Robert H Proctor

List of Publications by Citations

89 papers	6,035 citations	37 h-index	77 g-index
92 ext. papers	7,253 ext. citations	4.6 avg, IF	5.43 L-index

#	Paper	IF	Citations
89	Comparative genomics reveals mobile pathogenicity chromosomes in Fusarium. *Nature*, **2010**, 464, 367-73	36.4	1085
88	Deciphering the cryptic genome: genome-wide analyses of the rice pathogen Fusarium fujikuroi reveal complex regulation of secondary metabolism and novel metabolites. *PLoS Pathogens*, **2013**, 9, e1003475	7.6	321
87	Co-expression of 15 contiguous genes delineates a fumonisin biosynthetic gene cluster in Gibberella moniliformis. *Fungal Genetics and Biology*, **2003**, 38, 237-49	3.9	308
86	A polyketide synthase gene required for biosynthesis of fumonisin mycotoxins in Gibberella fujikuroi mating population A. *Fungal Genetics and Biology*, **1999**, 27, 100-12	3.9	299
85	Fusarium pathogenomics. *Annual Review of Microbiology*, **2013**, 67, 399-416	17.5	294
84	Phylogenetic analyses of RPB1 and RPB2 support a middle Cretaceous origin for a clade comprising all agriculturally and medically important fusaria. *Fungal Genetics and Biology*, **2013**, 52, 20-31	3.9	254
83	Characterization of four clustered and coregulated genes associated with fumonisin biosynthesis in Fusarium verticillioides. *Fungal Genetics and Biology*, **2001**, 34, 155-65	3.9	191
82	Genes, gene clusters, and biosynthesis of trichothecenes and fumonisins in Fusarium. *Toxin Reviews* , **2009**, 28, 198-215	2.3	181
81	One fungus, one name: defining the genus Fusarium in a scientifically robust way that preserves longstanding use. *Phytopathology*, **2013**, 103, 400-8	3.8	155
80	The Fusarium verticillioides FUM gene cluster encodes a Zn(II)2Cys6 protein that affects FUM gene expression and fumonisin production. *Eukaryotic Cell*, **2007**, 6, 1210-8		153
79	Evidence that a secondary metabolic biosynthetic gene cluster has grown by gene relocation during evolution of the filamentous fungus Fusarium. *Molecular Microbiology*, **2009**, 74, 1128-42	4.1	145
78	Transformation-mediated complementation of a FUM gene cluster deletion in Fusarium verticillioides restores both fumonisin production and pathogenicity on maize seedlings. *Molecular Plant-Microbe Interactions*, **2008**, 21, 87-97	3.6	139
77	Inactivation of a cytochrome P-450 is a determinant of trichothecene diversity in Fusarium species. *Fungal Genetics and Biology*, **2002**, 36, 224-33	3.9	136
76	The genetic basis for 3-ADON and 15-ADON trichothecene chemotypes in Fusarium. *Fungal Genetics and Biology*, **2011**, 48, 485-95	3.9	135
75	Discontinuous distribution of fumonisin biosynthetic genes in the Gibberella fujikuroi species complex. *Mycological Research*, **2004**, 108, 815-22		128
74	FvVE1 regulates filamentous growth, the ratio of microconidia to macroconidia and cell wall formation in Fusarium verticillioides. *Molecular Microbiology*, **2006**, 62, 1418-32	4.1	118
73	Fumonisin production in the maize pathogen Fusarium verticillioides: genetic basis of naturally occurring chemical variation. *Journal of Agricultural and Food Chemistry*, **2006**, 54, 2424-30	5.7	110

