

Цитати на научни публикации

на главен асистент д-р Григор Трайков Зехиров, лаборатория „Растително- почвени взаимодействия“

1. **Zehirov, G**, Georgiev, G. Alteration in cell permeability, apoplastic and tissue compartmentation of solutes in the root and nodules of boron deficient N₂-fixing soybean plants.. Comp. Rend de l'Acad. Bulg. Des Sci., 2001, 71-74

Цитира се в:

1. Bejandi T. Sharifii R. Sedghi M, Namvar A. Effects of plant density, Rhizobium inoculation and microelements on nodulation, chlorophyll content and yield of chickpea (*Cicer arietinum L.*), Journal of Biology and Agricultural, Research, 23, 3, 1067-1178., @2011
2. 张立军, 陈艳秋, 孙旭刚, 王力, & 施国强. 营养元素对大豆氮素营养及产量的影响浅析. 大豆科技, 4, 59-63., @2013

2002

2. **Zehirov, G**, Georgiev, G.. Growth, chemotaxis and nodulation to host roots of *Bradyrhizobium japonicum* 639 in response to the effect of root exudates released from boron deficient soybean plants.. Comp. Rend de l'Acad. Bulg. Des Sci., 55, 4, 2002, 87-92

Цитира се в:

3. Буньо Л, Цвілинюк О, Микієвич І, Величко О, Терек О. АКТИВНІСТЬ МІКРОФЛОРИ НАФТОЗАБРУДНЕНОГО ҐРУНТУ У РИЗОСФЕРНІЙ ЗОНІ РОСЛИН CAREX HIRTA L., Біологічні студії, 4, 55-62., @2010

2003

3. **Zehirov, G**, Georgiev, G. Effect of boron starvation on the apoplastic and total solute concentrations influencing nodule growth and acetylene reduction rate.. Bulg. J. Plant Physiol., Special issue, 2003, 367-373

Цитира се в:

4. Abasolo W, Eder M, Yamauchi K, Obel N, Reinecke A, Neumetzler L, ... Burgert I. Pectin may hinder the unfolding of xyloglucan chains during cell deformation: implications of the mechanical performance of *Arabidopsis* hypocotyls with pectin alterations, Molecular plant, 2, 5, 990-999., @2009
5. Yakubu H, Kwari J, Tekwa J. Nodulation and N₂-fixation by Grain Legumes as Affected by Boron Fertilizer in Sudano-sahelian Zone of North-eastern Nigeria, American-Eurasian Journal of Agricultural & Environmental Sci., 8, 5, 514-519., @2010
6. Tahir, M., Mehmood, Q., Tahir, S., Sheikh, A. A., & Rehman, A. PRODUCTION POTENTIAL OF SOYBEAN (*Glycine max L.*) IN RESPONSE TO BORON UNDER AGRO ECOLOGICAL CONDITIONS OF PAKISTAN., @2014
7. Ghanati F. Boron effects on wall polysaccharide composition of marshmallow cells, Iranian Journal of Science and Technology (Sciences), 39, 4, 497-501, @2015

2005

4. **Zehirov, G**, Georgiev, G. Effects of boron starvation on lignin content and mineral composition of N2-fixing soybean plants (*Glycine max L. merr.*). Proceedings from Balkan Scientific Conference of Biology in Plovdiv, 2005, 373-380

Цитира се е:

8. Haileslassie A, Blümmel M, Wani S, Sahrawat K, Pardhasaradhi G, Samireddypalle A. Extractable soil nutrient effects on feed quality traits of crop residues in the semiarid rainfed mixed crop-livestock farming systems of Southern India, Environment, development and sustainability, 15, 3, 723-741., @2013

2006

5. Geneva, M, **Zehirov, G**, Djonova, E, Kaloyanova, N, Georgiev, G, Stancheva, I. The effect of inoculation of pea plants with mycorrhizal fungi and Rhizobium on N and P assimilation. Plant, Soil and Environment, 52, 10, Czech Academy of Agricultural Sciences, 2006, ISSN:1805-9368, 435-440. ISI IF:1.078

Цитира се е:

9. Grigorova B, Vaseva I, Demirevska K, Feller U. Combined drought and heat stress in wheat: changes in some heat shock proteins. Biologia Plantarum, 55, 1, 105-111., @2011
10. Grigorova B, Vaseva I, Demirevska K, Feller U, Expression of selected heat shock proteins after individually applied and combined drought and heat stress, Acta Physiologiae Plantarum, 33, 5, 2041-2049, @2011
11. Yasmeen T, Hameed S, Tariq M, Iqbal J, Vigna radiata root associated mycorrhizae and their helping bacteria for improving crop productivity. Pak. J. Bot., 44(1): 87-94, @2012
12. Sharma MP, K Jaisinghami, SK Sharma, VS Bhatia, Effect of native soybean rhizobia and am fungi in the improvement of nodulation, growth, soil enzymes and physiological status of soybean under microcosm conditions, Agricultural Research, 1, 4, 346-351, @2012
13. Nagar El, Shafshak MM, Nadia SA, Abo Sedera FA, Esmail AAM, Kamel AS. Effect of bio and mineral fertilizer on growth and productivity of pea. Annals of Agric. Sci., 50(3), 303–316, @2012
14. A el Sayed; Application of nuclear technique to assess the optimization and benefits from bio and organic fertilization of some vegetables, Department of Soils Science Faculty of Agriculture Zagazig University, @2012
15. Hajong S, S Kumaria, P Tandon, Comparative study of key phosphorus and nitrogen metabolizing enzymes in mycorrhizal and non-mycorrhizal plants of *Dendrobium chrysanthum* Wall. ex Lindl., Acta Physiologiae Plantarum, 35, 7, 2311-2322, @2013
16. Tagore GS, Namdeo SL, Sharma SK, Kumar N. Effect of rhizobium and phosphate solubilizing bacterial inoculants on symbiotic traits, nodule leghemoglobin, and yield of chickpea genotypes, International Journal of Agronomy, 2013, Article ID 581627, <http://dx.doi.org/10.1155/2013/581627>, @2013
17. Hajong S, Kumaria S, Tandon P. Comparative study of key phosphorus and nitrogen metabolizing enzymes in mycorrhizal and non-mycorrhizal plants of *Dendrobium*

18. Kadian N, Yadav K, Aggarwal A. Significance of bioinoculants in promoting growth, nutrient uptake and yield of *Cyamopsis tetragonoloba* (L.) "Taub. European J Soil Biol. 58, 66-72, @2013
19. Tanwar A, Yadav K, Prasad K. Biological amendments on growth, nutritional quality, and yield of celery. Int. J. Veg. Sci. 19 (3), 228-239, @2013
20. Aghayari F., S. Maleki, M.R. Ardakani, F. Rejali, A.H. Faregh, Growth and yield of lentil (*Lens culinaris* L.), as affected by mycorrhizal symbiosis and *Azospirillum brasilense* under rainfed conditions, International Journal of Biosciences, 4, 12, 253-262, @2014
21. Hua J, Feng Y, Bai J, Lin X, Co-inoculation with AM fungus *Glomus caledonium* and the photoheterotrophic purple nonsulfur bacterium *Rhodopseudomonas palustris* results in mutual inhibition and lower arsenic accumulation of *Nicotiana tabacum* L. in an arsenic contaminated soil, Fresenius Environmental Bulletin 23(3):867-874, @2014
22. Afkhami MEJA, Stachowicz RJJ. Multiple Mutualist effects: conflict and synergy in multispecies mutualisms. Ecology 95(4): 833–844, @2014
23. داودی. "تأثیر کاربرد کود های زیستی و شیمیایی فسفری و روی بر عملکرد و اجزاء عملکرد دو رقم لوبيا چیتی". نشریه آب و خاک Mahmoud, Jafar M, Khavazi MJ, Rejali D. "The effect of biological and chemical phosphorus fertilizer application on yield and yield components of two varieties of beans, Journal of Soil and Water, @2015
24. Neera Garg, Priyanka Singla Stimulation of nitrogen fixation and trehalose biosynthesis by naringenin (Nar) and arbuscular mycorrhiza (AM) in chickpea under salinity stress, Plant Growth Regul, DOI 10.1007/s10725-016-0146-2, @2016
25. Neera Garg, Rekha Pandey, High effectiveness of exotic arbuscular mycorrhizal fungi is reflected in improved rhizobial symbiosis and trehalose turnover in *Cajanus cajan* genotypes grown under salinity stress Fungal Ecology, 21, 57–67, @2016
26. Bai B, Suri VK, Kumar A, Choudhary AK, Influence of *Glomus–Rhizobium* Symbiosis on Productivity, Root Morphology and Soil Fertility in Garden Pea in Himalayan Acid Alfisol. Communications in Soil Science and Plant Analysis, 47(6): 787-798, @2016
27. Desalegn G, Turetschek R, Kaul H-P, Wienkoop S, Microbial symbionts affect *Pisum sativum* proteome and metabolome under *Didymella pinodes* infection. Journal of Proteomics 143, 173–187, @2016
28. Adigun M O, Babalola O A. Soil Microbial Activities in Soybean Rhizosphere Inoculated with Bradyrhizobium and Mycorrhizal Fungi., @2016
6. Stancheva, I, Geneva, M, **Zehirov, G**, Tsvetkova, G, Hristozkova, M, Georgiev, G. Effects of combined inoculation of pea plants with arbuscular mycorrhizal fungi and Rhizobium on nodule formation and nitrogen fixing activity. General Appl. Plant Physiol., special issue, Institute of Plant Physiology and Genetics - Bulgarian Academy of Sciences, Printing House The Prof. Marin Drinov Academic Publishing House, 2006, ISSN:1314-5770, 61-66

