

Supplementary Material

A sea of worms: the striking cases of the European *Perinereis cultrifera* and *P. rullieri* (Annelida: Nereididae) species complexes, with description of 13 new species

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Table S1. *Perinereis* specimens used in this study with the respective vial codes, sampling area, museum voucher codes and GenBank accession numbers detailed for each specimen (holotypes highlighted in blue and unavailable specimens highlighted in orange)

Original material	BOLD Dataset: https://doi.org/10.5883/DS-MTPC		Location	Museum Voucher	GenBank COI	GenBank 16S	GenBank 28S
Species	Family	Vial code					
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTA1	Portugal, Praia Areosa	DBUA0002494.01.v01	PQ734040		
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTA2	Portugal, Praia Areosa	DBUA0002494.01.v02	PQ733922		
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTA3	Portugal, Praia Areosa	DBUA0002494.01.v03	PQ734013	PQ734852	PQ734951
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTA4	Portugal, Praia Areosa	DBUA0002494.01.v04	PQ734025		
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTA5	Portugal, Praia Areosa	DBUA0002494.01.v05	PQ734076	PQ734903	PQ734981
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTCM39	Portugal, Canto Marinho	DBUA0002494.02.v16		Morphology only	
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTCM43	Portugal, Canto Marinho	DBUA0002494.02.v03	PQ733990		
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTCM44	Portugal, Canto Marinho	DBUA0002494.02.v04	PQ733978		
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTCM45	Portugal, Canto Marinho	DBUA0002494.02.v05	PQ734121		
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTCM47	Portugal, Canto Marinho	DBUA0002494.02.v06	PQ734092		
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTCM48	Portugal, Canto Marinho	DBUA0002494.02.v07	PQ734039		
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTCM49	Portugal, Canto Marinho	DBUA0002494.02.v08	PQ734125		
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTCM55	Portugal, Canto Marinho	DBUA0002494.02.v09	PQ733929		
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTCM59	Portugal, Canto Marinho	DBUA0002494.02.v10	PQ734072		
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTCM60	Portugal, Canto Marinho	DBUA0002494.02.v11	PQ733939	PQ734802	PQ734921
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTCM61	Portugal, Canto Marinho	DBUA0002494.02.v12	PQ734030		
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTCM62	Portugal, Canto Marinho	DBUA0002494.02.v13	PQ734081		
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTCM63	Portugal, Canto Marinho	DBUA0002494.02.v14	PQ734038		
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	MTCM64	Portugal, Canto Marinho	DBUA0002494.02.v15	PQ733937		
<i>Perinereis olivierae</i> - MOTU ING	Nereididae	NLSB1-1	North Spain, Basque coast	DBUA0002495.01.v01	PQ734040	PQ734859	
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCT3.1	Canary, Tenerife	DBUA0002496.01.v01	PQ734074		
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCT3.2	Canary, Tenerife	DBUA0002496.02.v01	PQ734110		
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCT3.3	Canary, Tenerife	DBUA0002496.02.v02	PQ734034		
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCT3.4	Canary, Tenerife	DBUA0002496.02.v03	PQ733949		
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCT3.5	Canary, Tenerife	DBUA0002496.02.v04	PQ734107		
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCT3.6	Canary, Tenerife	DBUA0002496.02.v05	PQ733942	PQ734805	PQ734923
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCT3.7	Canary, Tenerife	DBUA0002496.02.v06	PQ734102	PQ734894	PQ734976
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCT3.8	Canary, Tenerife	DBUA0002496.02.v07	PQ734003	PQ734839	PQ734943
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCT3.9	Canary, Tenerife	DBUA0002496.02.v08	PQ734114	PQ734904	PQ734982
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCT3.10	Canary, Tenerife	DBUA0002496.02.v09	PQ734059	PQ734869	PQ734960
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCL2.1	Canary, Lanzarote	DBUA0002496.03.v01	PQ734101		
