**Curriculum Vitae of Tibor Tóth**

**Personal data**


**Name** Tibor TÓTH

**Title** Scientific Adviser, Editor-in-chief, Professor

**Position** Principal investigator

**Office and location** Institute for Soil Sciences and Agricultural Chemistry, Centre for Agricultural Research of the Hungarian Academy of Sciences (MTA ATK TAKI), Budapest II. Herman O. út 15. 1025 Hungary

**Mailing address** MTA ATK TAKI Budapest P. O. Box 35. Hungary 1525

**Mobile telephone** 36 (Hungary) – 30 – 287 8830

**Business telephone** 36 (Hungary) - 30 – 961 7462

**Business fax** 36 (Hungary) - 1 (Budapest) – 2122265

**Business electronic mail** tibor@rissac.hu

**http**://members.iif.hu/tot3700/


**Born** Debrecen, Hungary 24 April 1956

**Nationality** Hungarian

**University education and degrees**

**-József Attila University of Science**, Szeged, Hungary, M. Sc. *Biology, chemistry* (secondary school teacher), 1975-1980

**-University of Agriculture, Gödöllő**, Hungary, *Soil engineering* (postgradual course), 1984-86

**-University of Agriculture, Gödöllő**, Hungary, *University doctor's degree*, 1987

**-Hungarian Academy of Sciences,** *PhD in agriculture*, 1996

**-Veszprém University**, Hungary, *Doctor habilis degree*, 2003

**-Hungarian Academy of Sciences**, *Doctor of Hungarian Academy of Sciences degree*, 2005

**-Veszprém University, Hungary**, *Honorary Professor degree*, 2005

**Language skills based on Common European Framework of Reference for Languages levels**

-Hungarian, as *native* speaker.

-English, obtained *higher degree*, including skills for technical language, >>Level C1<< at the State Language Examination Comittee, 1983, Budapest

-Spanish, obtained *higher degree*, including skills for technical language, >>Level C1<< at the State Language Examination Comittee, 1985, Budapest

-Russian, obtained *medium degree*, >>Level B2<< at the State Language Examination Comittee, 1980, Budapest

-Italian, *reading and speaking* capability, >>Level A2<< at the British Institute, 2011, Ispra, Italy

-French, *reading* capability, >>approximately A2<<, no exam was passed

-German, *some reading* capability, >>approximately A1-A2<<, no exam was passed

**International research experience**

Long-term

-Japan, one year as *postdoctoral fellow* (supported by the Japan Society for the Promotion of Science) in the Laboratory of Soil Science, Department of Agricultural Chemistry, University of Tokyo, with the research topic „**Small distance variability studies of the soil**

**properties affecting crop and grassland performance on continental Chinese salt-affected soils"** . Supervisor: S. Matsumoto. 1990-91

-USA, 5 months *Fulbright fellowship* in the USDA ARS Salinity Laboratory, Riverside, with the research topic „**Study of the factors of natural salinization and alkalinization with the help of numerical simulation**". Supervisor: D. Suarez. 1998

-Japan, one year as *visiting professor* at the Laboratory of Soil Science, Division of Environmental Science and Technology, University of Kyoto, teaching the subject „**Salt-affected soils**". Tutor: T. Kosaki. 2003-4

-Italy, two years as *scientific support officer* at the European Commission Joint Research Center, Ispra, working on the **European delineation of agricultural areas affected by natural handicaps**. 2009-2011.

Short-term

-Cuba, six times one month stay in *soil and vegetation variability studies of saline grasslands* in Oriente, between 1989-2000

-India, six times 1-4 week stay for studies on *reclamation of salt-affected* soils in 1995-2004

-China, two times one month stay for *studies of abandoned saline lands* in 1992 and 1993

-USA, Spain, Russia, Egypt and Germany 1-4 weeks of *consultation and field trips*.

