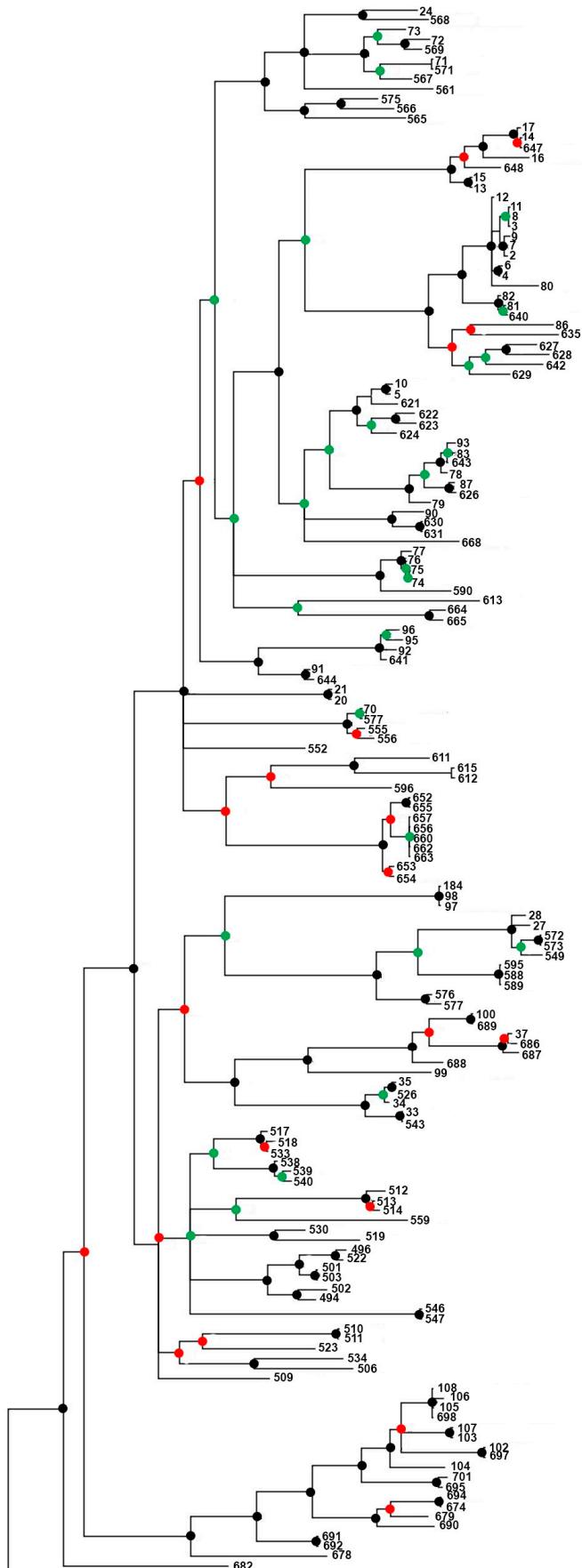
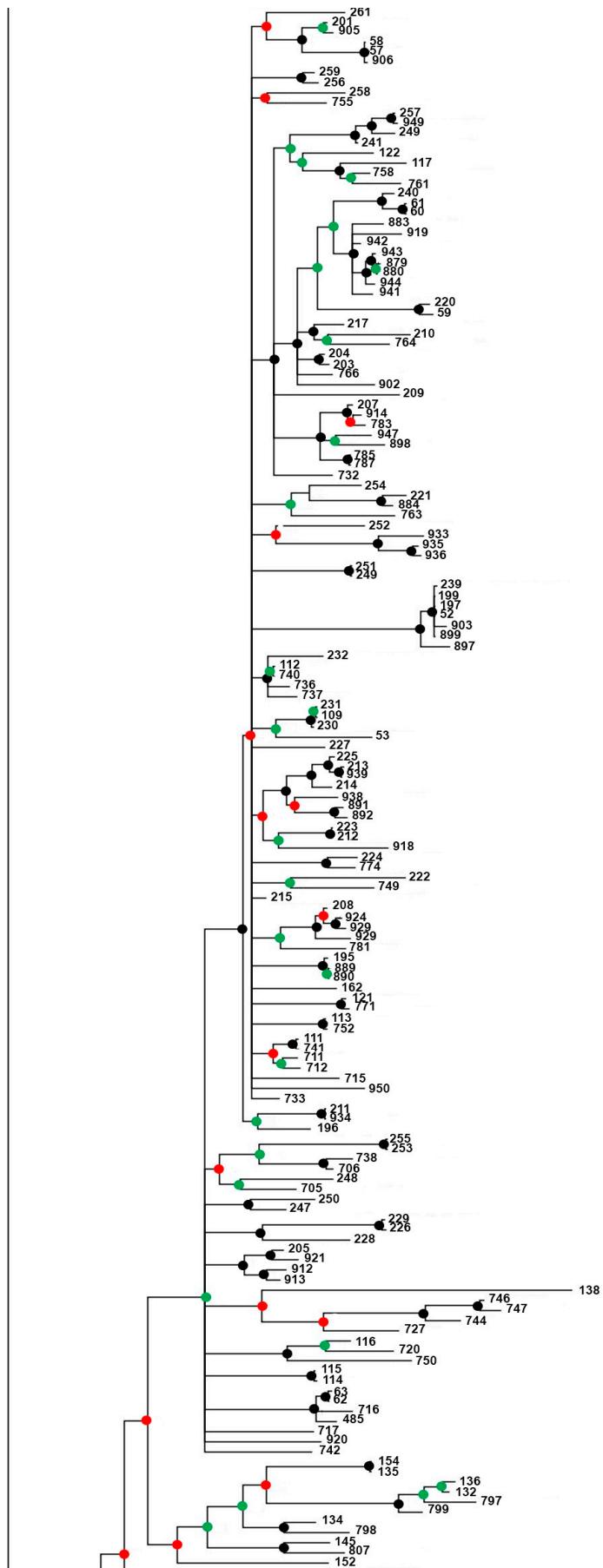