Цитира се:

29. Jahan M. Effects of biological, chemical and organic fertilizers on some physiological indices of Hairy vetch (*Vicia villosa* Roth). Iranian Journal of Field crops Research 13(2), 391-398, @2015
7. Doncheva, S, Stoyanova, Z, Georgieva, K, Nedeva, D, Dikova, R, **Zehirov, G**, Nikolova, A.

Exogenous succinate increases resistance of maize plants to copper stress. Journal of Plant Nutrition and Soils Sciences, 169, 2, Wiley, 2006, DOI:10.1002/jpln.200520560, 247-254. ISI IF:1.459

Цитира се 6:

30. Wozniak E, Martineau J. Quelatos/Complejos Derivados Naturales de Cytozyme, Plant Nutrition for Sustainable Agriculture, 10, 2, 1-8., @2007
31. Sevil Kilinc S, Ertan E, Seferoglu S. Effects of different nutrient solution formulations on morphological and biochemical characteristics of nursery fig trees grown in substrate culture, Sci Hortic, 113, 1, 20-27., @2007
32. Kumar P, Tewari RK, Sharma PN. Modulation of copper toxicity-induced oxidative damage by excess supply of iron in maize plants, Plant Cell Rep, 27, 2, 399-409., @2008
33. Sagasti Escalona S. Caracterización y regulación de la chaperona de cobre para la CuZn superóxido dismutasa cloroplástica de soja, PhD thesis, @2009
34. Baron D. Development of Annona emarginata (SCHLTDL.) H. Rainer (“ARATICUMDE-TERRA-FRIA”) seedlings grown in nutrient solution 100P, Dissertation (Master’s Degree) – Institute of Biosciences, UNESP – São Paulo State University, Botucatu Campus, São Paulo State, Brazil., @2010
35. Sirin U. - Effects of different nutrient solution formulations on yield and cut flower quality of gerbera (Gerbera Jamesonii) grown in soilless culture system. African Journal of Agricultural Research, 6 (21), 4910-4919, 2011, @2011
36. Janušauskaite D, Auškalniene O, Pšibišauskiene G. Evaluation of chlorophyll fluorescence in different densities of spring barley, Acta Physiol Plant, 33, 6, 2159-67, @2011
37. Chatterjee S, Singh L, Chattopadhyay B, Datta S, Mukhopadhyay SK. A study on the waste metal remediation using floriculture at east calcutta wetlands, a ramsar site in india. Environ Monit Assess, 184, 8, 5139-50., @2012
38. Janušauskaite D, Feiziene D. Chlorophyll fluorescence characteristics throughout spring triticale development stages as affected by fertilization, Acta Agric Scand Sect B Soil Plant Sci, 62, 1, 7-15., @2012
39. Bozhkov AI, Kuznetsova YA, Menzyanova NG, Kovaleva MK. The role of root border cells in the formation of a root-microenvironment system in wheat seedlings, In: From seed germination to young plants: Ecology, growth and environmental influences, 75-97., @2013
40. An Y, Zhou P, Xiao Q, Shi D. Effects of foliar application of organic acids on alleviation of aluminum toxicity in alfalfa, J Plant Nutr Soil Sci, 177, 3, 421-30., @2014
41. Dresler S, Hanaka A, Bednarek W, Maksymiec W. Accumulation of low-molecular-weight organic acids in roots and leaf segments of Zea mays plants treated with cadmium and copper. Acta Physiologiae Plantarum, 36, 6, 1565-1575., @2014
42. Hawrylak-Nowak B, Dresler S, Matraszek R. Exogenous malic and acetic acids reduce cadmium phytotoxicity and enhance cadmium accumulation in roots of sunflower plants, Plant Physiology and Biochemistry, 94, 225-234, @2015
43. Jung Y, Ha M, Lee J, Ahn YG, Kwak JH, Ryu DH, Hwang GS. Metabolite Profiling of the Response of Burdock Roots to Copper Stress, Journal of agricultural and food chemistry, 63, 4, 1309-1317, @2015
44. Asati A, Pichhode M, Nikhil K. Effect of Heavy Metals on Plants: An Overview. International Journal of Application or Innovation in Engineering & Management (IJAIEM)

45. Xue S, Zhu F, Wu C, Lei J, Hartley W, Pan W. Effects of manganese on the microstructures of *Chenopodium ambrosioides* L., a manganese tolerant plant. International journal of phytoremediation. 18, 7, 710-9, @2016
-

2008

8. Geneva, M, **Zehirov, G**, Stancheva, I, Georgiev, G. Effect of soil fertilizer, foliar fertilizer, and growth regulator application on milk thistle (*Silybum marianum* L.) development, seed yield, and silymarin content. Communications in Soil Science and Plant Analysis, 39, 1-2, Taylor and Francis, 2008, ISSN:0010-3624, 17-24. ISI IF:0.39

Цитира се е:

46. Andrzejewska J, Sadowska K, Mielcarek S. Effect of sowing date and rate on the yield and flavonolignan content of the fruits of milk thistle (*silybum marianum* L. gaertn.) grown on light soil in a moderate climate, Ind Crops Prod, 33, 2, 462-468., @2011
47. Rahimi A, Kamali M. Different planting date and fertilizing system effects on the seed yield, essential oil and nutrition uptake of milk thistle (*silybum marianum* (L.) gaertn), Adv Environ Biol, 6, 5, 1789-96., @2012
48. Martinelli T, Andrzejewska J, Salis M, Sulas L. Phenological growth stages of *Silybum marianum* according to the extended BBCH scale, Annals of Applied Biology, 166, 1, 53-66, @2015
-

2010

9. Van de Velde, W, **Zehirov, G**, Szatmari, A, Mergaert, P. Plant peptides govern terminal differentiation of bacteria in symbiosis.. Science, 2010, DOI:10.1126/science.1184057, 1122-1126. ISI IF:31.364

Цитира се е:

