

Supplementary data for: **Blaimer et al. 2018. Paleotropical diversification dominates the evolution of the hyperdiverse ant tribe Crematogastrini (Hymenoptera: Formicidae). Insect Systematics and Diversity.**

Table S1: Voucher collection information for specimens included in this study. Full collection information, including collecting locality and collector, is available from Antweb (www.antweb.org).

Genus	Species	Pinned Voucher	Located	CollectionCode
<i>Acanthomyrmex</i>	<i>ferox</i>	CASENT0106243	UCDC	PSW16449-02
<i>Acanthoponera</i>	<i>minor</i>	CASENT0039772	CASC	AVS2505
<i>Adlerzia</i>	<i>froggatti</i>	CASENT0227591	CASC	ANTC17797
<i>Ancyridris</i>	<i>polyrhachioides_nr</i>	CASENT0106303	UCDC	MJ2015
<i>Aphaenogaster</i>	<i>swammerdami</i>	CASENT0498428	CASC	BLF10111
<i>Aretidris</i>	<i>buenaventei</i>	CASENT0106232	UCDC	ANTC4121
<i>Atopomyrmex</i>	<i>mocquerysi</i>	CASENT0415562	CASC	BLF4036
<i>Atopomyrmex</i>	<i>cryptoceroides</i>	USNMENT01118238	USNM	n/a
<i>Calypatomyrmex</i>	<i>kaurus</i>	CASENT0417155	CASC	BLF4130(9)
<i>Calypatomyrmex</i>	<i>MM01</i>	USNMENT01118314	NCSU	BBB644-ANTS-12
<i>Cardiocondyla</i>	<i>mauritanica</i>	CASENT0106115	UCDC	PSW14593
<i>Cardiocondyla</i>	<i>thoracica</i>	CASENT0106252	UCDC	EMS666
<i>Cardiocondyla</i>	<i>MY01</i>	CASENT0106253	UCDC	ANTC11095
<i>Carebara</i>	<i>affinis</i>	CASENT0106016	UCDC	PSW15364
<i>Carebara</i>	<i>jajoby</i>	CASENT0494760	CASC	BLF9011
<i>Carebara</i>	<i>AU01</i>	CASENT0106279	UCDC	PSW15690-14
<i>Carebara</i>	<i>pygmaea</i>	CASENT0106280	UCDC	PSW16432
<i>Carebara</i>	<i>urichi</i>	CASENT0106295	UCDC	MGB1266
<i>Carebara</i>	<i>vidua</i>	CASENT0260120	CASC	ANTC18508
<i>Cataulacus</i>	<i>ebrardi</i>	CASENT0487553	CASC	BLF10344
<i>Cataulacus</i>	<i>hispidulus</i>	CASENT0106277	UCDC	PSW16462
<i>Cataulacus</i>	<i>guineensis</i>	USNMENT01118242	USNM	n/a
<i>Cataulacus</i>	<i>muticus</i>	USNMENT01118362	NCSU	BBB887
<i>Crematogaster</i>	<i>emeryana</i>	CASENT0106034	UCDC	PSW14954
<i>Crematogaster</i>	<i>kelleri</i>	CASENT0498885	CASC	BLF10001
<i>Crematogaster</i>	<i>acuta</i>	CASENT0106245	UCDC	PSW16026
<i>Crematogaster</i>	<i>modiglianii</i>	CASENT0106281	UCDC	PSW16428
<i>Crematogaster</i>	<i>lotti</i>	CASENT0320362	NCSU	BBB496
<i>Crematogaster</i>	<i>malala</i>	CASENT0142136	CASC	BLF20486
<i>Crematogaster</i>	<i>meijerei</i>	CASENT0193685	NCSU	MJ1116
<i>Crematogaster</i>	<i>aberrans</i>	CASENT0193779	NCSU	SH09-Ind-01
<i>Crematogaster</i>	<i>alafara</i>	CASENT0492850-52	CASC	BLF08628
<i>Crematogaster</i>	<i>rogenhoferi_cf</i>	CASENT0193596	NCSU	PSW16464
<i>Crematogaster</i>	<i>flavitarsis</i>	CASENT0193701	NCSU	hp0073
<i>Crematogaster</i>	<i>fruhstorferi</i>	CASENT0193728	NCSU	MJ-Kali-08-24
<i>Crematogaster</i>	<i>MM02</i>	USNMENT01118270	NCSU	BBB-647-ANTS-20
<i>Crematogaster</i>	<i>macracantha</i>	CASENT0320315	NCSU	JD-05-267
<i>Crematogaster</i>	<i>sordidula</i>	CASENT0193797	NCSU	BBB304

Genus	Species	Pinned Voucher	Located	CollectionCode
<i>Crematogaster</i>	<i>longispina</i>	CASENT0193767	NCSU	JTL6196
<i>Crematogaster</i>	<i>telolafy</i>	CASENT0492527	NCSU	BLF7652
<i>Cyphoidris</i>	<i>exalta</i>	CASENT0405993	CASC	BLF4000(49)
<i>Dacatria</i>	<i>templaris</i>	CASENT0235148	CASC	EG04x06-01
<i>Dacatinops</i>	<i>ignotus_cf</i>	CASENT0215429	UCDC	RAPII047.76
<i>Dacatinops</i>	<i>cirrosus</i>	USNMENT01117909	NCSU	BBB797-ANTS-10
<i>Dicroaspis</i>	<i>KM01</i>	CASENT0145951	CASC	BLF21317
<i>Dilobocondyla</i>	<i>borneensis_cf</i>	CASENT0106130	UCDC	PSW15526
<i>Dilobocondyla</i>	<i>MY01</i>	CASENT0217352	Hashimoto	MY426
<i>Dilobocondyla</i>	<i>MM01</i>	USNMENT01117220	NCSU	BBB559
<i>Diplomorium</i>	<i>longipenne</i>	CASENT0217046	CASC	EN1-T-HC-F10
<i>Eutetramorium</i>	<i>mocquerysi</i>	CASENT0077435	CASC	BLF9714
<i>Formica</i>	<i>moki</i>	CASENT0106084	UCDC	PSW14318
<i>Formicoxenus</i>	<i>diversipilosus</i>	CASENT0106244	UCDC	PSW16203
<i>Gauromyrmex</i>	<i>acanthinus</i>	CASENT0126225	UCDC	ANTC4201
<i>Harpagoxenus</i>	<i>sublaevis</i>	CASENT0106289	UCDC	MLB49-1
<i>Huberia</i>	<i>brounii</i>	CASENT0106136	UCDC	ANTC4014
<i>Huberia</i>	<i>striata</i>	USNMENT01118232	USNM	n/a
<i>Indomyrma</i>	<i>dasypyx</i>	MCZ594236	MCZC	n/a
<i>Kartidris</i>	<i>sparsipila</i>	CASENT0235130	CASC	BLF27472
<i>Lasiomyrma</i>	<i>IN01</i>	CASENT0366611	CASC	F89424
<i>Lasiomyrma</i>	<i>IN01</i>	CASENT0366612	CASC	F89425
<i>Leptothorax</i>	<i>muscorum_complex</i>	CASENT0106029	UCDC	PSW14909
<i>Liomyrmex</i>	<i>gestroi</i>	CASENT0106198	UCDC	PSW10061
<i>Lophomyrmex</i>	<i>ambiguus</i>	CASENT0106225	UCDC	PSW9612
<i>Lophomyrmex</i>	<i>bedoti_cf</i>	USNMENT01118303	NCSU	BBB644-ANTS-5
<i>Lordomyrma</i>	<i>desupra</i>	CASENT0106145	UCDC	PSW15766
<i>Lordomyrma</i>	<i>bhutanensis_cf</i>	CASENT0106234	UCDC	ANTC4192
<i>Lordomyrma</i>	<i>AU1</i>	CASENT0106338	UCDC	PSW09685-09
<i>Lordomyrma</i>	<i>PG02</i>	CASENT0106339	UCDC	EMS0678
<i>Lordomyrma</i>	<i>PG01</i>	CASENT0106340	UCDC	PSW10142-21
<i>Lordomyrma</i>	<i>AU03</i>	USNMENT01118400	USNM	PSW09842
<i>Lordomyrma</i>	<i>AU02</i>	CASENT0106341	UCDC	PSW15656-08
<i>Lordomyrma</i>	<i>PG04</i>	CASENT0106342	UCDC	PSW10050-22
<i>Lordomyrma</i>	<i>PG03</i>	USNMENT01118531	MCZC	E.O.Wilson#966
<i>Lordomyrma</i>	<i>epinotalis</i>	CASENT0171169	EMSC	EMS2610
<i>Lordomyrma</i>	<i>MM01</i>	USNMENT01117862	NCSU	BBB741-ANTS-14
<i>Lordomyrma</i>	<i>MM02</i>	USNMENT01117963	NCSU	BBB839-ANTS-24
<i>Malagidris</i>	<i>jugum</i>	CASENT0494278	CASC	BLF9947
<i>Malagidris</i>	<i>belti</i>	CASENT0119117	CASC	BLF14912
<i>Manica</i>	<i>bradleyi</i>	CASENT0106022	UCDC	PSW14755
<i>Mayriella</i>	<i>ebbei</i>	CASENT0106116	UCDC	PSW13799
<i>Mayriella</i>	<i>MM01</i>	USNMENT01117875	NCSU	BBB741-ANTS-17
<i>Melissotarsus</i>	<i>insularis</i>	CASENT0498665	CASC	BLF10081
<i>Meranoplus</i>	<i>radamae</i>	CASENT0486686	CASC	BLF7226