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCL2.2	Canary, Lanzarote	DBUA0002496.03.v02	PQ733982		
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCL2.3	Canary, Lanzarote	DBUA0002496.03.v03	PQ733953		
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCL2.4	Canary, Lanzarote	DBUA0002496.03.v04	PQ734017		
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCL2.5	Canary, Lanzarote	DBUA0002496.03.v05	PQ734118		
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCL2.6	Canary, Lanzarote	DBUA0002496.03.v06	PQ734007	PQ734841	PQ734945
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCL2.7	Canary, Lanzarote	DBUA0002496.03.v07	PQ734027	PQ734854	PQ734952
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCL2.8	Canary, Lanzarote	DBUA0002496.03.v08	PQ734133	PQ734911	PQ734985
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCL2.9	Canary, Lanzarote	DBUA0002496.03.v09	PQ734041	PQ734860	PQ734955
<i>Perinereis tiberna</i> sp. nov. (MOTU 10)	Nereididae	MTCL2.10	Canary, Lanzarote	DBUA0002496.03.v10	PQ734100	PQ734893	PQ734975
<i>Perinereis miquellai</i> sp. nov. (MOTU 2)	Nereididae	MTCC3.2	Canary, Gran Canaria	DBUA0002497.01.v01	PQ733986		
<i>Perinereis miquellai</i> sp. nov. (MOTU 2)	Nereididae	MTCC3.4	Canary, Gran Canaria	DBUA0002497.02.v01	PQ733943	PQ734806	PQ734924
<i>Perinereis miquellai</i> sp. nov. (MOTU 2)	Nereididae	MTCC3.6	Canary, Gran Canaria	DBUA0002497.02.v02	PQ734095	PQ734891	PQ734973
<i>Perinereis miquellai</i> sp. nov. (MOTU 2)	Nereididae	MTCC3.9	Canary, Gran Canaria	DBUA0002497.02.v03	PQ733940	PQ734803	PQ734922
<i>Perinereis miquellai</i> sp. nov. (MOTU 2)	Nereididae	MTCC3.10	Canary, Gran Canaria	DBUA0002497.02.v04	PQ734105	PQ734897	PQ734979
<i>Perinereis miquellai</i> sp. nov. (MOTU 2)	Nereididae	MTCC3.14	Canary, Gran Canaria	DBUA0002497.02.v05	PQ734012	PQ734844	PQ734948
<i>Perinereis miquellai</i> sp. nov. (MOTU 2)	Nereididae	MTCF2.1	Canary, Fuerteventura	DBUA0002497.03.v01	PQ733976	PQ734825	PQ734935
<i>Perinereis miquellai</i> sp. nov. (MOTU 2)	Nereididae	MTCF2.5 (MTCF1-5)	Canary, Fuerteventura	MTPC048-20	PQ733984	PQ734829	PQ734937
<i>Perinereis maleniae</i> sp. nov. (MOTU 5)	Nereididae	MTCC3.1	Canary, Gran Canaria	DBUA0002498.02.v11	PQ733930	PQ734797	
<i>Perinereis maleniae</i> sp. nov. (MOTU 5)	Nereididae	MTCC3.3	Canary, Gran Canaria	DBUA0002498.02.v01	PQ734083	PQ734884	PQ734968
<i>Perinereis maleniae</i> sp. nov. (MOTU 5)	Nereididae	MTCC3.5	Canary, Gran Canaria	DBUA0002498.01.v01	PQ734054		
<i>Perinereis maleniae</i> sp. nov. (MOTU 5)	Nereididae	MTCC3.7	Canary, Gran Canaria	DBUA0002498.02.v02	PQ733916	PQ734788	PQ734913
<i>Perinereis maleniae</i> sp. nov. (MOTU 5)	Nereididae	MTCC3.8	Canary, Gran Canaria	DBUA0002498.02.v03	PQ733955	PQ734812	PQ734927
<i>Perinereis maleniae</i> sp. nov. (MOTU 5)	Nereididae	MTCC3.11	Canary, Gran Canaria	DBUA0002498.02.v04	PQ734103	PQ734895	PQ734977
<i>Perinereis maleniae</i> sp. nov. (MOTU 5)	Nereididae	MTCC3.12	Canary, Gran Canaria	DBUA0002498.02.v05	PQ733926		
<i>Perinereis maleniae</i> sp. nov. (MOTU 5)	Nereididae	MTCC3.13	Canary, Gran Canaria	DBUA0002498.02.v06	PQ734042		
<i>Perinereis maleniae</i> sp. nov. (MOTU 5)	Nereididae	MTCC3.15	Canary, Gran Canaria	DBUA0002498.02.v07	PQ734099		
<i>Perinereis maleniae</i> sp. nov. (MOTU 5)	Nereididae	MTCC3.16	Canary, Gran Canaria	DBUA0002498.02.v08	PQ733983		
<i>Perinereis maleniae</i> sp. nov. (MOTU 5)	Nereididae	MTCC3.17	Canary, Gran Canaria	DBUA0002498.02.v09	PQ734078		
<i>Perinereis maleniae</i> sp. nov. (MOTU 5)	Nereididae	MTCC3.18 (MTCC1-9)	Canary, Gran Canaria	DBUA0002498.02.v10	PQ734130		
<i>Perinereis maleniae</i> sp. nov. (MOTU 5)	Nereididae	MTCH1	Canary, El Hierro	DBUA0002498.03.v01	PQ734043	PQ734861	PQ734956
<i>Perinereis</i> sp. 1 (MOTU 4)	Nereididae	PVAM2.1 (Only tissue available)	Azores, São Miguel	DBUA0002499.01.v01	PQ733979	PQ734827	PQ734936
<i>Perinereis</i> sp. 1 (MOTU 4)	Nereididae	PVAM2.2 (Only tissue available)	Azores, São Miguel	DBUA0002499.01.v02	PQ734018	PQ734848	PQ734949
<i>Perinereis</i> sp. 1 (MOTU 4)	Nereididae	PVAM2.3 (Only tissue available)	Azores, São Miguel	DBUA0002499.01.v03	PQ734071	PQ734878	PQ734965
