Christopher C Mundt

List of Publications by Year
in descending order

116 papers	7,076 citations	76326 40 h-index	64796 79 g-index
121 all docs	121 docs citations	121 times ranked	4766 citing authors

#	Article	IF	Citations
1	Genetic diversity and disease control in rice. Nature, 2000, 406, 718-722.	27.8	1,338
2	USE OFMULTILINECULTIVARS ANDCULTIVARMIXTURES FORDISEASEMANAGEMENT. Annual Review of Phytopathology, 2002, 40, 381-410.	7.8	585
3	Durable resistance: A key to sustainable management of pathogens and pests. Infection, Genetics and Evolution, 2014, 27, 446-455.	2.3	280
4	Cereal variety and species mixtures in practice, with emphasis on disease resistance. Agronomy for Sustainable Development, 2000, 20, 813-837.	0.8	276
5	Epidemiology in Mixed Host Populations. Phytopathology, 1999, 89, 984-990.	2.2	263
6	Effect of population size on the estimation of QTL: a test using resistance to barley stripe rust. Theoretical and Applied Genetics, 2005, 111, 1260-1270.	3.6	185
7	Local adaptation and effect of host genotype on the rate of pathogen evolution: an experimental test in a plant pathosystem. Journal of Evolutionary Biology, 2002, 15, 634-647.	1.7	147
8	Specific adaptation by Mycosphaerella graminicola to a resistant wheat cultivar. Plant Pathology, 2000, 49, 445-451.	2.4	142
9	Pyramiding for Resistance Durability: Theory and Practice. Phytopathology, 2018, 108, 792-802.	2.2	131
10	Measuring Immigration and Sexual Reproduction in Field Populations of Mycosphaerella graminicola. Phytopathology, 1998, 88, 1330-1337.	2.2	114
11	How Knowledge of Pathogen Population Biology Informs Management of Septoria Tritici Blotch. Phytopathology, 2016, 106, 948-955.	2.2	112
12	Genetic analysis of adult plant, quantitative resistance to stripe rust in wheat cultivar â€˜Stephensâ€™ in multi-environment trials. Theoretical and Applied Genetics, 2012, 124, 1-11.	3.6	109
13	Inheritance of Slowâ€Rusting Resistance to Leaf Rust in Wheat. Crop Science, 1992, 32, 1452-1456.	1.8	107
14	Pyramiding and dissecting disease resistance QTL to barley stripe rust. Theoretical and Applied Genetics, 2006, 113, 485-495.	3.6	95
15	Longâ€Distance Dispersal and Accelerating Waves of Disease: Empirical Relationships. American Naturalist, 2009, 173, 456-466.	2.1	94
16	An Improved Method for Measuring Quantitative Resistance to the Wheat Pathogen <i>Zymoseptoria tritici</i> Using High-Throughput Automated Image Analysis. Phytopathology, 2016, 106, 782-788.	2.2	90
17	Aggressiveness of Mycosphaerella graminicola Isolates from Susceptible and Partially Resistant Wheat Cultivars. Phytopathology, 2002, 92, 624-630.	2.2	84
18	Panicle Blast and Canopy Moisture in Rice Cultivar Mixtures. Phytopathology, 2005, 95, 433-438.	2.2	79

