Scott C Chapman

List of Publications by Year in Descending Order

163 papers	11,842 citations	58 h-index	106 g-index
176 ext. papers	14,151 ext. citations	5 avg, IF	6.28 L-index

#	Paper	IF	Citations
163	Estimating Photosynthetic Attributes from High-Throughput Canopy Hyperspectral Sensing in Sorghum.. *Plant Phenomics*, **2022**, 2022, 9768502	7	0
162	Evaluation of drought tolerance of wheat genotypes in rain-fed sodic soil environments using high-resolution UAV remote sensing techniques. *Biosystems Engineering*, **2022**, 217, 68-82	4.8	0
161	Detection of calcium, magnesium, and chlorophyll variations of wheat genotypes on sodic soils using hyperspectral red edge parameters. *Environmental Technology and Innovation*, **2022**, 27, 102469	7	1
160	A wiring diagram to integrate physiological traits of wheat yield potential. *Nature Food*, **2022**, 3, 318-324	14.4	0
159	Detecting Sorghum Plant and Head Features from Multispectral UAV Imagery. *Plant Phenomics*, **2021**, 2021, 9874650	7	4
158	UAV-Thermal imaging and agglomerative hierarchical clustering techniques to evaluate and rank physiological performance of wheat genotypes on sodic soil. *ISPRS Journal of Photogrammetry and Remote Sensing*, **2021**, 173, 221-237	11.8	8
157	Scaling up high-throughput phenotyping for abiotic stress selection in the field. *Theoretical and Applied Genetics*, **2021**, 134, 1845-1866	6	4
156	Genotype-specific P-spline response surfaces assist interpretation of regional wheat adaptation to climate change. *In Silico Plants*, **2021**, 3,	3.2	2
155	Comparison of Modelling Strategies to Estimate Phenotypic Values from an Unmanned Aerial Vehicle with Spectral and Temporal Vegetation Indexes. *Remote Sensing*, **2021**, 13, 2827	5	1
154	Using a gene-based phenology model to identify optimal flowering periods of spring wheat in irrigated mega-environments. *Journal of Experimental Botany*, **2021**, 72, 7203-7218	7	1
153	Limiting transpiration rate in high evaporative demand conditions to improve Australian wheat productivity. *In Silico Plants*, **2021**, 3,	3.2	3
152	Coupling of machine learning methods to improve estimation of ground coverage from unmanned aerial vehicle (UAV) imagery for high-throughput phenotyping of crops. *Functional Plant Biology*, **2021**, 48, 766-779	2.7	7
151	Integrating crop growth models with remote sensing for predicting biomass yield of sorghum. *In Silico Plants*, **2021**, 3,	3.2	7
150	Evolution and application of digital technologies to predict crop type and crop phenology in agriculture. *In Silico Plants*, **2021**, 3,	3.2	7
149	An analysis of simulated yield data for pepper shows how genotype □environment interaction in yield can be understood in terms of yield components and their QTLs. *Crop Science*, **2021**, 61, 1826-1842	2.4	3
148	UAV-thermal imaging: A technological breakthrough for monitoring and quantifying crop abiotic stress to help sustain productivity on sodic soils □A case review on wheat. *Remote Sensing Applications: Society and Environment*, **2021**, 23, 100583	2.8	2
147	Improving Biomass and Grain Yield Prediction of Wheat Genotypes on Sodic Soil Using Integrated High-Resolution Multispectral, Hyperspectral, 3D Point Cloud, and Machine Learning Techniques. *Remote Sensing*, **2021**, 13, 3482	5	6

146	Global Wheat Head Detection 2021: An Improved Dataset for Benchmarking Wheat Head Detection Methods. *Plant Phenomics*, **2021**, 2021, 9846158	7	14
145	Evaluation of water status of wheat genotypes to aid prediction of yield on sodic soils using UAV-thermal imaging and machine learning. *Agricultural and Forest Meteorology*, **2021**, 307, 108477	5.8	10
144	Improving estimation of in-season crop water use and health of wheat genotypes on sodic soils using spatial interpolation techniques and multi-component metrics. *Agricultural Water Management*, **2021**, 255, 107007	5.9	2
