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Ring Test Bulletin – RTB#42

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**RING TEST DETAILS****Ring Test #42****Type/Contents – Targeted, Scottish Fauna****Circulated – 22/02/2012****Completion Date – 27/04/2012****Number of Subscribing Laboratories – 23****Number of Participating Laboratories – 20****Number of Results Received – 24\***

\*multiple data entries per laboratory permitted

**Summary of differences**

Specimen	Genus	Species	Total differences for 24 returns	
			Genus	Species
RT4201	<i>Crenella</i>	<i>decussata</i>	1	1
RT4202	<i>Parvicardium</i>	<i>minimum</i>	0	2
RT4203	<i>Pholoe</i>	<i>assimilis</i>	0	3
RT4204	<i>Ampelisca</i>	<i>tenuicornis</i>	0	4
RT4205	<i>Polyphysia</i>	<i>crassa</i>	19	19
RT4206	<i>Testudinalia</i>	<i>testudinalis</i>	1	1
RT4207	<i>Fabricia</i>	<i>stellaris</i>	0	0
RT4208	<i>Iphinoe</i>	<i>serrata</i>	1	2
RT4209	<i>Malacoceros</i>	<i>fuliginosus</i>	0	0
RT4210	<i>Protodorvillea</i>	<i>kefersteini</i>	0	0
RT4211	<i>Ditrupa</i>	<i>arietina</i>	0	0
RT4212	<i>Pterolysippe</i>	<i>vanelli</i>	2	2
RT4213	<i>Paramphinome</i>	<i>jeffreysii</i>	2	2
RT4214	<i>Omalogyra</i>	<i>atomus</i>	0	0
RT4215	<i>Lacuna</i>	<i>vincta</i>	1	3
RT4216	<i>Gammarus</i>	<i>locusta</i>	1	1
RT4217	<i>Skeneopsis</i>	<i>planorbis</i>	0	0
RT4218	<i>Ecrobia</i>	<i>ventrosa</i>	15	14
RT4219	<i>Onoba</i>	<i>aculeus</i>	0	2
RT4220	<i>Timoclea</i>	<i>ovata</i>	0	0
RT4221	<i>Onoba</i>	<i>aculeus</i>	10	12
RT4222	<i>Bittium</i>	<i>reticulatum</i>	0	0
RT4223	<i>Turtonia</i>	<i>minuta</i>	9	9
RT4224	<i>Ampharete</i>	<i>falcata</i>	3	6
RT4225	<i>Maxmuelleria</i>	<i>lankesteri</i>	7	7
Total differences			72	90
Average diff. / data return			2.9	3.6

Table 1. The identification of fauna made by participating laboratories for RT42 (arranged by specimen). Names are given only where different from the AQC identification.

	RT4201	RT4202	RT4203	RT4204	RT4205	RT4206
<b>Taxon</b>	<i>Crenella decussata</i>	<i>Parvicardium minimum</i>	<i>Pholoe assimilis</i>	<i>Ampelisca tenuicornis</i>	<i>Polyphysia crassa</i>	<i>Testudinaria testudinalis</i>
LB1802	--	--	--	--	Scalibregma inflatum	Acmaea virginea
LB1803	--	--	--	- diadema	Scalibregma inflatum	--
LB1806	--	--	--	--	Lipobranthus jeffreysii	--
LB1807	--	--	--	--	Lipobranthus jeffreysii	--
LB1808	--	[Paravicardium] -	--	--	Scalibregma inflatum	[Collisella] [tessulata]
LB1809a	--	--	--	--	--	--
LB1809b	--	--	- baltica	--	--	--
LB1810	--	--	- inornata	--	Sclerocheilus minutus	--
LB1811	--	--	--	--	Lipobranthus jeffreysi	--
LB1812	--	- scabrum	--	- diadema	Lipobranthus jeffreysii	--
LB1813	- [decussata]	--	--	- typica	--	[tectura] -
LB1814	--	--	--	--	Lipobranthus jeffreysii	--
LB1815	--	- scabrum	- inornata	- eschrichtii	Lipobranthus jeffreysii	--
LB1816	--	--	--	--	Lipobranthus jeffreysii	--
LB1817	--	--	--	--	Lipobranthus jeffreysii	--
LB1819	--	--	--	--	Asclerocheilus intermedius	--
LB1820	--	--	--	--	Scalibregma inflatum	--
LB1821	--	--	--	--	--	--
LB1823a	--	--	--	--	Scalibregma inflatum	--
LB1823b	--	--	--	--	Scalibregma inflatum	--
LB1824	--	--	--	--	Asclerocheilus intermedius	--
LB1825a	--	--	--	--	Asclerocheilus intermedius	--
LB1825b	--	--	--	--	--	--
LB1825c	Glycymeris glycymeris	--	--	--	Asclerocheilus intermedius	--

