Curriculum Vitae

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LIST OF PEER REVIEWED PUBLICATIONS IN SCIENTIFIC JOURNALS

1. Rékási M., Mazsu N., Draskovits E., Bernhardt B., Szabó A., Rivier P-A., Farkas Cs., Borsányi B., Pirkó B., Molnár S., Kátay Gy., and Uzinger N. 2019. Comparing the agrochemical properties of compost and vermicomposts produced from municipal sewage sludge digestate. Bioresource Technology, 291, 121-861.
2. Horel Á., Tóth E., Gelybó Gy., Dencső M. and Farkas Cs. 2019. Biochar amendment affects soil water and CO2 regime during capsicum annuum plant growth. Agronomy, 9(2), 58.
3. Makó A., Tóth B., Hernádi H., Farkas Cs. and Marth P. 2019. Introduction of the Hungarian Detailed Soil Hydrophysical Database (MARTHA) Citation: Bulletin of Geography. Physical Geography Series, 16.
4. Koestel, J., Dathe, A., Skaggs, T. H., Klakegg, O., Ahmad, M. A., Babko, M., Gimenez D., Farkas Cs., Nemes A. and Jarvis, N. 2018. Estimating the Permeability of Naturally Structured Soil From Percolation Theory and Pore Space Characteristics Imaged by X-Ray. Water Resources Research, 54(11), 9255-9263. https://doi.org/10.1029/2018WR023609
5. Gelybó Gy., Tóth E., Farkas Cs., Horel Á., Kása I. and Bakacsi Zs. 2018. Potential impacts of climate change on soil properties. Agrokémia és Talajtan 67(1):121-141.
6. Thodsen H., Farkas Cs., Chormanski J., Trolle D., Blicher-Mathiesen G., Grant R., Engebretsen A.M., Kardel I. and Andersen H.E. 2017. Modelling nutrient load changes from fertilizer application scenarios in six catchments around the Baltic sea. Agriculture, Volume 7(5).
7. Horel A., Bakacsi Zs.,Dencső M., Farkas Cs., Gelybó Gy., Kása I., Tóth E., Molnár S. and Koós S. 2017. Eső hatása a Csorsza-patak vízgyűjtőjének téli hidrológiai folyamataira. Agrokémia és Talajtan, Volume 66 (1):61-77. ISSN 0002-1873
8. Potyó I., Kása I., Farkas Cs., Gelybó Gy., Bakacsi Zs., Dencső M., Tóth E. and Horel Á. 2017. Lebegtetett hordalékmérési módszerek összehasonlító vizsgálata balatoni részvízgyűjtőkön. Agrokémia és Talajtan, Volume 66(2), https://doi.org/10.1556/0088.2017.66.2.2
9. Kása I., Gelybó Gy., Horel Á., Bakacsi Zs., Tóth E., Koós S., Dencső M., Deelstra J., Molnár S. and Farkas Cs. 2017. Evaluation of three semi-distributed hydrological models in simulating discharge from a small forest and arable dominated catchment. Biologia, Volume 72(9):1002-1009.
10. Doulgeris C., Georgiou P., Apostolakis A., Papadimos D., Zervas D., Petriki O., Bobori D., Papamichail D., Antonopoulos V., Farkas Cs., and Stalnacke P. 2017. Assessment of the environmentally minimum lake level based on morphological features. European Water, Volume 58:197-202.
