

Differential metabolic responses of perennial grass *Cynodon transvaalensis* – *Cynodon dactylon* (*C₃*) to heat stress

Physiologia Plantarum

141, 251-264

DOI: [10.1111/j.1399-3054.2010.01432.x](https://doi.org/10.1111/j.1399-3054.2010.01432.x)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Plant Metabolomics: A Characterisation of Plant Responses to Abiotic Stresses. , 0, , .		12
2	Elevated cytokinin content in ipt transgenic creeping bentgrass promotes drought tolerance through regulating metabolite accumulation. <i>Journal of Experimental Botany</i> , 2012, 63, 1315-1328.	4.8	149
3	Influence of contrasting availabilities of water and nutrients on the radiation use efficiency in C ₃ and C ₄ grasses. <i>Austral Ecology</i> , 2012, 37, 323-329.	1.5	7
4	Proteins and Metabolites Regulated by Trinexapac-ethyl in Relation to Drought Tolerance in Kentucky Bluegrass. <i>Journal of Plant Growth Regulation</i> , 2012, 31, 25-37.	5.1	20
5	Diversity of non-structural carbohydrates in grasses (<i>Poaceae</i>) from Brazil. <i>Grass and Forage Science</i> , 2013, 68, 165-177.	2.9	29
6	Identification of Metabolites Associated with Superior Heat Tolerance in Thermal Bentgrass through Metabolic Profiling. <i>Crop Science</i> , 2013, 53, 1626-1635.	1.8	34
7	Elevated CO ₂ -Mitigation of High Temperature Stress Associated with Maintenance of Positive Carbon Balance and Carbohydrate Accumulation in Kentucky Bluegrass. <i>PLoS ONE</i> , 2014, 9, e89725.	2.5	31
8	Physiological and Metabolic Effects of 5-Aminolevulinic Acid for Mitigating Salinity Stress in Creeping Bentgrass. <i>PLoS ONE</i> , 2014, 9, e116283.	2.5	37
9	Differential Physiological and Metabolic Responses to Drought Stress of Peanut Cultivars and Breeding Lines. <i>Crop Science</i> , 2014, 54, 2262-2274.	1.8	9
10	Development of SCAR Marker Related to Summer Stress Tolerance in Tall Fescue (<i>Festuca</i>) Tj ETQq1 1 0.784314 rgBT /Overlock 1.1		5
11	Litters of photosynthetically divergent grasses exhibit differential metabolic responses to warming and elevated CO ₂ . <i>Ecosphere</i> , 2014, 5, art106.	2.2	6
12	Potential markers of coffee genotypes grown in different Brazilian regions: A metabolomics approach. <i>Food Research International</i> , 2014, 61, 75-82.	6.2	56
13	High temperatures limit plant growth but hasten flowering in root chicory (<i>Cichorium intybus</i>) independently of vernalisation. <i>Journal of Plant Physiology</i> , 2014, 171, 109-118.	3.5	21
14	Metabolic Response of Pakchoi Leaves to Amino Acid Nitrogen. <i>Journal of Integrative Agriculture</i> , 2014, 13, 778-788.	3.5	9
15	Metabolic acclimation of source and sink tissues to salinity stress in bermudagrass (<i>Cynodon</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 1 5.2		22
16	Warming and drought differentially influence the production and resorption of elemental and metabolic nitrogen pools in <i>Quercus rubra</i> . <i>Global Change Biology</i> , 2015, 21, 4177-4195.	9.5	59
17	Metabolic and Physiological Responses of Shiraz and Cabernet Sauvignon (<i>Vitis vinifera</i> L.) to Near Optimal Temperatures of 25 and 35 Å°C. <i>International Journal of Molecular Sciences</i> , 2015, 16, 24276-24294.	4.1	52
18	Metabolite Responses to Exogenous Application of Nitrogen, Cytokinin, and Ethylene Inhibitors in Relation to Heat-Induced Senescence in Creeping Bentgrass. <i>PLoS ONE</i> , 2015, 10, e0123744.	2.5	39

