

Table S1. Taxa used in this study, including SRA Accession numbers.

Family	Taxon	Collection locality	Identification reference or source	SRA Accession
Berothidae	<i>Mucroberotha vesicaria</i> Tjeder	South Africa	Collection	SAMN07526323
	<i>Spermophorella</i> sp.	Australia	Collection	SAMN07526347
Chrysopidae	<i>Abachrysa eureka</i> (Banks)	USA	Brooks & Barnard (1990)	SAMN07526336
	<i>Ankylopteryx alluaudi</i> Navás	Madagascar	Collection	SAMN07526349
	<i>Ankylopteryx anomala</i> (Brauer)	Thailand	Collection	SAMN07526332
	<i>Ankylopteryx octopunctata</i> (Fabricius)	India	Collection	SAMN07526443
	<i>Ankylopteryx</i> sp.	Thailand	Collection	SAMN07526441
	<i>Anomalochrysa hepatica</i> McLachlan	USA	Collection	SAMN07526238
	<i>Apochrysa lutea</i> (Walker)	Australia	Winterton (1995)	SAMN07526339
	<i>Apochrysa matsumurae</i> Okamoto	Japan	Tsukaguchi (1995)	SAMN07526237
	<i>Apochrysa voeltzkowi</i> (van der Weele)	South Africa	Tjeder (1966)	SAMN07526402
	<i>Atlantochrysa atlantica</i> (McLachlan)	Portugal	Collection	SAMN07526246
	<i>Austrochrysa</i> sp.	Papua New Guinea	Brooks & Barnard (1990)	SAMN07526439
	<i>Borniochrysa squamosa</i> (Tjeder)	South Africa	Tjeder (1966)	SAMN07526229
	<i>Brinckochrysa stenoptera</i> (Navás)	South Africa	Tjeder (1966)	SAMN07526358
	<i>Brinckochrysa turkanensis</i> (Navás)	South Africa	Tjeder (1966)	SAMN07526438
	<i>Cacarulla maculipennis</i> (Banks)	Bolivia	Brooks & Barnard (1990)	SAMN07526243
	<i>Calochrysa extranea</i> (Esben-Petersen)	Australia	New (1980)	SAMN07526326
	<i>Ceraeochrysa cincta</i> (Schneider)	Brazil	Freitas & Penny (2001)	SAMN07526356
	<i>Ceraeochrysa cornuta</i> (Navás)	Brazil	Freitas & Penny (2001)	SAMN07526435
	<i>Ceraeochrysa paraguayana</i> (Navás)	Brazil	Freitas & Penny (2001)	SAMN07526442
	<i>Ceratochrysa antica</i> (Walker)	South Africa	Tjeder (1966)	SAMN07526321
	<i>Chrysemosa jeanneli</i> (Navás)	South Africa	Tjeder (1966)	SAMN07526317
	<i>Chrysopa gibeauxi</i> (Leraut)	Italy	Collection	SAMN07526412
	<i>Chrysopa nigra</i> Okamoto	Japan	Collection	SAMN07526236
	<i>Chrysoperla furcifera</i> (Okamoto)	Thailand	Brooks (1997)	SAMN07526404
	<i>Chrysoperla savioi</i> (Navás)	China	Brooks (1997)	SAMN07526235
	<i>Chrysopidia ciliata</i> (Wesmael)	Switzerland	Collection	SAMN07526219
	<i>Chrysopidia</i> sp.	Vietnam	Collection	SAMN07526351
	<i>Chrysopodes collaris</i> (Schneider)	Brazil	Freitas & Penny (2001)	SAMN07526249
	<i>Chrysopodes crassinervis</i> Penny	Brazil	Freitas & Penny (2001)	SAMN07526357
	<i>Chrysopodes divisus</i> (Walker)	Brazil	Freitas & Penny (2001)	SAMN07526456
	<i>Chrysopodes lineafrons</i> Adams & Penny	Brazil	Freitas & Penny (2001)	SAMN07526446
	<i>Chrysopodes spinellus</i> Adams & Penny	Brazil	Freitas & Penny (2001)	SAMN07526440
