Spatial and temporal variation in plant hydraulic traits change impacts on vegetation

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Citation Report

#	Article	IF	CITATIONS
1	The <i>New Phytologist</i> Tansley Medal 2014. New Phytologist, 2015, 205, 951-952.	7.3	9
2	What plant hydraulics can tell us about responses to climateâ€change droughts. New Phytologist, 2015, 207, 14-27.	7.3	314
3	Water limitations on forest carbon cycling and conifer traits along a steep climatic gradient in the Cascade Mountains, Oregon. Biogeosciences, 2015, 12, 6617-6635.	3.3	19
4	Looking forward, looking back: capturing drought <i>in flagrante delicto</i> and uncovering its broader consequences for forest ecosystems. Tree Physiology, 2015, 35, 803-805.	3.1	2
5	The hydraulic architecture of Eucalyptus trees growing across a gradient of depth-to-groundwater. Functional Plant Biology, 2015, 42, 888.	2.1	11
6	Wood Anatomy and Plant Hydraulics in a Changing Climate. , 2015, , 235-253.		36
7	From plant functional types to plant functional traits. Progress in Physical Geography, 2015, 39, 514-535.	3.2	70
8	Responses to mild water deficit and rewatering differ among secondary metabolites but are similar among provenances within <i>Eucalyptus</i> species. Tree Physiology, 2016, 36, tpv106.	3.1	24
9	Leaf gas exchange performance and the lethal water potential of five European species during drought. Tree Physiology, 2016, 36, tpv117.	3.1	55
11	Linking hydraulic traits to tropical forest function in a size-structured and trait-driven model (TFSÂv.1-Hydro). Geoscientific Model Development, 2016, 9, 4227-4255.	3.6	211
12	Plasticity in Vulnerability to Cavitation of Pinus canariensis Occurs Only at the Driest End of an Aridity Gradient. Frontiers in Plant Science, 2016, 7, 769.	3.6	60
13	Pragmatic hydraulic theory predicts stomatal responses to climatic water deficits. New Phytologist, 2016, 212, 577-589.	7.3	168
14	Drought stress limits the geographic ranges of two tree species via different physiological mechanisms. Global Change Biology, 2016, 22, 1029-1045.	9.5	108
15	An ecoclimatic framework for evaluating the resilience of vegetation to water deficit. Global Change Biology, 2016, 22, 1677-1689.	9.5	68
16	Responses of two semiarid conifer tree species to reduced precipitation and warming reveal new perspectives for stomatal regulation. Plant, Cell and Environment, 2016, 39, 38-49.	5.7	111
17	<i>New Phytologist:</i> bridging theÂâ€~plant function – climate modelling divide'. New Phytologist, 2016, 209, 1329-1332.	7.3	2
18	Post-fire resprouting oaks (genus: Quercus) exhibit plasticity in xylem vulnerability to drought. Plant Ecology, 2016, 217, 697-710.	1.6	10
19	Meta-analysis reveals that hydraulic traits explain cross-species patterns of drought-induced tree mortality across the globe. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5024-5029.	7.1	554

#	Article	IF	CITATIONS
20	When a Tree Dies in the Forest: Scaling Climate-Driven Tree Mortality to Ecosystem Water and Carbon Fluxes. Ecosystems, 2016, 19, 1133-1147.	3.4	73
21	Structural determinants of increased susceptibility to dehydrationâ€induced cavitation in postâ€fire resprouting chaparral shrubs. Plant, Cell and Environment, 2016, 39, 2473-2485.	5.7	34
22	Ecosystem resilience to the Millennium drought in southeast Australia (2001–2009). Journal of Geophysical Research G: Biogeosciences, 2016, 121, 2312-2327.	3.0	17
23	Wood anatomy and carbonâ€isotope discrimination support longâ€term hydraulic deterioration as a major cause of droughtâ€induced dieback. Global Change Biology, 2016, 22, 2125-2137.	9.5	119
24	How adaptable is the hydraulic system of European beech in the face of climate changeâ€related precipitation reduction?. New Phytologist, 2016, 210, 443-458.	7.3	178
26	Low intra-tree variability in resistance to embolism in four Pinaceae species. Annals of Forest Science, 2016, 73, 681-689.	2.0	19
27	Noninvasive Measurement of Vulnerability to Drought-Induced Embolism by X-Ray Microtomography. Plant Physiology, 2016, 170, 273-282.	4.8	133
28	Limited variation found among Norway spruce half-sib families in physiological response to drought and resistance to embolism. Tree Physiology, 2016, 36, tpv141.	3.1	11
29	Modeling terrestrial carbon and water dynamics across climatic gradients: does plant trait diversity matter?. New Phytologist, 2016, 209, 137-151.	7.3	75
30	Prior height, growth, and wood anatomy differently predispose to drought-induced dieback in two Mediterranean oak speciesk. Annals of Forest Science, 2016, 73, 341-351.	2.0	63
31	Functional ecology of cryptogams: scaling from bryophyte, lichen, and soil crust traits to ecosystem processes. New Phytologist, 2017, 213, 993-995.	7.3	30
32	Will seasonally dry tropical forests be sensitive or resistant to future changes in rainfall regimes?. Environmental Research Letters, 2017, 12, 023001.	5.2	210
33	Effects of drought on leaf carbon source and growth of European beech are modulated by soil type. Scientific Reports, 2017, 7, 42462.	3.3	34
34	Prevalence and magnitude of groundwater use by vegetation: a global stable isotope meta-analysis. Scientific Reports, 2017, 7, 44110.	3.3	109
35	How does climate influence xylem morphogenesis over the growing season? Insights from long-term intra-ring anatomy in <i>Picea abies</i> i>Nannals of Botany, 2017, 119, mcw274.	2.9	85
36	Dynamics of stem water uptake among isohydric and anisohydric species experiencing a severe drought. Tree Physiology, 2017, 37, 1379-1392.	3.1	20
37	Differences in xylem and leaf hydraulic traits explain differences in drought tolerance among mature Amazon rainforest trees. Global Change Biology, 2017, 23, 4280-4293.	9.5	66
38	Capacitive water release and internal leaf water relocation delay drought-induced cavitation in African <i>Maesopsis eminii</i> . Tree Physiology, 2017, 37, 481-490.	3.1	22

