

Species	Collection	Number in Supp. Fig. S1	Latitude (-)	Longitude	COI	12S	ITS1	18S	Specimen code
<i>Macropanesthia rhinoceros</i>	Dimbulah, QLD	1	17.181	145.042	+	+	+	+	GEOPAN00001
	Mt Garnet, QLD	2	17.774	145.024	+	nd	nd	nd	GEOPAN00002
	Whitsunday Island, QLD	3	20.290	149.044	+	nd	nd	nd	GEOPAN00003
	Hughenden, QLD	4	19.936	144.268	+	nd	nd	nd	GEOPAN00004
	Charters Towers, QLD	5	20.111	146.611	+	nd	nd	nd	GEOPAN00005
	Magnetic Island, QLD	6	19.149	146.847	+	nd	nd	nd	GEOPAN00006
	Cooktown, QLD	7	15.281	144.989	+	nd	nd	nd	GEOPAN00007
	Gumili, QLD	8	19.832	147.669	+	nd	nd	nd	GEOPAN00008
	Coen, QLD	9	13.917	143.163	+	nd	nd	nd	GEOPAN00009
	Mt Carbine, QLD	10	16.508	145.161	+	nd	nd	nd	GEOPAN00010
	Alpha, QLD	11	23.476	146.564	+	nd	nd	+	GEOPAN00011
<i>Macropanesthia lineopunctata</i>	Jericho, QLD	12	23.558	145.719	+	nd	nd	+	GEOPAN00012
<i>Macropanesthia</i> sp. nov.	Kirrama NP, QLD	13	18.106	145.636	+	nd	nd	nd	GEOPAN00013
<i>Macropanesthia heppleorum</i>	Innot Hot Springs, QLD	14	17.638	145.286	+	+	+	nd	GEOPAN00014
<i>Geoscapheus woodwardi</i>	Muttaburra, QLD	15	22.535	144.586	+	+	+	nd	GEOPAN00015
<i>Macropanesthia spumigenina</i>	Jericho, QLD	16	23.564	145.823	nd	+	+	nd	GEOPAN00016
<i>Macropanesthia kraussiana</i>	Isisford, QLD	17	24.299	144.380	+	+	nd	nd	GEOPAN00017
<i>Macropanesthia intermorpha</i>	Hughenden, QLD	18	19.944	144.275	+	+	+	+	GEOPAN00018
<i>Neogeoscapheus hanni</i>	Mt Molloy, QLD	19	16.798	145.182	+	+	+	nd	GEOPAN00019
	Mt Molloy, QLD	20	16.665	145.299	+	+	nd	+	GEOPAN00020
<i>Macropanesthia mutica</i>	Dinden NP, QLD	21	17.021	145.600	+	+	nd	nd	GEOPAN00021
<i>Panesthia sloanei</i>	Ravenshoe, QLD	22	17.620	145.570	+	+	+	nd	GEOPAN00022
	Dinden NP, QLD	23	16.941	145.636	+	+	nd	nd	GEOPAN00023
	Paluma, QLD	24	19.010	146.199	+	+	+	+	GEOPAN00024
	Ravenshoe, QLD	25	17.525	145.511	+	+	+	nd	GEOPAN00025
	Mt Lewis, QLD	26	16.582	145.291	+	+	+	nd	GEOPAN00026
<i>Panesthia australis</i>	Mt Gingera, ACT	27	35.600	148.800	+	+	+	+	GEOPAN00027
	New England NP, NSW	28	30.489	152.409	+	+	+	nd	GEOPAN00028
	Brindabella Mts, ACT	29	35.400	148.800	nd	+	+	+	GEOPAN00029
	Kalangadoo, SA	30	37.563	140.769	+	nd	nd	+	GEOPAN00030
<i>Panesthia obtusa</i>	Blackdown Tableland NP, QLD	31	23.800	149.134	nd	+	nd	+	GEOPAN00031
	Columboola, QLD	32	26.634	150.344	+	+	+	nd	GEOPAN00032
<i>Neogeoscapheus hirsutus</i>	Gayndah, QLD	33	25.671	151.432	+	+	+	nd	GEOPAN00033
	Bundaberg, QLD	34	24.810	152.330	+	+	+	+	GEOPAN00034