Table 1. The identification of fauna made by participating laboratories for RT42 (arranged by specimen). Names are given only where different from the AQC identification.

	RT4207	RT4208	RT4209	RT4210	RT4211	RT4212
<b>Taxon</b>	<i>Fabricia stellaris</i>	<i>Iphinoe serrata</i>	<i>Malacoceros fuliginosus</i>	<i>Protodorvillea kefersteini</i>	<i>Ditrupa arietina</i>	<i>Pterolysippe vanelli</i>
LB1802	- [sabella]	--	- [fuliginosa]	--	--	Anobothrus gracilis
LB1803	--	--	--	- [kefesteini]	--	--
LB1806	--	--	--	--	--	--
LB1807	--	- trispinosa	--	--	--	--
LB1808	--	--	--	--	--	--
LB1809a	--	--	--	--	--	--
LB1809b	--	--	--	--	--	[Eclysippe] -
LB1810	--	--	--	--	--	--
LB1811	--	--	--	--	--	--
LB1812	- [sabella]	Leucon (Leucon) acutirostris	--	--	--	Amythasides macroglossus
LB1813	- [sabella ]	--	- [fuliginosis]	--	--	--
LB1814	--	--	--	--	--	[Eclysippe] -
LB1815	- [stellaris stellaris]	--	--	--	--	--
LB1816	--	--	--	--	--	--
LB1817	--	--	--	--	--	--
LB1819	--	--	--	--	--	[Auchenoplax] -
LB1820	--	--	--	--	--	--
LB1821	--	--	--	--	--	--
LB1823a	--	--	--	--	--	--
LB1823b	--	--	--	--	--	--
LB1824	--	--	--	--	--	--
LB1825a	- [sabella]	--	--	--	--	--
LB1825b	- [sabella]	--	--	--	--	--
LB1825c	- [sabella]	--	--	--	--	--

Table 1. The identification of fauna made by participating laboratories for RT42 (arranged by specimen). Names are given only where different from the AQC identification.

	RT4213	RT4214	RT4215	RT4216	RT4217	RT4218
<b>Taxon</b>	<i>Paramphinome jeffreysii</i>	<i>Omalogyra atomus</i>	<i>Lacuna vincta</i>	<i>Gammarus locusta</i>	<i>Skeneopsis planorbis</i>	<i>Ecrobia ventrosa</i>
LB1802	--	--	Cingulopsis fulgida	--	--	Hydrobia ulvae
LB1803	--	--	--	--	--	[Hydrobia] -
LB1806	--	--	--	--	--	--
LB1807	--	--	--	--	--	--
LB1808	--	--	--	--	--	Hydrobia ulvae
LB1809a	--	--	--	--	--	Hydrobia acuta
LB1809b	--	--	--	--	--	--
LB1810	--	--	- parva	--	--	0 0
LB1811	--	--	--	--	--	Hydrobia acuta neglecta
LB1812	--	--	- parva	--	--	Potamopyrgus antipodarum
LB1813	--	[ <i>Omalogyra atomus</i> ] -	[ <i>Lacuna vincta</i> ] -	Echinogammarus pirloti	--	Odostomia scalaris
LB1814	--	--	--	--	--	[ <i>Ventrosia</i> ] -
LB1815	--	--	--	--	--	--
LB1816	--	--	--	--	--	--
LB1817	--	--	--	--	--	--
LB1819	--	--	--	--	--	--
LB1820	--	--	--	--	--	- truncata
LB1821	--	--	--	--	--	--
LB1823a	--	--	--	--	--	Peringia ulvae
LB1823b	--	--	--	--	--	Mercuria confusa
LB1824	--	--	--	--	--	Marstoniopsis scholtzi
LB1825a	--	--	--	--	--	Pusillina sarsii
LB1825b	Linopherus hemuli	--	--	--	--	Hydrobia ulvae
LB1825c	Linophorus hemuli	--	--	--	--	Mercuria confusa

Table 1. The identification of fauna made by participating laboratories for RT42 (arranged by specimen). Names are given only where different from the AQC identification.

