, 1117 Budapest, Pázmány Péter lane 1/C, Hungary
- 2003 – 2009: M.Sc. degree at University of Debrecen, Centre for Agricultural and Applied Economic Science,  
Agricultural Environmental Management Engineer
- 1998 - 2003: Ottó Herman Secondary Grammar School, Miskolc, Hungary

### **Professional position:**

2019. Jan - Present: University of Debrecen, Associate Professor
2017. Jan - 2018. Dec: University of Debrecen, Assistant Professor
2017. June - 2019. Febr : University of the Free State, Postdoctoral Research Fellow
2012. Nov - 2016. Dec: University of Debrecen, Professor's assistant
2014. Sept - 2015. Sept: Institute for Soil Sciences and Agricultural Chemistry, Centre for Agricultural Research, Hungarian Academy of Sciences, research fellow
2009. Sept - 2012. Sept : *Ph.D.* student

### **Courses taught and other services provided to students and the home institution:**

- Plant physiology lecture in Hungarian
- Plant physiology practical lessons in Hungarian
- Plant physiology lecture in English
- Food Chemistry lecture in Hungarian
- Food Chemistry practical lessons in Hungarian
- Food Chemistry lecture in English
- Food Chemistry practical lessons in English

**Supervisor of students in the following topics, published units through dissertation/thesis:**

- 2010:  $\Delta^9$ -tetrahydro-cannabinol (THC) content of *Cannabis sativa* L. in weed varieties in Eastern part of Hungary (Special prize in Scientific Student Conference)
- 2010: Examination of some industrial by-products in plant nutrition (Highlighted 1<sup>st</sup> place in University Scientific Student Conference)
- 2011: Dangerous wastes or useful nutrition? Wood-ash and straw-ash. (1<sup>st</sup> place in University Scientific Student Conference)
- 2011: Possible use of fluid by-product of biogas factory. (1<sup>st</sup> place in University Scientific Student Conference, 3<sup>rd</sup> prize in International Agricultural Student Conference in Moscow)
- 2012: Effect of PGPB on different maize species.
- 2014: Examination of Mn-Si-living bacteria containing biofertilizer interaction on maize
- 2014: Examination of some industrial by-products in plant-soil system
- 2015: Complementation examinations of digestate in the cases of *Zea mays* L. and *Helianthus annuus* L.
- 2016: Effect of sewage sludge on photosynthetic activity and dry mass production of maize
- 2016: Effect of different nutrient supply doses on quantity and quality of oilseed rape yield (field experiment)
- 2016: Examination of possible compensation effect of bacteria fertilizer in case of Al-toxicity with maize as a test plant
- 2016: Investigation of effect of bacteria fertilizer on yield of maize and sunflower at different mineral fertilization levels (field experiment)
- 2017: Examination of possible compensation effect of bacterium containing product in aluminum toxicity in early growth stage of maize
- 2017: Effect of bean rust (*Uromyces appendiculatus*) on physiological characteristics, superoxide-dismutase and lipid-peroxidase activities of common bean
- 2017: Effects of fungicides on key plant physiological parameters of *Zea mays* L. and on changes in superoxide-dismutase (SOD) and lipid-peroxidase (LP) activity
- 2019: Influence of *Erysiphe graminis* on enzymes activity of wheat
- 2020: Investigation of Debrecen Vízmű Zrt. wastewater treatment process
- 2021: The effects of environmental stress factors on antioxidants and the impacts of industry processes on antioxidants
- 2021: Does the industrial process change polyphenols?
- 2021: Evaluation of the effect of climate change on crops plants
- 2021: Examination of corn smut infection on the physiological and biochemical characteristics of sweet corn hybrids

**Professional Qualifications through tertiary insitution:**

Environmental management  
Environmental technology

**Memberships:**

Hungarian Biology Society  
Hungarian Plant Biology Society  
Hungarian Soil Science Society  
Federation of European Societies of Plant Biology  
International Phytotechnology Society  
Official reviewer of International Journal of Research in BioScience (IJRBS)

Member of the 3<sup>rd</sup> International Conference on Environment and BioScience Technical Committee (ICEBS 2013)  
Member of the 4<sup>th</sup> International Conference on Environment and Industrial Innovation Technical Committee  
Member of the 5<sup>th</sup> International Conference on Environment and BioScience (ICEBS 2015) Technical Committee  
Member of the 6<sup>th</sup> International Conference on Environment and BioScience (ICEBS 2016) Technical Committee  
Member of the 7<sup>th</sup> International Conference on Environment and BioScience (ICEBS 2017) Technical Committee  
Member of the International Conference on Sustainable Agricultural Technologies (ICSAT) Technical Committee  
Member of the 8<sup>th</sup> International Conference on Environment and BioScience Technical Committee (2018)  
Member of the 4<sup>th</sup> International Conference on Sustainable Agriculture Technologies Technical Committee (2018)  
MDPI Guest Editor – The impacts of anthropogenic environmental changes on the antioxidant systems in crops Special Issue (2020-2021)  
MDPI Topic Editor (2020 – present)

