

Timothy D Colmer

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238
papers

15,625
citations

64
h-index

117
g-index

246
ext. papers

17,970
ext. citations

5.7
avg, IF

7.14
L-index

#	Paper	IF	Citations
238	Salinity tolerance in halophytes. <i>New Phytologist</i> , 2008 , 179, 945-963	9.8	1660
237	Long-distance transport of gases in plants: a perspective on internal aeration and radial oxygen loss from roots. <i>Plant, Cell and Environment</i> , 2003 , 26, 17-36	8.4	797
236	Flooding tolerance: suites of plant traits in variable environments. <i>Functional Plant Biology</i> , 2009 , 36, 665-681	2.7	511
235	How plants cope with complete submergence. <i>New Phytologist</i> , 2006 , 170, 213-26	9.8	395
234	Plant salt tolerance: adaptations in halophytes. <i>Annals of Botany</i> , 2015 , 115, 327-31	4.1	380
233	Use of wild relatives to improve salt tolerance in wheat. <i>Journal of Experimental Botany</i> , 2006 , 57, 1059-78		371
232	Sodium chloride toxicity and the cellular basis of salt tolerance in halophytes. <i>Annals of Botany</i> , 2015 , 115, 419-31	4.1	354
231	Neglecting legumes has compromised human health and sustainable food production. <i>Nature Plants</i> , 2016 , 2, 16112	11.5	344
230	Response and adaptation by plants to flooding stress. <i>Annals of Botany</i> , 2005 , 96, 501-5	4.1	318
229	Changes in growth, porosity, and radial oxygen loss from adventitious roots of selected mono- and dicotyledonous wetland species with contrasting types of aerenchyma. <i>Plant, Cell and Environment</i> , 2000 , 23, 1237-1245	8.4	248
228	Flooding tolerance in halophytes. <i>New Phytologist</i> , 2008 , 179, 964-974	9.8	207
227	Short-term waterlogging has long-term effects on the growth and physiology of wheat. <i>New Phytologist</i> , 2002 , 153, 225-236	9.8	206
226	Improving salt tolerance of wheat and barley: future prospects. <i>Australian Journal of Experimental Agriculture</i> , 2005 , 45, 1425		204
225	Salt tolerance in wild <i>Hordeum</i> species is associated with restricted entry of Na ⁺ and Cl ⁻ into the shoots. <i>Journal of Experimental Botany</i> , 2005 , 56, 2365-78	7	192
224	The barrier to radial oxygen loss from roots of rice (<i>Oryza sativa</i> L.) is induced by growth in stagnant solution. <i>Journal of Experimental Botany</i> , 1998 , 49, 1431-1436	7	175
223	Salt sensitivity in chickpea. <i>Plant, Cell and Environment</i> , 2010 , 33, 490-509	8.4	146
222	Effects of Anoxia on Wheat SeedlingsII. INFLUENCE OF O ₂ SUPPLY PRIOR TO ANOXIA ON TOLERANCE TO ANOXIA, ALCOHOLIC FERMENTATION, AND SUGAR LEVELS. <i>Journal of Experimental Botany</i> , 1991 , 42, 1437-1447	7	146

221	A comparison of NH ₄ ⁺ and NO ₃ ⁻ fluxes along roots of rice and maize. <i>Plant, Cell and Environment</i> , 1998 , 21, 240-246	8.4	140
220	Underwater photosynthesis of submerged plants - recent advances and methods. <i>Frontiers in Plant Science</i> , 2013 , 4, 140	6.2	138
219	Underwater photosynthesis and respiration in leaves of submerged wetland plants: gas films improve CO ₂ and O ₂ exchange. <i>New Phytologist</i> , 2008 , 177, 918-926	9.8	138
218	Osmotic adjustment and energy limitations to plant growth in saline soil. <i>New Phytologist</i> , 2020 , 225, 1091-1096	9.8	132
217	Root aeration in rice (<i>Oryza sativa</i>): evaluation of oxygen, carbon dioxide, and ethylene as possible regulators of root acclimatizations. <i>New Phytologist</i> , 2006 , 170, 767-77	9.8	131
216	Mechanisms of waterlogging tolerance in wheat--a review of root and shoot physiology. <i>Plant, Cell and Environment</i> , 2016 , 39, 1068-86	8.4	131
215	Similarity and diversity in adventitious root anatomy as related to root aeration among a range of wetland and dryland grass species. <i>Plant, Cell and Environment</i> , 2002 , 25, 441-451	8.4	128
214	Enhanced formation of aerenchyma and induction of a barrier to radial oxygen loss in adventitious roots of <i>Zea nicaraguensis</i> contribute to its waterlogging tolerance as compared with maize (<i>Zea mays ssp. mays</i>). <i>Plant, Cell and Environment</i> , 2012 , 35, 1618-30	8.4	126
213	Regulation of Root Traits for Internal Aeration and Tolerance to Soil Waterlogging-Flooding Stress. <i>Plant Physiology</i> , 2018 , 176, 1118-1130	6.6	122
212	Oxygen dynamics in submerged rice (<i>Oryza sativa</i>). <i>New Phytologist</i> , 2008 , 178, 326-334	9.8	121
211	Conditions leading to high CO ₂ (>5 kPa) in waterlogged-flooded soils and possible effects on root growth and metabolism. <i>Annals of Botany</i> , 2006 , 98, 9-32	4.1	121
210	Differential Solute Regulation in Leaf Blades of Various Ages in Salt-Sensitive Wheat and a Salt-Tolerant Wheat x <i>Lophopyrum elongatum</i> (Host) A. Love Amphiploid. <i>Plant Physiology</i> , 1995 , 108, 1715-1724	6.6	119
209	Resequencing of 429 chickpea accessions from 45 countries provides insights into genome diversity, domestication and agronomic traits. <i>Nature Genetics</i> , 2019 , 51, 857-864	36.3	116
208	Radial oxygen loss from intact roots of <i>Halophila ovalis</i> as a function of distance behind the root tip and shoot illumination. <i>Aquatic Botany</i> , 1999 , 63, 219-228	1.8	114
207	Ethylene regulates fast apoplastic acidification and expansin A transcription during submergence-induced petiole elongation in <i>Rumex palustris</i> . <i>Plant Journal</i> , 2005 , 43, 597-610	6.9	112
206	Surviving floods: leaf gas films improve O ₂ and CO ₂ exchange, root aeration, and growth of completely submerged rice. <i>Plant Journal</i> , 2009 , 58, 147-56	6.9	111
205	Ion transport in seminal and adventitious roots of cereals during O ₂ deficiency. <i>Journal of Experimental Botany</i> , 2011 , 62, 39-57	7	104
204	Diversity in root aeration traits associated with waterlogging tolerance in the genus <i>Hordeum</i> . <i>Functional Plant Biology</i> , 2003 , 30, 875-889	2.7	104