Supplementary Materials: The Megadiverse Australian Ant Genus *Melophorus*: Using CO1 Barcoding to Assess Species Richness

Alan N. Andersen, Benjamin D. Hoffmann and Kathryn Sparks

Figure S1: Complete fifty percent majority rule Bayesian consensus tree of *Melophorus* and outgroups considered in this study. Black circles indicate posterior probability (PP) > 0.95–1, green circles indicate PP > 0.7 < 0.95, and red circles indicate PP > 0.5 < 0.7. Numbers refer to specimen numbers listed in Tables S1 and S2. Table S1: List of specimens of *Melophorus* that were CO1-barcoded for this study. The species codes and species groups are as sorted in the TERC collection prior to CO1 analysis. All specimens are labeled in the TERC collection with the specimen number followed by ‘–15). Table S2: List of outgroup specimens that were CO1-barcoded for this study. All specimens are labeled in the TERC collection with the specimen number followed by ‘–15).





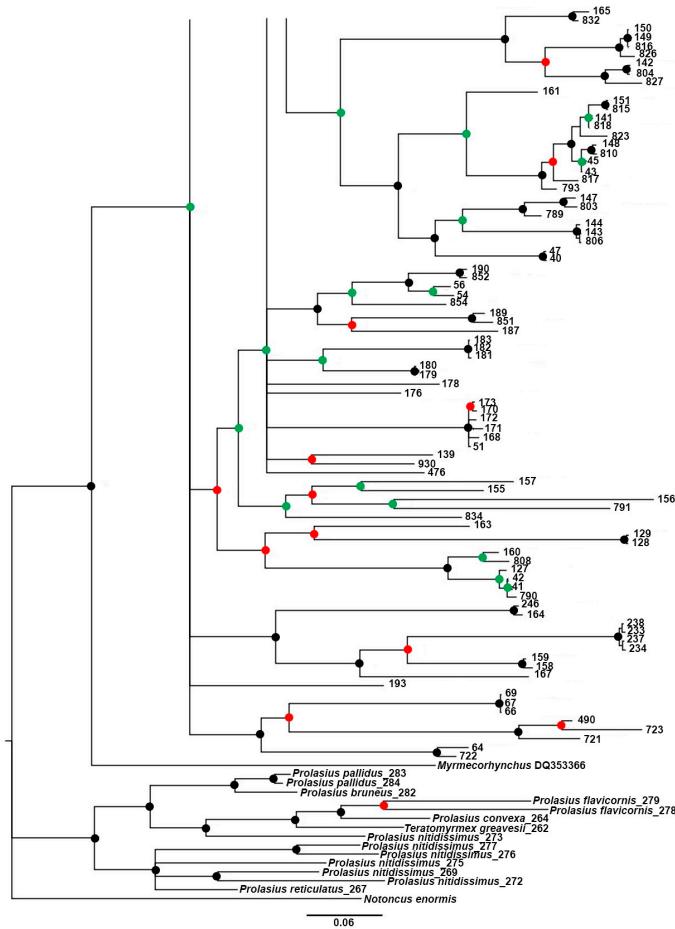


Figure S1. Fifty percent majority rule Bayesian consensus tree of *Melophorus*. Black circles indicate posterior probability (PP) > 0.95, green circles indicate PP > 0.7 < 0.95 and red circles indicate PP > 0.5 < 0.7.

Table S1. List of specimens of *Melophorus* that were CO1-barcoded for this study.

Specimen Number	Species Code	Species Group	Location
002	sp. 1	<i>aeneovirens</i>	Kakadu National Park, NT
003	sp. 1	<i>aeneovirens</i>	Kakadu National Park, NT
004	sp. 1	<i>aeneovirens</i>	Kakadu National Park, NT
005	sp. 1	<i>aeneovirens</i>	Kakadu National Park, NT
006	sp. 1	<i>aeneovirens</i>	Kakadu National Park, NT
007	sp. 1	<i>aeneovirens</i>	Kakadu National Park, NT
008	sp. 1	<i>aeneovirens</i>	Kakadu National Park, NT
009	sp. 1	<i>aeneovirens</i>	Kakadu National Park, NT
010	sp. 1	<i>aeneovirens</i>	Kakadu National Park, NT
011	sp. 1	<i>aeneovirens</i>	Kakadu National Park, NT
012	sp. 1	<i>aeneovirens</i>	Kakadu National Park, NT
013	sp. 2	<i>aeneovirens</i>	Kakadu National Park, NT
014	sp. 2	<i>aeneovirens</i>	Kakadu National Park, NT
015	sp. 2	<i>aeneovirens</i>	Kakadu National Park, NT
016	sp. 2	<i>aeneovirens</i>	Kakadu National Park, NT
017	sp. 2	<i>aeneovirens</i>	Kakadu National Park, NT
020	sp. 4	<i>aeneovirens</i>	Kakadu National Park, NT

