

Ricardo Aroca

List of Publications by Year in descending order

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93
papers

9,159
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41323

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6467
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#	ARTICLE	IF	CITATIONS
1	Physiological and genetic control of transpiration efficiency in African rice, <i>Oryza glaberrima</i> Steud. <i>Journal of Experimental Botany</i> , 2022, 73, 5279-5293.	2.4	12
2	Aquaporins and cation transporters are differentially regulated by two arbuscular mycorrhizal fungi strains in lettuce cultivars growing under salinity conditions. <i>Plant Physiology and Biochemistry</i> , 2021, 158, 396-409.	2.8	35
3	Root hydraulics adjustment is governed by a dominant cell-to-cell pathway in <i>Beta vulgaris</i> seedlings exposed to salt stress. <i>Plant Science</i> , 2021, 306, 110873.	1.7	7
4	Molecular Aspects of Plant Salinity Stress and Tolerance. <i>International Journal of Molecular Sciences</i> , 2021, 22, 4918.	1.8	3
5	Short-Term Exposure to High Atmospheric Vapor Pressure Deficit (VPD) Severely Impacts Durum Wheat Carbon and Nitrogen Metabolism in the Absence of Edaphic Water Stress. <i>Plants</i> , 2021, 10, 120.	1.6	3
6	Efficiency of two arbuscular mycorrhizal fungal inocula to improve saline stress tolerance in lettuce plants by changes of antioxidant defense mechanisms. <i>Journal of the Science of Food and Agriculture</i> , 2020, 100, 1577-1587.	1.7	55
7	Elucidating the Possible Involvement of Maize Aquaporins in the Plant Boron Transport and Homeostasis Mediated by <i>Rhizophagus irregularis</i> under Drought Stress Conditions. <i>International Journal of Molecular Sciences</i> , 2020, 21, 1748.	1.8	17
8	Radial water transport in arbuscular mycorrhizal maize plants under drought stress conditions is affected by indole-acetic acid (IAA) application. <i>Journal of Plant Physiology</i> , 2020, 246-247, 153115.	1.6	35
9	Elucidating the Possible Involvement of Maize Aquaporins and Arbuscular Mycorrhizal Symbiosis in the Plant Ammonium and Urea Transport under Drought Stress Conditions. <i>Plants</i> , 2020, 9, 148.	1.6	20
10	Plant Roots—The Hidden Half for Investigating Salt and Drought Stress Responses and Tolerance. <i>Signaling and Communication in Plants</i> , 2020, , 137-175.	0.5	3
11	Techniques to Determine the Effects of Jasmonates on Root Hydraulic Conductivity. <i>Methods in Molecular Biology</i> , 2020, 2085, 29-39.	0.4	0
12	Contribution of the arbuscular mycorrhizal symbiosis to the regulation of radial root water transport in maize plants under water deficit. <i>Environmental and Experimental Botany</i> , 2019, 167, 103821.	2.0	33
13	Local root ABA/cytokinin status and aquaporins regulate poplar responses to mild drought stress independently of the ectomycorrhizal fungus <i>Laccaria bicolor</i> . <i>Journal of Experimental Botany</i> , 2019, 70, 6437-6446.	2.4	31
14	Phenotypic and molecular traits determine the tolerance of olive trees to drought stress. <i>Plant Physiology and Biochemistry</i> , 2019, 139, 521-527.	2.8	14
15	The arbuscular mycorrhizal symbiosis regulates aquaporins activity and improves root cell water permeability in maize plants subjected to water stress. <i>Plant, Cell and Environment</i> , 2019, 42, 2274-2290.	2.8	69
16	Rhizobial symbiosis modifies root hydraulic properties in bean plants under non-stressed and salinity-stressed conditions. <i>Planta</i> , 2019, 249, 1207-1215.	1.6	14
17	Molecular Insights into the Involvement of a Never Ripe Receptor in the Interaction Between Two Beneficial Soil Bacteria and Tomato Plants Under Well-Watered and Drought Conditions. <i>Molecular Plant-Microbe Interactions</i> , 2018, 31, 633-650.	1.4	23
18	Phosphorus concentration coordinates a respiratory bypass, synthesis and exudation of citrate, and the expression of high-affinity phosphorus transporters in <i>Solanum lycopersicum</i> . <i>Plant, Cell and Environment</i> , 2018, 41, 865-875.	2.8	21

