

# PUBLICATIONS



## REVIEWS

1. **Borriss R (2015):** Towards a new generation of commercial microbial disease control and plant growth promotion products. In Lugtenberg B. (ed.) Principles of Plant Microbe Interactions. Springer International Publishing, Switzerland, pp.329-337
2. **Borriss R (2015):** Bacillus, a plant beneficial bacterium. In Lugtenberg B. (ed.) Principles of Plant Microbe Interactions. Springer International Publishing, Switzerland, pp.379-389
3. **Halpern M, Bar-Tal A, Ofeky M, Minz D, Müller T, Yermiyahu U (2015)** The Use of biostimulants for enhancing nutrient uptake. *Advances in Agronomy* 130-141-1748/MMBR.00050-14.
4. **Hardoim PR, van Overbeek LS, Berg G, Pirttilä AM, Compante S, Campisano A, Döring M, Sessitsch A (2015)** The Hidden world within plants: Ecological and evolutionary considerations for defining functioning of microbial endophytes. *Microbiol Mol Biol Rev.* 2015 September ; 79(3): 293–320. doi:10.112
5. **Holečková Z., Kulhánek, M., Balík, (2017):** Microorganisms in Plant Protection (the review. *Int. J. Plant Sci* (in press)
6. **Holečková Z., Kulhánek M., Balík J. (2017):** Use of active microorganisms in crop production - a review. Submitted to *Agronomy Journal*
7. **Matics H., Biró B. (2015):** History of soil fertility enhancement with inoculation methods. (A termékenységet javító baktériumos talajoltás történeti áttekintése). *J. Central European Agriculture*, 16 (2): .231-248 DOI: [10.5513/JCEA01/16.2.1614](https://doi.org/10.5513/JCEA01/16.2.1614)
8. **Nkebiwe, P.M., Weinmann, M., Bar-Tal, A., Müller, T. (2016).** Fertilizer placement to improve crop nutrient acquisition and yield: a review and meta-analysis. *Field Crops Research* 196:389-401
9. **Van Oosten, M.J., Pepe, O., De Pascale, S., Silletti, S., Maggio, A. (2017):** The role of biostimulants and bioeffectors as alleviators of abiotic stress in crop plants. *Chemical and Biological Technologies in Agriculture*, 4, 1, Article number 5.
10. **van Overbeek LS, Saikkonen K. (2016)** Impact of Bacterial-Fungal Interactions on the Colonization of the Endosphere. *Trends Plant Sci.* 2016 Mar;21(3):230-42. doi: 10.1016/j.tplants.2016.01.003.
11. **Zaytseva O, Neumann G. (2016):** Carbon nanomaterials: production, impact on plant development, agricultural and environmental applications” in *Chemical and Biological Technologies in Agriculture*, 2016. DOI: 10.1186/s40538-016-0070-8

- 12. Zaytseva O. and Neumann G. (2018):** Penetration and Accumulation of Carbon-Based Nanoparticles in Plants. In: Phytotoxicity of Nanoparticles. Eds. Faisal, M., Saquib, Q., Alatar, A.A., Al-Khedhairi, A.A, Springer International Publishing, Springer Nature Switzerland AG, DOI 10.1007/978-3-319-76708-6 ISBN 978-3-319-76707-9, pp.103-118.
- 13. Weinmann M. and Neumann G. (2020):** Bio-effectors to optimize the mineral nutrition of crop plants. In: Rengel Z. (ed.). Achieving Sustainable Crop Nutrition. Burleigh Dodds Science Publishing, Cambridge, UK, 2020, ISBN: 978 1 78676 312 9.