#	ARTICLE	IF	Citations
39	Plant source water apportionment using stable isotopes: A comparison of simple linear, twoâ€compartment mixing model approaches. Hydrological Processes, 2017, 31, 3750-3758.	2.6	75
40	Plant xylem hydraulics: What we understand, current research, and future challenges. Journal of Integrative Plant Biology, 2017, 59, 356-389.	8.5	301
41	Trait-based representation of hydrological functional properties of Âplants in weather and ecosystem models. Plant Diversity, 2017, 39, 1-12.	3.7	56
42	Climateâ€driven trends in stem wood density of tree species in the eastern United States: Ecological impact and implications for national forest carbon assessments. Global Ecology and Biogeography, 2017, 26, 1153-1164.	5.8	20
43	Trait covariance: the functional warp of plant diversity?. New Phytologist, 2017, 216, 976-980.	7.3	22
44	Vulnerability to xylem embolism as a major correlate of the environmental distribution of rain forest species on a tropical island. Plant, Cell and Environment, 2017, 40, 277-289.	5.7	67
45	Impacts of droughts on the growth resilience of Northern Hemisphere forests. Global Ecology and Biogeography, 2017, 26, 166-176.	5.8	232
46	Teresa Rosas. New Phytologist, 2017, 216, 984-985.	7. 3	O
47	Sex determines xylem anatomy in a dioecious conifer: hydraulic consequences in a drier world. Tree Physiology, 2017, 37, 1493-1502.	3.1	32
48	Drought timing and local climate determine the sensitivity of eastern temperate forests to drought. Global Change Biology, 2018, 24, 2339-2351.	9.5	168
49	Research frontiers for improving our understanding of droughtâ€induced tree and forest mortality. New Phytologist, 2018, 218, 15-28.	7. 3	334
50	Acclimation of branch and leaf hydraulics in adult Fagus sylvatica and Picea abies in a forest through-fall exclusion experiment. Tree Physiology, 2018, 38, 198-211.	3.1	37
51	Drivers and mechanisms of tree mortality in moist tropical forests. New Phytologist, 2018, 219, 851-869.	7.3	341
52	Fireâ€induced deforestation in droughtâ€prone Mediterranean forests: drivers and unknowns from leaves to communities. Ecological Monographs, 2018, 88, 141-169.	5.4	90
53	The legacy of water deficit on populations having experienced negative hydraulic safety margin. Global Ecology and Biogeography, 2018, 27, 346-356.	5.8	36
54	Synthesis and future research directions linking tree diversity to growth, survival, and damage in a global network of tree diversity experiments. Environmental and Experimental Botany, 2018, 152, 68-89.	4.2	113
55	Unexpected drought resistance strategies in seedlings of four Brachychiton species. Tree Physiology, 2018, 38, 664-677.	3.1	15
56	Assessing inter- and intraspecific variability of xylem vulnerability to embolism in oaks. Forest Ecology and Management, 2018, 424, 53-61.	3.2	84

