Franck E. Dayan

List of Publications by Year in Descending Order

201 papers	8,299 citations	48 h-index	83 g-index
211 ext. papers	9,503 ext. citations	4.1 avg, IF	6.38 L-index

#	Paper	IF	Citations
201	Biochemical and structural characterization of quizalofop-resistant wheat acetyl-CoA carboxylase.. *Scientific Reports*, **2022**, 12, 679	4.9	2
200	Low Temperature Delays Metabolism of Quizalofop in Resistant Winter Wheat and Three Annual Grass Weed Species. *Frontiers in Agronomy*, **2022**, 3,	4	1
199	An in-frame deletion mutation in the degron tail of auxin coreceptor confers resistance to the herbicide 2,4-D in .. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119,	11.5	3
198	Transgenerational Effect of Drought Stress and Sub-Lethal Doses of Quizalofop-p-ethyl: Decreasing Sensitivity to Herbicide and Biochemical Adjustment in Eragrostis plana. *Agriculture (Switzerland)*, **2022**, 12, 396	3	0
197	The search for new herbicide mechanisms of action: Is there a ‘holy grail’?. *Pest Management Science* , **2021**,	4.6	7
196	The Coaxium® Wheat Production System: A New Herbicide-Resistant System for Annual Grass Weed Control and Integrated Weed Management. *Outlooks on Pest Management*, **2021**, 32, 151-157	1.7	3
195	Absorption and Metabolism of Foliar-Applied Rimsulfuron in Potato (Solanum tuberosum L.), Common Lambsquarters (Chenopodium album L.) and Redroot Pigweed (Amaranthus retroflexus L.). *Potato Research*, **2021**, 64, 635	3.2	0
194	The Sorghum bicolor Root Exudate Sorgoleone Shapes Bacterial Communities and Delays Network Formation. *MSystems*, **2021**, 6,	7.6	4
193	Field Response of Green Ash (Fraxinus pennsylvanica) and Honey Locust (Gleditsia triacanthos) to Aminocyclopyrachlor1. *Journal of Environmental Horticulture*, **2021**, 39, 68-76	0.7	0
192	The Source of -Mediated Resistance to Soybean Aphids Is Located in the Stem. *Frontiers in Plant Science*, **2021**, 12, 689986	6.2	1
191	ACCase-inhibiting herbicides: mechanism of action, resistance evolution and stewardship. *Scientia Agricola*, **2021**, 78,	2.5	15
190	Biochemical Basis for the Time-of-Day Effect on Glufosinate Efficacy against. *Plants*, **2021**, 10,	4.5	1
189	Mechanisms of evolved herbicide resistance. *Journal of Biological Chemistry*, **2020**, 295, 10307-10330	5.4	117
188	A novel insight into the mode of action of glufosinate: how reactive oxygen species are formed. *Photosynthesis Research*, **2020**, 144, 361-372	3.7	10
187	Glufosinate enhances the activity of protoporphyrinogen oxidase inhibitors. *Weed Science*, **2020**, 68, 324-332	2	11
186	Arg-128-Leu target-site mutation in PPO2 evolves in wild poinsettia (Euphorbia heterophylla) with cross-resistance to PPO-inhibiting herbicides. *Weed Science*, **2020**, 68, 437-444	2	9
185	Glufosinate-ammonium: a review of the current state of knowledge. *Pest Management Science*, **2020**, 76, 3911-3925	4.6	32

184	Discovery for New Herbicide Sites of Action by Quantification of Plant Primary Metabolite and Enzyme Pools. *Engineering*, **2020**, 6, 509-514	9.7	15
183	Physiological Factors Affecting Uptake and Translocation of Glufosinate. *Journal of Agricultural and Food Chemistry*, **2020**, 68, 3026-3032	5.7	7
182	Cinmethylin controls multiple herbicide-resistant Lolium rigidum and its wheat selectivity is P450-based. *Pest Management Science*, **2020**, 76, 2601-2608	4.6	10
181	The Contribution of Romidepsin to the Herbicidal Activity of Biopesticide. *Journal of Natural Products*, **2020**, 83, 843-851	4.9	6
180	Metabolism-Based Herbicide Resistance, the Major Threat Among the Non-Target Site Resistance Mechanisms. *Outlooks on Pest Management*, **2020**, 31, 162-168	1.7	14
179	Sorghum Allelopathy for Sustainable Weed Management. *Progress in Biological Control*, **2020**, 263-288	0.6	1
