The soybean yield gap in Brazil – magnitude, causes a production

Journal of Agricultural Science 153, 1394-1411

DOI: 10.1017/s0021859615000313

Citation Report

#	Article	IF	CITATIONS
1	Acúmulo de matéria seca e produtividade em hÃbridos de arroz irrigado simulados com o modelo SimulArroz. Pesquisa Agropecuaria Brasileira, 2016, 51, 1907-1917.	0.9	7
2	Soybean Seed Treatment with Nickel Improves Biological Nitrogen Fixation and Urease Activity. Frontiers in Environmental Science, 2016, 4, .	1.5	42
3	Alternative sowing dates as a mitigation measure to reduce climate change impacts on soybean yields in southern Brazil. International Journal of Climatology, 2016, 36, 3664-3672.	1.5	24
4	Climate and Management Factors Influence Soybean Yield Potential in a Subtropical Environment. Agronomy Journal, 2016, 108, 1447-1454.	0.9	76
5	The Evaporative Stress Index as an indicator of agricultural drought in Brazil: An assessment based on crop yield impacts. Remote Sensing of Environment, 2016, 174, 82-99.	4.6	238
6	Gauging the sources of uncertainty in soybean yield simulations using the MONICA model. Agricultural Systems, 2017, 155, 9-18.	3.2	23
7	Sugarcane yield gap: can it be determined at national level with a simple agrometeorological model?. Crop and Pasture Science, 2017, 68, 272.	0.7	32
8	Improvement of Soybean Resilience to Drought through Deep Root System in Brazil. Agronomy Journal, 2017, 109, 1612-1622.	0.9	51
9	Inter-comparison of performance of soybean crop simulation models and their ensemble in southern Brazil. Field Crops Research, 2017, 200, 28-37.	2.3	82
10	Assessment of soybean yield with altered water-related genetic improvement traits under climate change in Southern Brazil. European Journal of Agronomy, 2017, 83, 1-14.	1.9	45
11	Interactions between temperature and drought in global and regional crop yield variability during 1961-2014. PLoS ONE, 2017, 12, e0178339.	1.1	174
12	Assessment of crop-management strategies to improve soybean resilience to climate change in Southern Brazil. Crop and Pasture Science, 2018, 69, 154.	0.7	40
13	Analysis of profitability of conservation tillage for a soybean monoculture associated with corn as an off-season crop. Cogent Food and Agriculture, 2018, 4, 1429699.	0.6	4
14	Rain-fed and irrigated cropland-atmosphere water fluxes and their implications for agricultural production in Southern Amazonia. Agricultural and Forest Meteorology, 2018, 256-257, 407-419.	1.9	22
15	Nutritional Attributes, Substitutability, Scalability, and Environmental Intensity of an Illustrative Subset of Current and Future Protein Sources for Aquaculture Feeds: Joint Consideration of Potential Synergies and Trade-offs. Environmental Science & Eamp; Technology, 2018, 52, 5532-5544.	4.6	57
16	Responses of soybean to water stress and supplemental irrigation in upper Indo-Gangetic plain: Field experiment and modeling approach. Field Crops Research, 2018, 219, 76-86.	2.3	45
17	Sensitivity and requirement of improvements of four soybean crop simulation models for climate change studies in Southern Brazil. International Journal of Biometeorology, 2018, 62, 823-832.	1.3	14
18	A Geostatistical Approach for Modeling Soybean Crop Area and Yield Based on Census and Remote Sensing Data. Remote Sensing, 2018, 10, 680.	1.8	17

