David R Gang

List of Publications by Year
in descending order

125 papers	9,588 citations	38742 50 h-index	38395 95 g-index
129 all docs	129 docs citations	129 times ranked	10943 citing authors

#	Article	IF	Citations
1	Accumulation of Salicylic Acid and Related Metabolites in Selaginella moellendorffii. Plants, 2022, 11, 461.	3.5	4
2	Root Exudates Alter the Expression of Diverse Metabolic, Transport, Regulatory, and Stress Response Genes in Rhizosphere Pseudomonas. Frontiers in Microbiology, 2021, 12, 651282.	3.5	58
3	The Evolution of Smoking and Intoxicant Plant Use in Ancient Northwestern North America. American Antiquity, 2021, 86, 715-733.	1.1	4
4	Changes in the Harpagide, Harpagoside, and Verbascoside Content of Field Grown Scrophularia lanceolata and Scrophularia marilandica in Response to Season and Shade. Metabolites, 2021, 11, 464.	2.9	2
5	Metabolomics-based analysis of miniature flask contents identifies tobacco mixture use among the ancient Maya. Scientific Reports, 2021, 11, 1590.	3.3	13
6	Untargeted Metabolomic Investigation of Wheat Infected with Stinking Smut Tilletia caries. Phytopathology, 2021, 111, 2343-2354.	2.2	1
7	Growth of â€˜Candidatus Liberibacter asiaticusâ€™ in a host-free microbial culture is associated with microbial community composition. Enzyme and Microbial Technology, 2020, 142, 109691.	3.2	7
8	An Ancient Residue Metabolomics-Based Method to Distinguish Use of Closely Related Plant Species in Ancient Pipes. Frontiers in Molecular Biosciences, 2020, 7, 133.	3.5	8
9	Organic Farming Sharpens Plant Defenses in the Field. Frontiers in Sustainable Food Systems, 2020, 4, .	3.9	11
10	Extractability, stability, and accumulation of nepetoidins in Ocimum basilicum L. leaves and cell cultures. Plant Cell, Tissue and Organ Culture, 2020, 143, 75-85.	2.3	4
11	Plant science decadal vision 2020â€“2030: Reimagining the potential of plants for a healthy and sustainable future. Plant Direct, 2020, 4, e00252.	1.9	26
12	Chronic Sublethal Aluminum Exposure and Avena fatua Caryopsis Colonization Influence Gene Expression of Fusarium avenaceum F.a.1. Frontiers in Microbiology, 2020, 11, 51.	3.5	2
13	Metabolomic Diversity and Identification of Antibacterial Activities of Bacteria Isolated From Marine Sediments in Hawaiâ€™i and Puerto Rico. Frontiers in Molecular Biosciences, 2020, 7, 23.	3.5	8
14	Controlled replication of â€˜ Candidatus Liberibacter asiaticus â€˜ DNA in citrus leaf discs. Microbial Biotechnology, 2020, 13, 747-759.	4.2	7
15	Host-free biofilm culture of â€œCandidatus Liberibacter asiaticus,â€•the bacterium associated with Huanglongbing. Biofilm, 2019, 1, 100005.	3.8	29
16	The infection of its insect vector by bacterial plant pathogen "Candidatus Liberibacter solanacearum" is associated with altered vector physiology. Enzyme and Microbial Technology, 2019, 129, 109358.	3.2	6
17	Physiochemical changes mediated by â€œCandidatus Liberibacter asiaticusâ€•in Asian citrus psyllids. Scientific Reports, 2019, 9, 16375.	3.3	13
18	Extracellular ATP Shapes a Defense-Related Transcriptome Both Independently and along with Other Defense Signaling Pathways. Plant Physiology, 2019, 179, 1144-1158.	4.8	99

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19	Dental calculus as a source of ancient alkaloids: Detection of nicotine by LC-MS in calculus samples from the Americas. Journal of Archaeological Science: Reports, 2018, 18, 509-515.	0.5	18
20	Production of methoxylated flavonoids in yeast using ring A hydroxylases and flavonoid O-methyltransferases from sweet basil. Applied Microbiology and Biotechnology, 2018, 102, 5585-5598.	3.6	15