143	Designing crops for adaptation to the drought and high-temperature risks anticipated in future climates. *Crop Science*, **2020**, 60, 605-621	2.4	34
142	Breeder friendly phenotyping. *Plant Science*, **2020**, 295, 110396	5.3	62
141	Global Wheat Head Detection (GWHD) Dataset: A Large and Diverse Dataset of High-Resolution RGB-Labelled Images to Develop and Benchmark Wheat Head Detection Methods. *Plant Phenomics*, **2020**, 2020, 3521852	7	50
140	Linking genetic maps and simulation to optimize breeding for wheat flowering time in current and future climates. *Crop Science*, **2020**, 60, 678-699	2.4	9
139	Evaluation of the Phenotypic Repeatability of Canopy Temperature in Wheat Using Continuous-Terrestrial and Airborne Measurements. *Frontiers in Plant Science*, **2019**, 10, 875	6.2	21
138	Pixel size of aerial imagery constrains the applications of unmanned aerial vehicle in crop breeding. *ISPRS Journal of Photogrammetry and Remote Sensing*, **2019**, 154, 1-9	11.8	17
137	On the dynamic determinants of reproductive failure under drought in maize. *In Silico Plants*, **2019**, 1,	3.2	29
136	Improving process-based crop models to better capture genotype□environment□management interactions. *Journal of Experimental Botany*, **2019**, 70, 2389-2401	7	26
135	Modelling impact of early vigour on wheat yield in dryland regions. *Journal of Experimental Botany*, **2019**, 70, 2535-2548	7	24
134	Modelling strategies for assessing and increasing the effectiveness of new phenotyping techniques in plant breeding. *Plant Science*, **2019**, 282, 23-39	5.3	103
133	A Weakly Supervised Deep Learning Framework for Sorghum Head Detection and Counting. *Plant Phenomics*, **2019**, 2019, 1525874	7	70
132	Integrated High-Throughput Phenotyping with High Resolution Multispectral, Hyperspectral and 3D Point Cloud Techniques for Screening Wheat Genotypes on Sodic Soils. *Proceedings (mdpi)*, **2019**, 36, 206	0.3	1
131	Combining Crop Growth Modeling and Statistical Genetic Modeling to Evaluate Phenotyping Strategies. *Frontiers in Plant Science*, **2019**, 10, 1491	6.2	21
130	From QTLs to Adaptation Landscapes: Using Genotype-To-Phenotype Models to Characterize G□ Over Time. *Frontiers in Plant Science*, **2019**, 10, 1540	6.2	20
129	A new probabilistic forecasting model for canopy temperature with consideration of periodicity and parameter variation. *Agricultural and Forest Meteorology*, **2019**, 265, 88-98	5.8	3

128	Estimation of plant height using a high throughput phenotyping platform based on unmanned aerial vehicle and self-calibration: Example for sorghum breeding. *European Journal of Agronomy*, **2018**, 95, 24-32	5	80
127	Modelling the nitrogen dynamics of maize crops Enhancing the APSIM maize model. *European Journal of Agronomy*, **2018**, 100, 118-131	5	44
126	Direct and Indirect Costs of Frost in the Australian Wheatbelt. *Ecological Economics*, **2018**, 150, 122-136	5.6	9
125	Visible, Near Infrared, and Thermal Spectral Radiance On-Board UAVs for High-Throughput Phenotyping of Plant Breeding Trials **2018**, 275-299		2
124	Sorghum Biomass Prediction Using Uav-Based Remote Sensing Data and Crop Model Simulation **2018**,		9
123	Aerial Imagery Analysis - Quantifying Appearance and Number of Sorghum Heads for Applications in Breeding and Agronomy. *Frontiers in Plant Science*, **2018**, 9, 1544	6.2	55
122	Determining Crop Growth Dynamics in Sorghum Breeding Trials Through Remote and Proximal Sensing Technologies **2018**,		6
121	The Value of Tactical Adaptation to El Niño Southern Oscillation for East Australian Wheat. *Climate* , **2018**, 6, 77	3.1	6
120	Dynamic monitoring of NDVI in wheat agronomy and breeding trials using an unmanned aerial vehicle. *Field Crops Research*, **2017**, 210, 71-80	5.5	135
119	Contribution of Crop Models to Adaptation in Wheat. *Trends in Plant Science*, **2017**, 22, 472-490	13.1	110