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<i>Meranoplus</i>	<i>castaneus</i>	CASENT0106276	UCDC	PSW16480
<i>Meranoplus</i>	<i>mcarthuri</i>	USNMENT01118234	USNM	n/a
<i>Meranoplus</i>	<i>fenestrata</i>	USNMENT01118401	USNM	TRS990104-03
<i>Meranoplus</i>	<i>mayri</i>	CASENT0347642	CASC	BLF25625
<i>Metapone</i>	<i>madagascarica</i>	CASENT0004528	CASC	BLF4840
<i>Metapone</i>	<i>PG01</i>	CASENT0106132	UCDC	ANTC4009
<i>Monomorium</i>	<i>hanneli</i>	CASENT0151856	CASC	BLF22509
<i>Myrmecina</i>	<i>graminicola</i>	CASENT0106054	UCDC	PSW14658
<i>Myrmecina</i>	<i>PG01</i>	CASENT0106283	UCDC	EMS712
<i>Myrmecina</i>	<i>americana</i>	CASENT0106284	UCDC	PSW16654
<i>Myrmecina</i>	<i>striata</i>	USNMENT01118317	NCSU	BBB642-ANTS-23
<i>Nesomyrmex</i>	<i>echinatinodis</i>	CASENT0106044	UCDC	PSW15105
<i>Nesomyrmex</i>	<i>brunneus</i>	CASENT0008660	CASC	ANTC1302
<i>Nesomyrmex</i>	<i>hafahafa</i>	CASENT0460666	CASC	BLF6010
<i>Nesomyrmex</i>	<i>madecassus</i>	CASENT0487130	CASC	BLF9369
<i>Nesomyrmex</i>	<i>wilda</i>	CASENT0106231	UCDC	PSW15599
<i>Ocymyrmex</i>	<i>fortior_cf</i>	CASENT0106140	UCDC	PSW15556
<i>Ocymyrmex</i>	<i>celer</i>	USNMENT01118236	USNM	n/a
<i>Ocymyrmex</i>	<i>nitidulus</i>	USNMENT01118237	USNM	n/a
<i>Ocymyrmex</i>	<i>picardi</i>	USNMENT01118235	USNM	n/a
<i>Paratopula</i>	<i>TH01</i>	CASENT0010838	UCDC	ANTC2893
<i>Perissomyrmex</i>	<i>snyderi</i>	CASENT0106226	UCDC	MGB793
<i>Pheidole</i>	<i>longispinosa</i>	CASENT0494701	CASC	BLF8915
<i>Podomyrma</i>	<i>silvicola</i>	CASENT0106143	UCDC	PSW15711
<i>Podomyrma</i>	<i>laevifrons</i>	USNMENT01118240	USNM	n/a
<i>Podomyrma</i>	<i>ruficeps</i>	USNMENT01118241	USNM	n/a
<i>Podomyrma</i>	<i>adelaidae</i>	USNMENT01118402	USNM	TRS990104-02
<i>Poecilomyrma</i>	<i>myrmecodiae</i>	CASENT0106144	UCDC	PSW15764
<i>Pogonomyrmex</i>	<i>imberbicus</i>	CASENT0005713	UCDC	PSW14699
<i>Pristomyrmex</i>	<i>orbiceps</i>	CASENT0417737	CASC	BLF4130(37)
<i>Pristomyrmex</i>	<i>punctatus</i>	CASENT0106274	UCDC	PSW16460-03
<i>Pristomyrmex</i>	<i>rigidus</i>	USNMENT01118346	NCSU	BBB644-ANTS-4
<i>Proatta</i>	<i>butteli</i>	CASENT0007617	CASC	WDSA051
<i>Propodilobus</i>	<i>pingorum</i>	Antbase.net01463	ABNC	ANTC4123
<i>Recurvidris</i>	<i>TH01</i>	CASENT0131659	CASC	T0301
<i>Recurvidris</i>	<i>MM01</i>	USNMENT01118089	NCSU	BBB643-ANTS-9
<i>Rhopalomastix</i>	<i>rothneyi</i>	CASENT0106013	UCDC	PSW15358
<i>Rhytidoponera</i>	<i>chalybaea</i>	CASENT0106000	UCDC	PSW15295
<i>Romblonella</i>	<i>scrobifera</i>	CASENT0106224	UCDC	PSW10144
<i>Romblonella</i>	<i>elysii</i>	USNMENT01118239	USNM	n/a
<i>Rostromyrmex</i>	<i>pasohensis</i>	CASENT0106343	UCDC	PSW17159-2
<i>Rotastruma</i>	<i>recava</i>	CASENT0106250	UCDC	PSW9601
<i>Rotastruma</i>	<i>stenoceps</i>	CASENT0106285	UCDC	PSW16603
<i>Royidris</i>	<i>notorthotenes</i>	CASENT0002259	CASC	BLF5708
<i>Royidris</i>	<i>longiseta</i>	CASENT0120396	CASC	BLF16147

Genus	Species	Pinned Voucher	Located	CollectionCode
<i>Stereomyrmex</i>	<i>horni</i>	MCZ594252	MCZC	n/a
<i>Strongylognathus</i>	<i>testaceus</i>	CASENT0106266	UCDC	ANTC11100
<i>Temnothorax</i>	<i>rugatulus</i>	CASENT0106025	UCDC	PSW14868
<i>Temnothorax</i>	<i>poeyi</i>	CASENT0106241	UCDC	PSW14471-3
<i>Temnothorax</i>	<i>bernardi</i>	CASENT0106299	UCDC	ANTC11110
<i>Temnothorax</i>	<i>kutteri</i>	CASENT0106300	UCDC	ANTC11111
<i>Terataner</i>	<i>MG27</i>	CASENT0494256	CASC	BLF9930
<i>Terataner</i>	<i>MG02</i>	CASENT0494349	CASC	BLF9911
<i>Terataner</i>	<i>bottegoi</i>	CASENT0106298	UCDC	PSW11162
<i>Tetheamyрма</i>	<i>subsporgia</i>	CASENT0106305	UCDC	PSW16443-83
<i>Tetramorium</i>	<i>validiusculum</i>	CASENT0106004	UCDC	PSW15315
<i>Tetramorium</i>	<i>immigrans</i>	CASENT0106026	UCDC	PSW14871
<i>Tetramorium</i>	<i>venator</i>	CASENT0415619	CASC	BLF4007
<i>Tetramorium</i>	<i>CF01</i>	CASENT0006833	CASC	BLF4031
<i>Tetramorium</i>	<i>severini</i>	CASENT0494149	CASC	BLF9786
<i>Tetramorium</i>	<i>MG125</i>	CASENT0048793	CASC	BLF09975
<i>Tetramorium</i>	<i>transversinodis</i>	CASENT0106251	UCDC	PSW13860
<i>Tetramorium</i>	<i>atratum</i>	CASENT0106265	UCDC	ANTC11099
<i>Tetramorium</i>	<i>spinosum</i>	CASENT0106287	UCDC	PSW15597
<i>Tetramorium</i>	<i>taylori</i>	CASENT0106297	UCDC	PSW15699
<i>Tetramorium</i>	<i>kutteri</i>	CASENT0106301	UCDC	ANTC11112
<i>Trichomyrmex</i>	<i>criniceps</i>	CASENT0106263	UCDC	PSW13849-05
<i>Trichomyrmex</i>	<i>destructor</i>	CASENT0147465	CASC	BLF21273
<i>Trichomyrmex</i>	<i>robustior</i>	CASENT0147087	CASC	BLF21967
<i>Vitsika</i>	<i>brevis</i>	CASENT0494750	CASC	BLF9031
<i>Vitsika</i>	<i>susplicax</i>	CASENT0068044	CASC	BLF13657
<i>Vitsika</i>	<i>producta</i>	CASENT0320458	CASC	BBB483
<i>Vollenhovia</i>	<i>emeryi</i>	CASENT0010125	USNM	ANTC4012
<i>Vollenhovia</i>	<i>rufiventris</i>	USNMENT01118243	USNM	n/a
<i>Vollenhovia</i>	<i>MM01</i>	USNMENT01118334	NCSU	BBB688-ANTS-27
<i>Vombisidris</i>	<i>bilongrudi</i>	CASENT0200241	UCDC	AL0578.01
<i>Xenomyrmex</i>	<i>floridanus</i>	CASENT0106053	UCDC	PSW14443
<i>Xenomyrmex</i>	<i>stollii</i>	USNMENT00444122	USNM	n/a