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MPIN2-1	Eastern Italy, Adriatic, Ravenna port	DBUA0002500.01.v01	PQ734096		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MPIN2-2	Eastern Italy, Adriatic, Ravenna port	DBUA0002500.01.v02	PQ734000		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MPIN2-3	Eastern Italy, Adriatic, Ravenna port	DBUA0002500.01.v03	PQ734069		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MPIN2-4	Eastern Italy, Adriatic, Ravenna port	DBUA0002500.01.v04	PQ733975		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MPIN2-6	Eastern Italy, Adriatic, Ravenna port	DBUA0002500.01.v05	PQ733965		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MPIN2-7	Eastern Italy, Adriatic, Ravenna port	DBUA0002500.01.v06	PQ734129		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MPIN2-8	Eastern Italy, Adriatic, Ravenna port	DBUA0002500.01.v07	PQ733961	PQ734816	PQ734929
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MPIN2-9	Eastern Italy, Adriatic, Ravenna port	DBUA0002500.01.v08	PQ734006	PQ734840	PQ734944
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MPIN2-10	Eastern Italy, Adriatic, Ravenna port	DBUA0002500.01.v09	PQ734082	PQ734883	PQ734967
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MPIN2-11	Eastern Italy, Adriatic, Ravenna port	DBUA0002500.01.v10	PQ734051		

<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MPIN2-12	Eastern Italy, Adriatic, Ravenna port	DBUA0002500.01.v11	PQ734127		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MPIN2-13	Eastern Italy, Adriatic, Ravenna port	DBUA0002500.01.v12	PQ733920	PQ734792	
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MPIN2-14	Eastern Italy, Adriatic, Ravenna port	DBUA0002500.01.v13	PQ734088	PQ734886	
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MPIN2-15	Eastern Italy, Adriatic, Ravenna port	DBUA0002500.01.v14	PQ733934		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MPIN2-16	Eastern Italy, Adriatic, Ravenna port	DBUA0002500.01.v15	PQ733923		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MTGC2-1	Greece, Crete, Gournes Beach	DBUA0002501.01.v01	PQ733998		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MTGC2-2	Greece, Crete, Gournes Beach	DBUA0002501.01.v02	PQ733921		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MTGC2-3	Greece, Crete, Gournes Beach	DBUA0002501.01.v03	PQ734084		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MTGC2-4	Greece, Crete, Gournes Beach	DBUA0002501.01.v04	PQ733933	PQ734799	
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MTGC2-5	Greece, Crete, Gournes Beach	DBUA0002501.01.v05	PQ733963	PQ734818	PQ734931
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MTGC2-6	Greece, Crete, Gournes Beach	DBUA0002501.01.v06	PQ733917	PQ734789	PQ734914
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MTGC2-7	Greece, Crete, Gournes Beach	DBUA0002501.01.v07	PQ734062	PQ734871	PQ734962
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MTGC2-8	Greece, Crete, Gournes Beach	DBUA0002501.01.v08	PQ734037		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MTGC2-9	Greece, Crete, Gournes Beach	DBUA0002501.01.v09	PQ734032		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MTGC2-10	Greece, Crete, Gournes Beach	DBUA0002501.01.v10	PQ734075		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MTGC2-11	Greece, Crete, Gournes Beach	DBUA0002501.01.v11	PQ734124		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MTGC2-12	Greece, Crete, Gournes Beach	DBUA0002501.01.v12	PQ734061		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MTGC2-13	Greece, Crete, Gournes Beach	DBUA0002501.01.v13	PQ734020		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MTGC2-14	Greece, Crete, Gournes Beach	DBUA0002501.01.v14	PQ733999		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MTGC2-15	Greece, Crete, Gournes Beach	DBUA0002501.01.v15	PQ733958		
<i>Perinereis rullieri</i> s.s. (MOTU 15)	Nereididae	MTGC2-16	Greece, Crete, Gournes Beach	DBUA0002501.01.v16	PQ734005		
<i>Perinereis nieri</i> sp. nov. (MOTU 8)	Nereididae	JLIC2-1	Western Italy, Calafuria	DBUA0002502.01.v01	PQ734002	PQ734838	PQ734942
<i>Perinereis nieri</i> sp. nov. (MOTU 8)	Nereididae	JLIC2-2	Western Italy, Montecristo Island	DBUA0002503.01.v01	PQ734112	PQ734902	
<i>Perinereis nieri</i> sp. nov. (MOTU 8)	Nereididae	MNHN6-2	France, Corsica	MNHN-IA-2000-2095	PQ734104	PQ734896	PQ734978
