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Supplementary Material

Gastrointestinal helminth parasites of the grey kangaroos, *Macropus fuliginosus* and *M. giganteus*

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Supplementary Table S1. Voucher specimens deposited in the South Australian Museum from *Macropus giganteus*, followed after the semicolon, by those from *Macropus fuliginosus*.

<i>Macropotrema</i> sp.n.	- ;18507, 18508.
<i>Progamotaenia effigia</i>	- ;47506-8, 45495, 29268, 44655, 45492-4, 29868, 10985, 10989, 7897, 7901, 29292, 8855, 12323, 8972, 14961, 8584, 9006, 8022, 14979.
<i>Progamotaenia festiva</i>	46168, 45900, 45899, 29377, 44658, 44654, 44649, 44651-3, 44646-7, 44648-8, 29609, 44428, 28944, 29378, 29397, 23641, 23246, 23226, 29399, 29390, 25692-4, 27265, 29413, 11043, 46098, 22288-9, 22287, 22290-1, 10101, 10166, 10417, 8997, 9711, 9485, 8578, 10852, 12057, 23243; 44650, 29603, 29606-7; - .
<i>Progamotaenia macropodis</i>	46170, 44503, 21335, 10411, 10941, 9483, 40803; 28613.
<i>Triplotaenia fimbriata</i>	10415; 29266, 28558.
<i>Triplotaenia undosa</i>	31161, 34939, 21327; 31513, 24242, 7891, 7923, 19928, 8815, 14906, 24238.
<i>Wallabicestus ewersi</i>	46169, 34736, 29248, 46383; 28608, 29233, 14983, 14980.
<i>Hypodontus macropi</i>	26055; 45532, 10384, 14900, 19629.
<i>Macropicola ocydromi</i>	- ; 47504-5, 45502, 33030, 31887, 31929, 8672.
<i>Macropostrongyloides mawsonae</i>	48605, 44348, 48754, 44605, 48601, 19719, 6751, 9725, 9605, 9623, 46291; 44628.
<i>Macropostrongyloides yamagutii</i>	44495, 44593-4, 44523, 31360; 47502, 47513, 34630, 44541, 44629, 33369, 45535, 31781, 31785, 31868, 31919, 31928, 10984, 7882, 7887, 11226, 14899, 19718, 6739-40, 14907.
<i>Paramacropostrongylus typicus</i>	45901, 44610, 44668; 47509, 47511-2, 45902, 45499, 44626-7, 45534, 31784-5, 7900, 8969, 14897, 6766-7, 14963.
<i>Paramacropostrongylus iugalis</i>	48441, 23233, 24271, 24173, 25687, 27702, 19762, 11058, 6837-8, 6771; 24240.
<i>Torquenema toraliforme</i>	46172, 46572, 34627, 44383, 25688, 6765, 9209, 9244, 12060, 10933, 9606, 9624; - .
<i>Labiosimplex bipapillosus</i>	48666, 48667, 49671, 48657, 48655, 48653, 48651, 48649, 48640, 48638, 48676, 48574, 44966, 44957, 44954, 44592, 32246-8, 32255, 32871, 23789, 23780, 23782, 2308-3, 24507, 30044, 30064, 30068, 8438, 7668, 7655, 7417, 7825, 12130, 11059, 11092, 26062-3, 13431-3, 13429, 13436, 13439, 10161, 9707, 14833, 10608, 10646, 10614, 14831, 10398, 10420, 10652, 10484, 9721, 7308, 12133, 10943; 23607.
<i>Labiosimplex kungi</i>	45783, 44982, 44967, 44948, 44969, 44980,