#	ARTICLE	IF	CITATIONS
19	Stress memory induced rearrangements of HSP transcription, photosystem II photochemistry and metabolism of tall fescue (<i>Festuca arundinacea</i> Schreb.) in response to high-temperature stress. <i>Frontiers in Plant Science</i> , 2015, 6, 403.	3.6	60
20	Evaluation of metabolite extraction protocols and determination of physiological response to drought stress via reporter metabolites in model plant <i>Brachypodium distachyon</i> . <i>Turkish Journal of Botany</i> , 2015, 39, 1042-1050.	1.2	10
21	Changes in the abundance of sugars and sugar-like compounds in tall fescue (<i>Festuca arundinacea</i>) due to growth in naphthalene-treated sand. <i>Environmental Science and Pollution Research</i> , 2015, 22, 5817-5830.	5.3	5
22	Improved abiotic stress tolerance of bermudagrass by exogenous small molecules. <i>Plant Signaling and Behavior</i> , 2015, 10, e991577.	2.4	53
23	Mycorrhiza and PGPB modulate maize biomass, nutrient uptake and metabolic pathways in maize grown in mining-impacted soil. <i>Plant Physiology and Biochemistry</i> , 2015, 97, 390-399.	5.8	48
24	Metabolomic Analysis Revealed Differential Adaptation to Salinity and Alkalinity Stress in Kentucky Bluegrass (<i>Poa pratensis</i>). <i>Plant Molecular Biology Reporter</i> , 2015, 33, 56-68.	1.8	48
25	Advances in Plant Tolerance to Abiotic Stresses. , 0, , .		30
26	Athletic Field Paint Color Impacts Transpiration and Canopy Temperature in Bermudagrass. <i>Crop Science</i> , 2016, 56, 2016-2025.	1.8	0
27	Metabolic pathways regulated by γ -aminobutyric acid (GABA) contributing to heat tolerance in creeping bentgrass (<i>Agrostis stolonifera</i>). <i>Scientific Reports</i> , 2016, 6, 30338.	3.3	130
28	Comparative analysis of metabolites profile in spinach (<i>Spinacia oleracea</i> L.) affected by different concentrations of gly and nitrate. <i>Scientia Horticulturae</i> , 2016, 204, 8-15.	3.6	15
29	Tolerance to high soil temperature in foxtail millet (<i>Setaria italica</i> L.) is related to shoot and root growth and metabolism. <i>Plant Physiology and Biochemistry</i> , 2016, 106, 73-81.	5.8	56
30	Heat Stress Related Physiological and Metabolic Traits in Peanut Seedlings. <i>Peanut Science</i> , 2016, 43, 24-35.	0.1	13
31	Mild heat treatments induce long-term changes in metabolites associated with energy metabolism in <i>Drosophila melanogaster</i> . <i>Biogerontology</i> , 2016, 17, 873-882.	3.9	13
32	Stress memory induced transcriptional and metabolic changes of perennial ryegrass (<i>Lolium perenne</i>) in response to high temperature stress. <i>Plant Physiology and Biochemistry</i> , 2017, 110, 107-115.	3.2	44
33	Metabolic changes of peanut (<i>Arachis hypogaea</i> L.) buds in response to low temperature (LT). <i>South African Journal of Botany</i> , 2017, 111, 341-345.	2.5	4
34	A combination of stomata deregulation and a distinctive modulation of amino acid metabolism are associated with enhanced tolerance of wheat varieties to transient drought. <i>Metabolomics</i> , 2017, 13, 1.	3.0	6
35	Physiological characteristics and metabolomics of transgenic wheat containing the maize C4 phosphoenolpyruvate carboxylase (PEPC) gene under high temperature stress. <i>Protoplasma</i> , 2017, 254, 1017-1030.	2.1	54
36	Physiological Effect of Cutting Height and High Temperature on Regrowth Vigor in Orchardgrass. <i>Frontiers in Plant Science</i> , 2017, 8, 805.	3.6	16