203	Simultaneous determination by capillary gas chromatography of organic acids, sugars, and sugar alcohols in plant tissue extracts as their trimethylsilyl derivatives. <i>Analytical Biochemistry</i> , 1999 , 266, 77-84	3.1	104
202	Salinity and waterlogging as constraints to saltland pasture production: A review. <i>Agriculture, Ecosystems and Environment</i> , 2009 , 129, 349-360	5.7	102
201	Tissue tolerance: an essential but elusive trait for salt-tolerant crops. <i>Functional Plant Biology</i> , 2016 , 43, 1103-1113	2.7	101
200	Contrasting dynamics of radial O ₂ -loss barrier induction and aerenchyma formation in rice roots of two lengths. <i>Annals of Botany</i> , 2011 , 107, 89-99	4.1	99
199	Does anoxia tolerance involve altering the energy currency towards PPI?. <i>Trends in Plant Science</i> , 2008 , 13, 221-7	13.1	98
198	Waterlogging tolerance in the tribe Triticeae: the adventitious roots of <i>Critesion marinum</i> have a relatively high porosity and a barrier to radial oxygen loss. <i>Plant, Cell and Environment</i> , 2001 , 24, 585-596	8.4	97
197	Salt Tolerance in the Halophyte <i>Halosarcia pergranulata</i> subsp. <i>pergranulata</i> . <i>Annals of Botany</i> , 1999 , 83, 207-213	4.1	95
196	Irrigation and fertiliser strategies for minimising nitrogen leaching from turfgrass. <i>Agricultural Water Management</i> , 2006 , 80, 160-175	5.9	93
195	Tolerance of wheat (<i>Triticum aestivum</i> cvs Gamenya and Kite) and triticale (<i>Triticosecale</i> cv. Muir) to waterlogging. <i>New Phytologist</i> , 1992 , 120, 335-344	9.8	88
194	Measuring soluble ion concentrations (Na(+), K(+), Cl(-)) in salt-treated plants. <i>Methods in Molecular Biology</i> , 2010 , 639, 371-82	1.4	87
193	<i>Lotus tenuis</i> tolerates the interactive effects of salinity and waterlogging by 'excluding' Na ⁺ and Cl ⁻ from the xylem. <i>Journal of Experimental Botany</i> , 2007 , 58, 2169-80	7	85
192	Community recommendations on terminology and procedures used in flooding and low oxygen stress research. <i>New Phytologist</i> , 2017 , 214, 1403-1407	9.8	84
191	Waterlogging Tolerance Among a Diverse Range of <i>Trifolium</i> Accessions is Related to Root Porosity, Lateral Root Formation and 'Aerotropic Rooting'. <i>Annals of Botany</i> , 2001 , 88, 579-589	4.1	83
190	The potential for developing fodder plants for the salt-affected areas of southern and eastern Australia: an overview. <i>Australian Journal of Experimental Agriculture</i> , 2005 , 45, 301		82
189	Plant growth and physiology under heterogeneous salinity. <i>Plant and Soil</i> , 2012 , 354, 1-19	4.2	79
188	Internal aeration of paddy field rice (<i>Oryza sativa</i>) during complete submergence---importance of light and floodwater O ₂ . <i>New Phytologist</i> , 2013 , 197, 1193-1203	9.8	78
187	Determination of metabolites by 1H NMR and GC: analysis for organic osmolytes in crude tissue extracts. <i>Analytical Biochemistry</i> , 1993 , 214, 260-71	3.1	77
186	Assessment of ICCV 2 \times JG 62 chickpea progenies shows sensitivity of reproduction to salt stress and reveals QTL for seed yield and yield components. <i>Molecular Breeding</i> , 2012 , 30, 9-21	3.4	76

