

Supplementary material

Phylogeny and divergence estimates for the gasteruptiid wasps (Hymenoptera : Evanioidea) reveals a correlation with hosts

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Fig. S1. Reconstruction ancestral state in phylogenies (RASP) analysis result, showing ancestral-state reconstruction of biogeography for all nodes. Main nodes discussed in the text are labelled with a letter. (See following page.)

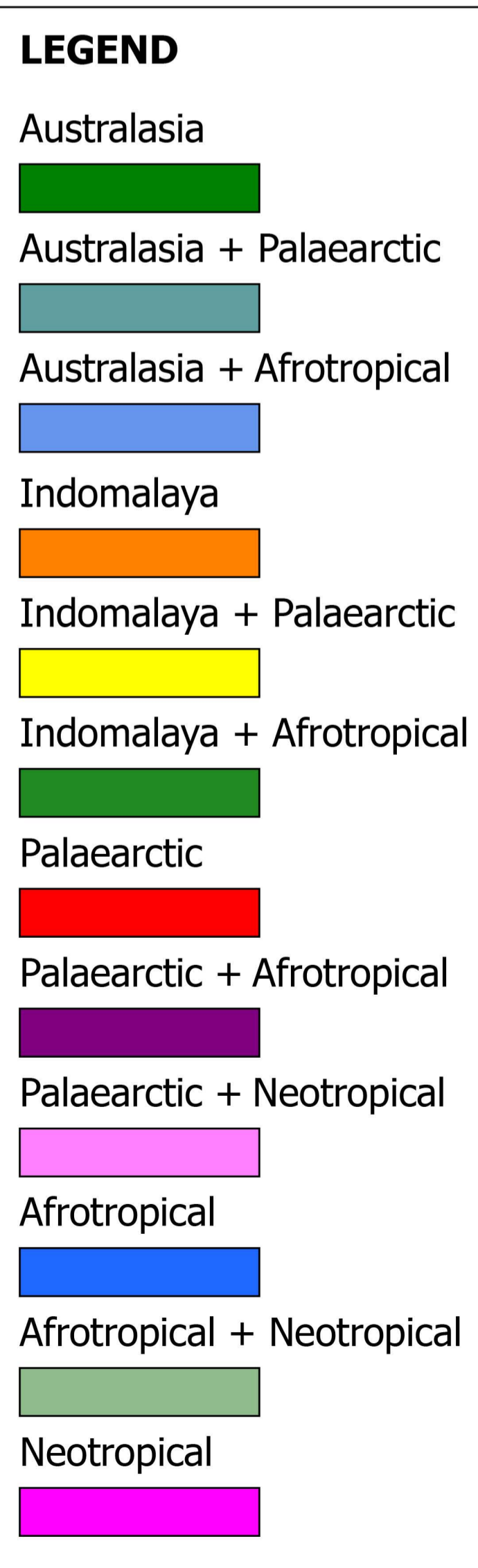
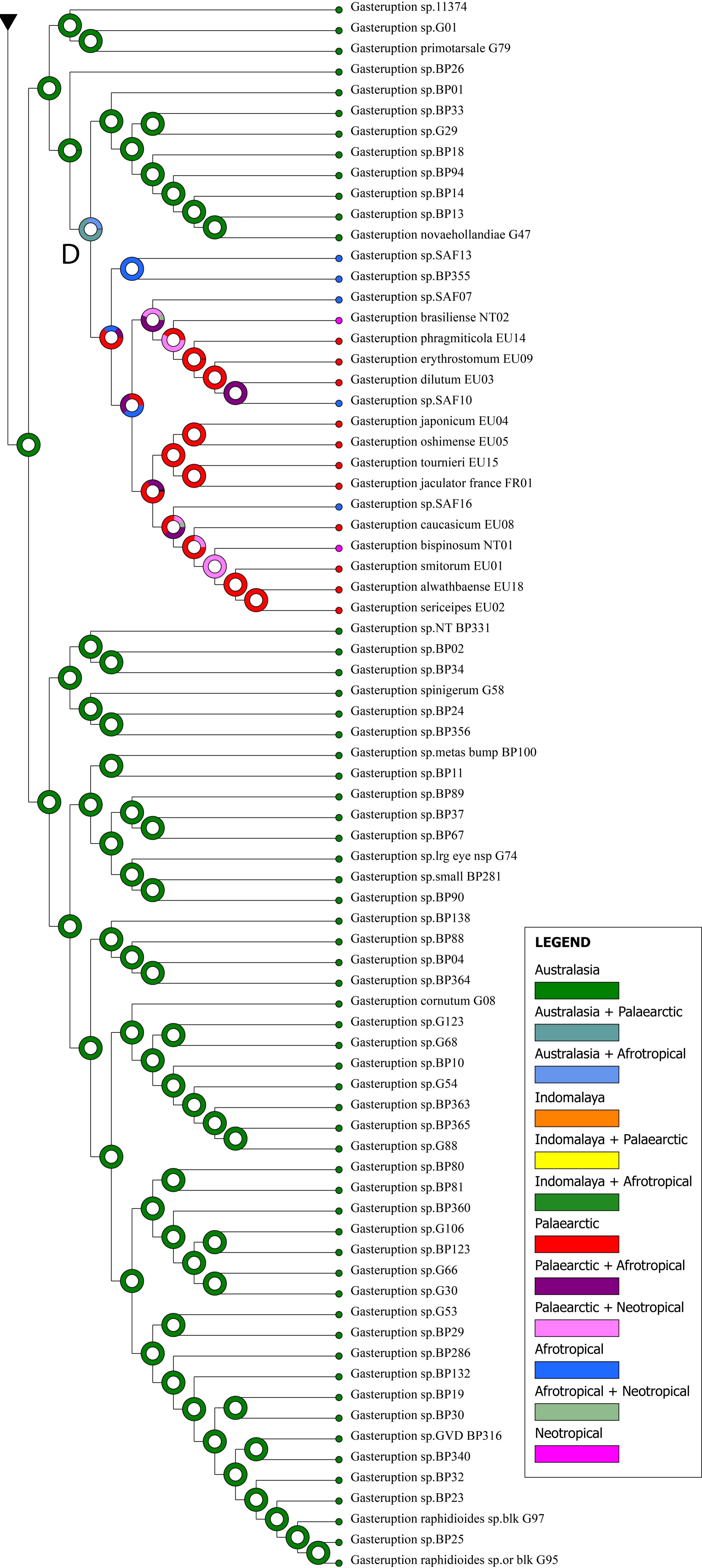
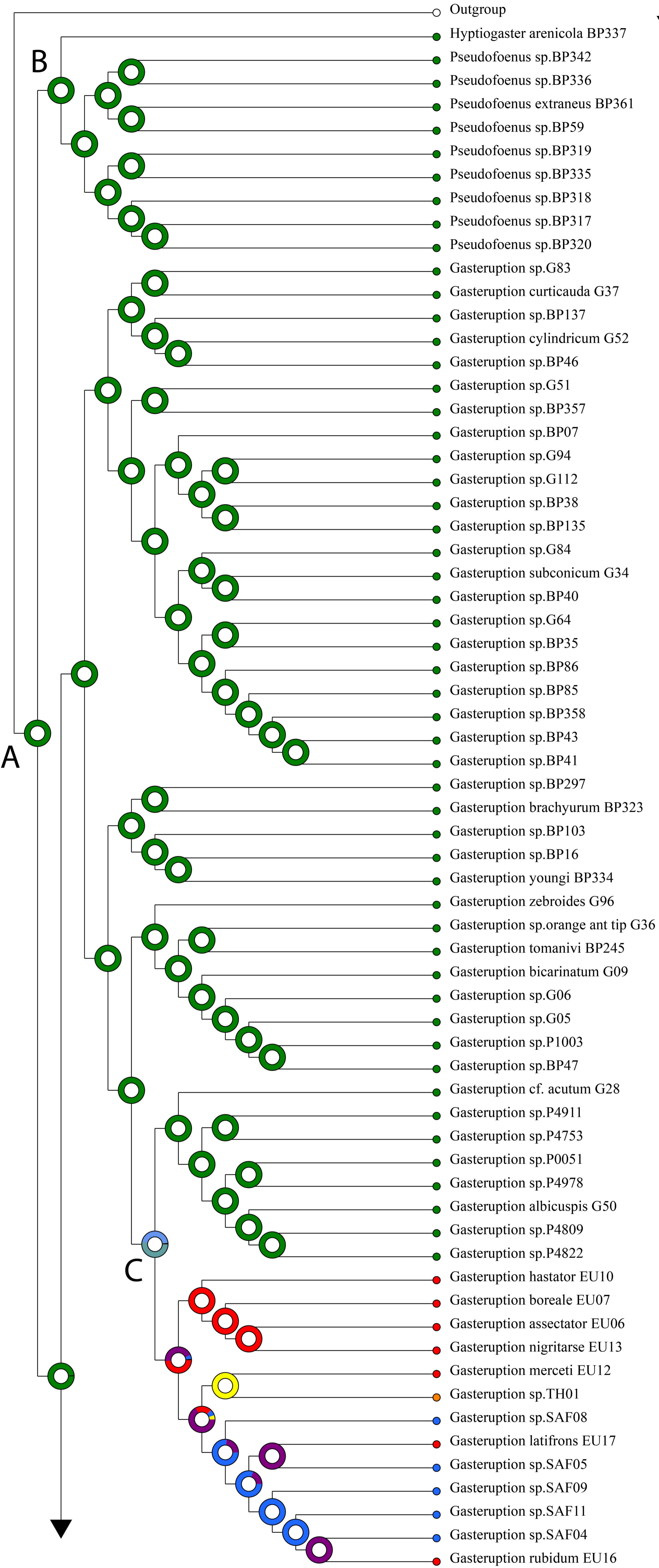


