Michael D Casler

List of Publications by Year in Descending Order

110 papers	2,988 citations	28 h-index	52 g-index
115 ext. papers	3,684 ext. citations	3.5 avg, IF	5.46 L-index

#	Paper	IF	Citations
110	Genomic Prediction of Complex Traits in Forage Plants Species: Perennial Grasses Case.. *Methods in Molecular Biology*, **2022**, 2467, 521-541	1.4	0
109	Subsampling and DNA pooling can increase gains through genomic selection in switchgrass. *Plant Genome*, **2021**, 14, e20149	4.4	0
108	Genetic loci associated with winter survivorship in diverse lowland switchgrass populations. *Plant Genome*, **2021**, 14, e20159	4.4	0
107	Agronomic fitness of three temperate forage grasses divergently selected for lignin concentration or ferulate cross-linking. *Euphytica*, **2021**, 217, 1	2.1	0
106	Genomic mechanisms of climate adaptation in polyploid bioenergy switchgrass. *Nature*, **2021**, 590, 438-444	50.4	42
105	Cool-Season Grasses for Humid Areas **2020**, 297-311		
104	Transcriptome profiling reveals differentially expressed genes associated with flowering time in contrasting switchgrass genotypes. *Crop Science*, **2020**, 60, 1472-1487	2.4	1
103	Selection for Winter Survivorship in Lowland Switchgrass. *Bioenergy Research*, **2020**, 13, 109-119	3.1	4
102	Selection for Flowering Time as a Mechanism to Increase Biomass Yield of Upland Switchgrass. *Bioenergy Research*, **2020**, 13, 100-108	3.1	4
101	Nitrogen Demand Associated with Increased Biomass Yield of Switchgrass and Big Bluestem: Implications for Future Breeding Strategies. *Bioenergy Research*, **2020**, 13, 120-131	3.1	2
100	Biomass Yield Evaluation for Switchgrass Breeding: Seeded Swards vs. Transplanted Plots Yield Different Results. *Bioenergy Research*, **2020**, 1	3.1	1
99	Genomic Prediction for Winter Survival of Lowland Switchgrass in the Northern USA. *G3: Genes, Genomes, Genetics*, **2019**, 9, 1921-1931	3.2	12
98	Quantitative Trait Loci for Freezing Tolerance in a Lowland x Upland Switchgrass Population. *Frontiers in Plant Science*, **2019**, 10, 372	6.2	12
97	Native Grass Species for Forage and Turf **2019**, 579-605		
96	Resilience, Stability, and Productivity of Alfalfa Cultivars in Rainfed Regions of North America. *Crop Science*, **2019**, 59, 800-810	2.4	13
95	Extensions of BLUP Models for Genomic Prediction in Heterogeneous Populations: Application in a Diverse Switchgrass Sample. *G3: Genes, Genomes, Genetics*, **2019**, 9, 789-805	3.2	3
94	Identification of Quantitative Trait Loci for Plant Height, Crown Diameter, and Plant Biomass in a Pseudo-F2 Population of Switchgrass. *Bioenergy Research*, **2019**, 12, 267-274	3.1	2