Table S2: Fossil calibrations used in this study. These are similar to calibration densities used in Ward *et al.* (2015) except that we incorporated updated younger estimates for Baltic amber (Aleksandrova and Zaporozhets (2008)) and Sicilian amber (LaPolla, 2013) into our calibration priors.

Genus	Calibration type	Distribution	Offset	Median	Quartile	Input-mean	Input-sd	Reference
<i>Carebara</i>	stem-group	lognormal	36	52	73	2.77	0.51	<i>Carebara antiqua</i> in Baltic amber (Mayr, 1868; Wheeler, 1915). Upper bound is approximate estimated age of ‘core Myrmicinae’ (Brady et al., 2006).
<i>Cataulacus</i>	stem-group	lognormal	20	40	73	3	0.59	Two species of <i>Cataulacus</i> described from Sicilian amber (Emery, 1891).
<i>Crematogaster</i>	crown <i>Crematogaster</i> (<i>Orthocrema</i>)	lognormal	15	28	35	2.55	0.27	<i>Crematogaster crinosa</i> -group in Dominican amber (Blaimer, 2012b). The calibrated node represents crown <i>Crematogaster</i> (<i>Orthocrema</i>). Median age from Blaimer (2012b).
<i>Nesomyrmex</i>	stem <i>N. wilda</i> & <i>N. echinatinodes</i>	lognormal	15	40	73	3.2	0.52	Two described species of <i>Nesomyrmex</i> from Dominican amber, similar to <i>N. wilda</i> and <i>N. echinatinodis</i> , respectively (De Andrade et al., 1999), here used conservatively to calibrate the node representing the most recent common ancestor (MRCA) of the NewWorld and Old World species.
<i>Pristomyrmex</i>	stem-group	lognormal	42	52	73	2.3	0.7	<i>Pristomyrmex</i> in late Eocene Danish amber (Dlussky & Radchenko, 2011).
<i>Temnothorax</i>	stem-group	lognormal	36	52	73	2.77	0.51	Six described species of <i>Temnothorax</i> in Baltic amber (Dlussky & Rasnitsyn, 2009).
<i>Tetramorium</i>	stem-group	lognormal	36	52	73	2.77	0.51	Three undescribed species of <i>Tetramorium</i> in Baltic amber (Dlussky & Rasnitsyn, 2009).

Table S3: Generic distributions and nesting preferences. Distributions taken from Ward *et al.* (2015) or scored using www.antmaps.org. T = Neotropical, N = Nearctic, P = Palearctic (Eurasia + North Africa), E = Afrotropical, M= Malagasy, O = Indomalayan, A = Australasian. 0 = absent, 1 = present.

	T	N	P	E	M	O	A	Nesting preference
<i>Acanthomyrmex</i>	0	0	0	0	0	1	1	0
<i>Adlerzia</i>	0	0	0	0	0	0	1	0
<i>Aretidris</i>	0	0	0	0	0	1	0	0
<i>Atopomyrmex</i>	0	0	0	1	0	0	0	1
<i>Calypatomyrmex</i>	0	0	0	1	0	1	1	0
<i>Cardiocondyla</i>	0	0	1	1	1	1	1	0
<i>Carebara</i>	1	1	1	1	1	1	1	0
<i>Cataulacus</i>	0	0	0	1	1	1	1	1
<i>Crematogaster</i>	1	1	1	1	1	1	1	0&1
<i>Cyphoidris</i>	0	0	0	1	0	0	0	0
<i>Dacatria</i>	0	0	1	0	0	1	0	0
<i>Dacetonops</i>	0	0	0	0	0	1	1	0
<i>Dicroaspis</i>	0	0	0	1	0	0	0	0
<i>Dilobocondyla</i>	0	0	0	0	0	1	1	1
<i>Diplomorium</i>	0	0	0	1	0	0	0	0
<i>Eutetramorium</i>	0	0	0	0	1	0	0	0
<i>Formicoxenus</i>	0	1	1	0	0	0	0	0
<i>Gauromyrmex</i>	0	0	0	0	0	1	0	1
<i>Harpagoxenus</i>	0	1	1	0	0	0	0	0
<i>Huberia</i>	0	0	0	0	0	0	1	0
<i>Indomyrma</i>	0	0	0	0	0	1	0	0
<i>Kartidris</i>	0	0	0	0	0	1	0	0
<i>Leptothorax</i>	0	1	1	0	0	0	0	0&1
<i>Liomyrmex</i>	0	0	0	0	0	1	1	0
<i>Lophomyrmex</i>	0	0	0	0	0	1	1	0
<i>Lordomyrma</i>	0	0	0	0	0	1	1	0
<i>Malagidris</i>	0	0	0	0	1	0	0	0
<i>Mayriella</i>	0	0	0	0	0	1	1	0
<i>Melissotarsus</i>	0	0	0	1	1	0	0	1
<i>Meranoplus</i>	0	0	0	1	1	1	1	0
<i>Metapone</i>	0	0	0	1	1	1	1	0
<i>Myrmecina</i>	0	1	1	0	0	1	1	0
<i>Nesomyrmex</i>	1	1	0	1	1	0	0	1
<i>Ocymyrmex</i>	0	0	0	1	0	0	0	0

	T	N	P	E	M	O	A	Nesting preference
<i>Paratopula</i>	0	0	0	0	0	1	1	1
<i>Perissomyrmex</i>	1	0	0	0	0	1	0	0
<i>Podomyrma</i>	0	0	0	0	0	0	1	1
<i>Poecilomyrma</i>	0	0	0	0	0	0	1	1
<i>Pristomyrmex</i>	0	0	0	1	0	1	1	0
<i>Proatta</i>	0	0	0	0	0	1	0	0
<i>Recurvidris</i>	0	0	0	0	0	1	1	0
<i>Rhopalomastix</i>	0	0	0	0	0	1	1	1
<i>Romblonella</i>	0	0	0	0	0	1	1	1
<i>Rostromyrmex</i>	0	0	0	0	0	1	0	0
<i>Rotastruma</i>	0	0	0	0	0	1	0	1
<i>Royidris</i>	0	0	0	0	1	0	0	0
<i>Stereomyrmex</i>	0	0	0	0	0	1	1	0
<i>Temnothorax</i>	1	1	1	1	0	1	0	0&1
<i>Terataner</i>	0	0	0	1	1	0	0	1
<i>Tetheamyрма</i>	0	0	0	0	0	1	0	0
<i>Tetramorium</i>	0	1	1	1	1	1	1	0&1
<i>Trichomyrmex</i>	0	0	1	1	1	1	0	0&1
<i>Vitsika</i>	0	0	0	0	1	0	0	1
<i>Vollenhovia</i>	0	0	1	0	0	1	1	0
<i>Vombisidris</i>	0	0	0	0	0	1	1	1
<i>Xenomyrmex</i>	1	1	0	0	0	0	0	1

Table S4: Dispersal constraints used in ancestral range estimations. Modified from Blaimer *et al.* (2015) by recognizing the Malagasy region as a separate biogeographic region. T = Neotropical, N = Nearctic, P = Palearctic, E = Afrotropical, M= Malagasy, O = Indomalayan, A = Australasian.

