

# Lewis H Ziska

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/5372695/lewis-h-ziska-publications-by-citations.pdf>

**Version:** 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

109  
papers

6,050  
citations

42  
h-index

76  
g-index

112  
ext. papers

7,043  
ext. citations

5.6  
avg, IF

6.01  
L-index

#	Paper	IF	Citations
109	Climate Impacts on Agriculture: Implications for Crop Production. <i>Agronomy Journal</i> , <b>2011</b> , 103, 351-370	2.2	770
108	Predicting plant invasions in an era of global change. <i>Trends in Ecology and Evolution</i> , <b>2010</b> , 25, 310-8	10.9	402
107	Cities as harbingers of climate change: common ragweed, urbanization, and public health. <i>Journal of Allergy and Clinical Immunology</i> , <b>2003</b> , 111, 290-5	11.5	299
106	Recent warming by latitude associated with increased length of ragweed pollen season in central North America. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 4248-51	11.5	256
105	Effects of high temperature and CO <sub>2</sub> concentration on spikelet sterility in indica rice. <i>Field Crops Research</i> , <b>1997</b> , 51, 213-219	5.5	205
104	Growth and Yield Response of Field-Grown Tropical Rice to Increasing Carbon Dioxide and Air Temperature. <i>Agronomy Journal</i> , <b>1997</b> , 89, 45-53	2.2	185
103	Carbon dioxide (CO) levels this century will alter the protein, micronutrients, and vitamin content of rice grains with potential health consequences for the poorest rice-dependent countries. <i>Science Advances</i> , <b>2018</b> , 4, eaaq1012	14.3	156
102	Invasive species and climate change: an agronomic perspective. <i>Climatic Change</i> , <b>2011</b> , 105, 13-42	4.5	141
101	Research note: Increasing Amb a 1 content in common ragweed ( <i>Ambrosia artemisiifolia</i> ) pollen as a function of rising atmospheric CO concentration. <i>Functional Plant Biology</i> , <b>2005</b> , 32, 667-670	2.7	139
100	An evaluation of cassava, sweet potato and field corn as potential carbohydrate sources for bioethanol production in Alabama and Maryland. <i>Biomass and Bioenergy</i> , <b>2009</b> , 33, 1503-1508	5.3	136
99	Predicting the impact of changing CO <sub>2</sub> on crop yields: some thoughts on food. <i>New Phytologist</i> , <b>2007</b> , 175, 607-618	9.8	131
98	Evaluation of the growth response of six invasive species to past, present and future atmospheric carbon dioxide. <i>Journal of Experimental Botany</i> , <b>2003</b> , 54, 395-404	7	131
97	Intraspecific variation in the response of rice ( <i>Oryza sativa</i> L.) to increased CO <sub>2</sub> and temperature: growth and yield response of 17 cultivars. <i>Journal of Experimental Botany</i> , <b>1996</b> , 47, 1353-1359	7	131
96	Food security and climate change: on the potential to adapt global crop production by active selection to rising atmospheric carbon dioxide. <i>Proceedings of the Royal Society B: Biological Sciences</i> , <b>2012</b> , 279, 4097-105	4.4	128
95	Growth dynamics and genotypic variation in tropical, field-grown paddy rice ( <i>Oryza sativa</i> L.) in response to increasing carbon dioxide and temperature. <i>Global Change Biology</i> , <b>1998</b> , 4, 645-656	11.4	112
94	Biomass and toxicity responses of poison ivy ( <i>Toxicodendron radicans</i> ) to elevated atmospheric CO <sub>2</sub> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 9086-9	11.5	111
93	Temperature-related changes in airborne allergenic pollen abundance and seasonality across the northern hemisphere: a retrospective data analysis. <i>Lancet Planetary Health</i> , <b>2019</b> , 3, e124-e131	9.8	106

