Miroslav VosÃ¡tka

List of Publications by Year
in descending order

93 papers	3,300 citations	126858 33 h-index	189801 50 g-index
96 all docs	96 docs citations	96 times ranked	3036 citing authors

#	Article	IF	Citations
1	Seed Coating: A Tool for Delivering Beneficial Microbes to Agricultural Crops. Frontiers in Plant Science, 2019, 10, 1357.	1.7	189
2	Phosphatase activity of extra-radical arbuscular mycorrhizal hyphae: A review. Plant and Soil, 2000, 226, 199-210.	1.8	146
3	Comparison of commonly used primer sets for evaluating arbuscular mycorrhizal fungal communities: Is there a universal solution?. Soil Biology and Biochemistry, 2014, 68, 482-493.	4.2	141
4	Inoculum of arbuscular mycorrhizal fungi for production systems: science meets business. Canadian Journal of Botany, 2004, 82, 1264-1271.	1.2	126
5	Arbuscular Mycorrhiza Stimulates Biological Nitrogen Fixation in Two Medicago spp. through Improved Phosphorus Acquisition. Frontiers in Plant Science, 2017, 8, 390.	1.7	100
6	Effects of inoculation with Glomus intraradices on lead uptake by Zea mays L. and Agrostis capillaris L.. Applied Soil Ecology, 2003, 23, 55-67.	2.1	97
7	Development of arbuscular mycorrhizal biotechnology and industry: current achievements and bottlenecks. Symbiosis, 2012, 58, 29-37.	1.2	86
8	Effectiveness of indigenous and non-indigenous isolates of arbuscular mycorrhizal fungi in soils from degraded ecosystems and man-made habitats. Applied Soil Ecology, 2000, 14, 201-211.	2.1	73
9	Arbuscular mycorrhiza decreases cadmium phytoextraction by transgenic tobacco with inserted metallothionein. Plant and Soil, 2005, 272, 29-40.	1.8	64
10	Differences in the effects of three arbuscular mycorrhizal fungal strains on P and Pb accumulation by maize plants. Plant and Soil, 2007, 296, 77-83.	1.8	62
11	Treatment with culture fractions from Pseudomonas putida modifies the development of Glomus fistulosum mycorrhiza and the response of potato and maize plants to inoculation. Applied Soil Ecology, 1999, 11, 245-251.	2.1	61
12	Associations of dominant plant species with arbuscular mycorrhizal fungi during vegetation development on coal mine spoil banks. Folia Geobotanica, 2001, 36, 85-97.	0.4	50
13	Mycorrhizal association of Agrostis capillaris and Glomus intraradices under heavy metal stress: Combination of plant clones and fungal isolates from contaminated and uncontaminated substrates. Applied Soil Ecology, 2008, 40, 19-29.	2.1	50
14	Effects of Inoculum Additions in the Presence of a Preestablished Arbuscular Mycorrhizal Fungal Community. Applied and Environmental Microbiology, 2013, 79, 6507-6515.	1.4	49
15	Long-term tracing of Rhizophagus irregularis isolate BEG140 inoculated on Phalaris arundinacea in a coal mine spoil bank, using mitochondrial large subunit rDNA markers. Mycorrhiza, 2012, 22, 69-80.	1.3	48
16	Cultivation of high-biomass crops on coal mine spoil banks: Can microbial inoculation compensate for high doses of organic matter?. Bioresource Technology, 2008, 99, 6391-6399.	4.8	47
17	Editorial: Beneficial Microbes Alleviate Climatic Stresses in Plants. Frontiers in Plant Science, 2019, 10, 595.	1.7	44
18	Seed coating with arbuscular mycorrhizal fungi as an ecotechnologicalapproach for sustainable agricultural production of common wheat (<i>Triticum aestivum</i>L.). Journal of Toxicology and Environmental Health - Part A: Current Issues, 2016, 79, 329-337.	1.1	43