#	Article	IF	CITATIONS
57	Xylem embolism refilling and resilience against droughtâ€induced mortality in woody plants: processes and tradeâ€offs. Ecological Research, 2018, 33, 839-855.	1.5	116
58	Drought tolerance traits predict survival ratio of native tree species planted in a subtropical degraded hilly area in South China. Forest Ecology and Management, 2018, 418, 41-46.	3.2	17
59	Time dependency of eddy covariance site energy balance. Agricultural and Forest Meteorology, 2018, 249, 467-478.	4.8	23
60	Quantifying in situ phenotypic variability in the hydraulic properties of four tree species across their distribution range in Europe. PLoS ONE, 2018, 13, e0196075.	2.5	25
61	Northern forest tree populations are physiologically maladapted to drought. Nature Communications, 2018, 9, 5254.	12.8	78
62	Plant Hydraulic Trait Covariation: A Global Meta-Analysis to Reduce Degrees of Freedom in Trait-Based Hydrologic Models. Forests, 2018, 9, 446.	2.1	13
63	Hydraulic diversity of forests regulates ecosystem resilience during drought. Nature, 2018, 561, 538-541.	27.8	332
64	Elucidating the hydraulic vulnerability of the longest-lived Southern Hemisphere conifer to aridification. Forest Ecology and Management, 2018, 430, 472-484.	3.2	4
65	The ecohydrological context of drought and classification of plant responses. Ecology Letters, 2018, 21, 1723-1736.	6.4	38
66	Embolism and mechanical resistances play a key role in dehydration tolerance of a perennial grass Dactylis glomerata L Annals of Botany, 2018, 122, 325-336.	2.9	28
67	Coordinated plasticity maintains hydraulic safety in sunflower leaves. Plant, Cell and Environment, 2018, 41, 2567-2576.	5.7	66
68	Functional Mapping of Quantitative Trait Loci (QTLs) Associated With Plant Performance in a Wheat MAGIC Mapping Population. Frontiers in Plant Science, 2018, 9, 887.	3.6	37
69	Applying the ecoâ€hydrological equilibrium hypothesis to model root distribution in waterâ€limited forests. Ecohydrology, 2018, 11, e2015.	2.4	15
70	Deriving pattern from complexity in the processes underlying tropical forest drought impacts. New Phytologist, 2018, 219, 841-844.	7.3	11
71	Forestâ€Typeâ€Dependent Water Use Efficiency Trends Across the Northern Hemisphere. Geophysical Research Letters, 2018, 45, 8283-8293.	4.0	26
72	Morphological and physiological traits in relation to carbon balance in a diverse clade of dryland mosses. Plant, Cell and Environment, 2019, 42, 3140-3151.	5.7	11
73	Widespread droughtâ€induced tree mortality at dry range edges indicates that climate stress exceeds species' compensating mechanisms. Global Change Biology, 2019, 25, 3793-3802.	9.5	153
74	Geographic scale and disturbance influence intraspecific trait variability in leaves and roots of North American understorey plants. Functional Ecology, 2019, 33, 1771-1784.	3.6	34

#	Article	IF	CITATIONS
75	Plant Evolutionary Ecology in the Age of the Extended Evolutionary Synthesis. Integrative and Comparative Biology, 2019, 59, 493-502.	2.0	12
76	Examining variation in hydraulic and resource acquisition traits along climatic gradients tests our understanding of plant form and function. New Phytologist, 2019, 223, 505-507.	7.3	7
77	Plant water content integrates hydraulics and carbon depletion to predict drought-induced seedling mortality. Tree Physiology, 2019, 39, 1300-1312.	3.1	79
78	Genomeâ€wide association study identified novel candidate loci affecting wood formation in Norway spruce. Plant Journal, 2019, 100, 83-100.	5.7	49
79	No local adaptation in leaf or stem xylem vulnerability to embolism, but consistent vulnerability segmentation in a North American oak. New Phytologist, 2019, 223, 1296-1306.	7.3	52
80	Vegetation Functional Properties Determine Uncertainty of Simulated Ecosystem Productivity: A Traceability Analysis in the East Asian Monsoon Region. Global Biogeochemical Cycles, 2019, 33, 668-689.	4.9	38
81	Climate and plant trait strategies determine tree carbon allocation to leaves and mediate future forest productivity. Global Change Biology, 2019, 25, 3395-3405.	9.5	53
82	Juvenile and adult leaves of heteroblastic Eucalyptus globulus vary in xylem vulnerability. Trees - Structure and Function, 2019, 33, 1167-1178.	1.9	14
83	Satellite-based vegetation optical depth as an indicator of drought-driven tree mortality. Remote Sensing of Environment, 2019, 227, 125-136.	11.0	79
84	Tree Circumference Changes and Species-Specific Growth Recovery After Extreme Dry Events in a Montane Rainforest in Southern Ecuador. Frontiers in Plant Science, 2019, 10, 342.	3.6	16
85	A simplified framework for fast and reliable measurement of leaf turgor loss point. Plant Physiology and Biochemistry, 2019, 139, 395-399.	5.8	22
86	Responses of plant leaf economic and hydraulic traits mediate the effects of early- and late-season drought on grassland productivity. AoB PLANTS, 2019, 11, plz023.	2.3	17
87	Testing the divergent adaptation of two congeneric tree species on a rainfall gradient using ecoâ€physioâ€morphological traits. Biotropica, 2019, 51, 364-377.	1.6	6
88	Climatic Change and Metabolome Fluxes. , 2019, , 179-237.		0
89	Seasonal Divergent Tree Growth Trends and Growth Variability along Drought Gradient over Northeastern China. Forests, 2019, 10, 39.	2.1	5
90	What's hot in conservation biogeography in a changing climate? Going beyond species range dynamics. Diversity and Distributions, 2019, 25, 492-498.	4.1	16
91	Implementing Plant Hydraulics in the Community Land Model, Version 5. Journal of Advances in Modeling Earth Systems, 2019, 11, 485-513.	3.8	213
92	A ligand-independent origin of abscisic acid perception. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 24892-24899.	7.1	84