## Peer-reviewed scientific Publications

### - 2013

1. **Akter Z., Weinmann M., Neumann G., Römheld V. (2013)** An *in-vitro* .screening method to study the activity potential of biofertilizers based on Trichoderma and Bacillus sp. J. Plant Nutr. 36: 1439-1452.
2. **Carvalhais LC, Dennis PG, Fan B, Fedoseyenko D, Kierul K, et al. (2013)** Linking Plant Nutritional Status to Plant-Microbe Interactions. PLoS ONE 8(7): e68555. doi:10.1371/journal.pone.0068555
3. **Dietel K, Beator B, Budiharjo A, Fan B, Borriss R (2013)** Bacterial traits involved in colonization of *Arabidopsis thaliana* roots by Bacillus amyloliquefaciens FZB42. Plant Pathol. J. 29(1) : 59-66  
<http://dx.doi.org/10.5423/PPJ.OA.10.2012.0155> pISSN 1598-2254 eISSN 2093-9280
4. **Imran M, Asim M,**
5. **Römheld V, Neumann G (2013)** Nutrient seed priming improves seedling development and increases grain yield of maize exposed to low root zone temperatures during early growth. Europ. J. Agron.49: 141-148.
6. **Niu B, Vater J, Rueckert C, Blom J, Lehmann M, Ru JJ, Chen XH, Wang Q, Borriss R (2013)** Polymyxin P is the active principle in suppressing phytopathogenic Erwinia spp. by the biocontrol rhizobacterium Paenibacillus polymyxa M-1. BMC Microbiology 13:137. doi:10.1186/1471-2180-13-137

### - 2014

7. **Budiharjo A, Chowdhury SP, Dietel K, Beator B, Dolgova O, et al. (2014)** Transposon Mutagenesis of the Plant-Associated Bacillus amyloliquefaciens ssp. plantarum FZB42 Revealed That the nfrA and RBAM17410 Genes Are Involved in Plant-Microbe-Interactions. PLoS ONE 9(5): e98267. doi:10.1371/journal.pone. 0098267
8. **Dudás A., Gáspár T., Kotroczó Z., Győri A., Wass-Matics H., Keöd Á., Végvári G., Biró B. (2014)** Egy spórás bacillus oltóanyag hatása a paradicsom

- növekedésére és terméshozamára. (Sporeforming bacillus inoculums affecting tomato growth and yield). *Economica*, 2014(3): 169-174.
9. **Gáspár T., Dudás A., Kotroczó Z., Wass-Matics H., Trugly B., Győri A., Szalai Z., Biró B. (2014)** Bioeffektor talajoltóanyagok alkalmazási módszerfejlesztése tenyészedény-kísérletben paradicsommal. (Development of application method of bioeffector inoculums application in pot-experiment). *Economica*, 2014(3): 183-189.
10. **Qiao JQ, Wu HJ, Huo, RGao XW, Borriss R (2014)** Stimulation of plant growth and biocontrol by *Bacillus amyloliquefaciens* subsp. *plantarum* FZB42 engineered for improved action. *Chemical and Biological Technologies in Agriculture* 1:12
11. **Scholz R, Vater J, Budiharjo A, Wang Z, He Y, Dietel K, Schwecke T, Herfort S, Lasch P, Borriss R (2014)** Amylocyclicin, a novel circular bacteriocin produced by *Bacillus amyloliquefaciens* FZB42. *Journal of Bacteriology* 196: 1842–1852.
12. **Schreiter S, Ding GC, Heuer H, Neumann G, Sandmann M, Grosch R, Kropf, Smalla K (2014)**: Effect of the soil type on the microbiome in the rhizosphere of field-grown lettuce. *Front Microbiol.* 2014 Apr 8;5:144. doi: 10.3389/fmicb.2014.00144
13. **Schreiter S, Sandmann M, Smalla K, Grosch R (2014)**: Soil type dependent rhizosphere competence and biocontrol of two bacterial inoculant strains and their effects on the rhizosphere microbial community of field-grown lettuce. *PLoS ONE* 9: 1-11.
14. **Ventorino V, Sannino F, Piccolo A, Cafaro V, Carotenuto R, Pepe O (2014)** *Methylobacterium populi* VP2: Plant growth-promoting bacterium Isolated from a highly polluted environment for polycyclic aromatic hydrocarbon (PAH) biodegradation. *The Scientific World Journal* 2014:, Article ID 931793, <http://dx.doi.org/10.1155/2014/93179>