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19	Arbuscular mycorrhizal symbiosis and salicylic acid regulate aquaporins and root hydraulic properties in maize plants subjected to drought. <i>Agricultural Water Management</i> , 2018, 202, 271-284.	2.4	56
20	Involvement of the def-1 Mutation in the Response of Tomato Plants to Arbuscular Mycorrhizal Symbiosis Under Well-Watered and Drought Conditions. <i>Plant and Cell Physiology</i> , 2018, 59, 248-261.	1.5	27
21	Improvement of Salt Tolerance in Rice Plants by Arbuscular Mycorrhizal Symbiosis. <i>Soil Biology</i> , 2018, , 259-279.	0.6	5
22	Arbuscular mycorrhizal symbiosis modifies the effects of a nitric oxide donor (sodium) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td (nitrate) lettuce plants under well watered and drought conditions. <i>Symbiosis</i> , 2018, 74, 11-20.	1.2	11
23	Proteomic analysis reveals that tomato interaction with plant growth promoting bacteria is highly determined by ethylene perception. <i>Journal of Plant Physiology</i> , 2018, 220, 43-59.	1.6	36
24	Determining Plant Water Relations. , 2018, , 109-134.		1
25	Arbuscular mycorrhizal fungus colonization in <i>Nicotiana tabacum</i> decreases the rate of both carboxylate exudation and root respiration and increases plant growth under phosphorus limitation. <i>Plant and Soil</i> , 2017, 416, 97-106.	1.8	31
26	Tomato ethylene sensitivity determines interaction with plant growth-promoting bacteria. <i>Annals of Botany</i> , 2017, 120, 101-122.	1.4	16
27	Transcriptomic analysis reveals the importance of JA-Ile turnover in the response of <i>Arabidopsis</i> plants to plant growth promoting rhizobacteria and salinity. <i>Environmental and Experimental Botany</i> , 2017, 143, 10-19.	2.0	24
28	Respiratory ATP cost and benefit of arbuscular mycorrhizal symbiosis with <i>Nicotiana tabacum</i> at different growth stages and under salinity. <i>Journal of Plant Physiology</i> , 2017, 218, 243-248.	1.6	19
29	Ethylene sensitivity and relative air humidity regulate root hydraulic properties in tomato plants. <i>Planta</i> , 2017, 246, 987-997.	1.6	8
30	Arbuscular mycorrhiza effects on plant performance under osmotic stress. <i>Mycorrhiza</i> , 2017, 27, 639-657.	1.3	113
31	Enhanced Drought Stress Tolerance by the Arbuscular Mycorrhizal Symbiosis in a Drought-Sensitive Maize Cultivar Is Related to a Broader and Differential Regulation of Host Plant Aquaporins than in a Drought-Tolerant Cultivar. <i>Frontiers in Plant Science</i> , 2017, 8, 1056.	1.7	138
32	Exploring the use of recombinant inbred lines in combination with beneficial microbial inoculants (AM fungus and PGPR) to improve drought stress tolerance in tomato. <i>Environmental and Experimental Botany</i> , 2016, 131, 47-57.	2.0	104
33	Regulation of cation transporter genes by the arbuscular mycorrhizal symbiosis in rice plants subjected to salinity suggests improved salt tolerance due to reduced Na ⁺ root-to-shoot distribution. <i>Mycorrhiza</i> , 2016, 26, 673-684.	1.3	152
34	Effects of different arbuscular mycorrhizal fungal backgrounds and soils on olive plants growth and water relation properties under well-watered and drought conditions. <i>Plant, Cell and Environment</i> , 2016, 39, 2498-2514.	2.8	59
35	Arbuscular mycorrhizal symbiosis induces strigolactone biosynthesis under drought and improves drought tolerance in lettuce and tomato. <i>Plant, Cell and Environment</i> , 2016, 39, 441-452.	2.8	321
36	Arbuscular mycorrhizal symbiosis and methyl jasmonate avoid the inhibition of root hydraulic conductivity caused by drought. <i>Mycorrhiza</i> , 2016, 26, 111-122.	1.3	86