72	Identification of gene clusters associated with fusaric acid, fusarin, and perithecial pigment production in Fusarium verticillioides. *Fungal Genetics and Biology*, **2012**, 49, 521-32	3.9	98
71	Evolution of structural diversity of trichothecenes, a family of toxins produced by plant pathogenic and entomopathogenic fungi. *PLoS Pathogens*, **2018**, 14, e1006946	7.6	90
70	A fumonisin biosynthetic gene cluster in Fusarium oxysporum strain O-1890 and the genetic basis for B versus C fumonisin production. *Fungal Genetics and Biology*, **2008**, 45, 1016-26	3.9	90
69	Restoration of wild-type virulence to Tri5 disruption mutants of Gibberella zeae via gene reversion and mutant complementation. *Microbiology (United Kingdom)*, **1997**, 143 (Pt 8), 2583-2591	2.9	89
68	Comparative "Omics" of the Fusarium fujikuroi Species Complex Highlights Differences in Genetic Potential and Metabolite Synthesis. *Genome Biology and Evolution*, **2016**, 8, 3574-3599	3.9	81
67	Birth, death and horizontal transfer of the fumonisin biosynthetic gene cluster during the evolutionary diversification of Fusarium. *Molecular Microbiology*, **2013**, 90, 290-306	4.1	72
66	Identification of a 12-gene Fusaric Acid Biosynthetic Gene Cluster in Fusarium Species Through Comparative and Functional Genomics. *Molecular Plant-Microbe Interactions*, **2015**, 28, 319-32	3.6	67
65	Characterization of a fusarium 2-gene cluster involved in trichothecene C-8 modification. *Journal of Agricultural and Food Chemistry*, **2003**, 51, 7936-44	5.7	63
64	FUM13 encodes a short chain dehydrogenase/reductase required for C-3 carbonyl reduction during fumonisin biosynthesis in Gibberella moniliformis. *Journal of Agricultural and Food Chemistry*, **2003**, 51, 3000-6	5.7	62
63	Fusarium Tri4 encodes a multifunctional oxygenase required for trichothecene biosynthesis. *Canadian Journal of Microbiology*, **2006**, 52, 636-42	3.2	59
62	Variation in Fumonisin and Ochratoxin Production Associated with Differences in Biosynthetic Gene Content in Aspergillus niger and A. welwitschiae Isolates from Multiple Crop and Geographic Origins. *Frontiers in Microbiology*, **2016**, 7, 1412	5.7	51
61	Variation in the fumonisin biosynthetic gene cluster in fumonisin-producing and nonproducing black aspergilli. *Fungal Genetics and Biology*, **2014**, 73, 39-52	3.9	49
60	Fusarium sibiricum sp. nov, a novel type A trichothecene-producing Fusarium from northern Asia closely related to F. sporotrichioides and F. langsethiae. *International Journal of Food Microbiology*, **2011**, 147, 58-68	5.8	48
59	Marasas et al. 1984 "Toxigenic Fusarium Species: Identity and Mycotoxicology" revisited. *Mycologia*, **2018**, 110, 1058-1080	2.4	48
58	Insights into natural products biosynthesis from analysis of 490 polyketide synthases from Fusarium. *Fungal Genetics and Biology*, **2016**, 89, 37-51	3.9	46
57	Genetic diversity and trichothecene chemotypes of the Fusarium graminearum clade isolated from maize in Nepal and identification of a putative new lineage. *Fungal Biology*, **2011**, 115, 38-48	2.8	46
56	FUM9 is required for C-5 hydroxylation of fumonisins and complements the meitotically defined Fum3 locus in Gibberella moniliformis. *Applied and Environmental Microbiology*, **2003**, 69, 6935-7	4.8	46
55	Analysis of aberrant virulence of Gibberella zeae following transformation-mediated complementation of a trichothecene-deficient (Tri5) mutant. *Microbiology (United Kingdom)*, **2000**, 146 (Pt 8), 2059-2068	2.9	42