**Membership in professional organizations**

-International Union of Soil Sciences, Elected *Vice-chairman* of **Commission 3.5. "Soil Degradation Control, Remediation and Reclamation"**, 2002-2006

-International Union of Soil Sciences, Elected *Vice-chairman* of **Working Group "Salt-affected soils"**, 2006-2010

-International Union of Soil Sciences, *Vice-chairman* of **Commission 3.6. "Salt-affected soils"** 2010- present

-*Member* **European Society for Soil Conservation**, 1994-present

-Hungarian Soil Science Society. Elected *Chairman* of the **Section on Soil Technology**, 2000-2005, 2005-present

**Other**

-*Elected member* of the **Committee for Soil Science and Agricultural Chemistry of the Hungarian Academy of Sciences**, 2002-2006, 2006-2011, 2011-present

-*Editorial Board member* of the journal **Arid Land Research and Management**, 2002—2006

-*Editor-in-Chief* of the journal **Arid Land Research and Management**, 2006—present

-*Member* of the **European Soil Bureau Network**, 2008-present

-*Member* of the **Evaluation Committee of the Hungarian National Science Foundation**, 2008-2013

**Research experience and positions**

-*Research Institute of the Debrecen Agricultural University, Karcag, Hungary* (first research associate, finally research fellow)

1981-1984: Soil Chemistry Laboratory in the framework of basic activity:

Development and interpretation of some laboratory methods used for the characterizaton of heavy salt-affected soils. The use of electrochemical and electrokinetic methods in the study of these soils. The study of the correlation of the properties of heavy salt-affected soils.

1985-1988: in a Department of soil improvement, in the framework of research projects financed mostly by state organizations:

The use of nuclear techniques for the characterization of different moisture regulation treatments. The evaluation of depth moisture measuring from the view point of judging different moisture regulation treatments. The study of the effect of different chemical amendments on plant physiological responses and plant composition. The applicability of field porometry in the study of moisture regulation treatments. The planning of controlling systems for the prevention of secondary salinization of lands used for irrigation.

-*Research Institute of Soil Science and Agricultural Chemistry, Budapest, Hungary* (first as research fellow, senior research fellow and research adviser)

1988-2008 and 2011-present: in the Department of Soil Science in the framework of research projects financed by national and foreign organizations:

The interpretation of depth moisture measurings in different management situations and the methodology for their evaluation. The study of the large-scale variability of soil and plant properties on salt-affected areas both under cultivation and in natural state. The study of the use of remote sensing techniques, such as aerial photography and field reflectometry for the characterization, reclamation and utilization of salt-affected soils. The description of the interrelationships and large-scale variability of salt-affected soils for the enhancement of the sampling and mapping of these soils using multivariate statistical methods and different estimation procedures.

- *European Commission Joint Research Center, Ispra, Italy* (scientific support officer)

2009-2011 in the Rural, Water and Ecosystem Resources Unit of the Institute for Environmental and Sustainability.

The task was working on the redefinition of the agricultural areas affected by natural handicaps, formally named as less favoured areas.

**Research Projects {collaborator (c.), co-principal (c. p. i.) or principal investigator (p. i.)}**

-The improvement of the fertility of the heavy salt-affected soils by moisture regulation - "TCP-7" program 1983-7(c.)
-Lysimetric investigations for the improvement of moisture regulation of heavy salt-affected soils - "TCP-7" program 1983-7 (c.)
-Controlling system for the prevention of secondary salinization of irrigated soils - "G-9" program 1987-8 (c.)
-Study of the material balance of protected ecosystems - "G-9" program 1988-9 (c.)
-The applicability of aerial photography for the characterization of protected areas - "G-10" program 1988-1990 (c.)
-The study of the bases of using remote sensing techniques for the characterization of salt-affected soils - joint US NSF and Hungarian Academy of Sciences project 1988-1990 (c.)
-Optimal resolution mapping of salt-affected landscapes - joint US AIDS Program for Scientific and Technical Cooperation and HNSF (Hungarian National Science Foundation) project 1991-4 (c.)
-Impacts of salinization on terrestrial ecosystem and its rehabilitation -joint Japanese and Chinese project 1990-3 (c.)
-Spatial variability of saline soils of Oriente, Cuba - joint Hungarian Academy of Sciences and Cuban Academy of Sciences project 1992-5 (p. i.)
-Agrogeological and pedological modelling of soil salinization in the Great Hungarian Plain - HNSF project 1994-7(c. p. i.)
-The effect of small herbivores in the secondary succession of semi-desertic grasslands - HNSF project 1994-7 (c.)
-Agrogeological and pedological study of areas exposed to pollution - HNSF project 1993-6 (c.)
-Optimalization of the use of amendments in sodic soils - Hungarian Ministry of Agriculture 1996-7 (p. i.)
-Salinization in the Kiskunság region - HNSF project (p. i.)
-Mapping and reclamation of salt-affected soils - Hungarian-Indian Intergovernmental project 1998-9 (p. i.)
-Ecological restoration of oldfields – Hungarian-US Joint Fund. 1997-2000 (c.)
-Surface minerals of salt-affected soils - HNSF project 1998-2001 (c. p. i.)
-Comparison of the effect of roads on habitat fragmentation in salt-affected grasslands with contrasting water regime - Technical and Information Services on National Roads project 1998-9 (p. i.)
-An integrated approach for sustainable management of irrigated lands susceptible to degradation/desertification - European Community project 1998-2000 (c.)
-Mapping of vegetation and soils of saline lands - joint Hungarian Academy of Sciences and Cuban Academy of Sciences project 1998-2000 (p. i.).