	RT4219	RT4220	RT4221	RT4222	RT4223	RT4224	RT4225
<b>Taxon</b>	<i>Onoba aculeus</i>	<i>Timoclea ovata</i>	<i>Onoba aculeus</i>	<i>Bittium reticulatum</i>	<i>Turtonia minuta</i>	<i>Ampharete falcata</i>	<i>Maxmuelleria lankesteri</i>
LB1802	--	--	<i>Cingulopsis fulgida</i>	--	<i>Mysella bidentata</i>	- lindstroemi	--
LB1803	--	--	- [aculeatus]	--	--	--	--
LB1806	--	--	<i>Obtusella intersecta</i>	--	<i>Kurtiella bidentata</i>	--	--
LB1807	--	--	<i>Obtusella intersecta</i>	--	--	--	<i>Thalassema thalasseum</i>
LB1808	--	--	--	--	<i>Kurtiella bidentata</i>	--	- [lankestrei]
LB1809a	--	--	--	--	--	--	<i>Thalassema thalasseum</i>
LB1809b	--	--	--	--	--	--	<i>Thalassema thalasseum</i>
LB1810	--	--	--	--	--	--	--
LB1811	- semicostata	--	<i>Obtusella intersecta</i>	--	--	--	--
LB1812	--	--	--	--	<i>Tellimya ferruginosa</i>	<i>Amythasides macroglossus</i>	<i>Thalassema thalasseum</i>
LB1813	--	--	<i>Obtusella intersecta</i>	--	<i>Kurtiella bidentata</i>	[Ampharate] grubei	<i>Echiurus echiurus</i>
LB1814	--	--	--	--	--	--	--
LB1815	--	--	--	--	--	<i>Pterolysippe vanelli</i>	<i>Falcidens crossotus</i>
LB1816	--	--	--	--	<i>Lasaea adansoni</i>	--	--
LB1817	--	--	<i>Obtusella intersecta</i>	--	--	--	--
LB1819	--	--	<i>Obtusella intersecta</i>	--	--	--	--
LB1820	--	--	--	--	--	--	--
LB1821	--	--	--	--	<i>Lasaea adansoni</i>	- sp.	--
LB1823a	- semicostata	--	--	--	<i>Tellimya ferruginosa</i>	--	--
LB1823b	--	--	- semicostata	--	--	--	--
LB1824	--	--	- semicostata	--	--	--	<i>Thalassema thalasseum</i>
LB1825a	--	--	<i>Rissoella diaphana</i>	--	--	--	--
LB1825b	--	--	<i>Obtusella intersecta</i>	--	<i>Kellia suborbicularis</i>	<i>Amage adspersa</i>	--
LB1825c	--	--	<i>Rissoella diaphana</i>	--	--	--	--

Table 2. The identification of fauna made by participating laboratories for RT42 (arranged by participant). Names are given only where different from the AQC identification.