021	sp. 4	<i>aeneovirens</i>	Kakadu National Park, NT
024	sp. 5	Group A	Kakadu National Park, NT
027	sp. 48	Group A	Kakadu National Park, NT
028	sp. 48	Group A	Kakadu National Park, NT
033	sp. 44	<i>froggatti</i>	Kakadu National Park, NT
034	sp. 16	<i>froggatti</i>	Kakadu National Park, NT
035	sp. 16	<i>froggatti</i>	Kakadu National Park, NT
037	sp. 38	<i>bagoti</i>	Kakadu National Park, NT
040	sp. 17	<i>ludius</i>	Kakadu National Park, NT
041	sp. 31	<i>ludius</i>	Kakadu National Park, NT
042	sp. 31	<i>ludius</i>	Kakadu National Park, NT
043	sp. 13	<i>ludius</i>	Kakadu National Park, NT
045	sp. 13	<i>ludius</i>	Kakadu National Park, NT
047	sp. 17	<i>ludius</i>	Kakadu National Park, NT
051	sp. 9	<i>mjobergi</i>	Kakadu National Park, NT
052	sp. 7	Group E	Kakadu National Park, NT
053	sp. 21	Group G	Kakadu National Park, NT
054	sp. 10	Group D	Kakadu National Park, NT
056	sp. 10	Group D	Kakadu National Park, NT
057	sp. 42	<i>perthensis</i>	Kakadu National Park, NT
058	sp. 42	<i>perthensis</i>	Kakadu National Park, NT
059	sp. 11	<i>fieldi</i>	Kakadu National Park, NT
060	sp. 11	<i>fieldi</i>	Kakadu National Park, NT
061	sp. 11	<i>fieldi</i>	Kakadu National Park, NT
062	<i>anderseni</i>	<i>anderseni</i>	Darwin, NT
063	<i>anderseni</i>	<i>anderseni</i>	Darwin, NT
064	Eurardy sp. VV	<i>potteri</i>	Eurardy Station, WA
066	sp. indet. (female)	?	Eurardy Station, WA
067	sp. indet. (female)	?	Eurardy Station, WA
068	sp. indet. (male)	?	Eurardy Station, WA
070	MF sp. E	<i>froggatti</i>	Theda Station, WA
071	sp. 5	Group A	Daly Waters, NT
072	sp. 5	Group A	Hughes air strip, NT
073	sp. 5	Group A	Bridge Creek, NT
074	Eurardy sp. BB	Group A	Eurardy Station, WA
075	Eurardy sp. BB	Group A	Eurardy Station, WA
076	Eurardy sp. M	Group A	Eurardy Station, WA
077	Eurardy sp. M	Group A	Eurardy Station, WA
078	sp. 1	<i>aeneovirens</i>	Lakefield Station, NT
079	sp. 1	<i>aeneovirens</i>	Pine Creek, NT
080	sp. 1	<i>aeneovirens</i>	Newcastle Waters, NT
081	sp. 1	<i>aeneovirens</i>	Newcastle Waters, NT
082	sp. 1	<i>aeneovirens</i>	Lake Woods, NT
083	sp. 1	<i>aeneovirens</i>	Lakefield Station, NT
086	sp. 1	<i>aeneovirens</i>	Howard Springs East, NT
087	sp. 1	<i>aeneovirens</i>	Humpty Doo, NT
090	sp. 1	<i>aeneovirens</i>	Theda Station, WA
091	sp. 35	<i>aeneovirens</i>	Mitchell Falls, WA
092	sp. 35	<i>aeneovirens</i>	Daly Waters, NT