#	Article	IF	CITATIONS
19	Yield gap of cassava crop as a measure of food security - an example for the main Brazilian producing regions. Food Security, 2018, 10, 1191-1202.	2.4	17
20	Antixenosis to Chrysodeixis includens (Lepidoptera: Noctuidae) among soybean genotypes. Bragantia, 2018, 77, 124-133.	1.3	9
21	The biophysical and socio-economic dimension of yield gaps in the southern Amazon – A bio-economic modelling approach. Agricultural Systems, 2018, 165, 1-13.	3.2	16
22	NDVI and meteorological data as indicators of the Pampa biome natural grasslands growth. Bragantia, 2018, 77, 404-414.	1.3	8
23	An accurate assessment tool based on intelligent technique for suitability of soybean cropland: case study in Kebumen Regency, Indonesia. Heliyon, 2018, 4, e00684.	1.4	8
24	Effect of irrigation regime on yield, harvest index and water productivity of soybean grown under different precipitation conditions in a temperate environment. Agricultural Water Management, 2018, 210, 224-231.	2.4	39
25	Optimum Leaf Area Index to Reach Soybean Yield Potential in Subtropical Environment. Agronomy Journal, 2018, 110, 932-938.	0.9	45
26	Soybean Yield Gap in the Areas of Yield Contest in Brazil. International Journal of Plant Production, 2018, 12, 159-168.	1.0	52
27	Assessment of economic returns by using a central pivot system to irrigate common beans during the rainfed season in Central Brazil. Agricultural Water Management, 2019, 224, 105749.	2.4	16
28	Intercomparison of structural features and performance of Eucalyptus simulation models and their ensemble for yield estimations. Forest Ecology and Management, 2019, 450, 117493.	1.4	23
29	Biochemical and physiological impacts of zinc sulphate, potassium phosphite and hydrogen sulphide in mitigating stress conditions in soybean. Physiologia Plantarum, 2020, 168, 456-472.	2.6	21
30	Fine-mapping QTLs and the validation of candidate genes for Aluminum tolerance using a high-density genetic map. Plant and Soil, 2019, 444, 119-137.	1.8	8
31	Sugarcane straw removal effects on soil water storage and drainage in southeastern Brazil. Journal of Soils and Water Conservation, 2019, 74, 466-476.	0.8	23
32	Assessing the growth gaps of Eucalyptus plantations in Brazil $\hat{a} \in$ Magnitudes, causes and possible mitigation strategies. Forest Ecology and Management, 2019, 451, 117464.	1.4	31
33	Characterizing Brazilian soybean-growing regions by water deficit patterns. Field Crops Research, 2019, 240, 95-105.	2.3	23
34	Machine Learning-Based Prediction of Drainage in Layered Soils Using a Soil Drainability Index. Soil Systems, 2019, 3, 30.	1.0	2
35	Uncertainty assessment of soya bean yield gaps using DSSATâ€CSMâ€CROPGROâ€Soybean calibrated by cultivar maturity groups. Journal of Agronomy and Crop Science, 2019, 205, 533-544.	1.7	18
36	Soybean-maize off-season double crop system in Brazil as affected by El Niño Southern Oscillation phases. Agricultural Systems, 2019, 173, 254-267.	3.2	36

3

#	Article	lF	Citations
37	Multi-scale assessment of winter wheat yield gaps with an integrated evaluation framework in the Huang-Huai-Hai farming region in China. Journal of Agricultural Science, 2019, 157, 523-536.	0.6	1
38	Assessment of different gridded weather data for soybean yield simulations in Brazil. Theoretical and Applied Climatology, 2019, 135, 237-247.	1.3	42
39	UAV-based thermal imaging in the assessment of water status of soybean plants. International Journal of Remote Sensing, 2020, 41, 3243-3265.	1.3	49
40	Intercomparison and Performance of Maize Crop Models and Their Ensemble for Yield Simulations in Brazil. International Journal of Plant Production, 2020, 14, 127-139.	1.0	8
41	Estimation of soybean yield from machine learning techniques and multispectral RPAS imagery. Remote Sensing Applications: Society and Environment, 2020, 20, 100397.	0.8	9
42	An Innovative Land Suitability Method to Assess the Potential for the Introduction of a New Crop at a Regional Level. Agronomy, 2020, 10, 330.	1.3	11
43	Climate change, crops and commodity traders: subnational trade analysis highlights differentiated risk exposure. Climatic Change, 2020, 162, 175-192.	1.7	3
44	Influence of Climate Variability on Soybean Yield in MATOPIBA, Brazil. Atmosphere, 2020, 11, 1130.	1.0	20
45	Yield gap of the double-crop system of main-season soybean with off-season maize in Brazil. Crop and Pasture Science, 2020, 71, 445.	0.7	7
46	Understanding Landscape Multifunctionality in a Post-forest Frontier: Supply and Demand of Ecosystem Services in Eastern Amazonia. Frontiers in Environmental Science, 2020, 7, .	1.5	14
47	Profitability of soybean production models with diversified crops in the autumn–winter. Agronomy Journal, 2020, 112, 4092-4103.	0.9	13
48	The impact of climate change on Brazil's agriculture. Science of the Total Environment, 2020, 740, 139384.	3.9	67
49	A model for the yield losses estimation in an early soybean (Glycine max (L.) Merr.) cultivar depending on the cutting height at harvest. Field Crops Research, 2020, 254, 107846.	2.3	16
50	Characterizing Sugarcane Production Areas Using Actual Yield and Edaphoclimatic Condition Data for the State of Goiás, Brazil. International Journal of Plant Production, 2020, 14, 511-520.	1.0	7
51	Biochar Amendment Enhances Water Retention in a Tropical Sandy Soil. Agriculture (Switzerland), 2020, 10, 62.	1.4	19
52	Evaluating the Contribution of Soybean Rust-Resistant Cultivars to Soybean Production and the Soybean Market in Brazil: A Supply and Demand Model Analysis. Sustainability, 2020, 12, 1422.	1.6	11
53	Topsoil Hardening: Effects on Soybean Root Architecture and Water Extraction Patterns. Journal of Soil Science and Plant Nutrition, 2020, 20, 2182-2194.	1.7	1
54	Does gypsum increase crop grain yield on noâ€ŧilled acid soils? A metaâ€analysis. Agronomy Journal, 2020, 112, 675-692.	0.9	25

