George E Heimpel

List of Publications by Year
in descending order

120 papers	7,593 citations	57758 44 h-index	58581 82 g-index
123 all docs	123 docs citations	123 times ranked	4712 citing authors

#	Article	IF	Citations
1	Ecology and Management of the Soybean Aphid in North America. Annual Review of Entomology, 2011, 56, 375-399.	11.8	458
2	Life-history strategies in parasitoid wasps: a comparative analysis of â€˜ovigenyâ€™. Journal of Animal Ecology, 2001, 70, 442-458.	2.8	431
3	Crop pests and predators exhibit inconsistent responses to surrounding landscape composition. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E7863-E7870.	7.1	401
4	Sex Determination in the Hymenoptera. Annual Review of Entomology, 2008, 53, 209-230.	11.8	384
5	THE EVOLUTION OF HOSTâ€FEEDING BEHAVIOUR IN INSECT PARASITOIDS. Biological Reviews, 1996, 71, 373-400.	10.4	233
6	Honeydew as a food source for natural enemies: Making the best of a bad meal?. Biological Control, 2008, 45, 176-184.	3.0	223
7	Adult feeding and lifetime reproductive success in the parasitoid Aphytis melinus. Entomologia Experimentalis Et Applicata, 1997, 83, 305-315.	1.4	203
8	Effects of sugar feeding on carbohydrate and lipid metabolism in a parasitoid wasp. Physiological Entomology, 2000, 25, 17-26.	1.5	182
9	Comparing floral nectar and aphid honeydew diets on the longevity and nutrient levels of a parasitoid wasp. Entomologia Experimentalis Et Applicata, 2004, 111, 189-199.	1.4	181
10	PCR-based gut content analysis of insect predators: using ribosomal ITS-1 fragments from prey to estimate predation frequency. Molecular Ecology, 2001, 10, 2059-2067.	3.9	173
11	The Soybean Aphid in China: A Historical Review. Annals of the Entomological Society of America, 2004, 97, 209-218.	2.5	169
12	Egg Limitation in Parasitoids: A Review of the Evidence and a Case Study. Biological Control, 1998, 11, 160-168.	3.0	166
13	Multifaceted determinants of host specificity in an aphid parasitoid. Oecologia, 2009, 160, 387-398.	2.0	166
14	Floral resources impact longevity and oviposition rate of a parasitoid in the field. Journal of Animal Ecology, 2008, 77, 565-572.	2.8	146
15	European buckthorn and Asian soybean aphid as components of an extensive invasional meltdown in North America. Biological Invasions, 2010, 12, 2913-2931.	2.4	137
16	Egg maturation, egg resorption and the costliness of transient egg limitation in insects. Proceedings of the Royal Society B: Biological Sciences, 2000, 267, 1565-1573.	2.6	130
17	Impact of flowering buckwheat on Lepidopteran cabbage pests and their parasitoids at two spatial scales. Biological Control, 2005, 34, 290-301.	3.0	123
18	COMMUNITY GENETICS: EXPANDING THE SYNTHESIS OF ECOLOGY AND GENETICS. Ecology, 2003, 84, 545-558.	3.2	110