093	sp. 1	<i>aeneovirens</i>	Pine Creek, NT
095	sp. 35	<i>aeneovirens</i>	Newcastle Waters, NT
096	sp. 35	<i>aeneovirens</i>	Larrimah, NT
097	Eurardy sp. P	<i>bagoti</i>	Eurardy Station, WA
098	Eurardy sp. P	<i>bagoti</i>	Eurardy Station, WA
099	sp. 38	<i>bagoti</i>	Gunlom Falls, NT
100	sp. 38	<i>bagoti</i>	Mirima National Park, WA
102	<i>bagoti</i>	<i>bagoti</i>	Mirima National Park, WA
103	<i>bagoti</i>	<i>bagoti</i>	Lake Woods, NT
104	<i>bagoti</i>	<i>bagoti</i>	Limmen National Park, NT
105	<i>bagoti</i>	<i>bagoti</i>	Uluru National Park+D150, NT
106	<i>bagoti</i>	<i>bagoti</i>	Alice Springs, NT
107	<i>bagoti</i>	<i>bagoti</i>	Newcastle Waters, NT
108	<i>bagoti</i>	<i>bagoti</i>	Henbury Station, NT
109	<i>bagoti</i>	<i>bagoti</i>	Cloncurry, Qld
111	Henbury sp. W2	<i>wheeleri</i>	Henbury Station, NT
112	nr. sp. P	<i>wheeleri</i>	Old Man Plains Station, NT
113	Henbury sp. W1	Group F	Henbury Station, NT
114	Eurardy sp. AA	Group F	Eurardy Station, WA
115	Eurardy sp. AA	Group F	Eurardy Station, WA
116	Eurardy sp. SS	Group F	Eurardy Station, WA
117	GISERA sp. B	<i>bruneus</i>	Myrtleville Station, Qld
121	Uluru sp. R	<i>bruneus</i>	Yorke Peninsula, SA
122	GWW sp. B1	<i>bruneus</i>	Karroun Hill Nature Reserve, WA
127	sp. 31	<i>ludius</i>	Kununurra, WA
128	Eurardy sp. S	<i>ludius</i>	Eurardy Station, WA
129	Eurardy sp. S	<i>ludius</i>	Eurardy Station, WA
132	NATT sp. J	<i>ludius</i>	Karroun Hill Nature Reserve, WA
134	NATT sp. J	<i>ludius</i>	Eurardy Station, NT
135	NATT sp. J	<i>ludius</i>	Eurardy Station, NT
136	NATT sp. J	<i>ludius</i>	Eurardy Station, NT
138	Eurardy sp. K	?	Eurardy Station, WA
139	Eurardy sp. K	Group M	Eurardy Station, WA
141	sp. 34	<i>ludius</i>	Kununurra, WA
142	sp. 34	<i>ludius</i>	Kununurra, WA
143	Theda sp. E	<i>ludius</i>	Theda Station, WA
144	Theda sp. E	<i>ludius</i>	Theda Station, WA
145	GISERA sp. K	<i>ludius</i>	Claravale Station, Qld
147	sp. 13	<i>luius</i>	Bridge Creek, NT
148	sp. 13	<i>ludius</i>	Groote Eylandt, NT
149	sp. 24	<i>ludius</i>	Kakadu NP, NT
150	sp. 24	<i>ludius</i>	Nhulunbuy, NT
151	sp. 24	<i>ludius</i>	Lakefield Station, NT
152	TREND sp. P	<i>ludius</i>	Fleureu Peninsula, SA
154	sp. AJ	<i>ludius</i>	Eurardy Station, WA
155	TREND sp. F	<i>ludius</i>	Marrabel, SA
156	Eurardy sp. W	<i>ludius</i>	Eurardy Station, WA
157	Eurardy sp. W	<i>ludius</i>	Eurardy Station, WA
158	Eurardy sp. W	<i>ludius</i>	Eurardy Station, WA

159	Eurardy sp. W	<i>ludius</i>	Eurardy Station, WA
160	GISERA sp. C	<i>ludius</i>	Myrtleville Station, Qld
161	Eurardy sp. B	<i>ludius</i>	Eurardy Station, WA
162	Eurardy sp. Z	<i>ludius</i>	Eurardy Station, WA
163	Eurardy sp. I	<i>ludius</i>	Eurady Station, WA
164	NATT sp. K	<i>ludius</i>	Daly Waters, NT
165	Theda sp. M1	<i>ludius</i>	Theda Station, WA
167	Eurardy sp. X	<i>ludius</i>	Eurardy Station, WA
168	sp. 9	<i>mjobergi</i>	Pine Creek, NT
170	sp. 9	<i>mjobergi</i>	Newcastle Waters, NT
171	sp. 9	<i>mjobergi</i>	Lakefield Station, NT
172	sp. 9	<i>mjobergi</i>	Lakefield Station, NT
173	sp. 9	<i>mjobergi</i>	Daly Waters, NT
176	Eurardy sp. N	<i>mjobergi</i>	Eurardy Station, WA
178	NATT sp. AG	<i>mjobergi</i>	Newcastle Waters, NT
179	GWW sp. J	<i>mjobergi</i>	Karroun Hill Nature Reserve, WA
180	GWW sp. J	<i>mjobergi</i>	Jilbadji Nature Reserve, WA
181	GWW sp. J	<i>mjobergi</i>	Eurardy Station, WA
182	GWW sp. J	<i>mjobergi</i>	Eurardy Station, WA
183	GWW sp. J	<i>mjobergi</i>	Eurardy Station, WA
184	Eurardy sp. AD	<i>mjobergi</i>	Eurardy Station, WA
187	sp. 10	Group D	Gove, NT
189	sp. 10	Group D	Hughes air strip, NT
190	sp. 10	Group D	Theda Station, WA
193	<i>hirsutus</i>	<i>hirsutus</i>	Mt Kosciusko, NSW
195	Eurardy sp. O	<i>turneri</i>	Eurardy Station, WA
196	GWW sp. BR	<i>turneri</i>	Karroun Hill Nature Reserve, WA
197	sp. 7	Group E	Edith Falls, NT
199	sp. 7	Group E	Newcastle Waters, NT
201	?perthensis	<i>perthensis</i>	Karroun Hill Nature Reserve, WA
203	Eurardy sp. B	<i>pillipes</i>	Eurady Station, WA
204	Eurardy sp. B	<i>pillipes</i>	Eurady Station, WA
205	TREND sp. B	<i>pillipes</i>	Yorke Peninsula, SA
207	sp. H	<i>pillipes</i>	Yorke Peninsula, SA
208	GWW sp. CN	Group J	Yellowdine Nature Reserve, WA
209	Eurardy sp. V	Group M	Eurardy Station, WA
210	sp. 82	<i>fieldi</i>	Lorella Springs, NT
211	sp. 82	<i>fieldi</i>	Uluru Nationaa Park+D185. NT
212	Henbury sp. F4	<i>fieldi</i>	Henbury Station, NT
213	sp. 82	<i>fieldi</i>	Jilbadji Nature Reserve, WA
214	sp. 82	<i>fieldi</i>	Jilbadji Nature Reserve, WA
215	sp. 82	<i>fieldi</i>	Karroun Hill Nature Reserve, WA
217	Eurardy sp. EE	<i>fieldi</i>	Eurardy Station, NT
220	sp. 11	<i>fieldi</i>	Groote Eylandt
221	sp. 11	<i>fieldi</i>	Lakefield Station, NT
222	sp. 11	<i>fieldi</i>	Lakefield Station, NT
223	Henbury sp. F4	<i>fieldi</i>	Henbury Station, NT
224	Mirima sp. E	<i>fieldi</i>	Mirima National Park, WA
225	Eurardy sp. AC	<i>fieldi</i>	Eurardy Station, WA