49. Prell J, Bourdès A, Kumar S, Lodwig E, Hosie A, Kinghorn S, White J, Poole P. Role of symbiotic auxotrophy in the rhizobium-legume symbioses, PLoS ONE, 5, 11., @2010
50. Qureshi MI, Munir S, Bashir H, Ahmad J, Iqbal M. Nodule physiology and proteomics of stressed legumes, Adv Bot Res, 56, C, 1-48., @2010
51. Oono R, Denison RF. Comparing symbiotic efficiency between swollen versus nonswollen rhizobial bacteroids, Plant Physiol, 154, 3, 1541-8., @2010
52. Charpentier M, Oldroyd G. How close are we to nitrogen-fixing cereals?, Curr Opin Plant Biol, 13, 5, 556-64., @2010
53. Martin F. Parlez-vous effectors?, New Phytol, 187, 4, 877-9., @2010
54. Yokota K, Soyano T, Kouchi H, Hayashi M. Function of GRAS proteins in root nodule symbiosis is retained in homologs of a non-legume, rice, Plant Cell Physiol, 51, 9, 1436-42., @2010
55. Maruya J, Saeki K. The bacA gene homolog, mlr7400, in mesorhizobium loti MAFF303099 is dispensable for symbiosis with lotus japonicus but partially capable of supporting the symbiotic function of bacA in sinorhizobium meliloti, Plant Cell Physiol, 51, 9, 1443-52.,

@2010

56. Kouchi H, Imaizumi-Anraku H, Hayashi M, Hakoyama T, Nakagawa T, Umehara Y, Suganuma N, Kawaguchi M. How many peas in a pod? legume genes responsible for mutualistic symbioses underground, *Plant Cell Physiol*, 51, 9, 1381-97., @2010
57. Wehmeier S, Arnold MFF, Marlow VL, Aouida M, Myka KK, Fletcher V, Benincasa M, Scocchi M, Ramotar D, Ferguson GP. Internalization of a thiazole-modified peptide in *sinorhizobium meliloti* occurs by BacA-dependent and -independent mechanisms, *Microbiology*, 156, 9, 2702-13., @2010
58. Ivanov S, Fedorova E, Bisseling T. Intracellular plant microbe associations: Secretory pathways and the formation of perimicrobial compartments, *Curr Opin Plant Biol*, 13, 4, 372-7., @2010
59. Oono R, Schmitt I, Sprent JI, Denison RF. Multiple evolutionary origins of legume traits leading to extreme rhizobial differentiation, *New Phytol*, 187, 2, 508-20., @2010
60. Groth M, Takeda N, Perry J, Uchid H, Dräxl S, Brachmann A, Sato S, Tabata S, Kawaguchi M, Wang TL, Parniskea M. NENA, a lotus japonicus homolog of Sec13, is required for rhizodermal infection by arbuscular mycorrhiza fungi and rhizobia but dispensable for cortical endosymbiotic development, *Plant Cell*, 22, 7, 2509-26., @2010
61. Hines PJ. Legume symbosome, *Sci Signal*, 3, 111., @2010
62. Leach J, Keyster M, Du Plessis M, Ludidi N. Nitric oxide synthase activity is required for development of functional nodules in soybean, *J Plant Physiol*, 167, 18, 1584-91., @2010
63. Groth M. Genetic Analysis of Arbuscular Mycorrhiza Development in *Lotus japonicus* (Doctoral dissertation, Imu)., @2010
64. Haney CH. The Role of Plant Membrane Proteins in Legume-rhizobia Symbiosis (Doctoral dissertation, Stanford University)., @2010
65. Doyle JJ. Phylogenetic perspectives on the origins of nodulation, *Mol Plant-Microbe Interact*, 24, 11, 1289-95., @2011
66. Login FH, Balmand S, Vallier A, Vincent-Monégat C, Vigneron A, Weiss-Gayet M, Rochat D, Heddi A. Antimicrobial peptides keep insect endosymbionts under control, *Science* 334, 6054, 362-5., @2011
67. Branca A, Paape TD, Zhou P, Briskine R, Farmer AD, Mudge J, Bharti AK, Woodward JE, May GD, Gentzbittel L, Ben C, Denny R, Sadowsky MJ, Ronfort J, Bataillon T, Young ND, Tiffin P. Whole-genome nucleotide diversity, recombination, and linkage disequilibrium in the model legume *medicago truncatula*, *Proc Natl Acad Sci U S A*, 108, 42, E864-70., @2011
68. El Msehli S, Lambert A, Baldacci-Cresp F, Hopkins J, Boncompagni E, Smiti SA, Hérouart D, Frendo P. Crucial role of (homo)glutathione in nitrogen fixation in *medicago truncatula* nodules, *New Phytol*, 192, 2, 496-506., @2011
69. Fumeaux C, Bakkou N, Kopcińska J, Golinowski W, Westenberg DJ, Muller P, Perret X. Functional analysis of the *nifQdctA1y4vGHIJ* operon of *sinorhizobium fredii* strain NGR234 using a transposon with a NifA-dependent read-out promoter, *Microbiology*, 157, 10, 2745-58., @2011
70. Oono R, Anderson CG, Denison RF. Failure to fix nitrogen by non-reproductive symbiotic rhizobia triggers host sanctions that reduce fitness of their reproductive clonemates, *Proc R Soc B Biol Sci*, 278, 1718, 2698-703., @2011
71. Brown DB, Huang Y-, Kannenberg EL, Sherrier DJ, Carlson RW. An acpXL mutant of

- rhizobium leguminosarum bv. phaseoli lacks 27-hydroxyoctacosanoic acid in its lipid a and is developmentally delayed during symbiotic infection of the determinate nodulating host plant phaseolus vulgaris, J Bacteriol, 193, 18, 4766-78., @2011
72. Ribeiro A, Graça I, Pawłowski K, Santos P. Actinorhizal plant defence-related genes in response to symbiotic frankia, Funct Plant Biol, 38, 8-9, 639-44., @2011
73. Popp C, Ott T. Regulation of signal transduction and bacterial infection during root nodule symbiosis, Curr Opin Plant Biol, 14, 4, 458-67., @2011
74. Venkateshwaran M, Ané J-. Legumes and nitrogen fixation: Physiological, molecular, evolutionary perspectives, and applications, In: The molecular and physiological basis of nutrient use efficiency in crops, 457-489., @2011
75. Wang D, Dong X. A highway for war and peace: The secretory pathway in plant-microbe interactions, Mol Plant, 4, 4, 581-7., @2011
76. Liu C-, Lee K-, Wang Y-, Peng M-, Lee K-, Suzuki S, Suzuki T, Oyaizu H. Involvement of the azorhizobial chromosome partition gene (parA) in the onset of bacteroid differentiation during sesbania rostrata stem nodule development, Appl Environ Microbiol, 77, 13, 4371-82., @2011
77. Ardisson S, Kobayashi H, Kambara K, Rummel C, Noel KD, Walker GC, Broughton WJ, Deakin WJ. Role of BacA in lipopolysaccharide synthesis, peptide transport, and nodulation by rhizobium sp. strain NGR234, J Bacteriol, 193, 9, 2218-28., @2011
78. Mulley G, White JP, Karunakaran R, Prell J, Bourdes A, Bunnewell S, Hill L, Poole PS. Mutation of GOGAT prevents pea bacteroid formation and N₂ fixation by globally downregulating transport of organic nitrogen sources, Mol Microbiol, 80, 1, 149-67., @2011
79. Yokota K, Hayashi M. Function and evolution of nodulation genes in legumes, Cell Mol Life Sci, 68, 8, 1341-51., @2011
80. Kouchi H. Symbiotic nitrogen fixation, In: Plant metabolism and biotechnology, 67-102., @2011
81. Marchetti M, Catrice O, Batut J, Masson-Boivin C. Cupriavidus taiwanensis bacteroids in mimosa pudica indeterminate nodules are not terminally differentiated, Appl Environ Microbiol, 77, 6, 2161-4., @2011
82. Marshall E, Costa LM, Gutierrez-Marcos J. Cysteine-rich peptides (CRPs) mediate diverse aspects of cell-cell communication in plant reproduction and development, J Exp Bot 62, 5, 1677-86., @2011
83. Appels R, Adelson DL, Moolhuijzen P, Webster H, Barrero R, Bellgard M. Genome studies at the PAG 2011 conference, Funct Integr Genomics, 11, 1, 1-11., @2011
84. Young ND, Debelle F, Oldroyd GED, Geurts R, Cannon SB, Uvdardi MK, Benedito VA, Mayer KFX, Gouzy J, Schoof H, Van De Peer Y, Proost S, Cook DR, Meyers BC, Spannagl M, Cheung F, De Mita S, Krishnakumar V, Gundlach H, Zhou S, Mudge J, Bharti AK, Murray JD, Roe BA. The medicago genome provides insight into the evolution of rhizobial symbioses, Nature, 480, 7378, 520-4., @2011
85. Moreau S, Verdenaud M, Ott T, Letort S, de Billy F, Niebel A, Gouzy J, de Carvalho-Niebel F, Gamas P. Transcription reprogramming during root nodule development in medicago truncatula, PLoS ONE, 6, 1., @2011
86. Mueller K, González JE. Complex regulation of symbiotic functions is coordinated by mcr and quorum sensing in sinorhizobium meliloti, J Bacteriol, 193, 2, 485-96., @2011