178	Conservation and divergence in sorgoleone production of sorghum species. *Journal of Environmental Quality*, **2020**, 49, 368-377	3.4	2
177	Trp2027Cys mutation evolves in Digitaria insularis with cross-resistance to ACCase inhibitors. *Pesticide Biochemistry and Physiology*, **2020**, 164, 1-6	4.9	8
176	Evolution of EPSPS double mutation imparting glyphosate resistance in wild poinsettia (Euphorbia heterophylla L.). *PLoS ONE*, **2020**, 15, e0238818	3.7	3
175	A Trp574Leu Target-Site Mutation Confers Imazamox Resistance in Multiple Herbicide-Resistant Wild Poinsettia Populations from Brazil. *Agronomy*, **2020**, 10, 1057	3.6	5
174	A novel TIPT double mutation in EPSPS conferring glyphosate resistance in tetraploid Bidens subalternans. *Pest Management Science*, **2020**, 76, 95-102	4.6	20
173	The influence of winter annual grass litter on herbicide availability. *Weed Science*, **2019**, 67, 702-709	2	1
172	Current Status and Future Prospects in Herbicide Discovery. *Plants*, **2019**, 8,	4.5	64
171	Fate of Glyphosate during Production and Processing of Glyphosate-Resistant Sugar Beet (Beta vulgaris). *Journal of Agricultural and Food Chemistry*, **2019**, 67, 2061-2065	5.7	10
170	Role of Glutamine Synthetase Isogenes and Herbicide Metabolism in the Mechanism of Resistance to Glufosinate in L. spp. Biotypes from Oregon. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 8431-8440	5.7	26
169	Predicting herbicide movement across semi-permeable membranes using three phase partitioning. *Pesticide Biochemistry and Physiology*, **2019**, 159, 22-26	4.9	5
168	Reactive oxygen species trigger the fast action of glufosinate. *Planta*, **2019**, 249, 1837-1849	4.7	40
167	Herbicide Metabolism: Crop Selectivity, Bioactivation, Weed Resistance, and Regulation. *Weed Science*, **2019**, 67, 149-175	2	35

166	Interactions Between Natural Herbicides and Lipid Bilayers Mimicking the Plant Plasma Membrane. *Frontiers in Plant Science*, **2019**, 10, 329	6.2	9
165	Herbicide Mechanisms of Action and Resistance **2019**, 36-48		10
164	Pesticides Modes of Action and Resistance: A Perspective from the 2019 IUPAC Congress. *Outlooks on Pest Management*, **2019**, 30, 157-163	1.7	13
163	Assessment of the ecotoxicological impact of natural and synthetic triketone herbicides on the diversity and activity of the soil bacterial community using omic approaches. *Science of the Total Environment*, **2019**, 651, 241-249	10.2	15
162	Proline-106 EPSPS Mutation Imparting Glyphosate Resistance in Goosegrass (Eleusine indica) Emerges in South America. *Weed Science*, **2019**, 67, 48-56	2	15
161	Assessing Fitness Costs from a Herbicide-Resistance Management Perspective: A Review and Insight. *Weed Science*, **2019**, 67, 137-148	2	15
160	A novel genomic approach to herbicide and herbicide mode of action discovery. *Pest Management Science*, **2019**, 75, 314-317	4.6	14
159	A cytochrome P450 CYP71 enzyme expressed in Sorghum bicolor root hair cells participates in the biosynthesis of the benzoquinone allelochemical sorgoleone. *New Phytologist*, **2018**, 218, 616-629	9.8	17
158	Evidence for photolytic and microbial degradation processes in the dissipation of leptospermone, a natural triketone herbicide. *Environmental Science and Pollution Research*, **2018**, 25, 29848-29859	5.1	1
157	Natural Product-Based Chemical Herbicides **2018**, 153-165		4
156	Is There a Natural Route to the Next Generation of Herbicides?. *Outlooks on Pest Management*, **2018**, 29, 54-57	1.7	10
155	Reversing resistance to tembotrione in an Amaranthus tuberculatus (var. rudis) population from Nebraska, USA with cytochrome P450 inhibitors. *Pest Management Science*, **2018**, 74, 2296-2305	4.6	34
154	Herbicides **2018**, 1-9		3