-Mechanisms of salt accumulation in relation to the soil – parent material - groundwater system - HNSF project 1999-2002 (c. p. i.)
-Reclamation of salt-affected soils - Hungarian-Egyptian Intergovernmental project 1998-9 (p. i.)
-The use of mycorrhizal fungi in phytoremediation projects - European Community project 2000-2003 (c.)
-Regional study of soil formation and prediction of soil properties with statistical and GIS techniques - HNSF project 2002-2006 (p. i.)
-Market oriented technological development of sustainable agriculture – 2001-2004 (c. p. i.)
- Land quality, land value and sustainable land use among the conditions of European Union –2005-2007 (c.p.i)
- Study of Sodium accumulation from the stand point of salinization with mineralogical model - HNSF project 2002-2005 (c.p.i.)
-Monitoring space-time dynamics of soil chemical properties to improve soil management and environmental quality - Hungarian-Flemish Intergovernmental project 2003-2005 (p. i.)
-Vegetation and salt/water dynamics in flat landscapes: Comparative and complementary studies in Pampa Deprimida (Argentina) and Hortobagy (Hungary) - Hungarian-Argentinan Intergovernmental project 2004-2005 (p. i.)
-Risk Assessment Methodologies for SOIL threats - RAMSOIL - European Community project 2007-2008 (c. p. i.)
-Statistical and hydrological modeling of soil and subsoil salt-accumulation caused by tree plantations established above shallow saline groundwater - HNSF project 2010-2013 (p.i.)
-Testing the common biophysical criteria for delimiting areas with natural handicaps (COM(2009)161) - EC DG AGRI-JRC project 2009-2010 (c.)
-Assessing agricultural vulnerabilities for the design of effective measures for adaptation to climate change in the EU – EC DG AGRI-JRC project 2011 (c.)

**Educational activity**

*Postgraduate courses for Ph. D. students*

-Regular assistant and lecturer for the field trip „*Salt-affected soils*" of the Wageningen Agricultural University between 1986 and 2000.

-Leader of postgradual (PhD) course registered at Agricultural Faculty of Veszprém University, Keszthely on *salt-affected soils*. Years 1997, 1999, 2000, 2002, 2003, 2005, 2007, 2009, 2012. (Course webpage http://members.iif.hu/tot3700/Kurzus.html)

-Teacher of postgradual (PhD) course registered at Department of Etology of L. Eötvös University, Budapest *„The soil as a habitat".* Years 2000, 2001, 2002, 2005, 2007, 2009. (Course webpage at http webpage http://members.iif.hu/tot3700/kurzusok/talajelohelyfelhiv.rtf)

-Member of two PhD Schools of the Agricultural Faculty of Veszprém University, Keszthely as
-Doctoral School of Animal- and Agricultural Environmental Sciences (Core member)
-Doctoral School of Crop and Horticultural Sciences (Academic staff member)

-Academic staff member of the Doctoral School of Environmental Sciences of Szent István University, Gödöllő.
(See at http://www.doktori.hu/index.php?menuid=192&sz_ID=3649&lang=EN)

*Co-tutorship of M. Sc. student:*

-Gabriella BERTA, *The geology of the Nyírőlapos study area.* (in Hungarian) ELTE University, Budapest, 1994

-Attila ZÖLDI, *Study of the relationship between the changes of groundwater and salt accumulation.* (in Hungarian) ELTE University, Budapest, 2001

-Brigitta SZABÓ, *Field determination of soil organic matter with quick methods.* (in Hungarian) SZIE University, Gödöllő, 2005

*Co-tutorship of Postgraduate students:*

-András SZABÓ, *Correlation of spatiotemporal variation of salt accumulation with the number of vegetation zones in Hortobágy grassland.* Soil engineering Postgradual thesis.(in Hungarian) SZIE University, Gödöllő, 2012.