118	Economic assessment of wheat breeding options for potential improved levels of post head-emergence frost tolerance. *Field Crops Research*, **2017**, 213, 75-88	5.5	6
117	The case for evidence-based policy to support stress-resilient cropping systems. *Food and Energy Security*, **2017**, 6, 5-11	4.1	3
116	Quantifying high temperature risks and their potential effects on sorghum production in Australia. *Field Crops Research*, **2017**, 211, 77-88	5.5	12
115	Projected impact of future climate on water-stress patterns across the Australian wheatbelt. *Journal of Experimental Botany*, **2017**, 68, 5907-5921	7	28
114	Multi-Spectral Imaging from an Unmanned Aerial Vehicle Enables the Assessment of Seasonal Leaf Area Dynamics of Sorghum Breeding Lines. *Frontiers in Plant Science*, **2017**, 8, 1532	6.2	82
113	EasyPCC: Benchmark Datasets and Tools for High-Throughput Measurement of the Plant Canopy Coverage Ratio under Field Conditions. *Sensors*, **2017**, 17,	3.8	30
112	Comparison of ground cover estimates from experiment plots in cotton, sorghum and sugarcane based on images and ortho-mosaics captured by UAV. *Functional Plant Biology*, **2016**, 44, 169-183	2.7	73
111	Identification of Earliness Per Se Flowering Time Locus in Spring Wheat through a Genome-Wide Association Study. *Crop Science*, **2016**, 56, 2962-2672	2.4	24

110	A standardized workflow to utilise a grid-computing system through advanced message queuing protocols. *Environmental Modelling and Software*, **2016**, 84, 304-310	5.2	2
109	Improvement of Predictive Ability by Uniform Coverage of the Target Genetic Space. *G3: Genes, Genomes, Genetics*, **2016**, 6, 3733-3747	3.2	18
108	Sorghum Crop Modeling and Its Utility in Agronomy and Breeding. *Agronomy*, **2016**,	0.8	4
107	Dynamic quantification of canopy structure to characterize early plant vigour in wheat genotypes. *Journal of Experimental Botany*, **2016**, 67, 4523-34	7	68
106	An integrated approach to maintaining cereal productivity under climate change. *Global Food Security*, **2016**, 8, 9-18	8.3	89
105	Assessment of the Potential Impacts of Wheat Plant Traits across Environments by Combining Crop Modeling and Global Sensitivity Analysis. *PLoS ONE*, **2016**, 11, e0146385	3.7	44
104	Modelling of Genotype by Environment Interaction and Prediction of Complex Traits across Multiple Environments as a Synthesis of Crop Growth Modelling, Genetics and Statistics **2016**, 55-82		29
103	Molecular Breeding for Complex Adaptive Traits: How Integrating Crop Ecophysiology and Modelling Can Enhance Efficiency **2016**, 147-162		19
102	A Direct Comparison of Remote Sensing Approaches for High-Throughput Phenotyping in Plant Breeding. *Frontiers in Plant Science*, **2016**, 7, 1131	6.2	155
101	Do wheat breeders have suitable genetic variation to overcome short coleoptiles and poor establishment in the warmer soils of future climates?. *Functional Plant Biology*, **2016**, 43, 961-972	2.7	17
100	Velocity of temperature and flowering time in wheat - assisting breeders to keep pace with climate change. *Global Change Biology*, **2016**, 22, 921-33	11.4	35
99	Recent changes in southern Australian frost occurrence: implications for wheat production risk. *Crop and Pasture Science*, **2016**, 67, 801	2.2	54
98	Genotypic Differences in Effects of Short Episodes of High-Temperature Stress during Reproductive Development in Sorghum. *Crop Science*, **2016**, 56, 1561-1572	2.4	21
97	The Quest for Understanding Phenotypic Variation via Integrated Approaches in the Field Environment. *Plant Physiology*, **2016**, 172, 622-634	6.6	75
96	The value of adapting to climate change in Australian wheat farm systems: farm to cross-regional scale. *Agriculture, Ecosystems and Environment*, **2015**, 211, 112-125	5.7	21
95	Frost trends and their estimated impact on yield in the Australian wheatbelt. *Journal of Experimental Botany*, **2015**, 66, 3611-23	7	98