	44955, 44951, 44949, 44947, 32219, 33552, 33559, 33575, 23786, 23071, 30041, 30045, 10153, 9274, 10843, 18419, 46291; 47510, 47518, 45580, 45782, 33010, 44972, 44976, 32265-6, 32263, 32248, 33555, 33569, 23073, 30444, 10540, 7919, 7921, 7931-2, 8816, 8981, 23060, 10664, 23670, 5481, 17413, 11229, 14975
<i>Labiosimplex laterilabellosus</i>	10711; 44974, 44977
<i>Labiosimplex longispicularis</i>	44981, 44965, 44950, -.
<i>Labiosimplex major</i>	45784, 44968, 44970, 44989, 44956, 44953, 32917, 33581, 33588, 9323, 10844, 46290; 45557, 45781, 44961, 44973, 44975, 9867, 14898, 5428, 8168, 14909.
<i>Labiosimplex occidentalis</i>	- ; 45645-6, 8416.
<i>Pharyngostrongylus kappa</i>	48672, 48656, 48652, 48654, 48153, 34620, 44380, 44492, 44608, 44600, 44518, 44492, 44431, 23241, 23230, 23233, 23234, 23235, 24246, 24254, 24275, 24691, 25697-8, 7677, 7535, 12051, 11062, 11090, 19900-2, 24037, 10147, 10164, 9709, 10599, 10603, 10606, 8649, 10401, 10422, 10613, 10648, 10653, 10482, 9715, 9215, 9275, 10850, 12056, 10939, 19899, 9610, 9620, 32768, 32760, 46236; 44468, 44620, 23183, 23777.
<i>Pharyngostrongylus lambda</i>	48661, 48658, 31620, 31713, 31725, 31731, 32547, 32567, 23224, 23152, 24253, 24139, 24245, 25696, 25056, 25695, 13381-2, 13387; - .
<i>Rugopharynx australis</i>	48662, 31623, 32566, 32591, 33576, 30915, 30824, 30805-6, 30809, 30844, 30810, 30832-3, 30842, 10496, 31961; 47522, 30802, 30834, 30901, 30820, 30918, 10540, 11005, 7893, 30823, 10678, 11095.
<i>Rugopharynx disjunctus</i>	- ; 32950, 33009, 31861, 31875, 31884, 31899, 31912-3.
<i>Rugopharynx moennigi</i>	33565, 30816; 45585, 31791, 31849, 7893, 7919, 7914, 7883, 12468, 8973, 49098, 10675, 8330, 31981.
<i>Rugopharynx macropodis</i>	48148, 33119, 34621, 34624, 44381, 44491, 44607, 44590-1, 44602, 44520, 44501, 44491, 44430, 32438, 32442, 32685, 29030, 33580, 33589, 33491, 30813, 30815, 30795, 30839, 30799, 10145, 10162, 9710, 10168, 10601, 10604, 10402, 10612, 10616, 10650, 10483, 9713, 9213, 9239, 9273, 9322, 9324, 10845, 12058, 10940, 30787, 9609, 9619, 20803, 46225; 47517, 47521, 47527, 34635, 44535, 44618, 44634, 44467, 31780, 31860, 31876, 32885, 31892, 31898, 31904, 31911-2, 14895,