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19	Increased protein content of chickpea (<i>Cicer arietinum</i> L.) inoculated with arbuscular mycorrhizal fungi and nitrogenâ€fixing bacteria under water deficit conditions. Journal of the Science of Food and Agriculture, 2017, 97, 4379-4385.	1.7	43
20	Nano Zero-Valent Iron Mediated Metal(loid) Uptake and Translocation by Arbuscular Mycorrhizal Symbioses. Environmental Science & Technology, 2018, 52, 7640-7651.	4.6	43
21	The Role of Arbuscular Mycorrhiza Fungi in the Decomposition of Fresh Residue and Soil Organic Carbon: A Miniâ€Review. Soil Science Society of America Journal, 2019, 83, 511-517.	1.2	42
22	Different native arbuscular mycorrhizal fungi influence the coexistence of two plant species in a highly alkaline anthropogenic sediment. Plant and Soil, 2006, 287, 209-221.	1.8	41
23	Effects of arbuscular mycorrhizal inoculation on cadmium accumulation by different tobacco (Nicotiana tabacum L.) types. Applied Soil Ecology, 2007, 35, 502-510.	2.1	41
24	Mycorrhiza influences plant community structure in succession on spoil banks. Basic and Applied Ecology, 2007, 8, 510-520.	1.2	40
25	Effects of Endo- and Ectomycorrhizal Fungi on Physiological Parameters and Heavy Metals Accumulation of Two Species from the Family Salicaceae. Water, Air, and Soil Pollution, 2012, 223, 399-410.	1.1	40
26	Seed coating with inocula of arbuscular mycorrhizal fungi and plant growth promoting rhizobacteria for nutritional enhancement of maize under different fertilisation regimes. Archives of Agronomy and Soil Science, 2019, 65, 31-43.	1.3	40
27	Antioxidant response in arbuscular mycorrhizal fungi inoculated wetland plant under Cr stress. Environmental Research, 2020, 191, 110203.	3.7	39
28	Inoculation ofRhododendron cv. Belle-Heller with two strains ofPhialocephala fortinii in two different substrates. Folia Geobotanica, 2003, 38, 191-200.	0.4	38
29	Dual Inoculation with Mycorrhizal and Saprotrophic Fungi Applicable in Sustainable Cultivation Improves the Yield and Nutritive Value of Onion. Scientific World Journal, The, 2012, 2012, 1-8.	0.8	38
30	Response of micropropagated potatoes transplanted to peat media to post-vitro inoculation with arbuscular mycorrhizal fungi and soil bacteria. Applied Soil Ecology, 2000, 15, 145-152.	2.1	37
31	Chitin stimulates development and sporulation of arbuscular mycorrhizal fungi. Applied Soil Ecology, 2003, 22, 283-287.	2.1	37
32	Real-time PCR quantification of arbuscular mycorrhizal fungi: does the use of nuclear or mitochondrial markers make a difference?. Mycorrhiza, 2017, 27, 577-585.	1.3	36
33	Development and activity of Glomus intraradices as affected by co-existence with Glomus claroideum in one root system. Mycorrhiza, 2009, 19, 393-402.	1.3	35
34	The response of Glomus fistulosum-maize mycorrhiza to treatments with culture fractions from Pseudomonas putida. Mycorrhiza, 1996, 6, 207-211.	1.3	34
35	Extraradical mycelium of arbuscular mycorrhizal fungi radiating from large plants depresses the growth of nearby seedlings in a nutrient deficient substrate. Mycorrhiza, 2011, 21, 641-650.	1.3	34
36	The role of the extraradical mycelium network of arbuscular mycorrhizal fungi on the establishment and growth of Calamagrostis epigejos in industrial waste substrates. Applied Soil Ecology, 2001, 18, 129-142.	2.1	33