94	Sorghum genotypes differ in high temperature responses for seed set. *Field Crops Research*, **2015**, 171, 32-40	5.5	65
93	Projected Impact of Future Climate on Drought Patterns in Complex Rainfed Environments. *Procedia Environmental Sciences*, **2015**, 29, 190-191		2

92	The shifting influence of drought and heat stress for crops in northeast Australia. *Global Change Biology*, **2015**, 21, 4115-27	11.4	173
91	SensorDB: a virtual laboratory for the integration, visualization and analysis of varied biological sensor data. *Plant Methods*, **2015**, 11, 53	5.8	21
90	Frost Trends and their Estimated Impact on Yield in the Australian Wheatbelt. *Procedia Environmental Sciences*, **2015**, 29, 171-172		8
89	APSIM Evolution towards a new generation of agricultural systems simulation. *Environmental Modelling and Software*, **2014**, 62, 327-350	5.2	809
88	Pheno-Copter: A Low-Altitude, Autonomous Remote-Sensing Robotic Helicopter for High-Throughput Field-Based Phenotyping. *Agronomy*, **2014**, 4, 279-301	3.6	184
87	Crop design for specific adaptation in variable dryland production environments. *Crop and Pasture Science*, **2014**, 65, 614	2.2	92
86	Predictions of heading date in bread wheat (Triticum aestivum L.) using QTL-based parameters of an ecophysiological model. *Journal of Experimental Botany*, **2014**, 65, 5849-65	7	48
85	Simulated breeding with QU-GENE graphical user interface. *Methods in Molecular Biology*, **2014**, 1145, 131-42	1.4	1
84	Quantification of the effects of VRN1 and Ppd-D1 to predict spring wheat (Triticum aestivum) heading time across diverse environments. *Journal of Experimental Botany*, **2013**, 64, 3747-61	7	92
83	Large-scale characterization of drought pattern: a continent-wide modelling approach applied to the Australian wheatbelt--spatial and temporal trends. *New Phytologist*, **2013**, 198, 801-820	9.8	171
82	Developmental and growth controls of tillering and water-soluble carbohydrate accumulation in contrasting wheat (Triticum aestivum L.) genotypes: can we dissect them?. *Journal of Experimental Botany*, **2013**, 64, 143-60	7	60
81	Genetic variability in high temperature effects on seed-set in sorghum. *Functional Plant Biology*, **2013**, 40, 439-448	2.7	44
80	Evaluation of reduced-tillering (tin) wheat lines in managed, terminal water deficit environments. *Journal of Experimental Botany*, **2013**, 64, 3439-51	7	38
79	Genotypic variability in the response to elevated CO of wheat lines differing in adaptive traits. *Functional Plant Biology*, **2013**, 40, 172-184	2.7	28
78	Breeding for the future: what are the potential impacts of future frost and heat events on sowing and flowering time requirements for Australian bread wheat (Triticum aestivum) varieties?. *Global Change Biology*, **2012**, 18, 2899-914	11.4	177
77	Plant adaptation to climate change opportunities and priorities in breeding. *Crop and Pasture Science*, **2012**, 63, 251	2.2	134
76	Evaluation of a reduced-tillering (tin) gene in wheat lines grown across different production environments. *Crop and Pasture Science*, **2012**, 63, 128	2.2	36
75	Indirect selection using reference and probe genotype performance in multi-environment trials. *Crop and Pasture Science*, **2011**, 62, 313	2.2	13

74	Effects of nitrogen supply on canopy development of maize and sunflower. *Crop and Pasture Science*, **2011**, 62, 1045	2.2	23
73	Evaluation of CIMMYT conventional and synthetic spring wheat germplasm in rainfed sub-tropical environments. II. Grain yield components and physiological traits. *Field Crops Research*, **2011**, 124, 195-204	2.5	19
72	Raising yield potential of wheat. I. Overview of a consortium approach and breeding strategies. *Journal of Experimental Botany*, **2011**, 62, 439-52	7	216
