Nadir Erbilgin

List of Publications by Year
in descending order

117 papers	3,675 citations	109321 35 h-index	168389 53 g-index
119 all docs	119 docs citations	119 times ranked	2757 citing authors

#	Article	IF	Citations
1	Mountain Pine Beetles Colonizing Historical and NaÃ¯ve Host Trees Are Associated with a Bacterial Community Highly Enriched in Genes Contributing to Terpene Metabolism. Applied and Environmental Microbiology, 2013, 79, 3468-3475.	3.1	236
2	Exogenous application of methyl jasmonate elicits defenses in Norway spruce (Picea abies) and reduces host colonization by the bark beetle Ips typographus. Oecologia, 2006, 148, 426-436.	2.0	157
3	Nature and ecological implications of pathogen-induced systemic resistance in conifers: A novel hypothesis. Physiological and Molecular Plant Pathology, 2006, 68, 95-104.	2.5	132
4	Population dynamics in changing environments: the case of an eruptive forest pest species. Biological Reviews, 2012, 87, 34-51.	10.4	127
5	Interactions Among Conifer Terpenoids and Bark Beetles Across Multiple Levels of Scale: An Attempt to Understand Links Between Population Patterns and Physiological Processes. Recent Advances in Phytochemistry, 2005, 39, 79-118.	0.5	118
6	Chemical similarity between historical and novel host plants promotes range and host expansion of the mountain pine beetle in a naÃ¯ve host ecosystem. New Phytologist, 2014, 201, 940-950.	7.3	115
7	Effect of varying monoterpene concentrations on the response of Ips pini (Coleoptera: Scolytidae) to its aggregation pheromone: implications for pest management and ecology of bark beetles. Agricultural and Forest Entomology, 2003, 5, 269-274.	1.3	95
8	Title is missing!. Journal of Chemical Ecology, 2000, 26, 2527-2548.	1.8	75
9	Modulation of predator attraction to pheromones of two prey species by stereochemistry of plant volatiles. Oecologia, 2001, 127, 444-453.	2.0	75
10	A host monoterpene influences Ips typographus (Coleoptera: Curculionidae, Scolytinae) responses to its aggregation pheromone. Agricultural and Forest Entomology, 2007, 9, 135-140.	1.3	67
11	Variation in carbon availability, defense chemistry and susceptibility to fungal invasion along the stems of mature trees. New Phytologist, 2013, 197, 586-594.	7.3	65
12	Defence syndromes in lodgepole â€“ whitebark pine ecosystems relate to degree of historical exposure to mountain pine beetles. Plant, Cell and Environment, 2017, 40, 1791-1806.	5.7	61
13	Association of declining red pine stands with reduced populations of bark beetle predators, seasonal increases in root colonizing insects, and incidence of root pathogens. Forest Ecology and Management, 2002, 164, 221-236.	3.2	60
14	Decline of ectomycorrhizal fungi following a mountain pine beetle epidemic. Ecology, 2014, 95, 1096-1103.	3.2	60
15	Fungal Volatiles Can Act as Carbon Sources and Semiochemicals to Mediate Interspecific Interactions Among Bark Beetle-Associated Fungal Symbionts. PLoS ONE, 2016, 11, e0162197.	2.5	59
16	Response to Host Volatiles by Native and Introduced Populations of Dendroctonus valens (Coleoptera: Curculionidae, Scolytinae) in North America and China. Journal of Chemical Ecology, 2006, 33, 131-146.	1.8	57
17	Differential effects of plant ontogeny and damage type on phloem and foliage monoterpenes in jack pine (Pinus banksiana). Tree Physiology, 2012, 32, 946-957.	3.1	51
18	Phytochemicals as mediators for host range expansion of a native invasive forest insect herbivore. New Phytologist, 2019, 221, 1268-1278.	7.3	51

#	Article	IF	Citations
19	Ectomycorrhizal fungi mediate indirect effects of a bark beetle outbreak on secondary chemistry and establishment of pine seedlings. New Phytologist, 2015, 208, 904-914.	7.3	50