0-50 Ma	T	N	P	E	M	O	A
T	1.0	1.0	0.01	0.5	0.01	0.01	0.5
N	1.0	1.00	1.0	0.01	0.01	0.01	0.01
P	0.01	1.0	1.00	1.0	0.01	1.0	0.01
E	0.5	0.01	1.0	1.00	0.5	1.0	0.5
M	0.01	0.01	0.01	0.5	1.00	0.01	0.01
O	0.01	0.01	1.0	1.0	0.01	1.00	1.0
A	0.5	0.01	0.01	0.5	0.01	1.0	1.00

50-80 Ma	T	N	P	E	M	O	A
T	1	1.0	0.01	1.0	0.01	0.01	1.0
N	1.0	1.00	1.0	0.01	0.01	0.01	0.01
P	0.01	1.0	1.00	1.0	0.01	1.0	0.01
E	1.0	0.01	1.0	1.00	0.5	1.0	1.0
M	0.01	0.01	0.01	0.5	1.00	0.5	0.01
O	0.01	0.01	1.0	1.0	0.50	1.00	0.5
A	1.0	0.01	0.01	1.0	0.01	0.5	1.00

Table S5: Species richness matrix used for diversification analyses. This table lists the assigned clade for each species, the number of species sampled, the number of nominal species described, and the number of nominal + subspecies described per clade. From these clade-specific values we calculated sampling probabilities which were used for BAMM analyses.

	Clade	Species sampled	Species described	Sample fraction	Species + subspecies	Sample fraction
<i>Acanthomyrmex_ferox</i>	Acantho	1	17	0.059	17	0.059
<i>Adlerzia_froggatti</i>	Adlerzia	1	1	1.000	1	1.000
<i>Aretidris_buenaventei</i>	Aretidris	1	2	0.5	2	0.500
<i>Atopomyrmex_cryptoceroides</i>	Atopo	2	3	0.667	3	0.667
<i>Atopomyrmex_mocquersyi</i>	Atopo	2	3	0.667	3	0.667
<i>Calyptomyrmex_kaurus</i>	Calypto	2	37	0.054	37	0.054
<i>Calyptomyrmex_MM01</i>	Calypto	2	37	0.054	37	0.054
<i>Cardiocondyla_mauritanica</i>	Cardio	3	72	0.042	75	0.040
<i>Cardiocondyla_MY01</i>	Cardio	3	72	0.042	75	0.040
<i>Cardiocondyla_thoracica</i>	Cardio	3	72	0.042	75	0.040
<i>Carebara_AU01</i>	Carebara	6	202	0.030	235	0.026
<i>Carebara_affinis</i>	Carebara	6	202	0.030	235	0.026
<i>Carebara_pygmaea</i>	Carebara	6	202	0.030	235	0.026
<i>Carebara_jajoby</i>	Carebara	6	202	0.030	235	0.026
<i>Carebara_urichi</i>	Carebara	6	202	0.030	235	0.026
<i>Carebara_vidua</i>	Carebara	6	202	0.030	235	0.026
<i>Cataulacus_ebrardi</i>	Catau	4	65	0.062	65	0.062
<i>Cataulacus_guineensis</i>	Catau	4	65	0.062	65	0.062
<i>Cataulacus_hispidulus</i>	Catau	4	65	0.062	65	0.062
<i>Cataulacus_muticus</i>	Catau	4	65	0.062	65	0.062
<i>Crematogaster_aberrans</i>	Cremato	17	496	0.034	766	0.022
<i>Crematogaster_acuta</i>	Cremato	17	496	0.034	766	0.022
<i>Crematogaster_alafara</i>	Cremato	17	496	0.034	766	0.022
<i>Crematogaster_rogenhoferi_cf</i>	Cremato	17	496	0.034	766	0.022
<i>Crematogaster_emeryana</i>	Cremato	17	496	0.034	766	0.022
<i>Crematogaster_flavitarisis</i>	Cremato	17	496	0.034	766	0.022
<i>Crematogaster_fruhstorferi</i>	Cremato	17	496	0.034	766	0.022
<i>Crematogaster_kelleri</i>	Cremato	17	496	0.034	766	0.022
<i>Crematogaster_longispina</i>	Cremato	17	496	0.034	766	0.022
<i>Crematogaster_lotti</i>	Cremato	17	496	0.034	766	0.022
<i>Crematogaster_macracantha</i>	Cremato	17	496	0.034	766	0.022
<i>Crematogaster_malala</i>	Cremato	17	496	0.034	766	0.022
<i>Crematogaster_meijerei</i>	Cremato	17	496	0.034	766	0.022
<i>Crematogaster_modiglianii</i>	Cremato	17	496	0.034	766	0.022

	Clade	Species sampled	Species described	Sample fraction	Species + subspecies	Sample fraction
<i>Crematogaster_MM02</i>	Cremato	17	496	0.034	766	0.022
<i>Crematogaster_sordidula</i>	Cremato	17	496	0.034	766	0.022
<i>Crematogaster_telolafy</i>	Cremato	17	496	0.034	766	0.022
<i>Cyphoidris_exalta</i>	Cypho	1	4	0.25	4	0.250
<i>Dacatria_templaris</i>	Daca	1	1	1	1	1.000
<i>Dacatinops_cirrosus</i>	Daceti	2	7	0.29	7	0.286
<i>Dacatinops_ignotus_cf</i>	Daceti	2	7	0.29	7	0.286
<i>Dicroaspis_KM01</i>	Dicro	1	2	0.5	2	0.500
<i>Dilobocondyla_borneensis_cf</i>	Dilobo	3	19	0.16	21	0.143
<i>Dilobocondyla_MM01</i>	Dilobo	3	19	0.16	21	0.143
<i>Dilobocondyla_MY01</i>	Dilobo	3	19	0.16	19	0.158
<i>Diplomorium_longipenne</i>	Diplo	1	1	1.00	1	1.000
<i>Eutetramorium_mocquerysi</i>	Eutetra	1	3	0.33	3	0.333
<i>Formicoxenus_diversipilosus</i>	Formico	1	7	0.14	7	0.143
<i>Gauromyrmex_acanthinus</i>	Gauro	1	2	0.50	2	0.500
<i>Harpagoxenus_sublaevis</i>	Harpago	1	3	0.33	3	0.333
<i>Huberia_brownii</i>	Huberia	2	2	1.00	2	1.000
<i>Huberia_striata</i>	Huberia	2	2	1.00	2	1.000
<i>Indomyrma_dasyppyx</i>	Indomy	1	2	0.50	2	0.500
<i>Kartidris_sparsipila</i>	Kartidris	1	6	0.17	6	0.167
<i>Leptothorax_muscorum_complex</i>	Lepto	1	19	0.05	21	0.048
<i>Liomyrmex_gestroi</i>	Liomy	1	1	1.00	1	1.000
<i>Lophomyrmex_ambiguus</i>	Lopho	2	13	0.15	13	0.154
<i>Lophomyrmex_bedoti_cf</i>	Lopho	2	13	0.15	13	0.154
<i>Ancyridris_polyrhachioides_nr</i>	Lordo	16	41	0.390	41	0.390
<i>Lasiomyrma_IN01_1</i>	Lordo	16	41	0.39	41	0.390
<i>Lasiomyrma_IN01_2</i>	Lordo	16	41	0.39	41	0.390
<i>Lordomyrma_AU02</i>	Lordo	16	41	0.39	41	0.390
<i>Lordomyrma_AU03</i>	Lordo	16	41	0.39	41	0.390
<i>Lordomyrma_AU1</i>	Lordo	16	41	0.39	41	0.390
<i>Lordomyrma_MM01</i>	Lordo	16	41	0.39	41	0.390
<i>Lordomyrma_MM02</i>	Lordo	16	41	0.39	41	0.390
<i>Lordomyrma_PG01</i>	Lordo	16	41	0.39	41	0.390
<i>Lordomyrma_PG02</i>	Lordo	16	41	0.39	41	0.390
<i>Lordomyrma_PG03</i>	Lordo	16	41	0.39	41	0.390
<i>Lordomyrma_PG04</i>	Lordo	16	41	0.39	41	0.390
<i>Lordomyrma_bhutanensis_cf</i>	Lordo	16	41	0.39	41	0.390
<i>Lordomyrma_desupra</i>	Lordo	16	41	0.39	41	0.390
<i>Lordomyrma_epinotalis</i>	Lordo	16	41	0.39	41	0.390