#	Article	IF	CITATIONS
55	Rules for grown soybean-maize cropping system in Midwestern Brazil: Food production and economic profits. Agricultural Systems, 2020, 182, 102850.	3.2	25
56	Analysis of Climate Extreme Indices in the MATOPIBA Region, Brazil. Pure and Applied Geophysics, 2020, 177, 4457-4478.	0.8	28
57	Gauging the effects of climate variability on Eucalyptus plantations productivity across Brazil: A process-based modelling approach. Ecological Indicators, 2020, 114, 106325.	2.6	20
58	Modeling the impact of agrometeorological variables on soybean yield in the Mato Grosso Do Sul: 2000–2019. Environment, Development and Sustainability, 2021, 23, 5151-5164.	2.7	3
59	Precrops alleviate soil physical limitations for soybean root growth in an Oxisol from southern Brazil. Soil and Tillage Research, 2021, 206, 104820.	2.6	23
60	Classification of Soybean Genotypes Assessed Under Different Water Availability and at Different Phenological Stages Using Leaf-Based Hyperspectral Reflectance. Remote Sensing, 2021, 13, 172.	1.8	15
61	Soybean production and yield in the context of global climatic changes. CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources, 0, , .	0.6	0
62	Thermomagnesium: A By-Product of Ni Ore Mining as a Clean Fertilizer Source for Maize. Agronomy, 2021, 11, 525.	1.3	4
63	Soya Bitkisinin Verim Parametreleri ile Bazı Kimyasal Toprak Özellikleri Arasındaki Pedotransfer Modellerin UygulanabilirliÄŸi. Journal of Tekirdag Agricultural Faculty, 2021, 18, 494-507.	0.2	1
64	Biophysical and management factors causing yield gap in soybean in the subtropics of Brazil. Agronomy Journal, 2021, 113, 1882-1894.	0.9	14
65	Yield Prediction in Soybean Crop Grown under Different Levels of Water Availability Using Reflectance Spectroscopy and Partial Least Squares Regression. Remote Sensing, 2021, 13, 977.	1.8	10
66	II. Ürün Soya Çeşitlerinin [Glycine max (L.) Merrill] Farklı Yetişme Dönemlerinde Ölçülen Fizyolojik Parametreleri. ISPEC Journal of Agricultural Sciences, 2021, 5, 100-106.	0.0	1
67	Modeling the current land suitability and future dynamics of global soybean cultivation under climate change scenarios. Field Crops Research, 2021, 263, 108069.	2.3	38
68	Cover crops decrease maize yield variability in sloping landscapes through increased water during reproductive stages. Field Crops Research, 2021, 265, 108111.	2.3	18
69	Water deficit in the soybean breeding. Agronomy Science and Biotechnology, 0, 7, 1-20.	0.3	2
70	Nutrient Removal by Grain in Modern Soybean Varieties. Frontiers in Plant Science, 2021, 12, 615019.	1.7	8
71	Optimization of China's maize and soy production can ensure feed sufficiency at lower nitrogen and carbon footprints. Nature Food, 2021, 2, 426-433.	6.2	90
72	Time-weighted dynamic time warping analysis for mapping interannual cropping practices changes in large-scale agro-industrial farms in Brazilian Cerrado. Science of Remote Sensing, 2021, 3, 100021.	2.2	16

