A stomatal safety-efficiency trade-off constrains respon

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Citation Report

#	Article	IF	Citations
1	Leaf drought tolerance cannot be inferred from classic leaf traits in a tropical rainforest. Journal of Ecology, 2020, 108, 1030-1045.	1.9	29
2	Plant root exudation under drought: implications for ecosystem functioning. New Phytologist, 2020, 225, 1899-1905.	3.5	296
3	Trait Multi-Functionality in Plant Stress Response. Integrative and Comparative Biology, 2020, 60, 98-112.	0.9	41
4	Assessment of Water Mimosa (Neptunia oleracea Lour.) Morphological, Physiological, and Removal Efficiency for Phytoremediation of Arsenic-Polluted Water. Plants, 2020, 9, 1500.	1.6	19
5	Droughtâ€induced lacuna formation in the stem causes hydraulic conductance to decline before xylem embolism in Selaginella. New Phytologist, 2020, 227, 1804-1817.	3.5	18
6	Phenotypic plasticity of two M. oleifera ecotypes from different climatic zones under water stress and re-watering. , 2020, 8, coaa028.		4
7	Soil Rather Than Xylem Vulnerability Controls Stomatal Response to Drought. Trends in Plant Science, 2020, 25, 868-880.	4.3	129
8	Trait velocities reveal that mortality has driven widespread coordinated shifts in forest hydraulic trait composition. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 8532-8538.	3.3	55
9	The Role of Grass MUTE Orthologues During Stomatal Development. Frontiers in Plant Science, 2020, 11, 55.	1.7	6
10	Methane emissions reduce the radiative cooling effect of a subtropical estuarine mangrove wetland by half. Global Change Biology, 2020, 26, 4998-5016.	4.2	31
11	Optimization of leaf morphology in relation to leaf water status: A theory. Ecology and Evolution, 2020, 10, 1510-1525.	0.8	13
12	Model approaches to advance crassulacean acid metabolism system integration. Plant Journal, 2020, 101, 951-963.	2.8	8
13	A balancing act: how plants integrate nitrogen and water signals. Journal of Experimental Botany, 2020, 71, 4442-4451.	2.4	53
14	Stomatal density and mechanics are critical for high productivity: insights from amphibious ferns. New Phytologist, 2021, 229, 877-889.	3.5	19
15	Does the water regime differentially modulate the responses to water stress in Lippia alba (Verbenaceae) genotypes with different ploidy levels?. Industrial Crops and Products, 2021, 160, 113137.	2.5	6
16	Navigating trade-offs in the social-ecological systems. Current Opinion in Environmental Sustainability, 2021, 48, 77-84.	3.1	25
17	Temperature and evaporative demand drive variation in stomatal and hydraulic traits across grape cultivars. Journal of Experimental Botany, 2021, 72, 1995-2009.	2.4	15
18	Stomatal morphology and physiology explain varied sensitivity to abscisic acid across vascular plant lineages. Plant Physiology, 2021, 186, 782-797.	2.3	30

#	Article	IF	Citations
19	Mutualism disruption by an invasive ant reduces carbon fixation for a foundational East African antâ€plant. Ecology Letters, 2021, 24, 1052-1062.	3.0	7
20	Coordinated variation in stem and leaf functional traits of temperate broadleaf tree species in the isohydricâ€“anisohydric spectrum. Tree Physiology, 2021, 41, 1601-1610.	1.4	20
22	Classical phenotyping and deep learning concur on genetic control of stomatal density and area in sorghum. Plant Physiology, 2021, 186, 1562-1579.	2.3	26
23	Climate and functional traits jointly mediate tree waterâ€use strategies. New Phytologist, 2021, 231, 617-630.	3.5	53
24	Pressureâ€“volume curve traits of chia (Salvia hispanica L.): an assessment of water-stress tolerance under field conditions. Irrigation Science, 2021, 39, 789.	1.3	2
25	Phenotypic plasticity in relation to inter-cultivar variation of garlic (Allium sativum L.) functional performance and yield-stability in response to water availability. Scientia Horticulturae, 2021, 285, 110128.	1.7	5
26	Partial root-zone drying irrigation increases water-use efficiency of tobacco plants amended with biochar. Industrial Crops and Products, 2021, 166, 113487.	2.5	14
27	CO2, nitrogen deposition and a discontinuous climate response drive water use efficiency in global forests. Nature Communications, 2021, 12, 5194.	5.8	30
28	Interactive effects of tree species mixture and climate on foliar and woody trait variation in a widely distributed deciduous tree. Functional Ecology, 2021, 35, 2397-2408.	1.7	10
29	Green Synthesized Metal Oxide Nanoparticles Mediate Growth Regulation and Physiology of Crop Plants under Drought Stress. Plants, 2021, 10, 1730.	1.6	52
31	Combining Heat Stress with Pre-Existing Drought Exacerbated the Effects on Chlorophyll Fluorescence Rise Kinetics in Four Contrasting Plant Species. International Journal of Molecular Sciences, 2021, 22, 10682.	1.8	10
32	Mild water and salt stress improve water use efficiency by decreasing stomatal conductance via osmotic adjustment in field maize. Science of the Total Environment, 2022, 805, 150364.	3.9	50
33	Hydrogen sulfide, potassium phosphite and zinc sulfate as alleviators of drought stress in sunflower plants. Ciencia E Agrotecnologia, 0, 44, .	1.5	13
34	Laboratory measurements of stomatal NO₂ deposition to native California trees and the role of forests in the NO_x cycle. Atmospheric Chemistry and Physics, 2020, 20, 14023-14041.	1.9	16
35	Fast plants have waterâ€use and drought strategies that balance rainfall retention and drought survival on green roofs. Ecological Applications, 2022, 32, e02486.	1.8	7
36	Roles of stomata in gramineous crops growth and biomass production. Cereal Research Communications, 0, , 1.	0.8	2
37	Macroscopic variation in Arabidopsis mutants despite stomatal uniformity across soil nutrient environments. Genetica, 2021, 149, 253-266.	0.5	1
38	Differential Response of Two Tomato Genotypes, Wild Type cv. Ailsa Craig and Its ABA-Deficient Mutant flacca to Short-Termed Drought Cycles. Plants, 2021, 10, 2308.	1.6	5