<i>Macropanesthia lithgowae</i>	Nutley SF, QLD	35	26.613	151.054	+	+	+	+	GEOPAN00035
	Gurgeena, QLD	36	25.453	151.386	+	nd	nd	+	GEOPAN00036
	Murgon, QLD	37	26.155	151.911	+	+	+	nd	GEOPAN00037
	Keysland, QLD	38	26.203	151.747	+	+	+	nd	GEOPAN00038
	Boat Mountain, QLD	39	26.160	151.970	+	+	+	nd	GEOPAN00039
<i>Neogeoscapheus barbarae</i>	Hivesville, QLD	40	26.090	151.690	+	+	+	nd	GEOPAN00040
<i>Panesthia tryoni tryoni</i>	Kroombit Tops NP, QLD	41	24.363	151.003	+	nd	+	+	GEOPAN00041
	Kroombit Tops NP, QLD	42	24.414	151.054	+	+	+	+	GEOPAN00042
<i>Macropanesthia mackerrasae</i>	Mt Woowoonga, QLD	43	25.429	152.117	+	+	+	+	GEOPAN00043
	Mt Walsh NP, QLD	44	25.571	152.052	+	+	nd	nd	GEOPAN00044
<i>Macropanesthia kinkunae</i>	Gtollow, QLD	45	25.058	152.341	+	+	+	nd	GEOPAN00045
<i>Geoscapheus crenulatus crenulatus</i>	Noosa, QLD	46	26.394	153.094	+	+	+	nd	GEOPAN00046
<i>Macropanesthia saxicola</i>	Yerlman, NSW	47	28.975	150.770	+	+	+	+	GEOPAN00047
	Pinedale, QLD	48	28.711	151.502	nd	+	+	nd	GEOPAN00048
<i>Parapanesthia gigantea</i>	Bollivia Hill, NSW	49	29.321	151.919	+	+	+	+	GEOPAN00049
	Ballandean, QLD	50	28.767	151.860	+	+	+	+	GEOPAN00050
<i>Panesthia tryoni tegminifera</i>	Dorrigo Mt, NSW	51	30.372	152.725	+	+	+	+	GEOPAN00051
<i>Parapanesthia gigantea</i>	Dunmore, QLD	52	27.701	151.032	+	nd	nd	nd	GEOPAN00052
<i>Panesthia tryoni tryoni</i>	Mt Worendo, QLD	53	28.300	153.200	+	+	+	+	GEOPAN00053
<i>Geoscapheus robustus</i>	Hattah, VIC	54	34.763	142.292	+	+	+	+	GEOPAN00054
	Parrakie, SA	55	35.379	140.253	nd	+	+	+	GEOPAN00055
	Lake Crosbie, VIC	56	35.047	141.718	+	+	+	+	GEOPAN00056
	Yanna, QLD	57	26.932	146.040	+	+	+	+	GEOPAN00057
	Pooginook CP, SA	58	34.056	140.131	+	+	+	+	GEOPAN00058
<i>Geoscapheus dilatatus</i>	Roma, QLD	59	26.863	148.966	nd	+	+	+	GEOPAN00059
	Hattah, VIC	60	34.767	142.332	+	+	+	+	GEOPAN00060
	Pooginook CP, SA	61	34.067	140.148	+	+	+	+	GEOPAN00061
	Ungarie, NSW	62	33.673	147.031	+	+	+	+	GEOPAN00062
<i>Panesthia tryoni tryoni</i>	Dalrymple Heights, QLD	63	21.053	148.554	+	+	nd	+	GEOPAN00063
	Blue Mt, QLD	64	21.605	148.973	+	+	+	+	GEOPAN00064
<i>Geoscapheus rugulosus</i>	Blackdown Tableland NP, QLD	65	23.806	149.065	+	+	+	+	GEOPAN00065
<i>Neogeoscapheus dahmsi</i>	Duaringa, QLD	66	23.571	149.667	+	+	+	+	GEOPAN00066
<i>Parapanesthia pearsoni</i>	Blackdown Tableland NP, QLD	67	23.807	149.122	+	+	+	+	GEOPAN00067
<i>Macropanesthia rothi</i>	Agnes Water, QLD	68	24.257	151.947	+	+	+	+	GEOPAN00068