	Taxon	LB1802	LB1803	LB1806	LB1807	LB1808
RT4201	<i>Crenella decussata</i>	--	--	--	--	--
RT4202	<i>Parvicardium minimum</i>	--	--	--	--	[Paravicardium] -
RT4203	<i>Pholoe assimilis</i>	--	--	--	--	--
RT4204	<i>Ampelisca tenuicornis</i>	--	- diadema	--	--	--
RT4205	<i>Polyphysia crassa</i>	Scalibregma inflatum	Scalibregma inflatum	Lipobranchus jeffreysii	Lipobranchus jeffreysii	Scalibregma inflatum
RT4206	<i>Testudinalia testudinalis</i>	Acmaea virginea	--	--	--	[Collisella] [tessulata]
RT4207	<i>Fabricia stellaris</i>	- [sabella]	--	--	--	--
RT4208	<i>Iphinoe serrata</i>	--	--	--	- trispinosa	--
RT4209	<i>Malacoceros fuliginosus</i>	- [fuliginosa]	--	--	--	--
RT4210	<i>Protodorvillea kefersteini</i>	--	- [kefesteini]	--	--	--
RT4211	<i>Ditrupa arietina</i>	--	--	--	--	--
RT4212	<i>Pterolysippe vanelli</i>	Anobothrus gracilis	--	--	--	--
RT4213	<i>Paramphinome jeffreysii</i>	--	--	--	--	--
RT4214	<i>Omalogyra atomus</i>	--	--	--	--	--
RT4215	<i>Lacuna vincta</i>	Cingulopsis fulgida	--	--	--	--
RT4216	<i>Gammarus locusta</i>	--	--	--	--	--
RT4217	<i>Skeneopsis planorbis</i>	--	--	--	--	--
RT4218	<i>Ecrobia ventrosa</i>	Hydrobia ulvae	[Hydrobia] -	--	--	Hydrobia ulvae
RT4219	<i>Onoba aculeus</i>	--	--	--	--	--
RT4220	<i>Timoclea ovata</i>	--	--	--	--	--
RT4221	<i>Onoba aculeus</i>	Cingulopsis fulgida	- [aculeatus]	Obtusella intersecta	Obtusella intersecta	--
RT4222	<i>Bittium reticulatum</i>	--	--	--	--	--
RT4223	<i>Turtonia minuta</i>	Mysella bidentata	--	Kurtiella bidentata	--	Kurtiella bidentata
RT4224	<i>Ampharete falcata</i>	- lindstroemi	--	--	--	--
RT4225	<i>Maxmuelleria lankesteri</i>	--	--	--	Thalassema thalasseum	- [lankestrei]

Table 2. The identification of fauna made by participating laboratories for RT42 (arranged by participant). Names are given only where different from the AQC identification.

	Taxon	LB1809a	LB1809b	LB1810	LB1811	LB1812
RT4201	<i>Crenella decussata</i>	--	--	--	--	--
RT4202	<i>Parvicardium minimum</i>	--	--	--	--	- scabrum
RT4203	<i>Pholoe assimilis</i>	--	- baltica	- inornata	--	--
RT4204	<i>Ampelisca tenuicornis</i>	--	--	--	--	- diadema
RT4205	<i>Polyphysia crassa</i>	--	--	Sclerocheilus minutus	Lipobranchus jeffreysi	Lipobranchus jeffreysii
RT4206	<i>Testudinalia testudinalis</i>	--	--	--	--	--
RT4207	<i>Fabricia stellaris</i>	--	--	--	--	- [sabella]
RT4208	<i>Iphinoe serrata</i>	--	--	--	--	Leucon (Leucon) acutirostris
RT4209	<i>Malacoceros fuliginosus</i>	--	--	--	--	--
RT4210	<i>Protodorvillea kefersteini</i>	--	--	--	--	--
RT4211	<i>Ditrupa arietina</i>	--	--	--	--	--
RT4212	<i>Pterolysippe vanelli</i>	--	[Eclysippe] -	--	--	Amythasides macroglossus
RT4213	<i>Paramphinome jeffreysii</i>	--	--	--	--	--
RT4214	<i>Omalogyra atomus</i>	--	--	--	--	--
RT4215	<i>Lacuna vincta</i>	--	--	- parva	--	- parva
RT4216	<i>Gammarus locusta</i>	--	--	--	--	--
RT4217	<i>Skeneopsis planorbis</i>	--	--	--	--	--
RT4218	<i>Ecrobia ventrosa</i>	Hydrobia acuta	--	0 0	Hydrobia acuta neglecta	Potamopyrgus antipodarum
RT4219	<i>Onoba aculeus</i>	--	--	--	- semicostata	--
RT4220	<i>Timoclea ovata</i>	--	--	--	--	--
RT4221	<i>Onoba aculeus</i>	--	--	--	Obtusella intersecta	--
RT4222	<i>Bittium reticulatum</i>	--	--	--	--	--
RT4223	<i>Turtonia minuta</i>	--	--	--	--	Tellimya ferruginosa
RT4224	<i>Ampharete falcata</i>	--	--	--	--	Amythasides macroglossus
RT4225	<i>Maxmuelleria lankesteri</i>	Thalassema thalasseum	Thalassema thalasseum	--	--	Thalassema thalasseum



Table 2. The identification of fauna made by participating laboratories for RT42 (arranged by participant). Names are given only where different from the AQC identification.