153	Origins and structure of chloroplastic and mitochondrial plant protoporphyrinogen oxidases: implications for the evolution of herbicide resistance. *Pest Management Science*, **2018**, 74, 2226-2234	4.6	36
152	A (-)-kolavenyl diphosphate synthase catalyzes the first step of salvinorin A biosynthesis in Salvia divinorum. *Journal of Experimental Botany*, **2017**, 68, 1109-1122	7	21
151	Allelopathic Potential of Sorghum (Sorghum bicolor (L.) Moench) in Weed Control: A Comprehensive Review. *Advances in Agronomy*, **2017**, 145, 43-95	7.7	27
150	Resistance to glufosinate is proportional to phosphinothricin acetyltransferase expression and activity in LibertyLink( ) and WideStrike( ) cotton. *Planta*, **2016**, 243, 925-33	4.7	22
149	Environmental Metabolic Footprinting: A novel application to study the impact of a natural and a synthetic triketone herbicide in soil. *Science of the Total Environment*, **2016**, 566-567, 552-558	10.2	14

148	Low doses of glyphosate change the responses of soyabean to subsequent glyphosate treatments. *Weed Research*, **2016**, 56, 124-136	1.9	26
147	Nortriketones: Antimicrobial Trimethylated Acylphloroglucinols from Ma nuka (Leptospermum scoparium). *Journal of Natural Products*, **2016**, 79, 564-9	4.9	21
146	Ecotoxicological Impact of the Bioherbicide Leptospermone on the Microbial Community of Two Arable Soils. *Frontiers in Microbiology*, **2016**, 7, 775	5.7	20
145	Khellin and Visnagin, Furanochromones from Ammi visnaga (L.) Lam., as Potential Bioherbicides. *Journal of Agricultural and Food Chemistry*, **2016**, 64, 9475-9487	5.7	27
144	Glyphosate-Resistant and Conventional Canola (Brassica napus L.) Responses to Glyphosate and Aminomethylphosphonic Acid (AMPA) Treatment. *Journal of Agricultural and Food Chemistry*, **2016**, 64, 3508-13	5.7	14
143	Biochemical Markers and Enzyme Assays for Herbicide Mode of Action and Resistance Studies. *Weed Science*, **2015**, 63, 23-63	2	92
142	Photolysis of natural triketonic herbicides in water. *Water Research*, **2015**, 78, 28-36	12.5	16
141	EPSPS Gene Amplification in Glyphosate-Resistant Italian Ryegrass (Lolium perenne ssp. multiflorum) Populations from Arkansas (United States). *Journal of Agricultural and Food Chemistry*, **2015**, 63, 5885-93	5.7	31
140	Metabolic Profiling and Enzyme Analyses Indicate a Potential Role of Antioxidant Systems in Complementing Glyphosate Resistance in an Amaranthus palmeri Biotype. *Journal of Agricultural and Food Chemistry*, **2015**, 63, 9199-209	5.7	42
139	Concerted action of target-site mutations and high EPSPS activity in glyphosate-resistant junglerice (Echinochloa colona) from California. *Pest Management Science*, **2015**, 71, 996-1007	4.6	45
138	Biotechnology in Weed Control **2015**, 1-25		15
137	Sarmentine, a natural herbicide from Piper species with multiple herbicide mechanisms of action. *Frontiers in Plant Science*, **2015**, 6, 222	6.2	25
136	Discovery of New Herbicide Modes of Action with Natural Phytotoxins. *ACS Symposium Series*, **2015**, 79-92	0.4	12
135	Possible glyphosate tolerance mechanism in pitted morningglory (Ipomoea lacunosa L.). *Journal of Agricultural and Food Chemistry*, **2015**, 63, 1689-97	5.7	22
134	Roots of the invasive species Carduus nutans L. and C. acanthoides L. produce large amounts of aplotaxene, a possible allelochemical. *Journal of Chemical Ecology*, **2014**, 40, 276-84	2.7	9
133	Novel bacterial bioassay for a high-throughput screening of 4-hydroxyphenylpyruvate dioxygenase inhibitors. *Applied Microbiology and Biotechnology*, **2014**, 98, 7243-52	5.7	21
132	Natural compounds as next-generation herbicides. *Plant Physiology*, **2014**, 166, 1090-105	6.6	191
131	The Growing Need for Biochemical Bioherbicides. *ACS Symposium Series*, **2014**, 31-43	0.4	6