185	Heat stress of two tropical seagrass species during low tides - impact on underwater net photosynthesis, dark respiration and diel in situ internal aeration. <i>New Phytologist</i> , 2016 , 210, 1207-18	9.8	75
184	Salt tolerance in a <i>Hordeum marinum</i> - <i>Triticum aestivum</i> amphiploid, and its parents. <i>Journal of Experimental Botany</i> , 2007 , 58, 1219-29	7	74
183	Protein synthesis by rice coleoptiles during prolonged anoxia: implications for glycolysis, growth and energy utilization. <i>Annals of Botany</i> , 2005 , 96, 703-15	4.1	74
182	Role of ethylene in acclimations to promote oxygen transport in roots of plants in waterlogged soils. <i>Plant Science</i> , 2008 , 175, 52-58	5.3	72
181	Investigating Drought Tolerance in Chickpea Using Genome-Wide Association Mapping and Genomic Selection Based on Whole-Genome Resequencing Data. <i>Frontiers in Plant Science</i> , 2018 , 9, 190	6.2	69
180	Diversity in the genus <i>Melilotus</i> for tolerance to salinity and waterlogging. <i>Plant and Soil</i> , 2008 , 304, 89-101	4.2	69
179	Salinity tolerance and ion accumulation in chickpea (<i>Cicer arietinum</i> L.) subjected to salt stress. <i>Plant and Soil</i> , 2013 , 365, 347-361	4.2	68
178	Interactive effects of Ca ²⁺ and NaCl salinity on the ionic relations and proline accumulation in the primary root tip of <i>Sorghum bicolor</i> . <i>Physiologia Plantarum</i> , 1996 , 97, 421-424	4.6	68
177	Growth and ion relations in response to combined salinity and waterlogging in the perennial forage legumes <i>Lotus corniculatus</i> and <i>Lotus tenuis</i> . <i>Plant and Soil</i> , 2006 , 289, 369-383	4.2	66
176	Morphology, anatomy and histochemistry of <i>Salicornioideae</i> (Chenopodiaceae) fruits and seeds. <i>Annals of Botany</i> , 2005 , 95, 917-33	4.1	64
175	Variable tolerance of wetland tree species to combined salinity and waterlogging is related to regulation of ion uptake and production of organic solutes. <i>New Phytologist</i> , 2006 , 169, 123-33	9.8	64
174	Microarray analysis of laser-microdissected tissues indicates the biosynthesis of suberin in the outer part of roots during formation of a barrier to radial oxygen loss in rice (<i>Oryza sativa</i>). <i>Journal of Experimental Botany</i> , 2014 , 65, 4795-806	7	63
173	Assessment of O ₂ diffusivity across the barrier to radial O ₂ loss in adventitious roots of <i>Hordeum marinum</i> . <i>New Phytologist</i> , 2008 , 179, 405-416	9.8	63
172	Salt sensitivity of the vegetative and reproductive stages in chickpea (<i>Cicer arietinum</i> L.): Podding is a particularly sensitive stage. <i>Environmental and Experimental Botany</i> , 2011 , 71, 260-268	5.9	62
171	A perspective on underwater photosynthesis in submerged terrestrial wetland plants. <i>AoB PLANTS</i> , 2011 , 2011, plr030	2.9	60
170	EST-derived SSR markers from defined regions of the wheat genome to identify <i>Lophopyrum elongatum</i> specific loci. <i>Genome</i> , 2005 , 48, 811-22	2.4	60
169	Aerenchyma formation and radial O ₂ loss along adventitious roots of wheat with only the apical root portion exposed to O ₂ deficiency. <i>Plant, Cell and Environment</i> , 2003 , 26, 1713-1722	8.4	60
168	Oxygen dynamics during submergence in the halophytic stem succulent <i>Halosarcia pergranulata</i> . <i>Plant, Cell and Environment</i> , 2006 , 29, 1388-99	8.4	58

167	Waterlogging of Winter Crops at Early and Late Stages: Impacts on Leaf Physiology, Growth and Yield. <i>Frontiers in Plant Science</i> , 2018 , 9, 1863	6.2	56
166	Two key genomic regions harbour QTLs for salinity tolerance in ICCV 2 DGG 11 derived chickpea (<i>Cicer arietinum</i> L.) recombinant inbred lines. <i>BMC Plant Biology</i> , 2015 , 15, 124	5.3	55
165	Waterlogging affects the growth, development of tillers, and yield of wheat through a severe, but transient, N deficiency. <i>Crop and Pasture Science</i> , 2009 , 60, 578	2.2	55
164	Growth responses of cool-season grain legumes to transient waterlogging. <i>Australian Journal of Agricultural Research</i> , 2007 , 58, 406		55
163	Salt sensitivity in chickpea: Growth, photosynthesis, seed yield components and tissue ion regulation in contrasting genotypes. <i>Journal of Plant Physiology</i> , 2015 , 182, 1-12	3.6	54
162	Effect of foliar applications of glycinebetaine on stomatal conductance, abscisic acid and solute concentrations in leaves of salt- or drought-stressed tomato. <i>Functional Plant Biology</i> , 1998 , 25, 655	2.7	53
161	Transfer of the barrier to radial oxygen loss in roots of <i>Hordeum marinum</i> to wheat (<i>Triticum aestivum</i>): evaluation of four H. marinum-wheat amphiploids. <i>New Phytologist</i> , 2011 , 190, 499-508	9.8	51
160	Response to non-uniform salinity in the root zone of the halophyte <i>Atriplex nummularia</i> : growth, photosynthesis, water relations and tissue ion concentrations. <i>Annals of Botany</i> , 2009 , 104, 737-45	4.1	51
159	Changes in physiological and morphological traits of roots and shoots of wheat in response to different depths of waterlogging. <i>Functional Plant Biology</i> , 2001 , 28, 1121	2.7	51
158	Regulation of root adaptive anatomical and morphological traits during low soil oxygen. <i>New Phytologist</i> , 2021 , 229, 42-49	9.8	51
157	Tolerance of <i>Hordeum marinum</i> accessions to O ₂ deficiency, salinity and these stresses combined. <i>Annals of Botany</i> , 2009 , 103, 237-48	4.1	50
156	Interactive effects of salinity, nitrogen and sulphur on the organic solutes in <i>Spartina alterniflora</i> leaf blades. <i>Journal of Experimental Botany</i> , 1996 , 47, 369-375	7	50
155	Gas film retention and underwater photosynthesis during field submergence of four contrasting rice genotypes. <i>Journal of Experimental Botany</i> , 2014 , 65, 3225-33	7	49
154	Root aeration via aerenchymatous phellem: three-dimensional micro-imaging and radial O ₂ profiles in <i>Melilotus siculus</i> . <i>New Phytologist</i> , 2012 , 193, 420-31	9.8	49
153	Morphological and physiological responses of rice (<i>Oryza sativa</i>) to limited phosphorus supply in aerated and stagnant solution culture. <i>Annals of Botany</i> , 2006 , 98, 995-1004	4.1	48
152	Oxygen loss from seagrass roots coincides with colonisation of sulphide-oxidising cable bacteria and reduces sulphide stress. <i>ISME Journal</i> , 2019 , 13, 707-719	11.9	48
151	Leaf gas films of <i>Spartina anglica</i> enhance rhizome and root oxygen during tidal submergence. <i>Plant, Cell and Environment</i> , 2011 , 34, 2083-92	8.4	47
150	Response of chickpea (<i>Cicer arietinum</i> L.) to terminal drought: leaf stomatal conductance, pod abscisic acid concentration, and seed set. <i>Journal of Experimental Botany</i> , 2017 , 68, 1973-1985	7	47