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19	Sex Ratios of Commercially Reared Biological Control Agents. Biological Control, 2000, 19, 77-93.	3.0	106
20	Egg Limitation, Host Quality, and Dynamic Behavior by a Parasitoid in the Field. Ecology, 1996, 77, 2410-2420.	3.2	101
21	The Ubiquity of Intraguild Predation among Predatory Arthropods. PLoS ONE, 2011, 6, e28061.	2.5	95
22	Prospects for Importation Biological Control of the Soybean Aphid: Anticipating Potential Costs and Benefits. Annals of the Entomological Society of America, 2004, 97, 249-258.	2.5	94
23	Indirect interactions between an introduced and a native ladybird beetle species mediated by a shared parasitoid. Biological Control, 2002, 25, 224-230.	3.0	90
24	Specialisation of bacterial endosymbionts that protect aphids from parasitoids. Ecological Entomology, 2014, 39, 736-739.	2.2	85
25	A â€˜Goldilocksâ€™ hypothesis for dispersal of biological control agents. BioControl, 2011, 56, 441-450.	2.0	84
26	Influence of floral resources on sugar feeding and nutrient dynamics of a parasitoid in the field. Ecological Entomology, 2006, 31, 470-480.	2.2	81
27	Effects of parasitoid fecundity and host resistance on indirect interactions among hosts sharing a parasitoid. Ecology Letters, 2003, 6, 556-566.	6.4	77
28	Host phylogeny and specialisation in parasitoids. Ecology Letters, 2012, 15, 453-460.	6.4	75
29	Worldwide Populations of the Aphid Aphis craccivora Are Infected with Diverse Facultative Bacterial Symbionts. Microbial Ecology, 2014, 67, 195-204.	2.8	74
30	Sugar feeding by the aphid parasitoid Binodoxys communis: How does honeydew compare with other sugar sources?. Journal of Insect Physiology, 2008, 54, 481-491.	2.0	73
31	Shifting paradigms in the history of classical biological control. BioControl, 2018, 63, 27-37.	2.0	72
32	Parasitoid nutritional ecology in a community context: the importance of honeydew and implications for biological control. Current Opinion in Insect Science, 2016, 14, 100-104.	4.4	69
33	Soil-Applied Imidacloprid Is Translocated to Nectar and Kills Nectar-Feeding <I>Anagyrus pseudococci</I> (Girault) (Hymenoptera: Encyrtidae). Environmental Entomology, 2007, 36, 1238-1245.	1.4	68
34	Perennial Grain and Oilseed Crops. Annual Review of Plant Biology, 2016, 67, 703-729.	18.7	68
35	Effects of Partial Sugar Deprivation on Lifespan and Carbohydrate Mobilization in the Parasitoid <I>Macrocentrus grandii</I> (Hymenoptera: Braconidae). Annals of the Entomological Society of America, 2001, 94, 909-916.	2.5	65
36	Flight Performance of the Soybean Aphid,Aphis glycines(Hemiptera: Aphididae) Under Different Temperature and Humidity Regimens. Environmental Entomology, 2008, 37, 301-306.	1.4	64

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37	Cryptic Species of Parasitoids Attacking the Soybean Aphid (Hemiptera: Aphididae) in Asia: Binodoxys communis and Binodoxys koreanus (Hymenoptera: Braconidae: Aphidiinae). Annals of the Entomological Society of America, 2009, 102, 925-936.	2.5	63
38	Gut sugar analysis in field-caught parasitoids: Adapting methods originally developed for biting flies. International Journal of Pest Management, 2004, 50, 193-198.	1.8	60
39	Factors Limiting the Spread of the Protective Symbiont Hamiltonella defensa in Aphis craccivora Aphids. Applied and Environmental Microbiology, 2014, 80, 5818-5827.	3.1	58
40	Reproductive Isolation and Genetic Variation between Two â€œStrainsâ€•ofBracon hebetor(Hymenoptera:) Tj ETQq0 0 0 rgBT /Overlock	3.0	53
41	Reproductive senescence and dynamic oviposition behaviour in insects. Evolutionary Ecology, 1998, 12, 871-879.	1.2	53
42	Environmental Consequences of Invasive Species: Greenhouse Gas Emissions of Insecticide Use and the Role of Biological Control in Reducing Emissions. PLoS ONE, 2013, 8, e72293.	2.5	50
43	Prospects for Importation Biological Control of the Soybean Aphid: Anticipating Potential Costs and Benefits. Annals of the Entomological Society of America, 2004, 97, 249-258.	2.5	49
44	Trends in biological control: public interest, international networking and research direction. BioControl, 2018, 63, 11-26.	2.0	48
45	Competitive interactions between an exotic and a native ladybeetle: a field cage study. Entomologia Experimentalis Et Applicata, 2004, 111, 19-28.	1.4	46
46	Relationship of Soybean Aphid (Hemiptera: Aphididae) to Soybean Plant Nutrients, Landscape Structure, and Natural Enemies. Environmental Entomology, 2010, 39, 31-41.	1.4	45
47	Experimental Support for Multiple-Locus Complementary Sex Determination in the Parasitoid Cotesia vestalis. Genetics, 2008, 180, 1525-1535.	2.9	44
48	Transient host paralysis as a means of reducing self-superparasitism in koinobiont endoparasitoids. Journal of Insect Physiology, 2009, 55, 321-327.	2.0	44
49	Survival of Diploid Males in Braconsp. near hebetor (Hymenoptera: Braconidae). Annals of the Entomological Society of America, 1999, 92, 110-116.	2.5	43
50	Virginity and the cost of insurance in highly inbred Hymenoptera. Ecological Entomology, 1994, 19, 299-302.	2.2	38
51	Physical and ant-mediated refuges from parasitism: Implications for non-target effects in biological control. Biological Control, 2007, 40, 306-313.	3.0	38
52	Trade-Offs Between Flight and Fecundity in the Soybean Aphid (Hemiptera: Aphididae). Journal of Economic Entomology, 2009, 102, 133-138.	1.8	37
53	Diversity of sex-determining alleles in Bracon hebetor. Heredity, 1999, 82, 282-291.	2.6	36
54	Flight Performance of the Soybean Aphid, <I>Aphis glycines</I> (Hemiptera: Aphididae) Under Different Temperature and Humidity Regimens. Environmental Entomology, 2008, 37, 301-306.	1.4	36