	30797.
<i>Rugopharynx rosemariae</i>	48644, 48152, 33120, 34623, 44382, 44606, 44590, 44601, 44519, 44490, 44429, 33558, 33573, 33577, 33492, 23240, 23145, 24718, 25689, 10146, 10155, 10163, 10169, 10600, 10605, 10666, 1195, 9240, 9277, 9325, 10846, 12059, 10938, 9611, 9621, 23591, 46231; 44619, 31886, 14896, 14910, 30793.
<i>Cloacina ares</i>	32417; -.
<i>Cloacina australis</i>	24678, 24035; -.
<i>Cloacina artemis</i>	44488, 44616, 44587, 44599, 44513, 44488, 31625, 24329, 24276, 24672, 25615, 25618, 24332, 24335, 34337, 24671, 24674, 24552, 24693, 25978-9, 24726, 24745, 24038, 24714, 24702, 24642, 27151, 24312, 26712, 46229; 45501, 32948, 33007, 44540, 44633, 44638, 31870, 31889, 31901, 31914, 24017, 11000, 24288, 24612.
<i>Cloacina cf artemis</i>	- ; 49283.
<i>Cloacina expansa</i>	48663, 48151, 33114, 44371, 44378, 44614, 44586, 44614, 44985, 44432, 31626, 31716, 31732, 32473, 32570, 32595, 33585, 33493, 23551-2, 23549, 23558, 23548, 23557, 23554, 24268, 24273, 24267, 24262, 24571, 26028, 26030, 25619, 26029, 26031, 25620, 23550, 23559, 23556, 25622, 24694, 24709, 10935, 23553, 23560, 46224; 47528, 47533, 45500, 33008, 33028, 34918, 44624, 44637, 45582, 31792, 31855, 31871, 31880, 31906, 31917, 31926, 31963, 23555, 24291, 25517, 14662-3, 24736, 24604, 24618, 24658, 24621, 23695, 25516, 24653, 24549.
<i>Cloacina feronia</i>	27240; -.
<i>Cloacina hera</i>	44367, 44374, 33554, 33560, 23564, 23586, 23582, 24323, 27161, 27275, 25625, 27241, 27158, 28583, 44230; 45905, 45583, 31793, 25483-4, 25510-11, 23694, 25508.
<i>Cloacina hermes</i>	45898, 33117, 44489, 44612, 44556-7, 44499, 32660, 32682, 33582, 24324, 25632, 24634, 25634, 28485, 25629-31, 25980, 25636-7, 27103, 24235, 24314, 46234; 34915, 44536, 44625, 44462, 25461-4, 25470-1, 25450, 25477, 25473, 25468, 25476, 25478.
<i>Cloacina herceus</i>	48645, 48677, 48675, 48150, 33115, 44365, 44375, 44486, 44588, 44856, 44596, 44497, 32680, 33583, 33586, 33494, 23538, 23010, 23009, 23531-2, 23529, 23532, 23539, 23523, 23012, 24319, 24280, 24263, 24327, 24717, 25648, 25649-50, 26542-5, 25647, 7814, 24683, 24572, 24555, 11064, 11089, 23520,

	23515-6, 24036, 24596, 24684, 24646, 25981, 24687, 24640, 24577, 24566, 24583, 24723, 24742, 10665, 10667, 24639, 23256, 32775, 46227; 47520, 47531, 47539, 46534; 34833, 44538, 44622, 44635, 44460, 23537, 23533, 23973, 25435, 25452, 11003, 23579.
<i>Cloacina hestia</i>	44368, 44670, 44486, 44433, 31627, 31717, 31727, 31730, 32543, 32472, 32569, 32597, 24318, 24294, 24328, 24278, 25640-1, 24707, 9278, 24556, 24564, 24679, 24553, 10936, 23527-8, 32765; 45580, 24292-3, 25939, 11002, 25335, 25458, 25449, 24289, 25457.
<i>Cloacina hydriformis</i>	32594; 45579; 31852.
<i>Cloacina kartana</i>	- ; 31523.
<i>Cloacina macropodis</i>	- ; 24628.
<i>Cloacina leto</i>	24695, 26777, 24676, 24673, 24688, 25980, 32764, 32743; -.
<i>Cloacina magnipapillata</i>	48639, 44366, 31718, 31728-9, 32554, 32550, 32571, 32596, 33566, 23581, 23569, 23567, 23565, 24277, 24261, 25625, 25623, 25628, 25653-5, 25623-4, 26026, 26010-13, 25675, 23570-1, 24033, 26020-3, 26025, 25666, 32736, 32753; 47537, 45497, 32949, 47006, 33027, 45577, 31778, 31794, 31848, 31857, 31872, 31881, 31902, 31905, 31915, 31925, 31962, 27286, 27230, 11004, 25500-3, 25490, 25488, 25447, 25504, 25497, 23575.
<i>Cloacina obtusa</i>	33113, 34622, 44370, 44377, 44611, 44584, 44515, 32436, 32439, 32679, 33579, 33587, 23134, 23139, 23131-2, 23135-6, 23133, 23138, 23130, 23137, 24317, 24334, 24259, 24266, 24692, 26032-3, 25658-9, 25621, 25661, 23524, 24644, 24570, 24720, 24685, 24557, 24568, 24677, 24574, 9714, 24716, 24710, 9326, 24576, 19848, 24732, 11076, 23541, 10680, 23588, 23599, 46223; 47540, 47535, 47429, 47514, 45496, 33129, 33026, 34632, 34916, 44623, 44632, 44636, 44463, 45581, 31779, 31709, 31850, 31858, 31873, 31883, 31890, 31907, 31918, 31927, 31964, 23140-1, 24241, 24602, 24611, 24645, 24741, 24629, 24614, 24632, 23540, 24724, 24624, 23693, 24657, 25525, 24616, 25496.
<i>Cloacina pelops</i>	48149, 33118, 44487, 44585, 44615, 44955, 44514, 44500, 32437, 32441, 32681, 33605, 26005-6, 26001, 26003, 25995-6, 10847, 10934, 23562, 24316, 46232; 44537, 44621, 44630, 44461.
<i>Cloacina selene</i>	33116, 44369, 44485, 44669, 44589, 44517, 44498, 32440, 32683, 33606, 33590, 26042,

