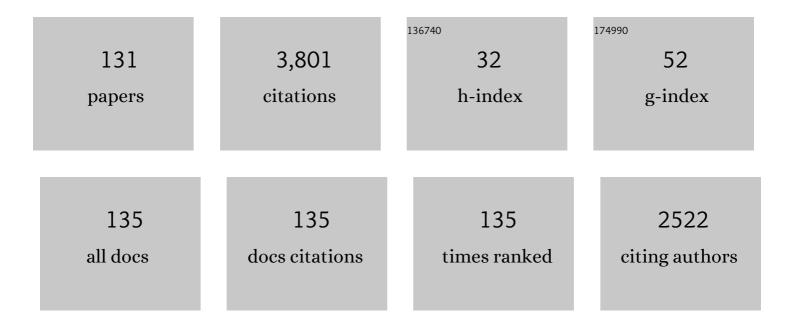
## Rahul Datta

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1917137/publications.pdf Version: 2024-02-01



<u> ΡΛΗΠΙ ΠΑΤΤΑ</u>

#	Article	IF	CITATIONS
1	Impact of Agrochemicals on Soil Microbiota and Management: A Review. Land, 2020, 9, 34.	1.2	397
2	Enzymatic Degradation of Lignin in Soil: A Review. Sustainability, 2017, 9, 1163.	1.6	246
3	Coupling Phosphate-Solubilizing Bacteria with Phosphorus Supplements Improve Maize Phosphorus Acquisition and Growth under Lime Induced Salinity Stress. Plants, 2020, 9, 900.	1.6	143
4	A critical review of the possible adverse effects of biochar in the soil environment. Science of the Total Environment, 2021, 796, 148756.	3.9	113
5	Sustainable Management with Mycorrhizae and Phosphate Solubilizing Bacteria for Enhanced Phosphorus Uptake in Calcareous Soils. Agriculture (Switzerland), 2020, 10, 334.	1.4	92
6	Drought Stress Alleviation by ACC Deaminase Producing Achromobacter xylosoxidans and Enterobacter cloacae, with and without Timber Waste Biochar in Maize. Sustainability, 2020, 12, 6286.	1.6	89
7	Glomalin – Truths, myths, and the future of this elusive soil glycoprotein. Soil Biology and Biochemistry, 2021, 153, 108116.	4.2	82
8	How enzymes are adsorbed on soil solid phase and factors limiting its activity: A Review. International Agrophysics, 2017, 31, 287-302.	0.7	80
9	Application of Single Superphosphate with Humic Acid Improves the Growth, Yield and Phosphorus Uptake of Wheat (Triticum aestivum L.) in Calcareous Soil. Agronomy, 2020, 10, 1224.	1.3	77
10	Potential role of compost mixed biochar with rhizobacteria in mitigating lead toxicity in spinach. Scientific Reports, 2020, 10, 12159.	1.6	71
11	Role of Soil Phosphorus on Legume Production. , 2018, , 487-510.		65
12	Soil microbial and nutrient dynamics under different sowings environment of Indian mustard (Brassica juncea L.) in rice based cropping system. Scientific Reports, 2021, 11, 5289.	1.6	65
13	Heavy metals immobilization and improvement in maize (Zea mays L.) growth amended with biochar and compost. Scientific Reports, 2021, 11, 18416.	1.6	64
14	Drought Stress in Grain Legumes: Effects, Tolerance Mechanisms and Management. Agronomy, 2021, 11, 2374.	1.3	63
15	Effect of Cadmium-Tolerant Rhizobacteria on Growth Attributes and Chlorophyll Contents of Bitter Gourd under Cadmium Toxicity. Plants, 2020, 9, 1386.	1.6	62
16	Amino Acid: Its Dual Role as Nutrient and Scavenger of Free Radicals in Soil. Sustainability, 2017, 9, 1402.	1.6	55
17	Zinc nutrition and arbuscular mycorrhizal symbiosis effects on maize (Zea mays L.) growth and productivity. Saudi Journal of Biological Sciences, 2021, 28, 6339-6351.	1.8	54
18	Alleviation of Cadmium Adverse Effects by Improving Nutrients Uptake in Bitter Gourd through Cadmium Tolerant Rhizobacteria. Environments - MDPI, 2020, 7, 54.	1.5	52

#	Article	IF	CITATIONS
19	Effect of Seaweed Extract on Productivity and Quality Attributes of Four Onion Cultivars. Horticulturae, 2020, 6, 28.	1.2	52
20	Long-Term Effects of Biochar-Based Organic Amendments on Soil Microbial Parameters. Agronomy, 2019, 9, 747.	1.3	50
21	Effects of Conservation Tillage and Nutrient Management Practices on Soil Fertility and Productivity of Rice (Oryza sativa L.)–Rice System in North Eastern Region of India. Sustainability, 2017, 9, 1816.	1.6	48
22	Comparative efficacy of phosphorous supplements with phosphate solubilizing bacteria for optimizing wheat yield in calcareous soils. Scientific Reports, 2022, 12, .	1.6	46
23	Phosphorus Nutrient Management through Synchronization of Application Methods and Rates in Wheat and Maize Crops. Plants, 2020, 9, 1389.	1.6	45