#	Article	IF	CITATIONS
93	The importance of physiological, structural and trait responses to drought stress in driving spatial and temporal variation in GPP across Amazon forests. Biogeosciences, 2019, 16, 4463-4484.	3.3	15
94	Greater focus on water pools may improve our ability to understand and anticipate droughtâ€induced mortality in plants. New Phytologist, 2019, 223, 22-32.	7.3	134
95	Does acclimation in cavitation resistance due to mechanical perturbation support the pit area or conduit reinforcement hypotheses in Phaseolus vulgaris? Physiologia Plantarum, 2019, 167, 378-390.	5.2	4
96	Incorporating local adaptation into forecasts of species' distribution and abundance under climate change. Global Change Biology, 2019, 25, 775-793.	9.5	169
97	Adjustments and coordination of hydraulic, leaf and stem traits along a water availability gradient. New Phytologist, 2019, 223, 632-646.	7.3	184
98	Tree resilience to drought increases in the Tibetan Plateau. Global Change Biology, 2019, 25, 245-253.	9.5	85
99	Engineering Drought Resistance in Forest Trees. Frontiers in Plant Science, 2018, 9, 1875.	3.6	86
100	Geographical adaptation prevails over speciesâ€specific determinism in trees' vulnerability to climate change at Mediterranean rearâ€edge forests. Global Change Biology, 2019, 25, 1296-1314.	9.5	55
101	Intraspecific variation in drought susceptibility in Eucalyptus globulus is linked to differences in leaf vulnerability. Functional Plant Biology, 2019, 46, 286.	2.1	18
102	Maternal environment regulates morphological and physiological traits in Eucalyptus grandis. Forest Ecology and Management, 2019, 432, 631-636.	3.2	14
103	Embolism resistance drives the distribution of Amazonian rainforest tree species along hydroâ€topographic gradients. New Phytologist, 2019, 221, 1457-1465.	7.3	123
104	Predictability of Leaf Morphological Traits for Paleoecological Reconstruction: The Case of Leaf Cuticle and Leaf Dry Mass per Area. International Journal of Plant Sciences, 2020, 181, 129-141.	1.3	5
105	Phenotypic plasticity and genetic adaptation of functional traits influences intra-specific variation in hydraulic efficiency and safety. Tree Physiology, 2020, 40, 215-229.	3.1	49
106	Towards a New Generation of Trait-Flexible Vegetation Models. Trends in Ecology and Evolution, 2020, 35, 191-205.	8.7	59
107	Growingâ€season temperature and precipitation are independent drivers of global variation in xylem hydraulic conductivity. Global Change Biology, 2020, 26, 1833-1841.	9.5	36
108	Plastic Responses of Magnolia schiedeana Schltdl., a Relict-Endangered Mexican Cloud Forest Tree, to Climatic Events: Evidences from Leaf Venation and Wood Vessel Anatomy. Forests, 2020, 11, 737.	2.1	11
109	Evolution of Abscisic Acid Signaling Module and Its Perception. Frontiers in Plant Science, 2020, 11, 934.	3.6	40
110	Toward spatioâ€temporal delineation of positive interactions in ecology. Ecology and Evolution, 2020, 10, 9026-9036.	1.9	7

#	Article	IF	CITATIONS
111	Disentangling the Effects of Genotype and Environment on Growth and Wood Features of Balfourodendron riedelianum Trees by Common Garden Experiments in Brazil. Forests, 2020, 11, 905.	2.1	3
112	Using a Trait-Based Approach to Compare Tree Species Sensitivity to Climate Change Stressors in Eastern Canada and Inform Adaptation Practices. Forests, 2020, 11, 989.	2.1	22
113	How does contemporary selection shape oak phenotypes?. Evolutionary Applications, 2020, 13, 2772-2790.	3.1	18
114	Lineageâ€based functional types: characterising functional diversity to enhance the representation of ecological behaviour in Land Surface Models. New Phytologist, 2020, 228, 15-23.	7.3	20
115	Biophysically Informed Imaging Acquisition of Plant Water Status. Frontiers in Forests and Global Change, 2020, 3, .	2.3	4
116	Plant hydraulics accentuates the effect of atmospheric moisture stress on transpiration. Nature Climate Change, 2020, 10, 691-695.	18.8	108
117	An Observationâ€Driven Approach to Improve Vegetation Phenology in a Global Land Surface Model. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002083.	3.8	8
118	New evidence of unexpectedly high animal density and diet diversity will benefit the conservation of the Critically Endangered western ringtail possum. Austral Ecology, 2020, 45, 596-608.	1.5	7
119	Global gradients in intraspecific variation in vegetative and floral traits are partially associated with climate and species richness. Global Ecology and Biogeography, 2020, 29, 992-1007.	5.8	51
120	Functional Trait Variation Among and Within Species and Plant Functional Types in Mountainous Mediterranean Forests. Frontiers in Plant Science, 2020, 11, 212.	3.6	35
121	Plant hydraulic traits reveal islands as refugia from worsening drought., 2020, 8, coz115.		12
122	Correcting tree-ring $\langle b \rangle \hat{l}' \langle b \rangle 13C$ time series for tree-size effects in eight temperate tree species. Tree Physiology, 2020, 40, 333-349.	3.1	17
123	A New Perspective on Ecological Prediction Reveals Limits to Climate Adaptation in a Temperate Tree Species. Current Biology, 2020, 30, 1447-1453.e4.	3.9	23
124	Responses to drought stress in Prunus sargentii and Larix kaempferi seedlings using morphological and physiological parameters. Forest Ecology and Management, 2020, 465, 118099.	3.2	108
125	Spectrally defined plant functional types adequately capture multidimensional trait variation in herbaceous communities. Ecological Indicators, 2021, 120, 106970.	6.3	6
126	When form does not predict function: Empirical evidence violates functional form hypotheses for marine macroalgae. Journal of Ecology, 2021, 109, 833-846.	4.0	8
127	Weak tradeoff between xylem hydraulic efficiency and safety: climatic seasonality matters. New Phytologist, 2021, 229, 1440-1452.	7.3	49
128	Understanding and predicting forest mortality in the western United States using longâ€term forest inventory data and modeled hydraulic damage. New Phytologist, 2021, 230, 1896-1910.	7.3	44