20	Changes in soil fungal community composition depend on functional group and forest disturbance type. New Phytologist, 2021, 229, 1105-1117.	7.3	50
21	Rapid Increases in Forest Understory Diversity and Productivity following a Mountain Pine Beetle (Dendroctonus ponderosae) Outbreak in Pine Forests. PLoS ONE, 2015, 10, e0124691.	2.5	48
22	No silver bullet: different soil handling techniques are useful for different research questions, exhibit differential type I and II error rates, and are sensitive to sampling intensity. New Phytologist, 2017, 216, 11-14.	7.3	48
23	Aerially applied verbenone-releasing laminated flakes protect Pinus contorta stands from attack by Dendroctonus ponderosae in California and Idaho. Forest Ecology and Management, 2009, 257, 1405-1412.	3.2	47
24	Effect of Water Stress and Fungal Inoculation on Monoterpene Emission from an Historical and a New Pine Host of the Mountain Pine Beetle. Journal of Chemical Ecology, 2011, 37, 1013-1026.	1.8	47
25	Population Dynamics ofIps piniandIps grandicollisin Red Pine Plantations in Wisconsin: Within- and Between-Year Associations with Predators, Competitors, and Habitat Quality. Environmental Entomology, 2002, 31, 1043-1051.	1.4	46
26	Weathering the storm: how lodgepole pine trees survive mountain pine beetle outbreaks. Oecologia, 2017, 184, 469-478.	2.0	46
27	Change in soil fungal community structure driven by a decline in ectomycorrhizal fungi following a mountain pine beetle (Dendroctonus ponderosae) outbreak. New Phytologist, 2017, 213, 864-873.	7.3	45
28	Variations in foliar monoterpenes across the range of jack pine reveal three widespread chemotypes: implications to host expansion of invasive mountain pine beetle. Frontiers in Plant Science, 2015, 6, 342.	3.6	44
29	Resin ducts as resistance traits in conifers: linking dendrochronology and resin-based defences. Tree Physiology, 2020, 40, 1313-1326.	3.1	43
30	The Impact of Phloem Nutrients on Overwintering Mountain Pine Beetles and Their Fungal Symbionts. Environmental Entomology, 2012, 41, 478-486.	1.4	41
31	Title is missing!. Journal of Chemical Ecology, 2000, 26, 823-840.	1.8	39
32	Bacteria influence mountain pine beetle brood development through interactions with symbiotic and antagonistic fungi: implications for climate-driven host range expansion. Oecologia, 2015, 179, 467-485.	2.0	39
33	Are bark beetle outbreaks less synchronous than forest Lepidoptera outbreaks?. Oecologia, 2005, 146, 365-372.	2.0	38
34	Acetophenone as an Anti-attractant for the Western Pine Beetle, Dendroctonus Brevicomis LeConte (Coleoptera: Scolytidae). Journal of Chemical Ecology, 2007, 33, 817-823.	1.8	38
35	Kairomonal range of generalist predators in specialized habitats: responses to multiple phloeophagous species emitting pheromones vs. host odors. Entomologia Experimentalis Et Applicata, 2001, 99, 205-210.	1.4	37
36	Host resistance elicited by methyl jasmonate reduces emission of aggregation pheromones by the spruce bark beetle, Ips typographus. Oecologia, 2011, 167, 691-699.	2.0	36

#	Article	IF	Citations
37	Water-deficit and fungal infection can differentially affect the production of different classes of defense compounds in two host pines of mountain pine beetle. Tree Physiology, 2017, 37, 338-350.	3.1	35
38	Trap Type, Chirality of Î±-Pinene, and Geographic Region Affect Sampling Efficiency of Root and Lower Stem Insects in Pine. Journal of Economic Entomology, 2001, 94, 1113-1121.	1.8	34
39	The Push-Pull Tactic for Mitigation of Mountain Pine Beetle (Coleoptera: Curculionidae) Damage in Lodgepole and Whitebark Pines. Environmental Entomology, 2012, 41, 1575-1586.	1.4	34