24	Assessment of some cultural experimental methods to study the effects of antibiotics on microbial activities in a soil: An incubation study. PLoS ONE, 2017, 12, e0180663.	1.1	44
25	Optimizing nutrient use efficiency, productivity, energetics, and economics of red cabbage following mineral fertilization and biopriming with compatible rhizosphere microbes. Scientific Reports, 2021, 11, 15680.	1.6	43
26	Effect of arbuscular mycorrhizal fungi on the physiological functioning of maize under zinc-deficient soils. Scientific Reports, 2021, 11, 18468.	1.6	43
27	Compost mixed fruits and vegetable waste biochar with ACC deaminase rhizobacteria can minimize lead stress in mint plants. Scientific Reports, 2021, 11, 6606.	1.6	41
28	Biochar and urease inhibitor mitigate NH3 and N2O emissions and improve wheat yield in a urea fertilized alkaline soil. Scientific Reports, 2021, 11, 17413.	1.6	41
29	Microbial expression profiles in the rhizosphere of two maize lines differing in N use efficiency. Plant and Soil, 2018, 433, 401-413.	1.8	39
30	Insight into metal immobilization and microbial community structure in soil from a steel disposal dump phytostabilized with composted, pyrolyzed or gasified wastes. Chemosphere, 2021, 272, 129576.	4.2	39
31	Impact of chlortetracycline and sulfapyridine antibiotics on soil enzyme activities. International Agrophysics, 2017, 31, 499-505.	0.7	38
32	Legumes for Carbon and Nitrogen Cycling: An Organic Approach. , 2020, , 337-375.		36
33	Influence of variable biochar concentration on yield-scaled nitrous oxide emissions, Wheat yield and nitrogen use efficiency. Scientific Reports, 2021, 11, 16774.	1.6	35
34	Effect of micronutrients foliar supplementation on the production and eminence of plum (Prunus) Tj ETQq0 0 0	rgBT/Ove	erlock 10 Tf 50
35	Effect of soil sieving on respiration induced by low-molecular-weight substrates. International Agrophysics, 2014, 28, 119-124.	0.7	34

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37	Toxicity of Cadmium and nickel in the context of applied activated carbon biochar for improvement in soil fertility. Saudi Journal of Biological Sciences, 2022, 29, 743-750.	1.8	34
38	Assessment of Water Quality in Lake Qaroun Using Ground-Based Remote Sensing Data and Artificial Neural Networks. Water (Switzerland), 2021, 13, 3094.	1.2	34
39	Biochar and Arbuscular mycorrhizal fungi mediated enhanced drought tolerance in Okra (Abelmoschus esculentus) plant growth, root morphological traits and physiological properties. Saudi Journal of Biological Sciences, 2021, 28, 5490-5499.	1.8	32
40	Synergistic Effect of Bacillus thuringiensis IAGS 199 and Putrescine on Alleviating Cadmium-Induced Phytotoxicity in Capsicum annum. Plants, 2020, 9, 1512.	1.6	31
41	Ecotone Dynamics and Stability from Soil Perspective: Forest-Agriculture Land Transition. Agriculture (Switzerland), 2019, 9, 228.	1.4	30
42	Pythium Damping-Off and Root Rot of Capsicum annuum L.: Impacts, Diagnosis, and Management. Microorganisms, 2021, 9, 823.	1.6	29
43	Effects of the Combinations of Rhizobacteria, Mycorrhizae, and Seaweed, and Supplementary Irrigation on Growth and Yield in Wheat Cultivars. Plants, 2021, 10, 811.	1.6	28
44	Connecting Bio-Priming Approach with Integrated Nutrient Management for Improved Nutrient Use Efficiency in Crop Species. Agriculture (Switzerland), 2021, 11, 372.	1.4	28
45	Chemical and Biological Enhancement Effects of Biochar on Wheat Growth and Yield under Arid Field Conditions. Sustainability, 2021, 13, 5890.	1.6	27
46	Ecotone Dynamics and Stability from Soil Scientific Point of View. Diversity, 2019, 11, 53.	0.7	26