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129	Where do leaf water leaks come from? Tradeâ€offs underlying the variability in minimum conductance across tropical savanna species with contrasting growth strategies. New Phytologist, 2021, 229, 1415-1430.	7.3	34
130	A Method for Performing Reforestation to Effectively Recover Soil Water Content in Extremely Degraded Tropical Rain Forests. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	6
131	Higher temperatures increase growth rates of Rocky Mountain montane tree seedlings. Ecosphere, 2021, 12, e03414.	2.2	6
132	Arctic tundra shrubification: a review of mechanisms and impacts on ecosystem carbon balance. Environmental Research Letters, 2021, 16, 053001.	5.2	121
133	Cropping systems alter hydraulic traits of barley but not pea grown in mixture. Plant, Cell and Environment, 2021, 44, 2912-2924.	5.7	8
134	Challenges and opportunities in precision irrigation decision-support systems for center pivots. Environmental Research Letters, 2021, 16, 053003.	5.2	31
135	Is the annual maximum leaf area index an important driver of water fluxes simulated by a land surface model in temperate forests?. Canadian Journal of Forest Research, 2021, 51, 595-603.	1.7	3
136	Multi-sensor remote sensing for drought characterization: current status, opportunities and a roadmap for the future. Remote Sensing of Environment, 2021, 256, 112313.	11.0	114
137	Climate and functional traits jointly mediate tree waterâ€use strategies. New Phytologist, 2021, 231, 617-630.	7.3	53
138	Acoustic Vulnerability, Hydraulic Capacitance, and Xylem Anatomy Determine Drought Response of Small Grain Cereals. Frontiers in Plant Science, 2021, 12, 599824.	3.6	3
139	HYDRAULICS OF PINUS (SUBSECTION PONDEROSAE) POPULATIONS ACROSS AN ELEVATION GRADIENT IN THE SANTA CATALINA MOUNTAINS OF SOUTHERN ARIZONA. Madro $ ilde{A}$ ±0, 2021, 67, .	0.4	4
140	Global ecosystem-scale plant hydraulic traits retrieved using model–data fusion. Hydrology and Earth System Sciences, 2021, 25, 2399-2417.	4.9	24
141	Hydraulic architecture explains species moisture dependency but not mortality rates across a tropical rainfall gradient. Biotropica, 2021, 53, 1213-1225.	1.6	6
142	Integrative Modelling of Gene Expression and Digital Phenotypes to Describe Senescence in Wheat. Genes, 2021, 12, 909.	2.4	4
143	Hydraulic variability of three temperate broadleaf tree species along a water availability gradient in central Europe. New Phytologist, 2021, 231, 1387-1400.	7.3	16
145	Hydraulicâ€stomatal coordination in tree seedlings: tight correlation across environments and ontogeny in <i>Acer pseudoplatanus</i> New Phytologist, 2021, 232, 1297-1310.	7.3	5
146	Acclimation of hydraulic and morphological traits to water deficit delays hydraulic failure during simulated drought in poplar. Tree Physiology, 2021, 41, 2008-2021.	3.1	21
147	The intraspecific variation of functional traits modulates drought resilience of European beech and pubescent oak. Journal of Ecology, 2021, 109, 3652-3669.	4.0	27