87. Plett JM, Martin F. Blurred boundaries: Lifestyle lessons from ectomycorrhizal fungal genomes., *Trends Genet*, 27, 1, 14-22., @2011
88. McVey EA, Montforts MHMM. Regulatory research on antimicrobial resistance in the environment, In: *Antimicrobial resistance in the environment*, 549-567, @2011
89. Soto MJ, Nogales J, Pérez-Mendoza D, Gallegos M-, Olivares J, Sanjuán J. Pathogenic and mutualistic plant-bacteria interactions: Ever increasing similarities, *Cent Eur J Biol*, 6, 6, 911-7., @2011
90. Oldroyd GED, Murray JD, Poole PS, Downie JA. The rules of engagement in the legume-rhizobial symbiosis, *Annu Rev Genet*, 45, 119-44., @2011
91. Ardisson S, Deakin WJ. Roles of effector proteins in the legume-rhizobia symbiosis, In: *Effectors in plant-microbe interactions*, 277-293., @2011
92. Terpolilli JJ, Hood GA, Poole PS. What determines the efficiency of N₂-fixing rhizobium-legume symbioses?, *Adv Microb Physiol*, 60, 326-89., @2012
93. Ziegler D, Mariotti A, Pflüger V, Saad M, Vogel G, Tonolla M, Perret X. In situ identification of plant-invasive bacteria with MALDI-TOF mass spectrometry, *PLoS ONE*, 7, 5., @2012
94. Queiroux C, Washburn BK, Davis OM, Stewart J, Brewer TE, Lyons MR, Jones KM. A comparative genomics screen identifies a sinorhizobium meliloti 1021 sodM-like gene strongly expressed within host plant nodules, *BMC Microbiol*, 12., @2012
95. Bodył A, MacKiewicz P, Gagat P. Organelle evolution: Paulinella breaks a paradigm, *Curr Biol*, 22, 9, R304-6., @2012
96. Perrineau M-, Galiana A, De Faria SM, Bena G, Duponnois R, Reddell P, Prin Y. Monoxenic nodulation process of acacia mangium (mimosoideae, phyllodineae) by bradyrhizobium sp., *Symbiosis*, 56, 2, 87-95., @2012
97. Meckfessel MH, Blancaflor EB, Plunkett M, Dong Q, Dickstein R. Multiple domains in mtenod8 protein including the signal peptide target it to the symbosome, *Plant Physiol*, 159, 1, 299-310., @2012
98. Tian CF, Garnerone A-, Mathieu-Demazière C, Masson-Boivin C, Batut J. Plant-activated bacterial receptor adenylate cyclases modulate epidermal infection in the sinorhizobium meliloti-medicago symbiosis, *Proc Natl Acad Sci U S A*, 109, 17, 6751-6., @2012
99. Nowack ECM, Grossman AR. Trafficking of protein into the recently established photosynthetic organelles of paulinella chromatophora, *Proc Natl Acad Sci U S A*, 109, 14, 5340-5., @2012
100. Damiani I, Baldacci-Cresp F, Hopkins J, Andrio E, Balzergue S, Lecomte P, Puppo A, Abad P, Fahey B, Hérouart D. Plant genes involved in harbouring symbiotic rhizobia or pathogenic nematodes, *New Phytol*, 194, 2, 511-22., @2012
101. Wang D, Yang S, Tang F, Zhu H. Symbiosis specificity in the legume - rhizobial mutualism, *Cell Microbiol*, 14, 3, 334-42., @2012
102. Meng L. Roles of secreted peptides in intercellular communication and root development, *Plant Sci*, 183, 106-14., @2012
103. Costa LM, Yuan J, Rouster J, Paul W, Dickinson H, Gutierrez-Marcos JF. Maternal control of nutrient allocation in plant seeds by genomic imprinting, *Curr Biol*, 22, 2, 160-5., @2012
104. Brown DB, Forsberg LS, Kannenberg EL, Carlson RW. Characterization of galacturonosyl

transferase genes rgtA, rgtB, rgtC, rgtD, and rgtE responsible for lipopolysaccharide synthesis in nitrogen-fixing endosymbiont rhizobium leguminosarum: Lipopolysaccharide core and lipid galacturonosyl residues confer membrane stability, *J Biol Chem*, 287, 2, 935-49., @2012

105. Hakoyama T, Niimi K, Yamamoto T, Isobe S, Sato S, Nakamura Y, Tabata S, Kumagai H, Umehara Y, Broosseleit K, Petersen TR, Sandal N, Stougaard J, Udvardi MK, Tamaoki M, Kawaguchi M, Kouchi H, Suganuma N. The integral membrane protein SEN1 is required for symbiotic nitrogen fixation in lotus japonicus nodules, *Plant Cell Physiol*, 53, 1, 225-36., @2012
106. López-García B, San Segundo B, Coca M. Antimicrobial peptides as a promising alternative for plant disease protection, *ACS Symp Ser*, 1095, 263-94., @2012
107. Provorov NA, Tsyanova AV, Brewin NJ, Tsyanov VE, Vorobyov NI. Evolution of symbiotic bacteria within the extra- and intra-cellular plant compartments: Experimental evidence and mathematical simulation (mini-review), *Symbiosis*, 58, 1-3, 39-50., @2012
108. Laporte P, Niebel A, Frugier F. Legume roots and nitrogen-fixing symbiotic interactions. In: *Root genomics and soil interactions*, 145-170., @2012
109. Bapaume L, Reinhart D. How membranes shape plant symbioses: Signaling and transport in nodulation and arbuscular mycorrhiza, *Front Plant Sci*, 3., @2012
110. Bosch TCG. Microbe-host conversations, *Biol Unserer Zeit*, 42, 5, 302-9., @2012
111. Heath KD, Burke PV, Stinchcombe JR. Coevolutionary genetic variation in the legume-rhizobium transcriptome, *Mol Ecol*, 21, 19, 4735-47., @2012
112. de-la-Peña C, Loyola-Vargas VM. The hidden chemical cross-talk between roots and microbes: A proteomic approach, *Curr Proteomics*, 9, 2, 103-17., @2012
113. Young ND, Bharti AK. Genome-enabled insights into legume biology, *Annu Rev Plant Biol*, 63, 283-305., @2012
114. Davy SK, Allemand D, Weis VM. Cell biology of cnidarian-dinoflagellate symbiosis, *Microbiol Mol Biol Rev*, 76, 2, 229-61., @2012
115. Bustos-Sanmamed P, Bazin J, Hartmann C, Crespi M, Lelandais-Brière C. Small RNA pathways and diversity in model legumes: Lessons from genomics, *Front Plant Sci*, 4., @2013
116. Guillén G, Díaz-Camino C, Loyola-Torres CA, Aparicio-Fabre R, Hernández-López A, Díaz-Sánchez M, Sanchez F. Detailed analysis of putative genes encoding small proteins in legume genomes, *Front Plant Sci*, 4., @2013
117. Provorov NA, Vorobyov NI. Reconstruction of the adaptively advantages macroevolutionary events in the mutualistic symbioses, In: *Evolutionary biology: Mechanisms and trends*, 169-187., @2013
118. Gugerli F, Brandl R, Castagnéryrol B, Franc A, Jactel H, Koelewijn H-, Martin F, Peter M, Pritsch K, Schröder H, Smulders MJM, Kremer A, Ziegenhagen B. Community genetics in the time of next-generation molecular technologies, *Mol Ecol*, 22, 12, 3198-207., @2013
119. Limpens E, Moling S, Hooiveld G, Pereira PA, Bisseling T, Becker JD, Küster H. Cell- and tissue-specific transcriptome analyses of medicago truncatula root nodules, *PLoS ONE*, 8, 5., @2013
120. Futahashi R, Tanaka K, Tanahashi M, Nikoh N, Kikuchi Y, Lee BL, Fukatsu T. Gene expression in gut symbiotic organ of stinkbug affected by extracellular bacterial symbiont, *PLoS ONE*, 8, 5., @2013