	Clade	Species sampled	Species described	Sample fraction	Species + subspecies	Sample fraction
<i>Propodilobus pingorum</i>	Lordo	16	41	0.39	41	0.390
<i>Malagidris belti</i>	Mala	2	6	0.33	6	0.333
<i>Malagidris jugum</i>	Mala	2	6	0.33	6	0.333
<i>Mayriella MM01</i>	Mayri	2	9	0.22	9	0.222
<i>Mayriella ebbei</i>	Mayri	2	9	0.22	9	0.222
<i>Melissotarsus insularis</i>	Melisso	1	4	0.25	4	0.250
<i>Meranoplus castaneus</i>	Merano	5	90	0.06	90	0.056
<i>Meranoplus fenestrata</i>	Merano	5	90	0.06	90	0.056
<i>Meranoplus mayri</i>	Merano	5	90	0.06	90	0.056
<i>Meranoplus mcarthuri</i>	Merano	5	90	0.06	90	0.056
<i>Meranoplus radamae</i>	Merano	5	90	0.06	90	0.056
<i>Metapone PG01</i>	Metapo	2	28	0.07	28	0.071
<i>Metapone madagascarica</i>	Metapo	2	28	0.07	28	0.071
<i>Myrmecina PG01</i>	Myrmecina	4	53	0.08	54	0.074
<i>Myrmecina americana</i>	Myrmecina	4	53	0.08	54	0.074
<i>Myrmecina graminicola</i>	Myrmecina	4	53	0.08	54	0.074
<i>Myrmecina striata</i>	Myrmecina	4	53	0.08	54	0.074
<i>Nesomyrmex hafahafa</i>	Nesomyrmex	5	81	0.06	82	0.061
<i>Nesomyrmex brunneus</i>	Nesomyrmex	5	81	0.06	82	0.061
<i>Nesomyrmex echinatinodis</i>	Nesomyrmex	5	81	0.06	82	0.061
<i>Nesomyrmex madecassus</i>	Nesomyrmex	5	81	0.06	82	0.061
<i>Nesomyrmex wilda</i>	Nesomyrmex	5	81	0.06	82	0.061
<i>Ocymyrmex celer</i>	Ocy	4	34	0.12	34	0.118
<i>Ocymyrmex fortior cf</i>	Ocy	4	34	0.12	34	0.118
<i>Ocymyrmex nitidulus</i>	Ocy	4	34	0.12	34	0.118
<i>Ocymyrmex picardi</i>	Ocy	4	34	0.12	34	0.118
<i>Paratopula TH01</i>	Para	1	12	0.08	12	0.083
<i>Perissomyrmex snyderi</i>	Perisso	1	6	0.17	6	0.167
<i>Podomyrma adelaidae</i>	Podo	4	52	0.08	62	0.065
<i>Podomyrma laevifrons</i>	Podo	4	52	0.08	62	0.065
<i>Podomyrma ruficeps</i>	Podo	4	52	0.08	62	0.065
<i>Podomyrma silvicola</i>	Podo	4	52	0.08	62	0.065
<i>Poecilomyrma myrmecodiae</i>	Poecilo	1	2	0.50	2	0.500
<i>Pristomyrmex orbiceps</i>	Pristo	3	59	0.05	59	0.051
<i>Pristomyrmex punctatus</i>	Pristo	3	59	0.05	59	0.051
<i>Pristomyrmex rigidus</i>	Pristo	3	59	0.05	59	0.051
<i>Proatta butteli</i>	Proatta	1	1	1.00	1	1.000
<i>Recurvidris MM01</i>	Recurvi	2	11	0.18	11	0.182
<i>Recurvidris TH01</i>	Recurvi	2	11	0.18	11	0.182

	Clade	Species sampled	Species described	Sample fraction	Species + subspecies	Sample fraction
<i>Rhopalomastix_rothneyi</i>	Rhopalo	1	6	0.17	8	0.125
<i>Romblonella_elysii</i>	Romblo	2	10	0.20	10	0.200
<i>Romblonella_scrobifera</i>	Romblo	2	10	0.20	10	0.200
<i>Rostromyrmex_pasohensis</i>	Rostro	1	1	1.00	1	1.000
<i>Rotastruma_recava</i>	Rota	2	2	1.00	2	1.000
<i>Rotastruma_stenoceps</i>	Rota	2	2	1.00	2	1.000
<i>Royidris_longiseta</i>	Royidris	2	15	0.13	15	0.133
<i>Royidris_notorthotenes</i>	Royidris	2	15	0.13	15	0.133
<i>Stereomyrmex_horni</i>	Stereo	1	3	0.33	3	0.333
<i>Temnothorax_bernardi</i>	Temno	4	394	0.01	435	0.009
<i>Temnothorax_kutteri</i>	Temno	4	394	0.01	435	0.009
<i>Temnothorax_poeyi</i>	Temno	4	394	0.01	435	0.009
<i>Temnothorax_rugatulus</i>	Temno	4	394	0.01	435	0.009
<i>Terataner_MG02</i>	Tera	3	14	0.21	14	0.214
<i>Terataner_MG27</i>	Tera	3	14	0.21	14	0.214
<i>Terataner_bottegoi</i>	Tera	3	14	0.21	14	0.214
<i>Tetheamyрма_subspongia</i>	Tethea	1	1	1.00	1	1.000
<i>Strongylognathus_testaceus</i>	Tetra	12	594	0.02	609	0.020
<i>Tetramorium_CF01</i>	Tetra	12	594	0.02	609	0.020
<i>Tetramorium_MG125</i>	Tetra	12	594	0.02	609	0.020
<i>Tetramorium_atratulum</i>	Tetra	12	594	0.02	609	0.020
<i>Tetramorium_immigrans</i>	Tetra	12	594	0.02	609	0.020
<i>Tetramorium_kutteri</i>	Tetra	12	594	0.02	609	0.020
<i>Tetramorium_severini</i>	Tetra	12	594	0.02	609	0.020
<i>Tetramorium_spinosum</i>	Tetra	12	594	0.02	609	0.020
<i>Tetramorium_taylori</i>	Tetra	12	594	0.02	609	0.020
<i>Tetramorium_transversinodis</i>	Tetra	12	594	0.02	609	0.020
<i>Tetramorium_validiusculum</i>	Tetra	12	594	0.02	609	0.020
<i>Tetramorium_venator</i>	Tetra	12	594	0.02	609	0.020
<i>Trichomyrmex_criniceps</i>	Tricho	3	24	0.13	28	0.107
<i>Trichomyrmex_destructor</i>	Tricho	3	24	0.13	28	0.107
<i>Trichomyrmex_robustior</i>	Tricho	3	24	0.13	28	0.107
<i>Vitsika_brevis</i>	Vitsika	3	16	0.19	16	0.188
<i>Vitsika_producta</i>	Vitsika	3	16	0.19	16	0.188
<i>Vitsika_suspicax</i>	Vitsika	3	16	0.19	16	0.188
<i>Vollenhovia_MM01</i>	Vollenho	3	59	0.05	77	0.039
<i>Vollenhovia_emeryi</i>	Vollenho	3	59	0.05	77	0.039
<i>Vollenhovia_rufiventris</i>	Vollenho	3	59	0.05	77	0.039
<i>Vombisidris_bilongrudi</i>	Vombi	1	17	0.06	17	0.059

	Clade	Species sampled	Species described	Sample fraction	Species + subspecies	Sample fraction
<i>Xenomyrmex_floridanus</i>	Xeno	2	4	0.50	5	0.400
<i>Xenomyrmex_stollii</i>	Xeno	2	4	0.50	5	0.400

Table S6: Library preparations and UCE sequence-capture statistics. Table listing, for each taxon included in the study, the pre-library preparation DNA concentration, the post-library preparation DNA concentration, the total raw read count, the total number of assembled contigs, their average coverage (X) and mean length, the number of assembled UCE contigs and their mean length and mean coverage, and the number of UCE loci. The UCE reads on target are the number of reads aligning to UCE loci/total reads.