47	Deep placement of nitrogen fertilizer improves yield, nitrogen use efficiency and economic returns of transplanted fine rice. PLoS ONE, 2021, 16, e0247529.	1.1	25
48	Drought Stress Alleviation by Potassium-Nitrate-Containing Chitosan/Montmorillonite Microparticles Confers Changes in Spinacia oleracea L. Sustainability, 2021, 13, 9903.	1.6	25
49	Impact of mineral fertilizers on mineral nutrients in the ginger rhizome and on soil enzymes activities and soil properties. Saudi Journal of Biological Sciences, 2021, 28, 5268-5274.	1.8	25
50	Biofertilizer-Based Zinc Application Enhances Maize Growth, Gas Exchange Attributes, and Yield in Zinc-Deficient Soil. Agriculture (Switzerland), 2021, 11, 310.	1.4	24
51	Application of Zinc Fertilizer and Mycorrhizal Inoculation on Physio-Biochemical Parameters of Wheat Grown under Water-Stressed Environment. Sustainability, 2021, 13, 11007.	1.6	23
52	Effects of the nitrification inhibitor nitrapyrin and mulch on N2O emission and fertilizer use efficiency using 15N tracing techniques. Science of the Total Environment, 2021, 757, 143739.	3.9	21
53	Heavy metal accumulation by roadside vegetation and implications for pollution control. PLoS ONE, 2021, 16, e0249147.	1.1	21
54	Fourier Transform Infrared Spectroscopy vibrational bands study of Spinacia oleracea and Trigonella corniculata under biochar amendment in naturally contaminated soil. PLoS ONE, 2021, 16, e0253390.	1.1	21

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55	Mitigation of lead (Pb) toxicity in rice cultivated with either ground water or wastewater by application of acidified carbon. Journal of Environmental Management, 2022, 307, 114521.	3.8	21
56	Rhizobacteria Inoculation and Caffeic Acid Alleviated Drought Stress in Lentil Plants. Sustainability, 2021, 13, 9603.	1.6	18
57	Citrus Canker—Distribution, Taxonomy, Epidemiology, Disease Cycle, Pathogen Biology, Detection, and Management: A Critical Review and Future Research Agenda. Agronomy, 2022, 12, 1075.	1.3	18
58	Humic Acid Mitigates the Negative Effects of High Rates of Biochar Application on Microbial Activity. Sustainability, 2020, 12, 9524.	1.6	17
59	Carbon Mineralization Rates and Kinetics of Surface-Applied and Incorporated Rice and Maize Residues in Entisol and Inceptisol Soil Types. Sustainability, 2021, 13, 7212.	1.6	17
60	Mineral Fertilizers Improves the Quality of Turmeric and Soil. Sustainability, 2021, 13, 9437.	1.6	17
61	Bio-based integrated pest management in rice: An agro-ecosystems friendly approach for agricultural sustainability. Journal of the Saudi Society of Agricultural Sciences, 2021, 20, 94-102.	1.0	16
62	Proteomic changes in various plant tissues associated with chromium stress in sunflower. Saudi Journal of Biological Sciences, 2022, 29, 2604-2612.	1.8	16
63	Studying soil erosion by evaluating changes in physico-chemical properties of soils under different land-use types. Journal of the Saudi Society of Agricultural Sciences, 2021, 20, 190-197.	1.0	15
64	Yield Enhancement and Better Micronutrients Uptake in Tomato Fruit through Potassium Humate Combined with Micronutrients Mixture. Agriculture (Switzerland), 2021, 11, 357.	1.4	15
65	Mitigation of bacterial spot disease induced biotic stress in Capsicum annuum L. cultivars via antioxidant enzymes and isoforms. Scientific Reports, 2021, 11, 9445.	1.6	15
66	Effect of carbon-enriched digestate on the microbial soil activity. PLoS ONE, 2021, 16, e0252262.	1.1	15
67	Quorum Sensing Inhibitory and Quenching Activity of <i>Bacillus cereus</i> RC1 Extracts on Soft Rot-Causing Bacteria <i>Lelliottia amnigena</i> . ACS Omega, 2022, 7, 25291-25308.	1.6	15