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19	Emergence and early evolution of fungicide resistance in North American populations of <i>Zymoseptoria tritici</i>. Plant Pathology, 2015, 64, 961-971.	2.4	79
20	Disease severity and yield of pure-line wheat cultivars and mixtures in the presence of eyespot, yellow rust, and their combination. Plant Pathology, 1995, 44, 173-182.	2.4	78
21	Relevance of integrated disease management to resistance durability. Euphytica, 2002, 124, 245-252.	1.2	74
22	Probability of Mutation to Multiple Virulence and Durability of Resistance Gene Pyramids.. Phytopathology, 1990, 80, 221-223.	2.2	72
23	Plant competition and disease in genetically diverse wheat populations. Oecologia, 1992, 91, 82-92.	2.0	69
24	The Effects of Host Diversity and Other Management Components on Epidemics of Potato Late Blight in the Humid Highland Tropics. Phytopathology, 2001, 91, 993-1000.	2.2	69
25	Landscape heterogeneity and disease spread: experimental approaches with a plant pathogen. , 2011, 21, 321-328.		65
26	Host Diversity Can Reduce Potato Late Blight Severity for Focal and General Patterns of Primary Inoculum. Phytopathology, 2000, 90, 1307-1312.	2.2	63
27	Development of Crown Rust Epidemics in Genetically Diverse Oat Populations: Effect of Genotype Unit Area. Phytopathology, 1985, 75, 607.	2.2	62
28	Associations and genetics of three components of slow rusting in leaf rust of wheat. Euphytica, 1993, 68, 99-109.	1.2	61
29	Effects of Wheat Cultivar Mixtures on Epidemic Progression of Septoria Tritici Blotch and Pathogenicity of Mycosphaerella graminicola. Phytopathology, 2002, 92, 617-623.	2.2	60
30	Working with Resource-Poor Farmers to Manage Plant Diseases. Plant Disease, 2001, 85, 684-695.	1.4	58
31	Analysis of Factors Affecting Disease Increase and Spread in Mixtures of Immune and Susceptible Plants in Computer-Simulated Epidemics. Phytopathology, 1986, 76, 832.	2.2	56
32	Effect of Host Genotype Unit Area on Development of Focal Epidemics of Bean Rust and Common Maize Rust in Mixtures of Resistant and Susceptible Plants. Phytopathology, 1986, 76, 895.	2.2	55
33	Using Restriction Fragment Length Polymorphisms to Assess Temporal Variation and Estimate the Number of Ascospores that Initiate Epidemics in Field Populations of Mycosphaerella graminicola. Phytopathology, 2001, 91, 1011-1017.	2.2	54
34	Influence of plant spatial patterns on disease dynamics, plant competition and grain yield in genetically diverse wheat populations. Agriculture, Ecosystems and Environment, 1991, 35, 1-12.	5.3	51
35	A population-level invasion by transposable elements triggers genome expansion in a fungal pathogen. ELife, 2021, 10, .	6.0	49
36	Host-pathogen relationship of geographically diverse isolates of Septoria tritici and wheat cultivars. Plant Pathology, 1995, 44, 838-847.	2.4	47

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37	Using mixing ability analysis from two-way cultivar mixtures to predict the performance of cultivars in complex mixtures. Field Crops Research, 2000, 68, 121-132.	5.1	47
38	Evolution of a pathogen population in host mixtures: simple raceâ€"complex race competition. Plant Pathology, 1996, 45, 440-453.	2.4	46
39	Methods for estimating epidemiological effects of quantitative resistance to plant diseases. Theoretical and Applied Genetics, 1984, 67, 219-230.	3.6	45
40	The role of selection on the genetic structure of pathogen populations: Evidence from field experiments with Mycosphaerella graminicola on wheat. Euphytica, 1996, 92, 73-80.	1.2	45
41	Multi-location wheat stripe rust QTL analysis: genetic background and epistatic interactions. Theoretical and Applied Genetics, 2015, 128, 1307-1318.	3.6	45
42	Importance of Autoinfection to the Epidemiology of Polycyclic Foliar Disease. Phytopathology, 2009, 99, 1116-1120.	2.2	43
43	Primary Disease Gradients of Wheat Stripe Rust in Large Field Plots. Phytopathology, 2005, 95, 983-991.	2.2	42
44	A Modification of Gregory's Model For Describing Plant Disease Gradients. Phytopathology, 1985, 75, 930.	2.2	41
45	Computerized Simulation of Crown Rust Epidemics in Mixtures of Immune and Susceptible Oat Plants with Different Genotype Unit Areas and Spatial Distributions of Initial Disease. Phytopathology, 1986, 76, 590.	2.2	41
46	Sexual reproduction facilitates the adaptation of parasites to antagonistic host environments: Evidence from empirical study in the wheat-Mycosphaerella graminicola system. International Journal for Parasitology, 2007, 37, 861-870.	3.1	40
47	Mixing ability analysis of wheat cultivar mixtures under diseased and nondiseased conditions. Theoretical and Applied Genetics, 1990, 80, 313-320.	3.6	39
48	Evolution of a pathogen population in host mixtures: rate of emergence of complex races. Theoretical and Applied Genetics, 1997, 94, 991-999.	3.6	39
49	Effect of wheat cultivar mixtures on populations of Puccinia striiformis races. Plant Pathology, 1994, 43, 917-930.	2.4	38
50	Aerial Dispersal and Multiple-Scale Spread of Epidemic Disease. EcoHealth, 2009, 6, 546-552.	2.0	38
51	Effect of Host Genotype Unit Area on Epidemic Development of Crown Rust Following Focal and General Inoculations of Mixtures of Immune and Susceptible Oat Plants. Phytopathology, 1985, 75, 1141.	2.2	38
52	Pyramiding and Validation of Quantitative Trait Locus (QTL) Alleles Determining Resistance to Barley Stripe Rust. Crop Science, 2003, 43, 2234-2239.	1.8	37
53	The Effects of Dispersal Gradient and Pathogen Life Cycle Components on Epidemic Velocity in Computer Simulations. Phytopathology, 2005, 95, 992-1000.	2.2	35
54	Influence of Number of Host Genotype Units on the Effectiveness of Host Mixtures for Disease Control: A Modeling Approach. Phytopathology, 1988, 78, 1087.	2.2	35