226	Henbury sp. F2	<i>fieldi</i>	GWW
227	Henbury sp. F2	<i>fieldi</i>	Henbury Station, NT
228	Henbury sp. F2	<i>fieldi</i>	Henbury Station, NT
229	Henbury sp. F2	<i>fieldi</i>	GWW
230	Eurardy sp. W1	<i>wheeleri</i>	Eurardy Station, WA
231	Eurardy sp. W1	<i>wheeleri</i>	Eurardy Station, WA
232	Uluru sp. BB	<i>wheeleri</i>	Uluru National Park, NT
233	Eurardy sp. HH	<i>ludius</i>	Eurardy Station, WA
234	Eurardy sp. HH	<i>ludius</i>	Eurardy Station, WA
237	Eurardy sp. HH	<i>ludius</i>	Eurardy Station, WA
238	Eurardy sp. HH	<i>ludius</i>	Eurardy Station, WA
239	sp. 7	<i>Group E</i>	Newcastle Waters, NT
240	sp. 25	<i>fieldi</i>	Newcastle Waters, NT
241	Eurardy sp. C	<i>fieldi</i>	Eurardy Station, WA
242	Eurardy sp. C	<i>fieldi</i>	Eurardy Station, WA
243	sp. 30	<i>fieldi</i>	Eurardy Station, NT
246	NATT sp. K	<i>ludius</i>	Larrimah, NT
247	sp. 30	<i>fieldi</i>	Eurardy Station, NT
248	sp.30	<i>fieldi</i>	Eurardy Station, NT
249	sp. 30	<i>fieldi</i>	Eurardy Station, NT
250	sp. 30	<i>fieldi</i>	Eurardy Station, NT
251	sp. 30	<i>fieldi</i>	Eurardy Station, NT
252	sp. 30	<i>fieldi</i>	Eurardy Station, NT
253	sp. 30	<i>fieldi</i>	Mirima National Park. WA
254	sp. 30	<i>fieldi</i>	Theda Station, WA
255	sp. 30	<i>fieldi</i>	Mirima National Park. WA
256	Eurardy sp. A	<i>fieldi</i>	Jilbadji Nature Reserve, WA
257	Eurardy sp. C	<i>fieldi</i>	Yellowdine Nature Reserve, WA
258	Henbury sp. F3	<i>fieldi</i>	Henbury Station, NT
259	Eurardy sp. A	<i>fieldi</i>	Eurardy Station, NT
261	GWW sp. S	<i>Group M</i>	Yellowdine Nature Reserve, WA
476	<i>fulvihirtus</i>	<i>fulvihirtus</i>	Flinders Ranges, SA
485	TREND sp. Y	<i>Group I</i>	Flinders Ranges, SA
490	Eurardy sp. Po1	<i>potteri</i>	Eurardy Station, WA
494	sp. N	<i>froggatti</i>	Warburton, WA
496	Henbury sp. Fr4	<i>froggatti</i>	Henbury Station, NT
501	Mirima sp. O	<i>froggatti</i>	Mirima National Park, WA
502	Mirima sp. O	<i>froggatti</i>	Theda Station, WA
503	Mirima sp. O	<i>froggatti</i>	Ning Bing Ranges, WA
506	sp. M	<i>froggatti</i>	Phillip Island, Vic
509	Henbury sp. Fr2	<i>froggatti</i>	Henbury Station, NT
510	Eurardy sp. E	<i>froggatti</i>	Eurardy Station, WA
511	Eurardy sp. E	<i>froggatti</i>	Eurardy Station, WA
512	GWW sp. D	<i>froggatti</i>	Jilbadji Nature Reserve, WA
513	GWW sp. D	<i>froggatti</i>	Jilbadji Nature Reserve, WA
514	GWW sp. D	<i>froggatti</i>	Yellowdine Nature Reserve, WA
517	sp. O	<i>froggatti</i>	Big Bush, Qld
518	sp. O	<i>froggatti</i>	Big Bush, Qld
519	Uluru sp. V	<i>froggatti</i>	Uluru NP, NT

