

Reimund Paul RÄjtter

List of Publications by Year in descending order

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Version: 2024-02-01

119
papers

10,950
citations

43973

48
h-index

31759

101
g-index

130
all docs

130
docs citations

130
times ranked

8443
citing authors

#	ARTICLE	IF	CITATIONS
1	Can intercropping be an adaptation to drought? A model-based analysis for pearl millet-cowpea. <i>Journal of Agronomy and Crop Science</i> , 2022, 208, 910-927.	1.7	10
2	Disentangling effects of altitude and shade cover on coffee fruit dynamics and vegetative growth in smallholder coffee systems. <i>Agriculture, Ecosystems and Environment</i> , 2022, 326, 107786.	2.5	4
3	Salinity Constraints for Small-Scale Agriculture and Impact on Adaptation in North Aceh, Indonesia. <i>Agronomy</i> , 2022, 12, 341.	1.3	7
4	Expected effects of climate change on the production and water use of crop rotation management reproduced by crop model ensemble for Czech Republic sites. <i>European Journal of Agronomy</i> , 2022, 134, 126446.	1.9	6
5	Revisiting food security in 2021: an overview of the past year. <i>Food Security</i> , 2022, 14, 1-7.	2.4	16
6	Impact of Different Methods of Root-Zone Application of Biochar-Based Fertilizers on Young Cocoa Plants: Insights from a Pot-Trial. <i>Horticulturae</i> , 2022, 8, 328.	1.2	2
7	Tackling climate risk to sustainably intensify smallholder maize farming systems in southern Africa. <i>Environmental Research Letters</i> , 2022, 17, 075005.	2.2	4
8	Global wheat production could benefit from closing the genetic yield gap. <i>Nature Food</i> , 2022, 3, 532-541.	6.2	29
9	Modeling the multi-functionality of African savanna landscapes under global change. <i>Land Degradation and Development</i> , 2021, 32, 2077-2081.	1.8	10
10	Sustainable intensification of crop production under alternative future changes in climate and technology: The case of the North Savo region. <i>Agricultural Systems</i> , 2021, 190, 103135.	3.2	15
11	Performance of 13 crop simulation models and their ensemble for simulating four field crops in Central Europe. <i>Journal of Agricultural Science</i> , 2021, 159, 69-89.	0.6	11
12	To bias correct or not to bias correct? An agricultural impact modelers' perspective on regional climate model data. <i>Agricultural and Forest Meteorology</i> , 2021, 304-305, 108406.	1.9	31
13	What determines a productive winter bean-wheat genotype combination for intercropping in central Germany?. <i>European Journal of Agronomy</i> , 2021, 128, 126294.	1.9	14
14	Quantifying sustainable intensification of agriculture: The contribution of metrics and modelling. <i>Ecological Indicators</i> , 2021, 129, 107870.	2.6	18
15	Maize-lablab intercropping is promising in supporting the sustainable intensification of smallholder cropping systems under high climate risk in southern Africa. <i>Experimental Agriculture</i> , 2020, 56, 104-117.	0.4	20
16	Why do crop models diverge substantially in climate impact projections? A comprehensive analysis based on eight barley crop models. <i>Agricultural and Forest Meteorology</i> , 2020, 281, 107851.	1.9	35
17	Fertilizer management in smallholder cocoa farms of Indonesia under variable climate and market prices. <i>Agricultural Systems</i> , 2020, 178, 102759.	3.2	21
18	Mapping disruption and resilience mechanisms in food systems. <i>Food Security</i> , 2020, 12, 695-717.	2.4	111