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55	Influence of barley variety mixtures on severity of scald and net blotch and on yield *. Plant Pathology, 1994, 43, 356-361.	2.4	34
56	Estimation of Rates of Recombination and Migration in Populations of Plant Pathogensâ€"A Reply. Phytopathology, 2000, 90, 324-326.	2.2	34
57	Velocity of Spread of Wheat Stripe Rust Epidemics. Phytopathology, 2005, 95, 972-982.	2.2	33
58	Evidence of Selection for Fungicide Resistance in <i>Zymoseptoria tritici</i> Populations on Wheat in Western Oregon. Plant Disease, 2016, 100, 483-489.	1.4	33
59	Frequency of Sexual Reproduction by Mycosphaerella graminicola on Partially Resistant Wheat Cultivars. Phytopathology, 2002, 92, 1175-1181.	2.2	31
60	Degree of host susceptibility in the initial disease outbreak influences subsequent epidemic spread. Journal of Applied Ecology, 2014, 51, 1622-1630.	4.0	31
61	Probability of Mutation to Multiple Virulence and Durability of Resistance Gene Pyramids: Further Comments.. Phytopathology, 1991, 81, 240-242.	2.2	29
62	Effect of genotype unit number and spatial arrangement on severity of yellow rust in wheat cultivar mixtures. Plant Pathology, 1996, 45, 215-222.	2.4	28
63	Epidemiological Effect of Gene Deployment Strategies on Bacterial Blight of Rice. Phytopathology, 1997, 87, 66-70.	2.2	28
64	Wheat Leaf Rust Severity as Affected by Plant Density and Species Proportion in Simple Communities of Wheat and Wild Oats. Phytopathology, 1998, 88, 708-714.	2.2	28
65	Initial epidemic area is strongly associated with the yearly extent of soybean rust spread in North America. Biological Invasions, 2013, 15, 1431-1438.	2.4	28
66	Effects of Planting Density and the Composition of Wheat Cultivar Mixtures on Stripe Rust: An Analysis Taking into Account Limits to the Replication of Controls. Phytopathology, 2000, 90, 1313-1321.	2.2	27
67	DISEASE, FREQUENCY-DEPENDENT SELECTION, AND GENETIC POLYMORPHISMS: EXPERIMENTS WITH STRIPE RUST AND WHEAT. Evolution; International Journal of Organic Evolution, 2000, 54, 406-415.	2.3	27
68	Influential disease foci in epidemics and underlying mechanisms: a field experiment and simulations. , 2014, 24, 1854-1862.		27
69	Effect of Plant Age and Leaf Position on Susceptibility to Wheat Stripe Rust. Phytopathology, 2017, 107, 412-417.	2.2	26
70	First Report of Resistance to QoI Fungicides in North American Populations of <i>Zymoseptoria tritici</i>, Causal Agent of Septoria Tritici Blotch of Wheat. Plant Disease, 2013, 97, 1511-1511.	1.4	26
71	Effect of two-component cultivar mixtures and yellow rust on yield and yield components of wheat. Plant Pathology, 1997, 46, 566-580.	2.4	22
72	Spatial scaling relationships for spread of disease caused by a windâ€dispersed plant pathogen. Ecosphere, 2012, 3, 1-10.	2.2	22