	<i>Cunctochrysa baetica</i> (Hölzel)	France	Collection	SAMN07526343
	<i>Cunctochrysa albolineata</i> (Killington)	India	Collection	SAMN07526421
	<i>Dictyochrysa peterseni</i> Kimmins	Australia	New (1980)	SAMN07526248
	<i>Dysochrysa furcata</i> Tjeder	South Africa	Tjeder (1966)	SAMN07526350
	<i>Eremochrysa</i> sp.	USA	Collection	SAMN07526330
	<i>Evanochrysa evanescens</i> (McLachlan)	Thailand	Brooks & Barnard (1990)	SAMN07526345
	<i>Glenochrysa opposita</i> (McLachlan)	Australia	New (1980)	SAMN07526397
	<i>Glenochrysa principissa</i> (Navás)	South Africa	Tjeder (1966)	SAMN07526232
	<i>Gonzaga nigriceps</i> (McLachlan)	Brazil	Brooks & Barnard (1990)	SAMN07526325
	<i>Hypochrysa elegans</i> (Burmeister)	Switzerland	Collection	SAMN07526241
	<i>Italochrysa impar</i> (Navás)	South Africa	Tjeder (1966)	SAMN07526411
	<i>Italochrysa insignis</i> (Walker)	Australia	Collection	SAMN07526405
	<i>Italochrysa okavangoensis</i> Tjeder	South Africa	Tjeder (1966)	SAMN07526427
	<i>Italochrysa orientalis</i> Yang et al.	China	Collection	SAMN07526214
	<i>Leucochrysa (Nodita)</i> sp.	French Guiana	Freitas & Penny (2001)	SAMN07526454
	<i>Leucochrysa cruentata</i> (Schneider)	Brazil	Freitas & Penny (2001)	SAMN07526242
	<i>Mallada signatus</i> (Schneider)	Australia	Collection	SAMN07526327
	<i>Mallada tripunctatus</i> (Banks)	Australia	Collection	SAMN07526433
	<i>Meleoma emuncta</i> (Fitch)	USA	Collection	SAMN07526360
	<i>Meleoma mexicana</i> Banks	Mexico	Collection	SAMN07526423
	<i>Nacarina aculeata</i> de Freitas & Penny	Brazil	Freitas & Penny (2001)	SAMN07526328
	<i>Nacarina</i> sp.	French Guiana	Freitas & Penny (2001)	SAMN07526458
	<i>Nesochrysa virgata</i> (Tjeder)	South Africa	Tjeder (1966)	SAMN07526413
	<i>Nineta pallida</i> (Schneider)	Switzerland	Collection	SAMN07526227
	<i>Nineta principiae</i> Monserrat	Switzerland	Collection	SAMN07526399
	<i>Nothancyla verreauxi</i> Navás	Australia	Collection	SAMN07526100
	<i>Nothochrysa californica</i> Banks	USA	Collection	SAMN07526338
	<i>Nothochrysa sinica</i> Yang	China	Collection	SAMN07526410
	<i>Oyochrysa ancora</i> Brooks	Gabon	Brooks (1984)	SAMN07526449
	<i>Parachrysopiella argentina</i> (Banks)	Argentina	Penny (1996)	SAMN07526353
	<i>Parachrysopiella pallidicornis</i> Penny	Argentina	Penny (1996)	SAMN07526425
	<i>Parankylopteryx</i> sp.	Ghana	Brooks (1983)	SAMN07526416
	<i>Peyerimhoffina gracilis</i> (Schneider)	Italy	Collection	SAMN07526359
	<i>Pimachrysa fusca</i> Adams	USA	Adams (1967)	SAMN07526318
	<i>Plesiochrysa atalotis</i> (Banks)	Australia	New (1980)	SAMN07526319
	<i>Plesiochrysa ramburi</i> (Schneider)	Australia	New (1980)	SAMN07526420
	<i>Pseudomallada edwardsi</i> (Banks)	Australia	New (1980)	SAMN07526361
