

## Supplementary Material

### **A new genus of scutigerid centipede from southern South America with the description of two new species and an updated molecular phylogeny of the myriapod order Scutigleromorpha (Myriapoda: Chilopoda)**

*Andrés O. Porta*<sup>A,B,C,\*</sup> and *Gonzalo Giribet*<sup>D</sup>

<sup>A</sup>División de Aracnología, Museo Argentino de Ciencias Naturales “Bernardino Rivadavia”, Avenida Ángel Gallardo 470, Buenos Aires, C1405DJR, Argentina

<sup>B</sup>Universidad de Buenos Aires (UBA), Facultad de Ciencias Exactas y Naturales, Departamento de Ecología, Genética y Evolución, Instituto de Ecología, Genética y Evolución de Buenos Aires (IEGEB, UBA-CONICET), Pabellón II, Ciudad Universitaria, Buenos Aires, C1428EGA, Argentina

<sup>C</sup>Departamento de Ciencias Exactas, Universidad Nacional del Oeste, Belgrano 369 C1718, San Antonio de Padua, Buenos Aires, Argentina

<sup>D</sup>Museum of Comparative Zoology, Department of Organismic and Evolutionary Biology, Harvard University, 26 Oxford Street, Cambridge, MA 02138, USA

\*Correspondence to: Email: [hugporta@yahoo.com.ar](mailto:hugporta@yahoo.com.ar)

**Table S1.** Scutigeromorph and outgroup sampling, MCZ accession numbers, country of origin and sequenced gene fragments.