71	Environment characterization as an aid to wheat improvement: interpreting genotype-environment interactions by modelling water-deficit patterns in North-Eastern Australia. *Journal of Experimental Botany*, **2011**, 62, 1743-55	7	194
70	Mega-Environment Differences Affecting Genetic Progress for Yield and Relative Value of Component Traits. *Crop Science*, **2010**, 50, 574-583	2.4	15
69	Adapting APSIM to model the physiology and genetics of complex adaptive traits in field crops. *Journal of Experimental Botany*, **2010**, 61, 2185-202	7	217
68	Functional dynamics of the nitrogen balance of sorghum: I. N demand of vegetative plant parts. *Field Crops Research*, **2010**, 115, 19-28	5.5	69
67	Functional dynamics of the nitrogen balance of sorghum. II. Grain filling period. *Field Crops Research* , **2010**, 115, 29-38	5.5	74
66	Molecular detection of genomic regions associated with grain yield and yield-related components in an elite bread wheat cross evaluated under irrigated and rainfed conditions. *Theoretical and Applied Genetics*, **2010**, 120, 527-41	6	129
65	Heat and drought adaptive QTL in a wheat population designed to minimize confounding agronomic effects. *Theoretical and Applied Genetics*, **2010**, 121, 1001-21	6	377
64	Detection and use of QTL for complex traits in multiple environments. *Current Opinion in Plant Biology*, **2010**, 13, 193-205	9.9	126
63	Designing the sorghum crop model in APSIM to simulate the physiology and genetics of complex adaptive traits. *Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology*, **2009**, 153, S222	2.6	2
62	Adaptation science for agriculture and natural resource management□urgency and theoretical basis. *Current Opinion in Environmental Sustainability*, **2009**, 1, 69-76	7.2	108
61	Simultaneous selection of major and minor genes: use of QTL to increase selection efficiency of coleoptile length of wheat (Triticum aestivum L.). *Theoretical and Applied Genetics*, **2009**, 119, 65-74	6	33
60	Simulating the yield impacts of organ-level quantitative trait loci associated with drought response in maize: a "gene-to-phenotype" modeling approach. *Genetics*, **2009**, 183, 1507-23	4	175
59	Grain number and grain weight in wheat lines contrasting for stem water soluble carbohydrate concentration. *Field Crops Research*, **2009**, 112, 43-54	5.5	135
58	Physiological determinants of maize and sunflower grain yield as affected by nitrogen supply. *Field Crops Research*, **2009**, 113, 256-267	5.5	81
57	Variation for and relationships among biomass and grain yield component traits conferring improved yield and grain weight in an elite wheat population grown in variable yield environments. *Crop and Pasture Science*, **2009**, 60, 717	2.2	48

56	Short-term responses of leaf growth rate to water deficit scale up to whole-plant and crop levels: an integrated modelling approach in maize. *Plant, Cell and Environment*, **2008**, 31, 378-91	8.4	103
55	Crop and environmental attributes underpinning genotype by environment interaction in synthetic-derived bread wheat evaluated in Mexico and Australia. *Australian Journal of Agricultural Research*, **2008**, 59, 447		19
54	Identification of QTL for sugar-related traits in a sweet grain sorghum (Sorghum bicolor L. Moench) recombinant inbred population. *Molecular Breeding*, **2008**, 22, 367-384	3.4	112
53	Characterization of drought stress environments for upland rice and maize in central Brazil. *Euphytica*, **2008**, 162, 395-410	2.1	49
52	Use of crop models to understand genotype by environment interactions for drought in real-world and simulated plant breeding trials. *Euphytica*, **2008**, 161, 195-208	2.1	139
51	Multi-environment QTL mixed models for drought stress adaptation in wheat. *Theoretical and Applied Genetics*, **2008**, 117, 1077-91	6	141
50	Global adaptation patterns of Australian and CIMMYT spring bread wheat. *Theoretical and Applied Genetics*, **2007**, 115, 819-35	6	25