Genus	Species	Pre-library conc. (ng/uL)	Post-library conc. (ng/uL)	Total read count	Total contigs (post-trim)			Contigs aligned to UCE loci			Reads on target
					Count	Avg. coverage (x)	Avg. length	Locus count	Avg. length	Avg. coverage (x)	
<i>Acanthomyrmex</i>	<i>ferox</i>	0.33	32.4	4,319,207	98123	8.1	353	2325	736	49.2	0.28
<i>Acanthoponera</i>	<i>minor</i>	1.33	29.4	1,246,324	20513	9.4	382	2233	705	29.1	0.56
<i>Adlerzia</i>	<i>froggatti</i>	1.61	105.0	921,263	13808	11.4	417	2207	578	22.0	0.47
<i>Ancyridris</i>	<i>polyrhachioides_nr</i>	0.74	29.7	1,606,400	24080	12.6	344	2166	428	40.9	0.37
<i>Aphaenogaster</i>	<i>swammerdami</i>	1.73	12.6	4,236,648	159348	6.8	330	2374	989	85.9	0.44
<i>Aretidris</i>	<i>buenaventei</i>	2.30	32.5	1,301,584	24272	8.0	330	2231	644	30.7	0.58
<i>Atopomyrmex</i>	<i>cryptoceroides</i>	0.69	24.4	4,909,037	90065	10.9	283	2311	419	121.9	0.39
<i>Atopomyrmex</i>	<i>mocquerysi</i>	1.54	45.2	2,331,188	80134	6.6	312	2323	757	47.1	0.42
<i>Calypatomyrmex</i>	<i>kaurus</i>	0.16	30.7	2,222,160	49291	9.5	343	2258	598	40.6	0.34
<i>Calypatomyrmex</i>	<i>MM01</i>	0.67	19.5	4,672,932	132526	6.6	331	2310	915	71.5	0.40
<i>Cardiocondyla</i>	<i>mauritanica</i>	0.22	55.0	3,186,147	141554	6.4	316	2334	781	44.4	0.24
<i>Cardiocondyla</i>	<i>MY01</i>	<0.05	15.3	1,337,789	29843	7.4	328	2241	665	30.2	0.51
<i>Cardiocondyla</i>	<i>thoracica</i>	0.90	34.1	3,245,465	85753	6.9	449	2292	768	48.7	0.33
<i>Carebara</i>	<i>affinis</i>	0.27	47.8	1,449,851	35789	6.4	336	2332	791	27.0	0.49
<i>Carebara</i>	<i>pygmaea</i>	0.45	18.0	836,447	7808	9.2	606	2164	582	17.4	0.37
<i>Carebara</i>	<i>AU01</i>	0.42	19.3	2,288,628	87637	5.6	316	2336	823	28.2	0.31
<i>Carebara</i>	<i>jajoby</i>	1.33	37.9	5,088,658	228374	6.9	348	2381	967	93.9	0.32
<i>Carebara</i>	<i>urichi</i>	0.72	32.7	2,059,117	54493	6.9	330	2335	815	32.4	0.40
<i>Carebara</i>	<i>vidua</i>	0.36	18.9	1,949,113	71959	5.6	294	2365	773	35.7	0.45
<i>Cataulacus</i>	<i>ebrardi</i>	1.27	69.4	2,473,846	79335	7.0	334	2267	747	33.4	0.30
<i>Cataulacus</i>	<i>guineensis</i>	0.98	8.7	5,201,008	123651	8.2	332	2251	496	105.5	0.36
<i>Cataulacus</i>	<i>hispidulus</i>	14.60	81.0	925,846	17447	8.0	366	2153	647	20.6	0.53
<i>Cataulacus</i>	<i>muticus</i>	5.51	25.9	4,746,946	128497	6.5	413	2286	883	85.1	0.44
<i>Crematogaster</i>	<i>aberrans</i>	1.00	8.8	1,532,621	31007	6.8	328	2352	877	33.8	0.65
<i>Crematogaster</i>	<i>acuta</i>	1.63	40.2	2,504,077	66797	8.3	320	2362	707	46.8	0.38
<i>Crematogaster</i>	<i>alafara</i>	2.07	16.1	1,467,135	24178	8.6	363	2312	787	35.1	0.64
<i>Crematogaster</i>	<i>rogenhoferi_cf</i>	0.07	6.2	1,625,664	37041	8.4	338	2268	535	26.4	0.32
<i>Crematogaster</i>	<i>emeryana</i>	0.47	62.5	1,909,414	56465	6.7	331	2306	746	29.7	0.38

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<i>Crematogaster</i>	<i>flavitaris</i>	0.42	15.2	1,376,967	20709	8.0	370	2258	816	25.4	0.61
<i>Crematogaster</i>	<i>fruhstorferi</i>	1.24	26.5	488,494	6123	8.7	468	2114	692	14.9	0.74
<i>Crematogaster</i>	<i>kelleri</i>	4.04	26.8	3,602,889	104057	9.0	312	2358	709	82.4	0.40
<i>Crematogaster</i>	<i>longispina</i>	1.13	62.6	4,032,330	136260	6.2	375	2312	1000	54.2	0.35
<i>Crematogaster</i>	<i>lotti</i>	1.09	12.8	1,128,292	17941	8.4	353	2273	666	24.1	0.56
<i>Crematogaster</i>	<i>macracantha</i>	0.69	10.2	1,800,794	41905	7.3	331	2357	739	38.8	0.54
<i>Crematogaster</i>	<i>malala</i>	0.26	8.8	2,594,077	70278	6.3	318	2354	839	41.4	0.45
<i>Crematogaster</i>	<i>meijerei</i>	0.35	10.5	3,564,815	117012	7.9	309	2399	626	68.6	0.32
<i>Crematogaster</i>	<i>modiglianii</i>	3.26	66.6	4,423,145	211323	6.3	350	2302	1049	48.2	0.24
<i>Crematogaster</i>	<i>MM02</i>	0.35	24.6	1,133,515	20128	8.2	355	2273	735	27.1	0.61
<i>Crematogaster</i>	<i>sordidula</i>	0.47	45.5	1,572,391	39278	7.2	322	2316	714	28.9	0.46
<i>Crematogaster</i>	<i>telolafy</i>	0.13	18.6	1,338,718	26057	8.7	350	2313	636	30.5	0.51
<i>Cyphoidris</i>	<i>exalta</i>	0.42	45.5	3,547,533	78525	9.2	335	2309	678	45.1	0.27
<i>Dacatria</i>	<i>templaris</i>	2.97	39.3	2,105,316	21761	11.2	399	2221	640	25.4	0.40
<i>Dacatinops</i>	<i>cirrosus</i>	<0.05	1.3	31,309	251	4.0	235	140	236	5.1	0.67
<i>Dacatinops</i>	<i>ignotus_cf</i>	<0.05	9.4	2,452,194	58891	7.5	309	2211	617	33.2	0.32
<i>Dicroaspis</i>	<i>KM01</i>	0.10	38.9	2,234,914	39770	10.8	337	2259	619	37.1	0.37
<i>Dilobocondyla</i>	<i>borneensis_cf</i>	1.48	58.3	2,142,120	45139	9.6	342	2339	691	32.6	0.34
<i>Dilobocondyla</i>	<i>MM01</i>	0.13	8.5	1,604,103	23001	12.3	372	2297	653	38.9	0.50
<i>Dilobocondyla</i>	<i>MY01</i>	0.47	13.2	1,330,998	18892	12.9	387	2143	430	22.4	0.26
<i>Diplomorium</i>	<i>longipenne</i>	0.43	41.6	4,623,772	159778	7.3	316	2391	773	69.8	0.31
<i>Eutetramorium</i>	<i>mocquerysi</i>	17.40	68.2	1,800,684	28379	10.6	333	2309	671	26.2	0.37
<i>Formica</i>	<i>moki</i>	17.50	26.3	2,322,700	55854	7.9	331	2275	739	43.2	0.44
<i>Formicoxenus</i>	<i>diversipilosus</i>	0.63	24.7	3,878,281	96522	9.0	334	2340	695	51.5	0.29
<i>Gauromyrmex</i>	<i>acanthinus</i>	<0.05	20.0	1,878,437	58797	6.7	307	2315	676	34.4	0.39
<i>Harpagoxenus</i>	<i>sublaevis</i>	3.44	35.4	2,315,188	59807	9.3	338	2291	690	31.4	0.28
<i>Huberia</i>	<i>brounii</i>	0.23	48.4	2,009,135	54253	7.1	338	2296	741	30.0	0.36
<i>Huberia</i>	<i>striata</i>	<0.05	1.6	150,006	1941	13.5	282	1209	269	15.3	0.68
<i>Indomyrma</i>	<i>dasyppyx</i>	<0.05	4.6	1,450,508	17395	11.8	313	2224	405	37.3	0.51
<i>Kartidris</i>	<i>sparsipila</i>	2.01	23.0	1,300,797	16651	10.3	367	2170	630	18.9	0.43
<i>Lasiomyrma</i>	<i>IN01_1</i>	<0.05	3.6	3,422,473	55818	9.3	318	1944	328	30.2	0.14
<i>Lasiomyrma</i>	<i>IN01_2</i>	<0.05	3.8	2,710,208	45118	8.6	314	2017	341	29.2	0.20
<i>Leptothorax</i>	<i>muscorum_complex</i>	0.62	66.2	1,503,748	28753	9.5	375	2210	727	23.8	0.40
<i>Liomyrmex</i>	<i>gestroi</i>	0.42	17.0	3,316,434	129997	7.0	300	2369	641	70.5	0.33

