

Rougerie et al., Australian Sphingidae – DNA barcodes challenge current species boundaries and distributions.

Table S5. DNA barcode matches at subspecies and species level for Australian Sphingidae: minimum genetic distances (K2P) to the nearest hetero-subspecific record (Δ_{ssp} to NN.ssp) and to the nearest hetero-specific record (Δ_{sp} to NN.sp); exact matches at subspecies level and Δ distances below 2% with non-Australian species are highlighted in white/black cells. The last two columns list the relevant taxa included, and the unsampled subspecies. PT=paratype, HT=holotype.

#	Species	Δ_{ssp}	NN.ssp*	Δ_{sp}	NN.sp*	Relevant taxa sampled	Unsampled subspecies
1	<i>Acosmeryx anceus</i>	2.23	<i>A. a. subdentata</i>	3.98	<i>A. omissa</i>	<i>A. anceus subdentata</i>	-
2	<i>Acosmeryx miskini</i>	N/A	N/A	3.21	<i>A. miskinoides</i>	<i>A. miskinoides</i> (PT)	-
3	<i>Angonyx papuana</i>	N/A	N/A	4.68	<i>A. meeki</i>	<i>A. meeki</i> , <i>A. testacea</i>	ssp. <i>bismarcki</i>
4	<i>Cephonodes hylas australis</i>	2.41	<i>C. h. virescens</i>	3.82	<i>C. janus</i>	ssp. <i>hylas</i> , <i>melanogaster</i> (PT), <i>virescens</i>	-
5	<i>Cephonodes janus</i>	N/A	N/A	3.37	<i>C. xanthus</i>	-	ssp. <i>austrosundanus</i> , <i>simplex</i>
6	<i>Cephonodes kingii</i>	N/A	N/A	4.59	<i>Hemaris aksana</i>	-	-
7	<i>Cephonodes picus</i>	N/A	N/A	2.26	<i>C. xanthus</i>	-	-
8	<i>Cizara ardeniae</i>	N/A	N/A	6.79	<i>Rethera komarovi</i>	<i>C. sculpta</i> , <i>Rethera komarovi</i>	-
9	<i>Daphnis dohertyi</i>	N/A	N/A	4.33	<i>D. protrudens</i>	-	ssp. <i>callusia</i>
10	<i>Daphnis moorei</i>	N/A	N/A	3.62	<i>D. hypothous</i>	-	-
11	<i>Daphnis placida</i>	1.84	<i>D. p. salomonis</i>	3.98	<i>D. protrudens</i>	ssp. <i>salomonis</i>	-
12	<i>Daphnis protrudens</i>	1.07	<i>D. p. lecourti</i>	3.53	<i>D. torenia</i>	ssp. <i>lecourti</i>	-
13	<i>Eupanacra splendens</i>	5.96	<i>E. s. paradoxa</i>	4.13	<i>E. busiris</i>	ssp. <i>paradoxa</i>	-
14	<i>Gnathothlibus australiensis</i>	N/A	N/A	3.48	<i>G. eras</i>	-	-
15	<i>Gnathothlibus eras</i>	N/A	N/A	0.16	<i>G. vanuatuensis</i>	<i>G. saccoi</i> , <i>G. vanuatuensis</i>	-
16	<i>Hippotion brennus</i>	N/A	N/A	0.33	<i>H. joiceyi</i>	<i>H. joiceyi</i>	-
17	<i>Hippotion celerio</i>	N/A	N/A	2.3	<i>H. aporodes</i>	-	-
18	<i>Hippotion rosetta</i>	N/A	N/A	0	<i>H. boerhaviae</i>	<i>H. boerhaviae</i>	-
19	<i>Hippotion scrofa</i>	N/A	N/A	3.37	<i>H. brunnea</i>	-	-
20	<i>Hippotion velox</i>	N/A	N/A	2.14	<i>H. aporodes</i>	-	-
21	<i>Hyles livornicoides</i>	N/A	N/A	2.21	<i>H. zygophylli</i>	-	-
22	<i>Macroglossum alcedo</i>	N/A	N/A	4.23	<i>M. troglodytus papuanum</i>	<i>M. t. papuanum</i>	-
23	<i>Macroglossum corythus</i>	0.41	<i>M. c. pylene</i>	2.85	<i>M. semifasciata</i>	ssp. <i>fuscicauda</i> , <i>fulvicaudata</i> , <i>luteata</i> , <i>pylene</i>	ssp. <i>novebudensis</i> , <i>novirlandum</i> , <i>platyxanthum</i> , <i>xanthurus</i>
24	<i>Macroglossum dohertyi doddi</i>	0.46	<i>M. d. dohertyi</i>	3.89	<i>M. hirundo</i>	<i>M. d. dohertyi</i>	-
25	<i>Macroglossum divergens queenslandi</i>	-	-	-	-	<i>M. d. divergens</i> , <i>M. d. heliophila</i>	-