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19	Simulating medium-term effects of cropping system diversification on soil fertility and crop productivity in southern Africa. <i>European Journal of Agronomy</i> , 2020, 119, 126089.	1.9	23
20	Variations in yield gaps of smallholder cocoa systems and the main determining factors along a climate gradient in Ghana. <i>Agricultural Systems</i> , 2020, 181, 102812.	3.2	31
21	Effect of cropping system, shade cover and altitudinal gradient on coffee yield components at Mt. Elgon, Uganda. <i>Agriculture, Ecosystems and Environment</i> , 2020, 295, 106887.	2.5	19
22	Mitigation efforts will not fully alleviate the increase in water scarcity occurrence probability in wheat-producing areas. <i>Science Advances</i> , 2019, 5, eaau2406.	4.7	104
23	Water use of <i>Coffea arabica</i> in open versus shaded systems under smallholder's farm conditions in Eastern Uganda. <i>Agricultural and Forest Meteorology</i> , 2019, 266-267, 231-242.	1.9	20
24	Using impact response surfaces to analyse the likelihood of impacts on crop yield under probabilistic climate change. <i>Agricultural and Forest Meteorology</i> , 2019, 264, 213-224.	1.9	19
25	Global wheat production with 1.5 and 2.0°C above pre-industrial warming. <i>Global Change Biology</i> , 2019, 25, 1428-1444.	4.2	107
26	Climate change impact and adaptation for wheat protein. <i>Global Change Biology</i> , 2019, 25, 155-173.	4.2	312
27	Implications of crop model ensemble size and composition for estimates of adaptation effects and agreement of recommendations. <i>Agricultural and Forest Meteorology</i> , 2019, 264, 351-362.	1.9	35
28	Data requirements for crop modelling—Applying the learning curve approach to the simulation of winter wheat flowering time under climate change. <i>European Journal of Agronomy</i> , 2018, 95, 33-44.	1.9	6
29	Linking modelling and experimentation to better capture crop impacts of agroclimatic extremes—A review. <i>Field Crops Research</i> , 2018, 221, 142-156.	2.3	80
30	Nitrogen management in crop rotations after the break-up of grassland: Insights from modelling. <i>Agriculture, Ecosystems and Environment</i> , 2018, 259, 28-44.	2.5	15
31	Exploring adaptations of groundnut cropping to prevailing climate variability and extremes in Limpopo Province, South Africa. <i>Field Crops Research</i> , 2018, 219, 1-13.	2.3	17
32	Cocoa agroforestry is less resilient to suboptimal and extreme climate than cocoa in full sun: Reply to Norgrove (2017). <i>Global Change Biology</i> , 2018, 24, e733-e740.	4.2	6
33	How does inter-annual variability of attainable yield affect the magnitude of yield gaps for wheat and maize? An analysis at ten sites. <i>Agricultural Systems</i> , 2018, 159, 199-208.	3.2	36
34	Adaptation response surfaces for managing wheat under perturbed climate and CO ₂ in a Mediterranean environment. <i>Agricultural Systems</i> , 2018, 159, 260-274.	3.2	68
35	How accurately do maize crop models simulate the interactions of atmospheric CO ₂ concentration levels with limited water supply on water use and yield?. <i>European Journal of Agronomy</i> , 2018, 100, 67-75.	1.9	68
36	Impacts of heat stress on leaf area index and growth duration of winter wheat in the North China Plain. <i>Field Crops Research</i> , 2018, 222, 230-237.	2.3	48

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37	Classifying multi-model wheat yield impact response surfaces showing sensitivity to temperature and precipitation change. <i>Agricultural Systems</i> , 2018, 159, 209-224.	3.2	47
38	Contribution of crop model structure, parameters and climate projections to uncertainty in climate change impact assessments. <i>Global Change Biology</i> , 2018, 24, 1291-1307.	4.2	149
39	Fertilizer management effects on oil palm yield and nutrient use efficiency on sandy soils with limited water supply in Central Kalimantan. <i>Nutrient Cycling in Agroecosystems</i> , 2018, 112, 317-333.	1.1	8
40	Progress in modelling agricultural impacts of and adaptations to climate change. <i>Current Opinion in Plant Biology</i> , 2018, 45, 255-261.	3.5	39
41	Multimodel ensembles improve predictions of crop-“environment”-management interactions. <i>Global Change Biology</i> , 2018, 24, 5072-5083.	4.2	111
42	The benefits of conservation agriculture on soil organic carbon and yield in southern Africa are site-specific. <i>Soil and Tillage Research</i> , 2018, 183, 72-82.	2.6	38
43	Cocoa agroforestry is less resilient to sub-optimal and extreme climate than cocoa in full sun. <i>Global Change Biology</i> , 2018, 24, 273-286.	4.2	82
44	Priority questions in multidisciplinary drought research. <i>Climate Research</i> , 2018, 75, 241-260.	0.4	35
45	Crop model improvement reduces the uncertainty of the response to temperature of multi-model ensembles. <i>Field Crops Research</i> , 2017, 202, 5-20.	2.3	109
46	Multi-model uncertainty analysis in predicting grain N for crop rotations in Europe. <i>European Journal of Agronomy</i> , 2017, 84, 152-165.	1.9	35
47	Wheat yield benefited from increases in minimum temperature in the Huang-Huai-Hai Plain of China in the past three decades. <i>Agricultural and Forest Meteorology</i> , 2017, 239, 1-14.	1.9	84
48	Performance of process-based models for simulation of grain N in crop rotations across Europe. <i>Agricultural Systems</i> , 2017, 154, 63-77.	3.2	43
49	The uncertainty of crop yield projections is reduced by improved temperature response functions. <i>Nature Plants</i> , 2017, 3, 17102.	4.7	170
50	The implication of input data aggregation on up-scaling soil organic carbon changes. <i>Environmental Modelling and Software</i> , 2017, 96, 361-377.	1.9	28
51	Designing future barley ideotypes using a crop model ensemble. <i>European Journal of Agronomy</i> , 2017, 82, 144-162.	1.9	84
52	Impact of Spatial Soil and Climate Input Data Aggregation on Regional Yield Simulations. <i>PLoS ONE</i> , 2016, 11, e0151782.	1.1	78
53	Multi-wheat-model ensemble responses to interannual climate variability. <i>Environmental Modelling and Software</i> , 2016, 81, 86-101.	1.9	50
54	Estimating model prediction error: Should you treat predictions as fixed or random?. <i>Environmental Modelling and Software</i> , 2016, 84, 529-539.	1.9	27