49	Relationships between height and yield in near-isogenic spring wheats that contrast for major reduced height genes. *Euphytica*, **2007**, 157, 391-397	2.1	57
48	An assessment of the genetic relationship between sweet and grain sorghums, within Sorghum bicolor ssp. bicolor (L.) Moench, using AFLP markers. *Euphytica*, **2007**, 157, 161-176	2.1	65
47	Application of Population Genetic Theory and Simulation Models to Efficiently Pyramid Multiple Genes via Marker-Assisted Selection. *Crop Science*, **2007**, 47, 582-588	2.4	61
46	Changes in agronomic traits of sunflower hybrids over 20 years of breeding in central Argentina. *Field Crops Research*, **2007**, 100, 73-81	5.5	22
45	Progress over 20 years of sunflower breeding in central Argentina. *Field Crops Research*, **2007**, 100, 61-72	5.5	45
44	Models for navigating biological complexity in breeding improved crop plants. *Trends in Plant Science*, **2006**, 11, 587-93	13.1	291
43	Global Adaptation of Spring Bread and Durum Wheat Lines Near-Isogenic for Major Reduced Height Genes. *Crop Science*, **2006**, 46, 603-613	2.4	50
42	Multivariate Analyses to Display Interactions between Environment and General or Specific Combining Ability in Hybrid Crops. *Crop Science*, **2006**, 46, 957-967	2.4	16
41	Defining Sunflower Selection Strategies for a Highly Heterogeneous Target Population of Environments. *Crop Science*, **2006**, 46, 136-144	2.4	24
40	Differential gene expression of wheat progeny with contrasting levels of transpiration efficiency. *Plant Molecular Biology*, **2006**, 61, 863-81	4.6	42
39	Genomics approaches for the identification of genes determining important traits in sugarcane. *Field Crops Research*, **2005**, 92, 137-147	5.5	57

38	Identification of differentially expressed genes in wheat undergoing gradual water deficit stress using a subtractive hybridisation approach. *Plant Science*, **2005**, 168, 661-670	5.3	23
37	Transcriptional response of sugarcane roots to methyl jasmonate. *Plant Science*, **2005**, 168, 761-772	5.3	50
36	Relationships between hard-seededness and seed weight in mungbean (Vigna radiata) assessed by QTL analysis. *Plant Breeding*, **2005**, 124, 292-298	2.4	41
35	Trait physiology and crop modelling as a framework to link phenotypic complexity to underlying genetic systems. *Australian Journal of Agricultural Research*, **2005**, 56, 947		126
34	Identification of differentially expressed transcripts from maturing stem of sugarcane by in silico analysis of stem expressed sequence tags and gene expression profiling. *Plant Molecular Biology*, **2004**, 54, 503-17	4.6	105
33	On systems thinking, systems biology, and the in silico plant. *Plant Physiology*, **2004**, 134, 909-11	6.6	103
32	Evaluating Plant Breeding Strategies by Simulating Gene Action and Dryland Environment Effects. *Agronomy Journal*, **2003**, 95, 99	2.2	140
31	An overview of APSIM, a model designed for farming systems simulation. *European Journal of Agronomy*, **2003**, 18, 267-288	5	1689
30	Evaluating Plant Breeding Strategies by Simulating Gene Action and Dryland Environment Effects. *Agronomy Journal*, **2003**, 95, 99-113	2.2	14
29	Using crop simulation to generate genotype by environment interaction effects for sorghum in water-limited environments. *Australian Journal of Agricultural Research*, **2002**, 53, 379		77
28	Development of a generic crop model template in the cropping system model APSIM. *European Journal of Agronomy*, **2002**, 18, 121-140	5	198
27	Expression profile analysis of the low-oxygen response in Arabidopsis root cultures. *Plant Cell*, **2002** , 14, 2481-94	11.6	314
26	Using biplots to interpret gene expression patterns in plants. *Bioinformatics*, **2002**, 18, 202-4	7.2	93
25	Lodging reduces sucrose accumulation of sugarcane in the wet and dry tropics. *Australian Journal of Agricultural Research*, **2002**, 53, 1183		37