Table S1. Specimen information

Voucher numbers, species identification, GenBank accession numbers for C01, EF1- α and 28s gene fragments, collection localities and voucher location for all material used in this study are given. Abbreviations for collection locations are: PNG, Papua New Guinea; N.P., national park; C.P., conservation park; SA, South Australia; WA, Western Australia; Qld, Queensland; Tas., Tasmania; Vic., Victoria. Abbreviations for voucher location are: AMS, Australian Museum, Sydney, NSW, Australia; BPC, Ben A. Parslow personal collection, to be deposited in SAMA; EMUS, Utah State University Insect Collection, Utah, USA; QM, Queensland Museum, Brisbane, Qld, Australia; MNHN, Muséum National d'Histoire Naturelle, Paris, France; RMNH, Naturalis Biodiversity Centre, Leiden, Netherlands; SAMA, South Australian Museum, Adelaide, SA, Australia; SAMC, Iziko South African Museum, Cape Town, South Africa; TMAG, Tasmanian Museum & Art Gallery, Hobart, Tas., Australia; WAM, West Australian Museum, Perth, WA, Australia; WINC, Waite Insect & Nematode Collection, Adelaide, SA, Australia

Species name	Voucher number	C01	EF1- α	28s	Collection locality	Voucher location
GASTERUPTIINAE						
<i>Gasteruption albicuspis</i> Kieffer, 1911	G50	–	MT265213	MT228042	Australia , Daintree N.P., Cape Tribulation, Qld	QM
<i>Gasteruption alwathbaense</i> Saure, Schmid-Egger & van Achterberg, 2017	EU18	–	MT265196	MT228025	Yemen , Lahj	RMNH
<i>Gasteruption assectator</i> (Linnaeus, 1758)	EU06	MT218480	MT265112	–	Bulgaria , Banya	RMNH
<i>Gasteruption bicarinatum</i> (Turner, 1918)	G09	MT218476	MT265108	MT227949	Australia , Piney Lakes Reserve, Winthrop, WA	BPC
<i>Gasteruption bispinosum</i> Kieffer, 1904	NT01	MT218475	MT265106	MT227947	Costa Rica , Escazu, San José	USU
<i>Gasteruption boreale</i> (Thomson, 1883)	EU07	–	MT265206	MT228035	Netherlands , Duiven, Gelderland	RMNH
<i>Gasteruption brachyurum</i> Schletterer, 1885	BP323	–	MT265186	MT228015	Australia , Geeveston, Tas.	BPC
<i>Gasteruption brasiliense</i> (Blanchard, 1840)	NT02	–	MT265201	MT228030	Brazil , Teodoro Sampaio, San José	USU
<i>Gasteruption breviscutum</i> Kieffer, 1911	G05	MT218473	MT265104	MT227945	Australia , Musk, Vic.	WINC
<i>Gasteruption caucasicum</i> (Guérin-Ménéville, 1844)	EU08	MT218450	MT265081	MT227928	Bulgaria , Banya	RMNH
<i>Gasteruption</i> cf. <i>acutum</i> (Pasteels 1956)	G28	MT218502	–	MT227972	Australia , Garners Beach, Bingil Bay, Qld	AM: K420869
<i>Gasteruption cornutum</i> Pasteels, 1957	G08	MT218458	MT265089	MT227934	Australia , Tarin Rock Nature Reserve, WA	WAM
<i>Gasteruption curticauda</i> Pasteels, 1957	G37	–	MT265191	MT228020	Australia , Manuka Road, Oyster Cove, Tas.	WINC
<i>Gasteruption cylindricum</i> (Turner, 1918)	G52	MT218486	MT265118	MT227957	Australia , St Lucia campus, University of Queensland, Qld	WINC
<i>Gasteruption dilutum</i> Semenov, 1892	EU03	MT218451	MT265082	–	Iran : Zabol, Sistan & Baluchestan	RMNH