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73	Path coefficient analysis of the effects of stripe rust and cultivar mixtures on yield and yield components of winter wheat. Theoretical and Applied Genetics, 1996, 92, 666-672.	3.6	21
74	Specificity of Incomplete Resistance to <i>Mycosphaerella graminicola</i> in Wheat. Phytopathology, 2008, 98, 555-561.	2.2	21
75	Effect of plot geometry on epidemic velocity of wheat yellow rust. Plant Pathology, 2009, 58, 370-377.	2.4	21
76	Primary Disease Gradients of Bacterial Blight of Rice. Phytopathology, 1999, 89, 64-67.	2.2	19
77	Invasiveness of plant pathogens depends on the spatial scale of host distribution. Ecological Applications, 2016, 26, 1238-1248.	3.8	19
78	Consequences of Long-Distance Dispersal for Epidemic Spread: Patterns, Scaling, and Mitigation. Plant Disease, 2019, 103, 177-191.	1.4	19
79	Variation for aggressiveness within and between lineages of Xanthomonas oryzae pv. oryzae. Plant Pathology, 2002, 51, 163-168.	2.4	18
80	Disentangling the influence of livestock vs. farm density on livestock disease epidemics. Ecosphere, 2018, 9, e02294.	2.2	18
81	Effects of competition on resistance gene polymorphism in a plant/pathogen system. Heredity, 2000, 85, 393-400.	2.6	17
82	Interaction effects of two biological control organisms on resistant and susceptible weed biotypes of Chondrilla juncea in western North America. Biological Control, 2009, 50, 50-59.	3.0	16
83	Use of the Modified Gregory Model to Describe Primary Disease Gradients of Wheat Leaf Rust Produced From Area Sources of Inoculum. Phytopathology, 1989, 79, 241.	2.2	16
84	Local dispersal of Puccinia striiformis f. sp. tritici from isolated source lesions. Plant Pathology, 2017, 66, 28-37.	2.4	14
85	Phytoplankton biodiversity and the inverted paradox. ISME Communications, 2021, 1, .	4.2	14
86	Effects of stripe rust on the evolution of genetically diverse wheat populations. Theoretical and Applied Genetics, 1993, 85-85, 809-821.	3.6	13
87	Quantitative trait loci analysis for resistance to Cephalosporium stripe, a vascular wilt disease of wheat. Theoretical and Applied Genetics, 2011, 122, 1339-1349.	3.6	13
88	Cropping system diversification for food production in Mindanao rubber plantations: a rice cultivar mixture and rice intercropped with mungbean. PeerJ, 2017, 5, e2975.	2.0	12
89	TCAP FACâ€WIN6 Elite Barley GWAS Panel QTL. I. Barley Stripe Rust Resistance QTL in Facultative and Winter Sixâ€Rowed Malt Barley Breeding Programs Identified via GWAS. Crop Science, 2018, 58, 103-119.	1.8	12
90	Registration of the BISON Genetic Stocks in Hordeum vulgare L.. Journal of Plant Registrations, 2011, 5, 135-140.	0.5	11