21	Analyses of organic residue from a conical pipe from the Niles-Wolford Mound (33Pi3), Pickaway County, Ohio. Journal of Archaeological Science: Reports, 2018, 19, 658-668.	0.5	0
22	Biosynthetic Pathway and Metabolic Engineering of Plant Dihydrochalcones. Journal of Agricultural and Food Chemistry, 2018, 66, 2273-2280.	5.2	39
23	Porcine Breast Extracellular Matrix Hydrogel for Spatial Tissue Culture. International Journal of Molecular Sciences, 2018, 19, 2912.	4.1	15
24	Biomolecular archaeology reveals ancient origins of indigenous tobacco smoking in North American Plateau. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11742-11747.	7.1	36
25	Production of the antibiotic secondary metabolite solanapyrone A by the fungal plant pathogen Ascochyta rabiei during fruiting body formation in saprobic growth. Environmental Microbiology, 2017, 19, 1822-1835.	3.8	13
26	Functional photosystem I maintains proper energy balance during nitrogen depletion in Chlamydomonas reinhardtii, promoting triacylglycerol accumulation. Biotechnology for Biofuels, 2017, 10, 89.	6.2	19
27	A (â€“)-kolavenyl diphosphate synthase catalyzes the first step of salvinorin A biosynthesis in Salvia divinorum. Journal of Experimental Botany, 2017, 68, 1109-1122.	4.8	28
28	Iridoid and phenylethanoid/phenylpropanoid metabolite profiles of Scrophularia and Verbascum species used medicinally in North America. Metabolomics, 2017, 13, 1.	3.0	10
29	Integrated analysis of zone-specific protein and metabolite profiles within nitrogen-fixing Medicago truncatula-Sinorhizobium medicae nodules. PLoS ONE, 2017, 12, e0180894.	2.5	14
30	Use of metabolomics for the chemotaxonomy of legume-associated Ascochyta and allied genera. Scientific Reports, 2016, 6, 20192.	3.3	29
31	Fecal Metabolome in Hmga1 Transgenic Mice with Polyposis: Evidence for Potential Screen for Early Detection of Precursor Lesions in Colorectal Cancer. Journal of Proteome Research, 2016, 15, 4176-4187.	3.7	10
32	AMPK/Î±-Ketoglutarate Axis Dynamically Mediates DNA Demethylation in the Prdm16 Promoter and Brown Adipogenesis. Cell Metabolism, 2016, 24, 542-554.	16.2	195
33	Assessment of photosynthesis regulation in mixotrophically cultured microalga Chlorella sorokiniana. Algal Research, 2016, 19, 30-38.	4.6	44
34	9-Fluorenylmethyl (Fm) Disulfides: Biomimetic Precursors for Persulfides. Organic Letters, 2016, 18, 904-907.	4.6	65
35	Methoxylated flavones: occurrence, importance, biosynthesis. Phytochemistry Reviews, 2016, 15, 363-390.	6.5	65
36	Colonization of Epidermal Tissue by Staphylococcus aureus Produces Localized Hypoxia and Stimulates Secretion of Antioxidant and Caspase-14 Proteins. Infection and Immunity, 2015, 83, 3026-3034.	2.2	14

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37	Identification of regulatory network hubs that control lipid metabolism inChlamydomonas reinhardtii. Journal of Experimental Botany, 2015, 66, 4551-4566.	4.8	100
38	HMGA1 Drives Metabolic Reprogramming of Intestinal Epithelium during Hyperproliferation, Polyposis, and Colorectal Carcinogenesis. Journal of Proteome Research, 2015, 14, 1420-1431.	3.7	30
39	Determining the Isomeric Heterogeneity of Neutral Oligosaccharide-Alditols of Bovine Submaxillary Mucin Using Negative Ion Traveling Wave Ion Mobility Mass Spectrometry. Analytical Chemistry, 2015, 87, 2228-2235.	6.5	27
40	Regulation of starch and lipid accumulation in a microalga Chlorella sorokiniana. Bioresource Technology, 2015, 180, 250-257.	9.6	110
41	The Regulation of Photosynthetic Structure and Function during Nitrogen Deprivation in Chlamydomonas reinhardtii Â Â. Plant Physiology, 2015, 167, 558-573.	4.8	94