	25994, 26043, 26040, 26044, 27197, 27968, 24315, 46226, 32756; 45498, 34634, 34917, 33539, 44464, 45578, 31851, 31856, 31874, 31882, 31891, 31903-4, 31913, 31924, 24282, 25522.
<i>Cloacina typhon</i>	44376, 31628, 31733, 32345, 25674, 25670, 25678, 25673, 11065, 24336, 24269, 27185, 25371,-3, 25375, 25668, 25617, 25663-6, 32767; -.
<i>Alocostoma clelandi</i>	44379, 33565, 33578, 23232, 23236, 23229, 36422, 25691, 24264, 7674, 24729, 19903, 13368, 13370-1, 13729, 23638, 32761, 46228, 46235; 23681, 23682.
<i>Alocostoma propinquum</i>	48668, 32621, 31556, 24743, 13369, 13752, 13386,25690; 46418, 46422.
<i>Macroponema arundeli</i>	48907, 48909, 48900-1, 48899-11, 48897, 48898, 48904, 48894, 32592, 48903, 23231, 12053, 46096, 48896, 48901, 48913, 48912, 48894, 32759 ; -.
<i>Macroponema comani</i>	48882, 48879, 48881, 48875, 48876, 48878, 48880, 38877, 31624, 31715, 32546, 32479, 23231, 25265, 7558, 6393, 7396, 7826, 7672, 7641, 11061, 11021, 19905, 24250, 13381, 13384-5, 13427, 13434, 23001, 11073, 10757, 9727, 9218, 12053, 10942, 9622, 32767, 32758;
<i>Papillostrongylus barbatus</i>	31734, 32593, 24255, 24257, 25699, 27258, 25700-1, 26054; 45584, 31363, 10546.
<i>Popovastrongylus macropodis</i>	31622, 31714, 31726, 32568, 32590, 23247, 24251, 24258, 25686, 25684-5, 8303, 13378, 22458, 4362;
<i>Popovastrongylus pearsoni</i>	44347, 44609; 44465, 23640, 23690, 15045.
<i>Wallabinema cobbi</i>	- ; 11351.
<i>Filarinema dissimile</i>	- ; 45544, 31783.
<i>Austrostrongylus chandleri</i>	45897, 45465; 45908.
<i>Austrostrongylus incurvispiculum</i>	- ; 31867, 31921, 8676.
<i>Austrostrongylus smalesae</i>	45896; 45907, 45725.
<i>Globocephaloides affinis</i>	12740; -.
<i>Globocephaloides macropodis</i>	11066; -.
<i>Globocephaloides trifidospicularis</i>	46171, 46574, 44434, 44667, 44521,10158, 10201, 9208, 10746, 9243, 10937, 9602, 9617, 44264; 45906, 34629, 45634, 14911, 23642.
<i>Macropoxyuris</i> spp.	46174, 34628, 44349, 44373, 44384, 44493, 44617, 44594, 44603, 44522, 44614, 44616, 44437, 32663, 26694, 26053, 7659, 7575, 7833, 12137, 11063,11060, 19792, 26476, 13423-6, 13435,10160, 9728, 9726, 9245, 9281, 8579, 9327, 12134, 32769, 32762; 47599-501, 47530, 45909, 33031, 32952, 44542, 44470, 44639, 8682, 31782, 31786, 31847, 31869, 31879,