11. Dencső M., Tóth E., Gelybó Gy., Kása I., Horel Á., Rékási M., Takács T., Farkas Cs., Potyó I., and Uzinger N. 2017. Changes in the moisture content and respiration of a calcareous sandy soil after combined treatment with biochar and compost or mineral fertiliser (in Hungarian; Komposzt illetve műtrágya bioszén kezeléssel mutatott együttes hatásának vizsgálata karbonátos homoktalaj nedvességtartalmára és talajlégzésére). Agrokémia és Talajtan, Volum 66(1) 79-93.
12. Farkas Cs., Kværnø S., Engebretsen A.M., Barneveld R. and Deelstra J. 2016. Applying profile- and catchment-based mathematical models for evaluating the run-off from a Nordic catchment. Journal of Hydrology and Hydromechanics, Volume 64(3):218-225
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14. Horel Á., Tóth E., Gelybó Gy., Kása I., Bakacsi Zs. and Farkas Cs. 2015. Effects of Land Use and Management on Soil Hydraulic Properties. Open Geoscience/Central European Journal of Geosciences, Volume: 7(1): 742-754.
15. Csorba Sz., Raveloson A., Tóth E., Nagy V. and Farkas Cs. 2014. Modelling soil water content variations under drought stress on soil column cropped with winter wheat. Journal of Hydrology and Hydromechanics, 62:269-276.
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17. Balashov E., Buchkina N., Rizhiya E. and Farkas Cs. 2014. Field validation of DNDC and SWAP models for temperature and water content of loamy and sandy loam Spodosols. International Agrophysics, 28:133-142.
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23. Csorba Sz., Farkas Cs., Birkás M. 2012. An analysis of the water retention capacity function of a soil of a heterogeneous pore structure in soil conserving tillage systems. Növénytermelés, 61:(Suppl):251-254.
24. Csorba Sz., Farkas Cs., Birkás M. 2011. Kétpórusú víztartóképesség-függvény alkalmazása a műveléshatás kimutatásában. Agrokémia és Talajtan, 60:(2) 335-342.
25. Farkas Cs., Hernádi H., Makó A., Máté F. 2011. Estimating climate change effects on soil water balance elements of Hungarian Calcic Chernozem soils. Agrokémia és Talajtan, Volume 60:4-56.
26. Tóth E, and Farkas Cs. 2010. Effects of regular soil disturbance on soil respiration in a peach plantation. „Klíma-21" Füzetek, 62:29-38. (in Hungarian)
27. Farkas Cs, and Hagyó A. 2010. Applicability of profile and catchment scale simulation models for estimating the effects of climate change on water regime. „Klíma-21" Füzetek, 62:59-74. (in Hungarian)
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32. Hernádi H, Farkas* Cs, Makó A, Máté F. 2009. Climate sensitivity of soil water regime of different Hungarian Chernozem soil subtypes. Biologia, 64(3):624-628.
33. Tóth E, Koós S, Farkas Cs. 2009. Soil carbon dioxide efflux determined from large undisturbed soil cores collected in different soil management systems. Biologia, 64(3):643-647.

