Silicon Application Increases Drought Tolerance of Ken Water Relations and Morphophysiological Functions

Scientific World Journal, The 2014, 1-10 DOI: 10.1155/2014/368694

Citation Report

#	Article	IF	CITATIONS
1	Effects of tire rubber ash and zinc sulfate on crop productivity and cadmium accumulation in five rice cultivars under field conditions. Environmental Science and Pollution Research, 2015, 22, 12424-12434.	5.3	58
2	Mechanisms of silicon-mediated alleviation of drought and salt stress in plants: a review. Environmental Science and Pollution Research, 2015, 22, 15416-15431.	5.3	322
3	Phytohormones and plant responses to salinity stress: a review. Plant Growth Regulation, 2015, 75, 391-404.	3.4	566
4	Potential role of phytohormones and plant growth-promoting rhizobacteria in abiotic stresses: consequences for changing environment. Environmental Science and Pollution Research, 2015, 22, 4907-4921.	5.3	459
5	Silicate application increases the photosynthesis and its associated metabolic activities in Kentucky bluegrass under drought stress and post-drought recovery. Environmental Science and Pollution Research, 2016, 23, 17647-17655.	5.3	93
6	Exogenously applied methyl jasmonate improves the drought tolerance in wheat imposed at early and late developmental stages. Acta Physiologiae Plantarum, 2016, 38, 1.	2.1	65
7	Improvement of wheat (<i>Triticum aestivum</i>) drought tolerance by seed priming with silicon. Archives of Agronomy and Soil Science, 2016, 62, 299-315.	2.6	80
8	miRNAs: Major modulators for crop growth and development under abiotic stresses. Biotechnology Letters, 2017, 39, 685-700.	2.2	77
9	Arsenic uptake, accumulation and toxicity in rice plants: Possible remedies for its detoxification: A review. Environmental Science and Pollution Research, 2017, 24, 9142-9158.	5.3	159
10	Effect of phytoliths for mitigating water stress in durum wheat. New Phytologist, 2017, 215, 229-239.	7.3	77
11	Nitrogen fertility and abiotic stresses management in cotton crop: a review. Environmental Science and Pollution Research, 2017, 24, 14551-14566.	5.3	103
12	Water-saving technologies affect the grain characteristics and recovery of fine-grain rice cultivars in semi-arid environment. Environmental Science and Pollution Research, 2017, 24, 12971-12981.	5.3	25
13	Bacillus safensis with plant-derived smoke stimulates rice growth under saline conditions. Environmental Science and Pollution Research, 2017, 24, 23850-23863.	5.3	22
14	Quantification the impacts of climate change and crop management on phenology of maize-based cropping system in Punjab, Pakistan. Agricultural and Forest Meteorology, 2017, 247, 42-55.	4.8	126
15	Significance and Role of Si in Crop Production. Advances in Agronomy, 2017, 146, 83-166.	5.2	67
16	Effects of Nitrogen Supply on Water Stress and Recovery Mechanisms in Kentucky Bluegrass Plants. Frontiers in Plant Science, 2017, 8, 983.	3.6	143
17	Arsenic Accumulation in Rice and Probable Mitigation Approaches: A Review. Agronomy, 2017, 7, 67.	3.0	112
18	Silicon-mediated regulation of antioxidant defense and glyoxalase systems confers drought stress tolerance in Brassica papers L. South African Journal of Botany, 2018, 115, 50-57	2.5	139