121. Provorov NA, Zhukov VA, Kurchak ON, Onishchuk OP, Andronov EE, Borisov AY, Chizhevskaya EP, Naumkina TS, Ovtsova AO, Vorobyov NI, Simarov BV, Tikhonovich IA. Comigration of root nodule bacteria and bean plants to new habitats: Coevolution mechanisms and practical importance, *Appl Biochem Microbiol*, 49, 3, 209-14., @2013
122. Haag AF, Arnold MFF, Myka KK, Kerscher B, Dall'Angelo S, Zanda M, Mergaert P, Ferguson GP. Molecular insights into bacteroid development during rhizobium-legume symbiosis, *FEMS Microbiol Rev*, 37, 3, 364-83., @2013
123. Nallu S, Silverstein KAT, Samac DA, Bucciarelli B, Vance CP, VandenBosch KA. Regulatory patterns of a large family of defensin-like genes expressed in nodules of *medicago truncatula*, *PLoS ONE*, 8, 4., @2013
124. Udvardi M, Poole PS. Transport and metabolism in legume-rhizobia symbioses, *Annu Rev Plant Biol*, 64, 781-805., @2013
125. Tesfaye M, Silverstein KAT, Nallu S, Wang L, Botanga CJ, Gomez SK, Costa LM, Harrison MJ, Samac DA, Glazebrook J, Katagiri F, Gutierrez-Marcos JF, VandenBosch KA. Spatio-temporal expression patterns of *arabidopsis thaliana* and *medicago truncatula* defensin-like genes, *PLoS ONE*, 8, 3., @2013
126. Capela D, Guan S, Masson-Boivin C. Diversity and evolution of nitrogen-fixing legume symbionts. In: *Molecular microbial ecology of the rhizosphere*, 467-481., @2013
127. Benyamina SM, Baldacci-Cresp F, Couturier J, Chibani K, Hopkins J, Bekki A, de Lajudie P, Rouhier N, Jacquot J-, Alloing G, Puppo A, Frendo P. Two *sinorhizobium meliloti* glutaredoxins regulate iron metabolism and symbiotic bacteroid differentiation, *Environ Microbiol*, 15, 795-810., @2013
128. Hanada K, Higuchi-Takeuchi M, Okamoto M, Yoshizumi T, Shimizu M, Nakaminami K, Nishi R, Ohashi C, Iida K, Tanaka M, Horii Y, Kawashima M, Matsui K, Toyoda T, Shinozaki K, Seki M, Matsui M. Small open reading frames associated with morphogenesis are hidden in plant genomes, *Proc Natl Acad Sci U S A*, 110, 6, 2395-400., @2013
129. Li XL, Xu J, Yu GQ, Luo L. A wound-induced small polypeptide gene family is upregulated in soybean nodules, *Chin Sci Bull*, 58, 9, 1003-9., @2013
130. De Coninck B, Cammue BPA, Thevissen K. Modes of antifungal action and in planta functions of plant defensins and defensin-like peptides, *Fungal Biol Rev*, 26, 4, 109-20., @2013
131. Shigenobu S, Stern DL. Aphids evolved novel secreted proteins for symbiosis with bacterial endosymbiont, *Proc R Soc B Biol Sci*, 280, 1750., @2013
132. Czyzewicz N, Yue K, Beeckman T, De Smet I. Message in a bottle: Small signalling peptide outputs during growth and development, *J Exp Bot*, 64, 17, 5281-96., @2013
133. Runti G, Lopez Ruiz MC, Stoilova T, Hussain R, Jennions M, Choudhury HG, Benincasa M, Gennaro R, Beis K, Scocchi M. Functional characterization of SbmA, a bacterial inner membrane transporter required for importing the antimicrobial peptide Bac7(1-35), *J Bacteriol*, 195, 23, 5343-51., @2013
134. Sommer MS, Schleiff E. Evolution of the protein translocons of the chloroplast envelope. In: *Endosymbiosis*, 81-110., @2013
135. Zhou P, Silverstein KAT, Gao L, Walton JD, Nallu S, Guhlin J, Young ND. Detecting small plant peptides using SPADA (small peptide alignment discovery application), *BMC Bioinform*, 14, 1., @2013
136. Pierre O, Engler G, Hopkins J, Brau F, Boncompagni E, Hérouart D. Peribacteroid space

acidification: A marker of mature bacteroid functioning in *medicago truncatula* nodules, *Plant Cell Environ*, 36, 11, 2059-70., @2013

137. Miransari M. Soil microbes and the availability of soil nutrients, *Acta Physiol Plant* 35, 11, 3075-84., @2013
138. Domonkos A, Horvath B, Marsh JF, Halasz G, Ayaydin F, Oldroyd GED, Kalo P. The identification of novel loci required for appropriate nodule development in *medicago truncatula*, *BMC Plant Biol*, 13, 1., @2013
139. González-Forero M, Gavrillets S. Evolution of manipulated behavior, *Am Nat*, 182, 4, 439-51., @2013
140. Morel MA, Castro-Sowinski S. The complex molecular signaling network in microbe-plant interaction, In: *Plant microbe symbiosis: Fundamentals and advances*, 169-199., @2013
141. Pini F, Frage B, Ferri L, De Nisco NJ, Mohapatra SS, Taddei L, Fioravanti A, Dewitte F, Galardini M, Brilli M, Villeret V, Bazzicalupo M, Mengoni A, Walker GC, Becker A, Biondi EG. The DivJ, CbrA and PleC system controls DivK phosphorylation and symbiosis in *sinorhizobium meliloti*, *Mol Microbiol*, 90, 1, 54-71., @2013
142. Frendo P, Matamoros MA, Alloing G, Becana M. Thiol-based redox signaling in the nitrogen-fixing symbiosis, *Front Plant Sci*, 4., @2013
143. Demina IV, Persson T, Santos P, Plaszczyca M, Pawlowski K. Comparison of the nodule vs. root transcriptome of the actinorhizal plant *datisca glomerata*: Actinorhizal nodules contain a specific class of defensins, *PLoS ONE*, 8, 8., @2013
144. Li Y, Tian CF, Chen WF, Wang L, Sui XH, Chen WX. High-resolution transcriptomic analyses of *sinorhizobium* sp. NGR234 bacteroids in determinate nodules of *vigna unguiculata* and indeterminate nodules of *leucaena leucocephala*, *PLoS ONE*, 8, 8., @2013
145. Xi J, Chen Y, Nakashima J, Wang S-, Chen R. *Medicago truncatula esn1* defines a genetic locus involved in nodule senescence and symbiotic nitrogen fixation, *Mol Plant-Microbe Interact*, 26, 8, 893-902., @2013
146. Huisman R, Ovchinnikova E, Bisseling T, Limpens E. Endocytic accommodation of microbes in plants, In: *Endocytosis in plants*, 271-295., @2013
147. Sadowsk CS, Wilson D, Schallies KB, Walker G, Gibson KE. The *sinorhizobium meliloti* sensor histidine kinase CbrA contributes to free-living cell cycle regulation, *Microbiology*, 159, 8, 1552-63., @2013
148. Hoshi M, Ohki Y, Ito K, Tomita T, Iwatsubo T, Ishimaru Y, Abe K, Asakura T. Experimental detection of proteolytic activity in a signal peptide peptidase of *arabidopsis thaliana*, *BMC Biochem*, 14, 1., @2013
149. Provorov NA. Improvement of symbiotic nitrogen fixation in plants: Molecular-genetic approaches and evolutionary models, *Russ J Plant Physiol*, 60, 1, 27-32., @2013
150. De Nisco NJ, Abo RP, Wu CM, Penterman J, Walker GC. Global analysis of cell cycle gene expression of the legume symbiont *sinorhizobium meliloti*. *Proc Natl Acad Sci U S A*, 111, 9, 3217-24., @2014
151. Penterman J, Abo RP, De Nisco NJ, Arnold MFF, Longhi R, Zanda M, Walker GC. Host plant peptides elicit a transcriptional response to control the *sinorhizobium meliloti* cell cycle during symbiosis, *Proc Natl Acad Sci U S A*, 111, 9, 3561-6., @2014
152. Selami N, Auriac M-, Catrice O, Capela D, Kaid-Harche M, Timmers T. Morphology and anatomy of root nodules of *retama monosperma* (L.)boiss, *Plant Soil*, 379, 1-2, 109-19., @2014