92	Influence of increasing carbon dioxide concentration on the photosynthetic and growth stimulation of selected C4 crops and weeds. <i>Photosynthesis Research</i> , <b>1997</b> , 54, 199-208	3.7	105
91	Quantitative and qualitative evaluation of selected wheat varieties released since 1903 to increasing atmospheric carbon dioxide: can yield sensitivity to carbon dioxide be a factor in wheat performance?. <i>Global Change Biology</i> , <b>2004</b> , 10, 1810-1819	11.4	97
90	The impact of recent increases in atmospheric CO <sub>2</sub> on biomass production and vegetative retention of Cheatgrass ( <i>Bromus tectorum</i> ): implications for fire disturbance. <i>Global Change Biology</i> , <b>2005</b> , 11, 1325-1332	11.4	94
89	Anthropogenic climate change and allergen exposure: The role of plant biology. <i>Journal of Allergy and Clinical Immunology</i> , <b>2012</b> , 129, 27-32	11.5	93
88	Future atmospheric carbon dioxide may increase tolerance to glyphosate. <i>Weed Science</i> , <b>1999</b> , 47, 608-615		88
87	Elevated atmospheric carbon dioxide concentrations amplify <i>Alternaria alternata</i> sporulation and total antigen production. <i>Environmental Health Perspectives</i> , <b>2010</b> , 118, 1223-8	8.4	84
86	Characterization of an urban-rural CO <sub>2</sub> /temperature gradient and associated changes in initial plant productivity during secondary succession. <i>Oecologia</i> , <b>2004</b> , 139, 454-8	2.9	77
85	Changes in biomass and root:shoot ratio of field-grown Canada thistle ( <i>Cirsium arvense</i> ), a noxious, invasive weed, with elevated CO <sub>2</sub> : implications for control with glyphosate. <i>Weed Science</i> , <b>2004</b> , 52, 584-588		76
84	Weedy (Red) Rice. <i>Advances in Agronomy</i> , <b>2015</b> , 181-228	7.7	69
83	Rising CO <sub>2</sub> , climate change, and public health: exploring the links to plant biology. <i>Environmental Health Perspectives</i> , <b>2009</b> , 117, 155-8	8.4	54
82	Combining the effects of increased atmospheric carbon dioxide on protein, iron, and zinc availability and projected climate change on global diets: a modelling study. <i>Lancet Planetary Health, The</i> , <b>2019</b> , 3, e307-e317	9.8	53
81	Three-year field evaluation of early and late 20th century spring wheat cultivars to projected increases in atmospheric carbon dioxide. <i>Field Crops Research</i> , <b>2008</b> , 108, 54-59	5.5	53
80	The temporal and species dynamics of photosynthetic acclimation in flag leaves of rice ( <i>Oryza sativa</i> ) and wheat ( <i>Triticum aestivum</i> ) under elevated carbon dioxide. <i>Physiologia Plantarum</i> , <b>2012</b> , 145, 395-405	4.6	52
79	The impact of elevated CO <sub>2</sub> on yield loss from a C <sub>3</sub> and C <sub>4</sub> weed in field-grown soybean. <i>Global Change Biology</i> , <b>2000</b> , 6, 899-905	11.4	52
78	Unique challenges and opportunities for northeastern US crop production in a changing climate. <i>Climatic Change</i> , <b>2018</b> , 146, 231-245	4.5	52
77	Rising Atmospheric Carbon Dioxide and Seed Yield of Soybean Genotypes. <i>Crop Science</i> , <b>2001</b> , 41, 385-391		50
76	Competitive Interactions between Cultivated and Red Rice as a Function of Recent and Projected Increases in Atmospheric Carbon Dioxide. <i>Agronomy Journal</i> , <b>2010</b> , 102, 118-123	2.2	49
75	Rising atmospheric CO <sub>2</sub> is reducing the protein concentration of a floral pollen source essential for North American bees. <i>Proceedings of the Royal Society B: Biological Sciences</i> , <b>2016</b> , 283,	4.4	47