#	ARTICLE	IF	CITATIONS
37	Metabolic Effects of Acibenzolar-S-Methyl for Improving Heat or Drought Stress in Creeping Bentgrass. <i>Frontiers in Plant Science</i> , 2017, 8, 1224.	3.6	33
38	Exogenous Glycine Nitrogen Enhances Accumulation of Glycosylated Flavonoids and Antioxidant Activity in Lettuce (<i>Lactuca sativa</i> L.). <i>Frontiers in Plant Science</i> , 2017, 8, 2098.	3.6	25
39	Differential Responses of Amino Acids and Soluble Proteins to Heat Stress Associated with Genetic Variations in Heat Tolerance for Hard Fescue. <i>Journal of the American Society for Horticultural Science</i> , 2018, 143, 45-55.	1.0	36
40	Comparative Metabolomics Approach Detects Stress-Specific Responses during Coral Bleaching in Soft Corals. <i>Journal of Proteome Research</i> , 2018, 17, 2060-2071.	3.7	25
41	Effect of glycine nitrogen on lettuce growth under soilless culture: a metabolomics approach to identify the main changes occurred in plant primary and secondary metabolism. <i>Journal of the Science of Food and Agriculture</i> , 2018, 98, 467-477.	3.5	35
42	Comparative analysis of metabolite changes in two contrasting rice genotypes in response to low-nitrogen stress. <i>Crop Journal</i> , 2018, 6, 464-474.	5.2	14
43	Systematic biology analysis on photosynthetic carbon metabolism of maize leaf following sudden heat shock under elevated CO ₂ . <i>Scientific Reports</i> , 2018, 8, 7849.	3.3	28
44	Enhanced stolon growth and metabolic adjustment in creeping bentgrass with elevated CO ₂ concentration. <i>Environmental and Experimental Botany</i> , 2018, 155, 87-97.	4.2	19
45	Alteration of Transcripts of Stress-Protective Genes and Transcriptional Factors by ¹³ C-Aminobutyric Acid (GABA) Associated with Improved Heat and Drought Tolerance in Creeping Bentgrass (<i>Agrostis</i>)		
46	Plant Metabolomics in a Changing World: Metabolite Responses to Abiotic Stress Combinations. , 0, , .		7
47	Metabolomics-Guided Elucidation of Abiotic Stress Tolerance Mechanisms in Plants. , 2018, , 89-131.		15
48	Correlated metabolic and elemental variations between the leaves and seeds of oak trees at contrasting geologically derived phosphorus sites. <i>Science of the Total Environment</i> , 2019, 691, 178-186.	8.0	9
49	Differential metabolic responses of shrubs and grasses to water additions in arid karst region, southwestern China. <i>Scientific Reports</i> , 2019, 9, 9613.	3.3	11
50	Integration of Transcriptomics and Metabolomics for Pepper (<i>Capsicum annuum</i> L.) in Response to Heat Stress. <i>International Journal of Molecular Sciences</i> , 2019, 20, 5042.	4.1	47
51	Impacts of abiotic stresses on the physiology and metabolism of cool-season grasses: A review. <i>Food and Energy Security</i> , 2019, 8, e00152.	4.3	25
52	Heat stress and plant development: role of sulphur metabolites and management strategies. <i>Acta Agriculturae Scandinavica - Section B Soil and Plant Science</i> , 2019, 69, 332-342.	0.6	22
53	Metabolomic changes associated with elevated CO ₂ -regulation of salt tolerance in Kentucky bluegrass. <i>Environmental and Experimental Botany</i> , 2019, 165, 129-138.	4.2	6
54	Recent developments in metabolomics-based research in understanding transgenic grass metabolism. <i>Metabolomics</i> , 2019, 15, 47.	3.0	5