Species name	Voucher number	C01	EF1- α	28s	Collection locality	Voucher location
<i>Gasteruption erythrostomum</i> (Dahlbom, 1831)	EU09	MT218511	MT265141	–	Netherlands , Duiven, Gelderland	RMNH
<i>Gasteruption fibuliforme</i> Pasteels, 1957	BP11	MT218542	MT265168	–	Australia , Mount Barker Summit, Mount Barker, SA	WINC
<i>Gasteruption hastator</i> (Fabricius, 1804)	EU10	MT218481	MT265113	MT227953	Spain , Castilla & Leon, Valdemierque,	RMNH
<i>Gasteruption jaculator</i> (Linnaeus, 1758)	FR01	MT218467	MT265098	–	France , La Ciotat, Bouches Du Rhône	WINC
<i>Gasteruption japonicum</i> Cameron, 1888	EU04	–	MT265199	MT228028	China , Xi'an, Shaanxi	RMNH
<i>Gasteruption latifrons</i> Saure, Schmid-Egger & van Achterberg, 2017	EU17	MT218508	MT265138	MT227978	Yemen , Manakhah, Sana'a	RMNH
<i>Gasteruption longicolle</i> Schletterer, 1889	G53	MT218461	MT265092	–	Australia , Tin Can Bay, Qld	BPC
<i>Gasteruption merceti</i> Kieffer, 1904	EU12	MT218514		MT227982	Hungary , Törökbálint	RMNH
<i>Gasteruption nigritarse</i> (Thomson, 1883)	EU13	MT218479	MT265111	MT227952	Turkey , Subatuk, Erzurum	RMNH
<i>Gasteruption novaehollandiae</i> Schletterer, 1885	G47	MT218453	MT265084	MT227929	Australia , Vivonne Bay C.P., Point Elen, Kangaroo Island, SA	WINC
<i>Gasteruption oshimense</i> Watanabe, 1934	EU05	MT218490	MT265122	MT227960	China , Qinling Mountains, Shaanxi	RMNH
<i>Gasteruption phragmiticola</i> Saure, 2006	EU14	MT218452	MT265083	–	Czech Republic , Doksy, Bohemia	RMNH
<i>Gasteruption platycephala</i> Pasteels 1957	G54	MT218454		MT227930	Australia , Geeveston, Tas.	BPC
<i>Gasteruption primotarsale</i> Pasteels, 1957	G79	–	MT265190	MT228019	Australia , Emu Bay, Kangaroo Island, SA	WINC
<i>Gasteruption raphidioides</i> (Westwood, 1851)	BP25	MT218556	MT265181	MT228011	Australia , Coromandel Valley, SA	WINC
<i>Gasteruption raphidioides</i> (Westwood, 1851)	G95	MT218471	MT265102	MT227943	Australia , Flinders Chase N.P., Kangaroo Island, SA	WINC
<i>Gasteruption raphidioides</i> (Westwood, 1851)	G97	MT218472	MT265103	MT227944	Australia , Flinders Chase N.P., Kangaroo Island, SA	WINC
<i>Gasteruption rubidum</i> Saure, Schmid-Egger & van Achterberg, 2017	EU16	MT218509	MT265139	MT227979	Yemen , Manakhah, Sana'a	RMNH
<i>Gasteruption sericeipes</i> Kieffer 1911	EU02	MT218478	MT265110	MT227951	United Arab Emirates , Al Wathba Wetland Reserve, Abu Dhabi	RMNH
<i>Gasteruption smitorum</i> van Achterbergan Achterberg & Talebi, 2014	EU01	–	MT265200	MT228029	Turkey , Çamlıbel, Erzurum	RMNH
<i>Gasteruption spinigerum</i> Schletterer, 1889	G58	MT218474	MT265105	MT227946	Australia , Mount Remarkable N.P., SA	BPC
<i>Gasteruption subconicum</i> Pasteels 1957	G34	MT218464	MT265095	MT227938	Australia , Bluff Knoll, Stirling Range N.P., WA	WINC
<i>Gasteruption terminale</i> (Westwood, 1841)	BP103	MT218533	MT265159	MT227998	Australia , Seal Bay, Kangaroo Island, SA	WINC
<i>Gasteruption tomanivi</i> Parslow, Stevens & Schwarz 2018	BP245	MG932556	MT265107	MT227948	Fiji , Mount Tomanivi, Viti Levu	SAMA
<i>Gasteruption tournieri</i> Schletterer, 1885	EU15	–	MT265197	MT228026	Bulgaria , Banya, Plovdiv	RMNH
<i>Gasteruption youngi</i> Jennings & Parslow 2014	BP334	MT218493	MT265125	MT227963	Australia , Great Victoria Desert Nature Reserve, Mamungari, SA	BPC
<i>Gasteruption zebroides</i> Pasteels 1957	G96	MT218487	MT265119	–	Australia , Witchelina Station, SA	WINC
<i>Gasteruption</i> sp.	11374	MT218498	MT265130	MT227968	PNG , Wanang, Madang	MNHN