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148	Continent-wide synthesis of the long-term population dynamics of quaking aspen in the face of accelerating human impacts. Oecologia, 2021, 197, 25-42.	2.0	8
149	Stressors Reveal Ecosystems' Hidden Characteristics. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2021JG006462.	3.0	1
150	Plant hydraulic transport controls transpiration sensitivity to soil water stress. Hydrology and Earth System Sciences, 2021, 25, 4259-4274.	4.9	6
151	Assessing Different Plantâ€Centric Water Stress Metrics for Irrigation Efficacy Using Soilâ€Plantâ€Atmosphereâ€Continuum Simulation. Water Resources Research, 2021, 57, e2021WR030211.	4.2	11
152	Limits to postâ€fire vegetation recovery under climate change. Plant, Cell and Environment, 2021, 44, 3471-3489.	5.7	90
153	Detecting forest response to droughts with global observations of vegetation water content. Global Change Biology, 2021, 27, 6005-6024.	9.5	73
154	Remote sensing of spectral diversity: A new methodological approach to account for spatio-temporal dissimilarities between plant communities. Ecological Indicators, 2021, 130, 108106.	6.3	20
155	Effects of Wood Hydraulic Properties on Water Use and Productivity of Tropical Rainforest Trees. Frontiers in Forests and Global Change, 2021, 3, .	2.3	11
156	Interactions among intrinsic water-use efficiency and climate influence growth and flowering in a common desert shrub. Oecologia, 2021, 197, 1027-1038.	2.0	7
158	Intra-specific variability in deep water extraction between trees growing on a Mediterranean karst. Journal of Hydrology, 2020, 590, 125428.	5.4	14
160	Plant water potential improves prediction of empirical stomatal models. PLoS ONE, 2017, 12, e0185481.	2.5	77
161	Fine-scale mapping of sapwood anatomical properties reveals plasticity in hydraulics during water deficit. The Journal of Plant Hydraulics, 0, 2, e003.	1.0	5
163	Long-term warming results in species-specific shifts in seed mass in alpine communities. PeerJ, 2019, 7, e7416.	2.0	6
164	Opportunities, challenges and pitfalls in characterizing plant waterâ€use strategies. Functional Ecology, 2022, 36, 24-37.	3.6	27
165	<i>In vivo</i> monitoring of droughtâ€induced embolism in <i>Callitris rhomboidea</i> trees reveals wide variation in branchlet vulnerability and high resistance to tissue death. New Phytologist, 2022, 233, 207-218.	7.3	21
166	Convergence of global hydrothermal pattern leads to an increase in vegetation net primary productivity. Ecological Indicators, 2021, 132, 108282.	6.3	7
169	Determining the scale at which variation in a single gene changes population yields. ELife, 2020, 9, .	6.0	6
170	Integrating plant physiology and community ecology across scales through traitâ€based models to predict drought mortality. New Phytologist, 2022, 234, 21-27.	7.3	16

#	Article	IF	CITATIONS
171	Verification of our empirical understanding of the physiology and ecology of two contrasting plantation species using a trait database. PLoS ONE, 2021, 16, e0254599.	2.5	5
172	Comparing statistical and mechanistic models to identify the drivers of mortality within a rear-edge beech population. , 0, 1 , .		4
173	The Drought Response of Eastern US Oaks in the Context of Their Declining Abundance. BioScience, 2022, 72, 333-346.	4.9	9
174	How can biosphere models simulate enough vegetation biomass in the mountains of the western United States? Implications of meteorological forcing. Environmental Modelling and Software, 2022, 148, 105288.	4.5	3
175	Altered climate memory characterizes tree growth during forest dieback. Agricultural and Forest Meteorology, 2022, 314, 108787.	4.8	6
176	On the pivotal role of water potential to model plant physiological processes. In Silico Plants, 2022, 4, .	1.9	18
177	Patterns of daily stem growth in different tree species in a warm-temperate forest in northern China. Dendrochronologia, 2022, 72, 125934.	2.2	2
178	Plant-water sensitivity regulates wildfire vulnerability. Nature Ecology and Evolution, 2022, 6, 332-339.	7.8	21
179	Aridity and cold temperatures drive divergent adjustments of European beech xylem anatomy, hydraulics and leaf physiological traits. Tree Physiology, 2022, 42, 1720-1735.	3.1	8
181	Expanding the wood anatomy economics spectrum: the correlates of vessel element lengths and pit apertures sizes in tropical forest trees. Plant Ecology and Diversity, 2021, 14, 279-291.	2.4	2
182	SilvAdapt.Net: A Site-Based Network of Adaptive Forest Management Related to Climate Change in Spain. Forests, 2021, 12, 1807.	2.1	4
183	The xylem of anisohydric <i>Quercus alba</i> L. is more vulnerable to embolism than isohydric codominants. Plant, Cell and Environment, 2022, 45, 329-346.	5.7	10
193	Intraâ€Specific Variability in Plant Hydraulic Parameters Inferred From Model Inversion of Sap Flux Data. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	3.0	4
194	Comprehensive Quantification of the Responses of Ecosystem Production and Respiration to Drought Time Scale, Intensity and Timing in Humid Environments: A FLUXNET Synthesis. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	3.0	10
195	Intraspecific trait changes in response to drought lead to trait convergence betweenâ€"but not withinâ€"species. Functional Ecology, 2022, 36, 1900-1911.	3.6	6
196	Experimental and conceptual approaches to root water transport. Plant and Soil, 2022, 478, 349-370.	3.7	10
197	Quantifying withinâ€species trait variation in space and time reveals limits to traitâ€mediated drought response. Functional Ecology, 2022, 36, 2399-2411.	3.6	9
198	Timing and Order of Extreme Drought and Wetness Determine Bioclimatic Sensitivity of Tree Growth. Earth's Future, 2022, 10, .	6.3	7

