Daniel R Papaj

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Complex signal function: developing a framework of testable hypotheses. Behavioral Ecology and Sociobiology, 2005, 57, 197-214.	1.4	819
2	Ovarian Dynamics and Host Use. Annual Review of Entomology, 2000, 45, 423-448.	11.8	275
3	Flower Choice and Learning in Foraging Bumblebees: Effects of Variation in Nectar Volume and Concentration.. Ethology, 2006, 112, 278-285.	1.1	182
4	Host marking behavior in phytophagous insects and parasitoids. Entomologia Experimentalis Et Applicata, 2001, 99, 273-293.	1.4	179
5	Flowers help bees cope with uncertainty: signal detection and the function of floral complexity. Journal of Experimental Biology, 2011, 214, 113-121.	1.7	153
6	Aposematic coloration, luminance contrast, and the benefits of conspicuousness. Behavioral Ecology, 2007, 18, 41-46.	2.2	147
7	Odor learning and foraging success in the parasitoid,Leptopilina heterotoma. Journal of Chemical Ecology, 1990, 16, 3137-3150.	1.8	146
8	Multimodal signals enhance decision making in foraging bumble-bees. Proceedings of the Royal Society B: Biological Sciences, 2008, 275, 797-802.	2.6	146
9	Flower choice copying in bumblebees. Biology Letters, 2005, 1, 504-507.	2.3	128
10	PEAK SHIFT DISCRIMINATION LEARNING AS A MECHANISM OF SIGNAL EVOLUTION. Evolution; International Journal of Organic Evolution, 2005, 59, 1300-1305.	2.3	113
11	â€˜Xâ€™ marks the spot: The possible benefits of nectar guides to bees and plants. Functional Ecology, 2011, 25, 1293-1301.	3.6	111
12	Effects of age, diet, female density, and the host resource on egg load in Anastrepha ludens and Anastrepha obliqua (Diptera: Tephritidae). Journal of Insect Physiology, 2001, 47, 975-988.	2.0	95
13	Forget-me-not: Complex floral displays, inter-signal interactions, and pollinator cognition. Environmental Epigenetics, 2011, 57, 215-224.	1.8	90
14	Colour learning in two behavioural contexts: how much can a butterfly keep in mind?. Animal Behaviour, 2003, 65, 425-434.	1.9	89
15	Brain Size: A Global or Induced Cost of Learning?. Brain, Behavior and Evolution, 2009, 73, 111-128.	1.7	87
16	Phytochemical basis of learning inRhagoletis pomonella and other herbivorous insects. Journal of Chemical Ecology, 1986, 12, 1125-1143.	1.8	86
17	Conditioning of leaf-shape discrimination by chemical cues in the butterfly, Battus philenor. Animal Behaviour, 1986, 34, 1281-1288.	1.9	85
18	Reproductive tradeoffs of learning in a butterfly. Behavioral Ecology, 2011, 22, 291-302.	2.2	80

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19	Learning in two contexts: the effects of interference and body size in bumblebees. Journal of Experimental Biology, 2005, 208, 2045-2053.	1.7	78
20	Demographic Consequences of Descrimination among Conspecific Host Plants by Battus Philenor Butterflies. Ecology, 1983, 64, 1402-1410.	3.2	69
21	Operational sex ratio versus gender density as determinants of copulation duration in the walnut fly, Rhagoletis juglandis (Diptera: Tephritidae). Behavioral Ecology and Sociobiology, 1996, 39, 171-180.	1.4	69
22	INTERPOPULATION DIFFERENCES IN HOST PREFERENCE AND THE EVOLUTION OF LEARNING IN THE BUTTERFLY, <i>BATTUS PHILENOR</i>. Evolution; International Journal of Organic Evolution, 1986, 40, 518-530.	2.3	63
23	Patterns of Phenotypic Plasticity in Common and Rare Environments: A Study of Host Use and Color Learning in the Cabbage White Butterfly<i>Pieris rapae</i>. American Naturalist, 2009, 173, 615-631.	2.1	62
24	Bees remember flowers for more than one reason: pollen mediates associative learning. Animal Behaviour, 2016, 111, 93-100.	1.9	62
25	Unrewarding experiences and their effect on foraging in the parasitic waspLeptopilina heterotoma (Hymenoptera: Eucoilidae). Journal of Insect Behavior, 1994, 7, 465-481.	0.7	61