Species name	Voucher number	C01	EF1- α	28s	Collection locality	Voucher location
<i>Gasteruption</i> sp.	BP01	MT218523	MT265150	MT227990	Australia , Stirling Range N.P., WA	WINC
<i>Gasteruption</i> sp.	BP02	MT218529	MT265156	MT227994	Australia , Stirling Range N.P., WA	WINC
<i>Gasteruption</i> sp.	BP04	MT218537	MT265163	–	Australia , Belair N.P., Belair, SA	WINC
<i>Gasteruption</i> sp.	BP07	MT218521	–	MT227988	Australia , Hiltaba Station, SA	WINC
<i>Gasteruption</i> sp.	BP10	MT218534	MT265160	MT227999	Australia , Kangaroo Island, SA	WINC
<i>Gasteruption</i> sp.	BP13	MT218524	MT265151	MT227991	Australia , Seal Bay, Kangaroo Island, SA	WINC
<i>Gasteruption</i> sp.	BP14	MT218525	MT265152	MT227992	Australia , Port Ellen, Kangaroo Island, SA	WINC
<i>Gasteruption</i> sp.	BP16	MT218532	MT265158	MT227997	Australia , Wirrabara Forest, Wirrabara, SA	WINC
<i>Gasteruption</i> sp.	BP18	MT218527	MT265154	MT227993	Australia , Flinders Chase N.P., Kangaroo Island, SA	WINC
<i>Gasteruption</i> sp.	BP19	MT218544	MT265170	–	Australia , Vivonne Bay C.P., Kangaroo Island, SA	WINC
<i>Gasteruption</i> sp.	BP23	MT218554	MT265179	MT228010	Australia , Flinders Chase N.P., Kangaroo Island, SA	WINC
<i>Gasteruption</i> sp.	BP24	MT218531	MT265157	MT227996	Australia , Belair N.P., Belair, SA	WINC
<i>Gasteruption</i> sp.	BP26	MT218528	MT265155	–	Australia , Hiltaba Station, SA	WINC
<i>Gasteruption</i> sp.	BP29	MT218543	MT265169	–	Australia , Seal Bay, Kangaroo Island, SA	WINC
<i>Gasteruption</i> sp.	BP30	MT218545	MT265171	–	Australia , Vivonne Bay C.P., Kangaroo Island, SA	WINC
<i>Gasteruption</i> sp.	BP32	MT218555	MT265180	–	Australia , Waite Campus, The University of Adelaide, SA	WINC
<i>Gasteruption</i> sp.	BP33	MT218549	–	MT228005	Australia , Stirling Range N.P., WA	WINC
<i>Gasteruption</i> sp.	BP34	MT218530	–	MT227995	Australia , Canaan Creek, Qld	WINC
<i>Gasteruption</i> sp.	BP35	MT218550	MT265175	MT228006	Australia , Mt Moffatt, Carnarvon N.P., Qld	WINC
<i>Gasteruption</i> sp.	BP37	MT218540	MT265166	–	Australia , Christmas Tree Well, Flint, WA	WINC
<i>Gasteruption</i> sp.	BP38	MT218516	MT265145	MT227984	Australia , Women's College, University of Queensland, Qld	WINC
<i>Gasteruption</i> sp.	BP40	MT218522	MT265149	MT227989	Australia , Bluff Knoll, Stirling Range N.P., WA	WINC
<i>Gasteruption</i> sp.	BP41	MT218517	MT265146	MT227985	Australia , King's Park, Perth, WA	WINC
<i>Gasteruption</i> sp.	BP43	MT218519	MT265147	–	Australia , Nanutarra, Pilbara region, WA	WINC
<i>Gasteruption</i> sp.	BP46	MT218546	MT265172	MT228003	Australia , St Lucia Campus, University of Queensland, Qld	WINC
<i>Gasteruption</i> sp.	BP47	MT218552	MT265177	MT228008	Australia , Musk, Vic.	WINC
<i>Gasteruption</i> sp.	BP67	MT218538	MT265164	MT228001	Australia , Kingswood, SA	WINC
<i>Gasteruption</i> sp.	BP80	–	MT265203	MT228032	Australia , Coromandel Valley, SA	WINC
<i>Gasteruption</i> sp.	BP81	MT218553	MT265178	MT228009	Australia , Belair N.P., Belair, SA	WINC
<i>Gasteruption</i> sp.	BP85	MT218520	MT265148	MT227987	Australia , Belair N.P., Belair, SA	WINC
<i>Gasteruption</i> sp.	BP86	MT218518	–	MT227986	Australia , Belair N.P., Belair, SA	WINC