-Kitti BALOG, *Effect of planted lowland forests on the salt and water regime of soil.* Soil engineering Postgradual thesis.(in Hungarian) SZIE University, Gödöllő, 2014.

*Consultancy of Ph. D. students:*

-Sándor KABOS, *Data analysis of environmental information systems: study of data systems with inconsistent spatial and temporal reference*, (in Hungarian) successfully obtained at GATE University, Gödöllő, 1999 (unofficial)

-Erik CZINEGE, *Amplification of the pedological foundation of site-specific nutrient application*, (in Hungarian) successfully obtained at GATE University, Gödöllő, 2000 (unofficial)

-Zsófia BAKACSI, *Agrogeological and pedological evaluations at Apajpuszta. The consequences of supposed groundwater level changes.* (in Hungarian) successfully obtained at ELTE University, Budapest. 2002 (unofficial)

-Ahmed DOUAIK, *Evaluation of the space-time variabilityof soil salinity by statistical, geostatistical and Bayesian maximum entropy methods.* successfully obtained at Faculty of Bioscience Engineering. Gent University, Belgium, 2005. (co-tutor)

-Anna FÜZI, *Interrelations between some halophytes and the rhizosphere microorganisms*, (in Hungarian) successfully obtained at SZIE University, Gödöllő, 2008

-Márta ZALATNAI, *Structure of the borders of lowland grassland associations and their relationship to edaphic background variables*, (in Hungarian) successfully obtained at Szeged University, 2008

-Andrea HUISZ, *The study of the effect of soil cultivation and addition of organic fertilizers on the aggregate stability.* (in Hungarian) successfully obtained at Debrecen University, 2012

**Publications**
(most important publications are downloadable at http://members.iif.hu/tot3700/TiborToth_PubList.htm)

Journal papers


Tóth, T. 1986. *Some methodological problems of neutron moisture measuring.* **DATE Tudományos Közlemények.** 26:253-271. (in Hungarian)

Tóth, T., and J. Lazányi. 1988. *Soil moisture under different field crops.* **Növénytermelés.** 37:559-569. (in Hungarian)

Tóth, T. 1989. *Field study of the factors affecting the water supply of plants in the plant-soil system.* **Agrokémia és Talajtan.** 38:255-260. (in Hungarian)

Tóth, T. 1989. *Correlations between some chemical, physical and hydrophysical properties of meadow solonetz soils.* **DATE Tudományos Közlemények.** 28:561-575. (in Hungarian)

Kertész, M., K. Rajkai, and T. Tóth. 1990. *The use of aerial photographs in the study of protected lands.* **Környezetgazdálkodási kutatások.** 3:62-100. (in Hungarian)

Tóth, T., and G. Chrappán. 1990. *Water use of different sorghum and Sudangrass genotypes.* **Sorghum Newsletter.** 31:53.

Tóth, T., F. Csillag, L. L. Biehl, and E. Michéli. 1991. *Characterization of semi-vegetated salt-affected soils by means of field remote sensing.* **Remote Sensing of Environment.** 37:167-180.

Tóth, T., and M. Kertész. 1993. *Mapping the degradation of solonetzic grassland.* **Agrokémia és Talajtan.** 42:43-54.

Tóth, T., and K. Rajkai. 1994. *Soil and plant correlations in a solonetzic grassland.* **Soil Science.** 157:253-262.

Kertész, M., and T. Tóth. 1994. *Soil survey based on sampling scheme adjusted to local heterogeneity.* **Agrokémia és Talajtan.** 43:113-132.

Tóth, T., S. Matsumoto, R. Mao, and Y. Yin. 1994. *Plant cover as predictor variable of salinity and alkalinity of abandoned saline soils of the Huang-Huai-Hai Plain, China.* **Agrokémia és Talajtan.** 43:175-195.

Csillag, J., T. Tóth, and M. Rédly. 1995. *Relationships between soil solution composition and soil water content of Hungarian salt-affected soils.* **Arid Soil Research and Rehabilitation.** 9:245-260.