#	ARTICLE	IF	CITATIONS
19	Can interaction between silicon and plant growth promoting rhizobacteria benefit in alleviating abiotic and biotic stresses in crop plants?. Agriculture, Ecosystems and Environment, 2018, 253, 98-112.	5.3	130
20	Coping with drought: stress and adaptive mechanisms, and management through cultural and molecular alternatives in cotton as vital constituents for plant stress resilience and fitness. Biological Research, 2018, 51, 47.	3.4	126
21	Silicon-mediated growth and yield improvement of sunflower (Helianthus annus L.) subjected to brackish water stress. Acta Physiologiae Plantarum, 2018, 40, 1.	2.1	4
22	How Does Silicon Mediate Plant Water Uptake and Loss Under Water Deficiency?. Frontiers in Plant Science, 2018, 9, 281.	3.6	97
23	Influence of composted poultry manure and irrigation regimes on some morpho-physiology parameters of maize under semiarid environments. Environmental Science and Pollution Research, 2018, 25, 19918-19931.	5.3	7
24	Arsenic accumulation in lentil (Lens culinaris) genotypes and risk associated with the consumption of grains. Scientific Reports, 2019, 9, 9431.	3.3	34
25	Silicon accumulation and its effect on agricultural traits and anthracnose incidence in lignocellulosic sorghum. Pesquisa Agropecuaria Tropical, 2019, 49, .	1.0	4
26	Morpho-physiological and biochemical responses of tolerant and sensitive rapeseed cultivars to drought stress during early seedling growth stage. Acta Physiologiae Plantarum, 2019, 41, 1.	2.1	71
27	Trends of electronic waste pollution and its impact on the global environment and ecosystem. Environmental Science and Pollution Research, 2019, 26, 16923-16938.	5.3	90
28	Performance of Aeluropus lagopoides (mangrove grass) ecotypes, a potential turfgrass, under high saline conditions. Environmental Science and Pollution Research, 2019, 26, 13410-13421.	5.3	33
29	Use of Diatomaceous Earth as a Silica Supplement on Potted Ornamentals. Horticulturae, 2019, 5, 21.	2.8	7
30	Improving maize grain yield by matching maize growth and solar radiation. Scientific Reports, 2019, 9, 3635.	3.3	54
31	Role of silicon in plant stress tolerance: opportunities to achieve a sustainable cropping system. 3 Biotech, 2019, 9, 73.	2.2	156
32	Severe Water Deficiency during the Mid-Vegetative and Reproductive Phase has Little Effect on Proso Millet Performance. Water (Switzerland), 2019, 11, 2155.	2.7	6
33	Morphological acclimation to agronomic manipulation in leaf dispersion and orientation to promote "ldeotype―breeding: Evidence from 3D visual modeling of "super―rice (Oryza sativa L.). Plant Physiology and Biochemistry, 2019, 135, 499-510.	5.8	32
34	Developing the first halophytic turfgrasses for the urban landscape from native Arabian desert grass. Environmental Science and Pollution Research, 2020, 27, 39702-39716.	5.3	23
35	Using GIS tools to detect the land use/land cover changes during forty years in Lodhran District of Pakistan. Environmental Science and Pollution Research, 2020, 27, 39676-39692.	5.3	114
36	Silicon Supplementation Improves Tolerance to Water Deficiency in Sorghum Plants by Increasing Root System Growth and Improving Photosynthesis. Silicon, 2020, 12, 2545-2554.	3.3	19

#	Article	IF	CITATIONS
37	Biofortification Under Climate Change: The Fight Between Quality and Quantity. , 2020, , 173-227.		16
38	Consequences of Salinity Stress on the Quality of Crops and Its Mitigation Strategies for Sustainable Crop Production: An Outlook of Arid and Semi-arid Regions. , 2020, , 503-533.		31
39	Alternative and Non-conventional Soil and Crop Management Strategies for Increasing Water Use Efficiency. , 2020, , 323-338.		8
40	Beneficial Effects of Mixing Kentucky Bluegrass With Red Fescue via Plant-Soil Interactions in Black Soil of Northeast China. Frontiers in Microbiology, 2020, 11, 556118.	3.5	7
41	Characteristics of Leaf Stomata and Their Relationship with Photosynthesis in <i>Saccharum officinarum</i> Under Drought and Silicon Application. ACS Omega, 2020, 5, 24145-24153.	3.5	56
42	Biostimulants for Plant Growth and Mitigation of Abiotic Stresses: A Metabolomics Perspective. Metabolites, 2020, 10, 505.	2.9	116
43	New strategies to overcome water limitation in cultivated maize: Results from sub-surface irrigation and silicon fertilization. Journal of Environmental Management, 2020, 263, 110398.	7.8	19
44	Foliar application of gibberellic acid endorsed phytoextraction of copper and alleviates oxidative stress in jute (Corchorus capsularis L.) plant grown in highly copper-contaminated soil of China. Environmental Science and Pollution Research, 2020, 27, 37121-37133.	5.3	69
45	Significance of silicon uptake, transport, and deposition in plants. Journal of Experimental Botany, 2020, 71, 6703-6718.	4.8	126
46	Pre-harvest silicon treatment improves quality of cut rose stems and maintains postharvest vase life. Journal of Plant Nutrition, 2020, 43, 1418-1426.	1.9	4
47	Determining nitrogen isotopes discrimination under drought stress on enzymatic activities, nitrogen isotope abundance and water contents of Kentucky bluegrass. Scientific Reports, 2020, 10, 6415.	3.3	38
48	Role of Triacontanol in Counteracting the Ill Effects of Salinity in Plants: A Review. Journal of Plant Growth Regulation, 2021, 40, 1-10.	5.1	46
49	Effect of Soil Water Deficits on Plant–Water Relationship: A Review. , 2021, , 1-98.		2
50	Role of Plant Growth Hormones During Soil Water Deficit: A Review. , 2021, , 489-583.		2
51	Accumulation of Silicon and Changes in Water Balance under Drought Stress in Brassica napus var. napus L Plants, 2021, 10, 280.	3.5	15
54	CRISPR technology for abiotic stress resistant crop breeding. Plant Growth Regulation, 2021, 94, 115-129.	3.4	8
55	Silicon dioxide nanofertilizers improve photosynthetic capacity of two Criollo cocoa clones (<i>Theobroma cacao</i> L.). Experimental Agriculture, 2021, 57, 85-102.	0.9	6
56	Cross-Talk between Phytohormone-Signalling Pathways under Abiotic Stress Conditions. , 2021, , 99-116.		2