<i>Perinereis nieri</i> sp. nov. (MOTU 8)	Nereididae	MNHN6-3	France, Corsica	MNHN-IA-2000-2096	PQ733925		
<i>Perinereis nieri</i> sp. nov. (MOTU 8)	Nereididae	MNHN6-4	France, Corsica	MNHN-IA-2000-2097	PQ733972		
<i>Perinereis nieri</i> sp. nov. (MOTU 8)	Nereididae	MNHN6-5	France, Corsica	MNHN-IA-2000-2098	PQ733951		
<i>Perinereis nieri</i> sp. nov. (MOTU 8)	Nereididae	MNHN8-2	France, Corsica	MNHN-IA-2000-2089	PQ734008		
<i>Perinereis nieri</i> sp. nov. (MOTU 8)	Nereididae	MNHN8-3	France, Corsica	MNHN-IA-2000-2090	PQ734009		
<i>Perinereis nieri</i> sp. nov. (MOTU 8)	Nereididae	MNHN8-4	France, Corsica	MNHN-IA-2000-2091	PQ734056		
<i>Perinereis nieri</i> sp. nov. (MOTU 8)	Nereididae	MNHN8-6	France, Corsica	MNHN-IA-2000-2092	PQ734122		
<i>Perinereis nieri</i> sp. nov. (MOTU 8)	Nereididae	MNHN8-7	France, Corsica	MNHN-IA-2000-2093	PQ734028		
<i>Perinereis nieri</i> sp. nov. (MOTU 8)	Nereididae	MNHN8-9	France, Corsica	MNHN-IA-2000-2094	PQ733915		
<i>Perinereis nieri</i> sp. nov. (MOTU 8)	Nereididae	MW_259	Western Italy, Vulcano Island	MW_259	PQ734058	PQ734868	
<i>Perinereis nieri</i> sp. nov. (MOTU 8)	Nereididae	MW_261	Eastern Italy, Taranto	MW_261	PQ734044	PQ734862	
<i>Perinereis twobae</i> sp. nov. (MOTU 3)	Nereididae	JLIC2-2	Western Italy, Calafuria	DBUA0002504.02.v01	PQ734035	PQ734857	
<i>Perinereis twobae</i> sp. nov. (MOTU 3)	Nereididae	JLIC2-5	Western Italy, Calafuria	DBUA0002504.02.v02	PQ734131	PQ734910	
<i>Perinereis twobae</i> sp. nov. (MOTU 3)	Nereididae	JLIC2-8	Western Italy, Calafuria	DBUA0002504.01.v01	PQ733960	PQ734815	
<i>Perinereis twobae</i> sp. nov. (MOTU 3)	Nereididae	JLIC2-9	Western Italy, Calafuria	DBUA0002504.02.v03	PQ733993	PQ734835	
<i>Perinereis twobae</i> sp. nov. (MOTU 3)	Nereididae	MNHN5-2	France, Corsica	MNHN IA-2001-152	PQ733996		
<i>Perinereis twobae</i> sp. nov. (MOTU 3)	Nereididae	MNHN5-3	France, Corsica	MNHN IA-2001-151	PQ733956	PQ734813	PQ734928
<i>Perinereis twobae</i> sp. nov. (MOTU 3)	Nereididae	JLIC2-2	Western Italy, Montecristo Island	DBUA0002505.01.v01	PQ734050	PQ734864	
<i>Perinereis twobae</i> sp. nov. (MOTU 3)	Nereididae	PeriJ23.1	Eastern Italy, Marina di Pulsano	DBUA0003328.01.v01	PQ733991	PQ734833	PQ734940
<i>Perinereis twobae</i> sp. nov. (MOTU 3)	Nereididae	PeriJ23.9	Eastern Italy, Marina di Pulsano	DBUA0003328.01.v02	PQ734053	PQ734866	PQ734958
<i>Perinereis twobae</i> sp. nov. (MOTU 3)	Nereididae	MW_258	Eastern Italy, Marina di Pulsano	MW_258	PQ733935		
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	JLIC2-3	Western Italy, Calafuria	DBUA0002506.01.v01	PQ733988	PQ734831	
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	JLIC2-4	Western Italy, Calafuria	DBUA0002506.01.v02	PQ733919	PQ734791	PQ734915
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	JLIC2-1	Eastern Italy, Trieste	DBUA0002507.02.v01	PQ733969	PQ734822	
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	JLIC2-2	Eastern Italy, Trieste	DBUA0002507.01.v01	PQ734021	PQ734850	
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	JLIC2-3	Eastern Italy, Trieste	DBUA0002507.02.v02	PQ734126	PQ734909	
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	TRMG01	Eastern Italy, Trieste	DBUA0002507.02.v03	PQ733928	PQ734796	
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	TRMG02	Eastern Italy, Trieste	DBUA0002507.02.v04	PQ734111	PQ734901	
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	TRMG03	Eastern Italy, Trieste	DBUA0002507.02.v05	PQ733957	PQ734814	
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	TRMG04	Eastern Italy, Trieste	DBUA0002507.02.v06	PQ734109	PQ734900	
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	TRMG05	Eastern Italy, Trieste	DBUA0002507.02.v07	PQ733980	PQ734828	
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	TRMG06	Eastern Italy, Trieste	DBUA0002507.02.v08	PQ734016	PQ734847	
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	TRMG07	Eastern Italy, Trieste	DBUA0002507.02.v09	PQ734064	PQ734873	
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	JLIC2-1	Western Italy, Pianosa Island	DBUA0002508.01.v01	PQ734014	PQ734845	
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	JLIC2-2	Western Italy, Montecristo Island	DBUA0002508.02.v01	PQ733974	PQ734824	
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	MNHN3-1	France, Corsica	MNHN IA-2001-155	PQ734106	PQ734898	
