Colour pattern model experiments data file and reflectance spectra

Supplementary material for manuscript

Reproductive isolation caused by colour pattern mimicry

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1) Count data

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1) Count data

Note: Numbers shown are counts of male behaviour events, either approach (X_A) or courtship (X_H) of the moving model. N, the number of males used in each replicate, is also given. Summed values are shown at the foot of each column. A few of the initial experiments were carried out without recording courtship behaviour and only approach data from these are included in the analysis. However at least 10 replicates of each experiment were carried out with courtship behaviour recorded.

cydno males Real wings					melpomene (Panama) males Real wings				
melpomene (Panama)		cydno			melpomene (Panama)		cydno		
X_A	X_H	X_A	X_H	N	X_A	X_H	X_A	X_H	N
4		13		10	1		1		10
9		3		11	6		0		10
1		6		11	4		3		10
12		8		10	64		32		15
10		7		12	13		11		15
2		11		10	17		12		15
1		1		12	29		3		14
13		3		12	12		10		13
6		6		10	59		34		12
4		1		10	43		18		12
6		9		10	6	1	2	0	8
18		13		10	19	9	5	0	5
4		5		8	28	13	11	0	5
35	4	28	4	8	38	22	14	0	5
15	0	21	3	8	20	14	12	0	5
15	2	15	2	8	18	4	13	1	6
23	0	10	1	8	23	2	4	0	6
7	0	23	5	9	24	6	6	0	6
2	0	3	0	9	31	8	12	1	6
5	0	4	3	9	13	2	19	0	6
4	0	8	0	9					
1	0	3	2	7	468	81	222	2	
4	1	3	1	7					
201	7	204	21						

| _cydno_ males Paper models | | | | | _melpomene_ (Panama) males Paper models | | | | |
| _melpomene_ (Panama) | | _cydno_ | | | _melpomene_ (Panama) | | _cydno_ | | |
X_A	X_H	X_A	X_H	N	X_A	X_H	X_A	X_H	N
22	0	16	0	10	23	3	16	0	6
3	0	5	0	10	6	2	6	0	6
30	0	20	2	10	6	1	2	0	6
16	1	13	1	10	52	9	31	0	6
5	0	15	1	10	13	2	3	0	6
16	1	17	3	10	24	7	9	0	6
18	1	19	3	10	29	5	23	0	6
7	0	11	1	9	38	5	23	1	6
18	0	16	1	9	15	5	9	1	5
9	1	5	2	9	26	5	10	0	5
6	1	9	1	9	3	1	6	0	7
150	5	146	15		235	45	138	2	

| _melpomene_ (Panama) males Real wings | | | | | _melpomene_ (Guiana) males Real wings | | | | |
| _melpomene_ (Panama) | | _melpomene_ (Guiana) | | | _melpomene_ (Panama) | | _melpomene_ (Guiana) | | |
X_A	X_H	X_A	X_H	N	X_A	X_H	X_A	X_H	N
19	8	8	6	7	35	11	41	14	9
17	9	19	10	7	16	3	15	4	8
6	1	5	4	6	15	2	19	2	8
19	9	17	12	5	33	4	22	4	8
28	13	31	11	5	32	9	31	8	8
38	22	23	12	5	46	4	35	2	8
20	14	32	8	5	33	6	38	4	8
18	4	17	6	6	27	2	43	3	8
20	2	24	2	6	9	1	13	3	10
24	6	9	2	6	21	5	9	2	10
209	88	185	73		267	47	266	46	

| melpomene (Panama) males Paper models | | | | | melpomene (Guiana) males Paper models | | | | |
melpomene (Panama)		melpomene (Guiana)			melpomene (Panama)		melpomene (Guiana)		
X_A	X_H	X_A	X_H	N	X_A	X_H	X_A	X_H	N
24	7	28	11	6	27	6	33	9	8
29	5	52	9	6	7	1	21	6	7
38	5	45	7	6	15	5	20	3	7
15	5	9	4	6	20	7	36	11	7
26	5	19	6	6	9	0	9	1	9
3	1	10	4	7	7	3	12	2	9
10	2	7	4	7	45	6	42	5	9
5	2	5	3	6	20	1	9	1	8
12	3	12	3	6	19	2	23	2	8
18	5	16	6	6	4	0	6	0	8
3	2	5	1	5	5	0	7	0	12
10	3	4	2	5	15	1	11	2	12
11	3	11	3	5	3	1	5	3	12
204	48	223	63		196	33	234	45	

| melpomene (Guiana) males Real wings | | | | | melpomene (Guiana) males Paper models | | | | |
melpomene (Guiana)		cydno			melpomene (Guiana)		cydno		
X_A	X_H	X_A	X_H	N	X_A	X_H	X_A	X_H	N
41	14	33	3	9	33	9	24	0	8
15	4	9	0	8	21	6	13	0	7
19	2	17	2	8	20	3	11	0	7
22	4	25	1	8	36	11	28	2	7
31	8	19	0	8	9	1	4	0	9
35	2	29	0	8	12	2	2	0	9
38	4	21	1	8	42	5	25	2	9
43	3	29	0	8	9	1	16	0	8
13	3	4	0	10	23	2	10	0	8
12	5	9	1	10	6	0	3	1	9
269	49	195	8		211	40	136	5	

2) Reflectance Spectra

Note: Spectra were measured using a Perkin Elmer Lambda 900 Spectrometer with an integrating sphere. Each colour region was measured separately for each species. Reflectance spectra of paper models and natural wings are shown together on each graph. We thank Steve Upson at Perkin Elmer for assistance with reflectance measurements.

H. melpomene, Guiana (black)
red = paper, blue = real

H. melpomene, Guiana (red)
red = paper, blue = real

H. melpomene, Panama (black)
red = paper, blue = real

H. melpomene, Panama (yellow)
red = paper, blue = real

H. melpomene, Panama (red)
red = paper, blue = real