#	Article	IF	Citations
57	Plant Growth and Morphophysiological Modifications in Perennial Ryegrass under Environmental Stress. , 0, , .		0
58	A Review on Kentucky Bluegrass Responses and Tolerance to Drought Stress. , 0, , .		2
59	Foliar Spray of Silicon Confers Drought Tolerance in Wheat (Triticum aestivum L.) by Enhancing Morpho-Physiological and Antioxidant Potential. Silicon, 2022, 14, 4793-4807.	3.3	13
60	Morphophysiological Traits, Biochemical Characteristic and Productivity of Wheat under Water and Nitrogen-Colimitation: Pathways to Improve Water and N Uptake. , 0, , .		0
61	Influence of Water Stress on Growth, Chlorophyll Contents and Solute Accumulation in Three Accessions of Vicia faba L. from Tunisian Arid Region. , 0, , .		2
62	Adapting Cereal Grain Crops to Drought Stress: 2020 and Beyond. , 0, , .		4
63	Effects of Salinity on Seed Germination and Early Seedling Stage. , 0, , .		19
64	Salt Stress in Plants and Amelioration Strategies: A Critical Review. , 0, , .		15
65	Abiotic Stress-Induced Molecular and Physiological Changes and Adaptive Mechanisms in Plants. , 0, , .		4
66	Protagonist of Mineral Nutrients in Drought Stress Tolerance of Field Crops. , 0, , .		2
67	Metabolomics-Guided Elucidation of Plant Abiotic Stress Responses in the 4IR Era: An Overview. Metabolites, 2021, 11, 445.	2.9	11
68	Fertilisation with Potassium Silicate Exerted Little Effect on Production Parameters of Cucumbers Exposed to UV and Drought. Stresses, 2021, 1, 142-161.	4.8	2
69	Elucidating the role of silicon in drought stress tolerance in plants. Plant Physiology and Biochemistry, 2021, 165, 187-195.	5.8	64
70	The mechanisms of silicon on maintaining water balance under water deficit stress. Physiologia Plantarum, 2021, 173, 1253-1262.	5.2	10
71	Mitigation of climate change and environmental hazards in plants: Potential role of the beneficial metalloid silicon. Journal of Hazardous Materials, 2021, 416, 126193.	12.4	19
72	Turf performance and physiological responses of native <i>Poa</i> species to summer stress in Northeast China. PeerJ, 2021, 9, e12252.	2.0	7
73	Nitrogen assimilation and gene regulation of two Kentucky bluegrass cultivars differing in response to nitrate supply. Scientia Horticulturae, 2021, 288, 110315.	3.6	7
74	Roles of Si and SiNPs in Improving Thermotolerance of Wheat Photosynthetic Machinery via Upregulation of PsbH, PsbB and PsbD Genes Encoding PSII Core Proteins. Horticulturae, 2021, 7, 16.	2.8	25