#	Article	IF	CITATIONS
73	Predictions of soybean harvest index evolution and evapotranspiration using STICS crop model. Agronomy Journal, 2021, 113, 3281-3298.	0.9	1
74	Soil Moisture Modulates Carbon Dioxide Assimilation in Soybean (Glycine max). Agricultural Research, 0, , 1.	0.9	0
75	Water deficit on the growth and yield of irrigated soybean in the Brazilian Cerrado region. Revista Brasileira De Engenharia Agricola E Ambiental, 2021, 25, 750-757.	0.4	1
76	Mutual analyses of agriculture land use and transportation networks: The future location of soybean and corn production in Brazil Agricultural Systems, 2021, 194, 103264.	3.2	19
77	Soybean. , 2021, , 282-319.		12
78	Nitric and nitrous oxide fluxes from intensifying crop agriculture in the seasonally dry tropical Amazon–Cerrado border region. , 2021, 4, e20169.		5
79	Assessment of agricultural efficiency and yield gap for soybean in the Brazilian Central Cerrado biome. Bragantia, 0, 80, .	1.3	6
80	A Pathway to Carbon Neutral Agriculture in Denmark. , 0, , .		12
81	Assessments and How an Increase in Temperature may Have an Impact on Agriculture in Brazil and Mapping of the Current and Future Situation. , 2019, , 31-65.		3
82	Effects of the El Niño Southern Oscillation phenomenon and sowing dates on soybean yield and on the occurrence of extreme weather events in southern Brazil. Agricultural and Forest Meteorology, 2020, 290, 108038.	1.9	16
83	Risk of Occurrence of Water Deficit in Soybean Cultivated in Lowland Soils. Earth Interactions, 2020, 24, 1-9.	0.7	5
84	Resilience of an Integrated Crop–Livestock System to Climate Change: A Simulation Analysis of Cover Crop Grazing in Southern Brazil. Frontiers in Sustainable Food Systems, 2020, 4, .	1.8	20
85	Terracing increases soil available water to plants in no-tillage. Revista Brasileira De Ciencia Do Solo, 2021, 45, .	0.5	4
86	Growth and transpiration of soybean genotypes with $\langle scp \rangle HaHB4 \langle scp \rangle \hat{A}^{\otimes}$ transcription factor for drought tolerance. Physiologia Plantarum, 2022, 174, .	2.6	3
87	Using leaf-based hyperspectral reflectance for genotype classification within a soybean germplasm collection assessed under different levels of water availability. International Journal of Remote Sensing, 2021, 42, 8165-8184.	1.3	2
88	Soybean and Maize Zoning in West African Economic and Monetary Union—A simulation Approach. Journal of Agricultural Science, 2021, 10, 158.	0.1	0
89	Mapping Algorithm Design and Maturity Model Construction of Online Learning Process Goals. International Journal of Emerging Technologies in Learning, 2019, 14, 31.	0.8	0
90	Assessment of Soybeans Crop Management Strategies Using Crop Growth Models for Central Brazil. Innovations in Landscape Research, 2020, , 525-543.	0.2	1