93	Nitrogen Fertilization Management of Switchgrass, Miscanthus and Giant Reed: A Review. *Advances in Agronomy*, **2019**, 153, 87-119	7.7	12
92	Breeding progress and preparedness for mass-scale deployment of perennial lignocellulosic biomass crops switchgrass, miscanthus, willow and poplar. *GCB Bioenergy*, **2019**, 11, 118-151	5.6	68
91	Reed Canary Grass **2018**, 153-173		3
90	Breeding for Biomass Yield in Switchgrass Using Surrogate Measures of Yield. *Bioenergy Research*, **2018**, 11, 1-12	3.1	14
89	Genomic prediction of crown rust resistance in Lolium perenne. *BMC Genetics*, **2018**, 19, 35	2.6	17
88	Chapter 4: Power and Replication Designing Powerful Experiments. *ACSESS Publications*, **2018**,		1
87	Genome-Wide Association Study in Pseudo-F Populations of Switchgrass Identifies Genetic Loci Affecting Heading and Anthesis Dates. *Frontiers in Plant Science*, **2018**, 9, 1250	6.2	9
86	Quantitative Trait Locus Mapping for Flowering Time in a Lowland Upland Switchgrass Pseudo-F2 Population. *Plant Genome*, **2018**, 11, 170093	4.4	18
85	Extensive Genetic Diversity is Present within North American Switchgrass Germplasm. *Plant Genome*, **2018**, 11, 170055	4.4	16
84	Competitive effects of cultivar and wild switchgrass on other native grasses. *Biological Invasions*, **2018**, 20, 2439-2449	2.7	4
83	Impact of Harvest Time and Cultivar on Conversion of Switchgrass to Bio-oils Via Fast Pyrolysis. *Bioenergy Research*, **2017**, 10, 388-399	3.1	5
82	Impact of Harvest Time and Switchgrass Cultivar on Sugar Release Through Enzymatic Hydrolysis. *Bioenergy Research*, **2017**, 10, 377-387	3.1	9
81	Biomass Yield of Switchgrass Cultivars under High- versus Low-Input Conditions. *Crop Science*, **2017**, 57, 821-832	2.4	19
80	Can Biomass Yield of Switchgrass be Increased without Increasing Nitrogen Requirements?. *Crop Science*, **2017**, 57, 2024-2031	2.4	1
79	Legume Addition to Perennial Warm-Season Grass Swards Increases Harvested Biomass. *Crop Science*, **2017**, 57, 3343-3351	2.4	5
78	Switchgrass Biomass Composition Traits and their Effects on its Digestion by Ruminants and Bioconversion to Ethanol. *Crop Science*, **2017**, 57, 275-281	2.4	3
77	Using variable importance measures to identify a small set of SNPs to predict heading date in perennial ryegrass. *Scientific Reports*, **2017**, 7, 3566	4.9	11
76	Transcriptional Analysis of Flowering Time in Switchgrass. *Bioenergy Research*, **2017**, 10, 700-713	3.1	9

75	Genome-wide associations with flowering time in switchgrass using exome-capture sequencing data. *New Phytologist*, **2017**, 213, 154-169	9.8	29
74	Registration of 'Azov' Meadow Fescue. *Journal of Plant Registrations*, **2017**, 11, 9-14	0.7	4
73	Accuracy of Genomic Prediction in Switchgrass (Panicum virgatum L.) Improved by Accounting for Linkage Disequilibrium. *G3: Genes, Genomes, Genetics*, **2016**, 6, 1049-62	3.2	24
72	Switchgrass Harvest Time Management Can Impact Biomass Yield and Nutrient Content. *Crop Science*, **2016**, 56, 1970-1980	2.4	16
71	Selection Signatures in Four Lignin Genes from Switchgrass Populations Divergently Selected for In Vitro Dry Matter Digestibility. *PLoS ONE*, **2016**, 11, e0167005	3.7	2
70	Genome-wide association study based on multiple imputation with low-depth sequencing data: application to biofuel traits in reed canarygrass. *G3: Genes, Genomes, Genetics*, **2015**, 5, 891-909	3.2	9
69	Replication Concepts for Bioenergy Research Experiments. *Bioenergy Research*, **2015**, 8, 1-16	3.1	31
68	Diversity and population structure of northern switchgrass as revealed through exome capture sequencing. *Plant Journal*, **2015**, 84, 800-15	6.9	33
67	Fundamentals of Experimental Design: Guidelines for Designing Successful Experiments. *Agronomy Journal*, **2015**, 107, 692-705	2.2	48
66	Insecticide Applications have Minor Effects on Switchgrass Biomass Yield. *Agronomy Journal*, **2015**, 107, 2031-2037	2.2	2
65	Switchgrass Germplasm Resources. *Crop Science*, **2015**, 55, 2463-2478	2.4	27
64	Registration of 'Hidden Valley' Meadow Fescue. *Journal of Plant Registrations*, **2015**, 9, 294-298	0.7	5
63	Designing Selection Criteria for Use of Reed Canarygrass as a Bioenergy Feedstock. *Crop Science*, **2015**, 55, 2130-2137	2.4	1
62	Cool-Season Forages. *CSSA Special Publication - Crop Science Society of America*, **2015**, 33-51		6
61	Conservation implications of the introduction history of meadow fescue (Festuca pratensis Huds.) to the Driftless Area of the Upper Mississippi Valley, USA. *Plant Ecology and Diversity*, **2015**, 8, 91-99	2.2	2
60	Divergent Selection for Secondary Traits in Upland Tetraploid Switchgrass and Effects on Sward Biomass Yield. *Bioenergy Research*, **2014**, 7, 329-337	3.1	15
59	Switchgrass **2014**, 75-89		5
58	Population genomic variation reveals roles of history, adaptation and ploidy in switchgrass. *Molecular Ecology*, **2014**, 23, 4059-73	5.7	39