	Taxon	LB1813	LB1814	LB1815	LB1816	LB1817
RT4201	<i>Crenella decussata</i>	- [decusata]	--	--	--	--
RT4202	<i>Parvicardium minimum</i>	--	--	- scabrum	--	--
RT4203	<i>Pholoe assimilis</i>	--	--	- inornata	--	--
RT4204	<i>Ampelisca tenuicornis</i>	- typica	--	- eschrichtii	--	--
RT4205	<i>Polyphysia crassa</i>	--	Lipobranichius jeffreysii	Lipobranichius jeffreysii	Lipobranichius jeffreysii	Lipobranichius jeffreysii
RT4206	<i>Testudinalia testudinalis</i>	[tectura] -	--	--	--	--
RT4207	<i>Fabricia stellaris</i>	- [sabella ]	--	- [stellaris stellaris]	--	--
RT4208	<i>Iphinoe serrata</i>	--	--	--	--	--
RT4209	<i>Malacoceros fuliginosus</i>	- [fuliginosis]	--	--	--	--
RT4210	<i>Protodorvillea kefersteini</i>	--	--	--	--	--
RT4211	<i>Ditrupea arietina</i>	--	--	--	--	--
RT4212	<i>Pterolysippe vanelli</i>	--	[Eclysippe] -	--	--	--
RT4213	<i>Paramphinome jeffreysii</i>	--	--	--	--	--
RT4214	<i>Omalogyra atomus</i>	[Omalogyra atomus] -	--	--	--	--
RT4215	<i>Lacuna vincta</i>	[Lacuna vincta] -	--	--	--	--
RT4216	<i>Gammarus locusta</i>	Echinogammarus pirloti	--	--	--	--
RT4217	<i>Skeneopsis planorbis</i>	--	--	--	--	--
RT4218	<i>Ecrobia ventrosa</i>	Odostomia scalaris	[Ventrosia] -	--	--	--
RT4219	<i>Onoba aculeus</i>	--	--	--	--	--
RT4220	<i>Timoclea ovata</i>	--	--	--	--	--
RT4221	<i>Onoba aculeus</i>	Obtusella intersecta	--	--	--	Obtusella intersecta
RT4222	<i>Bittium reticulatum</i>	--	--	--	--	--
RT4223	<i>Turtonia minuta</i>	Kurtiella bidentata	--	--	Lasaea adansoni	--
RT4224	<i>Ampharete falcata</i>	[Ampharate] grubei	--	Pterolysippe vanelli	--	--
RT4225	<i>Maxmuelleria lankesteri</i>	Echiurus echiurus	--	Falcidens crossotus	--	--