149	Rice leaf hydrophobicity and gas films are conferred by a wax synthesis gene (LGF1) and contribute to flood tolerance. <i>New Phytologist</i> , 2018 , 218, 1558-1569	9.8	46
148	Arabidopsis-rice-wheat gene orthologues for Na ⁺ transport and transcript analysis in wheat-L. elongatum aneuploids under salt stress. <i>Molecular Genetics and Genomics</i> , 2007 , 277, 199-212	3.1	46
147	Flooding tolerance of forage legumes. <i>Journal of Experimental Botany</i> , 2017 , 68, 1851-1872	7	44
146	Differential tolerance to combined salinity and O ₂ deficiency in the halophytic grasses <i>Puccinellia ciliata</i> and <i>Thinopyrum ponticum</i> : The importance of K ⁺ retention in roots. <i>Environmental and Experimental Botany</i> , 2013 , 87, 69-78	5.9	44
145	Oxygen deficiency and salinity affect cell-specific ion concentrations in adventitious roots of barley (<i>Hordeum vulgare</i>). <i>New Phytologist</i> , 2015 , 208, 1114-25	9.8	44
144	Salt sensitivity in chickpea (<i>Cicer arietinum</i> L.): ions in reproductive tissues and yield components in contrasting genotypes. <i>Plant, Cell and Environment</i> , 2015 , 38, 1565-77	8.4	44
143	Plant responses to heterogeneous salinity: growth of the halophyte <i>Atriplex nummularia</i> is determined by the root-weighted mean salinity of the root zone. <i>Journal of Experimental Botany</i> , 2012 , 63, 6347-58	7	43
142	Interactions of Ca ²⁺ and NaCl stress on the ion relations and intracellular pH of <i>Sorghum bicolor</i> root tips: An in vivo ³¹ P-NMR study. <i>Journal of Experimental Botany</i> , 1994 , 45, 1037-1044	7	43
141	Tissue-specific root ion profiling reveals essential roles of the CAX and ACA calcium transport systems in response to hypoxia in <i>Arabidopsis</i> . <i>Journal of Experimental Botany</i> , 2016 , 67, 3747-62	7	42
140	Pattern of solutes accumulated during leaf osmotic adjustment as related to duration of water deficit for wheat at the reproductive stage. <i>Plant Physiology and Biochemistry</i> , 2011 , 49, 1126-37	5.4	42
139	Anoxia tolerance in rice seedlings: exogenous glucose improves growth of an anoxia-'intolerant', but not of a 'tolerant' genotype. <i>Journal of Experimental Botany</i> , 2003 , 54, 2363-73	7	42
138	Evidence for down-regulation of ethanolic fermentation and K ⁺ effluxes in the coleoptile of rice seedlings during prolonged anoxia. <i>Journal of Experimental Botany</i> , 2001 , 52, 1507-17	7	42
137	Waterlogging tolerance is associated with root porosity in barley (<i>Hordeum vulgare</i> L.). <i>Molecular Breeding</i> , 2015 , 35, 1	3.4	41
136	Tolerance of extreme salinity in two stem-succulent halophytes (<i>Tecticornia</i> species). <i>Functional Plant Biology</i> , 2013 , 40, 897-912	2.7	40
135	Growth of tomato and an ABA-deficient mutant (<i>sitiens</i>) under saline conditions. <i>Physiologia Plantarum</i> , 2003 , 117, 58-63	4.6	40
134	Salt tolerance in <i>Eucalyptus</i> spp.: identity and response of putative osmolytes. <i>Plant, Cell and Environment</i> , 2005 , 28, 772-787	8.4	40
133	Salt tolerance and avoidance mechanisms at germination of annual pasture legumes: importance for adaptation to saline environments. <i>Plant and Soil</i> , 2009 , 315, 241-255	4.2	39
132	Aquatic adventitious root development in partially and completely submerged wetland plants <i>Cotula coronopifolia</i> and <i>Meionectes brownii</i> . <i>Annals of Botany</i> , 2012 , 110, 405-14	4.1	39

131	Simultaneous analysis of amino and organic acids in extracts of plant leaves as tert-butyldimethylsilyl derivatives by capillary gas chromatography. <i>Analytical Biochemistry</i> , 1998 , 259, 203-11	3.1	39
130	Spatial patterns of radial oxygen loss and nitrate net flux along adventitious roots of rice raised in aerated or stagnant solution. <i>Functional Plant Biology</i> , 2002 , 29, 1475-1481	2.7	39
129	Soil properties and turf growth on a sandy soil amended with fly ash. <i>Plant and Soil</i> , 2003 , 256, 103-114	4.2	38
128	The barrier to radial oxygen loss from roots of rice (<i>Oryza sativa</i> L.) is induced by growth in stagnant solution		38
127	A major locus involved in the formation of the radial oxygen loss barrier in adventitious roots of teosinte <i>Zea nicaraguensis</i> is located on the short-arm of chromosome 3. <i>Plant, Cell and Environment</i> , 2017 , 40, 304-316	8.4	36
126	Photosynthetic response to globally increasing CO ₂ of co-occurring temperate seagrass species. <i>Plant, Cell and Environment</i> , 2016 , 39, 1240-50	8.4	36
125	Vegetative and reproductive growth of salt-stressed chickpea are carbon-limited: sucrose infusion at the reproductive stage improves salt tolerance. <i>Journal of Experimental Botany</i> , 2017 , 68, 2001-2011	7	35
124	Aerenchymatous phellem in hypocotyl and roots enables O ₂ transport in <i>Melilotus siculus</i> . <i>New Phytologist</i> , 2011 , 190, 340-50	9.8	35
123	Linking oxygen availability with membrane potential maintenance and K ⁺ retention of barley roots: implications for waterlogging stress tolerance. <i>Plant, Cell and Environment</i> , 2014 , 37, 2325-38	8.4	34
122	Large number of flowers and tertiary branches, and higher reproductive success increase yields under salt stress in chickpea. <i>European Journal of Agronomy</i> , 2012 , 41, 42-51	5	34
121	Crassulacean acid metabolism enhances underwater photosynthesis and diminishes photorespiration in the aquatic plant <i>Isoetes australis</i> . <i>New Phytologist</i> , 2011 , 190, 332-9	9.8	34
120	Physical gills prevent drowning of many wetland insects, spiders and plants. <i>Journal of Experimental Biology</i> , 2012 , 215, 705-9	3	34
119	Aerenchyma Formation in Plants. <i>Plant Cell Monographs</i> , 2014 , 247-265	0.6	34
118	In situ O ₂ dynamics in submerged <i>Isoetes australis</i> : varied leaf gas permeability influences underwater photosynthesis and internal O ₂ . <i>Journal of Experimental Botany</i> , 2011 , 62, 4691-700	7	33
117	Revealing the roles of GORK channels and NADPH oxidase in acclimation to hypoxia in <i>Arabidopsis</i> . <i>Journal of Experimental Botany</i> , 2017 , 68, 3191-3204	7	33
116	Efficient use of energy in anoxia-tolerant plants with focus on germinating rice seedlings. <i>New Phytologist</i> , 2015 , 206, 36-56	9.8	32
115	Friend or Foe? Chloride Patterning in Halophytes. <i>Trends in Plant Science</i> , 2019 , 24, 142-151	13.1	32
114	Salinity and waterlogging tolerance amongst accessions of messina (<i>Melilotus siculus</i>). <i>Crop and Pasture Science</i> , 2011 , 62, 225	2.2	31