68	Dual-color quantum dots-based simultaneous detection of HPV-HIV co-infection. Sensors and Actuators B: Chemical, 2018, 258, 295-303.	4.0	14
69	Kaolin and Jasmonic acid improved cotton productivity under water stress conditions. Saudi Journal of Biological Sciences, 2021, 28, 6606-6614.	1.8	14
70	Biochar and Organic Amendments for Sustainable Soil Carbon and Soil Health. , 2020, , 45-85.		14
71	Production of Organic Fertilizers from Rocket Seed (Eruca Sativa L.), Chicken Peat and Moringa Oleifera Leaves for Growing Linseed under Water Deficit Stress. Sustainability, 2021, 13, 59.	1.6	14
72	Enantiomers of Carbohydrates and Their Role in Ecosystem Interactions: A Review. Symmetry, 2020, 12, 470.	1.1	13

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73	Assessment of the bioaccumulation pattern of Pb, Cd, Cr and Hg in edible fishes of East kolkata Wetlands, India. Saudi Journal of Biological Sciences, 2022, 29, 758-766.	1.8	13
74	Correlation of Soil Characteristics and Citrus Leaf Nutrients Contents in Current Scenario of Layyah District. Horticulturae, 2022, 8, 61.	1.2	13
75	Exploring the potential of moringa leaf extract as bio stimulant for improving yield and quality of black cumin oil. Scientific Reports, 2021, 11, 24217.	1.6	13
76	Effect of Plant Spacings on Growth, Physiology, Yield and Fiber Quality Attributes of Cotton Genotypes under Nitrogen Fertilization. Agronomy, 2021, 11, 2589.	1.3	13
77	Mitigation of Osmotic Stress in Cotton for the Improvement in Growth and Yield through Inoculation of Rhizobacteria and Phosphate Solubilizing Bacteria Coated Diammonium Phosphate. Sustainability, 2020, 12, 10456.	1.6	12
78	Gibberellic Acid Induced Changes on Growth, Yield, Superoxide Dismutase, Catalase and Peroxidase in Fruits of Bitter Gourd (Momordica charantia L.). Horticulturae, 2020, 6, 72.	1.2	12
79	Supplemental Effects of Biochar and Foliar Application of Ascorbic Acid on Physio-Biochemical Attributes of Barley (Hordeum vulgare L.) under Cadmium-Contaminated Soil. Sustainability, 2021, 13, 9128.	1.6	12
80	Abiotic Stresses: Alteration of Composition and Grain Quality in Food Legumes. Agronomy, 2021, 11, 2238.	1.3	12
81	Regulation of Phosphorus and Zinc Uptake in Relation to Arbuscular Mycorrhizal Fungi for Better Maize Growth. Agronomy, 2021, 11, 2322.	1.3	12
82	Bentonite-Based Organic Amendment Enriches Microbial Activity in Agricultural Soils. Land, 2020, 9, 258.	1.2	11
83	Nanoparticles combined with cefixime as an effective synergistic strategy against Salmonella enterica typhi. Saudi Journal of Biological Sciences, 2021, 28, 4164-4172.	1.8	11
84	Characterization and discrimination of Indian propolis based on physico-chemical, techno-functional, thermal and textural properties: A multivariate approach. Journal of King Saud University - Science, 2021, 33, 101405.	1.6	11
85	Physio-chemical characterization of indigenous agricultural waste materials for the development of potting media. Saudi Journal of Biological Sciences, 2021, 28, 7491-7498.	1.8	11
86	Recognizing the Basics of Phytochrome-Interacting Factors in Plants for Abiotic Stress Tolerance. Plant Stress, 2022, 3, 100050.	2.7	11
87	Bio-Priming with Compatible Rhizospheric Microbes Enhances Growth and Micronutrient Uptake of Red Cabbage. Land, 2022, 11, 536.	1.2	11
88	Evaluation of Jatropha curcas L. leaves mulching on wheat growth and biochemical attributes under water stress. BMC Plant Biology, 2021, 21, 303.	1.6	10
89	Immobilization of Cd in soil by biochar and new emerging chemically produced carbon. Journal of King Saud University - Science, 2021, 33, 101472.	1.6	10