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37	Nitrogen assimilation and transpiration: key processes conditioning responsiveness of wheat to elevated [CO_2] and temperature. <i>Physiologia Plantarum</i> , 2015, 155, 338-354.	2.6	48
38	Metabolic transition in mycorrhizal tomato roots. <i>Frontiers in Microbiology</i> , 2015, 6, 598.	1.5	111
39	Localized and non-localized effects of arbuscular mycorrhizal symbiosis on accumulation of osmolytes and aquaporins and on antioxidant systems in maize plants subjected to total or partial root drying. <i>Plant, Cell and Environment</i> , 2015, 38, 1613-1627.	2.8	91
40	Arbuscular mycorrhizal symbiosis ameliorates the optimum quantum yield of photosystem II and reduces non-photochemical quenching in rice plants subjected to salt stress. <i>Journal of Plant Physiology</i> , 2015, 185, 75-83.	1.6	151
41	Plant growth-promoting rhizobacteria act as biostimulants in horticulture. <i>Scientia Horticulturae</i> , 2015, 196, 124-134.	1.7	321
42	Mild Salt Stress Conditions Induce Different Responses in Root Hydraulic Conductivity of <i>Phaseolus vulgaris</i> Over-Time. <i>PLoS ONE</i> , 2014, 9, e90631.	1.1	38
43	Glutathione and transpiration as key factors conditioning oxidative stress in <i>Arabidopsis thaliana</i> exposed to uranium. <i>Planta</i> , 2014, 239, 817-830.	1.6	32
44	Involvement of plant endogenous ABA in <i>Bacillus megaterium</i> PGPR activity in tomato plants. <i>BMC Plant Biology</i> , 2014, 14, 36.	1.6	133
45	The Symbiosis with the Arbuscular Mycorrhizal Fungus <i>Rhizophagus irregularis</i> Drives Root Water Transport in Flooded Tomato Plants. <i>Plant and Cell Physiology</i> , 2014, 55, 1017-1029.	1.5	61
46	New Insights into the Regulation of Aquaporins by the Arbuscular Mycorrhizal Symbiosis in Maize Plants Under Drought Stress and Possible Implications for Plant Performance. <i>Molecular Plant-Microbe Interactions</i> , 2014, 27, 349-363.	1.4	206
47	Enhancement of root hydraulic conductivity by methyl jasmonate and the role of calcium and abscisic acid in this process. <i>Plant, Cell and Environment</i> , 2014, 37, 995-1008.	2.8	88
48	Photosynthetic and Molecular Markers of CO_2 -mediated Photosynthetic Downregulation in Nodulated Alfalfa. <i>Journal of Integrative Plant Biology</i> , 2013, 55, 721-734.	4.1	31
49	Importance of native arbuscular mycorrhizal inoculation in the halophyte <i>Asteriscus maritimus</i> for successful establishment and growth under saline conditions. <i>Plant and Soil</i> , 2013, 370, 175-185.	1.8	43
50	A native <i>Glomus intraradices</i> strain from a Mediterranean saline area exhibits salt tolerance and enhanced symbiotic efficiency with maize plants under salt stress conditions. <i>Plant and Soil</i> , 2013, 366, 333-349.	1.8	63
51	Different interaction among <i>Glomus</i> and <i>Rhizobium</i> species on <i>Phaseolus vulgaris</i> and <i>Zea mays</i> plant growth, physiology and symbiotic development under moderate drought stress conditions. <i>Plant Growth Regulation</i> , 2013, 70, 265-273.	1.8	26
52	Arbuscular mycorrhizal symbiosis influences strigolactone production under salinity and alleviates salt stress in lettuce plants. <i>Journal of Plant Physiology</i> , 2013, 170, 47-55.	1.6	299
53	Arbuscular mycorrhizal fungi native from a Mediterranean saline area enhance maize tolerance to salinity through improved ion homeostasis. <i>Plant, Cell and Environment</i> , 2013, 36, 1771-1782.	2.8	195
54	Native arbuscular mycorrhizal fungi isolated from a saline habitat improved maize antioxidant systems and plant tolerance to salinity. <i>Plant Science</i> , 2013, 201-202, 42-51.	1.7	155