Species name	Voucher number	C01	EF1- α	28s	Collection locality	Voucher location
<i>Gasteruption</i> sp.	BP88	MT218536	MT265162	–	Australia , Flinders Chase N.P., Kangaroo Island, SA	WINC
<i>Gasteruption</i> sp.	BP89	MT218539	MT265165	MT228002	Australia , Flinders Chase N.P., Kangaroo Island, SA	WINC
<i>Gasteruption</i> sp.	BP90	MT218548	MT265174	MT228004	Australia , Waite Campus, The University of Adelaide, SA	WINC
<i>Gasteruption</i> sp.	BP94	MT218526	MT265153	–	Australia , Stirling Linear Park, Mt Lofty, SA	WINC
<i>Gasteruption</i> sp.	BP100	–	MT265189	MT228018	Australia , Yalanda St, Eden Hills, SA	WINC
<i>Gasteruption</i> sp.	BP123	MT218551	MT265176	MT228007	Australia , Women's College, University of Queensland, Qld	WINC
<i>Gasteruption</i> sp.	BP132	MT218541	MT265167	–	Australia , Waite Campus, The University of Adelaide, SA	WINC
<i>Gasteruption</i> sp.	BP135	–	MT265204	MT228033	Australia , St Lucia Campus, University of Queensland, Qld	WINC
<i>Gasteruption</i> sp.	BP137	MT218547	MT265173	–	Australia , Waite Campus, The University of Adelaide, SA	WINC
<i>Gasteruption</i> sp.	BP138	MT218535	MT265161	MT228000	Australia , Auburn, SA	WINC
<i>Gasteruption</i> sp.	BP281	MT218513	MT265143	MT227981	Australia , Waite Campus, The University of Adelaide, SA	WINC
<i>Gasteruption</i> sp.	BP286	MT227982	MT265144	MT227983	Australia , Ferries McDonald C.P., SA	WINC
<i>Gasteruption</i> sp.	BP297	–	MT265185	MT228014	Australia , Glen Osmond Road, SA	WINC
<i>Gasteruption</i> sp.	BP316	MT218470	MT265101	MT227942	Australia , Great Victoria Desert Nature Reserve, Mamungari, SA	BPC
<i>Gasteruption</i> sp.	BP331	MT218455	MT265086	MT227931	Australia , Stirling Range N.P., WA	WINC
<i>Gasteruption</i> sp.	BP340	MT218469	MT265100	MT227941	Australia , Salmon Gums, Goldfields Highway, WA	BPC
<i>Gasteruption</i> sp.	BP355	MT218466	MT265097	–	Africa , Gumbi Wildlife Reserve, Bheki	WINC
<i>Gasteruption</i> sp.	BP356	MT218457	MT265088	MT227933	Australia , Authors Creek, Vic.	BPC
<i>Gasteruption</i> sp.	BP357	MT218459	MT265090	MT227935	Australia , Morgan–Burra Road, Winterton, SA	QM
<i>Gasteruption</i> sp.	BP358	MT218462	MT265093	MT227936	Australia , Kings Park, WA	BPC
<i>Gasteruption</i> sp.	BP360	MT218512	MT265142	–	Australia , Manbina Reserve, WA	BPC
<i>Gasteruption</i> sp.	BP363	–	MT265193	MT228022	Australia , Waite Campus, The University of Adelaide, SA	WINC
<i>Gasteruption</i> sp.	BP364	MT218484	MT265116	–	Australia , Flinders Chase N.P., Kangaroo Island, SA	WINC
<i>Gasteruption</i> sp.	BP365	–	MT265194	MT228023	Australia , Waite Campus, The University of Adelaide, SA	WINC
<i>Gasteruption</i> sp.	G01	MT218503	–	MT227973	Australia , Lawn hill N.P., Qld	QM