- 153.** Lin C-, Chang M-, Chen C-. A potent antimicrobial peptide derived from the protein LsGRP1 of lilium, *Phytopathology*, 104, 4, 340-6., **@2014**
- 154.** Németh T, Tóth A, Hamari Z, Falus A, Éder K, Vágvölgyi C, Guimaraes AJ, Nosanchuk JD, Gácser A. Transcriptome profile of the murine macrophage cell response to candida parapsilosis, *Fungal Genet Biol*, 65, 48-56., **@2014**
- 155.** Behm JE, Geurts R, Kiers ET. Parasponia: A novel system for studying mutualism stability, *Trends Plant Sci*, 19, 12, 757-62., **@2014**
- 156.** Pende N, Leisch N, Gruber-Vodicka HR, Heindl NR, Ott J, Den Blaauwen T, Bulgheresi S. Size-independent symmetric division in extraordinarily long cells, *Nat Commun*, 5., **@2014**
- 157.** Nallu S, Silverstein KAT, Zhou P, Young ND, Vandenbosch KA. Patterns of divergence of a large family of nodule cysteine-rich peptides in accessions of medicago truncatula, *Plant J*, 78, 4, 697-705., **@2014**
- 158.** Provorov NA, Vorobyov NI. Adaptive and progressive evolution of plant-microbial symbiosis, *Russ J Genet Appl Res*, 4, 2, 88-97., **@2014**
- 159.** Ferguson BJ, Mathesius U. Phytohormone regulation of legume-rhizobia interactions, *J Chem Ecol*, 40, 7, 770-90., **@2014**
- 160.** Marmiroli N, Maestri E. Plant peptides in defense and signaling, *Peptides*, 56, 30-44., **@2014**
- 161.** Roux B, Rodde N, Jardinaud M-, Timmers T, Sauviac L, Cottret L, Carrère S, Sallet E, Courcelle E, Moreau S, Debelle F, Capela D, De Carvalho-Niebel F, Gouzy J, Bruand C, Gamas P. An integrated analysis of plant and bacterial gene expression in symbiotic root nodules using laser-capture microdissection coupled to RNA sequencing, *Plant J*, 77, 6, 817-37., **@2014**
- 162.** Arnold MFF, Caro-Hernandez P, Tan K, Runti G, Wehmeier S, Scocchi M, Doerrler WT, Walker GC, Ferguson GP. Enteric YaiW is a surface-exposed outer membrane lipoprotein that affects sensitivity to an antimicrobial peptide, *J Bacteriol*, 196, 2, 436-44., **@2014**
- 163.** Trujillo DI, Silverstein KAT, Young ND. Genomic characterization of the LEED..PEEDs, a gene family unique to the medicago lineage, *G3 Genes Genome Genet*, 4, 10, 2003-12., **@2014**
- 164.** Libault M. The carbon-nitrogen balance of the nodule and its regulation under elevated carbon dioxide concentration, *BioMed Res Int*, 2014., **@2014**
- 165.** Cabeza R, Koester B, Liese R, Lingner A, Baumgarten V, Dirks J, Salinas-Riester G, Pommerenke C, Ditttert K, Schulze J. An RNA sequencing transcriptome analysis reveals novel insights into molecular aspects of the nitrate impact on the nodule activity of medicago truncatula, *Plant Physiol*, 164, 1, 400-11., **@2014**
- 166.** Soppa J. Polyploidy in archaea and bacteria: About desiccation resistance, giant cell size, long-term survival, enforcement by a eukaryotic host and additional aspects, *J Mol Microbiol Biotechnol*, 24, 5-6, 409-19., **@2014**
- 167.** Torres MF, Cuadros DF, Vaillancourt LJ. Evidence for a diffusible factor that induces susceptibility in the colletotrichum-maize disease interaction, *Mol Plant Pathol*, 15, 1, 80-93., **@2014**
- 168.** Nowack ECM. Paulinella chromatophora - rethinking the transition from endosymbiont to organelle, *Acta Soc Bot Pol*, 83, 4, 387-97., **@2014**
- 169.** De-la-Peña C, Loyola-Vargas VM. Biotic interactions in the rhizosphere: A diverse

cooperative enterprise for plant productivity, *Plant Physiol*, 166, 2, 701-19., @2014

170. Kiers ET, Denison RF. Inclusive fitness in agriculture, *Philos Trans R Soc B Biol Sci*, 369, 1642., @2014
171. Emerich DW, Krishnan HB. Review article symbiosomes: Temporary moonlighting organelles, *Biochem J*, 460, 1, 1-11., @2014
172. Peng J, Hao B, Liu L, Wang S, Ma B, Yang Y, Xie F, Li Y. RNA-seq and microarrays analyses reveal global differential transcriptomes of *mesorhizobium huakuii* 7653R between bacteroids and free-living cells, *PLoS ONE*, 9, 4., @2014
173. Gavrin A, Jansen V, Ivanov S, Bisseling T, Fedorova E. ARP2/3-Mediated Actin Nucleation Associated with Symbiosome Membrane is Essential for the Development of Symbiosomes in Infected Cells of *Medicago Truncatula* Root Nodules, *Molecular Plant-Microbe Interactions* 28, 5, 605-614, @2015
174. Tavormina P, De Coninck B, Nikonorova N, De Smet I, Cammue B. The plant peptidome: an expanding repertoire of structural features and biological functions, *The Plant Cell*, 27, 8, 2095-2118, @2015
175. Gourion B, Berrabah F, Ratet P, Stacey G. Rhizobium-legume symbioses: the crucial role of plant immunity, *Trends in plant science*, 20, 3, 186-194, @2015
176. Gourion B, Bonaldi K, Giraud E. Metabolism of Photosynthetic Bradyrhizobia during Root and Stem Symbiosis with *Aeschynomene* Legumes, *Biological Nitrogen Fixation*, 2, 283, @2015
177. Djordjevic M, Mohd-Radzman N, Imin N. Small-peptide signals that control root nodule number, development, and symbiosis, *Journal of Experimental Botany*, 66, 17, 5171-5181, @2015
178. Nowack E, Grossman A. Evolutionary pressures and the establishment of endosymbiotic association, In: *Microbial Evolution Under Extreme Conditions*, 246, @2015
179. Tsyganova A, Tsyganov V. Negative Hormonal Regulation of Symbiotic Nodule Development. I. Ethylene, *Sel'Skokhozyaistvennaya Biologiya*, 50, 3, 267-277, @2015
180. Provorov N. Adaptive Macroevolution of Legume-Rhizobia Symbiosis, *Sel'Skokhozyaistvennaya Biologiya*, 50, 3, 323-331, @2015
181. Lang C, Long S. Transcriptomic Analysis of *Sinorhizobium Meliloti* and *Medicago Truncatula* Symbiosis using Nitrogen Fixation-Deficient Nodules, *Molecular Plant-Microbe Interactions* 28, 8, 856-868, @2015
182. Wang C, Yu H, Zhang Z, Yu L, Xu X, Hong Z, Luo L. Phytosulfokine is Involved in Positive Regulation of *Lotus Japonicus* Nodulation, *Molecular Plant-Microbe Interactions*, 28, 8, 847-855, @2015
183. Handa Y, Nishide H, Takeda N, Suzuki Y, Kawaguchi M, Saito K. RNA-seq Transcriptional Profiling of an Arbuscular Mycorrhiza Provides Insights into Regulated and Coordinated Gene Expression in *Lotus japonicus* and *Rhizophagus irregularis*, *Plant and Cell Physiology*, 56, 8, 1490-1511, @2015
184. Clarke V, Loughlin P, Gavrin A, Chen C, Brear E, Day D, Smith P. Proteomic analysis of the soybean symbosome identifies new symbiotic proteins, *Molecular & Cellular Proteomics*, 14, 5, 1301-1322, @2015
185. McCormack M, Pajerowska-Mukhtar K. Roles of the plant immune response in root nodule symbiosis, *International Journal of Plant & Soil Science*, 7, 4, 228-237, @2015