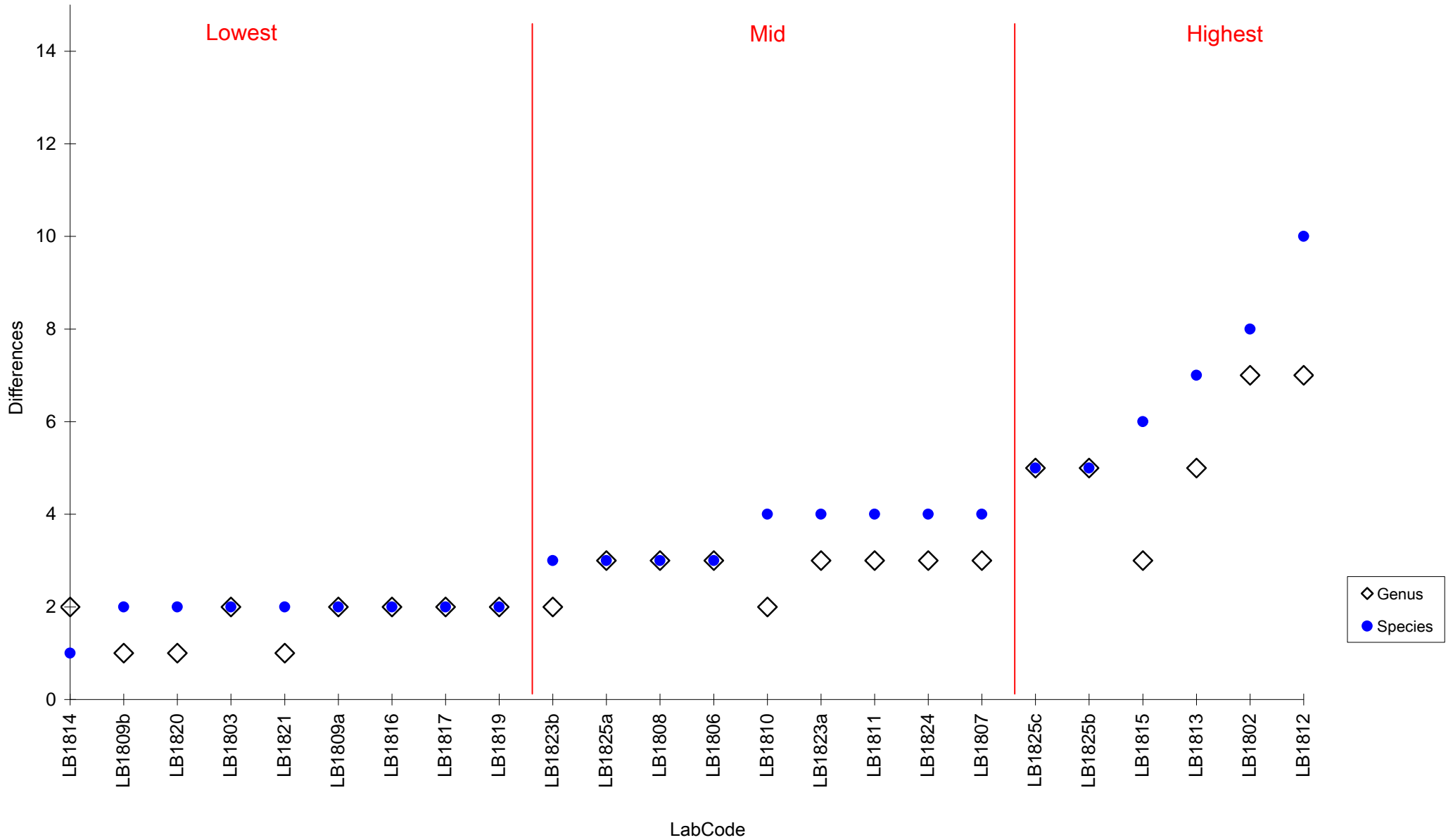
Table 2. The identification of fauna made by participating laboratories for RT42 (arranged by participant). Names are given only where different from the AQC identification.

	Taxon	LB1819	LB1820	LB1821	LB1823a	LB1823b
RT4201	<i>Crenella decussata</i>	--	--	--	--	--
RT4202	<i>Parvicardium minimum</i>	--	--	--	--	--
RT4203	<i>Pholoe assimilis</i>	--	--	--	--	--
RT4204	<i>Ampelisca tenuicornis</i>	--	--	--	--	--
RT4205	<i>Polyphysia crassa</i>	Asclerocheilus intermedius	Scalibregma inflatum	--	Scalibregma inflatum	Scalibregma inflatum
RT4206	<i>Testudinalia testudinalis</i>	--	--	--	--	--
RT4207	<i>Fabricia stellaris</i>	--	--	--	--	--
RT4208	<i>Iphinoe serrata</i>	--	--	--	--	--
RT4209	<i>Malacoceros fuliginosus</i>	--	--	--	--	--
RT4210	<i>Protodorvillea kefersteini</i>	--	--	--	--	--
RT4211	<i>Ditrupa arietina</i>	--	--	--	--	--
RT4212	<i>Pterolysippe vanelli</i>	[Auchenoplax] -	--	--	--	--
RT4213	<i>Paramphinome jeffreysii</i>	--	--	--	--	--
RT4214	<i>Omalogyra atomus</i>	--	--	--	--	--
RT4215	<i>Lacuna vincta</i>	--	--	--	--	--
RT4216	<i>Gammarus locusta</i>	--	--	--	--	--
RT4217	<i>Skeneopsis planorbis</i>	--	--	--	--	--
RT4218	<i>Ecrobia ventrosa</i>	--	- truncata	--	Peringia ulvae	Mercuria confusa
RT4219	<i>Onoba aculeus</i>	--	--	--	- semicostata	--
RT4220	<i>Timoclea ovata</i>	--	--	--	--	--
RT4221	<i>Onoba aculeus</i>	Obtusella intersecta	--	--	--	- semicostata
RT4222	<i>Bittium reticulatum</i>	--	--	--	--	--
RT4223	<i>Turtonia minuta</i>	--	--	Lasaea adansoni	Tellimya ferruginosa	--
RT4224	<i>Ampharete falcata</i>	--	--	- sp.	--	--
RT4225	<i>Maxmuelleria lankesteri</i>	--	--	--	--	--

Table 2. The identification of fauna made by participating laboratories for RT42 (arranged by participant). Names are given only where different from the AQC identification.