130	Evolution of resistance to phytoene desaturase and protoporphyrinogen oxidase inhibitors--state of knowledge. *Pest Management Science*, **2014**, 70, 1358-66	4.6	37
129	Herbicidal activity of formulated sorgoleone, a natural product of sorghum root exudate. *Pest Management Science*, **2014**, 70, 252-7	4.6	32
128	Involvement of facultative apomixis in inheritance of EPSPS gene amplification in glyphosate-resistant Amaranthus palmeri. *Planta*, **2014**, 239, 199-212	4.7	33
127	Novel bioassay for the discovery of inhibitors of the 2-C-methyl-D-erythritol 4-phosphate (MEP) and terpenoid pathways leading to carotenoid biosynthesis. *PLoS ONE*, **2014**, 9, e103704	3.7	13
126	In planta mechanism of action of leptospermone: impact of its physico-chemical properties on uptake, translocation, and metabolism. *Journal of Chemical Ecology*, **2013**, 39, 262-70	2.7	33
125	Clues to New Herbicide Mechanisms of Action from Natural Sources. *ACS Symposium Series*, **2013**, 203-215	0.4	8
124	Insight into the Structural Requirements of Protoporphyrinogen Oxidase Inhibitors: Molecular Docking and CoMFA of Diphenyl Ether, Isoxazole Phenyl, and Pyrazole Phenyl Ether. *Chinese Journal of Chemistry*, **2013**, 31, 1153-1158	4.9	8
123	Phytochemicals for Pest Management: Current Advances and Future Opportunities **2013**, 71-94		3
122	Validation of serine/threonine protein phosphatase as the herbicide target site of endothall. *Pesticide Biochemistry and Physiology*, **2012**, 102, 38-44	4.9	23
121	Chlorophyll fluorescence as a marker for herbicide mechanisms of action. *Pesticide Biochemistry and Physiology*, **2012**, 102, 189-197	4.9	93
120	In planta production of the highly potent resveratrol analogue pterostilbene via stilbene synthase and O-methyltransferase co-expression. *Plant Biotechnology Journal*, **2012**, 10, 269-83	11.6	40
119	Simulated Acid Rain Accelerates Litter Decomposition and Enhances the Allelopathic Potential of the Invasive Plant Wedelia trilobata (Creeping Daisy). *Weed Science*, **2012**, 60, 462-467	2	23
118	Natural products as sources for new pesticides. *Journal of Natural Products*, **2012**, 75, 1231-42	4.9	347
117	Tabanone, a New Phytotoxic Constituent of Cogongrass (Imperata cylindrica). *Weed Science*, **2012**, 60, 212-218	2	14
116	Oligofructans content and yield of yacon (Smallanthus sonchifolius) cultivated in Mississippi. *Scientia Horticulturae*, **2012**, 148, 83-88	4.1	7
115	Rationale for a natural products approach to herbicide discovery. *Pest Management Science*, **2012**, 68, 519-28	4.6	128
114	EPSPS gene amplification in glyphosate-resistant Italian ryegrass (Lolium perenne ssp. multiflorum) from Arkansas. *Pest Management Science*, **2012**, 68, 1223-30	4.6	130
113	Modes of action of microbially-produced phytotoxins. *Toxins*, **2011**, 3, 1038-64	4.9	74

112	Effects of the aglycone of ascaulitoxin on amino acid metabolism in Lemna paucicostata. *Pesticide Biochemistry and Physiology*, **2011**, 100, 41-50	4.9	25
111	Plant cell membrane as a marker for light-dependent and light-independent herbicide mechanisms of action. *Pesticide Biochemistry and Physiology*, **2011**, 101, 182-190	4.9	52
110	Manuka Oil, A Natural Herbicide with Preemergence Activity. *Weed Science*, **2011**, 59, 464-469	2	54
109	Porphyrins: One Ring in the Colors of Life. *American Scientist*, **2011**, 99, 236	2.7	21
108	Evaluation of the toxicity of Streptomyces aburaviensis (R9) extract towards various agricultural pests. *Agricultural Sciences*, **2011**, 02, 491-497	0.4	1
107	Herbicides as Probes in Plant Biology. *Weed Science*, **2010**, 58, 340-350	2	49
106	Alkylresorcinol synthases expressed in Sorghum bicolor root hairs play an essential role in the biosynthesis of the allelopathic benzoquinone sorgoleone. *Plant Cell*, **2010**, 22, 867-87	11.6	68