26	On the nature of learning in oviposition site acceptance by apple maggot flies. Animal Behaviour, 1986, 34, 98-107.	1.9	58
27	Foraging Bumble Bees Weigh the Reliability of Personal and Social Information. Current Biology, 2016, 26, 1195-1199.	3.9	54
28	Use of fruit wounds in oviposition by Mediterranean fruit flies. Entomologia Experimentalis Et Applicata, 1989, 53, 203-209.	1.4	52
29	The effect of prior adult experience on components of habitat preference in the apple maggot fly (Rhagoletis pomonella). Oecologia, 1988, 76, 538-543.	2.0	48
30	Host-marking pheromone and use of previously established oviposition sites by the mediterranean fruit fly (Diptera: Tephritidae). Journal of Insect Behavior, 1992, 5, 583-598.	0.7	46
31	Patterns of pollen and nectar foraging specialization by bumblebees over multiple timescales using RFID. Scientific Reports, 2017, 7, 42448.	3.3	46
32	Oviposition site guarding by male walnut flies and its possible consequences for mating success. Behavioral Ecology and Sociobiology, 1994, 34, 187-195.	1.4	44
33	How a generalist bee achieves high efficiency of pollen collection on diverse floral resources. Behavioral Ecology, 2017, 28, 991-1003.	2.2	43
34	Effects of experience on parasitoid movement in odour plumes. Physiological Entomology, 1992, 17, 90-96.	1.5	42
35	Big Genomes Facilitate the Comparative Identification of Regulatory Elements. PLoS ONE, 2009, 4, e4688.	2.5	41
36	Floral signal complexity as a possible adaptation to environmental variability: a test using nectar-foraging bumblebees, Bombus impatiens. Animal Behaviour, 2012, 83, 905-913.	1.9	41

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37	Host plant selection by Battus philenor butterflies: Evidence for individual differences in foraging behaviour. Animal Behaviour, 1983, 31, 341-347.	1.9	40
38	Components of Conspecific Host Discrimination Behavior in the Butterfly Battus Philenor. Ecology, 1987, 68, 245-253.	3.2	40
39	Colour learning when foraging for nectar and pollen: bees learn two colours at once. Biology Letters, 2015, 11, 20150628.	2.3	39
40	Concealed floral rewards and the role of experience in floral sonication by bees. Animal Behaviour, 2016, 120, 83-91.	1.9	39
41	Functional shifts in the use of parasitized hosts by a tephritid fly: the role of host quality. Behavioral Ecology, 1996, 7, 235-242.	2.2	38
42	Bioluminescent aposematism in millipedes. Current Biology, 2011, 21, R680-R681.	3.9	38
43	Role of colour and shape stimuli in host-enhanced oogenesis in the walnut fly, Rhagoletis juglandis. Physiological Entomology, 1998, 23, 97-104.	1.5	37
44	Plasticity of the Worker Bumblebee Brain in Relation to Age and Rearing Environment. Brain, Behavior and Evolution, 2013, 82, 250-261.	1.7	37
45	Learning of apple fruit biotypes by apple maggot flies. Journal of Insect Behavior, 1988, 1, 67-74.	0.7	36
46	Intraâ€tree foraging behavior of <i>Ceratitis capitata</i> flies in relation to host fruit density and quality. Entomologia Experimentalis Et Applicata, 1987, 45, 251-258.	1.4	35
47	d-(+)-Pinitol, an oviposition stimulant for the pipevine swallowtail butterfly,Battus philenor. Journal of Chemical Ecology, 1992, 18, 799-815.	1.8	34
48	Floral Nectar Guide Patterns Discourage Nectar Robbing by Bumble Bees. PLoS ONE, 2013, 8, e55914.	2.5	34
49	Shifts in foraging behavior by a Battus philenor population: field evidence for switching by individual butterflies. Behavioral Ecology and Sociobiology, 1986, 19, 31-39.	1.4	33
50	Superparasitism of larval hosts by the walnut fly, Rhagoletis juglandis, and its implications for female and offspring performance. Oecologia, 2004, 141, 460-467.	2.0	31
51	Bees learn preferences for plant species that offer only pollen as a reward. Behavioral Ecology, 2016, 27, 731-740.	2.2	29
52	Cross-induction of fruit acceptance by the medflyCeratitis capitata: The role of fruit size and chemistry. Journal of Insect Behavior, 1989, 2, 241-254.	0.7	28