522	Henbury sp. Fr4	<i>froggatti</i>	Henbury Station, NT
523	Uluru sp. J	<i>froggatti</i>	Uluru NP, NT
526	sp. 16	<i>froggatti</i>	Kakadu National Park, NT
530	GWW sp. L	<i>froggatti</i>	Jilbadji Nature Reserve, WA
533	GISERA sp. AH	<i>froggatti</i>	Myrtle Station, Qld
534	GISERA sp. AH	<i>froggatti</i>	Currawarra Station, Qld
538	TREND sp. A	<i>froggatti</i>	Mt Lofty Ranges, SA
539	TREND sp. A	<i>froggatti</i>	Spring Gully Conservation Park, SA
540	TREND sp. A	<i>froggatti</i>	Kangaroo Island, SA
543	sp. 44	<i>froggatti</i>	Kakadu National Park, NT
546	sp. 26	<i>froggatti</i>	Mirima National Park, WA
547	sp. 26	<i>froggatti</i>	Mirima National Park, WA
549	sp. 6	Group A	Darwin, NT
552	GISERA sp. A	<i>froggatti</i>	Myrtle Station, Qld
555	MF sp. E	<i>froggatti</i>	Mitchell Falls, WA
556	MF sp. E	<i>froggatti</i>	Mitchell Falls, WA
557	MF sp. E	<i>froggatti</i>	Mitchell Falls, WA
559	NATT sp. G	<i>froggatti</i>	Larrimah, NT
561	sp. 5	Group A	Kakadu National Park, NT
565	sp. 5	Group A	Mitchell River National Park, WA
566	sp. 5	Group A	Theda Station, WA
567	sp. 5	Group A	Mirima National Park, WA
568	sp. 5	Group A	Barunga, NT
569	sp. 37	Group A	Berry Springs, NT
571	sp. 5	Group A	Daly Waters, NT
572	NATT sp. AF	Group A	Newcastle Waters, NT
573	NATT sp. AN	Group A	Pine Creek, NT
575	MF sp. O	Group A	Mitchell Falls, WA
576	sp. 44	Group A	Prince Regent National Park, WA
577	sp. 44	Group A	Mitchell Falls, WA
588	Theda sp. A	Group A	Theda Station, WA
589	Theda sp. A	Group A	Theda Station, WA
590	GWW sp. Z	Group A	Karroun Hill Nature Reserve, WA
595	sp. 43	Group A	Kakadu National Park, NT
596	sp. 57	Group A	Nitmiluk National Park, NT
611	NATT sp. AH	Group B	Daly Waters, NT
612	sp. P	Group B	Wambiana Station, Qld
613	GISERA sp. S	Group B	Myrtle Station, Qld
615	TREND sp. AO	Group B	Flinders Ranges, SA
621	sp. 1	<i>aeneovirens</i>	Lorella Springs, NT
622	sp. 1	<i>aeneovirens</i>	Gove Peninsula, NT
623	sp. 1	<i>aeneovirens</i>	Gove Peninsula, NT
624	sp. 1	<i>aeneovirens</i>	Gove Peninsula, NT
626	sp. 1	<i>aeneovirens</i>	Howard Springs East, NT
627	sp. 1	<i>aeneovirens</i>	Mitchell Falls, NT
628	sp. 1	<i>aeneovirens</i>	Ning Bing Ranges, WA
629	sp. 1	<i>aeneovirens</i>	Mirima National Park, WA
630	sp. 1	<i>aeneovirens</i>	Theda Station, WA
631	sp. 1	<i>aeneovirens</i>	Theda Station, WA

635	sp. R	<i>aeneovirens</i>	Iron Range, Qld
640	sp. 1	<i>aeneovirens</i>	Lake Woods, NT
641	sp. 35	<i>aeneovirens</i>	Daly Waters, NT
642	sp. 1	<i>aeneovirens</i>	King River, NT
643	sp. 1	<i>aeneovirens</i>	Larrimah, NT
644	sp. 35	<i>aeneovirens</i>	Theda Station, WA
647	sp. 2	<i>aeneovirens</i>	Kakadu National Park, NT
648	sp. 2	<i>aeneovirens</i>	Wangi Falls, NT
652	TREND sp. R	<i>aeneovirens</i>	Scotia Sanctuary, NSW
653	TREND sp. R	<i>aeneovirens</i>	Lockhart Shire, NSW
654	TREND sp. R	<i>aeneovirens</i>	Ingalba Nature Reserve, NSW
655	TREND sp. R	<i>aeneovirens</i>	Yorke Peninsula, SA
656	TREND sp. Z	<i>aeneovirens</i>	Quorn, SA
657	TREND sp. Z	<i>aeneovirens</i>	Flinders Ranges, SA
660	TREND sp. Z	<i>aeneovirens</i>	Flinders Ranges, SA
662	TREND sp. Z	<i>aeneovirens</i>	Flinders Ranges, SA
663	TREND sp. Z	<i>aeneovirens</i>	Flinders Ranges, SA
664	GWW sp. B	<i>aeneovirens</i>	Yellowdine Nature Reserve, WA
665	GWW sp. B	<i>aeneovirens</i>	Karroun Hill Nature Reserve, WA
668	sp. Q	<i>aeneovirens</i>	Killarney Station, Qld
674	MF sp. G	<i>aeneovirens</i>	Mitchell Falls, WA
678	<i>iridescens</i>	<i>bagoti</i>	Gluepot Reserve, SA
679	GWW sp. H	<i>bagoti</i>	Karroun Hill Nature Reserve, WA
682	nr. <i>iridescens</i>	<i>bagoti</i>	Jilbadji Nature Reserve, WA
686	sp. 38	<i>bagoti</i>	King River, NT
687	sp. 38	<i>bagoti</i>	Kakadu National Park, NT
688	sp. 38	<i>bagoti</i>	Theda Station, WA
689	sp. 38	<i>bagoti</i>	Mirima National Park, WA
690	sp. L	<i>bagoti</i>	Warbuton, WA
691	Eurardy sp. O	<i>bagoti</i>	Eurardy Station
692	Eurardy sp. O	<i>bagoti</i>	Eurardy Station
694	GWW sp. G	<i>bagoti</i>	Karroun Hill Nature Reserve, WA
695	Uluru sp. H	<i>bagoti</i>	Warburton, WA
697	<i>bagoti</i>	<i>bagoti</i>	Mirima National Park, WA
698	<i>bagoti</i>	<i>bagoti</i>	Henbury Station, NT
701	Uluru sp. H	<i>bagoti</i>	Uluru National Park, NT
705	Uluru sp. N	<i>wheeleri</i>	Uluru National Park, NT
706	sp. E	<i>wheeleri</i>	Warburton, WA
711	sp. X	<i>wheeleri</i>	Yorke Peninsula, SA
712	sp. X	<i>wheeleri</i>	Flinders Ranges, SA
715	sp. G	<i>wheeleri</i>	Cape York Peninsula, Qld
716	GWW sp. CH	Group I	Karroun Hill Nature Reserve, WA
717	sp. A	<i>wheeleri</i>	Simpson Desert, Qld
718	Uluru sp. O	<i>wheeleri</i>	Uluru National Park, NT
720	NATT sp. AI	<i>wheeleri</i>	Lake Woods, NT
721	Henbury sp. Po1	<i>potteri</i>	Henbury Station, NT
722	Henbury sp. Po2	<i>potteri</i>	Henbury Station, NT
723	Henbury sp. Po3	<i>potteri</i>	Henbury Station, NT
727	Uluru sp. K	<i>wheeleri</i>	Uluru National Park, NT