#	Article	IF	CITATIONS
75	Alleviation of Stress-Induced Ethylene-Mediated Negative Impact on Crop Plants by Bacterial ACC Deaminase: Perspectives and Applications in Stressed Agriculture Management. Sustainable Development and Biodiversity, 2020, , 287-315.	1.7	12
76	QTL Mapping for Abiotic Stresses in Cereals. , 2020, , 229-251.		7
77	Role of Biotechnology in Climate Resilient Agriculture. , 2020, , 339-365.		7
78	Rice Production Under Climate Change: Adaptations and Mitigating Strategies. , 2020, , 659-686.		29
79	Silicon: A Plant Nutritional "Non-Entity―for Mitigating Abiotic Stresses. , 2020, , 17-49.		6
80	A review on morpho-physiological traits of plants under phthalates stress and insights into their uptake and translocation. Plant Growth Regulation, 2020, 91, 327-347.	3.4	26
81	Improvement of Salt Tolerance in Durum Wheat (Triticum Durum Desf.) by Auxin and Kenitin Application. European Scientific Journal, 2017, 13, .	0.1	4
82	Leaf gas exchange, oxidative stress, and physiological attributes of rapeseed (Brassica napus L.) grown under different light-emitting diodes. Photosynthetica, 2020, 58, 836-845.	1.7	44
83	Red light optimized physiological traits and enhanced the growth of ramie (Boehmeria nivea L.). Photosynthetica, 2020, 58, 922-931.	1.7	53
84	Developing mathematical model for diurnal dynamics of photosynthesis in <i>Saccharum officinarum</i> responsive to different irrigation and silicon application. PeerJ, 2020, 8, e10154.	2.0	16
86	Chapter 4 Silicon: A Potential Element to Impart Resistance to Photosynthetic Machinery under Different Abiotic Stresses. , 2016, , 67-82.		0
88	Carbon Cycle in Response to Global Warming. , 2020, , 1-15.		9
89	Biochar; a Remedy for Climate Change. , 2020, , 151-171.		13
90	Climate Change and Costal Plant Lives. , 2020, , 93-108.		5
91	Effect of Seed Priming with Nanosilicon on Morpho-Physiological Characterestics, Quercetin Content and Antioxidant Capacity in Calendula officinalis L. under Drought Stress Conditions. Journal of Medicinal Plants, 2020, 4, 186-203.	0.3	4
92	Does silicon really matter for the photosynthetic machinery in plants…?. Plant Physiology and Biochemistry, 2021, 169, 40-48.	5.8	46
93	Soil correction for planting bermudagrass using steel slag or limestone. Ornamental Horticulture, 2020, 26, 475-485.	1.0	2
94	Silicon Seed Priming Combined with Foliar Spray of Sulfur Regulates Photosynthetic and Antioxidant Systems to Confer Drought Tolerance in Maize (Zea mays L.). Silicon, 2022, 14, 7901-7917.	3.3	7

#	Article	IF	CITATIONS
95	The physiological function and molecular mechanism of hydrogen sulfide resisting abiotic stress in plants. Revista Brasileira De Botanica, 2022, 45, 563-572.	1.3	7
96	Management of abiotic stresses with nano-black carbon is a tool for crop production. Journal of Plant Nutrition, 2023, 46, 145-166.	1.9	4
97	Plant Growth-Promoting Rhizobacteria-Mediated Adaptive Responses of Plants Under Salinity Stress. Journal of Plant Growth Regulation, 2023, 42, 1307-1326.	5.1	21
98	Silicon Mitigates Negative Impacts of Drought and UV-B Radiation in Plants. Plants, 2022, 11, 91.	3.5	18
99	Transcriptome analysis of Kentucky bluegrass subject to drought and ethephon treatment. PLoS ONE, 2021, 16, e0261472.	2.5	7
100	Assessment of cold stress tolerance in maize through quantitative trait locus, genome-wide association study and transcriptome analysis. Notulae Botanicae Horti Agrobotanici Cluj-Napoca, 2021, 49, 12525.	1.1	3
101	Directions for future research to use silicon and silicon nanoparticles to increase crops tolerance to stresses and improve their quality. , 2022, , 349-367.		0
102	Silicon- and nanosilicon-mediated drought and waterlogging stress tolerance in plants. , 2022, , 121-152.		2
103	Silicon-mediated modulation of physiological attributes, and pollen morphology under normal and water-deficit conditions in rice (Oryza sativa L.). Cereal Research Communications, 2022, 50, 929-939.	1.6	1
113	The Multiple Role of Silicon Nutrition in Alleviating Environmental Stresses in Sustainable Crop Production. Plants, 2022, 11, 1223.	3.5	24
114	Genome Editing for Nutrient Use Efficiency in Crops. , 2022, , 347-383.		1
115	Improving Drought Stress Tolerance in Ramie (Boehmeria nivea L.) Using Molecular Techniques. Frontiers in Plant Science, 0, 13, .	3.6	4
116	Silicon Enhances Plant Vegetative Growth and Soil Water Retention of Soybean (Glycine max) Plants under Water-Limiting Conditions. Plants, 2022, 11, 1687.	3.5	4
117	Efficiency of different models for investigation of the responses of sunflower plant to Pb contaminations under SiO2 nanoparticles (NPs) and Pseudomonas fluorescens treatments. Arabian Journal of Geosciences, 2022, 15, .	1.3	4
118	Transcriptomic Analysis of Fusarium oxysporum Stress-Induced Pathosystem and Screening of Fom-2 Interaction Factors in Contrasted Melon Plants. Frontiers in Plant Science, 0, 13, .	3.6	3
119	Exogenous tryptophan application improves cadmium tolerance and inhibits cadmium upward transport in broccoli (Brassica oleracea var. italica). Frontiers in Plant Science, 0, 13, .	3.6	7
120	Does silicon help to alleviate water deficit stress and in the recovery of Dipteryx alata seedlings?. Brazilian Journal of Biology, 0, 82, .	0.9	2
121	Triacontanol priming as a smart strategy to attenuate lead toxicity in <i>Brassica oleracea</i> L International Journal of Phytoremediation, 2023, 25, 1173-1188.	3.1	2