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55	Arbuscular Mycorrhizal Fungi and the Tolerance of Plants to Drought and Salinity. <i>Soil Biology</i> , 2013, , 271-288.	0.6	9
56	Plant potassium content modifies the effects of arbuscular mycorrhizal symbiosis on root hydraulic properties in maize plants. <i>Mycorrhiza</i> , 2012, 22, 555-564.	1.3	50
57	Regulation by arbuscular mycorrhizae of the integrated physiological response to salinity in plants: new challenges in physiological and molecular studies. <i>Journal of Experimental Botany</i> , 2012, 63, 4033-4044.	2.4	435
58	Regulation of root water uptake under abiotic stress conditions. <i>Journal of Experimental Botany</i> , 2012, 63, 43-57.	2.4	487
59	Regulation of Root Water Uptake Under Drought Stress Conditions. , 2012, , 113-127.		13
60	Arbuscular mycorrhizal symbiosis increases relative apoplastic water flow in roots of the host plant under both well-watered and drought stress conditions. <i>Annals of Botany</i> , 2012, 109, 1009-1017.	1.4	220
61	Salinity stress alleviation using arbuscular mycorrhizal fungi. A review. <i>Agronomy for Sustainable Development</i> , 2012, 32, 181-200.	2.2	521
62	Influence of arbuscular mycorrhizal fungi and water regime on the development of endemic <i>Thymus</i> species in dolomitic soils. <i>Applied Soil Ecology</i> , 2011, 48, 31-37.	2.1	22
63	Influence of two bacterial isolates from degraded and non-degraded soils and arbuscular mycorrhizae fungi isolated from semi-arid zone on the growth of <i>Trifolium repens</i> under drought conditions: Mechanisms related to bacterial effectiveness. <i>European Journal of Soil Biology</i> , 2011, 47, 303-309.	1.4	48
64	<i>Azospirillum</i> and arbuscular mycorrhizal colonization enhance rice growth and physiological traits under well-watered and drought conditions. <i>Journal of Plant Physiology</i> , 2011, 168, 1031-1037.	1.6	181
65	The application of a treated sugar beet waste residue to soil modifies the responses of mycorrhizal and non mycorrhizal lettuce plants to drought stress. <i>Plant and Soil</i> , 2011, 346, 153-166.	1.8	19
66	Synergic effect of salinity and zinc stress on growth and photosynthetic responses of the cordgrass, <i>Spartina densiflora</i> . <i>Journal of Experimental Botany</i> , 2011, 62, 5521-5530.	2.4	54
67	Regulation of plasma membrane aquaporins by inoculation with a <i>Bacillus megaterium</i> strain in maize (<i>Zea mays</i> L.) plants under unstressed and salt-stressed conditions. <i>Planta</i> , 2010, 232, 533-543.	1.6	224
68	Host Response to Osmotic Stresses: Stomatal Behaviour and Water Use Efficiency of Arbuscular Mycorrhizal Plants. , 2010, , 239-256.		51
69	Interactions between <i>Glomus</i> species and <i>Rhizobium</i> strains affect the nutritional physiology of drought-stressed legume hosts. <i>Journal of Plant Physiology</i> , 2010, 167, 614-619.	1.6	66
70	The arbuscular mycorrhizal symbiosis enhances the photosynthetic efficiency and the antioxidative response of rice plants subjected to drought stress. <i>Journal of Plant Physiology</i> , 2010, 167, 862-869.	1.6	247
71	Modulation of Aquaporin Genes by the Arbuscular Mycorrhizal Symbiosis in Relation to Osmotic Stress Tolerance. <i>Cellular Origin and Life in Extreme Habitats</i> , 2010, , 357-374.	0.3	28
72	Expression Analysis of the First Arbuscular Mycorrhizal Fungi Aquaporin Described Reveals Concerted Gene Expression Between Salt-Stressed and Nonstressed Mycelium. <i>Molecular Plant-Microbe Interactions</i> , 2009, 22, 1169-1178.	1.4	105