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<i>Lophomyrmex</i>	<i>ambiguus</i>	0.45	23.7	3,157,064	72574	9.7	305	2382	550	71.3	0.41
<i>Lordomyrma</i>	<i>AU01</i>	0.06	9.8	2,231,511	40219	11.2	331	2340	469	60.0	0.44
<i>Lophomyrmex</i>	<i>bedoti_cf</i>	1.15	23.1	2,057,417	42408	7.0	330	2355	916	49.2	0.69
<i>Lordomyrma</i>	<i>AU02</i>	0.14	14.8	4,788,242	89204	8.0	305	2378	682	97.0	0.49
<i>Lordomyrma</i>	<i>AU03</i>	0.48	31.6	1,326,318	11686	24.1	330	2190	341	71.8	0.61
<i>Lordomyrma</i>	<i>bhutanensis_cf</i>	1.50	46.3	2,354,886	62363	8.4	347	2312	662	35.8	0.32
<i>Lordomyrma</i>	<i>desupra</i>	0.61	84.8	1,278,659	21114	10.1	373	2202	614	20.6	0.34
<i>Lordomyrma</i>	<i>epinotalis</i>	<0.05	0.3	13,667	136	4.9	267	103	229	4.7	0.55
<i>Lordomyrma</i>	<i>MM01</i>	<0.05	1.6	370,542	4865	12.5	352	2027	357	16.6	0.62
<i>Lordomyrma</i>	<i>MM02</i>	<0.05	5.2	1,577,669	26006	10.2	351	2289	500	28.7	0.35
<i>Lordomyrma</i>	<i>PG02</i>	0.16	7.5	3,681,775	37466	9.2	311	2376	651	58.7	0.62
<i>Lordomyrma</i>	<i>PG01</i>	0.18	21.2	1,846,082	30158	11.9	321	2361	510	64.3	0.60
<i>Lordomyrma</i>	<i>PG03</i>	<0.05	1.4	354,692	2303	13.9	301	761	244	13.0	0.26
<i>Lordomyrma</i>	<i>PG04</i>	0.20	23.1	5,845,581	118024	9.2	316	2330	520	102.7	0.34
<i>Malagidris</i>	<i>belti</i>	0.33	77.0	1,274,362	16387	13.9	436	2239	490	25.6	0.32
<i>Malagidris</i>	<i>jugum</i>	14.10	63.9	1,996,807	37709	9.8	336	2335	764	31.8	0.38
<i>Manica</i>	<i>bradleyi</i>	5.16	20.8	2,449,533	51473	9.0	330	2300	800	39.8	0.39
<i>Mayriella</i>	<i>ebbei</i>	1.59	50.0	3,128,344	133977	6.3	325	2345	867	46.7	0.32
<i>Mayriella</i>	<i>MM01</i>	<0.05	1.0	78,818	1996	8.1	329	1666	344	8.9	0.94
<i>Melissotarsus</i>	<i>insularis</i>	0.30	41.7	1,434,636	25114	11.1	396	2120	557	20.8	0.28
<i>Meranoplus</i>	<i>castaneus</i>	1.90	31.5	3,517,853	141198	7.0	317	2362	840	66.5	0.35
<i>Meranoplus</i>	<i>fenestrata</i>	1.79	8.9	4,869,847	109750	7.5	313	2360	896	118.6	0.62
<i>Meranoplus</i>	<i>mayri</i>	0.28	26.0	1,685,696	40829	7.5	296	2357	694	45.8	0.61
<i>Meranoplus</i>	<i>mcarthuri</i>	0.43	2.3	1,023,132	6795	19.7	282	1837	286	35.0	0.53
<i>Meranoplus</i>	<i>radamae</i>	1.20	21.8	3,536,589	51693	14.6	398	2139	524	51.3	0.20
<i>Metapone</i>	<i>madagascarica</i>	3.89	49.9	3,437,108	164799	5.9	321	2373	859	63.6	0.33
<i>Metapone</i>	<i>PG01</i>	0.58	49.6	1,114,359	21849	8.6	289	2256	564	38.6	0.67
<i>Monomorium</i>	<i>hanneli</i>	0.64	21.2	1,074,094	16663	9.9	357	2301	661	29.9	0.65
<i>Myrmecina</i>	<i>americana</i>	1.23	46.3	2,230,702	69283	7.1	345	2241	755	29.9	0.30
<i>Myrmecina</i>	<i>graminicola</i>	0.47	74.5	1,514,613	29599	7.9	561	2125	668	21.1	0.28
<i>Myrmecina</i>	<i>PG01</i>	7.41	48.7	1,581,323	37671	7.3	343	2243	756	28.9	0.44
<i>Myrmecina</i>	<i>striata</i>	0.58	19.3	693,384	10311	8.1	500	2125	636	18.8	0.57
<i>Nesomyrmex</i>	<i>echinatinodis</i>	0.46	58.7	1,185,213	18078	12.7	400	2061	606	15.3	0.26
<i>Nesomyrmex</i>	<i>madecassus</i>	5.67	35.1	3,751,245	127369	7.5	334	2339	870	44.5	0.27