42	Identification of a Unique 2-Oxoglutarate-Dependent Flavone 7-O-Demethylase Completes the Elucidation of the Lipophilic Flavone Network in Basil. Plant and Cell Physiology, 2015, 56, 126-136.	3.1	13
43	Functional Analyses of the Diels-Alderase Gene sol5 of Ascochyta rabiei and Alternaria solani Indicate that the Solanapyrone Phytotoxins Are Not Required for Pathogenicity. Molecular Plant-Microbe Interactions, 2015, 28, 482-496.	2.6	43
44	Comparative Proteomic Analysis of Developing Rhizomes of the Ancient Vascular Plant Equisetum hyemale and Different Monocot Species. Journal of Proteome Research, 2015, 14, 1779-1791.	3.7	8
45	Neutral red-mediated microbial electrosynthesis by Escherichia coli, Klebsiella pneumoniae, and Zymomonas mobilis. Bioresource Technology, 2015, 195, 57-65.	9.6	58
46	Characterizing metabolic changes in human colorectal cancer. Analytical and Bioanalytical Chemistry, 2015, 407, 4581-4595.	3.7	50
47	Staphylococcus aureus Induces Hypoxia and Cellular Damage in Porcine Dermal Explants. Infection and Immunity, 2015, 83, 2531-2541.	2.2	52
48	A Novel Type Pathway-Specific Regulator and Dynamic Genome Environments of a Solanapyrone Biosynthesis Gene Cluster in the Fungus Ascochyta rabiei. Eukaryotic Cell, 2015, 14, 1102-1113.	3.4	15
49	The response of Chlamydomonas reinhardtii to nitrogen deprivation: a systems biology analysis. Plant Journal, 2015, 81, 611-624.	5.7	207
50	Asian Citrus Psyllid Expression Profiles Suggest Candidatus Liberibacter Asiaticus-Mediated Alteration of Adult Nutrition and Metabolism, and of Nymphal Development and Immunity. PLoS ONE, 2015, 10, e0130328.	2.5	85
51	LC-MS determination of L-DOPA concentration in the leaf and flower tissues of six faba bean (Vicia) Tj ETQq1 1 0.784314 rgBT /Overlo 243.	0.6	12
52	Functional Analyses of the Diels-Alderase Genesol5ofAscochyta rabieiandAlternaria solaniIndicate that the Solanapyrone Phytotoxins Are Not Required for Pathogenicity. Molecular Plant-Microbe Interactions, 2015, 2015, 1-15.	2.6	18
53	Comparison of Potato and Asian Citrus Psyllid Adult and Nymph Transcriptomes Identified Vector Transcripts with Potential Involvement in Circulative, Propagative Liberibacter Transmission. Pathogens, 2014, 3, 875-907.	2.8	37
54	Characterization of a Tryptophan 2-Monooxygenase Gene from Puccinia graminis f. sp. tritici Involved in Auxin Biosynthesis and Rust Pathogenicity. Molecular Plant-Microbe Interactions, 2014, 27, 227-235.	2.6	61

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55	The Potato Tuber Mitochondrial Proteome Â Â. Plant Physiology, 2014, 164, 637-653.	4.8	122
56	A systems-wide comparison of red rice (Oryza longistaminata) tissues identifies rhizome specific genes and proteins that are targets for cultivated rice improvement. BMC Plant Biology, 2014, 14, 46.	3.6	43
57	Somatic embryogenesis and Agrobacterium-mediated transformation of turmeric (Curcuma longa). Plant Cell, Tissue and Organ Culture, 2014, 116, 333-342.	2.3	14
58	Identification and cloning of an NADPH-dependent hydroxycinnamoyl-CoA double bond reductase involved in dihydrochalcone formation in MalusÃ—domestica Borkh.. Phytochemistry, 2014, 107, 24-31.	2.9	31
59	Use of coupled ion mobility spectrometry-time of flight mass spectrometry to analyze saturated and unsaturated phenylpropanoic acids and chalcones. Chemistry Central Journal, 2014, 8, 38.	2.6	4
60	Unexpected roles for ancient proteins: flavone 8â€hydroxylase in sweet basil trichomes is a Rieskeâ€type, <scp>PAO</scp>â€family oxygenase. Plant Journal, 2014, 80, 385-395.	5.7	29