#	ARTICLE	IF	CITATIONS
74	Metabolic Responses of Hybrid Bermudagrass to Short-term and Long-term Drought Stress. <i>Journal of the American Society for Horticultural Science</i> , 2012, 137, 411-420.	1.0	45
75	Mitigation of Drought Stress Damage by Exogenous Application of a Non-Protein Amino Acid "Aminobutyric Acid on Perennial Ryegrass. <i>Journal of the American Society for Horticultural Science</i> , 2013, 138, 358-366.	1.0	77
76	Metabolite Profile of Xylem Sap in Cotton Seedlings Is Changed by K Deficiency. <i>Frontiers in Plant Science</i> , 2020, 11, 592591.	3.6	5
77	Comparison of osmoprotectants and antioxidant enzymes of different wild Kentucky bluegrass in Shanxi province under high-temperature stress. <i>European Journal of Horticultural Science</i> , 2020, 85, 284-292.	0.7	4
78	Metabolic profile of canola (<i>Brassica napus</i> L.) seedlings under hydric, osmotic and temperature stresses. <i>Plant Stress</i> , 2022, 3, 100059.	5.5	13
79	Integrated physiological and transcriptomic analyses of two warm- and cool-season turfgrass species in response to heat stress. <i>Plant Physiology and Biochemistry</i> , 2022, 170, 275-286.	5.8	3
80	Characterization of browning during CO ₂ deastringency treatment in astringent persimmon fruit. <i>Journal of Food Measurement and Characterization</i> , 2022, 16, 2273-2281.	3.2	3
81	Differential Physiological, Transcriptomic, and Metabolomic Responses of <i>Paspalum wettsteinii</i> Under High-Temperature Stress. <i>Frontiers in Plant Science</i> , 2022, 13, 865608.	3.6	8
82	The Functional Interplay between Ethylene, Hydrogen Sulfide, and Sulfur in Plant Heat Stress Tolerance. <i>Biomolecules</i> , 2022, 12, 678.	4.0	17
83	Differential Metabolic Responses of Lettuce Grown in Soil, Substrate and Hydroponic Cultivation Systems under NH ₄ ⁺ /NO ₃ ⁻ Application. <i>Metabolites</i> , 2022, 12, 444.	2.9	10
85	Integrative Analysis of High Temperature-Induced Transcriptome and Metabolome Alterations in the Leaves of Five Raspberry (<i>Rubus Ideaus</i> L.) Cultivars. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
86	Heat Stress During Gametogenesis Irreversibly Damages Female Reproductive Organ in Rice. <i>Rice</i> , 2022, 15, .	4.0	12
87	Spermine-mediated metabolic homeostasis improves growth and stress tolerance in creeping bentgrass (<i>Agrostis stolonifera</i>) under water or high-temperature stress. <i>Frontiers in Plant Science</i> , 0, 13, .	3.6	1
88	Integrative analysis of high temperature-induced transcriptome and metabolome alterations in the leaves of five raspberry (<i>Rubus ideaus</i> L.) cultivars. <i>Environmental and Experimental Botany</i> , 2022, 203, 105038.	4.2	4
89	Proteomic Analysis of Barley (<i>Hordeum vulgare</i> L.) Leaves in Response to Date Palm Waste Compost Application. <i>Plants</i> , 2022, 11, 3287.	3.5	1
90	Foliar Pathogen Infection Manipulates Soil Health through Root Exudate-Modified Rhizosphere Microbiome. <i>Microbiology Spectrum</i> , 2022, 10, .	3.0	9
91	Assessing Heat Tolerance in Creeping Bentgrass Lines Based on Physiological Responses. <i>Plants</i> , 2023, 12, 41.	3.5	3
92	Abiotic Stress Responses in Groundnut (<i>Arachis hypogaea</i> L.): Mechanisms and Adaptations. , 2023, , 279-290.		0

#	ARTICLE	IF	CITATIONS
93	Emerging trends in plant metabolomics and hormonomics to study abiotic stress tolerance associated with rhizospheric probiotics. , 2023, , 283-306.		3
94	miRNAs and Their Target Genes Play a Critical Role in Response to Heat Stress in <i>Cynodon dactylon</i> (L.) Pers.. <i>Molecular Biotechnology</i> , 2023, 65, 2004-2017.	2.4	3
95	Deciphering the toxicity mechanism of haloquinolines on <i>Chlorella pyrenoidosa</i> using QSAR and metabolomics approaches. <i>Ecotoxicology and Environmental Safety</i> , 2023, 257, 114943.	6.0	0
96	Alternative methods to synthetic chemical control of <i>Cynodon dactylon</i> (L.) Pers. A systematic review. <i>Agronomy for Sustainable Development</i> , 2023, 43, .	5.3	2
97	Effects of Climate Conditions before Harvest Date on Edamame Metabolome. <i>Plants</i> , 2024, 13, 87.	3.5	0
98	Exploring the potential of <i>Solanum pennellii</i> and <i>Solanum peruvianum</i> as rootstocks for enhancing thermotolerance of tomato plants. <i>Environmental and Experimental Botany</i> , 2024, 221, 105741.	4.2	0