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26	<i>Macroglossum hirundo errans</i>	2.14	<i>M. h. hirundo</i>	1.19	<i>M. rectans</i>	<i>M. h. lifuensis</i> , <i>M. h. hirundo</i>	-
27	<i>Macroglossum joannisi</i>	N/A	N/A	4.81	<i>M. divergens heliophila</i>	-	-
28	<i>Macroglossum micacea</i>	N/A	N/A	5.95	<i>M. obscura</i>	-	ssp. <i>albibase</i>
29	<i>Macroglossum nubilum</i>	N/A	N/A	3.5	<i>M. prometheus lineata</i>	-	-
30	<i>Macroglossum prometheus lineata</i>	2.2	<i>M. p. prometheus</i>	2.91	<i>M. paukstatorum</i>	ssp. <i>prometheus</i>	-
31	<i>Macroglossum rectans</i>	N/A	N/A	1.18	<i>M. hirundo errans</i>	-	-
32	<i>Macroglossum tenebrosa</i>	N/A	N/A	2.81	<i>M. corythus</i>	-	-
33	<i>Macroglossum troglodytus</i>	3.66	<i>M. t. papuanum</i>	2.92	<i>M. insipida</i>	ssp. <i>papuanum</i>	-
34	<i>Macroglossum vacillans</i>	N/A	N/A	3.13	<i>M. belis</i>	-	-
35	<i>Nephele hespera</i>	N/A	N/A	2.43	<i>N. joiceyi</i>	-	-
36	<i>Nephele subvaria</i>	N/A	N/A	2.14	<i>N. monostigma</i>	-	-
37	<i>Pseudoangonyx excellens</i>	N/A	N/A	5.97	<i>Macroglossum faro cottoni</i>	-	-
38	<i>Theretra celata</i>	1.23	<i>T. c. babarensis</i>	2.55	<i>T. rhesus</i>	ssp. <i>babarensis</i>	-
39	<i>Theretra indistincta</i>	0	<i>T. i. papuensis</i> , <i>T. i. manuselensis</i>	3.18	<i>T. insularis</i>	ssp. <i>papuensis</i> , <i>manuselensis</i>	ssp. <i>bismarcki</i>
40	<i>Theretra inornata</i>	N/A	N/A	3.37	<i>T. clotho</i>	-	-
41	<i>Theretra latreillii</i>	3.32	<i>T. l. lucasii</i>	4.59	<i>T. sugii</i>	ssp. <i>lucasii</i> , <i>prattorum</i>	-
42	<i>Theretra margarita</i>	N/A	N/A	4.41	<i>Xylophanes tyndarus</i>	-	-
43	<i>Theretra nesus</i>	0.56	<i>T. n. albata</i>	5.7	<i>Xylophanes turbata</i>	ssp. <i>albata</i>	-
44	<i>Theretra oldenlandiae lewini</i>	0.76	<i>T. o. oldenlandiae</i>	0	<i>T. insignis</i>	ssp. <i>fuscata</i> , <i>oldenlandiae</i> & <i>T. insignis</i>	ssp. <i>samoana</i>
45	<i>Theretra queenslandi</i>	N/A	N/A	0	<i>T. radiosa</i>	<i>T. muricolor</i>	-
46	<i>Theretra radiosa</i>	N/A	N/A	-	-	-	-
47	<i>Theretra silhetensis intersecta</i>	2.62	<i>T. s. silhetensis</i>	4.62	<i>Centroctena rutherfordi</i>	ssp. <i>silhetensis</i>	-
48	<i>Theretra tryoni</i>	N/A	N/A	3.1	<i>T. rhesus</i>	-	-
49	<i>Theretra turneri</i>	N/A	N/A	2.89	<i>T. insignis kuehni</i>	-	-
50	<i>Zacria vojtechii</i>	N/A	N/A	5.62	<i>Proserpinus proserpina</i>	-	-
51	<i>Ambulyx dohertyi</i>	2.45	<i>A. d. novobritannica</i>	5.2	<i>A. moorei</i>	ssp. <i>novoirlandensis</i> (HT), <i>novobritannica</i> (HT), <i>dohertyi</i> , <i>salomonis</i>	-
52	<i>Ambulyx wildei</i>	N/A	N/A	0	<i>A. rudloffii</i> , <i>A. ceramensis</i>	<i>A. rudloffii</i> (HT), <i>A. ceramensis</i>	-
53	<i>Coequosa australasiae</i>	N/A	N/A	5.74	<i>Pseudopolyptychus foliaceus</i>	-	-
54	<i>Coequosa triangularis</i>	N/A	N/A	7.48	<i>C. australasiae</i>	-	-