	Taxon	LB1824	LB1825a	LB1825b	LB1825c
RT4201	<i>Crenella decussata</i>	--	--	--	Glycymeris glycymeris
RT4202	<i>Parvicardium minimum</i>	--	--	--	--
RT4203	<i>Pholoe assimilis</i>	--	--	--	--
RT4204	<i>Ampelisca tenuicornis</i>	--	--	--	--
RT4205	<i>Polyphysia crassa</i>	Asclerocheilus intermedius	Asclerocheilus intermedius	--	Asclerocheilus intermedius
RT4206	<i>Testudinalia testudinalis</i>	--	--	--	--
RT4207	<i>Fabricia stellaris</i>	--	- [sabella]	- [sabella]	- [sabella]
RT4208	<i>Iphinoe serrata</i>	--	--	--	--
RT4209	<i>Malacoceros fuliginosus</i>	--	--	--	--
RT4210	<i>Protodorvillea kefersteini</i>	--	--	--	--
RT4211	<i>Ditrupa arietina</i>	--	--	--	--
RT4212	<i>Pterolysippe vanelli</i>	--	--	--	--
RT4213	<i>Paramphinome jeffreysii</i>	--	--	Linopherus hemuli	Linopherus hemuli
RT4214	<i>Omalogyra atomus</i>	--	--	--	--
RT4215	<i>Lacuna vincta</i>	--	--	--	--
RT4216	<i>Gammarus locusta</i>	--	--	--	--
RT4217	<i>Skeneopsis planorbis</i>	--	--	--	--
RT4218	<i>Ecrobia ventrosa</i>	Marstoniopsis scholtzi	Pusillina sarsii	Hydrobia ulvae	Mercuria confusa
RT4219	<i>Onoba aculeus</i>	--	--	--	--
RT4220	<i>Timoclea ovata</i>	--	--	--	--
RT4221	<i>Onoba aculeus</i>	- semicostata	Rissoella diaphana	Obtusella intersecta	Rissoella diaphana
RT4222	<i>Bittium reticulatum</i>	--	--	--	--
RT4223	<i>Turtonia minuta</i>	--	--	Kellia suborbicularis	--
RT4224	<i>Ampharete falcata</i>	--	--	Amage adspersa	--
RT4225	<i>Maxmuelleria lankesteri</i>	Thalassema thalasseum	--	--	--

Figure 1. The number of differences from the AQC identification of specimens distributed in RT42 for each of the participating laboratories. Arranged in order of increasing number of differences.



### Specimen Images and Detailed Breakdown of Identifications

LabCodes are abbreviated in this report to exclude the Scheme year, *i.e.* LB1801a = Lab 01a. An optional terminal character has been added to the LabCode (small case sequential letters) in cases where we have received multiple data entries from a laboratory, *i.e.* two participants from laboratory 01 would be coded as Lab 01a & Lab 01b. For details of your LabCode please contact your Scheme representative or Thomson Unicmarine Ltd.

(Figure codes: A=anterior; P=posterior; L=lateral; D=dorsal; V=ventral)

#### **RT4201 – *Crenella decussata* (Figure 1a).**

Substratum: Mixed. Salinity: Full. Depth: Circalittoral. Geography: W. Scotland. Condition: Good, Small, Juvenile (1.0-1.5 mm).