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	MNHN8-1	France, Corsica	MNHN IA-2001-156	PQ734134		
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	MNHN8-5	France, Corsica	MNHN IA-2001-153	PQ733971		
<i>Perinereis faulwetterae</i> sp. nov. (MOTU 9)	Nereididae	MNHN8-8	France, Corsica	MNHN IA-2001-154	PQ734001		
<i>Perinereis cultrifera</i> s.s. (MOTU 1)	Nereididae	JLIC2-6	Western Italy, Calafuria	DBUA0002509.01.v01	PQ734026	PQ734853	
<i>Perinereis cultrifera</i> s.s. (MOTU 1)	Nereididae	JLIC2-7	Western Italy, Calafuria	DBUA0002509.01.v02	PQ734080	PQ734882	
<i>Perinereis cultrifera</i> s.s. (MOTU 1)	Nereididae	CAMG01	Western Italy, Calafuria	DBUA0002509.01.v03	PQ734052	PQ734865	
<i>Perinereis cultrifera</i> s.s. (MOTU 1)	Nereididae	PeriJ23.6	Eastern Italy, Santa Caterina	DBUA0003331.02.v01	PQ734066	PQ734875	
<i>Perinereis cultrifera</i> s.s. (MOTU 1)	Nereididae	PeriJ23.2B	Western Italy, Gulf of Naples	DBUA0003331.01.v02	PQ733947	PQ734809	
<i>Perinereis cultrifera</i> s.s. (MOTU 1)	Nereididae	PeriJ23.3B	Western Italy, Gulf of Naples	DBUA0003331.01.v03	PQ733945	PQ734807	
<i>Perinereis cultrifera</i> s.s. (MOTU 1)	Nereididae	PeriJ23.14	Western Italy, Gulf of Naples	DBUA0003331.01.v01	PQ733968	PQ734821	PQ734933
<i>Perinereis cultrifera</i> s.s. (MOTU 1)	Nereididae	PeriJ23.2	Western Italy, Gulf of Naples	DBUA0003331.01.v04	PQ734060	PQ734870	PQ734961
<i>Perinereis cultrifera</i> s.s. (MOTU 1)	Nereididae	MW_260	Eastern Italy, Salento, Tricase	MW_260	PQ733946	PQ734808	
<i>Perinereis beaucoudrayi</i> comb. nov. (MOTU11)	Nereididae	MTCM42	Portugal, Canto Marinho	DBUA0002510.01.v01	PQ733936	PQ734800	PQ734919
<i>Perinereis beaucoudrayi</i> comb. nov. (MOTU11)	Nereididae	MTCM46	Portugal, Canto Marinho	DBUA0002510.01.v02	PQ733995	PQ734836	PQ734941
<i>Perinereis beaucoudrayi</i> comb. nov. (MOTU11)	Nereididae	DFPN09	Portugal, Areosa	DBUA0002511.01.v01	PQ733932	PQ734798	PQ734918
<i>Perinereis beaucoudrayi</i> comb. nov. (MOTU11)	Nereididae	CHFM2-2	North France, Bay of Morlaix	DBUA0002512.01.v01	PQ734085		
<i>Perinereis beaucoudrayi</i> comb. nov. (MOTU11)	Nereididae	CHFM2-3	North France, Bay of Morlaix	DBUA0002512.02.v01	PQ733941	PQ734804	
<i>Perinereis beaucoudrayi</i> comb. nov. (MOTU11)	Nereididae	CHFM2-4	North France, Bay of Morlaix	DBUA0002512.01.v02	PQ734089	PQ734887	PQ734970
<i>Perinereis beaucoudrayi</i> comb. nov. (MOTU11)	Nereididae	CHFM2-5	North France, Bay of Morlaix	DBUA0002512.01.v03	PQ733962	PQ734817	PQ734930
<i>Perinereis beaucoudrayi</i> comb. nov. (MOTU11)	Nereididae	CHFM2-6	North France, Bay of Morlaix	DBUA0002512.01.v04	PQ733970		

<i>Perinereis beaucoudrayi</i> comb. nov. (MOTU11)	Nereididae	CHFM2-7	North France, Bay of Morlaix	DBUA0002512.01.v05	PQ734097		
<i>Perinereis beaucoudrayi</i> comb. nov. (MOTU11)	Nereididae	CHFM2-12	North France, Bay of Morlaix	DBUA0002512.01.v06	PQ734094	PQ734890	
<i>Perinereis beaucoudrayi</i> comb. nov. (MOTU11)	Nereididae	RO2018-70	North France, Roscoff	DBUA0002513.01.v01	PQ734108	PQ734899	PQ734980
<i>Perinereis beaucoudrayi</i> comb. nov. (MOTU11)	Nereididae	RO2018-72	North France, Roscoff	DBUA0002513.01.v02	PQ734123	PQ734908	PQ734984
<i>Perinereis beaucoudrayi</i> comb. nov. (MOTU11)	Nereididae	NLFA2-1	North France, Arcachon Bay	DBUA0002514.01.v01	PQ733952	PQ734811	PQ734926
<i>Perinereis beaucoudrayi</i> comb. nov. (MOTU11)	Nereididae	NLFA2-2	North France, Arcachon Bay	DBUA0002514.01.v02	PQ734091	PQ734888	PQ734971
<i>Perinereis beaucoudrayi</i> comb. nov. (MOTU11)	Nereididae	JJF01-1	North France, Marennes-Oleron	MTPC139-20	PQ734077	PQ734880	PQ734966
<i>Perinereis beaucoudrayi</i> comb. nov. (MOTU11)	Nereididae	B749 (75758)	Norway, Stavanger (14-09-2018)	NTNU-VM75758	PQ734063	PQ734872	
<i>Perinereis</i> sp. 2 (MOTU 12)	Nereididae	ORMG04	Western Italy, Orbetello lagoon	DBUA0003332.01.v01	PQ733948	PQ734810	PQ734925
<i>Perinereis juno</i> sp. nov. (MOTU 14)	Nereididae	JLIP2-2	Western Italy, Elba Island - Portoferraio	DBUA0002515.01.v01	PQ734093	PQ734889	PQ734972
<i>Perinereis juno</i> sp. nov. (MOTU 14)	Nereididae	JLIP2-4	Western Italy, Elba Island - Portoferraio	DBUA0002515.02.v01	PQ734117	PQ734907	PQ734983