113	Development of wheat-Lophopyrum elongatum recombinant lines for enhanced sodium 'exclusion' during salinity stress. <i>Theoretical and Applied Genetics</i> , 2009 , 119, 1313-23	6	31
112	Spatio-temporal relief from hypoxia and production of reactive oxygen species during bud burst in grapevine (<i>Vitis vinifera</i>). <i>Annals of Botany</i> , 2015 , 116, 703-11	4.1	30
111	Water uptake by roots of <i>Hordeum marinum</i> : formation of a barrier to radial O ₂ loss does not affect root hydraulic conductivity. <i>Journal of Experimental Botany</i> , 2006 , 57, 655-64	7	30
110	Turfgrass (<i>Cynodon dactylon</i> L.) sod production on sandy soils: II. Effects of irrigation and fertiliser regimes on N leaching. <i>Plant and Soil</i> , 2006 , 284, 147-164	4.2	30
109	Oxygen dynamics in a salt-marsh soil and in <i>Suaeda maritima</i> during tidal submergence. <i>Environmental and Experimental Botany</i> , 2013 , 92, 73-82	5.9	29
108	The mechanism of improved aeration due to gas films on leaves of submerged rice. <i>Plant, Cell and Environment</i> , 2014 , 37, 2433-52	8.4	28
107	Prioritisation of novel pasture species for use in water-limited agriculture: a case study of Cullen in the Western Australian wheatbelt. <i>Genetic Resources and Crop Evolution</i> , 2011 , 58, 83-100	2	28
106	Photosynthesis in aquatic adventitious roots of the halophytic stem-succulent <i>Tecticornia pergranulata</i> (formerly <i>Halosarcia pergranulata</i>). <i>Plant, Cell and Environment</i> , 2008 , 31, 1007-16	8.4	28
105	Reduced leaching of nitrate, ammonium, and phosphorus in a sandy soil by fly ash amendment. <i>Soil Research</i> , 2002 , 40, 1201	1.8	28
104	Tolerance of combined submergence and salinity in the halophytic stem-succulent <i>Tecticornia pergranulata</i> . <i>Annals of Botany</i> , 2009 , 103, 303-12	4.1	27
103	Does N fertiliser regime influence N leaching and quality of different-aged turfgrass (<i>Pennisetum clandestinum</i>) stands?. <i>Plant and Soil</i> , 2009 , 316, 81-96	4.2	27
102	Analysis of dimethylsulphoniopropionate (DMSP), betaines and other organic solutes in plant tissue extracts using HPLC. <i>Phytochemical Analysis</i> , 2000 , 11, 163-168	3.4	27
101	Improving crop salt tolerance using transgenic approaches: An update and physiological analysis. <i>Plant, Cell and Environment</i> , 2020 , 43, 2932-2956	8.4	27
100	<i>Hordeum marinum</i> -wheat amphiploids maintain higher leaf K ⁺ :Na ⁺ and suffer less leaf injury than wheat parents in saline conditions. <i>Plant and Soil</i> , 2011 , 348, 365-377	4.2	26
99	Photosynthetic performance and fertility are repressed in GmAox2b antisense soybean. <i>Plant Physiology</i> , 2010 , 152, 1638-49	6.6	26
98	Waterlogging tolerance and recovery of 10 <i>Lotus</i> species. <i>Australian Journal of Experimental Agriculture</i> , 2008 , 48, 480		26
97	Tolerance of roots to low oxygen: 'Anoxic' cores, the phytoglobin-nitric oxide cycle, and energy or oxygen sensing. <i>Journal of Plant Physiology</i> , 2019 , 239, 92-108	3.6	25
96	Physiological Mechanisms of Flooding Tolerance in Rice: Transient Complete Submergence and Prolonged Standing Water. <i>Progress in Botany Fortschritte Der Botanik</i> , 2014 , 255-307	0.6	24