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55	The Endosymbiont Arsenophonus Is Widespread in Soybean Aphid, Aphis glycines, but Does Not Provide Protection from Parasitoids or a Fungal Pathogen. PLoS ONE, 2013, 8, e62145.	2.5	35
56	Dynamic egg maturation strategies in an aphid parasitoid. Physiological Entomology, 2007, 32, 143-149.	1.5	34
57	On-farm evaluation of a fall-seeded rye cover crop for suppression of soybean aphid (Hemiptera:) Tj ETQq1 1 0.784314 rgBT /Overlock	1.3	34
58	Effect of floral nectar, water, and feeding frequency on Cotesia glomerata longevity. BioControl, 2008, 53, 289-294.	2.0	33
59	Invasion of an Avian Nest Parasite, Philornis downsi, to the Galapagos Islands: Colonization History, Adaptations to Novel Ecosystems, and Conservation Challenges. Social and Ecological Interactions in the Galapagos Islands, 2018, , 213-266.	0.4	33
60	Sex determination meltdown upon biological control introduction of the parasitoid <scp>C</scp>otesia rubecula?. Evolutionary Applications, 2012, 5, 444-454.	3.1	32
61	Linking parasitoid nectar feeding and dispersal in conservation biological control. Biological Control, 2019, 132, 36-41.	3.0	31
62	Response of the soybean aphid parasitoid Binodoxys communis to olfactory cues from target and non-target host-plant complexes. Entomologia Experimentalis Et Applicata, 2007, 123, 149-158.	1.4	30
63	Potential exposure of a classical biological control agent of the soybean aphid, Aphis glycines, on non-target aphids in North America. Biological Invasions, 2009, 11, 857-871.	2.4	30
64	Reproductive compatibility and genetic variation between two strains of Aphelinus albipodus (Hymenoptera: Aphelinidae), a parasitoid of the soybean aphid, Aphis glycines (Homoptera: Aphididae). Biological Control, 2004, 31, 311-319.	3.0	29
65	Egg load dynamics and the risk of egg and time limitation experienced by an aphid parasitoid in the field. Ecology and Evolution, 2014, 4, 1739-1750.	1.9	29
66	Combined effects of host-plant resistance and intraguild predation on the soybean aphid parasitoid Binodoxys communis in the field. Biological Control, 2012, 60, 16-25.	3.0	27
67	Best practices for the use and exchange of invertebrate biological control genetic resources relevant for food and agriculture. BioControl, 2018, 63, 149-154.	2.0	27
68	Is parasitoid acceptance of different host species dynamic?. Functional Ecology, 2013, 27, 1201-1211.	3.6	26
69	Factors Affecting the Flight Capacity of <I>Tetrastichus planipennisi</I> (Hymenoptera:) Tj ETQq1 1 0.784314 rgBT /Overlo	1.4	26
70	Intraspecific variation in facultative symbiont infection among native and exotic pest populations: Potential implications for biological control. Biological Control, 2018, 116, 27-35.	3.0	26
71	Additive negative effects of Philornis nest parasitism on small and declining Neotropical bird populations. Bird Conservation International, 2019, 29, 339-360.	1.3	25
72	Linking risk and efficacy in biological control hostâ€“parasitoid models. Biological Control, 2015, 90, 49-60.	3.0	24