61	Ginger and turmeric expressed sequence tags identify signature genes for rhizome identity and development and the biosynthesis of curcuminoids, gingerols and terpenoids. BMC Plant Biology, 2013, 13, 27.	3.6	61
62	Ion mobility-mass correlation trend line separation of glycoprotein digests without deglycosylation. International Journal for Ion Mobility Spectrometry, 2013, 16, 105-115.	1.4	25
63	Genome of the long-living sacred lotus (Nelumbo nucifera Gaertn.). Genome Biology, 2013, 14, R41.	9.6	329
64	A Dynamic Model for Phytohormone Control of Rhizome Growth and Development. , 2013, , 143-165.		3
65	Carbohydrate Structure Characterization by Tandem Ion Mobility Mass Spectrometry (IMMS)². Analytical Chemistry, 2013, 85, 2760-2769.	6.5	69
66	Characterization of two candidate flavone 8-O-methyltransferases suggests the existence of two potential routes to nevadensin in sweet basil. Phytochemistry, 2013, 92, 33-41.	2.9	24
67	Production of huperzine A and other Lycopodium alkaloids in Huperzia species grown under controlled conditions and in vitro. Phytochemistry, 2013, 91, 208-219.	2.9	31
68	Next-Generation Sequencing-Based Transcriptional Profiling of Sacred Lotus â€œChina Antiqueâ€• Tropical Plant Biology, 2013, 6, 161-179.	1.9	13
69	The Roles of a Flavone-6-Hydroxylase and 7-O-Demethylation in the Flavone Biosynthetic Network of Sweet Basil. Journal of Biological Chemistry, 2013, 288, 1795-1805.	3.4	60
70	Ion mobility mass spectrometry analysis of isomeric disaccharide precursor, product and cluster ions. Rapid Communications in Mass Spectrometry, 2013, 27, 2699-2709.	1.5	34
71	TCW: Transcriptome Computational Workbench. PLoS ONE, 2013, 8, e69401.	2.5	17
72	A Set of Regioselective O-Methyltransferases Gives Rise to the Complex Pattern of Methoxylated Flavones in Sweet Basil Â Â Â. Plant Physiology, 2012, 160, 1052-1069.	4.8	49

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73	Nextâ€generation sequencingâ€based transcriptomic and proteomic analysis of the common reed, Phragmites australis (Poaceae), reveals genes involved in invasiveness and rhizome specificity. American Journal of Botany, 2012, 99, 232-247.	1.7	49
74	A SABATH Methyltransferase from the moss Physcomitrella patens catalyzes S-methylation of thiols and has a role in detoxification. Phytochemistry, 2012, 81, 31-41.	2.9	25
75	An elm EST database for identifying leaf beetle egg-induced defense genes. BMC Genomics, 2012, 13, 242.	2.8	27
76	Large-Scale Proteome Comparative Analysis of Developing Rhizomes of the Ancient Vascular Plant Equisetum Hyemale. Frontiers in Plant Science, 2012, 3, 131.	3.6	16
77	Suites of Terpene Synthases Explain Differential Terpenoid Production in Ginger and Turmeric Tissues. PLoS ONE, 2012, 7, e51481.	2.5	37
78	Comparative Functional Genomic Analysis ofSolanumGlandular Trichome Types Â Â. Plant Physiology, 2011, 155, 524-539.	4.8	168
79	Sulfinylated azadecalins act as functional mimics of a pollen germination stimulant in Arabidopsis pistils. Plant Journal, 2011, 68, 800-815.	5.7	29
80	Incorporation of non-natural nucleotides into template-switching oligonucleotides reduces background and improves cDNA synthesis from very small RNA samples. BMC Genomics, 2010, 11, 413.	2.8	48
81	Studies of a Biochemical Factory: Tomato Trichome Deep Expressed Sequence Tag Sequencing and Proteomics Â Â. Plant Physiology, 2010, 153, 1212-1223.	4.8	117
82	Modules of co-regulated metabolites in turmeric (Curcuma longa) rhizome suggest the existence of biosynthetic modules in plant specialized metabolism. Journal of Experimental Botany, 2009, 60, 87-97.	4.8	29