## - 2015

15. **Akter Z, Neumann G., Römheld V. (2015)** Effects of Biofertilizers on Mn and Zn Acquisition and Growth of Higher Plant: a Rhizobox Experiment. *Journal of Plant Nutrition* 38: 596-608. DOI:10.1080/01904167.2014.934478
16. **Biró B., Domonkos M., Kocsis T., Juhos K., Szalai Z., Végyvári G. (2015)** Két mikrobiális oltóanyag hatása tehéntrágya alapú komposztok és a talajok várható minőségi tulajdonságaira. (Two biofertilizers affecting a cow-compost ripening and potential soil quality). *Talajvédelem (Soil-protection)* 2015: 9-18.
17. **Biró B., Şumalan Ra., Şumalan Re., Farkas E., Schmidt B. (2016)** Az AM gombák hatása bűdöske foszfor-felvételére és fejlődésére modellkísérletben. (Effect of AM fungi on P-uptake of *Tagetes patula* in model experiments). *Kertgazdaság (Horticulture)*, 48(2): 45-56.

- 18. Geistlinger J, Zwanzig J, Heckendorff S, Schellenberg I (2015)** SSR Markers for *Trichoderma virens*: Their evaluation and application to identify and quantify root-endophytic strains. *Diversity* 7: 360-384; doi:10.3390/d7040360
- 19. Imran M, Kolla M, Römheld V, Neumann G (2015)** Impact of nutrient seed priming on germination, seedling development, nutritional status and grain yield of maize. *Journal of Plant Nutrition*, 38:12, 1803-1821, DOI:10.1080/01904167.2014.990094
- 20. Leiser WL, Olatoye MO, Rattunde FW, Neumann G, Weltzien E, Haussmann BIG (2015)** No need to breed for enhanced colonization by arbuscular mycorrhizal fungi to improve low-P adaptation of West African sorghums. *Plant Soil* DOI 10.1007/s11104-015-2437-2441.

- 2016

- 21. Bradáčová K, Weber NF, Morad-Talab N, Asim M, Imran M, Weinmann M, Neumann G (2016)** Micronutrients (Zn/Mn), seaweed extracts, and plant growth-promoting bacteria as cold-stress protectants in maize. *Chem. Biol. Technol. Agric.* 3:19 DOI 10.1186/s40538-016-0069-1
- 22. Biró B., Şumalan Ra., Şumalan Re., Farkas E., Schmidt B. (2016)** Az AM gombák hatása bűdöske foszfor-felvételére és fejlődésére modellkísérletben. (Effect of AM fungi on P-uptake of *Tagetes patula* in model experiments). *Kertgazdaság (Horticulture)*, 48(2): 45-56.
- 23. Di Stasio, E., Maggio, A., Ventorino, V., Pepe, O., Raimondi, G., De Pascale, S. (2016)** Free-living (N<sub>2</sub>)-fixing bacteria as potential enhancers of tomato growth under salt stress. *Acta Horticulturae*, in press.
- 24. Hanc, A., Boucek, J., Svehla, P., Dreslova, M., Tlustos, P. (2016)** Properties of vermicompost aqueous extracts prepared under different conditions. *Environmental Technology* (published online at <http://dx.doi.org/10.1080/09593330.2016.1231225>).
- 25. Imran M, Römheld V and Neumann G (2016):** Accumulation and distribution of Zn and Mn in soybean seeds after nutrient seed priming and its contribution to plant growth under Zn and Mn-deficient conditions. *Journal of Plant Nutrition*. 40: 695-708 DOI: 10.1080/01904167.2016.1262400
- 26. Kocsis T., Biró B., Mátrai G., Ulmer Á., Kotroczó Z. (2016):** Növényi eredetű bioszén tartamhatása a talaj szervesanyag-tartalmára és Agrokémiai tulajdonságaira. (Biochar affected to SOM and soil agronomical properties). *Kertgazdaság (Horticulture)*, 48(1): 89-96.
- 27. Lékfeldt JDS, Rex M, Mercl F, Kulhánek M, Tlustoš P, Magid J, de Neergaard A (2016)** Effect of bioeffectors and recycled P-fertiliser products on the growth of spring wheat. *Chem. Biol. Technol. Agric.* 3:22 DOI 10.1186/s40538-016-0074-4