#	Article	IF	Citations
199	Biotic responses to climate extremes in terrestrial ecosystems. IScience, 2022, 25, 104559.	4.1	18
200	Canopy height and climate dryness parsimoniously explain spatial variation of unstressed stomatal conductance. Geophysical Research Letters, 0, , .	4.0	3
201	Hydropeaking impacts on riverine plants downstream from the world's largest hydropower dam, the Three Gorges Dam. Science of the Total Environment, 2022, 845, 157137.	8.0	4
202	Magnitude and determinants of plant root hydraulic redistribution: A global synthesis analysis. Frontiers in Plant Science, 0, 13, .	3.6	1
203	Model-assisted ideotyping reveals trait syndromes to adapt viticulture to a drier climate. Plant Physiology, 2022, 190, 1673-1686.	4.8	14
204	Predicting ecosystem productivity based on plant community traits. Trends in Plant Science, 2023, 28, 43-53.	8.8	19
205	Strategies of tree species to adapt to drought from leaf stomatal regulation and stem embolism resistance to root properties. Frontiers in Plant Science, $0,13,.$	3.6	8
206	On the Impacts of Historical and Future Climate Changes to the Sustainability of the Main Sardinian Forests. Remote Sensing, 2022, 14, 4893.	4.0	2
207	Climatic origin of provenances of <i>Corymbia calophylla</i> affects canker disease susceptibility, caused by <i>Quambalaria coyrecup</i> , and interactions with drought stress. Forest Pathology, 2022, 52, .	1.1	0
208	Forest fluxes and mortality response to drought: model description (ORCHIDEE-CAN-NHA r7236) and evaluation at the Caxiuan ΔE drought experiment. Geoscientific Model Development, 2022, 15, 7809-7833.	3.6	3
209	Climate-driven sapwood-specific hydraulic conductivity and the Huber value but not leaf-specific hydraulic conductivity on a global scale. Science of the Total Environment, 2023, 857, 159334.	8.0	2
210	Phenological physiology: seasonal patterns of plant stress tolerance in a changing climate. New Phytologist, 2023, 237, 1508-1524.	7.3	11
211	Habitat preference and vulnerability to drought of three <i>Hypericum</i> species of the p \tilde{A}_i ramo. Plant Ecology and Diversity, 0, , .	2.4	1
212	Concurrent time course of xylem hydraulic dysfunction and non-structural carbohydrates under contrasting water deficits and nitrogen supplies in poplar. Environmental and Experimental Botany, 2023, 206, 105173.	4.2	1
213	Parameterizing Vegetation Traits with a Processâ€Based Ecohydrological Model and Xylem Water Isotopic Observations. Journal of Advances in Modeling Earth Systems, 0, , .	3.8	1
214	Effects of Different Root Zone Heating Methods on the Growth and Photosynthetic Characteristics of Cucumber. Horticulturae, 2022, 8, 1137.	2.8	1
215	Diverging growth and resilience of Pinus tabulaeformis and Pinus massoniana to droughts in north-south transition zone, central China. Dendrochronologia, 2023, 78, 126060.	2.2	2
216	Tree-level stomatal regulation is more closely related to xylem hydraulic traits than to leaf photosynthetic traits across diverse tree species. Agricultural and Forest Meteorology, 2023, 329, 109291.	4.8	4

#	Article	IF	CITATIONS
217	Application of UAS-Based Remote Sensing in Estimating Winter Wheat Phenotypic Traits and Yield During the Growing Season. PFG - Journal of Photogrammetry, Remote Sensing and Geoinformation Science, 0, , .	1.1	2
218	Deadly acceleration in dehydration of <i>Eucalyptus viminalis</i> leaves coincides with high-order vein cavitation. Plant Physiology, 2023, 191, 1648-1661.	4.8	6
219	Coordination of hydraulic and morphological traits across dominant grasses in eastern Australia. Functional Ecology, 2023, 37, 1126-1139.	3.6	2
220	Acclimation limits for embolism resistance and osmotic adjustment accompany the geographical dry edge of Mediterranean species. Functional Ecology, 2023, 37, 1421-1435.	3.6	4
221	Optimal plant water use strategies explain soil moisture variability. Advances in Water Resources, 2023, 173, 104405.	3.8	7
222	Xylem resistance to cavitation increases during summer in <i>Pinus halepensis</i> Plant, Cell and Environment, 2023, 46, 1849-1859.	5.7	6
224	Changes in Water Status and Carbon Allocation in Conifers Subjected to Spruce Budworm Defoliation and Consequences for Tree Mortality and Forest Management. Advances in Global Change Research, 2023, , 249-269.	1.6	1
225	The Trees of the Pisa Botanic Garden under Climate Change Scenarios: What Are We Walking into?. Sustainability, 2023, 15, 4585.	3.2	1
226	Hydraulic and Economical Traits in Short- and Long-Shoot Leaves of Ginkgo biloba Males and Females. Forests, 2023, 14, 535.	2.1	2
227	Contrasting stem water uptake and storage dynamics of water-saver and water-spender species during drought and recovery. Tree Physiology, 2023, 43, 1290-1306.	3.1	2
228	Climate changeâ€induced ecosystem disturbance: a review on sclerophyllous and semiâ€deciduous forests in Tunisia. Plant Biology, 0, , .	3.8	1
229	Spatial Heterogeneity of Vegetation Resilience Changes to Different Drought Types. Earth's Future, 2023, 11, .	6.3	5
230	Decoupling of functional traits from intraspecific patterns of growth and drought stress resistance. New Phytologist, 2023, 239, 174-188.	7.3	1
231	Experimental drier climates affect hydraulics and induce high mortality of seedlings of three northern conifer species. Forest Ecology and Management, 2023, 544, 121127.	3.2	2
232	Genomeâ€wide association study of multiyear dynamic growth traits in hybrid <i>Liriodendron</i> identifies robust genetic loci associated with growth trajectories. Plant Journal, 0, , .	5.7	1
233	Xylem structure and function of two saltbush shrub species (<i>Atriplex</i>) from differing microhabitats. Journal of Plant Ecology, 0, , .	2.3	0
235	Stomatal regulation and xylem hydraulics of limber pine and Engelmann spruce in Great Basin sky-island ecosystems. Science of the Total Environment, 2023, 892, 164351.	8.0	0
236	Linking stem rehydration kinetics to hydraulic traits using a novel method and mechanistic model. Annals of Botany, 2023, 131, 1121-1131.	2.9	0