40	Fungal species assemblages associated with Phytophthora ramorum-infected coast live oaks following bark and ambrosia beetle colonization in northern California. Forest Ecology and Management, 2013, 291, 30-42.	3.2	32
41	The Lodgepole Ã— Jack Pine Hybrid Zone in Alberta, Canada: A Stepping Stone for the Mountain Pine Beetle on its Journey East Across the Boreal Forest?. Journal of Chemical Ecology, 2013, 39, 1209-1220.	1.8	32
42	Larger Resin Ducts Are Linked to the Survival of Lodgepole Pine Trees During Mountain Pine Beetle Outbreak. Frontiers in Plant Science, 2019, 10, 1459.	3.6	32
43	Influence of bark beetle outbreaks on nutrient cycling in native pine stands in western Canada. Plant and Soil, 2015, 390, 29-47.	3.7	31
44	Intraguild interactions between generalist predators and an introduced parasitoid of Glycaspis brimblecombei (Homoptera: Psylloidea). Biological Control, 2004, 31, 329-337.	3.0	30
45	Trees Wantedâ€"Dead or Alive! Host Selection and Population Dynamics in Tree-Killing Bark Beetles. PLoS ONE, 2011, 6, e18274.	2.5	30
46	Inter-species interactions and ecosystem effects of non-indigenous invasive and native tree-killing bark beetles. Biological Invasions, 2011, 13, 1151-1164.	2.4	30
47	Ophiostomatoid fungi can emit the bark beetle pheromone verbenone and other semiochemicals in media amended with various pine chemicals and beetle-released compounds. Fungal Ecology, 2019, 39, 285-295.	1.6	28
48	Attraction of ambrosia and bark beetles to coast live oaks infected by <i>Phytophthora ramorum</i>. Agricultural and Forest Entomology, 2008, 10, 315-321.	1.3	27
49	Rapid monoterpene induction promotes the susceptibility of a novel host pine to mountain pine beetle colonization but not to beetle-vectored fungi. Tree Physiology, 2017, 37, 1597-1610.	3.1	27
50	Anatomical defences against bark beetles relate to degree of historical exposure between species and are allocated independently of chemical defences within trees. Plant, Cell and Environment, 2019, 42, 633-646.	5.7	27
51	Overstory and shrub effects on natural regeneration processes in native Pinus radiata stands. Forest Ecology and Management, 2007, 240, 178-185.	3.2	26
52	Pheromone Production by an Invasive Bark Beetle Varies with Monoterpene Composition of its NaÃ¯ve Host. Journal of Chemical Ecology, 2015, 41, 540-549.	1.8	26
53	The Effect of Water Limitation on Volatile Emission, Tree Defense Response, and Brood Success of Dendroctonus ponderosae in Two Pine Hosts, Lodgepole, and Jack Pine. Frontiers in Ecology and Evolution, 2016, 4, .	2.2	26
54	Direction of interaction between mountain pine beetle (Dendroctonus ponderosae) and resource-sharing wood-boring beetles depends on plant parasite infection. Oecologia, 2016, 182, 1-12.	2.0	26

#	ARTICLE	IF	CITATIONS
55	Successful Colonization of Lodgepole Pine Trees by Mountain Pine Beetle Increased Monoterpene Production and Exhausted Carbohydrate Reserves. Journal of Chemical Ecology, 2018, 44, 209-214.	1.8	26
56	Reserves Accumulated in Non-Photosynthetic Organs during the Previous Growing Season Drive Plant Defenses and Growth in Aspen in the Subsequent Growing Season. Journal of Chemical Ecology, 2014, 40, 21-30.	1.8	24
57	Longâ€term nitrogen addition does not sustain host tree stem radial growth but doubles the abundance of highâ€biomass ectomycorrhizal fungi. Global Change Biology, 2021, 27, 4125-4138.	9.5	23
58	Attraction of <I>Ips pini</I> (Coleoptera: Scolytidae) and Its Predators to Various Enantiomeric Ratios of Ipsdienol and Lanierone in California: Implications for the Augmentation and Conservation of Natural Enemies. Environmental Entomology, 2003, 32, 1115-1122.	1.4	22