<i>Perinereis juno</i> sp. nov. (MOTU 14)	Nereididae	JLIP2-6	Western Italy, Elba Island - Portoferraio	DBUA0002515.02.v02	PQ734068	PQ734876	PQ734963
<i>Perinereis juno</i> sp. nov. (MOTU 14)	Nereididae	JLIP2-9	Western Italy, Elba Island - Portoferraio	DBUA0002515.02.v03	PQ734098	PQ734892	PQ734974
<i>Perinereis juno</i> sp. nov. (MOTU 14)	Nereididae	JLIP2-11	Western Italy, Elba Island - Portoferraio	DBUA0002515.02.v04	PQ733989	PQ734832	PQ734939
<i>Perinereis juno</i> sp. nov. (MOTU 14)	Nereididae	JLIP2-12	Western Italy, Elba Island - Portoferraio	DBUA0002515.02.v05	PQ734119		
<i>Perinereis juno</i> sp. nov. (MOTU 14)	Nereididae	ORMG06	Western Italy, Orbetello lagoon	DBUA0003330.01.v01	PQ734079	PQ734881	
<i>Perinereis castelli</i> sp. nov. (MOTU 17)	Nereididae	JLIP2-1	Western Italy, Elba Island - Portoferraio	DBUA0002516.01.v01	PQ734011	PQ734843	PQ734947
<i>Perinereis castelli</i> sp. nov. (MOTU 17)	Nereididae	JLIP2-3	Western Italy, Elba Island - Portoferraio	DBUA0002516.02.v01	PQ734049	PQ734863	PQ734957
<i>Perinereis castelli</i> sp. nov. (MOTU 17)	Nereididae	JLIP2-5	Western Italy, Elba Island - Portoferraio	DBUA0002516.02.v02	PQ733973	PQ734823	PQ734934
<i>Perinereis castelli</i> sp. nov. (MOTU 17)	Nereididae	JLIP2-7	Western Italy, Elba Island - Portoferraio	DBUA0002516.02.v03	PQ734033	PQ734856	PQ734954
<i>Perinereis castelli</i> sp. nov. (MOTU 17)	Nereididae	JLIP2-8	Western Italy, Elba Island - Portoferraio	DBUA0002516.02.v04	PQ734087	PQ734885	PQ734969
<i>Perinereis castelli</i> sp. nov. (MOTU 17)	Nereididae	JLIP2-10	Western Italy, Elba Island - Portoferraio	DBUA0002516.02.v05	PQ734022		
<i>Perinereis castelli</i> sp. nov. (MOTU 17)	Nereididae	JLIP2-13	Western Italy, Elba Island - Portoferraio	DBUA0002516.02.v06	PQ734048		
<i>Perinereis castelli</i> sp. nov. (MOTU 17)	Nereididae	JLIP2-14	Western Italy, Elba Island - Portoferraio	DBUA0002516.02.v07	PQ734086		
<i>Perinereis castelli</i> sp. nov. (MOTU 17)	Nereididae	MW_159	Eastern Italy, La Strea (Ionian Sea)	MW_159	PQ733931		
<i>Perinereis houbinae</i> sp. nov. (MOTU 7)	Nereididae	MNHN7-1	France, Corsica	MNHN IA-2001-146	PQ734120		
<i>Perinereis houbinae</i> sp. nov. (MOTU 7)	Nereididae	MNHN7-2	France, Corsica	MNHN IA-2001-147	PQ733954		
<i>Perinereis houbinae</i> sp. nov. (MOTU 7)	Nereididae	MNHN7-3	France, Corsica	MNHN IA-2001-148	PQ733985		
<i>Perinereis houbinae</i> sp. nov. (MOTU 7)	Nereididae	MNHN7-4	France, Corsica	MNHN IA-2001-149	PQ734019	PQ734849	PQ734950
<i>Perinereis houbinae</i> sp. nov. (MOTU 7)	Nereididae	MNHN7-5	France, Corsica	MNHN IA-2001-150	PQ733938	PQ734801	PQ734920
<i>Perinereis houbinae</i> sp. nov. (MOTU 7)	Nereididae	MNHN4-1	France, Corsica	MNHN IA-2001-143	PQ734004		
<i>Perinereis houbinae</i> sp. nov. (MOTU 7)	Nereididae	MNHN4-2	France, Corsica	MNHN IA-2001-144	PQ733981		
<i>Perinereis houbinae</i> sp. nov. (MOTU 7)	Nereididae	MNHN5-1	France, Corsica	MNHN IA-2001-145	PQ734067		
<i>Perinereis houbinae</i> sp. nov. (MOTU 7)	Nereididae	MW_164	Eastern Italy, Alimini lagoon	MW_164	PQ733950		
<i>Perinereis houbinae</i> sp. nov. (MOTU 7)	Nereididae	MW_165	Eastern Italy, Alimini lagoon	MW_165	PQ734023	PQ734851	
<i>Perinereis houbinae</i> sp. nov. (MOTU 7)	Nereididae	MW_166	Eastern Italy, Alimini lagoon	MW_166	PQ733992	PQ734834	
<i>Perinereis jupiter</i> sp. nov. (MOTU 13)	Nereididae	ORMG1	Western Italy, Orbetello lagoon	DBUA0003333.02.v01	PQ734073	PQ734879	
<i>Perinereis jupiter</i> sp. nov. (MOTU 13)	Nereididae	ORMG2	Western Italy, Orbetello lagoon	DBUA0003333.01.v01	PQ734010	PQ734842	PQ734946
<i>Perinereis jupiter</i> sp. nov. (MOTU 13)	Nereididae	ORMG3	Western Italy, Orbetello lagoon	DBUA0003333.02.v02	PQ734036	PQ734858	
<i>Perinereis jupiter</i> sp. nov. (MOTU 13)	Nereididae	ORMG5	Western Italy, Orbetello lagoon	DBUA0003333.02.v03	PQ733997	PQ734837	
<i>Perinereis jupiter</i> sp. nov. (MOTU 13)	Nereididae	ORMG7	Western Italy, Orbetello lagoon	DBUA0003333.02.v04	PQ734115	PQ734905	
<i>Perinereis jupiter</i> sp. nov. (MOTU 13)	Nereididae	ORMG8	Western Italy, Orbetello lagoon	DBUA0003333.02.v05	PQ734116	PQ734906	
<i>Perinereis jupiter</i> sp. nov. (MOTU 13)	Nereididae	ORMG9	Western Italy, Orbetello lagoon	DBUA0003333.02.v06	PQ734015	PQ734846	
<i>Perinereis caesarea</i> sp. nov. (MOTU 10)	Nereididae	PeriJ23.8	Eastern Italy, Porto Cesario/La Strea (Ionian Sea)	DBUA0003334.01.v01	PQ734055	PQ734867	PQ734959