34. Ristolainen A, Farkas Cs, Tóth T. 2009. Prediction of Soil Properties with Field Geo-electrical Probes. Communications in Soil Science and Plant Analysis, 40:555-565.
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36. Farkas Cs, Hernádi H, Makó A, Máté F. 2009. Climate sensitivity of different Calcic Chernozem soil subtypes. „Klíma-21" füzetek, 57:15-30. (in Hungarian)
37. Birkás M, Stingli A, Farkas Cs, and Bottlik L. 2009. Relationship between tillage induced soil compaction and soil degradation under unfavourable climate conditions. Növénytermelés, 58:5-26. (in Hungarian)
38. Tóth E, Farkas Cs, Koós S, and Németh T. 2009. Effects of soil tillage on soil carbon dioxide efflux A művelés hatása a talaj szén-dioxid kibocsátására I. Laboratóriumi módszertan tesztelése bolygatatlan talajoszlopokon. Agrokémia és Talajtan 58(2):215-226. (in Hungarian)
39. Farkas Cs, Hernádi H, Makó A, Máté F. 2009. A talajvízmérleg klímaérzékenysé gének vizsgálata mészlepedékes csernozjom talajokon. (Climate sensitivity of the soil water regime on pseudomyceliar chernozem soils). Agrokémia és Talajtan, 58(2):197-214. (in Hungarian)
40. Koós S, Ristolainen A, Farkas Cs. 2009. Evaluating the effect of abiotic mechanical stress on spatial distribution of soil hydraulic properties. Cereal Research Communications, 37:383-386.
41. Hernádi H., Farkas Cs., Makó A. and Máté F. 2008. Evaluating the climate sensitivity of Hungarian Chernozem soils using the MARTHA data base and the SWAP simulation model. Talajvédelem. Special referred issue of the Hungarian Society for Soil Protection pp. 105-114. (in Hungarian)
42. Farkas Cs., Hagyó A., Horváth E. and Várallyay Gy. 2008. Studying the water regime of Chernozem soils in the context of predicted climate change scenarios. „Klíma-21" Füzetek. (in Hungarian – in print)
43. Tóth E., Koós S. and Farkas Cs. 2008. Studying the relationship between the carbon-dioxide emission and water content of a Mollisol in different soil management systems. Talajvédelem. Special referred issue of the Hungarian Society for Protection pp. 175-184. (in Hungarian)
44. Bakacsi Zs., Farkas Cs., Pásztor L. and Szabó J. 2008. Regionalization of soil hydraulic parameters in the Bodrog Interfluve region. Talajvédelem. Special referred issue of the Hungarian Society for Protection pp. 33-42. (in Hungarian)
45. Lukács A., Pártay G. and Farkas Cs. 2008. Studying the soil-water-plant relationships on winter wheat grown in undisturbed soil columns. Cer. Res. Com. Vol.36. S479-S482.
46. Tóth E., Farkas Cs., Hagyó A., Nagy V. and Stekauerová, V., 2008: Assessment of spatial variation of the soil water regime in the soil-plant system. Cer. Res. Com. Vol.36. S307-S310.
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48. Farkas Cs., Hagyó A., Horváth E. and Várallyay Gy., 2008: A Chernozem Soil Water Regime Response to Predicted Climate Change Scenarios. Soil and Water Research, Vol.3. S58-S67.
49. Lukács A., Pártay G., Németh T., Csorba Sz. and Farkas Cs., 2008: Drought stress tolerance of two wheat genotypes. Soil and Water Research, Vol.3. S95-S104.
50. Farkas, Cs., Ristolainen, A., Tóth, T., Koós, S. and László, P., 2007: Evaluating the sustainability of different soil tillage practices using field measured electrical properties. Cereal Research Communications, Vol. 35. No. 2. pp. 377-380.
51. Hagyó A., Farkas Cs., Lukács A., Csorba Sz. and Németh T., 2007: Water cycle of different wheat genotypes under different water stresses. Cer. Res. Comm., Vol. 35. No. 2. pp. 437-440.
52. Horváth E., Farkas Cs., Flachner Zs., Tóth E. and Bakacsi Zs., 2007: Analysing soil hydraulic properties in the Bodrogköz Region for supporting sustainable land use. Cer. Res. Comm., Vol. 35. No. 2. pp. 485-488.
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54. Farkas Cs., Ristolainen A. and Alakukku, L., 2006: Spatial variation of soil properties affecting yield. Cer. Res. Comm., Vol. 34. No. 1. pp. 155-158.
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57. Farkas Cs., Hagyó A., Tóth E., Szabó J. and Németh T., 2005: Evaluation of the soil water regime of ain irrigated maize field. Acta Agronomica Hungarica, Vol. 53. pp.161-175.
58. Farkas Cs., Randriamampianina R. and Majercak, J., 2005: Modelling impacts of different climate change scenarios on soil water regime of a Mollisol. Cer. Res. Comm., Vol. 33. No. 1. pp. 185-188.
59. Tóth E., Koós S., Farkas Cs. and Németh T., 2005: Carbon-dioxide emission from Calcareous Chernozem soil. Cer. Res. Comm., Vol. 33. No. 1. pp. 129-132.
60. Farkas Cs, Tóth E. and Várallyay Gy., 2004: Physical properties of a tilled soil. „Agro-21" Füzetek, Vol. 37. pp.111-122. (in Hungarian)
61. Stekauerova V, Sutor J. and Farkas Cs., 2003: Evaluation of soil pedotransfer functions for soils of the Csallóköz and Szigetköz Regions. Acta Agronomica Hungarica, Vol. 51(3). pp. 355-367
62. Farkas, Cs. and Rajkai, K., 2002: Moisture regime with respect to spatial variability of soil hydrophysical properties. Agrokémia és Talajtan, Vol. 51, No. 1-2., pp. 7-16.
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65. Farkas Cs., Gyuricza Cs. és László P., 1999: Studying certain soil physical properties in a long-term field experiment on a brown forest soil. Növénytermelés, Vol. 48., pp.323-336. (in Hungarian)
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67. Gyuricza Cs., Farkas Cs., Baráth Cs.-né, Birkás M. és Murányi A. 1998: Studying the penetration resistance of a brown forest soil under long-term tillage. Növénytermelés, 47:199-212. (in Hungarian)
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LIST OF PEER REVIEWED PUBLICATIONS AS BOOK CHAPTERS