#	Article	IF	Citations
39	Extreme heat increases stomatal conductance and droughtâ€induced mortality risk in vulnerable plant species. Global Change Biology, 2022, 28, 1133-1146.	4.2	97
40	Stomatal responses in grapevine become increasingly more tolerant to low water potentials throughout the growing season. Plant Journal, 2022, 109, 804-815.	2.8	19
41	Stomatal regulation prevents plants from critical water potentials during drought: Result of a model linking soilâ€“plant hydraulics to abscisic acid dynamics. Ecohydrology, 2022, 15, .	1.1	14
42	Small and slow is safe: On the drought tolerance of tropical tree species. Global Change Biology, 2022, 28, 2622-2638.	4.2	35
43	Comparison of canopy transpiration between Pinus sylvestris var. mongolica and Pinus tabuliformis plantations in a semiarid sandy region of Northeast China. Agricultural and Forest Meteorology, 2022, 314, 108784.	1.9	16
45	Stomatal size and density trade-off varies with leaf phenology and species shade tolerance in a South Asian moist tropical forest. Functional Plant Biology, 2022, 49, 307-318.	1.1	5
46	Stomatal closure during water deficit is controlled by below-ground hydraulics. Annals of Botany, 2022, 129, 161-170.	1.4	37
47	Soilâ€”Plant Relationships in Soybean Cultivated under Conventional Tillage and Long-Term No-Tillage. Agronomy, 2022, 12, 697.	1.3	10
48	Aridity and cold temperatures drive divergent adjustments of European beech xylem anatomy, hydraulics and leaf physiological traits. Tree Physiology, 2022, 42, 1720-1735.	1.4	8
49	Drought acclimation of Quercus ilex leaves improves tolerance to moderate drought but not resistance to severe water stress. Plant, Cell and Environment, 2022, 45, 1967-1984.	2.8	26
50	Linking the growth patterns of coniferous species with their performance under climate aridization. Science of the Total Environment, 2022, 831, 154971.	3.9	9
51	Stomatal conductance drives variations of yield and water use of maize under water and nitrogen stress. Agricultural Water Management, 2022, 268, 107651.	2.4	15
52	Stomatal opening ratio mediates trait coordinating network adaptation to environmental gradients. New Phytologist, 2022, 235, 907-922.	3.5	17
53	Into the Shadows and Back into Sunlight: Photosynthesis in Fluctuating Light. Annual Review of Plant Biology, 2022, 73, 617-648.	8.6	66
54	Effects of Nitrogen Fertilization on Physiological Response of Maize to Soil Salinity. Agriculture (Switzerland), 2022, 12, 877.	1.4	2
55	Drought Stress: Responses and Mechanism in Plants. Reviews in Agricultural Science, 2022, 10, 168-185.	0.9	15
57	The effects of LED light quality on ecophysiological and growth responses of Epilobium hirsutum L., a Korean endangered plant, in a smart farm facility. Journal of Ecology and Environment, 0, 46, .	1.6	2
58	Testing the association of relative growth rate and adaptation to climate across natural ecotypes of Arabidopsis. New Phytologist, 2022, 236, 413-432.	3.5	5