- 186.** Barnett M, Long S. The *Sinorhizobium meliloti* SyrM regulon: effects on global gene expression are mediated by syrA and nodD3, *Journal of bacteriology*, 197, 10, 1792-1806, @2015
- 187.** O'Rourke J, Fu F, Bucciarelli B, Yang S, Samac D, Lamb J, ... Vance C. The *Medicago sativa* gene index 1.2: a web-accessible gene expression atlas for investigating expression differences between *Medicago sativa* subspecies, *BMC genomics*, 16, 1, 502, @2015
- 188.** Okazaki S, Tittabutr P, Teulet A, Thouin J, Fardoux J, Chaintreuil C, ... Giraud E. Rhizobium-legume symbiosis in the absence of Nod factors: two possible scenarios with or without the T3SS, *The ISME journal*, @2015
- 189.** Lafuente A, Pérez-Palacios P, Doukkali B, Molina-Sánchez M, Jiménez-Zurdo J, Caviedes M, ... Pajuelo E. Unraveling the effect of arsenic on the model *Medicago*-*Ensifer* interaction: a transcriptomic meta-analysis, *New Phytologist*, 205, 1, 255-272, @2015
- 190.** Berrabah F, Ratet P, Gourion B. Multiple steps control immunity during the intracellular accommodation of rhizobia, *Journal of experimental botany*, 66, 7, 1977-1985, @2015
- 191.** Nelson M, Sadowsky M. Secretion systems and signal exchange between nitrogen-fixing rhizobia and legumes, *Frontiers in plant science*, 6, 491, 11, @2015
- 192.** Kim M, Chen Y, Xi J, Waters C, Chen R, Wang D. An antimicrobial peptide essential for bacterial survival in the nitrogen-fixing symbiosis, *Proceedings of the National Academy of Sciences*, 201500123, @2015
- 193.** Suzuki T, Yoro E, Kawaguchi M. Chapter Three-Leguminous Plants: Inventors of Root Nodules to Accommodate Symbiotic Bacteria, *International review of cell and molecular biology*, 316, 111-158, @2015
- 194.** Joly V, Matton D. KAPPA, a simple algorithm for discovery and clustering of proteins defined by a key amino acid pattern: a case study of the cysteine-rich proteins, *Bioinformatics*, 31, 11, 1716-1723, @2015
- 195.** Chuang H, Feng J, Feng Y, Wei M. An *Arabidopsis* WDR protein coordinates cellular networks involved in light, stress response and hormone signals, *Plant Science*, 241, 23-31, @2015
- 196.** Smith D, Praslickova D, Ilangumaran G. Inter-organismal signaling and management of the phytomicrobiome, *Frontiers in plant science*, 6, 722, @2015
- 197.** Vorobyov N, Provorov N. Simulation of the evolution of the legume-rhizobia symbiosis under the conditions of ecological instability, *Russian Journal of Genetics: Applied Research*, 5, 2, 91-101, @2015
- 198.** Provorov N, Tikhonovich I. Bacterial genome evolution in superspecies systems: An approach to the reconstruction of symbiogenesis processes, *Russian Journal of Genetics*, 51, 4, 377-385, @2015
- 199.** Provorov N, Vorobyev N. Evolution of host-beneficial traits in nitrogen-fixing bacteria: Modeling and construction of systems for interspecies altruism, *Applied Biochemistry and Microbiology*, 51, 4, 381-387, @2015
- 200.** Rashid M, Krehenbrink M, Akhtar M. Nitrogen-Fixing Plant-Microbe Symbioses, In Sustainable Agriculture Reviews, 193-234, @2015
- 201.** Becker A. Knöllchensymbiose—wenn Pflanzen und Bakterien sich verstehen, *BIOspektrum*, 21, 2, 151-153, @2015
- 202.** Debelle F. The *Medicago truncatula* Genome, *Biological Nitrogen Fixation*, 787-798, @2015

- 203.** Ostrowski M, Kowalczyk S. Peptydy sygnałowe roślin, @2015
- 204.** Zhou P. Defense-related gene families in the model legume, *Medicago truncatula*: computational analysis, pan-genome characterization, and structural variation, Doctoral dissertation, UNIVERSITY OF MINNESOTA, @2015
- 205.** Kitaeva AB, Demchenko KN, Tikhonovich IA, Timmers AC, Tsyanov VE. Comparative analysis of the tubulin cytoskeleton organization in nodules of *Medicago truncatula* and *Pisum sativum*: bacterial release and bacteroid positioning correlate with characteristic microtubule rearrangements, *New Phytologist*, @2015
- 206.** Guinel FC. Ethylene, a Hormone at the Center-Stage of Nodulation, *Front. PlantSci.* 6:1121, @2015
- 207.** Zgadzaj R, James E, Kelly S, Kawaharada Y, de Jonge N, Jensen D. ... Radutoiu S. A legume genetic framework controls infection of nodules by symbiotic and endophytic bacteria, *PLoS Genet*, 11, 6, e1005280, @2015
- 208.** Moënne-Locoz Y, Mavingui P, Combes C, Normand P, Steinberg C. Microorganisms and Biotic Interactions, In *Environmental Microbiology: Fundamentals and Applications*, 395-444, @2015
- 209.** Price P, Tanner H, Dillon B, Shabab M, Walker G, Griffitts J. Rhizobial peptidase HrrP cleaves host-encoded signaling peptides and mediates symbiotic compatibility, *Proceedings of the National Academy of Sciences*, 201417797, @2015
- 210.** Pislariu C, Sinharoy S, Wen J, Murray J, Ratet P, Udvardi M. Retrotransposon (Tnt1)-Insertion Mutagenesis in *Medicago* as a Tool for Genetic Dissection of Symbiosis in Legumes, *Biological Nitrogen Fixation*, 837-854, @2015
- 211.** Shabab M, Arnold M F, Penterman J, Wommack A.J, Bocker H T, Price P A, ... & Walker G C . Disulfide cross-linking influences symbiotic activities of nodule peptide NCR247, *Proceedings of the National Academy of Sciences*, 201610724, @2016
- 212.** Kunert K J., Vorster B J, Fenta B A, Kibido T, Dionisio G, Foyer C H. Drought stress responses in soybean roots and nodules, *Frontiers in Plant Science*, 7, @2016
- 213.** Morales J, Kokkori S, Weidauer D, Chapman J, Goltsman E, Rokhsar D, ... & Nowack E C. Development of a toolbox to dissect host-endosymbiont interactions and protein trafficking in the trypanosomatid *Angomonas deanei*, *BMC Evolutionary Biology*, 16(1), 247, @2016
- 214.** Satgé C, Moreau S, Sallet E, Lefort G, Auriac M C, Remblière C, ... & Gamas P. Reprogramming of DNA methylation is critical for nodule development in *Medicago truncatula*, *Nature Plants*, 2, 16166, @2016
- 215.** Ahsan N, Salomon A R. Proteomic Tools for the Investigation of Nodule Organogenesis. In *Agricultural Proteomics*, Volume 1, 127-145, Springer International Publishing, @2016
- 216.** Bulgheresi S. Bacterial cell biology outside the streetlight, *Environmental Microbiology*, 18(8), 2305-2318, @2016
- 217.** Huang C T, Liu C T, Chen S J, Kao W Y. Phylogenetic Identification, Phenotypic Variations, and Symbiotic Characteristics of the Peculiar Rhizobium, Strain CzR2, Isolated from *Crotalaria zanzibarica* in Taiwan, *Microbes and Environments*, ME16063, @2016
- 218.** Kang Y, Li M, Sinharoy S, Verdier J. A snapshot of functional genetic studies in *Medicago truncatula*, *Frontiers in Plant Science*, 7, @2016
- 219.** Young N, Zhou, P, Silverstein K. Exploring structural variants in environmentally sensitive gene families, *Current opinion in plant biology*, 30, 19-24, @2016