732	Henbury sp. W4	<i>wheeleri</i>	Henbury Station, NT
733	sp. F	<i>fieldi</i>	Undara, Qld
736	nr. sp. P	<i>wheeleri</i>	Newcastle Waters, NT
737	nr. sp. P	<i>wheeleri</i>	Warburton, WA
738	sp. E	<i>wheeleri</i>	Mt Isa, Qld
740	nr. sp. P	<i>wheeleri</i>	Old Man Plains Station, NT
741	Henbury sp. W2	<i>wheeleri</i>	Henbury Station, NT
742	Uluru sp. Z	<i>ludius</i>	Uluru National Park, NT
744	Humbert sp. H	Group H	Victoria River Downs Station, NT
746	Henbury sp. H1	Group H	Nullagine, WA
747	Henbury sp. H1	Group H	Old Man Plains Station, NT
749	NATT sp. AT	Group F	Daly Waters, NT
750	sp. B	Group F	Lorella Springs, NT
752	Henbury sp. W1	Group F	Henbury Station, NT
755	sp. K	Group F	Fountain Springs, Qld
758	<i>bruneus</i>	<i>bruneus</i>	Henbury Station, NT
761	nr. <i>bruneus</i>	<i>bruneus</i>	Karroun Hill Nature Reserve, WA
763	Uluru sp. N	<i>bruneus</i>	Uluru National Park, NT
764	NATT.sp. V	<i>bruneus</i>	Lake Woods, NT
766	GWW sp. N	<i>bruneus</i>	Karroun Hill Nature Reserve, WA
771	Uluru sp. R	<i>bruneus</i>	Uluru National Park, NT
774	sp. H	<i>fieldi</i>	Limmen National Park. NT
781	Uluru sp. L	<i>bruneus</i>	Uluru National Park, NT
783	Henbury sp. B3	<i>bruneus</i>	Henbury Station, NT
785	NATT sp. U	<i>bruneus</i>	Lakefield Station, NT
787	NATT sp. U	<i>bruneus</i>	Lakefield Station, NT
789	Theda sp. C	<i>ludius</i>	Theda Station, WA
790	sp. 31	<i>ludius</i>	Lakefield Station, NT
791	Theda sp. C	<i>ludius</i>	Theda Station, WA
793	NATT sp. AB	<i>ludius</i>	Daly Waters, NT
797	GWW sp. Q	<i>ludius</i>	Yellowdine Nature Reserve, WA
798	TREND sp. G	<i>ludius</i>	Mt Lofty Ranges, SA
799	Mirima sp. C	<i>ludius</i>	Mirima National Park, WA
803	sp. 34	<i>ludius</i>	Larrimah, NT
804	sp. 34	<i>ludius</i>	Mirima National Park, WA
806	Theda sp. E	<i>ludius</i>	Theda Station, WA
807	GISERA sp. K	<i>ludius</i>	Myrtle Station, Qld
808	GISERA sp. C	<i>ludius</i>	Myrtle Station, Qld
810	sp. 13	<i>ludius</i>	Groote Eylandt, NT
815	sp. 24	<i>ludius</i>	Lakefield Station, NT
816	sp. 24	<i>ludius</i>	Nhulunbuy, NT
817	sp. 24	<i>ludius</i>	Kakadu National Park+D390, NT
818	sp. 13	<i>ludius</i>	Mirima National Park, WA
823	sp. 13	<i>ludius</i>	Newcastle Waters, NT
826	NATT sp. S	<i>ludius</i>	Roper River, NT
827	NingBing sp. D	<i>ludius</i>	Ning Bing Ranges, WA
832	Theda sp. M1	<i>ludius</i>	Theda Station, WA
834	? <i>ludius</i>	<i>ludius</i>	Myrtle Station, Qld
851	sp. 10	Group D	Howard Springs East, NT