- 28. Nebbioso A, De Martino A, Eitlbany N, Smalla K, Piccolo A (2016)** Phytochemical profiling of tomato roots following treatments with different microbial inoculants as revealed by IT-TOF mass spectrometry. *Chemical and Biological Technologies in Agriculture* 20163:12 DOI: 10.1186/s40538-016-0063-7
- 29. Nkebiwe PM, Weinmann M, Müller T (2016)** Improving fertilizer-depot exploitation and maize growth by inoculation with plant growth-promoting bacteria: from lab to field. *Chemical and Biological Technologies in Agriculture* 3:15 DOI: 10.1186/s40538-016-0065-5
- 30. Sánchez-Esteva S, Gómez-Muñoz B, Jensen LS, de Neergaard A, Magid J (2016)** The effect of *Penicillium bilaii* on wheat growth and phosphorus uptake as affected by soil pH, soil P and application of sewage sludge. *Chemical and Biological Technologies in Agriculture* 3:21 DOI: 10.1186/s40538-016-0075-3
- 31. Selby C, Carmichael E, Sharma HSS (2016)** Bio-refining of perennial ryegrass (*Lolium perenne*): evaluation of aqueous extracts for plant defence elicitor activity using French bean cell suspension cultures. *Chemical and Biological Technologies in Agriculture* 3:11 DOI: 10.1186/s40538-016-0061
- 32. Sharma HSS, Selby C, Carmichael E, McRoberts C, Rao JR, Ambrosino P, Chiurazzi M, Pucci M, Martin T (2016)** Physicochemical analyses of plant biostimulant formulations and characterisation of commercial products by instrumental techniques. *Chemical and Biological Technologies in Agriculture* 3:13 DOI: 10.1186/s40538-016-0064-6
- 33. Tlustoš P, Mercl F, Břendová K., Ohecová P., Vondráčková S. Száková J. (2016):** The modification of soil properties and plant uptake by the application of bioeffectors and amendments. *Mechanization in agriculture & conserving of the resources* 5: 26-29
- 34. Viscardi S., Ventorino V., Duran P., Maggio A., De Pascale S., de la Luz Mora M., Pepe O. (2016):** Assessment of plant growth promoting activities and abiotic stress tolerance of *Azotobacter chroococcum* strains for a potential use in sustainable agriculture. *Journal of Soil Science and Plant Nutrition* 16:848-863.
- 2017
- 35. Ansari M., Shekari F\*, Mohammadi MH, Biró B, Végári G (2017):** Improving germination indices of alfalfa cultivars under saline stress by inoculation with beneficial bacteria. *Seed Sci. & Technol.*, 45: 1-10.
- 36. Bryndum S, Pittroff SM, Nicolaisen MH, Magid J, de Neergaard A (2017)** Microbial inoculation has a limited effect on vegetable waste compost turnover and quality. *Waste Management* (under review)
- 37. Di Stasio et al. (2017):** *Ascophyllum nodosum* based algal extracts act as enhancers of growth, fruit quality, and adaptation to stress in salinized tomato plants. *Plant Soil* (under review)