<i>Perinereis caesarea</i> sp. nov. (MOTU 10)	Nereididae	PeriJ23.11	Eastern Italy, La Strea (Ionian Sea)	DBUA0003334.02.v01	PQ734070	PQ734877	PQ734964
<i>Perinereis muscoi</i> sp. nov. (MOTU 6)	Nereididae	PeriJ23.10	Eastern Italy, Marina di Pulsano (Ionian Sea)	DBUA0003335.01.v01	PQ733924	PQ734794	PQ734916
<i>Perinereis muscoi</i> sp. nov. (MOTU 6)	Nereididae	PeriJ23.13	Eastern Italy, Marina di Pulsano (Ionian Sea)	DBUA0003335.02.v01	PQ734128		
<i>Perinereis minerva</i> sp. nov. (MOTU 15)	Nereididae	PeriJ23.5	Eastern Italy, La Strea (Ionian Sea)	DBUA0003329.01.v01	PQ734029	PQ734855	PQ734953
<i>Perinereis minerva</i> sp. nov. (MOTU 15)	Nereididae	PeriJ23.7	Eastern Italy, Acquatina (South Adriatic Sea)	DBUA0003329.02.v02	PQ733987	PQ734830	PQ734938
Original sequences using specimens from the Cardiff Museum (UK)							
Species	Family	Vial code	Location	Museum Voucher	GenBank COI	GenBank 16S	GenBank 28S
" <i>P. cultrifera</i> " / (<i>P. beaucoudrayi</i> comb. nov.)	Nereididae	14.08.31	Ireland, Fahy	NMW.Z_14.08.31	PQ733966	PQ734819	
" <i>P. cultrifera</i> " / (<i>P. beaucoudrayi</i> comb. nov.)	Nereididae	03.62.88	Great Britain, Northumberland	NMW.Z_03.62.88	PQ733918	PQ734790	
" <i>P. cultrifera</i> " / (<i>P. beaucoudrayi</i> comb. nov.)	Nereididae	03.62.89	Great Britain, Northumberland	NMW.Z_03.62.89	PQ734065	PQ734874	
" <i>P. cultrifera</i> " / (<i>P. beaucoudrayi</i> comb. nov.)	Nereididae	17.18.24	Great Britain, Northumberland, Cresswell	NMW.Z_17.18.24	PQ733977	PQ734826	
" <i>P. cultrifera</i> " / (<i>P. marionii</i>)	Nereididae	17.08.10	Great Britain, Thurlestone	NMW.Z_2017.009-10	PQ733994		
" <i>P. cultrifera</i> " / (<i>P. marionii</i>)	Nereididae	17.08.05	Great Britain, Thurlestone	NMW.Z_2017.009-05	PQ734031		
" <i>Perinereis</i> sp." / (<i>P. marionii</i>)	Nereididae	2019.023.12	Great Britain, Plymouth	NMW.Z_19.23.12	PQ733964		
" <i>P. cultrifera</i> " / (<i>A. virens</i>)	Nereididae	21.04.2	Scotland, Clachan	NMW.Z_21.04.02	PQ734045		
Outgroups original material							
Species	Family	Vial code	Location	Museum Voucher	Sequencing results COI	Sequencing results 16S	Sequencing results 28S-D2
<i>Neanthes nubila</i> - MOTU OUT	Nereididae	DFPN1	Portugal, Praia Norte	DBUA0002517.01.v01	PQ734024		
<i>Neanthes nubila</i> - MOTU OUT	Nereididae	DFPN2	Portugal, Praia Norte	DBUA0002517.01.v02	PQ734057		
<i>Neanthes nubila</i> - MOTU OUT	Nereididae	DFPN3	Portugal, Praia Norte	DBUA0002517.01.v03	PQ734047		
<i>Neanthes nubila</i> - MOTU OUT	Nereididae	DFPN4	Portugal, Praia Norte	DBUA0002517.01.v04	PQ734132		
<i>Neanthes nubila</i> - MOTU OUT	Nereididae	DFPN5	Portugal, Praia Norte	DBUA0002517.01.v05	PQ733959		
<i>Neanthes nubila</i> - MOTU OUT	Nereididae	DFPN6	Portugal, Praia Norte	DBUA0002517.01.v06	PQ734046		
<i>Neanthes nubila</i> - MOTU OUT	Nereididae	DFPN7	Portugal, Praia Norte	DBUA0002517.01.v07	PQ733944		
<i>Neanthes nubila</i> - MOTU OUT	Nereididae	DFPN8	Portugal, Praia Norte	DBUA0002517.01.v08	PQ733927	PQ734795	PQ734917
<i>Neanthes nubila</i> - MOTU OUT	Nereididae	DFPN10	Portugal, Praia Norte	DBUA0002517.01.v09	PQ733967	PQ734820	PQ734932
<i>Neanthes nubila</i> - MOTU OUT	Nereididae	DFPN11	Portugal, Praia Norte	DBUA0002517.01.v10	PQ734090		
Other <i>Perinereis</i>, external studies							
Species	GenBank COI	Location	References				
<i>Perinereis louizomarum</i> - MOTU GB1	OP459427	NE Algeria	Rezzag Machene <i>et al.</i> (2023)				
<i>Perinereis louizomarum</i> - MOTU GB1	OP459428	NE Algeria	Rezzag Machene <i>et al.</i> (2023)				
<i>Perinereis marionii</i> - MOTU GB2	OP347386	Portugal, Canto Marinho	Teixeira <i>et al.</i> (2022b)				
<i>Perinereis marionii</i> - MOTU GB2	OP347380	Great Britain, Plymouth	Teixeira <i>et al.</i> (2022b)				
<i>Perinereis euiini</i> - MOTU GB3	KY249122	South Korea, Gyeongsangnam-do	Park and Kim (2017)				
<i>Perinereis euiini</i> - MOTU GB3	KY249123	South Korea, Gyeongsangnam-do	Park and Kim (2017)				

<i>Perinereis euini</i> - MOTU GB3	KY249124	South Korea, Gyeongsangnam-do	Park and Kim (2017)
<i>Perinereis andersonni</i> - MOTU GB4	MH143495	Brazil, Espirito Santo	Paiva <i>et al.</i> (2019)
<i>Perinereis andersonni</i> - MOTU GB4	MH143498	Brazil, Espirito Santo	Paiva <i>et al.</i> (2019)