105	Alkylresorcinol biosynthesis in plants: new insights from an ancient enzyme family?. *Plant Signaling and Behavior*, **2010**, 5, 1286-9	2.5	36
104	Protoporphyrinogen Oxidase-Inhibiting Herbicides **2010**, 1733-1751		18
103	Synthesis and antitubercular activity of heterocycle substituted diphenyl ether derivatives. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2010**, 25, 730-6	5.6	12
102	Introduction to the Symposium on Nonherbicide Use of Herbicides. *Weed Science*, **2010**, 58, 323-323	2	
101	Natural Products for Weed Management in Organic Farming in the USA. *Outlooks on Pest Management*, **2010**, 21, 156-160	1.7	21
100	Sorgoleone. *Phytochemistry*, **2010**, 71, 1032-9	4	92
99	Biochemical and structural consequences of a glycine deletion in the alpha-8 helix of protoporphyrinogen oxidase. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2010**, 1804, 1548-56	4	44
98	The case against (-)-catechin involvement in allelopathy of Centaurea stoebe (spotted knapweed). *Plant Signaling and Behavior*, **2009**, 4, 422-4	2.5	19
97	Dynamic root exudation of sorgoleone and its in planta mechanism of action. *Journal of Experimental Botany*, **2009**, 60, 2107-17	7	77
96	Is (-)-catechin a novel weapon of spotted knapweed (Centaurea stoebe)?. *Journal of Chemical Ecology*, **2009**, 35, 141-53	2.7	69
95	Synthesis, antitubercular activity and docking study of novel cyclic azole substituted diphenyl ether derivatives. *European Journal of Medicinal Chemistry*, **2009**, 44, 492-500	6.8	69

94	Natural products in crop protection. *Bioorganic and Medicinal Chemistry*, **2009**, 17, 4022-34	3.4	735
93	Beta-triketone inhibitors of plant p-hydroxyphenylpyruvate dioxygenase: modeling and comparative molecular field analysis of their interactions. *Journal of Agricultural and Food Chemistry*, **2009**, 57, 5194-200	5.7	28
92	Mineralization of the allelochemical sorgoleone in soil. *Chemosphere*, **2009**, 76, 1041-7	8.4	38
91	Biological Activity of Allelochemicals **2009**, 361-384		25
90	Amicarbazone, a New Photosystem II Inhibitor. *Weed Science*, **2009**, 57, 579-583	2	42
89	The majority of in vitro macrophage activation exhibited by extracts of some immune enhancing botanicals is due to bacterial lipoproteins and lipopolysaccharides. *International Immunopharmacology*, **2008**, 8, 1023-32	5.8	55
88	A pathogenic fungi diphenyl ether phytotoxin targets plant enoyl (acyl carrier protein) reductase. *Plant Physiology*, **2008**, 147, 1062-71	6.6	38
87	A functional genomics investigation of allelochemical biosynthesis in Sorghum bicolor root hairs. *Journal of Biological Chemistry*, **2008**, 283, 3231-3247	5.4	71
86	Phytotoxic Eremophilanes from Ligularia macrophylla. *Journal of Agricultural and Food Chemistry*, **2007**, 55, 10656-63	5.7	26
85	Molecular and Biochemical Characterization of Novel Polyketide Synthases Likely to Be Involved in the Biosynthesis of Sorgoleone. *ACS Symposium Series*, **2007**, 141-151	0.4	1
84	p-Hydroxyphenylpyruvate dioxygenase is a herbicidal target site for beta-triketones from Leptospermum scoparium. *Phytochemistry*, **2007**, 68, 2004-14	4	81
83	Biosynthesis of salvinorin A proceeds via the deoxyxylulose phosphate pathway. *Phytochemistry*, **2007**, 68, 1872-81	4	38
82	NATURAL PRODUCTS FOR PEST MANAGEMENT **2007**, 209-251		2
81	Biosynthesis of lipid resorcinols and benzoquinones in isolated secretory plant root hairs. *Journal of Experimental Botany*, **2007**, 58, 3263-72	7	35
80	BIOCONTROL OF WEEDS WITH ALLELOPATHY: CONVENTIONAL AND TRANSGENIC APPROACHES **2007**, 75-85		10
79	Molecular and Biochemical Investigations of Sorgoleone Biosynthesis. *Recent Advances in Phytochemistry*, **2006**, 40, 157-177		