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55	Uncertainty of wheat water use: Simulated patterns and sensitivity to temperature and CO ₂ . <i>Field Crops Research</i> , 2016, 198, 80-92.	2.3	47
56	Lessons from climate modeling on the design and use of ensembles for crop modeling. <i>Climatic Change</i> , 2016, 139, 551-564.	1.7	66
57	Similar estimates of temperature impacts on global wheat yield by three independent methods. <i>Nature Climate Change</i> , 2016, 6, 1130-1136.	8.1	352
58	Comparing the performance of 11 crop simulation models in predicting yield response to nitrogen fertilization. <i>Journal of Agricultural Science</i> , 2016, 154, 1218-1240.	0.6	70
59	Spatial sampling of weather data for regional crop yield simulations. <i>Agricultural and Forest Meteorology</i> , 2016, 220, 101-115.	1.9	35
60	Dynamic economic modelling of crop rotations with farm management practices under future pest pressure. <i>Agricultural Systems</i> , 2016, 144, 65-76.	3.2	41
61	Evaluating the precision of eight spatial sampling schemes in estimating regional means of simulated yield for two crops. <i>Environmental Modelling and Software</i> , 2016, 80, 100-112.	1.9	26
62	Variability in crop yields associated with climate anomalies in China over the past three decades. <i>Regional Environmental Change</i> , 2016, 16, 1715-1723.	1.4	21
63	Historical data provide new insights into response and adaptation of maize production systems to climate change/variability in China. <i>Field Crops Research</i> , 2016, 185, 1-11.	2.3	43
64	Changing regional weather-crop yield relationships across Europe between 1901 and 2012. <i>Climate Research</i> , 2016, 70, 195-214.	0.4	44
65	Crop modelling for integrated assessment of risk to food production from climate change. <i>Environmental Modelling and Software</i> , 2015, 72, 287-303.	1.9	230
66	Exploring climate change impacts and adaptation options for maize production in the Central Rift Valley of Ethiopia using different climate change scenarios and crop models. <i>Climatic Change</i> , 2015, 129, 145-158.	1.7	102
67	Temporal and spatial changes of maize yield potentials and yield gaps in the past three decades in China. <i>Agriculture, Ecosystems and Environment</i> , 2015, 208, 12-20.	2.5	66
68	Use of crop simulation modelling to aid ideotype design of future cereal cultivars. <i>Journal of Experimental Botany</i> , 2015, 66, 3463-3476.	2.4	146
69	A statistical analysis of three ensembles of crop model responses to temperature and CO ₂ concentration. <i>Agricultural and Forest Meteorology</i> , 2015, 214-215, 483-493.	1.9	31
70	WOFOST developer's response to article by Stella et al., <i>Environmental Modelling & Software</i> 59 (2014): 44-58. <i>Environmental Modelling and Software</i> , 2015, 73, 57-59.	1.9	5
71	Heat stress impacts on wheat growth and yield were reduced in the Huang-Huai-Hai Plain of China in the past three decades. <i>European Journal of Agronomy</i> , 2015, 71, 44-52.	1.9	33
72	Analysis and classification of data sets for calibration and validation of agro-ecosystem models. <i>Environmental Modelling and Software</i> , 2015, 72, 402-417.	1.9	112