57	Nucleotide polymorphism and copy number variant detection using exome capture and next-generation sequencing in the polyploid grass Panicum virgatum. *Plant Journal*, **2014**, 79, 993-1008	6.9	32
56	Genomic Selection in Forage Breeding: Accuracy and Methods. *Crop Science*, **2014**, 54, 143-156	2.4	50
55	Predictive Relationships between Plant Morphological Traits and Biomass Yield in Switchgrass. *Crop Science*, **2014**, 54, 637-645	2.4	18
54	Inheritance of Secondary Morphological Traits for Among-and-Within-Family Selection in Upland Tetraploid Switchgrass. *Crop Science*, **2014**, 54, 646-653	2.4	8
53	Selection for Biomass Yield in Upland, Lowland, and Hybrid Switchgrass. *Crop Science*, **2014**, 54, 626-636	2.4	54
52	Accelerating the switchgrass (Panicum virgatum L.) breeding cycle using genomic selection approaches. *PLoS ONE*, **2014**, 9, e112227	3.7	45
51	Heterosis and Reciprocal-cross Effects in Tetraploid Switchgrass. *Crop Science*, **2014**, 54, 2063-2069	2.4	20
50	Regional Gene Pools for Restoration, Conservation, and Genetic Improvement of Prairie Grasses **2014**, 67-80		1
49	Chemistry and Microbial Functional Diversity Differences in Biofuel Crop and Grassland Soils in Multiple Geographies. *Bioenergy Research*, **2013**, 6, 601-619	3.1	5
48	Genetic Variability for Biofuel Traits in a Circumglobal Reed Canarygrass Collection. *Crop Science*, **2013**, 53, 524-531	2.4	5
47	Plant Mortality and Natural Selection May Increase Biomass Yield in Switchgrass Swards. *Crop Science*, **2013**, 53, 500-506	2.4	10
46	Switchgrass genomic diversity, ploidy, and evolution: novel insights from a network-based SNP discovery protocol. *PLoS Genetics*, **2013**, 9, e1003215	6	481
45	Selection Methods in Forage Breeding: A Quantitative Appraisal. *Crop Science*, **2013**, 53, 1925-1936	2.4	24
44	Partial Decomposition of the Genetic Correlation between Forage Yield and Fiber Using Semihybrids. *Crop Science*, **2013**, 53, 1403-1411	2.4	2
43	Switchgrass Breeding, Genetics, and Genomics. *Green Energy and Technology*, **2012**, 29-53	0.6	95
42	Big Bluestem Gene Pools in the Central and Northeastern United States. *Crop Science*, **2012**, 52, 189-200	2.4	15
41	Biochemical processing of reed canarygrass into fuel ethanol. *International Journal of Low-Carbon Technologies*, **2012**, 7, 338-347	2.8	6
40	Switchgrass **2012**, 563-590		22

39	The Evolution of Switchgrass as an Energy Crop. *Green Energy and Technology*, **2012**, 1-28	0.6	19
38	The Switchgrass Genome: Tools and Strategies. *Plant Genome*, **2011**, 4, 273-282	4.4	68
37	Post-glacial evolution of Panicum virgatum: centers of diversity and gene pools revealed by SSR markers and cpDNA sequences. *Genetica*, **2011**, 139, 933-48	1.5	70
36	Quantifying Actual and Theoretical Ethanol Yields for Switchgrass Strains Using NIRS Analyses. *Bioenergy Research*, **2011**, 4, 96-110	3.1	106
35	Biomass Yield and Quality of Reed Canarygrass under Five Harvest Management Systems for Bioenergy Production. *Bioenergy Research*, **2011**, 4, 111-119	3.1	39
34	Natural Hybrids and Gene Flow between Upland and Lowland Switchgrass. *Crop Science*, **2011**, 51, 2626-2641	2.4	55
33	Has selection for improved agronomic traits made reed canarygrass invasive?. *PLoS ONE*, **2011**, 6, e25757	3.7	29
32	Genetic diversity and population structure of Eurasian populations of reed canarygrass: cytotypes, cultivars, and interspecific hybrids. *Crop and Pasture Science*, **2011**, 62, 982	2.2	9
31	Genome-size Variation in Switchgrass (Panicum virgatum): Flow Cytometry and Cytology Reveal Rampant Aneuploidy. *Plant Genome*, **2010**, 3,	4.4	69
30	Changes in Mean and Genetic Variance During Two Cycles of Within-family Selection in Switchgrass. *Bioenergy Research*, **2010**, 3, 47-54	3.1	42
29	DOE Bioenergy Center Special Issue: The Great Lakes Bioenergy Research Center (GLBRC). *Bioenergy Research*, **2010**, 3, 1-2	3.1	2
28	Biomass Yield of Naturalized Populations and Cultivars of Reed Canary Grass. *Bioenergy Research*, **2009**, 2, 165-173	3.1	26
27	Biofuels, Bioenergy, and Bioproducts from Sustainable Agricultural and Forest Crops. *Bioenergy Research*, **2009**, 2, 77-78	3.1	2
26	Meadow Fescue, Tall Fescue, and Orchardgrass Response to Nitrogen Application Rate. *Forage and Grazinglands*, **2009**, 7, 1-12		10
25	Theoretical Expected Genetic Gains for Among-and-Within-Family Selection Methods in Perennial Forage Crops. *Crop Science*, **2008**, 48, 890	2.4	106
24	Efficiency of Indirect Selection for Dry Matter Yield Based on Fresh Matter Yield in Perennial Ryegrass Sward Plots. *Crop Science*, **2008**, 48, 127-133	2.4	10
23	Grass Yield and Quality Affect Potential Stocking Rate and Milk Production. *Forage and Grazinglands*, **2008**, 6, 1		4
22	Genetic Diversity, Plant Adaptation Regions, and Gene Pools for Switchgrass. *Crop Science*, **2007**, 47, 2261-2273	2.4	78