Tóth, T., S. Matsumoto, R. Mao, and Y. Yin. 1995. *Precision of predicting soil salinity based on vegetation categories of abandoned lands.* **Soil Science.** 160. 218-231.

Tóth, T., and M. Kertész. 1996. *Application of soil-vegetation correlation to optimal resolution mapping of solonetzic rangeland.* **Arid Soil Research and Rehabilitation.** 10:1-12.

Tóth, T., M. Kertész, C. Guerra, J. Labrada Labrada, B. Pérez Machado, P. Castillo Fonseca, and M. Nieto Martínez. 1997. *Plant composition of a pasture as a predictor of soil salinity.* **Revista de Biologia Tropical**. 45: 1385-1393.

Tóth, T., M. Kertész, and L. Pásztor. 1998. *New approaches in salinity/sodicity mapping in Hungary.* **Agrokémia és Talajtan.** 47:76-86.

Tóth, T., and L. Kuti. 1999. *Geological factors affecting the salinization of the Nyírőlapos Sample Area (Hortobágy, Hungary). I. General geological characterization, calcite concentration and pH values of subsurface layers.* **Agrokémia és Talajtan.** 48:431-444. (in Hungarian)

Tóth, T., and L. Kuti. 1999. *Geological factors affecting the salinization of the Nyírőlapos Sample Area (Hortobágy, Hungary). II. Multiple relations and the prediction of surface soil salinity.* **Agrokémia és Talajtan.** 48:445-457. (in Hungarian)

Kuti, L., T. Tóth, L. Pásztor, and U. Fügedi. 1999. *Relationship between the data of agrogeological maps and the extent of salt-affected soils on the Great Hungarian Plain.* **Agrokémia és Talajtan.**48:501-516. (in Hungarian)

Tóth, T., M. Kertész, and L. Pásztor. 2000. *Method for the application of gypsum to sodic soils using GIS.* **Agrokémia és Talajtan.** 49:55-64. (in Hungarian)

Török, K., T. Szili-Kovács, M. Halassy, T. Tóth, Zs. Hayek, M. W. Paschke, and L. J. Wardell. 2000. *Immobilization of soil nitrogen as a possible method for the restoration of sandy grassland* . **Applied Vegetation Science.** 3: 7-24.

Szili-Kovács, T., T. Tóth, M. Halassy, and K. Török. 2000. *Restoration of sandy grasslands through the immobilization of soil nitrogen. 1. Laboratory incubation experiments.* **Agrokémia és Talajtan.** 49:479-490. (in Hungarian)

Szili-Kovács, T., T. Tóth, K. Török, and M. Halassy. 2000. *Restoration of sandy grasslands through the immobilization of soil nitrogen. 2. Field experiments.* **Agrokémia és Talajtan.** 49:479-490. (in Hungarian)

Füzy, A., I. Vörös, T. Takács, T. Tóth, and B. Biró. 2001. *Colonisation of arbuscular mycorrhizal fungi on Festuca pseudiva and Matricaria chamomilla in two Hungarian salt-affected soils.* In: **Scientific Bulletin of University of North University of Baie Mare (Romania) Serie C, Volume XV. Fascicle: Mechanics, Tribology. Technology of Machine Manufacturing.** Part IV.109-117. International Multidisciplinary Conference. May 25-26. 2001.

Tóth, T., and Gy. Várallyay. 2001. *Variability of a the soil of a study site according to the factors of salt accumulation.* **Agrokémia és Talajtan.** 50:19-34. (in Hungarian)

Tóth, T., L. Kuti, I. Fórizs, and S. Kabos. 2001. *Changes in the factors of soil salt accumation in the study site "Nyírőlapos" of the region Hortobágy, Hungary.* **Agrokémia és Talajtan**.50:409-426. (in Hungarian)

Tóth, T., L. Kuti, S. Kabos, and L. Pásztor. 2001. *Use of digitalized hydrogeological maps for evaluation of salt-affected soils of large areas.* **Arid Land Research and Management.** 15:329-346.

Tóth, T., S. Kabos, L. Pásztor, and L. Kuti. 2002. *Statistical prediction of the presence of salt-affected soils by using digitalized hydrogeological maps.* **Arid Land Research and Management.** 16:55-68.