#	Article	IF	CITATIONS
237	Xylem structure and hydraulic function in roots and stems of chaparral shrub species from high and low elevation in the Sierra Nevada, California. Physiologia Plantarum, 2023, 175, .	5.2	2
238	Influence of altitude and tree class on climate-growth relationships in a larch plantation in subtropical China. Journal of Forestry Research, 2023, 34, 1869-1880.	3.6	4
239	Quantitatively mapping the research status and trends of vegetation responses to climate change with bibliometric analysis. Journal of Soils and Sediments, 2023, 23, 2963-2979.	3.0	1
241	Physiological response mechanism of European birch (Betula pendula Roth) to PEG-induced drought stress and hydration. Frontiers in Plant Science, 0, 14, .	3.6	0
242	Anthropogenic disturbance modifies tree functional traits in the only remnant swamp forest of Bangladesh. Frontiers in Ecology and Evolution, 0, 11 , .	2.2	0
243	Increased hydraulic risk in assemblages of woody plant species predicts spatial patterns of drought-induced mortality. Nature Ecology and Evolution, 2023, 7, 1620-1632.	7.8	2
244	PROSPECT-GPR: Exploring spectral associations among vegetation traits in wavelength selection for leaf mass per area and water contents. Science of Remote Sensing, 2023, 8, 100100.	4.8	0
245	Scots pines colonizing the harsh environment of volcano slopes increased their hydraulic safety margin. Trees - Structure and Function, 2023, 37, 1681-1693.	1.9	2
246	Vapour pressure deficit modulates hydraulic function and structure of tropical rainforests under nonlimiting soil water supply. New Phytologist, 2023, 240, 1405-1420.	7.3	2
247	Increased atmospheric moisture demand induced a reduction in the water content of boreal forest during the past three decades. Agricultural and Forest Meteorology, 2023, 342, 109759.	4.8	0
248	Tree demographic and neighbourhood responses to regional environmental gradients of the northwestern United States. Journal of Ecology, 0 , , .	4.0	0
249	Robust inference of ecosystem soil water stress from eddy covariance data. Agricultural and Forest Meteorology, 2023, 343, 109744.	4.8	0
250	Estimating Fineâ€Scale Transpiration From UAVâ€Derived Thermal Imagery and Atmospheric Profiles. Water Resources Research, 2023, 59, .	4.2	0
251	When do plant hydraulics matter in terrestrial biosphere modelling?. Global Change Biology, 2024, 30,	9.5	0
252	Constraining Plant Hydraulics With Microwave Radiometry in a Land Surface Model: Impacts of Temporal Resolution. Water Resources Research, 2023, 59, .	4.2	1
253	Distinct trait syndromes and plasticity maintain similar performance between seedlings populations of the riparian tree species Populus nigra L Environmental and Experimental Botany, 2024, 218, 105598.	4.2	0
254	Plant hydraulics at the heart of plant, crops and ecosystem functions in the face of climate change. New Phytologist, 0, , .	7.3	1
255	Global dryland aridity changes indicated by atmospheric, hydrological, and vegetation observations at meteorological stations. Hydrology and Earth System Sciences, 2023, 27, 4551-4562.	4.9	0

#	Article	IF	CITATIONS
257	No effect of snow on shrub xylem traits: Insights from a snow-manipulation experiment on Disko Island, Greenland. Science of the Total Environment, 2024, 916, 169896.	8.0	0
258	Constrained trait variation by water availability modulates radial growth in evergreen and deciduous Mediterranean oaks. Agricultural and Forest Meteorology, 2024, 346, 109884.	4.8	0
259	Tracheids vs. Tree Rings as Proxies for Dendroclimatic Reconstruction at High Altitude: The Case of Pinus sibirica Du Tour. Forests, 2024, 15, 167.	2.1	0
261	Moss functional trait ecology: Trends, gaps, and biases in the current literature. American Journal of Botany, 2024, 111, .	1.7	1
262	The interacting effect of climate change and herbivory can trigger largeâ€scale transformations of European temperate forests. Global Change Biology, 2024, 30, .	9.5	0
263	Radial growth responses of Larix gmelinii to drought events in dry and wet areas of northern temperate forests. Dendrochronologia, 2024, 84, 126185.	2.2	0
264	Finding balance: Treeâ€ring isotopes differentiate between acclimation and stressâ€induced imbalance in a longâ€term irrigation experiment. Global Change Biology, 2024, 30, .	9.5	0