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55	<i>Imber tropicus</i>	N/A	N/A	8.19	<i>Adhemarius gannascus</i>	-	-
56	<i>Agrius convolvuli</i>	N/A	N/A	4.98	<i>A. godarti</i>	-	-
57	<i>Agrius godarti</i>	N/A	N/A	4.98	<i>A. convolvuli</i>	-	-
58	<i>Cerberonoton rubescens severina</i>	5.5	<i>M. r. thielei</i>	5.35	<i>M. loeffleri</i>	ssp. <i>rubescens</i> , <i>thielei</i> , <i>titan</i> , <i>amboinicus</i>	ssp. <i>philippinensis</i>
59	<i>Coenotes eremophilae</i>	N/A	N/A	0.31	<i>C. jakli</i>	<i>C. jakli</i> (PT)	-
60	<i>Hopliocnema brachycera</i>	N/A	N/A	3.05	<i>H. lacunosa</i>	-	-
61	<i>Hopliocnema lacunosa</i>	N/A	N/A	3.05	<i>H. brachycera</i>	-	-
62	<i>Hopliocnema ochra</i>	N/A	N/A	3.69	<i>H. lacunosa</i>	-	-
63	<i>Leucomonia bethia</i>	N/A	N/A	4.83	<i>Psilogramma increta</i>	-	-
64	<i>Psilogramma argos</i>	N/A	N/A	5.2	<i>P. sulawesica</i>	-	-
65	<i>Psilogramma casuarinae</i>	N/A	N/A	3.06	<i>P. lifuense</i>	<i>P. hausmanni</i> (HT)	-
66	<i>Psilogramma exigua</i>	N/A	N/A	3.2	<i>P. lifuense</i>	-	-
67	<i>Psilogramma maxmouldsi</i>	N/A	N/A	3.05	<i>P. vanuatui</i>	-	-
68	<i>Psilogramma menephron</i>	N/A	N/A	0	<i>P. anne</i> , <i>P. bartschereri</i>	<i>P. bartschereri</i> (HT), <i>P. anne</i> (HT), <i>P. gloriosa</i> (HT), <i>P. choui</i> (HT), <i>P.</i> <i>danneri</i> (HT), <i>P. gerstmeieri</i> (HT), <i>P. hainanensis</i> (HT), <i>P. stameri</i> (HT), <i>P. surholti</i> (HT)	-
69	<i>Psilogramma papuensis</i>	N/A	N/A	2.14	<i>P. manusensis</i>	<i>P. mastrigti</i> (HT), <i>P. koalae</i> (HT)	-
70	<i>Psilogramma penumbra</i>	N/A	N/A	2.25	<i>P. vanuatui</i>	-	-
71	<i>Synoecha marmorata</i>	N/A	N/A	3.36	<i>Coenotes eremophilae</i>	-	-
72	<i>Tetrachroa edwardsi</i>	N/A	N/A	5.57	<i>Manduca leucospila</i>	-	-

* These columns list taxa retrieved as closest match on BOLD (www.boldsystems.org) through its ID-engine used on October, 1st 2013. The results may change with completion of the reference library and should not be interpreted as indicative of relatedness between the species/subspecies tested and its best close match.