83	Identification of candidate genes affecting Î”9-tetrahydrocannabinol biosynthesis in Cannabis sativa. Journal of Experimental Botany, 2009, 60, 3715-3726.	4.8	130
84	In vitro production of huperzine A, a promising drug candidate for Alzheimerâ€™s disease. Phytochemistry, 2008, 69, 2022-2028.	2.9	86
85	A systems biology investigation of the MEP/terpenoid and shikimate/phenylpropanoid pathways points to multiple levels of metabolic control in sweet basil glandular trichomes. Plant Journal, 2008, 54, 349-361.	5.7	132
86	Ginger and Turmeric Ancient Spices and Modern Medicines. , 2008, , 299-311.		7
87	Identifying Substrates and Products of Enzymes of Plant Volatile Biosynthesis with the Help of Metabolic Profiling. , 2007, , 169-182.		0
88	Evolution of Cinnamate/p-Coumarate Carboxyl Methyltransferases and Their Role in the Biosynthesis of Methylcinnamate. Plant Cell, 2007, 19, 3212-3229.	6.6	66
89	Huperzine A from Huperzia speciesâ€”An ethnopharmacolgical review. Journal of Ethnopharmacology, 2007, 113, 15-34.	4.1	251
90	Characterization and identification of diarylheptanoids in ginger (Zingiber officinale Rosc.) using high-performance liquid chromatography/electrospray ionization mass spectrometry. Rapid Communications in Mass Spectrometry, 2007, 21, 509-518.	1.5	64

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91	Metabolic Profiling of Turmeric (Curcuma longaL.) Plants Derived from in Vitro Micropropagation and Conventional Greenhouse Cultivation. Journal of Agricultural and Food Chemistry, 2006, 54, 9573-9583.	5.2	52
92	Chavicol formation in sweet basil (Ocimum basilicum): cleavage of an esterified C9 hydroxyl group with NAD(P)H-dependent reduction. Organic and Biomolecular Chemistry, 2006, 4, 2733-2744.	2.8	70
93	Applications of Metabolomics in Agriculture. Journal of Agricultural and Food Chemistry, 2006, 54, 8984-8994.	5.2	223
94	Developmental Regulation of Phenylpropanoid Biosynthesis in Leaves and Glandular Trichomes of Basil (Ocimum basilicum L.). International Journal of Plant Sciences, 2006, 167, 447-454.	1.3	21
95	A survey of potential huperzine A natural resources in China: The Huperziaceae. Journal of Ethnopharmacology, 2006, 104, 54-67.	4.1	80
96	Analysis of curcuminoids by positive and negative electrospray ionization and tandem mass spectrometry. Rapid Communications in Mass Spectrometry, 2006, 20, 1001-1012.	1.5	89
97	Instrument dependence of electrospray ionization and tandem mass spectrometric fragmentation of the gingerols. Rapid Communications in Mass Spectrometry, 2006, 20, 3089-3100.	1.5	35
98	Use of liquid chromatographyâ€“electrospray ionization tandem mass spectrometry to identify diarylheptanoids in turmeric (Curcuma longa L.) rhizome. Journal of Chromatography A, 2006, 1111, 21-31.	3.7	108
99	Biosynthesis of curcuminoids and gingerols in turmeric (Curcuma longa) and ginger (Zingiber) Tj ETQq1 1 0.784314 rgBT /Overlock 1 Phytochemistry, 2006, 67, 2017-2029.	2.9	106
100	Metabolic profiling of in vitro micropropagated and conventionally greenhouse grown ginger (Zingiber officinale). Phytochemistry, 2006, 67, 2239-2255.	2.9	40
101	Metabolic profiling and phylogenetic analysis of medicinal Zingiber species: Tools for authentication of ginger (Zingiber officinale Rosc.). Phytochemistry, 2006, 67, 1673-1685.	2.9	138
102	Eugenol and isoeugenol, characteristic aromatic constituents of spices, are biosynthesized via reduction of a coniferyl alcohol ester. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10128-10133.	7.1	323
103	The Lycopodium Alkaloids. ChemInform, 2005, 36, no.	0.0	0