	MCZ number		18S rRNA	28S rRNA a	28S rRNA b	28S rRNA c	16S rRNA	COI	12S rRNA
<b>Outgroups</b>									
<i>Lithobius variegatus rubriceps</i>	IZ-131540		AF000773	–	–	–	AY084071	AF334311	–
<i>Anopsobius neozelanicus</i>	IZ-131464		AF173248	DQ222132	DQ222132	DQ222132	AF334337	DQ222165	–
<i>Paralamyctes validus</i>	IZ-131508		AF334289	–	–	–	AF334358	AF334330	–
<i>Craterostigma tasmanianus</i>	IZ-132142		AF000774	DQ222133	DQ222133	DQ222133	AF370860	AF370835	–
<i>Scolopendra viridis</i>	IZ-130727		DQ201419	–	DQ222134	DQ222134	DQ201425	DQ201431	–
<b>Psellioididae</b>									
<i>Sphendononema guildingii</i>	IZ-130902	Brazil	DQ222122	DQ222139	DQ222139	DQ222139	DQ222154	DQ222168	FJ660871
<i>Sphendononema rugosa</i>	IZ-130921	Cameroon	HQ591445	HQ591446	HQ591447	HQ591447	HQ591448	HQ591450	HQ591453
<b>Scutigerinidae</b>									
<i>Scutigerina hova</i>	IZ-130880	Madagascar	DQ222120	–	–	–	DQ222153	–	–
<i>Scutigerina malagassa</i>	IZ-130937	Madagascar	DQ222119	KF218758	KF218758	KF218758	DQ222152	DQ222167	FJ660869
<i>Scutigerina weberi</i>	IZ-130938	Swaziland	AY288689	–	AY288705	DQ222135	AY288717	AY288741	–
<i>Scutigerina weberi</i>	IZ-130934	South Africa	KF218741	KF218759	KF218759	KF218759	KF218776	KF218788	KF218811
<i>Scutigerina weberi</i>	IZ-130935	South Africa	KF218742	KF218760	KF218760	KF218760	KF218777	–	KF218813
<i>Scutigerina weberi</i>	IZ-130936	South Africa	KF218743	–	KF218761	KF218761	–	KF218789	KF218812
<i>Scutigerina cf. weberi</i>	IZ-130939	Madagascar	DQ222118	–	–	–	DQ222151	DQ222166	FJ660870
<b>Scutigeridae, Scutigerinae</b>									
<i>Dendrothereua homa</i>	IZ-142974	Arizona, USA	FJ660705	FJ660746	FJ660746	FJ660746	FJ660786	FJ660818	FJ660873
<i>Dendrothereua nubila</i>	IZ-130879	Costa Rica	FJ660704	FJ660744	FJ660745	FJ660745	FJ660785	FJ660817	FJ660872
<i>Dendrothereua sp.</i>	IZ-130874	Mexico	KF218744	KF218765	KF218766	–	KF218778	KF218790	–
<i>Dendrothereua sp.</i>	IZ-130875	Mexico	KF218745	KF218767	KF218767	–	KF218779	KF218791	–
<i>Dendrothereua sp.</i>	IZ-130876	Mexico	KF218746	–	KF218768	KF218768	–	KF218792	–
<i>Dendrothereua sp.</i>	IZ-130920	Dominican Republic	KF218747	KF218769	KF218769	KF218769	KF218780	–	–
<i>Dendrothereua sp.</i>	IZ-89420	Guatemala	–	–	–	–	KF218781	KF218794	–
<i>Dendrothereua sp.</i>	IZ-125268	Nicaragua	KF218749	KF218771	KF218772	KF218772	–	KF218793	–
<i>Scutigera coleoptrata</i>	IZ-130907	Turkey	FJ660707	FJ660748	FJ660748	FJ660748	FJ660788	–	FJ660876
<i>Scutigera coleoptrata</i>	IZ-130908	Georgia	FJ660708	FJ660749	FJ660749	FJ660749	–	FJ660819	FJ660877
<i>Scutigera coleoptrata</i>	IZ-130911	Bulgaria	FJ660711	FJ660752	FJ660752	FJ660752	FJ660791	FJ660820	FJ660880
<i>Tachythereua sp.</i>	IZ-142970	Senegal	FJ660716	FJ660756	FJ660756	FJ660756	FJ660795	–	FJ660884
<b>Scutigeridae, incertae sedis</b>									
<i>Edgethereua chilensis</i> , sp. nov.	IZ-152997	Chile	<b>PP086649</b>	<b>PP086651</b>	<b>PP086651</b>	<b>PP086651</b>	<b>PP086653</b>	<b>PP086508</b>	<b>PP086655</b>
<i>Edgethereua chilensis</i> , sp. nov.	IZ-152998	Chile	<b>PP086650</b>	<b>PP086652</b>	<b>PP086652</b>	<b>PP086652</b>	<b>PP086654</b>	–	–
<i>Ballonema gracilipes</i>	IZ-130943	Papua New Guinea	KF218750	–	–	–	HQ591449	–	HQ591454
<i>Ballonema sp.</i>	IZ-130940	Papua New Guinea	KF218751	KF218762	KF218762	KF218762	KF218782	KF218796	–
<i>Ballonema sp.</i>	IZ-130941	Papua New Guinea	KF218752	KF218763	KF218763	KF218763	KF218783	KF218795	KF218814
<i>Ballonema sp.</i>	IZ-130942	Papua New Guinea	KF218753	KF218764	KF218764	KF218764	KF218784	KF218797	KF218815
<i>Lassophora nossibei</i>	IZ-130917	Madagascar	FJ660714–5	FJ660755	FJ660755	FJ660755	FJ660794	FJ660821	FJ660883
<i>Lassophora sp.</i>	IZ-130933	Mozambique	KF218754	KF218773	KF218773	KF218773	KF218785	KF218798	KF218816
<b>Scutigeridae, Thereuoneminae</b>									
<i>Allothereua bidenticulata</i>	IZ-130863	NSW, Australia	FJ660717	FJ660757	FJ660757	FJ660757	FJ660796	FJ660822	FJ660885
<i>Allothereua linderi</i>	IZ-130865/IZ-130866	NSW, Australia	DQ222128	DQ222147	DQ222147	DQ222147	DQ222160	DQ222174	FJ660886
<i>Allothereua maculata</i>	IZ-130867	WA, Australia	FJ660720	FJ660759	FJ660759	FJ660759	FJ660798	FJ660823	FJ660888
<i>Allothereua maculata</i>	IZ-130871	WA, Australia	FJ660724	FJ660763	FJ660763	FJ660763	FJ660802	FJ660827	FJ660892
<i>Allothereua serrulata</i>	IZ-130872	NSW, Australia	DQ222129	DQ222148	DQ222148	DQ222148	DQ222161	DQ222175	FJ660893
<i>Parascutigera festiva</i>	IZ-130888	New Caledonia	FJ660725	FJ660766	FJ660766	FJ660766	FJ660803	FJ660828	FJ660895
<i>Parascutigera guttata</i>	IZ-130891	Qld, Australia	FJ660726	FJ660767	FJ660767	FJ660767	FJ660804	FJ660829	FJ660896
<i>Parascutigera latericia</i>	IZ-130894	New Caledonia	FJ660730	FJ660770	FJ660770	FJ660770	FJ660807	FJ660830	–
<i>Parascutigera nubila</i>	IZ-130896	New Caledonia	KF218755	–	FJ660772	FJ660772	FJ660808	FJ660832	FJ660898
<i>Parascutigera sp.</i>	IZ-130884	Qld, Australia	FJ660735	–	–	–	FJ660809	FJ660834	FJ660900
<i>Parascutigera sp.</i>	IZ-130883	Qld, Australia	FJ660736	FJ660776	FJ660776	FJ660776	FJ660810	–	FJ660901
<i>Parascutigera sp.</i>	IZ-130885	Qld, Australia	FJ660737	FJ660777	FJ660777	FJ660777	FJ660811	FJ660835	FJ660902
<i>Parascutigera cf. sphinx</i>	IZ-130898	WA, Australia	FJ660740	FJ660780	FJ660780	FJ660780	FJ660813	FJ660838	FJ660905
<i>Pilbarascutigera incola</i>	IZ-130864	WA, Australia	FJ660742	FJ660782	FJ660783	FJ660783	FJ660815	–	FJ660907
Thereuoneminae sp.	IZ-103188	Guam	KF218756	KF218774	KF218774	KF218774	KF218786	KF218799	–
Thereuoneminae sp.	IZ-103200	Micronesia	KF218757	–	KF218775	KF218775	KF218787	KF218800	–
<i>Thereuonema tuberculata</i>	IZ-130925	Japan	DQ222126	DQ222145	DQ222145	DQ222145	DQ222158	DQ222173	FJ660908
<i>Thereuonema turkestanica</i>	IZ-130926/IZ-130927	Uzbekistan	DQ201417	DQ222144	DQ222144	DQ222144	DQ201423	DQ201427	FJ660909
<i>Thereuopoda clunifera</i>	IZ-130928	Japan	AF173239	DQ222142	DQ222142	DQ222142	AY288716	DQ222171	FJ660910
<i>Thereuopoda longicornis</i>	IZ-130929	Thailand	DQ222125	DQ222143	DQ222143	DQ222143	DQ222157	DQ222172	–
<i>Thereuopodina</i> , sp. nov.	IZ-130930	Qld, Australia	DQ222127	DQ222146	DQ222146	DQ222146	DQ222159	–	FJ660911

New sequences appear in bold. The 28S rRNA gene is listed in three different amplicons. Dashes indicate missing amplicon.