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91	Biology and control of cephalosporium stripe of wheat. Plant Pathology, 2014, 63, 1207-1217.	2.4	11
92	Outbreak propagule pressure influences the landscape spread of a wind-dispersed, epidemic-causing, plant pathogen. Landscape Ecology, 2015, 30, 2111-2119.	4.2	11
93	Reduced Virulence of Azoxystrobin-Resistant <i>Zymoseptoria tritici</i> Populations in Greenhouse Assays. Phytopathology, 2016, 106, 884-889.	2.2	11
94	Temporal Dynamics and Spatial Variation of Azoxystrobin and Propiconazole Resistance in <i>Zymoseptoria tritici</i>: A Hierarchical Survey of Commercial Winter Wheat Fields in the Willamette Valley, Oregon. Phytopathology, 2017, 107, 345-352.	2.2	11
95	Baseline and Temporal Changes in Sensitivity of <i>Zymoseptoria tritici</i> Isolates to Benzovindiflupyr in Oregon, U.S.A., and Cross-Sensitivity to Other SDHI Fungicides. Plant Disease, 2021, 105, 169-174.	1.4	10
96	Lack of a synergistic interaction between ozone and wheat leaf rust in wheat swards. Environmental and Experimental Botany, 1999, 41, 195-207.	4.2	9
97	Identification of Cephalosporium stripe resistance quantitative trait loci in two recombinant inbred line populations of winter wheat. Theoretical and Applied Genetics, 2015, 128, 329-341.	3.6	9
98	Variable competitive effects of fungicide resistance in field experiments with a plant pathogenic fungus. Ecological Applications, 2017, 27, 1305-1316.	3.8	9
99	Sensitivity variation and cross-resistance of Zymoseptoria tritici to azole fungicides in North America. European Journal of Plant Pathology, 2017, 151, 269.	1.7	9
100	Genetic structure and population diversity in the wheat sharp eyespot pathogenRhizoctonia cerealisin the Willamette Valley, Oregon, USA. Plant Pathology, 2020, 69, 101-111.	2.4	9
101	Sensitivity of Wheat Genotypes to a Toxic Fraction Produced by Cephalosporium gramineum and Correlation with Disease Susceptibility. Phytopathology, 2001, 91, 702-707.	2.2	8
102	A Hydroponic Seedling Assay for Resistance to Cephalosporium Stripe of Wheat. Plant Disease, 1998, 82, 1126-1131.	1.4	7
103	Number of genes controlling slow rusting resistance to leaf rust in five spring wheat cultivars. Annals of Applied Biology, 2004, 145, 91-94.	2.5	7
104	The effect of diversity and spatial arrangement on biomass of agricultural cultivars and native plant species. Basic and Applied Ecology, 2007, 8, 521-532.	2.7	7
105	Diversifying variety for the control of Rice Blast in China. Biodiversity, 2001, 2, 10-14.	1.1	6
106	Impact of density and disease on frequency-dependent selection and genetic polymorphism: experiments with stripe rust and wheat. Evolutionary Ecology, 2008, 22, 637-657.	1.2	6
107	Frequency of Sexual Recombination by <i>Mycosphaerella graminicola</i> in Mild and Severe Epidemics. Phytopathology, 2008, 98, 752-759.	2.2	6
108	The Study of Plant Disease Epidemics. Hortscience: A Publication of the American Society for Hortcultural Science, 2009, 44, 2065b-2065.	1.0	6

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109	A Genome-Wide Association Study of Resistance to <i>Puccinia striiformis</i> f. sp. <i>hordei</i> and <i>P. graminis</i> f. sp. <i>tritici</i> in Barley and Development of Resistant Germplasm. Phytopathology, 2020, 110, 1082-1092.	2.2	5
110	Relationship between Incidence of Cephalosporium Stripe and Yield Loss in Winter Wheat. International Journal of Agronomy, 2012, 2012, 1-9.	1.2	4
111	Delays in Epidemic Outbreak Control Cost Disproportionately Large Treatment Footprints to Offset. Pathogens, 2022, 11, 393.	2.8	4
112	Dispersal kernels may be scalable: Implications from a plant pathogen. Journal of Biogeography, 2019, 46, 2042-2055.	3.0	3
113	Path coefficient analysis of the effects of stripe rust and cultivar mixtures on yield and yield components of winter wheat. Theoretical and Applied Genetics, 1996, 92, 666-672.	3.6	3
114	Combined effects of disease and competition on plant fitness. Canadian Journal of Botany, 2000, 78, 646-654.	1.1	3
115	Methods for Screening Wheat Genotypes for Resistance to Sharp Eyespot in the Field and Greenhouse. Plant Disease, 2020, 104, 3192-3196.	1.4	2
116	Comparing the efficacy of control strategies for infectious disease outbreaks using field and simulation studies. Ecological Applications, 2022, , e2631.	3.8	1