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73	Life Cycle and Host Specificity of the Parasitoid Conura annulifera (Hymenoptera: Chalcididae), a Potential Biological Control Agent of Philornis downsi (Diptera: Muscidae) in the GalÃ¡pagos Islands. Annals of the Entomological Society of America, 2017, 110, 317-328.	2.5	24
74	Continental-scale suppression of an invasive pest by a host-specific parasitoid underlines both environmental and economic benefits of arthropod biological control. PeerJ, 2018, 6, e5796.	2.0	23
75	Could increased understanding of foraging behavior help to predict the success of biological control?. Current Opinion in Insect Science, 2018, 27, 26-31.	4.4	22
76	The influence of aphid-produced honeydew on parasitoid fitness and nutritional state: A comparative study. Basic and Applied Ecology, 2018, 29, 55-68.	2.7	22
77	Components of the Functional Response of Perillus bioculatus (Hemiptera: Pentatomidae). Environmental Entomology, 1994, 23, 855-859.	1.4	21
78	The defensive aphid symbiont Hamiltonella defensa affects host quality differently for Aphelinus glycinis versus Aphelinus atriplicis. Biological Control, 2018, 116, 3-9.	3.0	21
79	Impact of the parasitoid Aphelinus certus on soybean aphid populations. Biological Control, 2018, 127, 17-24.	3.0	20
80	A matrix model describing hostâ€“parasitoid population dynamics: The case of Aphelinus certus and soybean aphid. PLoS ONE, 2019, 14, e0218217.	2.5	20
81	Natural Enemies and the Evolution of Resistance to Transgenic Insecticidal Crops by Pest Insects: The Role of Egg Mortality. Environmental Entomology, 2005, 34, 512-526.	1.4	19
82	Host specificity of Aphelinus species collected from soybean aphid in Asia. Biological Control, 2017, 115, 55-73.	3.0	18
83	Effect of parasitism on flight behavior of the soybean aphid, Aphis glycines. Biological Control, 2009, 51, 475-479.	3.0	16
84	Host range and community structure of avian nest parasites in the genus Philornis (Diptera: Muscidae) on the island of Trinidad. Ecology and Evolution, 2015, 5, 3695-3703.	1.9	16
85	Parasitoidâ€induced transgenerational fecundity compensation in an aphid. Entomologia Experimentalis Et Applicata, 2016, 159, 197-206.	1.4	16
86	Invasive Parasites and the Fate of Darwin's Finches in the Galapagos Islands: The Case of the Vegetarian Finch (Platyspiza crassirostris). Wilson Journal of Ornithology, 2017, 129, 345-349.	0.2	15
87	Counties not countries: Variation in host specificity among populations of an aphid parasitoid. Evolutionary Applications, 2019, 12, 815-829.	3.1	15
88	Soybean aphid biotype 1 genome: Insights into the invasive biology and adaptive evolution of a major agricultural pest. Insect Biochemistry and Molecular Biology, 2020, 120, 103334.	2.7	15
89	Extraordinary sex ratios for extraordinary reasons. Trends in Ecology and Evolution, 1997, 12, 298-299.	8.7	14
90	Parasitism of Autumnal Morphs of the Soybean Aphid (Hemiptera: Aphididae) by Binodoxys communis (Hymenoptera: Braconidae) on Buckthorn. Annals of the Entomological Society of America, 2011, 104, 935-944.	2.5	12