	31894, 31920, 31965, 7912, 8960, 8326, 10671.
<i>Gongylonema macropodum</i>	11060; -.

Supplementary Table S2. Localities, coordinates and numbers of *Macropus fuliginosus* examined.

Locality	No. of kangaroos	Latitude (° ' S)	Longitude (° ' E)
New South Wales			
Bourke	8	30 05	145 56
(incl. Springfield Stn via Bourke; Warraweena Stn via Bourke; Calooma Stn via Bourke)			
Byrock	1	30 40	146 24
Glenariff	2	30 47	146 36
Girilambone	3	31 15	146 54
Thackaringa Stn via Broken Hill	1	32 04	141 06
Menindee	4	32 24	142 25
Warrananga Stn via Wentworth	2	34 00	141 35
Total	21		
Victoria			
88 km W of Mildura	1	34 16	141 35
Birthday Plains	1	34 54	141 36
Hattah Lakes National Park	1	34 46	142 16
Pine Plains Stn via Patchewollock	2	35 26	141 56
Dadswell's Bridge	1	36 54	142 31
Laharum	1	36 56	142 19
Wartook	1	36 57	142 20
Brimpaen	8	37 02	142 12
Dartmoor	1	37 55	141 16
Total	17		
South Australia			
Ceduna	1	32 08	133 41
Nonning Stn via Iron Knob	4	32 25	136 30
Mount Ive Stn via Iron Knob	2	32 28	136 04
Iron Knob	1	32 44	137 09
Minnipa	1	32 51	135 09
Lock	1	33 34	135 45
Sedan	1	34 34	139 18
Kersbrook	1	34 47	138 51

Jabuk	1	35 23	140 04
Second Valley	1	35 32	138 14
D'Estrees Bay	11	35 36	137 37
Parndana	7	35 48	147 16
Tintinara	1	35 53	140 04
MacGillivray	7	35 54	137 28
Keith	1	36 06	140 21
Willalooka	1	36 22	140 20
Bool Lagoon	1	37 08	140 40
Total	43		
Western Australia			
Northampton	1	28 21	114 38
Menzies	5	29 42	121 02
Kalgoorlie	3	30 45	121 28
Widgiemootha	1	31 29	121 34
Mundrabilla	3	31 51	127 51
Perth	1	31 55	115 50
Williams	3	32 02	116 53
Cocklebidy	2	32 03	126 06
Waroona	8	32 51	115 55
Dungunna Stn via Cranbrook	1	34 18	117 33
Porongorup	1	34 42	117 53
Total	29		
Grand total	109		

Supplementary Table S3. Localities, coordinates and numbers of *Macropus giganteus* examined.