24	Spatial and seasonal effects confounding interpretation of sunflower yields in Argentina. *Field Crops Research*, **2002**, 73, 107-120	5.5	23
23	The GP problem: quantifying gene-to-phenotype relationships. *In Silico Biology*, **2002**, 2, 151-64	2	41
22	Genotype by environment interaction and indirect selection for yield in sunflower: I. Two-mode pattern analysis of oil and biomass yield across environments in Argentina. *Field Crops Research*, **2001**, 72, 17-38	5.5	45
21	Genotype by environment interaction and indirect selection for yield in sunflower. *Field Crops Research*, **2001**, 72, 39-50	5.5	20

20	Genotype by environment interactions affecting grain sorghum. I. Characteristics that confound interpretation of hybrid yield. *Australian Journal of Agricultural Research*, **2000**, 51, 197		59
19	Genotype by environment interactions affecting grain sorghum. II. Frequencies of different seasonal patterns of drought stress are related to location effects on hybrid yields. *Australian Journal of Agricultural Research*, **2000**, 51, 209		132
18	Genotype by environment interactions affecting grain sorghum. III. Temporal sequences and spatial patterns in the target population of environments. *Australian Journal of Agricultural Research*, **2000** , 51, 223		85
17	Can Seasonal Climate Forecasts Predict Movements in Grain Prices?. *Atmospheric and Oceanographic Sciences Library*, **2000**, 367-380		4
16	Selection Improves Drought Tolerance in Tropical Maize Populations: II. Direct and Correlated Responses among Secondary Traits. *Crop Science*, **1999**, 39, 1315-1324	2.4	120
15	Selection Improves Drought Tolerance in Tropical Maize Populations: I. Gains in Biomass, Grain Yield, and Harvest Index. *Crop Science*, **1999**, 39, 1306-1315	2.4	193
14	Using a Chlorophyll Meter to Estimate Specific Leaf Nitrogen of Tropical Maize during Vegetative Growth. *Agronomy Journal*, **1997**, 89, 557-562	2.2	212
13	Genotype by environment effects and selection for drought tolerance in tropical maize. I. Two mode pattern analysis of yield. *Euphytica*, **1997**, 95, 01-09	2.1	41
12	Genotype by environment effects and selection for drought tolerance in tropical maize. II. Three-mode pattern analysis. *Euphytica*, **1997**, 95, 11-20	2.1	29
11	Reversing yield declines of a sub-tropical vertisol. *Communications in Soil Science and Plant Analysis*, **1995**, 26, 1105-1119	1.5	1
10	Effect of drought during early reproductive development on the dynamics of yield development of cultivars of groundnut (Arachis hypogaea L.). *Field Crops Research*, **1993**, 32, 227-242	5.5	14
9	Effect of drought during pod filling on utilization of water and on growth of cultivars of groundnut (Arachis hypogaea L.). *Field Crops Research*, **1993**, 32, 243-255	5.5	9
8	Effect of drought during early reproductive development on growth of cultivars of groundnut (Arachis hypogaea L.). II. Biomass production, pod development and yield. *Field Crops Research*, **1993**, 32, 211-225	5.5	18
7	Predicting leaf area development of sunflower. *Field Crops Research*, **1993**, 34, 101-112	5.5	14
6	Effect of drought during early reproductive development on growth of cultivars of groundnut (Arachis hypogaea L.). I. Utilization of radiation and water during drought. *Field Crops Research*, **1993**, 32, 193-210	5.5	27
5	A Sunflower Simulation Model: I. Model Development. *Agronomy Journal*, **1993**, 85, 725-735	2.2	101
4	A Sunflower Simulation Model: II. Simulating Production Risks in a Variable Sub-Tropical Environment. *Agronomy Journal*, **1993**, 85, 735-742	2.2	24
3	Osmotic adjustment inSorghum bicolor (L. Moench) grown under moisture stress in soil and osmotically modified solution cultures. *Plant and Soil*, **1988**, 107, 57-62	4.2	5

2	Grain Yield Improvement in Water-Limited Environments215-249		18
1	Sorghum Crop Modeling and Its Utility in Agronomy and Breeding. *Agronomy*,215-239	0.8	2