1. Greipsland I., Borch H., Engebretsen A.M., Farkas Cs., Eggestad H. and Krogstad T. 2013. Testing mathematical models for simulating nutrients in the Skuterud catchment. (in Norwegian). Aas Bioforsk Publications, Volume 8(57), 36p. ISBN 978-82-17-01079-1.
2. Kværnø S.H., Farkas Cs., Stenrød M., Eklo O.M., Nemes A., Stolte J., Deelstra J., Engebretsen A. 2013. Model simulations for scenario analyses and risk assessment at the catchment scale. In: Bechmann, M. and Deelstra, J. (eds.): Agriculture and Environment – Long-term monitoring in Norway Akademika Publishing, Trondheim, ISBN: 978-82-321-0014-9.
3. Deelstra J., Farkas Cs., Engebretsen A., Kværnø S., Beldring S., Olszewska, A. and Nesheim L. 2010. Can we simulate runoff from agriculture-dominated watershed? Comparison of the DrainMod, SWAT, HBV, COUP

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4. Farkas Cs, Alberti G, Balogh J, Barcza Z, Birkás M, Czóbel Sz, Davis KJ, Führer E, Gelybó Gy, Grosz B, Kljun N, Koós S, Machon A, Marjanović H, Nagy Z, Peresotti A, Pintér K, Tóth E, and Horváth L. 2010. Measurements and estimations of biosphere-atmosphere exchange of greenhouse gases - Methodologies. In: Atmospheric Greenhouse Gases: The Hungarian Perspective (ed: Haszpra L.). Dordrecht - Heidelberg - London - New York: Springer, 65-90.
5. Tóth E, Barcza Z, Birkás M, Gelybó Gy, Zsembeli J, Bottlik L, Davis KJ, Haszpra L, Kern A, Kljun N, Koós S, Kovács Gy, Stingli A, Farkas* Cs. 2010. Measurements and estimations of biosphere-atmosphere exchange of greenhouse gases - Arable lands. In: Atmospheric Greenhouse Gases: The Hungarian Perspective (ed: Haszpra L.). Dordrecht - Heidelberg - London - New York: Springer, 157-197.
6. Borch H., Farkas Cs., Øgaard A.F. and Bechmann M. 2010. The AGRICAT-P Model – a tool for modelling the mitigation effects of agricultural runoff in Norwegian catchments. Ås: Bioforsk Publications 5(9). (ISBN 978-82-17-00608-4) 56p.
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8. Várallyay Gy, and Farkas Cs. 2008. Expected effects of climate change on Hungarian soils. Csete L. & Harnos Zs. (editors): Climate Change: Environment – Risk - Society. Szaktudás kiadó, Budapest. pp. 89-127. (in Hungarian)
9. Farkas Cs, Rajkai K., Kertész M., Bakacsi Zs., and van Meirvenne M. 2008. Spatial variability of soil hydro-physical properties. A case-study in Herceghalom, Hungary. In: P.V. Krasilnikov, F. Carré and L. Montanarella (Eds.): Soil geography and geostatistics– Concepts and applications. JRC Scientific and Technical Reports, 2008. pp. 107-129.
   Available at: http://eusoils.jrc.it/ESDB_Archive/eusoils_docs/other/EUR23290.pdf
10. Farkas Cs, and Flachner Zs. 2008. Characterising the soil water regime in the Bodrogköz Region using large-scale soil physical data base. In: Tuba Z. (ed.) Bodrogköz: The Landscape Monograph of the Hungarian part of the Bodrogköz Region. Gödöllő-Sárospatak: Lorántffy Zsuzsanna Szellemében Alapítvány, 147-158. (in Hungarian)
11. Farkas Cs, Rajkai K., Kertész M., and van Meirvenne M. 2007. Spatial variability of soil hydro-physical properties. The Herceghalom case study. In: Geostatistics and soil geography. (Ed. P. V. Krasilnikov). Nauka, Moscow, 2007. pp. 43-66. (in Russian with English summary)
12. Rátonyi T., Farkas Cs., Gyuricza Cs., Jakab P., Juhász Cs. and Szöllősi I.: 2006. The role of hydrological factors in crop production. In: Birkás M. (ed.): “Soil use and management”. Mezőgazda Publisher, Budapest, pp. 30-54. (In Hungarian)
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14. Farkas Cs., 2004. A művelés és a talajállapot hatása a talaj nedvességforgalmára (Effect of soil tillage on soil properties and soil water regime). In: Birkás M, Gyuricza Cs. (eds.): “Soil management – Tillage effects

– Soil water". Quality Press Nyomda és Kiadó Kft., Szent István University, Gödöllő, Hungary, pp. 61-81. (In Hungarian with English summary)

15. Korsunskaia L.P. and Farkas Cs., 2004. Seasonal variability of soil water retention curves. In: Józefaciuk G. (ed.): Physics, chemistry and biogeochemistry in soil and plant studies. Multi-Authors Work, Institute of Agrophysics, Centre of Excellence for Applied Physics in Sustainable Agriculture AGROPHYSICS, Lublin, Poland, pp. 78-82.
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