- 220.** Schwartzman J, Ruby E. Stress as a Normal Cue in the Symbiotic Environment. *Trends in microbiology*, 24, 5, 414-424, @2016
- 221.** Masson F, Zaidman-Rémy A, Heddi A. Antimicrobial peptides and cell processes tracking endosymbiont dynamics, *Phil. Trans. R. Soc. B*, 371, 1695, 20150298, @2016
- 222.** Chou M, Xia C, Feng Z, Sun Y, Zhang D, Zhang M, ... Wei G. A translationally controlled tumor protein gene Rpf41 is required for the nodulation of Robinia pseudoacacia, *Plant molecular biology*, 90, 4-5, 389-402, @2016
- 223.** Wang C, Yu H, Luo L, Duan L, Cai L, He X, ... Duanmu D. NODULES WITH ACTIVATED DEFENSE 1 is required for maintenance of rhizobial endosymbiosis in *Medicago truncatula* *New Phytologist*, @2016
- 224.** Kitaeva A, Demchenko K, Tikhonovich I, Timmers A, Tsyganov V. Comparative analysis of the tubulin cytoskeleton organization in nodules of *Medicago truncatula* and *Pisum sativum*: bacterial release and bacteroid positioning correlate with characteristic microtubule rearrangements, *New Phytologist*, 210, 1, 168-183, @2016
- 225.** Carro L, Persson T, Pujic P, Alloisio N, Fournier P, Boubakri H, ... Normand P. Organic acids metabolism in *Frankia alni*, *Symbiosis*, 1-12, @2016
- 226.** Kant C, Pradhan S, Bhatia S. Dissecting the Root Nodule Transcriptome of Chickpea (*Cicer arietinum* L.), *PLoS one*, 11, 6, e0157908, @2016
- 227.** Muñoz V, Ibáñez F, Figueredo M, Fabra A. An oxidative burst and its attenuation by bacterial peroxidase activity is required for optimal establishment of the *Arachis hypogaea*-*Bradyrhizobium* sp. symbiosis., *Journal of applied microbiology*, @2016
- 228.** Pan H, Oztas O, Zhang X, Wu X, Stonoha C, Wang E, ... Wang D. A symbiotic SNARE protein generated by alternative termination of transcription, *Nature plants*, 2, 15197, @2016
- 229.** Geddes B, Oresnik I. The Mechanism of Symbiotic Nitrogen Fixation, In *The Mechanistic Benefits of Microbial Symbionts*, 69-97, Springer International Publishing, @2016
- 230.** Checcucci A, Azzarello E, Bazzicalupo M, Galardini M, Lagomarsino A, Mancuso S, ... Mengoni A. Mixed nodule infection in *sinorhizobium meliloti-medicago sativa* symbiosis suggest the presence of cheating behavior, *Frontiers in Plant Science*, 7(June2016) doi:10.3389/fpls.2016.00835, @2016
- 231.** Okazaki S, Tittabutr P, Teulet A, Thouin J, Fardoux J, Chaintreuil C, ... Giraud E. Rhizobium-legume symbiosis in the absence of nod factors: Two possible scenarios with or without the T3SS, *ISME Journal*, 10(1), 64-74, @2016
- 10.** Vassileva V, **Zehirov G**, Ugrinova M, Iantcheva, A. Variable leaf epidermal morphology in *Tnt1* insertional mutants of the model legume *Medicago truncatula*. *Biotechnology & Biotechnological Equipment*, 24, 4, 2010, 2060-2065. ISI IF:0.503

Цитира се:

- 232.** Panara F, Calderini O, Porceddu A. *Medicago truncatula* functional genomics: an invaluable resource for studies on agriculture sustainability, *In Tech.*, 7, 131-154, .., @2012
- 233.** Kunt K, Özktük R, Elverici M. *Harpactea ballarini* sp. nov., a new dysderid (Araneae, Dysderidae) spider from Turkey, *Turkish Journal of Zoology*, 37, 2, 238-241, @2013
- 234.** Petrović D, Golubović Z, Dajić Z, Tomantschger K, Radojević R. Mathematical modeling the surface roughness distribution of artificial cell wall material, *The Second International Symposium on Agricultural Engineering*, 9-10 Oct 2015, Belgrade-Zemun, @2015

2011

11. Ishihara, H, Koriyama, H, Osawa, A, **Zehirov, G.....**, Uchiumi, T. Characteristics of bacteroids in indeterminate nodules of the leguminous tree leucaena glauca.. Microbes and Environments, 26, 2, 2011, 156-159. ISI IF:1.906

Цитира се е:

235. Okubo T, Tsukui T, Maita H, Okamoto S, Oshima K, Fujisawa T, Saito A, Futamata H, Hattori R, Minamisawa K. Complete genome sequence of bradyrhizobium sp. S23321: Insights into symbiosis evolution in soil oligotrophs, Microbes Environ, 27, 306-315., @2012
236. Evgenia Ovchinnikova. Genetic analysis of symbiosome formation, PhD thesis, Wageningen University, Wageningen, NL., @2012
-

2013

12. Iantcheva A, Revalska M, **Zehirov G**, Vassileva V. Transformation of Medicago truncatula cell suspension culture provides a system for functional analysis. In Vitro Cellular and Developmental Biology – Plant, 50, 2, 2013, ISSN:ISSN: 1054-5476, DOI:doi: 10.1007/s11627-013-9554-4, 149-157. ISI IF:1.162

Цитира се е:

237. Wong S M. Optimisation of transformation system and expression of a cinnamate-4-hydroxylase (C4H) gene silencing construct in suspension cells of boesenbergia rotunda/Wong Sher Ming (Doctoral dissertation, University of Malaya), @2016
-

2014

13. Iantcheva A, Revalska M, **Zehirov G**, Vassileva V. Agrobacterium-mediated transformation of Medicago truncatula cell suspension culture provides a system for functional analysis. In Vitro Cellular and Developmental Biology – Plant, 50, 2, 2014, 147-157. ISI IF:1.139

Цитира се е:

238. Khan EU, Liu J-H. Development of Agrobacterium-mediated transformation protocol for mature seed-derived callus tissues of citrus cultivar 'Gailiangcheng orange x weizhang Satsuma mandarin', International Journal of Development Research, 5, 10, 5636-5643, @2015
239. Wong SM. Optimisation of transformation system and expression of a cinnamate-4-hydroxylase (C4H) gene silencing construct in suspension cells of boesenbergia rotunda/Wong Sher Ming. Doctoral dissertation, University of Malaya, @2016
-

2015

14. Revalska M, Vassileva V, **Zehirov G**, Iantcheva A. Is the auxin influx carrier LAX3 essential for plant growth and development in the model plants Medicago truncatula, Lotus japonicus and Arabidopsis

thaliana?. Biotechnology and Biotechnological Equipment, 29, 4, 2015, 786-797. ISI IF:0.3

Цитира се е:

240. Grisi PU, Imatomi M, de Cassia Pereira V, Anese S, Gualtieri SC. Influence of *Serjania lethalis* A. St.-Hil. (Sapindaceae) leaf and stem crude extracts on diaspores and seedlings of different cultivated species. South African Journal of Botany 2016, 105, 97-105, @2016

2016

15. Iantcheva A, Revalska M, **Zehirov G**, Boycheva I, Magne K, Radkova M, Ratet P, Vassileva V. Tnt1 retrotransposon as an efficient tool for development of an insertional mutant collection of *Lotus japonicus*. In Vitro Cell.Dev.Biol.—Plant, 52, 2016, 338-347. ISI IF:1.152

Цитира се е:

241. Mun T, Bachmann A, Gupta V, Stougaard J. Lotus Base: An integrated information portal for the model legume *Lotus japonicus*. Scientific Reports 6, 39447, DOI: 10.1038/srep39447, @2016