74	Changes in competitive ability between a C4 crop and a C3 weed with elevated carbon dioxide. <i>Weed Science</i> , <b>2001</b> , 49, 622-627	2	46
73	The role of climate change and increasing atmospheric carbon dioxide on weed management: Herbicide efficacy. <i>Agriculture, Ecosystems and Environment</i> , <b>2016</b> , 231, 304-309	5.7	45
72	Cheatgrass is favored by warming but not CO2 enrichment in a semi-arid grassland. <i>Global Change Biology</i> , <b>2016</b> , 22, 3026-38	11.4	43
71	Biochemical and molecular characteristics of leaf photosynthesis and relative seed yield of two contrasting rice cultivars in response to elevated [CO <sub>2</sub> ]. <i>Journal of Experimental Botany</i> , <b>2014</b> , 65, 6049-56	7	43
70	Rising atmospheric carbon dioxide and plant biology: the overlooked paradigm. <i>DNA and Cell Biology</i> , <b>2008</b> , 27, 165-72	3.6	43
69	Evaluation of yield loss in field sorghum from a C3 and C4 weed with increasing CO2. <i>Weed Science</i> , <b>2003</b> , 51, 914-918	2	43
68	Climate change, aerobiology, and public health in the Northeast United States. <i>Mitigation and Adaptation Strategies for Global Change</i> , <b>2008</b> , 13, 607-613	3.9	42
67	Rising CO2 and pollen production of common ragweed ( <i>Ambrosia artemisiifolia</i> L.), a known allergy-inducing species: implications for public health.. <i>Functional Plant Biology</i> , <b>2000</b> , 27, 893	2.7	42
66	Higher airborne pollen concentrations correlated with increased SARS-CoV-2 infection rates, as evidenced from 31 countries across the globe. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	40
65	Anthropogenic climate change is worsening North American pollen seasons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	36
64	The interaction of high temperature and elevated CO2 on photosynthetic acclimation of single leaves of rice in situ. <i>Physiologia Plantarum</i> , <b>1997</b> , 99, 178-184	4.6	34
63	Elevated Atmospheric Carbon Dioxide and Weed Populations in Glyphosate Treated Soybean. <i>Crop Science</i> , <b>2006</b> , 46, 1354-1359	2.4	34
62	Differential Response of Cultivated and Weedy (Red) Rice to Recent and Projected Increases in Atmospheric Carbon Dioxide. <i>Agronomy Journal</i> , <b>2008</b> , 100, 1259-1263	2.2	33
61	Crop ecosystem responses to climatic change: crop/weed interactions. <b>2000</b> , 333-352		31
60	Climate Change, Carbon Dioxide, and Pest Biology: Monitor, Mitigate, Manage. <i>Journal of Agricultural and Food Chemistry</i> , <b>2016</b> , 64, 6-12	5.7	30
59	Recent and projected increases in atmospheric carbon dioxide and the potential impacts on growth and alkaloid production in wild poppy ( <i>Papaver setigerum</i> DC.). <i>Climatic Change</i> , <b>2008</b> , 91, 395-403	4.5	29
58	Quantifying the effect of drought on carbon dioxide-induced changes in competition between a C3 crop (tomato) and a C4 weed ( <i>Amaranthus retroflexus</i> ). <i>Weed Research</i> , <b>2011</b> , 51, 591-600	1.9	28
57	Growth and photosynthetic response of three soybean cultivars to simultaneous increases in growth temperature and CO2. <i>Physiologia Plantarum</i> , <b>1995</b> , 94, 575-584	4.6	28

56	Alterations in the production and concentration of selected alkaloids as a function of rising atmospheric carbon dioxide and air temperature: implications for ethno-pharmacology. <i>Global Change Biology</i> , <b>2005</b> , 11, 1798-1807	11.4	27
55	Macroclimate associated with urbanization increases the rate of secondary succession from fallow soil. <i>Oecologia</i> , <b>2009</b> , 159, 637-47	2.9	25
54	Growth and photosynthetic response of three soybean cultivars to simultaneous increases in growth temperature and CO <sub>2</sub> . <i>Physiologia Plantarum</i> , <b>1995</b> , 94, 575-584	4.6	25
53	Intraspecific variation in seed yield of soybean ( <i>Glycine max</i> ) in response to increased atmospheric carbon dioxide. <i>Functional Plant Biology</i> , <b>1998</b> , 25, 801	2.7	25
52	Evidence for divergence of response in Indica, Japonica, and wild rice to high CO <sub>2</sub> × temperature interaction. <i>Global Change Biology</i> , <b>2016</b> , 22, 2620-32	11.4	24
51	Recent and projected increases in atmospheric CO <sub>2</sub> concentration can enhance gene flow between wild and genetically altered rice ( <i>Oryza sativa</i> ). <i>PLoS ONE</i> , <b>2012</b> , 7, e37522	3.7	24
50	Assessment of cultivated and wild, weedy rice lines to concurrent changes in CO concentration and air temperature: determining traits for enhanced seed yield with increasing atmospheric CO <sub>2</sub> . <i>Functional Plant Biology</i> , <b>2014</b> , 41, 236-243	2.7	22
49	Climate Change, Carbon Dioxide, and Pest Biology, Managing the Future: Coffee as a Case Study. <i>Agronomy</i> , <b>2018</b> , 8, 152	3.6	22
48	Plant Responses to Rising Atmospheric Carbon Dioxide17-47		20
47	Elevated carbon dioxide alters chemical management of Canada thistle in no-till soybean. <i>Field Crops Research</i> , <b>2010</b> , 119, 299-303	5.5	19
46	Empirical Selection of Cultivated Oat in Response to Rising Atmospheric Carbon Dioxide. <i>Crop Science</i> , <b>2007</b> , 47, 1547-1552	2.4	19
45	Influence of rising atmospheric CO <sub>2</sub> since 1900 on early growth and photosynthetic response of a noxious invasive weed, Canada thistle ( <i>Cirsium arvense</i> ). <i>Functional Plant Biology</i> , <b>2002</b> , 29, 1387-1392	2.7	19
44	Increasing minimum daily temperatures are associated with enhanced pesticide use in cultivated soybean along a latitudinal gradient in the mid-western United States. <i>PLoS ONE</i> , <b>2014</b> , 9, e98516	3.7	19
43	Rising Atmospheric CO <sub>2</sub> Lowers Concentrations of Plant Carotenoids Essential to Human Health: A Meta-Analysis. <i>Molecular Nutrition and Food Research</i> , <b>2019</b> , 63, e1801047	5.9	18
42	Exposure to Extreme Heat Events Is Associated with Increased Hay Fever Prevalence among Nationally Representative Sample of US Adults: 1997-2013. <i>Journal of Allergy and Clinical Immunology: in Practice</i> , <b>2017</b> , 5, 435-441.e2	5.4	16
41	Understanding the nexus of rising CO <sub>2</sub> , climate change, and evolution in weed biology. <i>Invasive Plant Science and Management</i> , <b>2019</b> , 12, 79-88	1	14
40	The impact of nitrogen supply on the potential response of a noxious, invasive weed, Canada thistle ( <i>Cirsium arvense</i> ) to recent increases in atmospheric carbon dioxide. <i>Physiologia Plantarum</i> , <b>2003</b> , 119, 105-112	4.6	14
39	High [CO <sub>2</sub> ] and Temperature Increase Resistance to Cyhalofop-Butyl in Multiple-Resistant. <i>Frontiers in Plant Science</i> , <b>2019</b> , 10, 529	6.2	13