852	sp. 10	Group D	Theda Station, NT
854	sp. 76	Group D	Daly Waters, NT
879	TREND sp. H	<i>fieldi</i>	Flinders Ranges, SA
880	TREND sp. H	<i>fieldi</i>	Flinders Ranges, SA
883	Ezzy sp. H	<i>turneri</i>	Alice Springs, NT
884	sp. 11	<i>fieldi</i>	Edith Falls, NT
889	GWW sp. Y	<i>turneri</i>	Karroun Hill Nature Reserve, WA
890	GWW sp. Y	<i>turneri</i>	Karroun Hill Nature Reserve, WA
891	Henbury sp. T1	<i>turneri</i>	Henbury Station, NT
892	Henbury sp. T1	<i>turneri</i>	Henbury Station, NT
897	sp. 7	Group E	Nhulunbuy, NT
898	sp. 79	Group E	Daly Waters, NT
899	sp. 7	Group E	Edith Falls, NT
902	NATT sp. N	Group E	Ning Bing Ranges, WA
903	NATT sp. AH	Group E	Lake Woods, NT
905	?perthensis	<i>perthensis</i>	Karroun Hill Nature Reserve, WA
906	sp. 42	<i>perthensis</i>	Kakadu National Park, NT
912	sp. 80	<i>pillipes</i>	Katherine, NT
913	sp. 80	<i>pillipes</i>	Nhulunbuy, NT
914	Gluepot sp. P1	<i>pillipes</i>	Gluepot Reserve, SA
918	Henbury sp. P1	<i>pillipes</i>	Henbury Station, NT
919	GISERA sp. E	<i>pillipes</i>	Myrtleville Station, Qld
920	GISERA sp. E	<i>pillipes</i>	Claravale Station, Qld
921	TREND sp. B	<i>pillipes</i>	Flinders Ranges, SA
924	sp. 15	Group J	Larrimah, NT
927	sp. 40	Group J	Kakadu National Park, NT
929	NATT sp. AE	Group J	Lake Woods, NT
930	GWW sp. M	Group M	Karroun Hill Nature Reserve, WA
933	sp. 82	<i>fieldi</i>	Gluepot Reserve, SA
934	sp. 82	<i>fieldi</i>	Uluru National Park, NT
935	sp. 82	<i>fieldi</i>	Newcastle Waters, NT
936	sp. 82	<i>fieldi</i>	Henbury Station, NT
938	sp. 82	<i>fieldi</i>	Karroun Hill Nature Reserve, WA
939	sp. 82	<i>fieldi</i>	Yellowdine Nature Reserve, WA
941	sp. I	<i>fieldi</i>	Yarra Valley, Vic
942	YY sp. A	<i>fieldi</i>	You Yang Raanges, Vic
943	TREND sp. H	<i>fieldi</i>	Mt Lofty Ranges, SA
944	TREND sp. H	<i>fieldi</i>	Quorn, SA
947	GWW sp. C	<i>fieldi</i>	Karroun Hill Nature Reserve, WA
949	GWW sp. CE	<i>fieldi</i>	Karroun Hill Nature Reserve, WA
950	sp. 20	<i>fieldi</i>	Newcastle Waters, NT

Table S2. List of outgroup specimens that were CO1-barcoded for this study.

Specimen Number	Identification	Location
262	<i>Teratomyrmex greavesi</i>	Lamington NP, Qld
264	<i>Prolasius</i> sp. 1 (<i>convexa</i> gp.)	Lamington NP, Qld
267	<i>P. reticulatus</i>	Jilbadji Nature Reserve, WA
269	<i>P. nitidissimus</i>	Ironstone Mtn, Tas
272	<i>Prolasius</i> sp. 2 (<i>nitidissimus</i> gp.)	Fleurieu Peninsula, SA
273	<i>Prolasius</i> sp. 3 (<i>nitidissimus</i> gp.)	Tambourine Mtn, Qld
275	<i>Prolasius</i> sp. 5 (<i>nitidissimus</i> gp.)	Atherton Tablelands, Qld
276	<i>Prolasius</i> sp. 6 (<i>nitidissimus</i> gp.)	Mt Lewis, Qld
277	<i>Prolasius</i> sp. 7 (<i>nitidissimus</i> gp.)	Mt Finnigan, Qld
278	<i>Prolasius</i> sp. 8 (<i>flavicornis</i> gp.)	Grampian Ranges, Vic
279	<i>Prolasius</i> sp. 9 (<i>flavicornis</i> gp.)	Katoomba, NSW
282	<i>Prolasius</i> sp. 10 (<i>bruneus</i> gp.)	Mt Field NP, Tas
283	<i>Prolasius</i> sp. 11 (<i>pallidus</i> gp.)	Mt Field NP, Tas
284	<i>Prolasius</i> sp. 12 (<i>pallidus</i> gp.)	Ben Lomond NP, Tas
286	<i>Notoncus</i> sp. (<i>enormis</i> gp.)	Sydney, NSW