#	Article	IF	Citations
59	Functional Groups Mask Inter- and Intraspecific Variation in Water Use Strategies in a Seasonally Dry Tropical Forest. Frontiers in Water, 0, 4, .	1.0	2
60	Stomatal clustering in Begonia improves water use efficiency by modulating stomatal movement and leaf structure. Plant-Environment Interactions, 2022, 3, 141-154.	0.7	6
61	Effects of trehalose and polyacrylate-based hydrogels on tomato growth under drought. AoB PLANTS, 2022, 14, .	1.2	1
62	Multifunctional Flexible Humidity Sensor Systems Towards Noncontact Wearable Electronics. Nano-Micro Letters, 2022, 14, .	14.4	91
63	Examining physiological, water relations, and hydraulic vulnerability traits to determine anisohydric and isohydric behavior in almond (Prunus dulcis) cultivars: Implications for selecting agronomic cultivars under changing climate. Frontiers in Plant Science, 0, 13, .	1.7	3
64	Physiological traits and response strategies of four subtropical tree species exposed to drought. Environmental and Experimental Botany, 2022, 203, 105046.	2.0	4
65	Dynamic Energy Budget models: fertile ground for understanding resource allocation in plants in a changing world. , 2022, 10, .		4
66	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, .	1.7	8
67	Functional traits and its variation linked to speciesâ€™ degree of isohydry in subtropical regions with high heterogeneity. Plant and Soil, 2023, 482, 277-296.	1.8	1
68	Evidence for phylogenetic signal and correlated evolution in plantâ€“water relation traits. New Phytologist, 2023, 237, 392-407.	3.5	15
69	Soilâ€“Plant Relationships in Soybean Cultivated under Crop Rotation after 17 Years of No-Tillage and Occasional Chiseling. Plants, 2022, 11, 2657.	1.6	6
70	Hydraulic trade-off and coordination strategies mediated by leaf functional traits of desert shrubs. Frontiers in Plant Science, 0, 13, .	1.7	1
71	Intensive grassland management disrupts below-ground multi-trophic resource transfer in response to drought. Nature Communications, 2022, 13, .	5.8	6
72	Reversible changes in structure and function of photosynthetic apparatus of pea (Pisum) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	2.8	17
73	Domestication has reduced leaf water use efficiency associated with the anatomy of abaxial stomata in cotton. Journal of Experimental Botany, 2023, 74, 878-888.	2.4	5
74	Diurnal Variation in Transport and Use of Intracellular Leaf Water and Related Photosynthesis in Three Karst Plants. Agronomy, 2022, 12, 2758.	1.3	4
75	Elevated CO2 enhanced water use efficiency of wheat to progressive drought stress but not on maize. Frontiers in Plant Science, 0, 13, .	1.7	6
76	Transpiration response to soil drying and vapor pressure deficit is soil texture specific. Plant and Soil, 0, , .	1.8	6

#	Article	IF	Citations
77	Are cell wall traits a component of the succulent syndrome?. Frontiers in Plant Science, 0, 13, .	1.7	4
78	How Important Are Functional and Developmental Constraints on Phenotypic Evolution? An Empirical Test with the Stomatal Anatomy of Flowering Plants. American Naturalist, 2023, 201, 794-812.	1.0	3
79	Above and belowground traits impacting transpiration decline during soil drying in 48 maize (<i>Zea) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.4	8
80	How good are containerized trees for urban cooling?. Urban Forestry and Urban Greening, 2023, 79, 127822.	2.3	3
81	Soilâ€plant hydraulics explain stomatal efficiencyâ€safety tradeoff. Plant, Cell and Environment, 2023, 46, 3120-3127.	2.8	5
82	Quantitative responses of tomato yield, fruit quality and water use efficiency to soil salinity under different water regimes in Northwest China. Agricultural Water Management, 2023, 277, 108134.	2.4	7
83	Different Leaf Anatomical Responses to Water Deficit in Maize and Soybean. Life, 2023, 13, 290.	1.1	1
84	Aridityâ€dependent sequence of water potentials for stomatal closure and hydraulic dysfunctions in woody plants. Global Change Biology, 2023, 29, 2030-2040.	4.2	4
86	The role of tree size, wood anatomical and leaf stomatal traits in shaping tree hydraulic efficiency and safety in a South Asian tropical moist forest. Global Ecology and Conservation, 2023, 43, e02453.	1.0	0
87	Polyamines inhibit abscisic acidâ€induced stomatal closure by scavenging hydrogen peroxide. Physiologia Plantarum, 2023, 175, .	2.6	2
88	No-till cover crop effects on the thermal properties of a Paleudult. Soil and Tillage Research, 2023, 231, 105717.	2.6	0
89	Constitutive expression of AtSINA2 from Arabidopsis improves grain yield, seed oil and drought tolerance in transgenic soybean. Plant Physiology and Biochemistry, 2023, 196, 444-453.	2.8	3
90	CO₂ Demand-Supply Coordination in Photosynthesis Reflecting the Plant-Environment Interaction: Extension and Parameterization of Demand Function and Supply Function. American Journal of Plant Sciences, 2023, 14, 220-245.	0.3	1
91	Leaf morphology, functional trait and altitude response in perennial vetch (Vicia unijuga A. Braun), alfalfa (Medicago sativa L.) and sainfoin (Onobrychis viciifolia Scop.). Planta, 2023, 257, .	1.6	1
92	Constant hydraulic supply and ABA dynamics facilitate the trade-offs in water and carbon. Frontiers in Plant Science, 0, 14, .	1.7	1
93	Contributions of phenotypic integration, plasticity and genetic adaptation to adaptive capacity relating to drought in Banksia marginata (Proteaceae). Frontiers in Plant Science, 0, 14, .	1.7	0