78	Characterization of a higher plant herbicide-resistant phytoene desaturase and its use as a selectable marker. *Plant Biotechnology Journal*, **2006**, 4, 263-73	11.6	35
77	A Functional Genomics Approach for the Identification of Genes Involved in the Biosynthesis of the Allelochemical Sorgoleone. *ACS Symposium Series*, **2006**, 265-276	0.4	5

76	Factors modulating the levels of the allelochemical sorgoleone in Sorghum bicolor. *Planta*, **2006**, 224, 339-46	4.7	82
75	Clues in the search for new herbicides **2006**, 63-83		8
74	Composition and Phytotoxic Activity of Nepeta pannonica L. Essential Oil. *Journal of Essential Oil Research*, **2005**, 17, 704-707	2.3	12
73	Melanin: dietary mucosal immune modulator from Echinacea and other botanical supplements. *International Immunopharmacology*, **2005**, 5, 637-47	5.8	40
72	Molluscicidal activity of vulgarone B from Artemisia douglasiana (Besser) against the invasive, alien, mollusc pest, Pomacea canaliculata (Lamarck). *International Journal of Pest Management*, **2005**, 51, 175-180	1.5	18
71	The potential for advances in crop allelopathy. *Outlooks on Pest Management*, **2005**, 16, 64-68	1.7	8
70	Hydrilla, the Perfect Aquatic Weed, Becomes More Noxious Than Ever. *Outlooks on Pest Management*, **2005**, 16, 277-282	1.7	10
69	Generation of reactive oxygen species by a novel anthraquinone derivative in the cyanobacterium Planktothrix perornata (Skuja). *Pesticide Biochemistry and Physiology*, **2005**, 81, 198-207	4.9	11
68	Chemistry of the lichen Hypogymnia physodes transplanted to an industrial region. *Journal of Chemical Ecology*, **2005**, 31, 2975-91	2.7	58
67	Molecular evolution of herbicide resistance to phytoene desaturase inhibitors in Hydrilla verticillata and its potential use to generate herbicide-resistant crops. *Pest Management Science*, **2005**, 61, 258-68	4.6	39
66	Patterns of essential oil relationships in Pimpinella (Umbelliferae) based on phylogenetic relationships using nuclear and chloroplast sequences. *Plant Genetic Resources: Characterisation and Utilisation*, **2005**, 3, 149-169	1	30
65	Inhibition of plant asparagine synthetase by monoterpene cineoles. *Plant Physiology*, **2005**, 137, 1487	6.6	5
64	Chemical Basis for Weed Suppressive Activity of Sorghum. *ACS Symposium Series*, **2005**, 59-70	0.4	3
63	Somatic mutation-mediated evolution of herbicide resistance in the nonindigenous invasive plant hydrilla (Hydrilla verticillata). *Molecular Ecology*, **2004**, 13, 3229-37	5.7	105
62	Physiological basis for resistance to diphenyl ether herbicides in common waterhemp (Amaranthus rudis). *Weed Science*, **2004**, 52, 333-338	2	21
61	Arbuscular mycorrhiza improves acclimatization and increases lignan content of micropropagated mayapple (Podophyllum peltatum L.). *Plant Science*, **2004**, 166, 23-29	5.3	22
60	New Herbicide Target Sites from Natural Compounds. *ACS Symposium Series*, **2004**, 151-160	0.4	2
59	Podophyllum peltatum possesses a beta-glucosidase with high substrate specificity for the aryltetralin lignan podophyllotoxin. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2003**, 1646, 157-63	4	10

58	United States Department of Agriculture-Agricultural Research Service research on natural products for pest management. *Pest Management Science*, **2003**, 59, 708-17	4.6	56
57	PSII inhibitory activity of resorcinolic lipids from Sorghum bicolor. *Journal of Natural Products*, **2003**, 66, 42-5	4.9	31
56	Activity of quinones on colletotrichum species. *Journal of Agricultural and Food Chemistry*, **2003**, 51, 3824-8	5.7	80
55	Chromatographic separation and in vitro activity of sorgoleone congeners from the roots of sorghum bicolor. *Journal of Agricultural and Food Chemistry*, **2003**, 51, 7589-95	5.7	59