Species name	Voucher number	C01	EF1- α	28s	Collection locality	Voucher location
<i>Gasteruption</i> sp.	G06	–	MT265187	MT228016	Australia , Stapylton, Yatala, Qld	QM
<i>Gasteruption</i> sp.	G29	–	MT265202	MT228031	Australia , Bundjalung N.P., NSW	QM
<i>Gasteruption</i> sp.	G30	MT218488	MT265120	MT227958	Australia , Authors Creek, Vic.	BPC
<i>Gasteruption</i> sp.	G36	–	MT265184	MT228013	Australia , Waite Campus, The University of Adelaide, SA	WINC
<i>Gasteruption</i> sp.	G51	MT218460	MT265091	–	Australia , Alice Springs, NT	ANIC
<i>Gasteruption</i> sp.	G64	MT218477	MT265109	MT227950	Australia , Musk, Vic.	WINC
<i>Gasteruption</i> sp.	G66	MT218489	MT265121	MT227959	Australia , Warra, Tas.	TMAG: F33377
<i>Gasteruption</i> sp.	G68	–	MT265192	MT228021	Australia , Cox Scrub N.P., SA	BPC
<i>Gasteruption</i> sp.	G74	MT218485	MT265117	MT227956	Australia , Manuka Road, Oyster Cove, Tas.	TMAG: F33302
<i>Gasteruption</i> sp.	G83	MT218507	MT265137	MT227977	Australia , Manuka Road, Tas.	TMAG: F33303
<i>Gasteruption</i> sp.	G84	MT218465	MT265096	MT227939	Australia , Kangaroo Island, SA	BPC
<i>Gasteruption</i> sp.	G88	–	MT265195	MT228024	Australia , Taroom, Qld	QM
<i>Gasteruption</i> sp.	G94	MT218463	MT265094	MT227937	Australia , Mulgathing Station, SA	SAMA
<i>Gasteruption</i> sp.	G106	–	MT265183	MT228012	Australia , Inskip point, Qld	BPC
<i>Gasteruption</i> sp.	G112	MT218500	MT265132	MT227970	Australia , Auburn, SA	WINC
<i>Gasteruption</i> sp.	G123	MT218468	MT265099	MT227940	Australia , Tinderry Mountains, NSW	ANIC: 32 114661
<i>Gasteruption</i> sp.	P0051	–	MT265211	MT228040	PNG , Wanang, Madang	MNHN
<i>Gasteruption</i> sp.	P1003	–	MT265188	MT228017	PNG , Mount Wilhelm, Madang	MNHN
<i>Gasteruption</i> sp.	P4753	–	MT265209	MT228038	PNG , Mount Wilhelm, Madang	MNHN
<i>Gasteruption</i> sp.	P4809	MT218505	MT265135	MT227975	PNG , Mount Wilhelm, Madang	MNHN
<i>Gasteruption</i> sp.	P4822	–	MT265210	MT228039	PNG , Mount Wilhelm, Madang	MNHN
<i>Gasteruption</i> sp.	P4911	MT218501	MT265133	MT227971	PNG , Wanang, Madang	MNHN
<i>Gasteruption</i> sp.	P4978	–	MT265212	MT228041	PNG , Mount Wilhelm, Madang	MNHN
<i>Gasteruption</i> sp.	SAF04	MT218482	MT265114	MT227954	South Africa , (no location)	SAMC: P087012
<i>Gasteruption</i> sp.	SAF05	–	MT265207	MT228036	South Africa , Dwarsriviershoek Farm, Banghoek valley	SAMC: P087028
<i>Gasteruption</i> sp.	SAF07	MT218456	MT265087	MT227932	South Africa , Dwarsriviershoek Farm, Banghoek valley	SAMC: P087050
<i>Gasteruption</i> sp.	SAF08	–	MT265205	MT228034	South Africa , (no location)	SAMC: P086991
<i>Gasteruption</i> sp.	SAF09	MT218499	MT265131	MT227969	South Africa , Dwarsriviershoek Farm, Banghoek valley	SAMC: P087169
<i>Gasteruption</i> sp.	SAF10	MT218506	MT265136	MT227976	South Africa , Dwarsriviershoek Farm, Banghoek valley	SAMC: P087175