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37	Effect ofGlomus intraradices isolated from Pb-contaminated soil on Pb uptake byAgrostis capillaris is changed by its cultivation in a metal-free substrate. Folia Geobotanica, 2003, 38, 155-165.	0.4	33
38	Native Grass Facilitates Mycorrhizal Colonisation and P Uptake of Tree Seedlings in Two Anthropogenic Substrates. Water, Air, and Soil Pollution, 2005, 166, 217-236.	1.1	32
39	Differences in AM fungal root colonization between populations of perennial Aster species have genetic reasons. Oecologia, 2008, 157, 211-220.	0.9	31
40	Arbuscular mycorrhiza differentially affects synthesis of essential oils in coriander and dill. Mycorrhiza, 2016, 26, 123-131.	1.3	31
41	Delivery of Inoculum of Rhizophagus irregularis via Seed Coating in Combination with Pseudomonas libanensis for Cowpea Production. Agronomy, 2019, 9, 33.	1.3	31
42	Inoculation effects on root-colonizing arbuscular mycorrhizal fungal communities spread beyond directly inoculated plants. PLoS ONE, 2017, 12, e0181525.	1.1	31
43	Saprotrophic fungi transform organic phosphorus from spruce needle litter. Soil Biology and Biochemistry, 2006, 38, 3372-3379.	4.2	29
44	Improved grain yield of cowpea (Vigna unguiculata) under water deficit after inoculation with Bradyrhizobium elkanii and Rhizophagus irregularis. Crop and Pasture Science, 2017, 68, 1052.	0.7	28
45	In vitro and post vitro inoculation of micropropagated Rhododendrons with ericoid mycorrhizal fungi. Applied Soil Ecology, 2000, 15, 125-136.	2.1	27
46	Response to cadmium of Daucus carota hairy roots dual cultures with Glomus intraradices or Gigaspora margarita. Mycorrhiza, 2005, 15, 217-224.	1.3	27
47	Influence of arbuscular mycorrhiza on the growth and cadmium uptake of tobacco with inserted metallothionein gene. Applied Soil Ecology, 2005, 29, 209-214.	2.1	27
48	The International Market Development for Mycorrhizal Technology. , 2008, , 419-438.		27
49	Intraradical Dynamics of Two Coexisting Isolates of the Arbuscular Mycorrhizal Fungus Glomus intraradices Sensu Lato as Estimated by Real-Time PCR of Mitochondrial DNA. Applied and Environmental Microbiology, 2012, 78, 3630-3637.	1.4	27
50	Growth and nutrition of cowpea (<i>Vigna unguiculata</i>) under water deficit as influenced by microbial inoculation via seed coating. Journal of Agronomy and Crop Science, 2019, 205, 447-459.	1.7	27
51	The effect of EDDS chelate and inoculation with the arbuscular mycorrhizal fungus Glomus intraradices on the efficacy of lead phytoextraction by two tobacco clones. Applied Soil Ecology, 2007, 35, 163-173.	2.1	26
52	Management of nursery practices for efficient ectomycorrhizal fungi application in the production of Quercus ilex. Symbiosis, 2010, 52, 125-131.	1.2	26
53	Species-dependent partitioning of C and N stable isotopes between arbuscular mycorrhizal fungi and their C3 and C4 hosts. Soil Biology and Biochemistry, 2015, 82, 52-61.	4.2	26
54	Arbuscular mycorrhizal fungi colonization and physiological functions toward wetland plants under different water regimes. Science of the Total Environment, 2020, 716, 137040.	3.9	25

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55	Effect of inoculation with soil yeasts on mycorrhizal symbiosis of maize. Pedobiologia, 2006, 50, 341-345.	0.5	24
56	Interaction of arbuscular mycorrhizal fungi and rhizobia: Effects on flax yield in spoilâ€bank clay. Journal of Plant Nutrition and Soil Science, 2011, 174, 128-134.	1.1	24
57	Plant growth promotion of Miscanthusâ€‰Ã—â€‰giganteus by endophytic bacteria and fungi on non-polluted and polluted soils. World Journal of Microbiology and Biotechnology, 2018, 34, 48.	1.7	24
58	The development of arbuscular mycorrhiza in two simulated stages of spoil-bank succession. Applied Soil Ecology, 2007, 35, 363-369.	2.1	23
59	Arbuscular mycorrhizal fungi are an alternative to the application of chemical fertilizer in the production of the medicinal and aromatic plant<i>Coriandrum sativum</i>L.. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2016, 79, 320-328.	1.1	23
60	A novel inserted membrane technique for studies of mycorrhizal extraradical mycelium. Mycorrhiza, 2001, 11, 291-296.	1.3	22
61	Does the sequence of plant dominants affect mycorrhiza development in simulated succession on spoil banks?. Plant and Soil, 2008, 302, 273-282.	1.8	22
62	Effects of inoculation with native arbuscular mycorrhizal fungi on clonal growth of Potentilla reptans and Fragaria moschata (Rosaceae). Plant and Soil, 2008, 308, 55-67.	1.8	22
63	Inoculation with a ligninolytic basidiomycete, but not root symbiotic ascomycetes, positively affects growth of highbush blueberry (Ericaceae) grown in a pine litter substrate. Plant and Soil, 2012, 355, 341-352.	1.8	22
64	Title is missing!. Plant and Soil, 1998, 207, 45-57.	1.8	21
65	The response of Aster amellus (Asteraceae) to mycorrhiza depends on the origins of both the soil and the fungi. American Journal of Botany, 2011, 98, 850-858.	0.8	21
66	Combined effects of fungal inoculants and the cytokinin-like growth regulator thidiazuron on growth, phytohormone contents and endophytic root fungi in MiscanthusÂÃ— giganteus. Plant Physiology and Biochemistry, 2017, 120, 120-131.	2.8	21
67	Growth response of threeFestuca rubra clones to light quality and arbuscular mycorrhiza. Folia Geobotanica, 1998, 33, 159-169.	0.4	20
68	Effect of past agricultural use on the infectivity and composition of a community of arbuscular mycorrhizal fungi. Agriculture, Ecosystems and Environment, 2016, 221, 28-39.	2.5	20
69	The potential of mycorrhizal inoculation and organic amendment to increase yields of <i>Galega orientalis</i> and <i>Helianthus tuberosus</i> in a spoilâ€bank substrate. Journal of Plant Nutrition and Soil Science, 2011, 174, 664-672.	1.1	19
70	Seed Coating with Arbuscular Mycorrhizal Fungi for Improved Field Production of Chickpea. Agronomy, 2019, 9, 471.	1.3	19
71	Alien ectomycorrhizal plants differ in their ability to interact with co-introduced and native ectomycorrhizal fungi in novel sites. ISME Journal, 2020, 14, 2336-2346.	4.4	19
72	In vitro proliferation of Glomus fistulosum intraradical hyphae from mycorrhizal root segments of maize. Mycological Research, 1998, 102, 1067-1073.	2.5	18