Tóth, T., and G. Jozefaciuk. 2002. *Physicochemical properties of a solonetzic toposequence*. **Geoderma** 106: 137-159.

Joshi, D. C., T. Tóth, and D. Sári. 2002. *Spectral reflectance characteristics of Na-carbonate irrigated arid secondary sodic soils.* **Arid Land Research and Management.** 16:161-176.

Tóth, T., and L. Kuti. 2002. *Numerical simulation versus repeated field instrumental measurements: a case study of monitoring salinity status in a native sodic grassland with shallow groundwater.* **Agrokémia és Talajtan.** 51: 243-252.

Kuti, L., T. Tóth, A. Zöld, and I. Szentpétery. 2002. *The fluctuation of groundwater level, and its consequences in the soil - parent material - groundwater system of a sodic grassland.* **Agrokémia és Talajtan**. 51: 253-262.

Landwehr, M., U. Hildebrandt, P. Wilde, K. Nawrath, T. Tóth, B. Biró, and H. Bothe. 2002. *The arbuscular mycorrhizal fungus Glomus geosporum in European saline, sodic and gypsum soils.* **Mycorrhiza** 12: 199-211.

Joshi, D. C., T. Tóth, and D. Sári. 2002. *Visual descrimination of surface features of salt affected soils using satellite images in arid region of Rajasthan (India).* **Indian Journal of Remote Sensing.** 30: 33-38.

Bába, K., D. Sári, and T. Tóth. 2003. *Clam associations on different substrates. The Heavy metal pollution in 2000.* **Soosiana.** 23: 37-48. (in Hungarian)

Tóth, T., and B. Szabó. 2003. *Field determination of soil organic matter with quick methods.* **Agrokémia és Talajtan** 52: 409-508. (in Hungarian)

Rédei, T., Z. Botta-Dukát, J. Csiky, A. Kun, and T. Tóth. 2003. *On the possible role of local effects on the species richness of acidic and calcareous rock grasslands in northern Hungary.* **Folia Geobotanica** 38: 453–467.

Kuti, L., T. Tóth, J. Kalmár, and P. Kovács-Pálffy. 2003. *Mineral composition of salt-affected soils and recent mineral formation at Apajpuszta and Zabszék.* **Agrokémia és Talajtan** 52: 275-292. (in Hungarian)

Tóth, T., L. Kuti, and U. Fügedi. 2003. *Monthly studies at Zabszék saline lake. Temporal changes in lake-water, groundwater, soil, vegetation.* **Természetvédelmi Közlemények.** 10: 191-206. (in Hungarian)

Füzy, A., B. Bíró, and T. Tóth. 2003. *Relationship between plants, microbes and several soil properties on Hungarian salt-affected soils.* **Természetvédelmi Közlemények.** 10: 207-216. (in Hungarian)

Gonzalez-Nunez, LM., T. Tóth, and D. Garcia. 2004. *Integrated management for the sustainable use of salt-affected soils in Cuba.* **Universidad y Ciencia**. 20(40) 85-102.

Fórizs, I., L. Kuti, and T. Tóth. 2004. *Isotope hydrological study of soil salinization in a sodic grassland on the Hortobágy, Hungary.* **Berichte des Institutes für Erdwissenschaften Karl-Franzens-Universität Graz** 8:30-34.

Douaik, A., M. Van Meirvenne., T. Tóth, and M. Serre. 2004. *Space-time mapping of soil salinity using probabilistic Bayesian Maximum Entropy.* **Stochastic Environmental Research and Risk Assessment.** 18:219-227.

Tóth, T., I. Fórizs, L. Kuti, and J. L. Wardell. 2005. *Data on the elements of carbon cycle in a Solonetz and Solonchak soil.* **Cereal Research Communications.** 33: (No.1) 133-136.

Kuti, L., B. Kerék, and T. Tóth. 2005. *Agrogeological characterisation of the plain and hilly regions of Hungary.* **Tákökológiai Lapok**. 3: 83-97. (in Hungarian)

Douaik, A., M. Van Meirvenne, and T. Tóth. 2005. *Soil salinity mapping using spatio-temporal kriging and bayesian maximum entropy with interval soft data.* **Geoderma.** 128: 234– 248.