- 38. Gómez-Muñoz, B., Lekfeldt, JDS., Magid, J., Jensen, LS., de Neergaard, A. (2017):** Interactions between cold stress and soil fertility level affects biomass productivity of maize seed coated with *Penicillium* sp. or Mn/Zn. *J. Agron. Crop Sci.* (under review).
- 39. Holečková Z., Kulhánek, M., Balík, J. (2017):** Influence of Bioeffectors Application on Maize Growth, Yields and Nutrient Uptake. *Int. J. Plant Sci* (in press)
- 40. Kocsis T., Biró B., Ulmer Á., Szántó M., Kotroczó Z. (2017)** Time-lapse effect of ancient plant coal biochar on some soil agrochemical parameters and soil characteristics. *Environ Sci Pollut Res.* DOI 10.1007/s11356-017-8707-0
- 41. Kocsis T., Kotroczó Z., Biró B. (2017)** Bioszén dózisok és bioeffektor baktérium oltás hatása homoktalajon tenyészedénykísérletben. (Biochar doses and bioeffector bacteria in pot experiments with sandy soils). *Talajvédelem (Soil Protection Suppl.)*. pp. 53-60.
- 42. Kotroczó Z., Biró B., Kocsis T., Veres Z., Tóth J.A., Fekete I. (2017)** Hosszú távú szerves anyag manipuláció hatása a talaj természetes biológiai aktivitására. (Long-term organic matter manipulation affected to the natural soilbiological activity). *Talajvédelem (Soil Protection Suppl.)* pp. 73-83.
- 43. Imran M, Garbe-Schönberg D, Neumann G, Boeltd B, Mühling KH (2017):** Zinc distribution and localization in primed maize seeds and its translocation during early seedling development. *Environmental and Experimental Botany* 143: 91–98.
- 44. Li M., Cozzolino V., Mazzei P., Monda H., Drosos M., Piccolo A (2017)** Effects of microbial bioeffectors and P amendments on P forms in a maize cropped soil as evaluated by <sup>31</sup>P-NMR spectroscopy. *Plant Soil* DOI 10.1007/s11104-017-3405-8
- 45. Mosimann C, Oberhänsli T, Ziegler D, Nassal D, Kandeler E, Boller T, Mäder P and Thonar C (2017)** Tracing of Two *Pseudomonas* Strains in the Root and Rhizoplane of Maize, as Related to Their Plant Growth-Promoting Effect in Contrasting Soils. *Front. Microbiol.* 7:2150. doi: 10.3389/fmicb.2016.02150
- 46. Monda H, Cozzolino V, Vinci G, Spaccini R, Piccolo A (2017)** Molecular characteristics of water-extractable organic matter from different composted biomasses and their effects on seed germination and early growth of maize. *Science of the Total Environment* 590–59: 40-49.
- 47. Nkebiwe P.M., Neumann G., Müller T. 2017:** Densely rooted rhizosphere hotspots induced around subsurface NH<sub>4</sub><sup>+</sup>-fertilizer depots: a home for soil PGPMs ? *Chem. Biol. Technol. Agric.* (2017) 4: 29.  
<https://doi.org/10.1186/s40538-017-0111-y>
- 48. Symanczik S, Gisler M, Thonar C, Schlaeppi K, Van der Heijden M, Kahmen A, Boller T, Mäder P (2017):** Application of Mycorrhiza and Soil from a Permaculture System Improved Phosphorus Acquisition in Naranjilla. . *Frontiers in Plant Sci* 8: Article No. 1263. doi: 10.3389/fpls.2017.01263
- 49. Thonar C, Lekfeldt JDS, Cozzolino V, Kundel D, Kulhánek M, Mosimann C, Neumann G, Piccolo A, Rex M, Symanczik S, Walder F, Weinmann M, de**

**Neergaard A, Mäder P (2017):** Potential of three microbial bio-effectors to promote maize growth and nutrient acquisition from alternative phosphorous fertilizers in contrasting soils Chemical and Biological Technologies in Agriculture 4:7 DOI 10.1186/s40538-017-0088-6.

- 50. Windisch S, Bott S, Ohler MA, Mock H-P, Lippmann R, Grosch R, Smalla K, Ludewig U, Neumann G. (2017):** *Rhizoctonia solani* and bacterial inoculants stimulate root exudation of antifungal compounds in lettuce in a soil-type specific manner. Agronomy 7: 44. doi:10.3390/agronomy7020044
- 51. Wollmann, I., Möller, K. (2017):** Phosphorus bioavailability of sewage sludge based recycled fertilizers in an organically managed field experiment. J. Plant Nutr. Soil Sci. (under review)