	<i>Pseudomallada prasinus</i> (Navás)	Switzerland	Collection	SAMN07526250

Chrysopidae	<i>Pseudomallada tactus</i> (Navás)	South Africa	Collection	SAMN07526396	
	<i>Pseudomallada venosellus</i> (Esben-Petersen)	South Africa	Collection	SAMN07526437	
	<i>Pseudomallada zelleri</i> (Schneider)	Switzerland	Collection	SAMN07526434	
	<i>Retipenna hasegawai</i> (Nakahara)	China	Collection	SAMN07526245	
	<i>Retipenna variegata</i> Brooks	China	Collection	SAMN07526239	
	<i>Semachrysa matsumurae</i> (Okamoto)	Malaysia	Brooks (1983)	SAMN07526244	
	<i>Semachrysa minuta</i> Brooks	China	Brooks (1983)	SAMN07526457	
	<i>Signochrysa ornatissima</i> (Nakahara)	Vietnam	Collection	SAMN07526247	
	<i>Stigmachrysa cladostigma</i> (Navás)	China	Collection	SAMN07526324	
	<i>Ungla</i> sp.	Brazil	Freitas & Penny (2001)	SAMN07526348	
	<i>Vieira leschenaulti</i> (Navás)	French Guiana	Tauber (2007)	SAMN07526240	
	<i>Yumachrysa apache</i> (Banks)	USA	Collection	SAMN07526346	
	Hemerobiidae	<i>Carobius elongatus</i> New	Australia	Collection	SAMN07526403
		<i>Drepanacra binocula</i> (Newman)	Australia	Collection	SAMN07526355
<i>Gayomyia falcata</i> (Blanchard)		Chile	Collection	SAMN07526406	
<i>Hemerobius incursus</i> Banks		Malaysia	Collection	SAMN07526426	
<i>Micromus tasmaniae</i> (Walker)		Australia	Collection	SAMN07526344	
<i>Neuronema laminatum</i> Tjeder		China	Collection	SAMN07526400	
<i>Nomerobius signatus</i> (Hagen)		Chile	Collection	SAMN07526455	
<i>Notiobiella viridis</i> Tillyard		Australia	Collection	SAMN07526428	
<i>Psychobiella sordida</i> Banks		Australia	Collection	SAMN07526329	
<i>Symphorobius beameri</i> Gurney		USA: New Mexico	Collection	SAMN07526384	
<i>Zachobiella pallida</i> Banks		Australia	Collection	SAMN07526432	
Ithonidae		<i>Fontecilla graphicus</i> Navás	Chile	Collection	SAMN07526354
		<i>Oliarces clara</i> Banks	USA	Collection	SAMN07526211
		<i>Platystoechotes lineata</i> Carpenter	USA	Collection	SAMN07526424
	<i>Polystoechotes punctata</i> (Fabricius)	USA	Collection	SAMN07526212	
	<i>Rapisma cryptunum</i> P. Barnard & New	Thailand	Collection	SAMN07526216	
Mantispidae	<i>Asperala erythraea</i> (Brauer)	Australia: Northern Territory	Collection	SAMN07526376	
	<i>Ditaxis biseriata</i> (Westwood)	Australia: Queensland	Collection	SAMN07526380	
	<i>Nolima pinal</i> Rehn	USA: Arizona	Collection	SAMN07526393	
	<i>Theristria delicatula</i> (Westwood)	Australia: New South Wales	Collection	SAMN07526394	
Nymphidae	<i>Myiodactylus osmyloides</i> Brauer	Australia	Collection	SAMN07526452	
	<i>Nymphes myrmeleonoides</i> Leach	Australia: Queensland	Collection	SAMN07526127	
Psychopsidae	<i>Zygophlebius leoninus</i> Navás	South Africa	Collection	SAMN07526215	

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