#	Article	IF	CITATIONS
92	Evaluating irrigated rice yields in Japan within the Climate Zonation Scheme of the Global Yield Gap Atlas. Journal of Agricultural Science, 2020, 158, 718-729.	0.6	2
93	Comprehensive yield gap analysis and optimizing agronomy practices of soybean in Iran. Journal of Agricultural Science, 2020, 158, 739-747.	0.6	8
94	Managing runoff in rainfed agriculture under no-till system: potential for improving crop production. Revista Brasileira De Ciencia Do Solo, 2021, 45, .	0.5	1
95	Bitki (Soya/Glycine Max. L. Merill) Verim Parametreleri ile Bazı Fiziksel Toprak Özellikleri Arasındaki Deneysel İliğkilerin Belirlenmesi. Toprak Bilimi Ve Bitki Besleme Dergisi, 0, , .	0.4	0
96	Endophytic fungi from an overlooked plant species: A case study in Kelissa brasiliensis (Baker) Ravenna. Acta Botanica Brasilica, 0, 36, .	0.8	1
97	Water monitoring of soybean crops using the TVDI obtained from surface radiometric sensors. Pesquisa Agropecuaria Brasileira, 0, 57, .	0.9	1
98	Data-driven projections suggest large opportunities to improve Europe's soybean self-sufficiency under climate change. Nature Food, 2022, 3, 255-265.	6.2	26
99	Drought stress induces changes in the physiology and root system of soybean plants. Revista Brasileira De Botanica, 2021, 44, 779-789.	0.5	2
100	Stability of Protein and Oil Content in Soybean across Dry and Normal Environments—A Case Study in Croatia. Agronomy, 2022, 12, 915.	1.3	1
101	Determination of the effects of different tillage methods and irrigation levels on soybean yield and yield components. Journal of Agricultural Science, 2022, 160, 76-85.	0.6	1
104	Improvement of vegetable soybean: genetic diversity and correlations of traits between immature and mature plants. Crop Breeding and Applied Biotechnology, 2022, 22, .	0.1	0
105	Diversified crop rotations increase the yield and economic efficiency of grain production systems. European Journal of Agronomy, 2022, 137, 126528.	1.9	22
106	Physiological and yield responses of soybean under water deficit. Journal of Crop Science and Biotechnology, 0, , .	0.7	2
107	In memoriam of Paulo Cesar Sentelhas. Scientia Agricola, 0, 80, .	0.6	0
108	Optimal soybean sowing window adjusted to climatic variability based on El Nino-Southern Oscillation using agrometeorological modeling. Pesquisa Agropecuaria Tropical, 0, 52, .	1.0	0
109	Yield gap in bitter gourd production: A perspective of farm-specific efficiency in Narsingdi district in Bangladesh. Social Sciences & Humanities Open, 2022, 6, 100335.	1.3	0
110	Potential Use of Data-Driven Models to Estimate and Predict Soybean Yields at National Scale in Brazil. International Journal of Plant Production, 2022, 16, 691-703.	1.0	3
111	Identification of Functional Genetic Variations Underlying Flooding Tolerance in Brazilian Soybean Genotypes. International Journal of Molecular Sciences, 2022, 23, 10611.	1.8	2

#	Article	IF	CITATIONS
112	Impact of soil compaction on 30-year soybean yield simulated with CROPGRO-DSSAT. Agricultural Systems, 2022, 203, 103523.	3.2	3
113	Productivity of Soybean under Projected Climate Change in a Semi-Arid Region of West Africa: Sensitivity of Current Production System. Agronomy, 2022, 12, 2614.	1.3	4
114	Protecting the Amazon forest and reducing global warming via agricultural intensification. Nature Sustainability, 2022, 5, 1018-1026.	11.5	22
115	Quantifying Potential Yield and Yield Gaps of Soybean Using CROPGRO-Soybean Model in the Humid Tropics of Southwestern Ethiopia. International Journal of Plant Production, 2022, 16, 653-667.	1.0	1
116	Shared centre pivot. An experience of smallholder irrigation in Midwest Brazil. Agricultural Water Management, 2023, 275, 108028.	2.4	0
117	Assessing the sensitive spectral bands for soybean water status monitoring and soil moisture prediction using leaf-based hyperspectral reflectance. Agricultural Water Management, 2023, 277, 108089.	2.4	13
118	Soybean yield prediction by machine learning and climate. Theoretical and Applied Climatology, 2023, 151, 1709-1725.	1.3	8
119	Integrating life cycle assessment (LCA) with boundary line analysis (BLA) to reduce agro-environmental risk of crop production: a case study of soybean production in Northern Iran. Clean Technologies and Environmental Policy, 0, , .	2.1	2
120	Can Soil Moisture and Crop Production Be Influenced by Different Cropping Systems?. AgriEngineering, 2023, 5, 112-126.	1.7	2
121	Physiological and biochemical responses of soybean to drought as represented by the fraction of transpirable soil water. Semina:Ciencias Agrarias, 2022, 43, 2449-2470.	0.1	0
122	Decomposition of yield gap of soybean in environmentÂ×ÂgeneticsÂ×Âmanagement in Southern Brazil. European Journal of Agronomy, 2023, 145, 126795.	1.9	6
123	Grain-cropping suitability for evaluating the agricultural land use change in Brazil. Applied Geography, 2023, 154, 102937.	1.7	4
124	Prospects for soybean production increase by closing yield gaps in the Northeast Farming Region, China. Field Crops Research, 2023, 293, 108843.	2.3	3
125	Soybean Seed Enrichment with Cobalt and Molybdenum as an Alternative to Conventional Seed Treatment. Plants, 2023, 12, 1164.	1.6	3
136	Water Availability of Soil and Growth of Maize on Ultisols Due to Amelioration with Coconut Shell Biochar and Leuchaena Compost., 2023,, 343-355.		0