95	Comparisons of annual pasture legumes in growth, ion regulation and root porosity demonstrate that <i>Melilotus siculus</i> has exceptional tolerance to combinations of salinity and waterlogging. <i>Environmental and Experimental Botany</i> , 2012 , 77, 175-184	5.9	24
94	Pattern of Water Use and Seed Yield under Terminal Drought in Chickpea Genotypes. <i>Frontiers in Plant Science</i> , 2017 , 8, 1375	6.2	24
93	Aquatic adventitious roots of the wetland plant <i>Meionectes brownii</i> can photosynthesize: implications for root function during flooding. <i>New Phytologist</i> , 2011 , 190, 311-9	9.8	24
92	Leaf gas films, underwater photosynthesis and plant species distributions in a flood gradient. <i>Plant, Cell and Environment</i> , 2016 , 39, 1537-48	8.4	24
91	Anatomical and biochemical characterisation of a barrier to radial O loss in adventitious roots of two contrasting <i>Hordeum marinum</i> accessions. <i>Functional Plant Biology</i> , 2017 , 44, 845-857	2.7	23
90	Responses of rice to Fe in aerated and stagnant conditions: growth, root porosity and radial oxygen loss barrier. <i>Functional Plant Biology</i> , 2014 , 41, 922-929	2.7	22
89	Salt sensitivity in chickpea is determined by sodium toxicity. <i>Planta</i> , 2016 , 244, 623-37	4.7	21
88	Adaptation of Rice to Flooded Soils. <i>Progress in Botany Fortschritte Der Botanik</i> , 2014 , 215-253	0.6	21
87	Salinity drives host reaction in <i>Phaseolus vulgaris</i> (common bean) to <i>Macrophomina phaseolina</i> . <i>Functional Plant Biology</i> , 2011 , 38, 984-992	2.7	21
86	Responses by coleoptiles of intact rice seedlings to anoxia: k(+) net uptake from the external solution and translocation from the caryopses. <i>Annals of Botany</i> , 2003 , 91 Spec No, 271-8	4.1	21
85	Growth responses of <i>Melilotus siculus</i> accessions to combined salinity and root-zone hypoxia are correlated with differences in tissue ion concentrations and not differences in root aeration. <i>Environmental and Experimental Botany</i> , 2015 , 109, 89-98	5.9	20
84	Effectiveness of Cultural Thatch-Mat Controls for Young and Mature Kikuyu Turfgrass. <i>Agronomy Journal</i> , 2009 , 101, 67-74	2.2	20
83	Salinity tolerance in chickpea is associated with the ability to 'exclude' Na from leaf mesophyll cells. <i>Journal of Experimental Botany</i> , 2019 , 70, 4991-5002	7	19
82	Effects of organic acids on the formation of the barrier to radial oxygen loss in roots of <i>Hordeum marinum</i> . <i>Functional Plant Biology</i> , 2014 , 41, 187-202	2.7	19
81	<i>Lotus tenuis</i> tolerates combined salinity and waterlogging: maintaining O ₂ transport to roots and expression of an NHX1-like gene contribute to regulation of Na ⁺ transport. <i>Physiologia Plantarum</i> , 2010 , 139, 358-74	4.6	19
80	Oxygen Transport, Respiration, and Anaerobic Carbohydrate Catabolism in Roots in Flooded Soils 2005 , 137-158		19
79	Variable response of three <i>Trifolium repens</i> ecotypes to soil flooding by seawater. <i>Annals of Botany</i> , 2014 , 114, 347-55	4.1	18
78	Salinity and waterlogging tolerances in three stem-succulent halophytes (<i>Tecticornia</i> species) from the margins of ephemeral salt lakes. <i>Plant and Soil</i> , 2011 , 348, 379-396	4.2	18

77	Nitrogen Increases Evapotranspiration and Growth of a Warm-Season Turfgrass. <i>Agronomy Journal</i> , 2009 , 101, 17-24	2.2	18
76	Contrasting water relations of three coastal tree species with different exposure to salinity. <i>Physiologia Plantarum</i> , 2006 , 127, 360-373	4.6	18
75	Rice acclimation to soil flooding: Low concentrations of organic acids can trigger a barrier to radial oxygen loss in roots. <i>Plant, Cell and Environment</i> , 2019 , 42, 2183-2197	8.4	17
74	Regulation of intracellular pH during anoxia in rice coleoptiles in acidic and near neutral conditions. <i>Journal of Experimental Botany</i> , 2009 , 60, 2119-28	7	17
73	Waterlogging tolerance, tissue nitrogen and oxygen transport in the forage legume <i>Melilotus siculus</i> : a comparison of nodulated and nitrate-fed plants. <i>Annals of Botany</i> , 2018 , 121, 699-709	4.1	16
72	Submergence tolerance in <i>Hordeum marinum</i> : dissolved CO ₂ determines underwater photosynthesis and growth. <i>Functional Plant Biology</i> , 2010 , 37, 524	2.7	16
71	Wheat genotypes show contrasting abilities to recover from anoxia in spite of similar anoxic carbohydrate metabolism. <i>Journal of Plant Physiology</i> , 2007 , 164, 1605-11	3.6	16
70	Intermittent anoxia induces oxidative stress in wheat seminal roots: assessment of the antioxidant defence system, lipid peroxidation and tissue solutes. <i>Functional Plant Biology</i> , 2005 , 32, 495-506	2.7	16
69	Salinization of the soil solution decreases the further accumulation of salt in the root zone of the halophyte <i>Atriplex nummularia</i> Lindl. growing above shallow saline groundwater. <i>Plant, Cell and Environment</i> , 2018 , 41, 99-110	8.4	15
68	Improvement of salt and waterlogging tolerance in wheat: comparative physiology of <i>Hordeum marinum</i> - <i>Triticum aestivum</i> amphiploids with their <i>H. marinum</i> and wheat parents. <i>Functional Plant Biology</i> , 2013 , 40, 1168-1178	2.7	15
67	Granular wetting agents ameliorate water repellency in turfgrass of contrasting soil organic matter content. <i>Plant and Soil</i> , 2011 , 348, 411-424	4.2	15
66	Turfgrass (<i>Cynodon dactylon</i> L.) sod production on sandy soils: I. Effects of irrigation and fertiliser regimes on growth and quality. <i>Plant and Soil</i> , 2006 , 284, 129-145	4.2	15
65	CO ₂ and O ₂ dynamics in leaves of aquatic plants with C ₃ or CAM photosynthesis - application of a novel CO ₂ microsensor. <i>Annals of Botany</i> , 2018 , 122, 605-615	4.1	14
64	Shoot atmospheric contact is of little importance to aeration of deeper portions of the wetland plant <i>Meionectes brownii</i> ; submerged organs mainly acquire O ₂ from the water column or produce it endogenously in underwater photosynthesis. <i>Plant, Cell and Environment</i> , 2013 , 36, 213-23	8.4	14
63	A GmAox2b antisense gene compromises vegetative growth and seed production in soybean. <i>Planta</i> , 2012 , 236, 199-207	4.7	14
62	Variation in salinity tolerance, early shoot mass and shoot ion concentrations within <i>Lotus tenuis</i> : towards a perennial pasture legume for saline land. <i>Crop and Pasture Science</i> , 2010 , 61, 379	2.2	14
61	Manipulation of ethanol production in anoxic rice coleoptiles by exogenous glucose determines rates of ion fluxes and provides estimates of energy requirements for cell maintenance during anoxia. <i>Journal of Experimental Botany</i> , 2005 , 56, 2453-63	7	14
60	Lateral roots, in addition to adventitious roots, form a barrier to radial oxygen loss in <i>Zea nicaraguensis</i> and a chromosome segment introgression line in maize. <i>New Phytologist</i> , 2021 , 229, 94-103	9.8	14