Kun, A., T. Tóth, B. Szabó, and J. Koncz. 2005. *The dolomite phenomenon: Relations among rocks, soils and vegetation. (Rock, soil and plant analysis on the limestones*

*and dolomite grasslands in Hungary).* **Botanikai Közlemények.** 92. (1-2) 1-25. (in Hungarian)

Douaik, A., M. Van Meirvenne, and T. Tóth. 2006. *Temporal stability of spatial patterns of soil salinity determined from laboratory and field electrical conductivity.* **Arid Land Research and Management.** 20: 1-13.

Ristolainen, A., T. Tóth, and Cs. Farkas. 2006. *Measurement of soil electrical properties for the characterization of the conditions of food chain element transport in soils. Part I. Instrumental comparison.* **Cereal Research Communications.** 34: (No.1) 159-162.

Tóth, T., A. Ristolainen, V. Nagy, D. Kovács, and Cs. Farkas. 2006. *Measurement of soil electrical properties for the characterization of the conditions of food chain element transport in soils. Part II. Classification of management units.* **Cereal Research Communications.** 34: (No.1) 163-166.

Huisz, A., S. Sleutel, T. Tóth, G. Hofman, S. De Neve, and T. Németh. 2006. *Effect of cultivation systems on the distribution of soil organic matter in different fractions.* **Cereal Research Communications.** 34: (No.1) 207-210.

Kovács, D., T. Tóth, and P. Marth. 2006. *Study of food chain element transport analogy: salinity/sodicity/alkalinity of Hungarian soils during a decade as shown by the national soil monitoring network.* **Cereal Research Communications.** 34: (No.1) 231-234.

Tóth, G., L. Montanarella, Gy. Várallyay, T. Tóth, and N. Filippi. 2006. *Strengthening optimal food chain element transportby minimizing soil degradation. Recommendations for soil threats identification on different scales in the European Union.* **Cereal Research Communications.** 34: (No.1) 335-338.

Tóth, T., T. Németh, A. Bidló, F. Dér, M. Fekete, T. Fábián, Z. Gaál, B. Heil, T. Hermann, E. Horváth, G.Kovács, A. Makó, F. Máté, K. Mészáros, Z. Patocskai, F. Speiser, I. Szűcs, G. Tóth, Gy. Várallyay, J. Vass, and Sz. Vinogradov. 2006. *The optimal strategy to improve food chain element cycles – Development of an Internet based soil bonitation system powered by a GIS of 1:10 000 soil type maps.* **Cereal Research Communications.** 34: (No.1) 841-844.

Tóth, T., and G. Szendrei. 2006. *Types and distribution of salt affected soils in Hungary, and the characterisation of the processes of salt accumulation.* **Topographia Mineralogica Hungariae.** IX: 7-20. (in Hungarian)

Szendrei, G., T. Tóth, P. Kovács Pálffy, I. Sajó, S. Szakáll, and Á. Kovács. 2006. *Occurrences of salt efflorescences on soil surfaces in Hungary.* **Topographia Mineralogica Hungariae.** IX: 61-78. (in Hungarian)

Tóth, T., and G. Szendrei. 2006. *Relationship between salt efflorescences and environmental conditions with special emphasis on edaphological conditions.* **Topographia Mineralogica Hungariae.** IX. 79-90. (in Hungarian)

Kovács, D., T. Tóth and P. Marth. 2006. *Soil salinity between 1992 and 2000 in Hungary.* **Agrokémia és Talajtan.** 55: 89-98.

Tóth, T., T. Németh, T. Fábián, T. Hermann, E. Horváth, Z. Patocskai, F. Speiser, Sz.Vinogradov, and G. Tóth. 2006. *Internet-based land valuation system powered by a GIS of 1:10,000 soil maps.* **Agrokémia és Talajtan.** 55: 109-116.

Füzy, A., T. Tóth, and B. Biró. 2006. *Seasonal dynamics of mycorrhizal colonization in the rhizosphere of some dominant halophytes.* **Agrokémia és Talajtan.** 55: 231-240.

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**Community service**

-1983-1988 *Member of the Executive Comittee* of the **Hungarian Red Cross** organization at the Research Institute of the Debrecen Agricultural University, Karcag.

-1996-2009 *Voluntary Soil Instructor* at the **Nature Protection Camp for Students** in Hortobágy National Park.

-1996-8 Occasional *voluntary guide* for **elementary school hiking tours** of 1-2 days

-1991-present Occasional *voluntary disc jockey* in public latin dance evenings

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