53	Division of labor of anthers in heterantherous plants: flexibility of bee pollen collection behavior may serve to keep plants honest. Arthropod-Plant Interactions, 2017, 11, 307-315.	1.1	26
54	How well can relative specialistRhagoletis flies learn to discriminate fruit for oviposition?. Journal of Insect Behavior, 1993, 6, 167-176.	0.7	25

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55	Sex differences in pollinator behavior: Patterns across species and consequences for the mutualism. Journal of Animal Ecology, 2019, 88, 971-985.	2.8	25
56	Differences in learning between wild and laboratory Ceratitis capitata flies. Entomologia Experimentalis Et Applicata, 1987, 45, 65-72.	1.4	24
57	Asymmetries in Physiological State as a Possible Cause of Resident Advantage in Contests. Behaviour, 1998, 135, 1013-1030.	0.8	24
58	Effects of developmental change in body size on ectotherm body temperature and behavioral thermoregulation: caterpillars in a heat-stressed environment. Oecologia, 2015, 177, 171-179.	2.0	24
59	Sonicating bees demonstrate flexible pollen extraction without instrumental learning. Environmental Epigenetics, 2019, 65, 425-436.	1.8	24
60	Artificial pollen dispensing flowers and feeders for bee behaviour experiments. Journal of Pollination Ecology, 0, 18, 13-22.	0.5	24
61	Host-marking behaviour as a quantitative signal of competition in the walnut fly Rhagoletis juglandis. Ecological Entomology, 2004, 29, 336-344.	2.2	22
62	Sampling and tracking a changing environment: persistence and reward in the foraging decisions of bumblebees. Interface Focus, 2017, 7, 20160149.	3.0	21
63	Resource quality or competition: why increase resource acceptance in the presence of conspecifics?. Behavioral Ecology, 2011, 22, 730-737.	2.2	20
64	A within-species warning function for an aposematic signal. Proceedings of the Royal Society B: Biological Sciences, 2005, 272, 2519-2523.	2.6	19
65	Role of host fruit color in the behavior of the walnut fly Rhagoletis juglandis. Entomologia Experimentalis Et Applicata, 1999, 93, 247-256.	1.4	18
66	Why are floral signals complex? An outline of functional hypotheses. , 2011, , 279-300.		18
67	Nutritional complexity and the structure of bee foraging bouts. Behavioral Ecology, 2016, 27, 903-911.	2.2	18
68	Effects of sodium puddling on male mating success, courtship and flight in a swallowtail butterfly. Animal Behaviour, 2016, 114, 203-210.	1.9	17
69	Patterns of Egg Load in the Walnut Fly Rhagoletis juglandis (Diptera: Tephritidae) in Nature and Their Possible Significance for Distribution of Sexes. Annals of the Entomological Society of America, 1996, 89, 875-882.	2.5	15
70	Plasticity in Learning Causes Immediate and Trans-Generational Changes in Allocation of Resources. Integrative and Comparative Biology, 2013, 53, 329-339.	2.0	15
71	Extreme weather change and the dynamics of oviposition behavior in the pipevine swallowtail, Battus philenor. Oecologia, 2007, 152, 365-375.	2.0	14
72	Mimicry in viceroy butterflies is dependent on abundance of the model queen butterfly. Communications Biology, 2019, 2, 68.	4.4	14

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73	Why study plasticity in multiple traits? New hypotheses for how phenotypically plastic traits interact during development and selection. Evolution; International Journal of Organic Evolution, 2022, 76, 858-869.	2.3	14
74	Host Utilization by the Walnut Fly,Rhagoletis juglandis(Diptera: Tephritidae). Environmental Entomology, 2000, 29, 994-1001.	1.4	13
75	Learning of bimodal vs. unimodal signals in restrained bumble bees. Journal of Experimental Biology, 2020, 223, .	1.7	13
76	Linking components of complex signals to morphological part: the role of anther and corolla in the complex floral display. Animal Behaviour, 2018, 135, 223-236.	1.9	12