104	Characterization of gingerol-related compounds in ginger rhizome (Zingiber officinale Rosc.) by high-performance liquid chromatography/electrospray ionization mass spectrometry. Rapid Communications in Mass Spectrometry, 2005, 19, 2957-2964.	1.5	111
105	Metabolic, Genomic, and Biochemical Analyses of Glandular Trichomes from the Wild Tomato Species Lycopersicon hirsutum Identify a Key Enzyme in the Biosynthesis of Methylketones. Plant Cell, 2005, 17, 1252-1267.	6.6	162
106	EVOLUTION OF FLAVORS AND SCENTS. Annual Review of Plant Biology, 2005, 56, 301-325.	18.7	138
107	Is There a Better Source of Huperzine A thanHuperzia serrata? Huperzine A Content of Huperziaceae Species in China. Journal of Agricultural and Food Chemistry, 2005, 53, 1393-1398.	5.2	83
108	Characterization of Geraniol Synthase from the Peltate Glands of Sweet Basil. Plant Physiology, 2004, 134, 370-379.	4.8	242

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109	Understanding in Vivo Benzenoid Metabolism in Petunia Petal Tissue. Plant Physiology, 2004, 135, 1993-2011.	4.8	384
110	The Biochemical and Molecular Basis for the Divergent Patterns in the Biosynthesis of Terpenes and Phenylpropenes in the Peltate Glands of Three Cultivars of Basil. Plant Physiology, 2004, 136, 3724-3736.	4.8	210
111	The Lycopodium alkaloids. Natural Product Reports, 2004, 21, 752.	10.3	611
112	New Secondary Metabolites: Potential Evolution. , 2004, , 818-821.		0
113	Crystal Structures of Pinoresinol-Lariciresinol and Phenylcoumaran Benzylic Ether Reductases and Their Relationship to Isoflavone Reductases. Journal of Biological Chemistry, 2003, 278, 50714-50723.	3.4	85
114	Differential Production of meta Hydroxylated Phenylpropanoids in Sweet Basil Peltate Glandular Trichomes and Leaves Is Controlled by the Activities of Specific Acyltransferases and Hydroxylases. Plant Physiology, 2002, 130, 1536-1544.	4.8	105
115	Characterization of Phenylpropene O-Methyltransferases from Sweet Basil. Plant Cell, 2002, 14, 505-519.	6.6	224
116	Peltate Glandular Trichomes ofOcimum basilicumL. (Sweet Basil) Contain High Levels of Enzymes Involved in the Biosynthesis of Phenylpropenes. Journal of Herbs, Spices and Medicinal Plants, 2002, 9, 189-195.	1.1	14
117	An Investigation of the Storage and Biosynthesis of Phenylpropenes in Sweet Basil. Plant Physiology, 2001, 125, 539-555.	4.8	432
118	Genetics and biochemistry of secondary metabolites in plants: an evolutionary perspective. Trends in Plant Science, 2000, 5, 439-445.	8.8	645
119	Recombinant Pinoresinol-Lariciresinol Reductases from Western Red Cedar (Thuja plicata) Catalyze Opposite Enantiospecific Conversions. Journal of Biological Chemistry, 1999, 274, 618-627.	3.4	83
120	Evolution of Plant Defense Mechanisms. Journal of Biological Chemistry, 1999, 274, 7516-7527.	3.4	173
121	Regiochemical control of monolignol radical coupling: A new paradigm for lignin and lignan biosynthesis. Chemistry and Biology, 1999, 6, 143-151.	6.0	175
122	The 'Abnormal Lignins': Mapping Heartwood Formation Through the Lignan Biosynthetic Pathway. ACS Symposium Series, 1998, , 389-421.	0.5	23
123	Phylogenetic Links in Plant Defense Systems: Lignans, Isoflavonoids, and Their Reductases. ACS Symposium Series, 1997, , 58-89.	0.5	17
124	(+)-Pinoresinol/(+)-Lariciresinol Reductase from Forsythia intermedia. Journal of Biological Chemistry, 1996, 271, 29473-29482.	3.4	176
125	Seasonal variation in volatile secondary compounds ofChrysothamnus nauseosus (Pallas) britt.; asteraceae ssp.hololeucus (Gray) hall. & clem. Influences herbivory. Journal of Chemical Ecology, 1994, 20, 2055-2063.	1.8	16