<i>Panesthia cribrata</i>	Kroombit Tops NP, QLD	69	24.370	150.940	+	+	+	nd	GEOPAN00069
	Mogo, NSW	70	35.768	150.065	+	nd	nd	nd	GEOPAN00070
	Mallanganee SF, NSW	71	28.900	152.750	+	nd	nd	nd	GEOPAN00071
	Bullocks Hut Rd, Norfolk Is	72	29.010	167.930	+	nd	nd	nd	GEOPAN00072
	Rocky Point Reserve, Norfolk Is	73	29.057	167.941	+	+	+	+	GEOPAN00073
	Kilara, NSW	74	33.769	151.156	+	nd	nd	+	GEOPAN00074
	Mt Pitt, Norfolk Is	75	29.017	167.938	+	nd	nd	nd	GEOPAN00075
	Kowmung River, NSW	76	33.900	150.000	+	nd	+	nd	GEOPAN00076
	Mogo, NSW	77	35.768	150.065	+	nd	nd	nd	GEOPAN00077
	Yarraman, QLD	78	26.800	152.000	+	nd	nd	nd	GEOPAN00078
	Ebor, NSW	79	30.420	152.310	+	nd	+	nd	GEOPAN00079
	Taree, NSW	80	31.890	152.480	+	nd	nd	nd	GEOPAN00080
	Mt Nebo, QLD	81	27.400	152.800	+	nd	+	nd	GEOPAN00081
	Wyong, NSW	82	33.280	151.420	+	+	+	+	GEOPAN00082
	Upper Tallebudgera Ck, QLD	83	28.200	153.300	+	nd	nd	nd	GEOPAN00083
<i>Panesthia lata</i>	Blackburn Is, Lord Howe Is	84	31.535	159.060	+	+	+	+	GEOPAN00084
	Roach Is, Lord Howe Is	85	31.499	159.068	+	nd	+	+	GEOPAN00085
<i>Panesthia matthewsi</i>	Mt Walsh NP, QLD	86	25.570	152.053	nd	+	nd	+	GEOPAN00086
<i>Panesthia cribrata</i> (unwinged)	Gayndah, QLD	87	25.564	151.695	+	+	+	+	GEOPAN00087
	Gayndah, QLD	88	25.703	151.426	+	nd	+	+	GEOPAN00088
	Gayndah, QLD	89	25.564	151.695	+	+	nd	nd	GEOPAN00089
<i>Panesthia ancaudelloides</i>	Ravenshoe, QLD	90	17.632	145.530	+	+	nd	+	GEOPAN00090
<i>Panesthia cribrata</i> (unwinged)	Gurgeena, QLD	91	25.453	386.000	+	nd	nd	nd	GEOPAN00091
	Goodnight Scrub NP, QLD	92	25.228	151.922	+	+	+	+	GEOPAN00092
	Bulburin NP, QLD	93	24.527	151.471	+	+	+	+	GEOPAN00093
<i>Panesthia a. angustipennis</i>	Margaret Knoll Lookout, Christmas Is	not shown	10.467	105.711	nd	+	+	+	GEOPAN00094
	Central Area Workshop, Christmas Is	not shown	10.477	105.631	+	+	+	+	GEOPAN00095
	Seychelles, Le Niot, Mahe'	not shown	4.620	55.430	+	+	nd	+	GEOPAN00096
<i>Panesthia saussurii</i>	Sabah, Borneo Is, Malaysia	#	#	#	AB007542	nd	nd	nd	#
	Philippines: Gingoog, Mindanao Is	#	#	#	AB036098	AB036140	nd	AB036192	#
<i>Panesthia heurni</i>	Papua New Guinea: Kubor Range	#	#	#	AB036099	AB036141	nd	AB036193	#
<i>Panesthia papuensis</i>	Papua New Guinea: Kubor Range	#	#	#	#	nd	nd	nd	#
<i>Panesthia a. yayeyamensis</i>	Japan: Okinawa, Inomotejima, Urauchi	#	#	#	AB007541	AB036139	+	AB036191	#
<i>Panesthia a. spadica</i>	Japan: Kouchi, Ashizurimisaki	#	#	#	AB007534	AB036138	nd	AB036190	#
<i>Panesthia a. baluensis</i>	Malaysia: Sabah, Mt Kinabalu	#	#	#	+	nd	nd	nd	#