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73	Crop rotation modelling – A European model intercomparison. <i>European Journal of Agronomy</i> , 2015, 70, 98-111.	1.9	125
74	The AgMIP Coordinated Climate-Crop Modeling Project (C3MP): Methods and Protocols. <i>ICP Series on Climate Change Impacts, Adaptation, and Mitigation</i> , 2015, , 191-220.	0.4	10
75	Uncertainties in Scaling-Up Crop Models for Large-Area Climate Change Impact Assessments. <i>ICP Series on Climate Change Impacts, Adaptation, and Mitigation</i> , 2015, , 261-277.	0.4	11
76	Statistical Analysis of Large Simulated Yield Datasets for Studying Climate Effects. <i>ICP Series on Climate Change Impacts, Adaptation, and Mitigation</i> , 2015, , 279-295.	0.4	2
77	Rising temperatures reduce global wheat production. <i>Nature Climate Change</i> , 2015, 5, 143-147.	8.1	1,544
78	Multimodel ensembles of wheat growth: many models are better than one. <i>Global Change Biology</i> , 2015, 21, 911-925.	4.2	387
79	Effect of weather data aggregation on regional crop simulation for different crops, production conditions, and response variables. <i>Climate Research</i> , 2015, 65, 141-157.	0.4	43
80	Effects of climate and historical adaptation measures on barley yield trends in Finland. <i>Climate Research</i> , 2015, 65, 221-236.	0.4	20
81	Assessing climate effects on wheat yield and water use in Finland using a super-ensemble-based probabilistic approach. <i>Climate Research</i> , 2015, 65, 23-37.	0.4	9
82	Temperature and precipitation effects on wheat yield across a European transect: a crop model ensemble analysis using impact response surfaces. <i>Climate Research</i> , 2015, 65, 87-105.	0.4	122
83	Variability of effects of spatial climate data aggregation on regional yield simulation by crop models. <i>Climate Research</i> , 2015, 65, 53-69.	0.4	39
84	Maize growing duration was prolonged across China in the past three decades under the combined effects of temperature, agronomic management, and cultivar shift. <i>Global Change Biology</i> , 2014, 20, 3686-3699.	4.2	95
85	Climate variability and change in the Central Rift Valley of Ethiopia: challenges for rainfed crop production. <i>Journal of Agricultural Science</i> , 2014, 152, 58-74.	0.6	98
86	Cultivating resilience by empirically revealing response diversity. <i>Global Environmental Change</i> , 2014, 25, 186-193.	3.6	40
87	Responses of wheat growth and yield to climate change in different climate zones of China, 1981–2009. <i>Agricultural and Forest Meteorology</i> , 2014, 189-190, 91-104.	1.9	149
88	Climate-induced yield variability and yield gaps of maize (<i>Zea mays</i> L.) in the Central Rift Valley of Ethiopia. <i>Field Crops Research</i> , 2014, 160, 41-53.	2.3	97
89	Robust uncertainty. <i>Nature Climate Change</i> , 2014, 4, 251-252.	8.1	15
90	Adverse weather conditions for European wheat production will become more frequent with climate change. <i>Nature Climate Change</i> , 2014, 4, 637-643.	8.1	452