38	Ratooning as an adaptive management tool for climatic change in rice systems along a north-south transect in the southern Mississippi valley. <i>Agricultural and Forest Meteorology</i> , <b>2018</b> , 263, 409-416	5.8	13
37	Associations between alteration in plant phenology and hay fever prevalence among US adults: Implication for changing climate. <i>PLoS ONE</i> , <b>2019</b> , 14, e0212010	3.7	12
36	Increases in atmospheric carbon dioxide: Anticipated negative effects on food quality. <i>PLoS Medicine</i> , <b>2018</b> , 15, e1002600	11.6	12
35	Observed changes in soyabean growth and seed yield from <i>Abutilon theophrasti</i> competition as a function of carbon dioxide concentration. <i>Weed Research</i> , <b>2013</b> , 53, 140-145	1.9	11
34	The role of water availability on weed-rop interactions in processing tomato for southern Italy. <i>Acta Agriculturae Scandinavica - Section B Soil and Plant Science</i> , <b>2013</b> , 63, 62-68	1.1	10
33	A quantitative and qualitative assessment of mung bean ( <i>Vigna mungo</i> (L.) Wilczek) seed in response to elevated atmospheric carbon dioxide: potential changes in fatty acid composition. <i>Journal of the Science of Food and Agriculture</i> , <b>2007</b> , 87, 920-923	4.3	10
32	Global Climate Change and Pollen Aeroallergens: A Southern Hemisphere Perspective. <i>Immunology and Allergy Clinics of North America</i> , <b>2021</b> , 41, 1-16	3.3	10
31	Tolerance of subzero winter cold in kudzu ( <i>Pueraria montana</i> var. <i>lobata</i> ). <i>Oecologia</i> , <b>2018</b> , 187, 839-849	2.9	10
30	Assessing the impact of increasing carbon dioxide and temperature on crop-weed interactions for tomato and a C3 and C4 weed species. <i>European Journal of Agronomy</i> , <b>2013</b> , 50, 60-65	5	9
29	Could recent increases in atmospheric CO <sub>2</sub> have acted as a selection factor in <i>Avena fatua</i> populations? A case study of cultivated and wild oat competition. <i>Weed Research</i> , <b>2017</b> , 57, 399-405	1.9	9
28	Evidence for recent evolution in an invasive species, <i>Microstegium vimineum</i> , Japanese stiltgrass. <i>Weed Research</i> , <b>2015</b> , 55, 260-267	1.9	9
27	Plant Responses to Elevated CO <sub>2</sub> <b>2012</b> ,		9
26	Rising Carbon Dioxide and Weed Ecology <b>2004</b> , 159-176		9
25	Nutritional quality of crops in a high CO <sub>2</sub> world: an agenda for research and technology development. <i>Environmental Research Letters</i> , <b>2021</b> , 16, 064045	6.2	9
24	Impacts of Climate Change on Allergen Seasonality 92-112		9
23	Historical and experimental evidence for enhanced concentration of artemisinin, a global anti-malarial treatment, with recent and projected increases in atmospheric carbon dioxide. <i>Climatic Change</i> , <b>2015</b> , 132, 295-306	4.5	8
22	An Overview of Rising CO <sub>2</sub> and Climatic Change on Aeroallergens and Allergic Diseases. <i>Allergy, Asthma and Immunology Research</i> , <b>2020</b> , 12, 771-782	5.3	7
21	Climate Change and the Herbicide Paradigm: Visiting the Future. <i>Agronomy</i> , <b>2020</b> , 10, 1953	3.6	7