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73	Interaction of soil filamentous fungi affects needle composition and nutrition of Norway spruce seedlings. Trees - Structure and Function, 2009, 23, 887-897.	0.9	18
74	Genetic, phenotypic and functional variation within a Glomus geosporum isolate cultivated with or without the stress of a highly alkaline anthropogenic sediment. Applied Soil Ecology, 2010, 45, 39-48.	2.1	18
75	Asymmetric response of root-associated fungal communities of an arbuscular mycorrhizal grass and an ectomycorrhizal tree to their coexistence in primary succession. Mycorrhiza, 2017, 27, 775-789.	1.3	18
76	Can mycorrhizal inoculation stimulate the growth and flowering of peat-grown ornamental plants under standard or reduced watering?. Applied Soil Ecology, 2014, 80, 93-99.	2.1	17
77	Early successional ectomycorrhizal fungi are more likely to naturalize outside their native range than other ectomycorrhizal fungi. New Phytologist, 2020, 227, 1289-1293.	3.5	17
78	Abiotic contexts consistently influence mycorrhiza functioning independently of the composition of synthetic arbuscular mycorrhizal fungal communities. Mycorrhiza, 2019, 29, 127-139.	1.3	16
79	Is mycorrhiza functioning influenced by the quantitative composition of the mycorrhizal fungal community?. Soil Biology and Biochemistry, 2021, 157, 108249.	4.2	16
80	Arbuscular Mycorrhizal Inoculant Increases Yield of Spice Pepper and Affects the Indigenous Fungal Community in the Field. Hortscience: A Publication of the American Society for Hortcultural Science, 2012, 47, 603-606.	0.5	16
81	Co-Adaptation of Plants and Communities of Arbuscular Mycorrhizal Fungi to Their Soil Conditions. Folia Geobotanica, 2014, 49, 521-540.	0.4	15
82	Inoculation of grass and tree seedlings used for reclaiming eroded areas in Iceland with mycorrhizal fungi. Folia Geobotanica, 2003, 38, 209-222.	0.4	14
83	Establishment of mycorrhizal symbiosis inGentiana verna. Folia Geobotanica, 2003, 38, 177-189.	0.4	12
84	Using microbial seed coating for improving cowpea productivity under a lowâ€input agricultural system. Journal of the Science of Food and Agriculture, 2020, 100, 1092-1098.	1.7	11
85	Effect of clone selection, nitrogen supply, leaf damage and mycorrhizal fungi on stilbene and emodin production in knotweed. BMC Plant Biology, 2011, 11, 98.	1.6	10
86	Mycorrhizal Fungi as Helping Agents in Phytoremediation of Degraded and contaminated Soils. , 2006, , 237-257.		9
87	Factors influencing the production of stilbenes by the knotweed, Reynoutria xbohemica. BMC Plant Biology, 2010, 10, 19.	1.6	9
88	Decomposition of spruce litter needles of different quality by Setulipes androsaceus and Thysanophora penicillioides. Plant and Soil, 2008, 311, 151-159.	1.8	6
89	Root symbioses ofAlnus glutinosa (L.) gaertn. and their possible role in alder decline: A preliminary study. Folia Geobotanica Et Phytotaxonomica, 1996, 31, 153-162.	0.4	5
90	Editorial: Advanced Microbial Biotechnologies for Sustainable Agriculture. Frontiers in Microbiology, 2021, 12, 634891.	1.5	3

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91	Knowledge on population biology of AMF as a tool for mycorrhizal technology: An introduction. Folia Geobotanica, 2003, 38, 111-112.	0.4	2
92	Growth and viability of mycorrhizal extraradical mycelia associated with three temperate orchid species. Biologia (Poland), 2009, 64, 63-68.	0.8	2
93	Intercropping of Tagetes patula with cauliflower and carrot increases yield of cauliflower and tentatively reduces vegetable pests. International Journal of Pest Management, 2020, , 1-11.	0.9	0