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91	â€Fingerprintsâ€™™ of four crop models as affected by soil input data aggregation. <i>European Journal of Agronomy</i> , 2014, 61, 35-48.	1.9	28
92	Cultivar diversity has great potential to increase yield of feed barley. <i>Agronomy for Sustainable Development</i> , 2013, 33, 519-530.	2.2	20
93	Uncertainty in simulating wheat yields under climate change. <i>Nature Climate Change</i> , 2013, 3, 827-832.	8.1	1,021
94	Adapting to Climate Variability and Change: Experiences from Cereal-Based Farming in the Central Rift and Kobo Valleys, Ethiopia. <i>Environmental Management</i> , 2013, 52, 1115-1131.	1.2	82
95	Characteristic â€fingerprintsâ€™™ of crop model responses to weather input data at different spatial resolutions. <i>European Journal of Agronomy</i> , 2013, 49, 104-114.	1.9	51
96	Implication of crop model calibration strategies for assessing regional impacts of climate change in Europe. <i>Agricultural and Forest Meteorology</i> , 2013, 170, 32-46.	1.9	148
97	Sensitivities of crop models to extreme weather conditions during flowering period demonstrated for maize and winter wheat in Austria. <i>Journal of Agricultural Science</i> , 2013, 151, 813-835.	0.6	82
98	Modelling shifts in agroclimate and crop cultivar response under climate change. <i>Ecology and Evolution</i> , 2013, 3, 4197-4214.	0.8	72
99	Projections of climate change impacts on crop production: A global and a Nordic perspective. <i>Acta Agriculturae Scandinavica - Section A: Animal Science</i> , 2012, 62, 166-180.	0.2	14
100	Mitigation of Climate Change to Enhance Food Security: An Analytical Framework. <i>Forum for Development Studies</i> , 2012, 39, 51-73.	0.7	16
101	Sensitivity of barley varieties to weather in Finland. <i>Journal of Agricultural Science</i> , 2012, 150, 145-160.	0.6	79
102	Shifts in comparative advantages for maize, oat and wheat cropping under climate change in Europe. <i>Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment</i> , 2012, 29, 1514-1526.	1.1	63
103	Changes in time of sowing, flowering and maturity of cereals in Europe under climate change. <i>Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment</i> , 2012, 29, 1527-1542.	1.1	135
104	Simulation of spring barley yield in different climatic zones of Northern and Central Europe: A comparison of nine crop models. <i>Field Crops Research</i> , 2012, 133, 23-36.	2.3	269
105	Cropâ€™climate models need an overhaul. <i>Nature Climate Change</i> , 2011, 1, 175-177.	8.1	295
106	Agroclimatic conditions in Europe under climate change. <i>Global Change Biology</i> , 2011, 17, 2298-2318.	4.2	315
107	Simulation of winter wheat yield and its variability in different climates of Europe: A comparison of eight crop growth models. <i>European Journal of Agronomy</i> , 2011, 35, 103-114.	1.9	408
108	What would happen to barley production in Finland if global warming exceeded 4Â°C? A model-based assessment. <i>European Journal of Agronomy</i> , 2011, 35, 205-214.	1.9	94

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109	A Modelling Framework for Assessing Adaptive Management Options of Finnish Agrifood Systems to Climate Change. <i>Journal of Agricultural Science</i> , 2010, 2, .	0.1	3
110	TechnoGIN, a tool for exploring and evaluating resource use efficiency of cropping systems in East and Southeast Asia. <i>Agricultural Systems</i> , 2006, 87, 80-100.	3.2	32
111	Nutrient emission models in environmental policy evaluation at different scalesâ€”experience from the Netherlands. <i>Agriculture, Ecosystems and Environment</i> , 2005, 105, 291-306.	2.5	18
112	Simulation of nitrogen leaching in sandy soils in The Netherlands with the ANIMO model and the integrated modelling system STONE. <i>Agriculture, Ecosystems and Environment</i> , 2005, 105, 523-540.	2.5	35
113	The integrated modeling system STONE for calculating nutrient emissions from agriculture in the Netherlands. <i>Environmental Modelling and Software</i> , 2003, 18, 597-617.	1.9	66
114	Climate Change Effects on Plant Growth, Crop Yield and Livestock. <i>Climatic Change</i> , 1999, 43, 651-681.	1.7	165
115	Variations in yield response to fertilizer application in the tropics: I. Quantifying risks and opportunities for smallholders based on crop growth simulation. <i>Agricultural Systems</i> , 1997, 53, 41-68.	3.2	19
116	Variations in yield response to fertilizer application in the tropics: II. Risks and opportunities for smallholders cultivating maize on Kenya's arable land. <i>Agricultural Systems</i> , 1997, 53, 69-95.	3.2	44
117	Impacts of changes in climate and socio-economic factors on land use in the Rhine basin: projections for the decade 2040-49. <i>Studies in Environmental Science</i> , 1995, 65, 947-950.	0.0	6
118	Impact of global warming on European cereal production.. <i>CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources</i> , 0, , 1-15.	0.6	1
119	Biochar-Based Fertilizer Can Enhance Nutrient Availability in Young Cocoa Plants. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0