59	Attraction of <I>Ips pini</I> (Coleoptera: Scolytinae) and Its Predators to Natural Attractants and Synthetic Semiochemicals in Northern California: Implications for Population Monitoring. Environmental Entomology, 2004, 33, 1554-1561.	1.4	21
60	Aerially applied methylcyclohexenone-releasing flakes protect Pseudotsuga menziesii stands from attack by Dendroctonus pseudotsugae. Forest Ecology and Management, 2009, 257, 1231-1236.	3.2	21
61	Tree-mediated interactions between the jack pine budworm and a mountain pine beetle fungal associate. Ecological Entomology, 2011, 36, 425-434.	2.2	21
62	Areaâ€wide application of verbenoneâ€releasing flakes reduces mortality of whitebark pine <i>Pinus albicaulis</i> caused by the mountain pine beetle <i>Dendroctonus ponderosae</i>. Agricultural and Forest Entomology, 2012, 14, 367-375.	1.3	20
63	Role of stressed mango host conditions in attraction of and colonization by the mango bark beetle<i> Hypocryphalus mangiferae</i> Stebbing (Coleoptera: Curculionidae: Scolytinae) and in the symptom development of quick decline of mango trees in Pakistan. Entomological Research, 2010, 40, 316-327.	1.1	19
64	Ultrastructure of the mycangium of the southern pine beetle, Dendroctonus frontalis (Coleoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 216-224.	0.8	19
65	Resource availability and repeated defoliation mediate compensatory growth in trembling aspen (<i>Populus tremuloides</i>) seedlings. PeerJ, 2014, 2, e491.	2.0	19
66	GC-EAD responses to semiochemicals by eight beetles in the subcortical community associated with Monterey pine trees in coastal California: similarities and disparities across three trophic levels. Chemoecology, 2008, 18, 243-254.	1.1	18
67	Acetophenone superior to verbenone for reducing attraction of western pine beetle <i>Dendroctonus brevicomis </i>to its aggregation pheromone. Agricultural and Forest Entomology, 2008, 10, 433-441.	1.3	17
68	Mountain pine beetle (<i>Dendroctonus ponderosae</i>) can produce its aggregation pheromone and complete brood development in naÃ¯ve red pine (<i>Pinus resinosa</i>) under laboratory conditions. Canadian Journal of Forest Research, 2015, 45, 1873-1877.	1.7	17
69	Spatial variation in soil available water holding capacity alters carbon mobilization and allocation to chemical defenses along jack pine stems. Environmental and Experimental Botany, 2020, 171, 103902.	4.2	17
70	Fatty Acid Composition of Novel Host Jack Pine Do Not Prevent Host Acceptance and Colonization by the Invasive Mountain Pine Beetle and Its Symbiotic Fungus. PLoS ONE, 2016, 11, e0162046.	2.5	17
71	Drought stress leads to systemic induced susceptibility to a nectrotrophic fungus associated with mountain pine beetle in Pinus banksiana seedlings. PLoS ONE, 2017, 12, e0189203.	2.5	16
72	Combined drought and bark beetle attacks deplete nonâ€structural carbohydrates and promote death of mature pine trees. Plant, Cell and Environment, 2021, 44, 3866-3881.	5.7	16

#	Article	IF	Citations
73	Dwarf mistletoe infection in jack pine alters growthâ€“defense relationships. Tree Physiology, 2018, 38, 1538-1547.	3.1	15
74	Spatial characteristics of volatile communication in lodgepole pine trees: Evidence of kin recognition and intra-species support. Science of the Total Environment, 2019, 692, 127-135.	8.0	15
75	Pathophysiological responses of pine defensive metabolites largely lack differences between pine species but vary with eliciting ophiostomatoid fungal species. Tree Physiology, 2019, 39, 1121-1135.	3.1	15
76	Temporal variation in contamination of pine engraver beetles with <i>Fusarium circinatum</i> in native Monterey pine forests in California. Plant Pathology, 2008, 57, 1103-1108.	2.4	13