**Professional honors, fellowships, awards:**

2017. Postdoctoral Research Fellowship – University of the Free State, RSA, 2 years, Title of research project: The influence of low nitrogen and low phosphorous and a combination of the two on protein expression, nutritional value and baking quality of two high quality bread wheat cultivars  
2015. Campus Hungary Scholarship – Baylor College of Medicine, USDA/ARS Children’s Nutrition Research Center, Houston, TX USA, 2 months  
2015. Hungarian State Eötvös Postdoctoral Fellowship (USDA/ARS Children’s Nutrition Research Center, Baylor College of Medicine) 4 months, Effects of antropogenetic pollutions on a variety of beans  
2014. Campus Hungary Scholarship – Baylor College of Medicine, Houston, TX, USA, 1 month  
2014. Hungarian State Eötvös Postdoctoral Fellowship (University of Hohenheim, Stuttgart) 7 months, Title of research project: Perspectives to improve use efficiency of recycling fertilizers based industrial waste products by combined application of plant growth promoting microorganisms.  
2014. Campus Hungary Scholarship - Beijing International Symposium on Land Reclamation and Ecological Restoration (conference attendance)  
2013. Hungarian State Scholarship – Post Doctoral Fellowship to Germany, 4 months, Title of research project: Examination of different bioeffectors on phosphor mobilization  
2013. Campus Hungary Scholarship – 10<sup>th</sup> International Phytotechnologies Conference, Syracuse, USA. (Travel grant: conference attendance)  
2011. Phyto Scholar to the 8<sup>th</sup> International Phytotechnology Conference in Portland, OR, USA (Travel grant: conference registration, lodging, transport)

**Chairman at international conferences:**

4<sup>th</sup> International Geography Symposium – GeoMED 2016, 23-26 May, 2016, Kemer, Turkey  
9<sup>th</sup> International Symposium on Plant - Soil Interactions at Low pH (PSILPH) 18-23 October 2015, Dubrovnik, Croatia  
Beijing International Symposium on Land Reclamation and Ecological Restoration (LRER2014), 16-19 October 2014, Beijing, China

**Oral presentations in International Conferences in English:**

- 10<sup>th</sup> International Symposium on Plant-Soil Interactions at Low pH, 25-29 June, 2018. Putrajaya, Malaysia (Enzymatic responses of *Phaseolus vulgaris* L. genotypes to Al-stress)
- 13<sup>th</sup> International Gluten Workshop, 14-17 March 2018, Mexico City, Mexico (The effect of low nitrogen and low phosphorous and a combination of the two on the quantity of HMW-GS in two South African bread wheat cultivars)
- 4<sup>th</sup> Latin American Cereals Conference, 11-14 March 2018, Mexico City, Mexico (The influence of nitrogen and phosphorous deficiency on protein quality and quantity in two bread wheat cultivars in South Africa)
- 4<sup>th</sup> International Geography Symposium – GeoMED 2016, 23-26 May, 2016, Kemer, Turkey
- 9<sup>th</sup> International Symposium on Plant - Soil Interactions at Low pH (PSILPH) 18-23 October 2015, Dubrovnik, Croatia, (Role of bacteria in Al-toxicity)
- 2014 Beijing International Symposium on Land Reclamation and Ecological Restoration (LRER2014), 16-19 October, 2014 Beijing, China (Is there any possible way of the use of industrial wastes in crop production?)
- Hungarian Plant Biology Society, 27-29 August, 2014 Szeged, Hungary (Diverse plant physiological examinations of soil-plant-industrial by-products systems)
- 3<sup>rd</sup> International Conference on Environment and BioScience, 23-24 November 2013, Phuket, Thailand (Industrial by-products: stress factors or nutrients?)
- International Symposium on Environmental Science and Technology, 4-7 June, 2013, Dalian, China (Possible recycling of industrial wastes and by-products in agriculture)
- 11<sup>th</sup> Alps-Adria Scientific Workshop, 26-30 March, 2012 Smolenice, Slovakia, (Green development: waste water or green water?)
- 15<sup>th</sup> International Eco-Conference, 9<sup>th</sup> Eco-Conference on Environmental Protection of Urban and Suburban Settlements. 21-24 September, 2011, Novi Sad, Serbia (Dependence of chlorophyll contents of rape and wheat on sewage sludge treatment)
- 8<sup>th</sup> International Phytotechnology Society Conference, 13-16 September, 2011. Portland, OR, USA. (Bacteria containing fertilizer: reduce the Al uptake of plants)
- International Symposium on Environmental Science and Technology, 1-4 June, 2011. Dongguang, China (Waste management – reuse in agriculture?)
- International Symposium on Kaz Mountains (Mount Ida) and Edremit. 5-7 May, 2011. Edremit, Turkey (New possibilities in environmental friendly plant nutrition)
- 10<sup>th</sup> Alps-Adria Scientific Workshop, 14-19 March, 2011. Opatija, Croatia (Abusive land use and problem of plant production)
- 9<sup>th</sup> European Geopark Conference, October 2010. Mytilini, Lesvos, Greece (Industrial produce and environmental protection)
- 1<sup>st</sup> International Symposium of Croatian Soil Tillage Research Organization. 9-11 September 2010. Osijek, Croatia (Can we available nutrients using bacteria?)
- 2<sup>nd</sup> International Geography Symposium, 2-5 June, 2010. Kemer, Turkey (Industrial byproducts as possible soil-amendments)
- 45<sup>th</sup> Croatian and 5<sup>th</sup> International Symposium on Agriculture. 15-19 February, 2010. Opatija, Croatia (Effect of industrial wastes and by-products on the physiological parameters of crop seedlings)
- 2<sup>nd</sup> International Scientific/Professional Conference on Agriculture in Nature and Environment Protection, 4-6 June, 2009. Vukovar, Croatia (Physiological effects of quicklime and cement factory powder)

**Summary of scientific work completed to date:**

Number of total scientific publications: 245

IF: 73.146

Number of citations: 291

Number of independent citations: 230

Hirsch index: 9

May 14, 2022 at Denver

Dr. *habil.* Brigitta Tóth *Ph.D.*  
associate professor