54	Phylogenomic Analysis of a 55.1-kb 19-Gene Dataset Resolves a Monophyletic that Includes the Species Complex. *Phytopathology*, **2021**, 111, 1064-1079	3.8	39
53	The geographic distribution and complex evolutionary history of the NX-2 trichothecene chemotype from Fusarium graminearum. *Fungal Genetics and Biology*, **2016**, 95, 39-48	3.9	38
52	Variation in secondary metabolite production potential in the Fusarium incarnatum-equiseti species complex revealed by comparative analysis of 13 genomes. *BMC Genomics*, **2019**, 20, 314	4.5	37
51	A polyphasic approach for characterization of a collection of cereal isolates of the Fusarium incarnatum-equiseti species complex. *International Journal of Food Microbiology*, **2016**, 234, 24-35	5.8	36
50	Heterologous expression of two trichothecene P450 genes in Fusarium verticillioides. *Canadian Journal of Microbiology*, **2006**, 52, 220-6	3.2	35
49	Differential Retention of Gene Functions in a Secondary Metabolite Cluster. *Molecular Biology and Evolution*, **2017**, 34, 2002-2015	8.3	32
48	No to : Phylogenomic and Practical Reasons for Continued Inclusion of the Fusarium solani Species Complex in the Genus. *MSphere*, **2020**, 5,	5	32
47	Population genetic structure and mycotoxin potential of the wheat crown rot and head blight pathogen Fusarium culmorum in Algeria. *Fungal Genetics and Biology*, **2017**, 103, 34-41	3.9	31
46	Complementary host–pathogen genetic analyses of the role of fumonisins in the Zea mays–Gibberella moniliformis interaction. *Physiological and Molecular Plant Pathology*, **2007**, 70, 149-160	2.6	30
45	Fusarium mycotoxins: a trans-disciplinary overview. *Canadian Journal of Plant Pathology*, **2018**, 40, 161-171	1.6	27
44	Fusarium agapanthi sp. nov., a novel bikaverin and fusarubin-producing leaf and stem spot pathogen of Agapanthus praecox (African lily) from Australia and Italy. *Mycologia*, **2016**, 108, 981-992	2.4	27
43	Biosynthetic and genetic relationships of B-series fumonisins produced by Gibberella fujikuroi mating population A. *Natural Toxins*, **1999**, 7, 251-8		22
42	Two Horizontally Transferred Xenobiotic Resistance Gene Clusters Associated with Detoxification of Benzoxazolinones by Fusarium Species. *PLoS ONE*, **2016**, 11, e0147486	3.7	20
41	Production and Role of Hormones During Interaction of Species With Maize (L.) Seedlings. *Frontiers in Plant Science*, **2018**, 9, 1936	6.2	20
40	Effect of deletion of a trichothecene toxin regulatory gene on the secondary metabolism transcriptome of the saprotrophic fungus Trichoderma arundinaceum. *Fungal Genetics and Biology*, **2018**, 119, 29-46	3.9	18
39	Synergistic Phytotoxic Effects of Culmorin and Trichothecene Mycotoxins. *Toxins*, **2019**, 11,	4.9	16
38	Karyotype evolution in. *IMA Fungus*, **2018**, 9, 13-26	6.8	15
37	Reducing production of fumonisin mycotoxins in Fusarium verticillioides by RNA interference. *Mycotoxin Research*, **2018**, 34, 29-37	4	14

36	Fusarium algeriense, sp. nov., a novel toxigenic crown rot pathogen of durum wheat from Algeria is nested in the Fusarium burgessii species complex. *Mycologia*, **2017**, 109, 935-950	2.4	13
35	Variation in type A trichothecene production and trichothecene biosynthetic genes in Fusarium goolgardi from natural ecosystems of Australia. *Toxins*, **2015**, 7, 4577-94	4.9	13
34	Fumonisins B, A and C profile and masking in Fusarium verticillioides strains on fumonisin-inducing and maize-based media. *International Journal of Food Microbiology*, **2012**, 159, 93-100	5.8	13
33	Botrydial and botcinins produced by Botrytis cinerea regulate the expression of Trichoderma arundinaceum genes involved in trichothecene biosynthesis. *Molecular Plant Pathology*, **2016**, 17, 1017-31	5.7	12
32	Role of Trichoderma arundinaceum tri10 in regulation of terpene biosynthetic genes and in control of metabolic flux. *Fungal Genetics and Biology*, **2019**, 122, 31-46	3.9	12
31	Tricarballylic ester formation during biosynthesis of fumonisin mycotoxins in. *Mycology*, **2013**, 4, 179-186	3.7	11
30	Fusarium praegraminearum sp. nov., a novel nivalenol mycotoxin-producing pathogen from New Zealand can induce head blight on wheat. *Mycologia*, **2016**, 108, 1229-1239	2.4	10
29	Identification and distribution of gene clusters required for synthesis of sphingolipid metabolism inhibitors in diverse species of the filamentous fungus Fusarium. *BMC Genomics*, **2020**, 21, 510	4.5	10
28	arabinanase (Arb93B) Enhances Wheat Head Blight Susceptibility by Suppressing Plant Immunity. *Molecular Plant-Microbe Interactions*, **2019**, 32, 888-898	3.6	10
27	Molecular systematics of two sister clades, the Fusarium concolor and F. babinda species complexes, and the discovery of a novel microcycle macroconidium-producing species from South Africa. *Mycologia*, **2018**, 110, 1189-1204	2.4	10
26	Mycotoxin Production in According to Contemporary Species Concepts. *Annual Review of Phytopathology*, **2021**, 59, 373-402	10.8	10
25	, sp. nov., a member of the species complex recovered from pseudoflowers on yellow-eyed grass (spp.) from Guyana. *Mycologia*, **2020**, 112, 39-51	2.4	9
24	Gain and loss of a transcription factor that regulates late trichothecene biosynthetic pathway genes in Fusarium. *Fungal Genetics and Biology*, **2020**, 136, 103317	3.9	9
23	A cytochrome P450 monooxygenase gene required for biosynthesis of the trichothecene toxin harzianum A in Trichoderma. *Applied Microbiology and Biotechnology*, **2019**, 103, 8087-8103	5.7	8
22	Requirement of Two Acyltransferases for 4- O-Acylation during Biosynthesis of Harzianum A, an Antifungal Trichothecene Produced by Trichoderma arundinaceum. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 723-734	5.7	8
21	Fusarium subtropicale, sp. nov., a novel nivalenol mycotoxin-producing species isolated from barley (Hordeum vulgare) in Brazil and sister to F. praegraminearum. *Mycologia*, **2018**, 110, 860-871	2.4	8
20	Heterothallic sexual reproduction in three canker-inducing tree pathogens within the Fusarium torreyae species complex. *Mycologia*, **2018**, 110, 710-725	2.4	8
19	Comparative Genomics and Transcriptomics During Sexual Development Gives Insight Into the Life History of the Cosmopolitan Fungus. *Frontiers in Microbiology*, **2019**, 10, 1247	5.7	7