90	Mineralization of Farm Manures and Slurries under Aerobic and Anaerobic Conditions for Subsequent Release of Phosphorus and Sulphur in Soil. Sustainability, 2021, 13, 8605.	1.6	10

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91	To extinguish or not to extinguish: The role of forest fire in nature and soil resilience. Journal of King Saud University - Science, 2021, 33, 101539.	1.6	10
92	What Factors Predict Falls in Older Adults Living in Nursing Homes: A Pilot Study. Journal of Functional Morphology and Kinesiology, 2019, 4, 3.	1.1	9
93	Nitrification Inhibitor and Plant Growth Regulators Improve Wheat Yield and Nitrogen Use Efficiency. Journal of Plant Growth Regulation, 2022, 41, 216-226.	2.8	9
94	Nitrogen Fertilizer Effects on Microbial Respiration, Microbial Biomass, and Carbon Sequestration in a Mediterranean Grassland Ecosystem. International Journal of Environmental Research, 2021, 15, 655-665.	1.1	9
95	Phosphate solubilizing bacteria optimize wheat yield in mineral phosphorus applied alkaline soil. Journal of the Saudi Society of Agricultural Sciences, 2022, 21, 339-348.	1.0	9
96	Synchronization of Boron application methods and rates is environmentally friendly approach to improve quality attributes of Mangifera indica L. On sustainable basis. Saudi Journal of Biological Sciences, 2021, 29, 1869-1880.	1.8	9
97	The Use of Soil Conditioners to Ensure a Sustainable Wheat Yield under Water Deficit Conditions by Enhancing the Physiological and Antioxidant Potentials. Land, 2022, 11, 368.	1.2	9
98	Statistical Based Bioprocess Design for Improved Production of Amylase from Halophilic Bacillus sp. H7 Isolated from Marine Water. Molecules, 2021, 26, 2833.	1.7	8
99	Acidified Biochar Confers Improvement in Quality and Yield Attributes of Sufaid Chaunsa Mango in Saline Soil. Horticulturae, 2021, 7, 418.	1.2	8
100	Antimicrobial, antioxidant and cytotoxic properties of Chenopodium glaucum L PLoS ONE, 2021, 16, e0255502.	1.1	8
101	Environmental Pollution Indices and Multivariate Modeling Approaches for Assessing the Potentially Harmful Elements in Bottom Sediments of Qaroun Lake, Egypt. Journal of Marine Science and Engineering, 2021, 9, 1443.	1.2	8
102	Cholesterol Reduction and Vitamin B12 Production Study on Enterococcus faecium and Lactobacillus pentosus Isolated from Yoghurt. Sustainability, 2021, 13, 5853.	1.6	7
103	Key factors shaping prokaryotic communities in subtropical forest soils. Applied Soil Ecology, 2022, 169, 104162.	2.1	7
104	Mycorrhiza and Phosphate Solubilizing Bacteria: Potential Bioagents for Sustainable Phosphorus Management in Agriculture. Phyton, 2022, 91, 257-278.	0.4	7
105	Improvement in growth and yield attributes of cluster bean through optimization of sowing time and plant spacing under climate change scenario. Saudi Journal of Biological Sciences, 2022, 29, 781-792.	1.8	7
106	Soil organic carbon and labile and recalcitrant carbon fractions attributed by contrasting tillage and cropping systems in old and recent alluvial soils of subtropical eastern India. PLoS ONE, 2021, 16, e0259645.	1.1	7
107	Successful Outcome of Phytostabilization in Cr(VI) Contaminated Soils Amended with Alkalizing Additives. International Journal of Environmental Research and Public Health, 2020, 17, 6073.	1.2	6
108	Contrasting effects of maize residue, coal gas residue and their biochars on nutrient mineralization, enzyme activities and CO2 emissions in sandy loess soil. Saudi Journal of Biological Sciences, 2021, 28, 4155-4163.	1.8	6