54	Elucidation of the biosynthetic pathway of the allelochemical sorgoleone using retrobiosynthetic NMR analysis. *Journal of Biological Chemistry*, **2003**, 278, 28607-11	5.4	62
53	Physiological factors influencing the antifungal activity of zopfiellin. *Pesticide Biochemistry and Physiology*, **2002**, 73, 87-93	4.9	17
52	The inhibitory activity of natural products on plant p-hydroxyphenylpyruvate dioxygenase. *Phytochemistry*, **2002**, 60, 281-8	4	130
51	Phytotoxicity and volatile constituents from leaves of Callicarpa japonica Thunb. *Phytochemistry*, **2002**, 61, 37-40	4	37
50	Composition of the essential oil of Lepidium meyenii (Walp). *Phytochemistry*, **2002**, 61, 149-55	4	45
49	Aryltetralin Lignans Inhibit Plant Growth by Affecting the Formation of Mitotic Microtubular Organizing Centers. *Pesticide Biochemistry and Physiology*, **2002**, 72, 45-54	4.9	47
48	Bioactivation of the Fungal Phytotoxin 2,5-Anhydro-D-glucitol by Glycolytic Enzymesisan Essential Component of itsMechanism of Action. *Zeitschrift Fur Naturforschung - Section C Journal of Biosciences*, **2002**, 57, 645-653	1.7	8
47	Chemicals from nature for weed management. *Weed Science*, **2002**, 50, 138-151	2	194
46	Octan-1-ol / Water Partition Coefficients of p-benzo-and p-naphthoquinones corrected for pH effect. *Journal of Chemical Research*, **2002**, 2002, 518-519	0.6	6
45	The lignans of Podophyllum. *Studies in Natural Products Chemistry*, **2002**, 26, 149-182	1.5	18
44	Structural Diversity of Lichen Metabolites and Their Potential Use **2002**, 151-169		15
43	Bioactivation of the fungal phytotoxin 2,5-anhydro-D-glucitol by glycolytic enzymes is an essential component of its mechanism of action. *Zeitschrift Fur Naturforschung - Section C Journal of Biosciences*, **2002**, 57, 645-53	1.7	2
42	Strategies for Using Transgenes to Produce Allelopathic Crops1. *Weed Technology*, **2001**, 15, 826-834	1.4	50
41	High yield of podophyllotoxin from leaves of Podophyllum peltatum by in situ conversion of podophyllotoxin 4- O-beta-D-glucopyranoside. *Planta Medica*, **2001**, 67, 97-9	3.1	50

40	Chapter Twelve Crop Allelopathy: Enhancement through biotechnology. *Recent Advances in Phytochemistry*, **2001**, 257-274		6
39	Mode of Action, Localization of Production, Chemical Nature, and Activity of Sorgoleone: A Potent PSII Inhibitor in Sorghum spp. Root Exudates1. *Weed Technology*, **2001**, 15, 813-825	1.4	162
38	Phytotoxic and fungitoxic activities of the essential oil of kenaf (Hibiscus cannabinus L.) leaves and its composition. *Journal of Agricultural and Food Chemistry*, **2001**, 49, 3768-71	5.7	70
37	Synthesis, herbicidal activity, and mode of action of IR 5790. *Journal of Agricultural and Food Chemistry*, **2001**, 49, 2302-7	5.7	12
36	Lichens as a potential source of pesticides. *Outlooks on Pest Management*, **2001**, 12, 229-232		44
35	Searching for Rice Allelochemicals. *Agronomy Journal*, **2001**, 93, 16-20	2.2	86
34	Protoporphyrinogen Oxidase Inhibitors **2001**, 1529-1541		2
33	9,10-Anthraquinone Reduces the Photosynthetic Efficiency of Oscillatoria perornata and Modifies Cellular Inclusions. *International Journal of Plant Sciences*, **2000**, 161, 265-270	2.6	21
32	Predicting the activity of the natural phytotoxic diphenyl ether cyperine using Comparative Molecular Field Analysis. *Pest Management Science*, **2000**, 56, 717-722	4.6	9
31	Natural products as sources of herbicides: current status and future trends. *Weed Research*, **2000**, 40, 99-111	1.9	302
30	Podophyllotoxin. *Phytochemistry*, **2000**, 54, 115-20	4	306
29	Allelopathic Effects of Volatile Cineoles on Two Weedy Plant Species. *Journal of Chemical Ecology*, **2000**, 26, 303-313	2.7	176
28	Investigating the Mode of Action of Natural Phytotoxins. *Journal of Chemical Ecology*, **2000**, 26, 2079-2094	2.7	200
