Host responses to interspecific brood parasitism: a by-product of adaptations to conspecific parasitism?

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Appendices

Appendix 1 The statistical assessment and the resulting estimates of nest desertion as a response to brood parasitism in European blackbirds and song thrush.

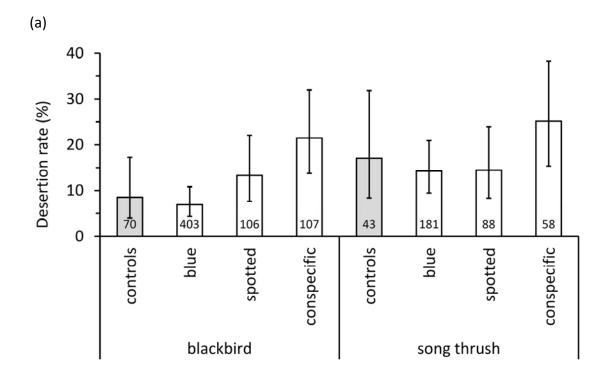
Table A1.1 Statistical results from the model explaining nest desertion as a response (0 = nest survived the 6-day period, i.e. experimental egg accepted or ejected and control nests not deserted, 1 = nest deserted). Treatments = blue model, spotted model, conspecific egg, control. Test statistics and *P*-values for non-significant terms are from backward elimination procedure just before the particular term (being the least significant) was removed from the model. For *post-hoc* comparisons see Table A2. FEG = first egg laying date. For effect sizes see the main article text.

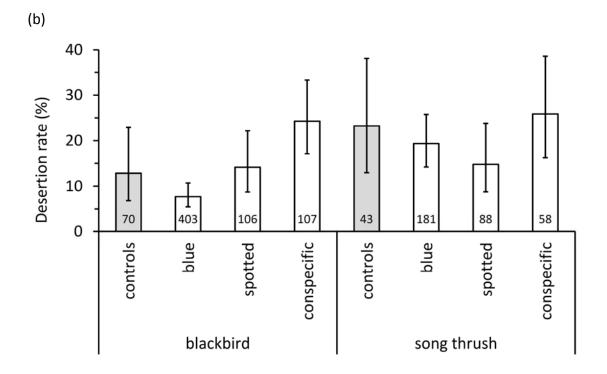
Predictors		Blackbird		9	ong thrush	
	ddf	F	Р	ddf	F	Р
Treatment	669	5.32	0.001	355	0.88	0.45
Breeding density	669	0.64	0.53	355	3.27	0.04
Clutch	650	2.81	0.09	346	2.83	0.09
Nest stage	647	0.50	0.68	342	0.59	0.62
Laying date	669	12.32	0.0005	345	0.88	0.35

Table A1.2 *Post-hoc* comparisons (Tukey HSD test) for "Treatment" levels of nest desertion between experimental and control treatment from final models (see Table A1.1).

Comparison	Blackbird			Song thrush		
	df	t	Р	df	t	Р
Blue vs. control	669	-0.54	0.59	355	0.21	1.00
Spotted vs. control	669	1.04	0.73	355	-0.08	1.00
Conspecific vs. control	669	2.41	0.02	355	1.18	0.64

Figure A1 Nest desertion rates (least square means with t-type 95% confidence intervals) of blackbirds and song thrush (a) with significant predictors (see Results) and (b) without predictors. When confidence intervals highly overlap between control nests and experimental nests within each species, the difference between treatments is non-significant. Numbers inside bars indicate sample sizes (n=nests).





Appendix 2 Statistical analyses of egg rejection rates from models with nest desertion as a specific rejection response to parasitism excluded or included.

Table A2.1 Egg ejection (desertion as response excluded) response and latency to ejection by thrushes. Test statistics and *P*-values for non-significant terms are from backward elimination procedure just before the particular term (being the least significant) was removed from the model. For effect sizes see the main article text.

Type of parasitism	Blackbird			Song thrush			
	ddf	F	Р	ddf	F	Р	
CONSPECIFIC							
Ejection							
Breeding density	79	6.32	0.01	41	3.01	0.09	
Clutch	76	1.17	0.28	39	0.79	0.38	
Nest stage	73	1.05	0.38	35	0.67	0.57	
Laying date	72	0.24	0.62	38	0.63	0.43	
Latency to ejection							
Breeding density	22	8.27	0.009	11	1.22	0.29	
Clutch	17	0.00	1.00	11	5.13	0.04	
Nest stage	19	0.52	0.60	8	1.38	0.32	
Laying date	21	0.21	0.65	7	0.05	0.82	
INTERSPECIFIC							
Ejection							
Geography	455	7.30	0.0008	216	0.59	0.55	
Egg model	455	29.57	<0.0001	216	20.40	<0.0001	
G*E	446	1.11	0.33	206	0.24	0.79	
Clutch	449	0.40	0.53	208	0.70	0.40	
Nest stage	455	5.41	0.001	213	2.31	0.08	

Laying date	448	0.04	0.85	212	1.63	0.20
Latency to ejection						
Latency to ejection						
Geography	308	0.16	0.86	101	2.53	0.08
Egg model	308	29.87	<0.0001	101	0.33	0.57
G*E	300	2.53	0.08	95	1.33	0.27
Clutch	303	0.29	0.59	101	7.99	0.006
Nest stage	308	3.86	0.01	98	1.97	0.12
Laying date	302	0.05	0.82	97	0.40	0.53

Table A2.2 Egg rejection (ejection and desertion pooled) response and latency to rejection by thrushes. Test statistics and *P*-values for non-significant terms are from backward elimination procedure just before the particular term (being the least significant) was removed from the model. For effect sizes see the main article text.

Type of parasitism	Blackbird			Song thrush			
	ddf	F	Р	ddf	F	Р	
CONSPECIFIC							
Rejection							
Breeding density	105	5.31	0.02	56	1.88	0.18	
Clutch	101	1.43	0.24	51	3.23	0.08	
Nest stage	98	1.00	0.40	47	0.43	0.73	
Laying date	97	0.92	0.34	50	1.33	0.25	
Latency to rejection							
Breeding density	48	2.94	0.09	23	2.01	0.17	
Clutch	44	0.19	0.66	23	4.70	0.04	
Nest stage	41	0.70	0.56	20	0.59	0.63	
Laying date	47	0.64	0.43	19	0.04	0.85	
INTERSPECIFIC							
Rejection							
Geography	501	7.51	0.0006	264	0.14	0.87	
Egg model	501	24.46	<0.0001	264	16.03	<0.0001	
G*E	485	0.86	0.42	253	0.09	0.92	
Clutch	488	1.09	0.30	255	0.75	0.39	
Nest stage	501	5.08	0.002	261	1.72	0.16	
Laying date	487	0.18	0.67	260	1.56	0.21	

Latency to rejection

Geography	357	0.08	0.93	145	0.35	0.70
Egg model	357	30.95	<0.0001	145	4.13	0.04
G*E	339	2.83	0.06	142	0.89	0.41
Clutch	342	0.03	0.85	145	5.37	0.02
Nest stage	354	2.06	0.10	145	2.72	0.05
Laying date	341	0.03	0.96	144	0.39	0.53