18	Self-Protection against the Sphingolipid Biosynthesis Inhibitor Fumonisin B Is Conferred by a Cluster-Encoded Ceramide Synthase. *MBio*, **2020**, 11,	7.8	7
17	Genetic bases for variation in structure and biological activity of trichothecene toxins produced by diverse fungi. *Applied Microbiology and Biotechnology*, **2020**, 104, 5185-5199	5.7	7
16	MycoKey Round Table Discussions of Future Directions in Research on Chemical Detection Methods, Genetics and Biodiversity of Mycotoxins. *Toxins*, **2018**, 10,	4.9	7
15	An endophyte of (esparto or needle grass) from Tunisia is a novel species in the species complex. *Mycologia*, **2020**, 112, 792-807	2.4	5
14	A Meiotic Drive Element in the Maize Pathogen Fusarium verticillioides Is Located Within a 102 kb Region of Chromosome V. *G3: Genes, Genomes, Genetics*, **2016**, 6, 2543-52	3.2	5
13	Pseudoflowers produced by Fusarium xyrophilum on yellow-eyed grass (Xyris spp.) in Guyana: A novel floral mimicry system?. *Fungal Genetics and Biology*, **2020**, 144, 103466	3.9	5
12	Design and validation of a robust multiplex polymerase chain reaction assay for idiomorph within the species complex. *Mycologia*, **2019**, 111, 772-781	2.4	4
11	Use of the volatile trichodiene to reduce Fusarium head blight and trichothecene contamination in wheat. *Microbial Biotechnology*, **2021**,	6.3	4
10	Targeting Fumonisin Biosynthetic Genes. *Methods in Molecular Biology*, **2017**, 1542, 201-214	1.4	3
9	Intrapopulation Antagonism Can Reduce the Growth and Aggressiveness of the Wheat Head Blight Pathogen. *Phytopathology*, **2020**, 110, 916-926	3.8	3
8	Trichoderma trichothecenes **2020**, 281-301		3
7	DNA sequence-based identification of Fusarium: A work in progress.. *Plant Disease*, **2021**,	1.5	3
6	Volatile Organic Compound Profile Fingerprints Using DART-MS Shows Species-Specific Patterns in Mycotoxin Producing Fungi.. *Journal of Fungi (Basel, Switzerland)*, **2021**, 8,	5.6	2
5	A-to-I mRNA editing controls spore death induced by a fungal meiotic drive gene in homologous and heterologous expression systems.. *Genetics*, **2022**,	4	2
4	Maternal mitochondrial inheritance in two Fusarium pathogens of prickly ash (Zanthoxylum bungeanum) in northern China. *Mycologia*, **2019**, 111, 235-243	2.4	1
3	A PCR method to identify ochratoxin A-producing Aspergillus westerdijkiae strains on dried and aged foods. *International Journal of Food Microbiology*, **2021**, 344, 109113	5.8	1
2	, sp. nov, a novel type A trichothecene-producing species from native grasses in a wetland ecosystem in Argentina. *Mycologia*, **2021**, 1-17	2.4	0
1	Genus-wide analysis of Fusarium polyketide synthases reveals broad chemical potential.. *Fungal Genetics and Biology*, **2022**, 103696	3.9	0