		15	Circiana
#		IF	CITATIONS
122	Can deficit irrigations be an optimum solution for increasing water productivity under arid conditions? A case study on wheat plants. Saudi Journal of Biological Sciences, 2023, 30, 103537.	3.8	1
123	How does silicon help alleviate biotic and abiotic stresses in plants? Mechanisms and future prospects. , 2023, , 359-402.		3
124	Silicon Nutrition in Plants under Water-Deficit Conditions: Overview and Prospects. Water (Switzerland), 2023, 15, 739.	2.7	16
125	Biochar for Mitigation of Heat Stress in Crop Plants. Sustainable Agriculture Reviews, 2023, , 159-187.	1.1	0
126	Biochar Application to Soil for Mitigation of Nutrients Stress in Plants. Sustainable Agriculture Reviews, 2023, , 189-216.	1.1	0
127	Biochar for Improving Crop Productivity and Soil Fertility. Sustainable Agriculture Reviews, 2023, , 75-98.	1.1	0
128	Biochar Application for Improving the Yield and Quality of Crops Under Climate Change. Sustainable Agriculture Reviews, 2023, , 3-55.	1.1	0
129	Effects of Silicon Application and Groundwater Level in a Subirrigation System on Yield of a Three-Cut Meadow. Water (Switzerland), 2023, 15, 2103.	2.7	4
130	Irrigation Scheduling Under Crop Water Requirements: Simulation and Field Learning. , 2023, , 261-279.		0
131	Potential Applications of Silicate Solubilizing Bacteria and Potassium Silicate on Sugarcane Crop under Drought Condition. Silicon, 2023, 15, 6879-6887.	3.3	3
132	Influences of calcium silicate fertilization to physiological and bio-active responses of maize under drought and well-watered conditions. Journal of Plant Nutrition, 0, , 1-14.	1.9	0
133	Wheat Water Ecophysiology: A Review on Recent Developments. Global Journal of Botanical Science, 0, 11, 16-27.	0.4	1
134	Sustainable Development Goals, Deep Tech, and the Path Forward. , 2023, , 241-300.		0
135	Multifaceted Mechanisms of Silicon in Alleviation of Drought Stress in Plants. , 2023, , 437-463.		0
136	Genetic variation and response to selection of photosynthetic and forage characteristics in Kentucky bluegrass (Poa pratensis L.) ecotypes under drought conditions. Frontiers in Plant Science, 0, 14, .	3.6	0
137	Evaluation of the normalized difference vegetation index and the concentration of carotenoids in limestone and silicate experiments in lettuce. GeSec, 2023, 14, 18832-18845.	0.3	0
138	Exogenous Uniconazole Application Positively Regulates Carbon Metabolism under Drought Stress in Wheat Seedlings. Agronomy, 2024, 14, 22.	3.0	0
139	Exogenous Silicon Application Improves Chilling Injury Tolerance and Photosynthetic Performance of Citrus. Agronomy, 2024, 14, 139.	3.0	0

#	Article	IF	Citations
140	Modulation in phytohormone metabolism in plants under stress conditions. , 2024, , 297-319.		0
141	Perspectives of phytohormones application to enhance salinity tolerance in plants. , 0, , .		Ο
142	Silicon improves root functioning and water management as well as alleviates oxidative stress in oilseed rape under drought conditions. Frontiers in Plant Science, 0, 15, .	3.6	0
143	The combined application of rutin and silicon alleviates osmotic stress in maize seedlings by triggering accumulation of osmolytes and antioxidants' defense mechanisms. Physiology and Molecular Biology of Plants, 2024, 30, 513-525.	3.1	0