77	Assessing the dual-mycorrhizal status of a widespread tree species as a model for studies on stand biogeochemistry. Mycorrhiza, 2021, 31, 313-324.	2.8	13
78	Production of complementary defense metabolites reflects a coâ€evolutionary arms race between a host plant and a mutualistic bark beetleâ€fungal complex. Plant, Cell and Environment, 2021, 44, 3064-3077.	5.7	13
79	Spatial analysis of forest gaps resulting from bark beetle colonization of red pines experiencing belowground herbivory and infection. Forest Ecology and Management, 2003, 177, 145-153.	3.2	12
80	Prescribed fire does not promote outbreaks of a primary bark beetle at lowâ€density populations. Journal of Applied Ecology, 2016, 53, 222-232.	4.0	12
81	Root condensed tannins vary over time, but are unrelated to leaf tannins. AoB PLANTS, 2018, 10, ply044.	2.3	12
82	Selection of entomopathogenic fungus Beauveria bassiana (Deuteromycotina: Hyphomycetes) for the biocontrol of Dendroctonus ponderosae (Coleoptera: Curculionidae, Scolytinae) in Western Canada. Applied Microbiology and Biotechnology, 2021, 105, 2541-2557.	3.6	12
83	Bark beetleâ€mediated fungal infections of susceptible trees induce resistance to subsequent infections in a dose dependent manner. Agricultural and Forest Entomology, 2009, 11, 255-263.	1.3	11
84	The ecological interaction of the mountain pine beetle and jack pine budworm in the boreal forest. Forestry Chronicle, 2010, 86, 766-774.	0.6	11
85	Community-level determinants of smooth brome (Bromus inermis) growth and survival in the aspen parkland. Plant Ecology, 2016, 217, 1395-1413.	1.6	11
86	A Blend of Ethanol and (âˆ’)-Î±-Pinene were Highly Attractive to Native Siricid Woodwasps (Siricidae,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf ... Ecology, 2017, 43, 172-179.	1.8	11
87	Ectomycorrhizal fungal species differentially affect the induced defensive chemistry of lodgepole pine. Oecologia, 2018, 188, 395-404.	2.0	11
88	Nitrogen and Ergosterol Concentrations Varied in Live Jack Pine Phloem Following Inoculations With Fungal Associates of Mountain Pine Beetle. Frontiers in Microbiology, 2020, 11, 1703.	3.5	10
89	Primary and Secondary Metabolite Profiles of Lodgepole Pine Trees Change with Elevation, but Not with Latitude. Journal of Chemical Ecology, 2021, 47, 280-293.	1.8	10
90	Colonization of cut branches of five coniferous hosts of the pitch canker fungus by <i>Pityophthorus</i> spp. (Coleoptera: Scolytidae) in central, coastal California. Canadian Entomologist, 2005, 137, 337-349.	0.8	9

#	Article	IF	Citations
91	Hylobius abietisL. feeding on the novel hostPinus brutiaTen. increases emission of volatile organic compounds. Journal of Applied Entomology, 2017, 141, 133-140.	1.8	9
92	Trap trees: an effective method for monitoring mountain pine beetle activities in novel habitats. Canadian Journal of Forest Research, 2017, 47, 1432-1437.	1.7	9
93	Fertilization of lodgepole pine trees increased diameter growth but reduced root carbohydrate concentrations. Forest Ecology and Management, 2010, 260, 1914-1920.	3.2	8
94	Competitors and natural enemies may cumulatively mediate Dendroctonus ponderosae colonization of burned Pinus forests. Forest Ecology and Management, 2015, 337, 98-109.	3.2	8
95	Exposure to Fungal Volatiles Can Influence Volatile Emissions From Other Ophiostomatoid Fungi. Frontiers in Microbiology, 2020, 11, 567462.	3.5	8
96	Induced Defenses of a Novel Host Tree Affect the Growth and Interactions of Bark Beetle-Vectored Fungi. Microbial Ecology, 2020, 80, 181-190.	2.8	8
97	Using structural sustainability for forest health monitoring and triage: Case study of a mountain pine beetle (Dendroctonus ponderosae)-impacted landscape. Ecological Indicators, 2016, 70, 451-459.	6.3	7