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- 52. Gómez-Muñoz B, Jensen LS, de Neergaard, AE Richardson, Magid J 2018** Effects of *Penicillium bilaii* on maize growth are mediated by available phosphorus. Plant Soil <https://doi.org/10.1007/s11104-018-3756-9>
- 53. Mercl F, Tejnecký V, Dietel K, Břendová K, Kulhánek M, Száková J, Tlustoš P (2018):** Co-application of wood ash and *Paenibacillus mucilaginosus* to soil: the effect on maize nutritional status, root exudation and composition of soil solution. Plant Soil <https://doi.org/10.1007/s11104-018-3664-z>
- 54. Moradtalab N, Weinmann M, Walker F, Höglinger B, Ludewig U and Neumann G (2018):** Silicon Improves chilling tolerance during early growth of maize by effects on micronutrient homeostasis and hormonal balances. Front. Plant Sci. 9:420. doi: 10.3389/fpls.2018.00420
- 55. Nassal D., Spohn M., Eltlbany N., Jacquiod S., Smalla K., Marhan S., Kandeler E. (2018):** Effects of phosphorus-mobilizing bacteria on tomato growth and soil microbial activity. Plant Soil 427:17-37.
- 56. Weber NF, Herrmann I, Hochholdinger F, Ludewig U, Neumann G (2018):** PGPR-induced growth stimulation and nutrient acquisition in maize: Do root hairs matter? Sci. Agr.Bohemica 49: 164-172.
- 57. Wollmann, I., Gauro, A., Müller, T., Möller, K. (2018):** Phosphorus bioavailability of sewage sludge based recycled fertilizers. J.Plant Nutr. Soil Sci.181:158-166
- 58. Mpanga IK, Dapaah HK, Geistlinger J, Ludewig U, Neumann G (2018):** Soil type-dependent interactions of P-solubilizing microorganisms with organic and inorganic fertilizers mediate plant growth promotion in tomato. Agronomy 2018, 8, 213; doi:10.3390/agronomy8100213
- 59. Van Oosten MJ, Di Stasio E, Cirillo V, Silletti S, Ventorino V, Pepe O, Raimondi G, Maggio A (2018):** Root inoculation with *Azotobacter chroococcum* 76A enhances tomato plants adaptation to salt stress under low N conditions Plant Biology (2018) 18:20.5 <https://doi.org/10.1186/s12870-018-1411-5>
- 60. Vinci G., Cozzolino V., Mazzei P., Monda H., Spaccini R., Piccolo A. (2018):** Effects of *Bacillus amyloliquefaciens* and organic and inorganic phosphate amendments on Maize plants as revealed by NMR and GC-MS based metabolomics.Plant Soil 429(10):1-14
- 61. Vinci G, Cozzolino V, Mazzei P, Monda H, Spaccini R, Piccolo A (2018):** An alternative to mineral phosphorus fertilizers: The combined effects of *Trichoderma harzianum* and compost on *Zea mays*, as revealed by <sup>1</sup>H NMR

and GC-MS metabolomics. PLoS ONE 13(12): e0209664.  
<https://doi.org/10.1371/journal.pone.0209664>