Species name	Voucher number	C01	EF1- α	28s	Collection locality	Voucher location
<i>Gasteruption</i> sp.	SAF11	MT218483	MT265115	MT227955	Mozambique , Gorongosa N.P., Sofala	SAMC
<i>Gasteruption</i> sp.	SAF13	MT218504	MT265134	MT227974	Mozambique , Gorongosa N.P., Sofala	SAMC: P087059
<i>Gasteruption</i> sp.	SAF16	–	MT265198	MT228027	South Africa , Dwarsriviershoek Farm, Banghoek valley	SAMC: P087164
<i>Gasteruption</i> sp.	TH01	–	MT265208	MT228037	Thailand , (No location)	WINC
HYPTIOGASTRINAE						
<i>Hyptiogaster arenicola</i> Turner, 1918	BP337	MT218496	MT265128	MT227966	Australia , Kings Park, Perth, WA	WINC
<i>Pseudofoenus extraneus</i> (Turner, 1918)	BP361	–	MT265214	MT228043	Fiji , Viti Levu	BPC
<i>Pseudofoenus fallax</i> (Schletterer, 1889)	BP317	MT218491	MT265123	MT227961	Australia , Kingscote, Kangaroo Island, SA	BPC
<i>Pseudofoenus inaequalis</i> (Turner, 1918)	BP320	MT218492	MT265124	MT227962	Australia , Glass Gorge Road, Oratunga Station, SA	BPC
<i>Pseudofoenus mitchellae</i> Jennings & Austin, 2002	BP319	MT218495	MT265127	MT227965	Australia , Great Victoria Desert Nature Reserve, Mamungari, SA	BPC
<i>Pseudofoenus morganensis</i> Jennings & Austin, 2002	BP318	MT218494	MT265126	MT227964	Australia , Waldana Well, Great Victoria Desert, SA	BPC
<i>Pseudofoenus</i> sp.	BP59	MT218557	MT265182	–	Australia , Lashmar C.P., Kangaroo Island, SA	WINC
<i>Pseudofoenus</i> sp.	BP335	MT218497	MT265129	MT227967	Australia , Kalbarri N.P., WA	WINC
<i>Pseudofoenus</i> sp.	BP336	–	MT265215	MT228044	Australia , Credo Station Reserve, WA	WINC
<i>Pseudofoenus</i> sp.	BP342	MT218510	MT265140	MT227980	Australia , Jarvis Hills Road, Hawker, SA	BPC
AULACIDAE						
<i>Aulacus brabyi</i> Jennings & Austin, 2018	BP345	MT218449	–	MT227927	Australia , Flinders Chase N.P., Kangaroo Island, SA	WINC
<i>Aulacus impolitus</i> Smith, 1991	Aul_01	GQ374652	JQ519541	GQ374745	Unknown ex GenBank	Unknown
<i>Pristaulacus strangaliae</i> Rohwer, 1917	Aul_02	KY082429	GQ410728	GQ374742	Unknown ex GenBank	Unknown
EVANIIDAE						
<i>Evaniella semaeoda</i> (Bradley, 1908)	Eva_01	GQ374648	GQ410727	GQ374740	Unknown ex GenBank	Unknown
<i>Brachygaster minuta</i> (Olivier, 1792)	Eva_02	AY800156	JQ519543	AY817528	France , Le Bois Noir, Lans-en-Vercors	Unknown

Table S2. Primers used to amplify gene regions in the present study

Gene region	Primer	Sequence	Reference
C01	M200 (fwd)	GGATTTGGAAATTGATTAGTTCC	Simon <i>et al.</i> 1994
	M205 (rev)	ACTGTAAATATATGATGAACTCA	Simon <i>et al.</i> 1994
	LCO1490 (fwd)	GGTCAACAAATCATAAAGATATTGG	Folmer <i>et al.</i> 1994
	HCO2198 (rev)	TAAACTTCAGGGTGACCAAAAAATCA	Folmer <i>et al.</i> 1994
EF1- α	G1044 (fwd)	AGATGGGYAARGGTTCTTCAA	Belshaw and Quicke 1997
	G1045 (rev)	AACATGTTGTCDCCGTGCCATCC	Belshaw and Quicke 1997
28s	G0748 (fwd)	AGAGAGAGTTCAAGAGTACGTG	Dowton and Austin 1998
	G1386 (rev)	TTGGTCCGTGTTTCAAGACGGG	Dowton and Austin 1998

Table S3. Relative probability values for ancestral distributions for four nodes discussed in the text

The node values indicate the probability of any particular region being ancestral for that node

	Nodes (probabilities in percentage values)		
	A	C	D
Australasia	100	0	0
Australasia + Indomalaya	0	1.8	0
Australasia + Palaeartic	0	53.15	69.93
Australasia + Afrotropical	0	45.05	29.17
Australasia + Neotropical	0	0	0.91

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