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91	The evolution of parasitoid fecundity: a paradigm under scrutiny. Ecology Letters, 2012, 15, 357-364.	6.4	12
92	Sexâ€specific dispersal by a parasitoid wasp in the field. Entomologia Experimentalis Et Applicata, 2016, 159, 252-259.	1.4	12
93	Balancing selection maintains sex determining alleles in multipleâ€locus complementary sex determination. Evolution; International Journal of Organic Evolution, 2017, 71, 1246-1257.	2.3	10
94	Broken wing fringe setae as a relative estimate of parasitoid age. Entomologia Experimentalis Et Applicata, 2006, 121, 87-92.	1.4	9
95	Competition and brood reduction: testing alternative models of clutch-size evolution in parasitoids. Behavioral Ecology, 2009, 20, 403-409.	2.2	9
96	Density-dependent lifespan and estimation of life expectancy for a parasitoid with implications for population dynamics. Oecologia, 2020, 194, 311-320.	2.0	9
97	Neonicotinoids from coated seeds toxic for honeydew-feeding biological control agents. Environmental Pollution, 2021, 289, 117813.	7.5	9
98	Determinants of egg load in the soybean aphid parasitoid Binodoxys communis. Entomologia Experimentalis Et Applicata, 2010, 136, 254-261.	1.4	8
99	Mind the Gap: the evolution of oviposition site and specialization in the parasitoid superfamily Chalcidoidea. Biological Journal of the Linnean Society, 2018, 124, 213-227.	1.6	8
100	Environmentally cued hatching in the birdâ€parasitic nest fly <scp>P</scp>hilornis downsi. Entomologia Experimentalis Et Applicata, 2018, 166, 752-760.	1.4	8
101	Population structure of a nest parasite of Darwinâ€™s finches within its native and invasive ranges. Conservation Genetics, 2021, 22, 11-22.	1.5	8
102	A phylogenetic perspective on parasitoid host ranges with implications for biological control. Current Opinion in Insect Science, 2021, 44, 95-100.	4.4	8
103	COMPLEMENTARY SEX DETERMINATION IN HYMENOPTERAN PARASITOIDS AND ITS IMPLICATIONS FOR BIOLOGICAL CONTROL. Insect Science, 2003, 10, 81-93.	3.0	7
104	Description of Brachymeria philornisae sp. n. (Hymenoptera: Chalcididae),Âa parasitoid of the bird parasite Philornis trinitensis (Diptera: Muscidae) in Tobago, with a review of the sibling species. Zootaxa, 2017, 4242, 34.	0.5	7
105	Ecological dissociation and re-association with a superior competitor alters host selection behavior in a parasitoid wasp. Oecologia, 2019, 191, 261-270.	2.0	7
106	Interspecific differences in milkweeds alter predator density and the strength of trophic cascades. Arthropod-Plant Interactions, 2016, 10, 249-261.	1.1	6
107	Shifting microbiomes complement life stage transitions and diet of the bird parasite Philornis downsi from the Galapagos Islands. Environmental Microbiology, 2021, 23, 5014-5029.	3.8	6
108	Entmophagous insects: progress in evolutionary and applied ecology. Trends in Ecology and Evolution, 1995, 10, 96-97.	8.7	5

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109	Effect of Binodoxys communis parasitism on flight behavior of the soybean aphid, Aphis glycines. Biological Control, 2012, 62, 10-15.	3.0	4
110	Editorial overview: Parasites/parasitoids/biological control: Communities without parasitoids?. Current Opinion in Insect Science, 2016, 14, viii-x.	4.4	4
111	A field-based assessment of the parasitoid Aphelinus certus as a biological control agent of soybean aphid in North America. Biological Control, 2020, 146, 104284.	3.0	4
112	Parasitoidâ€mediated indirect interactions between unsuitable and suitable hosts generate apparent predation in microcosm and modeling studies. Ecology and Evolution, 2021, 11, 2449-2460.	1.9	4
113	Behavior of the Avian Parasite Philornis downsi (Diptera: Muscidae) in and Near Host Nests in the Galapagos Islands. Journal of Insect Behavior, 2021, 34, 296-311.	0.7	4
114	Diet breadth of the aphid predator Chrysoperla rufilabris Burmeister (Neuroptera:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 Td (	1.0	4
115	Specificity within birdâ€“parasiteâ€“parasitoid food webs: A novel approach for evaluating potential biological control agents of the avian vampire fly. Journal of Applied Ecology, 2022, 59, 2189-2198.	4.0	4
116	The Soybean Aphid: a Review of Its Biology and Management. Annals of the Entomological Society of America, 2004, 97, 203-203.	2.5	3
117	High Hyperparasitism ofCotesia rubecula(Hymenoptera: Braconidae) in Minnesota and Massachusetts. Journal of the Kansas Entomological Society, 2016, 89, 385-389.	0.2	3
118	The effects of host plant species on adult oviposition and larval performance of the aphid predator Aphidoletes aphidimyza. Ecological Entomology, 2020, 45, 606-616.	2.2	2
119	Persistence of the invasive bird-parasitic fly Philornis downsi over the host interbreeding period in the Galapagos Islands. Scientific Reports, 2022, 12, 2325.	3.3	1
120	Use of artificial nest boxes by two species of small, arboreal mammals in ecuadorian tropical dry forest. Neotropical Biodiversity, 2022, 8, 108-111.	0.5	0