21	Chemical composition and response to dilute-acid pretreatment and enzymatic saccharification of alfalfa, reed canarygrass, and switchgrass. *Biomass and Bioenergy*, **2006**, 30, 880-891	5.3	376
20	Hierarchical Analysis of Switchgrass Morphology. *Crop Science*, **2005**, 45, 2465-2472	2.4	29
19	Development of Species-Specific SCAR Markers in Bentgrass. *Crop Science*, **2003**, 43, 345	2.4	24
18	Inheritance of Dollar Spot Resistance in Creeping Bentgrass. *Crop Science*, **2003**, 43, 2189-2196	2.4	27
17	Development of Species-Specific SCAR Markers in Bentgrass. *Crop Science*, **2003**, 43, 345	2.4	22
16	Performance of Meadow Fescue Accessions under Management-Intensive Grazing. *Crop Science*, **2001**, 41, 1946-1953	2.4	14
15	Frost Seeding into Aging Alfalfa Stands. *Agronomy Journal*, **2001**, 93, 609-619	2.2	6
14	Forage Yield of Stockpiled Perennial Grasses in the Upper Midwest USA. *Agronomy Journal*, **2000**, 92, 740-747	2.2	22
13	Seasonal Yield Distribution of Cool-Season Grasses following Winter Defoliation. *Agronomy Journal*, **2000**, 92, 974-980	2.2	27
12	Forage Yield Precision, Experimental Design, and Cultivar Mean Separation for Alfalfa Cultivar Trials. *Agronomy Journal*, **2000**, 92, 1064-1071	2.2	8
11	Patterns of Variation in a Collection of Meadow Fescue Accessions. *Crop Science*, **2000**, 40, 248-255	2.4	21
10	Spatial Variation Affects Precision of Perennial Cool-Season Forage Grass Trials. *Agronomy Journal*, **1999**, 91, 75-81	2.2	19
9	Pasture Growth, Production, and Quality Under Rotational and Continuous Grazing Management. *Journal of Production Agriculture*, **1999**, 12, 569-577		29
8	Establishment of Temperate Pasture Species into Alfalfa by Frost-Seeding. *Agronomy Journal*, **1999**, 91, 916-921	2.2	9
7	Selection and Evaluation of Smooth Bromegrass Clones with Divergent Lignin or Etherified Ferulic Acid Concentration. *Crop Science*, **1999**, 39, 1866-1873	2.4	60
6	The Wisconsin integrated cropping systems trial: Combining agroecology with production agronomy. *Renewable Agriculture and Food Systems*, **1995**, 10, 98-107		35
5	An Approach to Reduce the Time Required for Bean Yield Evaluation in Coffee Breeding. *Crop Science*, **1993**, 33, 448-452	2.4	3
4	Blocking Principles for Biological Experiments. *Assa, Cssa and Sssa*,53-72	0.3	1

3	Power and Replication Designing Powerful Experiments. *Assa, Cssa and Sssa*,73-83	0.3	
2	Extensions of BLUP models for genomic prediction in heterogeneous populations: Application in a diverse switchgrass sample		1
1	Nitrogen Fertilization and Harvest Management of Switchgrass: Impacts on Biomass Yield and Nitrogen Removal. *Bioenergy Research*,1	3.1	0