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109	The Synergistic Action of Three Piper Plant Extracts and Biofertilizer for Growth Promotion and Biocontrol of Blast Disease in Red Rice. Sustainability, 2021, 13, 10412.	1.6	6
110	Alleviation of Cd stress in maize by compost mixed biochar. Journal of King Saud University - Science, 2022, 34, 102014.	1.6	6
111	Maize productivity and soil nutrients variations by the application of vermicompost and biochar. PLoS ONE, 2022, 17, e0267483.	1.1	6
112	Formalin fumigation and steaming of various composts differentially influence the nutrient release, growth and yield of muskmelon (Cucumis melo L.). Scientific Reports, 2021, 11, 21057.	1.6	5
113	Effect of Short-Term Zero Tillage and Legume Intercrops on Soil Quality, Agronomic and Physiological Aspects of Cotton under Arid Climate. Land, 2022, 11, 289.	1.2	5
114	Carbohydrate Partitioning, Growth and Ionic Compartmentalisation of Wheat Grown under Boron Toxic and Salt Degraded Land. Agronomy, 2022, 12, 740.	1.3	5
115	Does the accretion of carbon fractions and their stratification vary widely with soil orders? A case study in Alfisol and Entisol of subâ€ŧropical eastern India. Land Degradation and Development, 0, , .	1.8	5
116	Characterization, enzymatic and biochemical properties of endophytic bacterial strains of the medicinal plant Ajuga turkestanica (Rgl.) Brig (Lamiaceae). Journal of King Saud University - Science, 2022, 34, 102183.	1.6	4
117	Effect of Different Levels of Zinc and Compost on Yield and Yield Components of Wheat. Agronomy, 2022, 12, 1562.	1.3	4
118	Exploring Functional Diversity and Community Structure of Diazotrophic Endophytic Bacteria Associated with Pennisetum glaucum Growing under Field in a Semi-Arid Region. Land, 2022, 11, 991.	1.2	4
119	Perspective on the status and behaviour of SARS-CoV-2 in soil. Saudi Journal of Biological Sciences, 2022, 29, 1014-1020.	1.8	3
120	Chemical role of α-tocopherol in Salt Stress Mitigation by Improvement in Morpho-physiological Attributes of Sunflower (Helianthus annuus L.). Saudi Journal of Biological Sciences, 2021, 29, 1386-1393.	1.8	3
121	Glomalin: A Key Indicator for Soil Carbon Stabilization. , 2021, , 47-81.		2
122	Biochar Role in Soil Carbon Stabilization and Crop Productivity. , 2021, , 1-46.		1
123	Microbial Potential for Carbon Fixation and Stabilization. , 2021, , 125-168.		1
124	Sole and combined effect of foliar zinc and arbuscular mycorrhizae inoculation on basmati rice growth, productivity and grains nutrient. PLoS ONE, 2022, 17, e0266248.	1.1	1
125	Mulching impact of Jatropha curcas L. leaves on soil fertility and yield of wheat under water stress. Scientific Reports, 2022, 12, .	1.6	1
126	Correction: Ejaz et al. The Use of Soil Conditioners to Ensure a Sustainable Wheat Yield under Water Deficit Conditions by Enhancing the Physiological and Antioxidant Potentials. Land 2022, 11, 368. Land, 2022, 11, 946.	1.2	1

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127	Physio-biochemical, Anatomical and Functional responses of Helianthus annuus L. and Brassica juncea (Linn) to cypermethrin pesticide exposure. Journal of King Saud University - Science, 2022, , 102210.	1.6	1
128	Role of Soil Microbes and Their Cell Components in Carbon Stabilization. , 2021, , 169-204.		0
129	Plant Growth and Morphophysiological Modifications in Perennial Ryegrass under Environmental Stress. , 0, , .		0
130	Carbon Stabilisation in Tropical Ecosystem. , 2021, , 243-275.		0
131	Synchronization of arbuscular mycorrhizae fungi inoculation with different zinc application methods for improvement in Basmati rice growth and yield in alkaline calcareous soil. Journal of King Saud University - Science, 2022, , 102053.	1.6	0