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<i>Nesomyrmex</i>	<i>hafahafa</i>	7.18	40.6	2,740,625	71981	8.2	317	2355	716	43.0	0.33
<i>Nesomyrmex</i>	<i>brunneus</i>	0.57	55.4	918,938	14751	9.8	350	2245	562	27.9	0.62
<i>Nesomyrmex</i>	<i>wilda</i>	1.73	73.4	1,104,806	15815	11.7	391	2183	570	22.8	0.38
<i>Ocomyrmex</i>	<i>celer</i>	0.30	2.5	1,184,523	8296	20.9	397	1931	309	51.9	0.55
<i>Ocomyrmex</i>	<i>fortior_cf</i>	4.76	49.5	2,180,869	16725	9.8	357	2098	533	26.5	0.47
<i>Ocomyrmex</i>	<i>nitidulus</i>	0.22	4.6	5,301,512	138397	7.7	318	2345	666	123.2	0.44
<i>Ocomyrmex</i>	<i>picardi</i>	0.90	5.9	688,219	4294	20.8	375	1551	277	31.0	0.48
<i>Paratopula</i>	<i>TH01</i>	0.37	33.4	3,617,205	110607	8.3	331	2347	728	56.1	0.30
<i>Perissomyrmex</i>	<i>snyderi</i>	5.27	47.3	850,808	6908	28.1	419	2074	504	19.2	0.41
<i>Pheidole</i>	<i>longispinosa</i>	8.38	11.6	4,986,691	207564	7.0	341	2391	964	95.6	0.37
<i>Podomyrma</i>	<i>adelaidae</i>	3.80	19.3	5,221,805	117306	7.5	323	2309	930	105.4	0.55
<i>Podomyrma</i>	<i>laevifrons</i>	0.10	4.1	728,124	5899	21.3	416	1185	257	24.3	0.23
<i>Podomyrma</i>	<i>ruficeps</i>	0.16	10.2	1,195,708	10522	21.5	451	2005	334	30.1	0.27
<i>Podomyrma</i>	<i>silvicola</i>	23.10	45.3	2,030,856	31563	9.4	422	2305	643	31.9	0.40
<i>Poecilomyrma</i>	<i>myrmecodiae</i>	5.07	35.9	4,395,494	197468	6.5	344	2375	1039	59.0	0.28
<i>Pogonomyrmex</i>	<i>imberbiculus</i>	9.11	17.6	796,065	8611	14.1	494	2167	615	21.9	0.50
<i>Pristomyrmex</i>	<i>orbiceps</i>	1.94	33.8	2,495,481	64439	8.9	339	2313	653	50.2	0.36
<i>Pristomyrmex</i>	<i>punctatus</i>	1.21	59.9	2,243,086	54604	7.9	352	2260	761	32.1	0.33
<i>Pristomyrmex</i>	<i>rigidus</i>	0.58	7.4	809,412	12856	8.6	400	2043	527	12.0	0.34
<i>Proatta</i>	<i>butтели</i>	0.53	24.6	1,485,700	27424	8.9	354	2355	788	39.4	0.63
<i>Propodilobus</i>	<i>pingorum</i>	0.44	9.0	2,853,619	60180	10.5	321	2305	561	36.7	0.22
<i>Recurvidris</i>	<i>MM01</i>	0.14	15.6	1,401,772	29659	7.4	322	2337	754	33.8	0.63
<i>Recurvidris</i>	<i>TH01</i>	0.12	8.5	1,402,364	28749	7.1	333	2266	696	22.5	0.45
<i>Rhopalomastix</i>	<i>rothneyi</i>	0.15	42.6	941,110	14311	9.5	415	2155	619	17.5	0.46
<i>Rhytidoponera</i>	<i>chalybaea</i>	3.25	24.8	1,036,012	14902	11.4	432	2173	701	24.4	0.54
<i>Romblonella</i>	<i>elysii</i>	0.13	7.1	816,410	7693	21.1	320	1744	296	40.0	0.44
<i>Romblonella</i>	<i>scrobifera</i>	0.64	29.5	2,685,928	66286	9.4	307	2348	537	61.4	0.36
<i>Rostromyrmex</i>	<i>pasohensis</i>	<0.05	4.4	1,536,317	16102	14.7	372	900	384	29.0	0.13
<i>Rotastruma</i>	<i>recava</i>	1.32	46.7	2,955,171	47597	13.0	313	2303	432	67.4	0.36
<i>Rotastruma</i>	<i>stenoceps</i>	2.96	37.3	1,188,961	21135	9.5	356	2219	634	23.8	0.47
<i>Royidris</i>	<i>longiseta</i>	0.95	13.3	2,384,460	86457	5.8	309	2342	870	39.1	0.41
<i>Royidris</i>	<i>notorthotenes</i>	1.73	47.4	3,013,781	136632	6.1	311	2330	838	46.5	0.30
<i>Stereomyrmex</i>	<i>horni</i>	<0.05	5.9	3,230,369	64965	7.6	296	2339	507	51.5	0.38
<i>Strongylognathus</i>	<i>testaceus</i>	1.76	81.2	2,967,660	117519	6.4	313	2318	812	49.3	0.34

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<i>Temnothorax</i>	<i>bernardi</i>	2.28	27.6	892,391	13663	9.9	396	2132	595	19.9	0.48
<i>Temnothorax</i>	<i>kutteri</i>	0.58	33.9	2,043,600	52045	8.0	349	2316	671	35.4	0.36
<i>Temnothorax</i>	<i>poeyi</i>	3.09	40.3	3,880,794	136816	7.3	315	2359	821	60.2	0.33
<i>Temnothorax</i>	<i>rugatulus</i>	0.11	46.7	965,183	17124	9.2	366	2174	560	19.3	0.42
<i>Terataner</i>	<i>bottegoi</i>	1.69	24.3	3,683,051	100310	9.0	311	2376	624	73.9	0.34
<i>Terataner</i>	<i>MG02</i>	2.28	50.8	2,861,595	94447	7.2	317	2322	774	40.7	0.29
<i>Terataner</i>	<i>MG27</i>	27.10	43.8	1,631,503	26016	9.6	353	2249	589	25.4	0.36
<i>Tetheamyрма</i>	<i>subsporgia</i>	<0.05	4.9	1,238,435	17820	9.5	333	2109	453	18.0	0.30
<i>Tetramorium</i>	<i>atratum</i>	0.68	68.8	1,564,773	26914	10.3	310	2281	570	53.9	0.63
<i>Tetramorium</i>	<i>immigrans</i>	0.14	46.5	1,029,058	21189	7.5	347	2250	671	24.0	0.58
<i>Tetramorium</i>	<i>CF01</i>	0.55	49.4	3,222,266	116574	7.0	329	2328	800	53.9	0.33
<i>Tetramorium</i>	<i>kutteri</i>	0.36	32.0	2,914,419	119186	6.3	303	2351	805	58.4	0.39
<i>Tetramorium</i>	<i>MG125</i>	<0.05	25.8	3,751,920	153528	6.6	319	2369	785	60.1	0.31
<i>Tetramorium</i>	<i>severini</i>	2.54	40.4	2,473,079	73324	7.1	327	2318	671	38.7	0.32
<i>Tetramorium</i>	<i>spinosum</i>	1.20	55.6	1,876,258	57239	6.6	313	2321	717	34.3	0.42
<i>Tetramorium</i>	<i>taylori</i>	2.39	65.3	1,608,792	31548	8.7	365	2272	769	32.5	0.46
<i>Tetramorium</i>	<i>transversinodis</i>	1.28	46.0	3,106,375	125855	6.8	317	2332	639	52.5	0.29
<i>Tetramorium</i>	<i>validiusculum</i>	0.40	69.7	942,664	13830	9.2	389	2212	675	20.3	0.57
<i>Tetramorium</i>	<i>venator</i>	0.57	50.7	4,435,726	169231	7.2	341	2357	790	68.6	0.28
<i>Trichomyrmex</i>	<i>criniceps</i>	1.71	96.6	1,645,368	27117	10.8	349	2278	648	32.1	0.39
<i>Trichomyrmex</i>	<i>destructor</i>	1.22	89.1	697,823	10413	10.2	379	2155	544	18.3	0.53
<i>Trichomyrmex</i>	<i>robustior</i>	0.57	38.9	1,066,078	15448	12.2	400	2211	613	22.1	0.45
<i>Vitsika</i>	<i>brevis</i>	0.64	45.2	4,724,175	179909	7.6	349	2358	880	68.0	0.26
<i>Vitsika</i>	<i>producta</i>	5.84	12.5	960,659	10840	11.1	417	2282	672	22.4	0.61
<i>Vitsika</i>	<i>susplicax</i>	0.43	51.0	3,049,036	89424	8.0	320	2337	708	43.8	0.31
<i>Vollenhovia</i>	<i>emeryi</i>	0.83	55.9	3,197,618	91107	8.2	324	2218	736	44.7	0.31
<i>Vollenhovia</i>	<i>MM01</i>	0.32	23.6	911,477	15192	9.2	358	2094	647	20.7	0.53
<i>Vollenhovia</i>	<i>rufiventris</i>	0.76	10.9	4,515,131	103582	9.7	286	2305	527	96.7	0.38
<i>Vombisidris</i>	<i>bilongrudi</i>	0.45	33.4	3,219,488	84011	8.7	318	2354	718	47.3	0.32
<i>Xenomyrmex</i>	<i>floridanus</i>	0.79	68.1	1,980,281	46774	7.7	342	2304	782	31.6	0.41
<i>Xenomyrmex</i>	<i>stollii</i>	0.26	6.8	4,198,385	126531	6.2	320	2371	862	69.5	0.44
	Average	2.14	32.5	2,279,011	59518	9.4	347	2200	654	42.1	0.42
	min	<0.05	0.3	13,667	136	4	235	103	229	4.7	0.13
	max	27.10	105.0	5,845,581	228374	28.1	606	2399	1049	123.2	0.94

Table S7: Alignment statistics. Calculated with AMAS (Borowiec 2016) from the 90% complete matrix, the 50-best, the 50-random-1, and the 50-random-2 matrices.

Alignment name	Taxa	Alignment length (bp)	Proportion missing	Variable sites	Prop. variable sites	PIC	Prop PIC	Heterogeneity score (RCFV)	AT content	GC content
UCE-complete-90%	161	913718	0.18	538960	0.59	447069	0.49	0.012	0.56	0.44
UCE-50-best	161	33874	0.19	21138	0.62	18043	0.53	0.016	0.61	0.39
UCE-50-random-1	161	24984	0.20	15122	0.61	12575	0.50	0.014	0.56	0.44
UCE-50-random-2	161	25188	0.19	14862	0.59	12173	0.48	0.015	0.55	0.45