98	A Native Parasitic Plant Systemically Induces Resistance in Jack Pine to a Fungal Symbiont of Invasive Mountain Pine Beetle. Journal of Chemical Ecology, 2017, 43, 506-518.	1.8	7
99	Mountain pine beetle outbreak enhanced resin duct-defenses of lodgepole pine trees. Forest Ecology and Management, 2019, 441, 271-279.	3.2	7
100	Integrating genomic information and productivity and climate-adaptability traits into a regional white spruce breeding program. PLoS ONE, 2022, 17, e0264549.	2.5	7
101	Too much of a good thing: landscape-scale facilitation eventually turns into competition between a lepidopteran defoliator and a bark beetle. Landscape Ecology, 2015, 30, 301-312.	4.2	6
102	Changes in soil fungal communities following anthropogenic disturbance are linked to decreased lodgepole pine seedling performance. Journal of Applied Ecology, 2020, 57, 1292-1302.	4.0	6
103	Mechanisms and consequences of flight polyphenisms in an outbreaking bark beetle species. Journal of Experimental Biology, 2020, 223, .	1.7	4
104	Density-dependent responses of mountain pine beetle to its pheromones and host volatiles in naÃ¯ve lodgepole pine stands. Forest Ecology and Management, 2020, 472, 118257.	3.2	4
105	Increment Coring Induced Traumatic Resin Ducts in White Spruce But Not in Lodgepole Pine. Tree-Ring Research, 2020, 76, 54.	0.6	4
106	Host Defense Metabolites Alter the Interactions between a Bark Beetle and its Symbiotic Fungi. Microbial Ecology, 2022, 84, 834-843.	2.8	4
107	Soil inoculation of lodgepole pine seedlings alters rootâ€associated fungal communities but does not improve seedling performance in beetleâ€killed pine stands. Restoration Ecology, 2023, 31, .	2.9	4
108	First Observations of Mormon Metalmark (Apodemia mormo) Oviposition Behaviour in Canada. Canadian Field-Naturalist, 2012, 126, 34.	0.1	3

#	Article	IF	Citations
109	Fire-mediated interactions between a tree-killing bark beetle and its competitors. Forest Ecology and Management, 2015, 356, 262-272.	3.2	3
110	Short- and long-term cold storage of jack pine bolts is associated with higher concentrations of monoterpenes and nutrients. Canadian Journal of Forest Research, 2019, 49, 305-308.	1.7	3
111	Soil transfers from intact to disturbed boreal forests neither alter ectomycorrhizal fungal communities nor improve pine seedling performance. Journal of Applied Ecology, 2022, 59, 2430-2439.	4.0	3
112	Evidence for divergence in cuticular hydrocarbon sex pheromone between California and Mississippi (United States of America) populations of bark beetle parasitoid <i>Roptrocerus xylophagorum</i> (Hymenoptera: Pteromalidae). Canadian Entomologist, 2015, 147, 472-475.	0.8	2
113	Mutualistic Ophiostomatoid Fungi Equally Benefit from Both a Bark Beetle Pheromone and Host Tree Volatiles as Nutrient Sources. Microbial Ecology, 2021, 81, 1106-1110.	2.8	2
114	Microhabitat Use in a Northern Peripheral Population ofApodemia mormo: Factors Beyond the Host Plant. Journal of the Lepidopterists' Society, 2014, 68, 54-60.	0.2	1
115	Soil Available Water Holding Capacity Can Alter the Reproductive Performance of Mountain Pine Beetle (Coleoptera: Curculionidae) in Jack Pine (Pinales: Pinaceae) Through Phloem Nitrogen Concentration. Environmental Entomology, 2019, 48, 945-952.	1.4	1
116	Chemical similarity between introduced and native populations of Scots pine can facilitate transcontinental expansion of mountain pine beetle in North America. Biological Invasions, 2020, 22, 1067-1083.	2.4	1
117	An invasive grass and litter impact tree encroachment into a native grassland. Applied Vegetation Science, 2021, 24, e12618.	1.9	1