20	Cultivar-Specific Changes in Peanut Yield, Biomass, and Allergenicity in Response to Elevated Atmospheric Carbon Dioxide Concentration. <i>Crop Science</i> , <b>2016</b> , 56, 2766-2774	2.4	7
19	The potential role of sucrose transport gene expression in the photosynthetic and yield response of rice cultivars to future CO concentration. <i>Physiologia Plantarum</i> , <b>2020</b> , 168, 218-226	4.6	7
18	Global Climate Change and Carbon Dioxide: Assessing Weed Biology and Management. <i>ICP Series on Climate Change Impacts, Adaptation, and Mitigation</i> , <b>2010</b> , 191-208		6
17	The shape of impacts to come: lessons and opportunities for adaptation from uneven increases in global and regional temperatures. <i>Climatic Change</i> , <b>2016</b> , 139, 341-349	4.5	6
16	Elevated CO <sub>2</sub> may reduce arsenic accumulation in diverse ecotypes of <i>Arabidopsis thaliana</i> . <i>Journal of Plant Nutrition</i> , <b>2018</b> , 41, 645-653	2.3	5
15	Comment on "Unexpected reversal of C versus C grass response to elevated CO during a 20-year field experiment". <i>Science</i> , <b>2018</b> , 361,	33.3	5
14	Early growth phase and caffeine content response to recent and projected increases in atmospheric carbon dioxide in coffee ( <i>Coffea arabica</i> and <i>C. canephora</i> ). <i>Scientific Reports</i> , <b>2020</b> , 10, 5875	4.9	4
13	Chapter 13 : Air Quality. Impacts, Risks, and Adaptation in the United States: The Fourth National Climate Assessment, Volume II <b>2018</b> ,		3
12	Recent CO levels promote increased production of the toxin parthenin in an invasive <i>Parthenium hysterophorus</i> biotype. <i>Nature Plants</i> , <b>2021</b> , 7, 725-729	11.5	3
11	Leaf characteristics of rice cultivars with a stronger yield response to projected increases in CO concentration. <i>Physiologia Plantarum</i> , <b>2021</b> , 171, 416-423	4.6	3
10	Crop Adaptation: Weedy and Crop Wild Relatives as an Untapped Resource to Utilize Recent Increases in Atmospheric CO. <i>Plants</i> , <b>2021</b> , 10,	4.5	3
9	Responses of rice qualitative characteristics to elevated carbon dioxide and higher temperature: implications for global nutrition. <i>Journal of the Science of Food and Agriculture</i> , <b>2021</b> , 101, 3854-3861	4.3	2
8	Weeds on the Farm: Assessing the Role of Climate Change and CO <sub>2</sub> on Agricultural Productivity	85-105	1
7	Plant Invasions, Rising CO <sub>2</sub> , and Global Climate Change <b>2022</b> , 71-87		1
6	Accelerated sea-level rise is suppressing CO stimulation of tidal marsh productivity: A 33-year study.. <i>Science Advances</i> , <b>2022</b> , 8, eabn0054	14.3	1
5	Climate, Carbon Dioxide, and Plant-Based Aero-Allergens: A Deeper Botanical Perspective.. <i>Frontiers in Allergy</i> , <b>2021</b> , 2, 714724	0	0
4	Weeds in a Time of Climate	199-217	
3	Weeds, CO <sub>2</sub> , Climate, and Health	127-141	

2 Benefits from Weeds181-197

1 An Evaluation of the Impact of Rising Carbon Dioxide and Climatic Change on Weed Biology:  
Competition to Community Composition61-83