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73	Exogenous ABA accentuates the differences in root hydraulic properties between mycorrhizal and non mycorrhizal maize plants through regulation of PIP aquaporins. <i>Plant Molecular Biology</i> , 2009, 70, 565-579.	2.0	95
74	Hydrogen peroxide effects on root hydraulic properties and plasma membrane aquaporin regulation in <i>Phaseolus vulgaris</i> . <i>Plant Molecular Biology</i> , 2009, 70, 647-661.	2.0	68
75	Influence of Salinity on the In Vitro Development of <i>Glomus intraradices</i> and on the In Vivo Physiological and Molecular Responses of Mycorrhizal Lettuce Plants. <i>Microbial Ecology</i> , 2008, 55, 45-53.	1.4	298
76	Plant Responses to Drought Stress and Exogenous ABA Application are Modulated Differently by Mycorrhization in Tomato and an ABA-deficient Mutant (Sitiens). <i>Microbial Ecology</i> , 2008, 56, 704-719.	1.4	111
77	Differential Effects of a <i>Bacillus megaterium</i> Strain on <i>Lactuca sativa</i> Plant Growth Depending on the Origin of the Arbuscular Mycorrhizal Fungus Coinoculated: Physiologic and Biochemical Traits. <i>Journal of Plant Growth Regulation</i> , 2008, 27, 10-18.	2.8	75
78	Evaluation of the Possible Participation of Drought-induced Genes in the Enhanced Tolerance of Arbuscular Mycorrhizal Plants to Water Deficit. , 2008, , 185-205.		16
79	Mycorrhizal and non-mycorrhizal <i>Lactuca sativa</i> plants exhibit contrasting responses to exogenous ABA during drought stress and recovery. <i>Journal of Experimental Botany</i> , 2008, 59, 2029-2041.	2.4	200
80	How does arbuscular mycorrhizal symbiosis regulate root hydraulic properties and plasma membrane aquaporins in <i>Phaseolus vulgaris</i> under drought, cold or salinity stresses?. <i>New Phytologist</i> , 2007, 173, 808-816.	3.5	382
81	A gene from the arbuscular mycorrhizal fungus <i>Glomus intraradices</i> encoding a binding protein is up-regulated by drought stress in some mycorrhizal plants. <i>Environmental and Experimental Botany</i> , 2007, 60, 251-256.	2.0	33
82	Drought, Abscisic Acid and Transpiration Rate Effects on the Regulation of PIP Aquaporin Gene Expression and Abundance in <i>Phaseolus vulgaris</i> Plants. <i>Annals of Botany</i> , 2006, 98, 1301-1310.	1.4	199
83	Does the enhanced tolerance of arbuscular mycorrhizal plants to water deficit involve modulation of drought-induced plant genes?. <i>New Phytologist</i> , 2006, 171, 693-698.	3.5	89
84	PIP Aquaporin Gene Expression in Arbuscular Mycorrhizal <i>Glycine max</i> and <i>Lactuca sativa</i> Plants in Relation to Drought Stress Tolerance. <i>Plant Molecular Biology</i> , 2006, 60, 389-404.	2.0	212
85	Exogenous Catalase and Ascorbate Modify the Effects of Abscisic Acid (ABA) on Root Hydraulic Properties in <i>Phaseolus vulgaris</i> L. Plants. <i>Journal of Plant Growth Regulation</i> , 2006, 25, 10-17.	2.8	27
86	Identification of a Gene from the Arbuscular Mycorrhizal Fungus <i>Glomus intraradices</i> Encoding for a 14-3-3 Protein that is Up-Regulated by Drought Stress during the AM Symbiosis. <i>Microbial Ecology</i> , 2006, 52, 575-582.	1.4	56
87	The Role of Aquaporins and Membrane Damage in Chilling and Hydrogen Peroxide Induced Changes in the Hydraulic Conductance of Maize Roots. <i>Plant Physiology</i> , 2005, 137, 341-353.	2.3	230
88	Drought enhances maize chilling tolerance. II. Photosynthetic traits and protective mechanisms against oxidative stress. <i>Physiologia Plantarum</i> , 2003, 117, 540-549.	2.6	112
89	Involvement of abscisic acid in leaf and root of maize (<i>Zea mays</i> L.) in avoiding chilling-induced water stress. <i>Plant Science</i> , 2003, 165, 671-679.	1.7	117
90	Photosynthetic characteristics and protective mechanisms against oxidative stress during chilling and subsequent recovery in two maize varieties differing in chilling sensitivity. <i>Plant Science</i> , 2001, 161, 719-726.	1.7	92

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91	Different root low temperature response of two maize genotypes differing in chilling sensitivity. <i>Plant Physiology and Biochemistry</i> , 2001, 39, 1067-1073.	2.8	113
92	The Electron Partitioning between the Cytochrome and Alternative Respiratory Pathways during Chilling Recovery in Two Cultivars of Maize Differing in Chilling Sensitivity. <i>Plant Physiology</i> , 2000, 122, 199-204.	2.3	122
93	Categorization of the water status of rice inoculated with arbuscular mycorrhizae and with water deficit. <i>Agronomy Mesoamerican</i> , 0, , 339-355.	0.1	2