Locality	No. of kangaroos	Latitude (° ' S)	Longitude (° ' E)
Queensland			
The Lynd Junction	4	18 56	144 29
Bluewater Springs	1	19 12	145 26
Townsville (incl. Oak Valley)	4	19 16	146 49
Woodstock	3	19 36	146 50
Inkerman Stn via Home Hill	1	19 44	147 28
Reid River	1	19 46	146 50
Mingela	2	19 53	146 38
Charters Towers	9	20 05	146 16
(incl. Jumba Stn via Charters Towers; Harvest Home Stn via Charters Towers; Pallamana Stn via Charters Towers)			
Homestead	1	20 22	145 39
Nelia via Julia Creek	1	20 39	142 13
Hughenden	1	20 51	144 12
Prairie (inc. Woodbine Stn via Prairie)	5	20 52	144 36
Clermont	3	23 00	147 54
Yaamba	1	23 08	150 22
Rockhampton	3	23 22	150 32
Mount Hay	1	23 33	150 13
Barcaldine	1	23 33	145 17
Melmoth Stn via Dingo	2	23 35	149 18
Bogantungan	1	23 39	147 18
Wowan	1	23 55	150 12
Darling Plains Stn via Banana	1	24 28	150 08
Theodore	1	24 57	150 05
Taroom	1	25 57	149 53
Mungallala	1	26 26	147 22
Charleville	2	26 20	146 17
Miles	2	26 40	150 11
Moonie	1	27 43	150 22
Felton East	1	27 48	151 46
Bollon	1	28 02	147 29
Cunnamulla	3	28 04	145 41
Warwick	2	28 13	152 02
Oman Ama	2	28 24	151 18
Inglewood	2	28 25	151 05
Total	66		

New South Wales and ACT			
Enngonia	1	29 19	145 51
Moree	1	29 07	150 02
Bukulla Stn via Weilmoringle	7	29 14	146 54
Bourke (incl. Warraweena Stn via Bourke)	14	30 05	145 56
Pilliga	1	30 21	148 53
Ebor	1	30 24	152 21
Kingstown	1	30 30	151 07
Armidale	6	30 31	151 40
Girilambone	1	31 15	146 54
Coonabarabran	2	31 16	149 17
Nyngan	3	31 34	147 12
Mullengudgerly	1	31 41	147 26
Gilganda	1	31 43	148 39
Trangie	1	32 02	147 59
Forbes	1	33 23	148 01
West Wyalong	1	33 55	147 12
Beckom	1	34 20	146 58
Jerilderie	2	35 22	145 43
Bondo State Forest	1	35 24	148 45
Tidbinbilla	1	35 27	148 52
Finlay	1	35 39	145 34
Total	49		
Victoria			
Picola North	2	36 00	145 07
Mitta Mitta	1	36 32	147 22
Dartmouth	2	36 34	147 32
Boho South	1	36 47	145 48
Nagambie	1	36 47	145 10
Mount Zero (Grampian Range)	3	36 53	142 22
Dadswell's Bridge	1	36 54	142 31
Laharum(Grampian Range)	4	36 56	142 19
Wartook(Grampian Range)	3	36 57	142 20
Brimpaen(Grampian Range)	6	37 02	142 12
Zumsteins(Grampian Range)	1	37 04	142 21
Hall's Gap(Grampian Range)	3	37 07	142 33
Bonang	2	37 11	148 44
Box's Cutting	1	37 13	142 54
Gisborne	1	37 30	144 35
Yan Yean	2	37 34	145 06
Epping	1	37 38	145 02

Healesville	1	37 39	145 32
Yarra Glen	1	37 40	145 23
Bellbird Creek	1	37 40	148 49
Bacchus Marsh	1	37 41	144 26
Research	1	37 42	145 11
Marlo	3	37 48	148 32
Stoughton Vale	1	37 55	144 20
You Yang Range	1	37 58	144 24
Lara (incl. Serendip, Little River)	4	38 02	144 25
Avalon	2	38 02	144 28
Bellbrae	1	38 20	144 16
Portland	6	38 21	141 36
Anglesea	1	38 25	144 11
Total	59		
Tasmania			
Evandale	2	41 34	147 14
Grand total	176		