59	Life at the boundary: photosynthesis at the soil-fluid interface. A synthesis focusing on mosses. <i>Journal of Experimental Botany</i> , 2016 , 67, 1613-23	7	13
58	Tolerance of submerged germinating rice to 50-200 mM NaCl in aerated solution. <i>Physiologia Plantarum</i> , 2013 , 149, 222-33	4.6	13
57	Microsite and litter cover effects on seed banks vary with seed size and dispersal mechanisms: implications for revegetation of degraded saline land. <i>Plant Ecology</i> , 2012 , 213, 1145-1155	1.7	13
56	Drivers of plant traits that allow survival in wetlands. <i>Functional Ecology</i> , 2020 , 34, 956-967	5.6	13
55	Effect of Timing and Duration of Soil Saturation on Soilborne Pythium Diseases of Common Bean (<i>Phaseolus vulgaris</i>). <i>Plant Disease</i> , 2015 , 99, 112-118	1.5	12
54	Salinity tolerances of three succulent halophytes (<i>Tecticornia</i> spp.) differentially distributed along a salinity gradient. <i>Functional Plant Biology</i> , 2016 , 43, 739-750	2.7	12
53	Visualisation by high resolution synchrotron X-ray phase contrast micro-tomography of gas films on submerged superhydrophobic leaves. <i>Journal of Structural Biology</i> , 2014 , 188, 61-70	3.4	12
52	Leaf gas films delay salt entry and enhance underwater photosynthesis and internal aeration of <i>Melilotus siculus</i> submerged in saline water. <i>Plant, Cell and Environment</i> , 2014 , 37, 2339-49	8.4	12
51	Evaluation of a soil moisture sensor to reduce water and nutrient leaching in turfgrass (<i>Cynodon dactylon</i> cv. Wintergreen). <i>Australian Journal of Experimental Agriculture</i> , 2007 , 47, 215		12
50	Root O consumption, CO production and tissue concentration profiles in chickpea, as influenced by environmental hypoxia. <i>New Phytologist</i> , 2020 , 226, 373-384	9.8	12
49	pH regulation in anoxic rice coleoptiles at pH 3.5: biochemical pHstats and net H ⁺ influx in the absence and presence of NOFormula. <i>Journal of Experimental Botany</i> , 2012 , 63, 1969-83	7	11
48	Development and use of a variable-speed lateral boom irrigation system to define water requirements of 11 turfgrass genotypes under field conditions. <i>Australian Journal of Experimental Agriculture</i> , 2007 , 47, 86		11
47	A Review of Warm-Season Turfgrass Evapotranspiration, Responses to Deficit Irrigation, and Drought Resistance. <i>Crop Science</i> , 2017 , 57, S-98	2.4	10
46	Diel O ₂ Dynamics in Partially and Completely Submerged Deepwater Rice: Leaf Gas Films Enhance Internodal O ₂ Status, Influence Gene Expression and Accelerate Stem Elongation for 'Snorkelling' during Submergence. <i>Plant and Cell Physiology</i> , 2019 , 60, 973-985	4.9	10
45	Root-zone hypoxia reduces growth of the tropical forage grass <i>Urochloa humidicola</i> in high-nutrient but not low-nutrient conditions. <i>Annals of Botany</i> , 2019 , 124, 1019-1032	4.1	10
44	Waterlogging differentially affects yield and its components in wheat, barley, rapeseed and field pea depending on the timing of occurrence. <i>Journal of Agronomy and Crop Science</i> , 2020 , 206, 363-375	3.9	10
43	Cross-tolerance for drought, heat and salinity stresses in chickpea (<i>Cicer arietinum</i> L.). <i>Journal of Agronomy and Crop Science</i> , 2020 , 206, 405-419	3.9	10
42	Tolerance to partial and complete submergence in the forage legume <i>Melilotus siculus</i> : an evaluation of 15 accessions for petiole hyponastic response and gas-filled spaces, leaf hydrophobicity and gas films, and root phellem. <i>Annals of Botany</i> , 2019 , 123, 169-180	4.1	10