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62. **Bradáčová K, Florea AS, Bar-Tal A, Minz D, Yermiyahu U, Shawahna R, Kraut-Cohen J, Zolti A, Erel R, Dietel K, Weinmann M, Zimmermann B, Berger N, Ludewig U, Neumann G, Pošta G. (2019):** Microbial consortia versus single-strain inoculants: an advantage in PGPM-assisted tomato production? *Agronomy*, 9(2), 105; <https://doi.org/10.3390/agronomy9020105>
63. **Eltlbany N, Ding G, Baklawa M, Nassal D, Weber N, Kandeler E, Neumann G, Ludewig U, van Overbeek L, Smalla K (2019):** Enhanced tomato plant growth in soil under reduced P supply through microbial inoculants and microbiome shifts. *FEMS Microbiology Ecology*, 95, 2019, fiz124.
64. **Moradtalab N, Hajiboland R, Aliasgharzad N, Hartmann TE, Neumann G (2019):** Silicon and the association with an arbuscular mycorrhizal fungus (*Rhizophagus clarus*) mitigate the adverse effects of drought stress on strawberry. *Agronomy* 9(1): 41; <https://doi.org/10.3390/agronomy9010041>
65. **Mpanga IA, Nkebiwe PM, Kuhlmann K, Cozzolino V, Piccolo A, Geistlinger G, Berger N, Ludewig U, Neumann G (2019):** The Form of N Supply Determines Plant Growth Promotion by P-Solubilizing Microorganisms in Maize. *Microorganisms* 7(2): 38 <https://doi.org/10.3390/microorganisms7020038> - 29
66. **Mpanga IK, Gomez-Genao NJ, Moradtalab N, Wanke D, Chrobaczek V, Ahmed A, Windisch S, Geistlinger J, Walker F, Ludewig U, Neumann G (2019):** The role of N form supply for PGPM-host plant interactions in maize. *J. Plant Nutr. Soil Sci. Publ. online* DOI: 10.1002/jpln.201900133e
67. **Bradáčová K, Sittinger M, Tietz K, Neuhäuser B, Kandeler E, Berger N, Ludewig U, Neumann G (2019)** Maize inoculation with microbial consortia: contrasting effects on rhizosphere activities, nutrient acquisition and early growth in different soils. *Microorganisms* 7(9), 329; <https://doi.org/10.3390/microorganisms7090329>.
68. **Mercl F, García-Sánchez M, Kulhánek M, Košnář Z, Száková J, Tlustoš P (2019).** Improved phosphorus fertilisation efficiency of wood ash by fungal strains *Penicillium* sp. PK112 and *Trichoderma harzianum* OMG08 on acidic soil
69. **Moradtalab, N., Ludewig, U., Neumann, G. (2019).** Transcriptomic Profiling of Silicon-affected Maize (*Zea mays* L.) Seedlings under Cold Stress. *Planta*. Submitted.

- 2020

70. **Bradáčová K, Kandeler E, Berger N, Ludewig U, Neumann G (2020).** Microbial consortia Stimulate early growth of Maize depending on Nitrogen and Phosphorus supply. *Plant, Soil and Environment* <https://doi.org/10.17221/382/2019-PSE>.
71. **Moradtalab, N., Ahmed, A., Geistlinger, J., Walker, F., Höglinger, B., Ludewig, U., Neumann, G. (2020).** Synergisms of microbial consortia, N forms, and micronutrients alleviate oxidative damage and stimulate hormonal cold stress adaptations in maize *Front Plant Sci.* accepted



**72. Mpanga, I.K., Ludewig, U., Dapaah, H.K., Neumann G.(2020).** Acquisition of Rock Phosphate by combined application of Ammonium fertilizers and *Bacillus amyloliquefaciens* FZB42 in Maize as affected by Soil pH. J. Appl. Microbiol., accepted.

## **Other Publications**

- 1. Biró B (2016)** Baktériumtrágyák és bioeffektor termékek a talaj klímahatásai ellen. Mikroorganizmusok a növény-talaj rendszerben. (Biofertilizers and bioeffectors in soil-plant systems) Agrarhírnök 2: 14-15
- 2. Biró B (2016)** A talajok precíziós baktériumtrágyázásának lehetőségei és alapelvei. (Precision bacterial fertilization of soils) . Haszon Agrár Magazin 10: 12-16
- 3. Biró B (2016)** Törpék a föld alatt. A mikrobiális talajoltás szempontjai, határai, hatásai. Talajélet különszám. Agrárágazat 17: 22-26.
- 4. Redaktion LOP (2016):** Homogenisierteres Saatgut und zusätzliche Beizung mit Bodenhilfsstoffen. LOP das Fachmagazin für den professionellen Pflanzenbau. 07/16
- 5. Van den Berg G (2016):** Seed dressing with micronutrients mitigates stress effects (3). Plant Nutrition Courier 4/16
- 6. Biró B. (2017)** Biológiai Talajművelés: Termésmenővelők, biostimulánsok és bioeffektív megoldások. 1. rész: A talaj, mint láthatatlan ökoszisztéma. (BI@OLOGICAL Soil-cultivation. Plant-growth promoters, biostimulants and bioeffective solutions. Part 1: The soil as invisible ecosystem). Agrarsektor.(Agrárágazat), 2017 (1): 92-96.
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