27	Behavior of sulfentrazone in ionic exchange resins, electrophoresis gels, and cation-saturated soils. *Weed Science*, **2000**, 48, 239-247	2	31
26	Inhibition of plant asparagine synthetase by monoterpene cineoles. *Plant Physiology*, **2000**, 123, 725-32	6.6	62
25	Natural products as sources for new mechanisms of herbicidal action. *Crop Protection*, **2000**, 19, 583-589	2.7	124
24	The phytotoxic lichen metabolite, usnic acid, is a potent inhibitor of plant p-hydroxyphenylpyruvate dioxygenase. *FEBS Letters*, **2000**, 480, 301-5	3.8	73
23	Composition and some biological activities of the essential oil of Callicarpa americana (L.). *Journal of Agricultural and Food Chemistry*, **2000**, 48, 3008-12	5.7	60

22	Measuring asparagine synthetase activity in crude plant extracts. *Journal of Agricultural and Food Chemistry*, **2000**, 48, 1692-6	5.7	16
21	Amino- and urea-substituted thiazoles inhibit photosynthetic electron transfer. *Journal of Agricultural and Food Chemistry*, **2000**, 48, 3689-93	5.7	22
20	Comparative phytotoxicity of artemisinin and several sesquiterpene analogues. *Phytochemistry*, **1999**, 50, 607-614	4	81
19	Dehydrozaluzanin C, a natural sesquiterpenolide, causes rapid plasma membrane leakage. *Phytochemistry*, **1999**, 52, 805-813	4	79
18	Phytotoxicity of Quassinoids: Physiological Responses and Structural Requirements. *Pesticide Biochemistry and Physiology*, **1999**, 65, 15-24	4.9	34
17	Phytotoxic lignans of Leucophyllum frutescens. *Natural Toxins*, **1999**, 7, 39-43		26
16	Joint action of natural and synthetic photosystem II inhibitors. *Pest Management Science*, **1999**, 55, 137-146		31
15	Thiol-dependent degradation of protoporphyrin IX by plant peroxidases. *FEBS Letters*, **1999**, 444, 227-30	3.8	19
14	Glutathione-dependent oxidative modification of protoporphyrin and other dicarboxylic porphyrins by mammalian and plant peroxidases. *Biochemical and Biophysical Research Communications*, **1999**, 259, 195-200	3.4	6
13	Structure-Activity Relationships of Diphenyl Ethers and Other Oxygen-Bridged Protoporphyrinogen Oxidase Inhibitors **1999**, 141-161		5
12	A new photosystem II electron transfer inhibitor from Sorghum bicolor. *Journal of Natural Products*, **1998**, 61, 927-30	4.9	107
11	A new photosystem II electron transfer inhibitor from sorghum bicolor. *Journal of Natural Products*, **1998**, 61, 1456	4.9	9
10	Horseradish peroxidase-dependent oxidation of deuteroporphyrin IX into chlorins. *Archives of Biochemistry and Biophysics*, **1998**, 351, 27-34	4.1	12
9	Inhibitory Activity of Sulfentrazone and Its Metabolic Derivatives on Soybean (Glycine max) Protoporphyrinogen Oxidase. *Journal of Agricultural and Food Chemistry*, **1998**, 46, 2024-2029	5.7	27
8	Effects of Isoxazole Herbicides on Protoporphyrinogen Oxidase and Porphyrin Physiology. *Journal of Agricultural and Food Chemistry*, **1997**, 45, 967-975	5.7	42
7	Selectivity and mode of action of carfentrazone-ethyl, a novel phenyl triazolinone herbicide. *Pest Management Science*, **1997**, 51, 65-73		60
6	Oxidation of porphyrinogens by horseradish peroxidase and formation of a green pyrrole pigment. *Biochemical and Biophysical Research Communications*, **1996**, 227, 195-9	3.4	15
5	Physiological Basis for Differential Sensitivity to Sulfentrazone by Sicklepod (Senna obtusifolia) and Coffee Senna (Cassia occidentalis). *Weed Science*, **1996**, 44, 12-17	2	47

4	Postemergence Activity of Sulfentrazone: Effects of Surfactants and Leaf Surfaces. *Weed Science*, **1996**, 44, 797-803	2	51
3	Natural Phytotoxins with Potential for Development in Weed Management Strategies143-154		
2	Herbicides, Cinmethylin		2
1	Herbicides, Carotenoid Biosynthesis Inhibitors		3