<i>Ancudellia shawi</i>	Papua New Guinea: Mt Bosavi	#	#	#	AB036097	AB036137	+	AB036189	#
<i>Ancudellia kheilii</i>	Papua New Guinea: Mt Hagen	#	#	#	AB036095	AB036135	nd	AB036187	#
<i>Ancudellia marshallae</i>	Indonesia: Jayapura	#	#	#	AB036096	AB036136	+	AB036188	#
<i>Panesthia transversa</i>	Malaysia: Sabah, Gaya Is	#	#	#	AB036102	AB036144	+	AB036196	#
<i>Caesaria crenulata</i>	Malaysia: Sabah, Danum Vally	#	#	#	AB036103	AB036145	+	AB036197	#
<i>Macropanesthia deplanata</i>	Malaysia: Sabah, Rafflesia Forest Reserve	#	#	#	AB036105	AB036151	nd	AB036203	#
<i>Macropanesthia deplanata</i>	Malaysia: Sabah, Mt Trus Madi	#	#	#	AB036104	AB036151	nd	AB036202	#
<i>Salganea esakii</i>	Japan: Kagoshima, Yakushima,	#	#	#	AB007518	AB036146	+	AB036198	#
<i>Salganea taiwanensis ryukyuanus</i>	Japan: Kagoshima, Amamioshima, Yuwandake	#	#	#	AB005459	AB036147	nd	AB036199	#
<i>Salganea gressiti</i>	Taiwan: Habonsan	#	#	#	AB007529	AB036148	nd	AB036200	#
<i>Salganea raggei</i>	Taiwan: Santimon	#	#	#	AB007531	AB036149	+	AB036201	#
<b>Outgroups</b>									
<i>Diploptera punctata</i>					DQ874273	U17781	nd	DQ874123	
<i>Zetobora</i> sp.					EF363210	EF363311	nd	EF363254	
<i>Epilampra</i> sp.					EU253871	EU253698	nd	EU253775	
<i>Nauchotella cinerea</i>					DQ874301	DQ874068	nd	DQ874156	
<i>Trichobletia pygmaea</i>					AB036106	AB036152	+	AB036205	
<i>Schultesia lamprodidiformis</i>					AB023404	U17828	+	AB036204	
<i>Photelalia pallida</i>					DQ874314	DQ874086	nd	DQ874174	
<i>Blaberus giganteus</i>					AB014064	EF363291	nd	EF363234	
<i>Pycnoscelus surinamensis</i>					DQ874325	DQ874097	nd	DQ874185	
<i>Nyctibora</i> sp.					DQ874303	DQ874072	nd	DQ874160	

# information from Maekawa et al. (1999) and Maekawa et al. (2003)

"+" indicates GenBank Accession number pending

nd: not determined

GPS coordinates for a total of 35 Australian taxa, including *P. tryoni* subspecies, *P. a. angustipennis* from Christmas Island, and *P. lata* from Lord Howe Island, are shown in this table. Note that at some locations, multiple samples were examined. This is why we state in the Materials and Methods that 122 Australian specimens were included, despite the fact that only 95 locations are listed for Australian species in this table.

All samples have been deposited into the Entomology Collection of the Faculty of Agriculture, at the University of Sydney (Badham Building, A16, Science Road, Camperdown 2060).