41	Drought tolerances of three stem-succulent halophyte species of an inland semiarid salt lake system. <i>Functional Plant Biology</i> , 2014 , 41, 1230-1238	2.7	10
40	Characterization of the multigene family TaHKT 2;1 in bread wheat and the role of gene members in plant Na(+) and K(+) status. <i>BMC Plant Biology</i> , 2014 , 14, 159	5.3	10
39	Energetics of acclimation to NaCl by submerged, anoxic rice seedlings. <i>Annals of Botany</i> , 2017 , 119, 129-142	4.2	10
38	Ameliorating water repellency under turfgrass of contrasting soil organic matter content: Effect of wetting agent formulation and application frequency. <i>Agricultural Water Management</i> , 2011 , 99, 1-7	5.9	10
37	Global patterns of the leaf economics spectrum in wetlands. <i>Nature Communications</i> , 2020 , 11, 4519	17.4	10
36	Sensitivity of chickpea and faba bean to root-zone hypoxia, elevated ethylene, and carbon dioxide. <i>Plant, Cell and Environment</i> , 2019 , 42, 85-97	8.4	10
35	The influence of NaCl salinity and hypoxia on aspects of growth in Trifolium species. <i>Crop and Pasture Science</i> , 2009 , 60, 71	2.2	9
34	Evaluation of root porosity and radial oxygen loss of disomic addition lines of Hordeum marinum in wheat. <i>Functional Plant Biology</i> , 2017 , 44, 400-409	2.7	8
33	Tolerance and recovery of the annual pasture legumes Melilotus siculus, Trifolium michelianum and Medicago polymorpha to soil salinity, soil waterlogging and the combination of these stresses. <i>Plant and Soil</i> , 2019 , 444, 267-280	4.2	8
32	Hydraulic redistribution: limitations for plants in saline soils. <i>Plant, Cell and Environment</i> , 2017 , 40, 2437-2446	8.4	8
31	Leaf gas films contribute to rice (Oryza sativa) submergence tolerance during saline floods. <i>Plant, Cell and Environment</i> , 2018 , 41, 885-897	8.4	7
30	Salt accumulation and depletion in the root-zone of the halophyte Atriplex nummularia Lindl.: influence of salinity, leaf area and plant water use. <i>Plant and Soil</i> , 2014 , 382, 31-41	4.2	7
29	Alternative oxidase, a determinant of plant gametophyte fitness and fecundity. <i>Plant Signaling and Behavior</i> , 2010 , 5, 604-6	2.5	7
28	Root Physiology [From Gene to Function. <i>Plant and Soil</i> , 2005 , 274, vii-xv	4.2	7
27	Phenotypic variation for productivity and drought tolerance is widespread in germplasm collections of Australian Cullen species. <i>Crop and Pasture Science</i> , 2012 , 63, 656	2.2	7
26	Contrasting submergence tolerance in two species of stem-succulent halophytes is not determined by differences in stem internal oxygen dynamics. <i>Annals of Botany</i> , 2015 , 115, 409-18	4.1	6
25	Na and/or Cl Toxicities Determine Salt Sensitivity in Soybean (L.), Mungbean (L.) R. Wilczek), Cowpea (L.), and Common Bean (L.). <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	6
24	Drying half of the root-zone from mid fruit growth to maturity in Hass Avocado (Persea americana Mill.) trees for one season reduced fruit production in two years. <i>Scientia Horticulturae</i> , 2009 , 120, 437-442	4.1	5

23	Solute Regulation by Calcium in Salt-Stressed Plants 1994 , 443-461		5
22	Root phenotypes of dwarf and "overgrowth" SLN1 barley mutants, and implications for hypoxic stress tolerance. <i>Journal of Plant Physiology</i> , 2019 , 234-235, 60-70	3.6	5
21	Uptake of inorganic phosphorus by the aquatic plant <i>Isoetes australis</i> inhabiting oligotrophic vernal rock pools. <i>Aquatic Botany</i> , 2017 , 138, 64-73	1.8	4
20	Microsite and litter cover effects on soil conditions and seedling recruitment in a saline agricultural system. <i>Plant and Soil</i> , 2011 , 348, 397-409	4.2	4
19	Development of <i>Melilotus siculus</i> A New Salt and Waterlogging-tolerant Annual Fodder Legume Species for Mediterranean-type Climates 2010 , 131-135		4
18	Waterlogging tolerance of grass pea (<i>Lathyrus sativus</i> L.) at germination related to country of origin. <i>Experimental Agriculture</i> , 2020 , 56, 837-850	1.7	4
17	Novel Salinity Tolerance Loci in Chickpea Identified in Glasshouse and Field Environments. <i>Frontiers in Plant Science</i> , 2021 , 12, 667910	6.2	4
16	The barrier to radial oxygen loss impedes the apoplastic entry of iron into the roots of <i>Urochloa humidicola</i> . <i>Journal of Experimental Botany</i> , 2021 , 72, 3279-3293	7	4
15	Opportunistic Mediterranean agriculture Using ephemeral pasture legumes to utilize summer rainfall. <i>Agricultural Systems</i> , 2013 , 120, 76-84	6.1	3
14	Spectral detection of stress-related pigments in salt-lake succulent halophytic shrubs. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2016 , 52, 457-463	7.3	2
13	Estimation of genetic components of variation for salt tolerance in chickpea using the generation mean analysis. <i>Euphytica</i> , 2011 , 182, 73-86	2.1	2
12	Effects on Growth and Development of Individual Chromosomes from Slow-growing <i>Lophopyrum elongatum</i> Lf when Incorporated into Bread Wheat (<i>Triticum aestivum</i> L.). <i>Annals of Botany</i> , 2001 , 88, 215-223	4.1	2
11	Approaches to scheduling water allocations to kikuyugrass grown on a water repellent soil in a drying-climate. <i>Agricultural Water Management</i> , 2020 , 230, 105957	5.9	2
10	Differential responses of three coastal grassland species to seawater flooding. <i>Journal of Plant Ecology</i> , 2016 , rtw037	1.7	2
9	Root length is proxy for high-throughput screening of waterlogging tolerance in <i>Urochloa</i> spp. grasses. <i>Functional Plant Biology</i> , 2021 , 48, 411-421	2.7	2
8	Submergence tolerance and recovery in Lotus: Variation among fifteen accessions in response to partial and complete submergence. <i>Journal of Plant Physiology</i> , 2020 , 249, 153180	3.6	1
7	The genetics of vigour-related traits in chickpea (<i>Cicer arietinum</i> L.): insights from genomic data. <i>Theoretical and Applied Genetics</i> , 2021 , 135, 107	6	1
6	Tolerance of four grain legume species to waterlogging, hypoxia and anoxia at germination and recovery. <i>AoB PLANTS</i> , 2021 , 13, plab052	2.9	1

5	Dryland field validation of genotypic variation in salt tolerance of chickpea (<i>Cicer arietinum</i> L.) determined under controlled conditions. <i>Field Crops Research</i> , 2022 , 276, 108392	5.5	o
4	Underwater Photosynthesis and Internal Aeration of Submerged Terrestrial Wetland Plants. <i>Plant Cell Monographs</i> , 2014 , 315-327	0.6	o
3	Response of Mungbean (cvs. Celera II-AU and Jade-AU) and Blackgram (cv. Onyx-AU) to Transient Waterlogging. <i>Frontiers in Plant Science</i> , 2021 , 12, 709102	6.2	o
2	Physiological Adaptations to Wetland Habitats 2018 , 383-394		
1	Physiological Adaptations to Wetland Habitats 2016 , 1-12		