77	Resource presence and operational sex ratio as determinants of copulation duration in the flyRhagoletis juglandis. Animal Behaviour, 1999, 57, 1063-1069.	1.9	11
78	Molecular phylogeny, ecology and multispecies aggregation behaviour of bombardier beetles in Arizona. PLoS ONE, 2018, 13, e0205192.	2.5	10
79	Leaf buds, a factor in host selection by Battus philenor butterflies. Ecological Entomology, 1986, 11, 301-307.	2.2	9
80	Acoustic Component and Social Context of the Wing Display of the Walnut Fly Rhagoletis juglandis. Journal of Insect Behavior, 2000, 13, 511-524.	0.7	9
81	Learning signals within sensory environments: Does host cue learning in butterflies depend on background?. Animal Biology, 2006, 56, 173-192.	1.0	9
82	The value of information in floral cues: bumblebee learning of floral size cues. Behavioral Ecology, 2015, 26, 1335-1344.	2.2	8
83	Why Have Multiple Plastic Responses? Interactions between Color Change and Heat Avoidance Behavior in <i>Battus philenor</i> Larvae. American Naturalist, 2017, 189, 657-666.	2.1	8
84	Multiple rewards have asymmetric effects on learning in bumblebees. Animal Behaviour, 2017, 126, 123-133.	1.9	8
85	Fruit size and clutch size in wild <i>Ceratitis capitata</i>. Entomologia Experimentalis Et Applicata, 1990, 54, 195-198.	1.4	7
86	Big maggots dig deeper: size-dependent larval dispersal in flies. Oecologia, 2015, 179, 55-62.	2.0	7
87	Memory flies sooner from flies that learn faster. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 13539-13540.	7.1	6
88	White flowers finish last: pollen-foraging bumble bees show biased learning in a floral color polymorphism. Evolutionary Ecology, 2017, 31, 173-191.	1.2	6
89	Sensory bias and signal detection trade-offs maintain intersexual floral mimicry. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190469.	4.0	6
90	Sex differences in the foraging behavior of a generalist hawkmoth. Insect Science, 2022, 29, 304-314.	3.0	6

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91	Resource allocation to testes in walnut flies and implications for reproductive strategy. Journal of Insect Physiology, 2010, 56, 1523-1529.	2.0	5
92	Aggregative Behavior is Not Explained by an Allee Effect in the Walnut Infesting Fly, Rhagoletis juglandis. Journal of Insect Behavior, 2012, 25, 166-182.	0.7	4
93	Long Frontal Projections Help Battus philenor (Lepidoptera: Papilionidae) Larvae Find Host Plants. PLoS ONE, 2015, 10, e0131596.	2.5	4
94	Brawls Bring Buzz: Male Size Influences Competition and Courtship in Diadasia rinconis (Hymenoptera:) Tj ETQq0 0 0 rgBT /Overlock 10	1.5	4
95	Long horns protect Hestina japonica butterfly larvae from their natural enemies. Scientific Reports, 2022, 12, 2835.	3.3	4
96	Effect of host stimuli on ovariole development in the walnut fly, <i>Rhagoletis juglandis</i> (Diptera,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.5	3
97	Oviposition site guarding by male walnut flies and its possible consequences for mating success. Behavioral Ecology and Sociobiology, 1994, 34, 187-195.	1.4	3
98	Colour plasticity alters thermoregulatory behaviour in Battus philenor caterpillars by modifying the cue received. Animal Behaviour, 2018, 140, 93-98.	1.9	2
99	Nesting biology of<i>Centris</i>(<i>Paracentris</i>)<i>burgdorfi</i>(Apidae: Centridini). Journal of Apicultural Research, 2021, 60, 817-827.	1.5	2
100	Comparison of colorâ€learning rates among eight species of three insect orders (Hymenoptera, Diptera,) Tj ETQq0 0 0 rgBT /Overlock 10	1.5	2
101	The Size of it: Scant Evidence That Flower Size Variation Affects Deception in Intersexual Floral Mimicry. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	1
102	In Praise of a Good Colleague: Ronald John Prokopy. Journal of Insect Behavior, 2004, 17, 569-577.	0.7	0