<i>Perinereis andersonni</i> - MOTU GB4	MH143502	Brazil, Espirito Santo	Paiva <i>et al.</i> (2019)
<i>Perinereis andersonni</i> - MOTU GB4	MH143503	Brazil, Espirito Santo	Paiva <i>et al.</i> (2019)
<i>Perinereis andersonni</i> - MOTU GB4	MH143522	Brazil, Espirito Santo	Paiva <i>et al.</i> (2019)
<i>Perinereis kaustiana</i> - MOTU GB5	PP279019	Red Sea, Saudi Arabia, Gulf of Aqaba (Magna)	Teixeira <i>et al.</i> (2024)
<i>Perinereis kaustiana</i> - MOTU GB5	PP279020	Red Sea, Saudi Arabia, Gulf of Aqaba (Magna)	Teixeira <i>et al.</i> (2024)
<i>Perinereis kaustiana</i> - MOTU GB5	PP279017	Red Sea, Saudi Arabia, Gulf of Aqaba (Magna)	Teixeira <i>et al.</i> (2024)
<i>Perinereis kaustiana</i> - MOTU GB5	PP279010	Red Sea, Saudi Arabia, Gulf of Aqaba (Magna)	Teixeira <i>et al.</i> (2024)
<i>Perinereis kaustiana</i> - MOTU GB5	PP279029	Red Sea, Saudi Arabia, Gulf of Aqaba (Magna)	Teixeira <i>et al.</i> (2024)
<i>Perinereis kaustiana</i> - MOTU GB5	PP279018	Red Sea, Saudi Arabia, Gulf of Aqaba (Magna)	Teixeira <i>et al.</i> (2024)
<i>Perinereis kaustiana</i> - MOTU GB5	PP279009	Red Sea, Saudi Arabia, Gulf of Aqaba (Magna)	Teixeira <i>et al.</i> (2024)
<i>Perinereis kaustiana</i> - MOTU GB5	PP279035	Red Sea, Saudi Arabia, Gulf of Aqaba (Magna)	Teixeira <i>et al.</i> (2024)
<i>Perinereis kaustiana</i> - MOTU GB5	PP279005	Red Sea, Saudi Arabia, Gulf of Aqaba (Magna)	Teixeira <i>et al.</i> (2024)
<i>Perinereis kaustiana</i> - MOTU GB5	PP279004	Red Sea, Saudi Arabia, Duba lagoon (Al Muwaileh)	Teixeira <i>et al.</i> (2024)
<i>Perinereis kaustiana</i> - MOTU GB5	PP279008	Red Sea, Saudi Arabia, Shushah Island	Teixeira <i>et al.</i> (2024)
<i>Perinereis kaustiana</i> - MOTU GB5	PP279025	Red Sea, Saudi Arabia, Shushah Island	Teixeira <i>et al.</i> (2024)
" <i>P. cultrifera</i> " - MOTU ING	KR916909	Northern Portugal	Lobo <i>et al.</i> (2016)
" <i>P. cultrifera</i> " - MOTU ING	KR916910	Northern Portugal	Lobo <i>et al.</i> (2016)
" <i>P. cultrifera</i> " - MOTU ING	KR916911	Northern Portugal	Lobo <i>et al.</i> (2016)
Outgroups, external studies			
Species	GenBank COI	Location	References
<i>Alitta virens</i>	OP038747	Sweden, Tjarno	Teixeira <i>et al.</i> (2022a)
<i>Alitta virens</i>	OP038760	Sweden, Tjarno	Teixeira <i>et al.</i> (2022a)
<i>Alitta virens</i>	OP038799	Sweden, Tjarno	Teixeira <i>et al.</i> (2022a)
<i>Hediste diversicolor</i>	OP038792	Norway, Grimstad	Teixeira <i>et al.</i> (2022a)
<i>Hediste diversicolor</i>	OP038820	Norway, Grimstad	Teixeira <i>et al.</i> (2022a)
<i>Hediste diversicolor</i>	OP038824	Norway, Grimstad	Teixeira <i>et al.</i> (2022a)

Table S2. Primers and PCR conditions used in this study.

Marker	Primer	Fragment (bp)	Direction (5'-3')	PCR thermal cycling conditions	References
COI	PolyLCO PolyHCO	658	(F) GAYTATWTTCAACAAATCATAAAGATATTGG (R) TAMACTTCWGGGTGACCAARAATCA	1, 94°C (1 min); 2, 5 cycles: 94°C (40 s), 45°C (40 s), 72°C (1 min); 3, 35 cycles: 94°C (40 s), 51°C (40 s), 72°C (1 min); 4, 72°C (5 min).	Carr <i>et al.</i> (2011)
COI	LoboF1 LoboR1	658	(F) KBTCHACAAAYCAYAARGAYATHGG (R) TAAACYTCWGGRTGWCCRAARAAYCA	1, 94°C (5 min); 2, 5 cycles: 94°C (30 s), 45°C (90 s), 72°C (1 min); 3, 45 cycles: 94°C (30 s), 54°C (90 s), 72°C (1 min); 4, 72°C (5 min)	Lobo <i>et al.</i> (2013)
16S	16SAR-L 16SANN-F 16SBR-H 28SR	~368	(F) CGCCTGTTTATCAAAAACAT (F) GCGGTATCCTGACCGTRCWAAGGTA (R) CCGGTCTGAACTCAGATCACGT (R) GAATTGCAGGACACATTGAAC	1, 94°C (3 min); 2, 40 cycles: 94°C (30 s), 47°C (30 s), 72°C (1 min); 3, 72°C (7 min).	Kessing <i>et al.</i> 1989
28S	28sC1 28s-D2	~420	(F) ACCCGCTGAATTTAAGCAT (R) TCCGTGTTTCAAGACGG	1, 96°C (4 min); 2, 45 cycles: 94°C (30 s), 55°C (30 s), 72°C (1 min); 3, 72°C (8 min).	Hassouna <i>et al.</i> (1984)

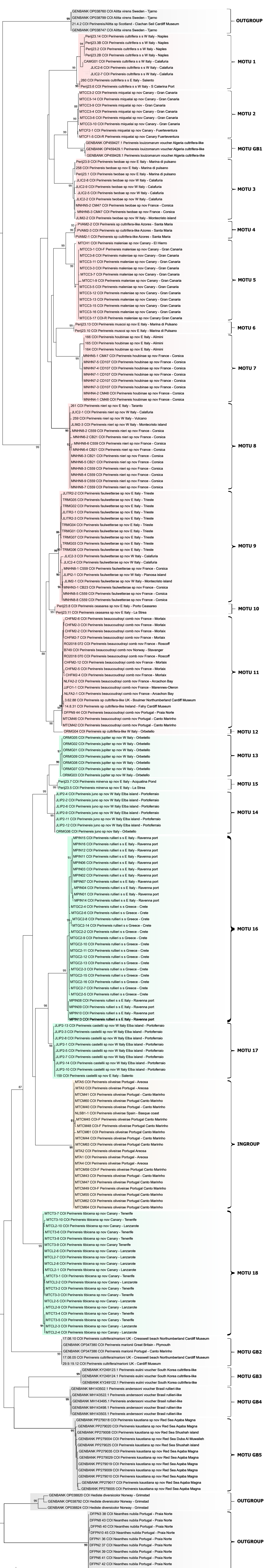


Fig. S1. Maximum Likelihood (ML) Phylogenetic Tree using General Time Reversible model with Gamma distributed rates across sites. ML tree using concatenated *COI*, *16S* and *28S-D2* sequences belonging to the *P. cultrifera* (red) and *P. rullieri* complexes (green), respective Ingroups (yellow), other similar *Perinereis* species (MOTUs "GB"; grey) and Outgroups (grey). Bootstrap values lower than 85% are not displayed

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