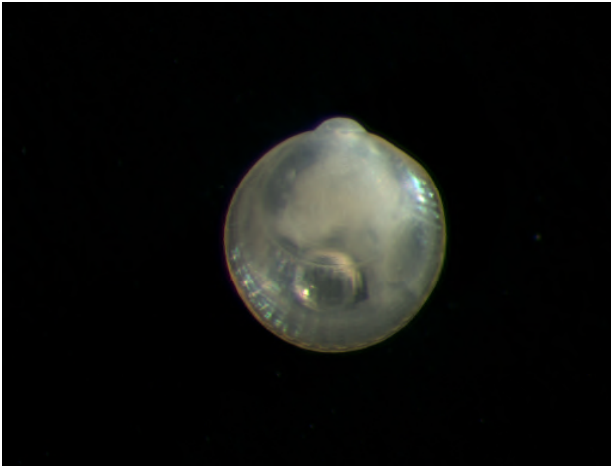


Fig. 1a. *Crenella decussata* (RT4201) – L

One generic and one specific difference:

Lab 25c identified as *Glycymeris glycymeris* (Figure 1b) (which has a taxodont hinge and weaker radial sculpture).

Lab 13 incorrectly spelt the species.

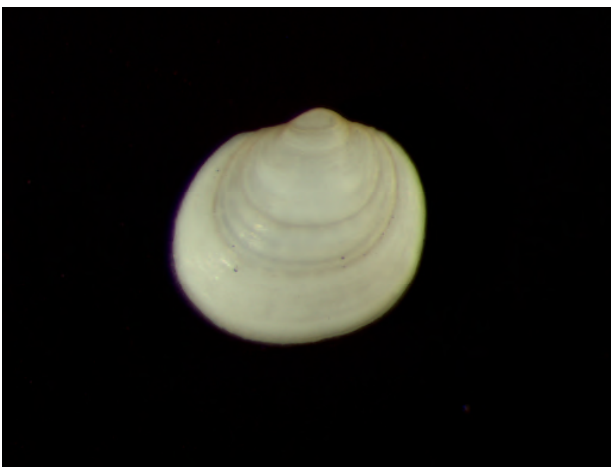


Fig. 1b. *Glycymeris glycymeris* – L

**RT4202 – *Parvicardium minimum* (Figure 2a).**

Substratum: Mud. Salinity: Full. Depth: Circalittoral (Lower shelf). Geography: N. North Sea. Condition: Good, Medium (2-3 mm).



Fig. 2a. *Parvicardium minimum* (RT4202) – L

No generic and two specific differences:  
Labs 12 and 15 identified as *Parvicardium scabrum* (Figure 2b) (which has fewer ribs, more acute spines and a more angular shell outline).

Lab 08 incorrectly spelt the genus.



Fig. 2b. *Parvicardium scabrum* – L

**RT4203 – *Pholoe assimilis* (Figure 3a).**

Substratum: Mud. Salinity: Full. Depth: Circalittoral. Geography: E. Scotland. Condition: Fair/Poor, Small (2 mm).



Fig. 3a. *Pholoe assimilis* (RT4203) – D

No generic and three specific differences:  
Lab 09b identified as *Pholoe baltica* (Figure 3b) (which has a prominent facial tubercle);  
Labs 10 and 15 identified as *Pholoe inornata* (Figure 3c) (which has papillated tentacular cirri, more irregular eyes and submarginal elytral papillae).



Fig. 3b. *Pholoe baltica* – D



Fig. 3c. *Pholoe inornata* – D

**RT4204 – *Ampelisca tenuicornis* (Figure 4a).**

Substratum: Mixed. Salinity: Full. Depth: Infralittoral. Geography: Shetland. Condition: Good, Med/Large.



Fig. 4a. *Ampelisca tenuicornis* (RT4204) – L

No generic and four specific differences:

Labs 03 and 12 identified as *Ampelisca diadema* (Figure 4b) (which has longer first antennae and a transverse row of setae on the inner surface of coxal plate 1);

Lab 13 identified as *Ampelisca typica* (Figure 4c) (which has a larger and more angular urosomal keel);

Lab 15 identified as *Ampelisca eschrichtii* (no photograph available) (which has a shorter ischium than merus on pereopod 7).



Fig. 4b. *Ampelisca diadema* – L



Fig. 4c. *Ampelisca typica* - L



**RT4205 – *Polyphysia crassa* (Figure 5a).**

Substratum: Mud. Salinity: Full. Depth: Circalittoral. Geography: N. Scotland. Condition: Fair, Small (2-3 mm).



Fig. 5a. *Polyphysia crassa* (RT4205) – L

Nineteen generic and nineteen specific differences:  
Labs 02, 03, 08, 20, 23a and 23b identified as *Scalibregma inflatum* (Figure 5b) (which has a T-shaped prostomium);

Labs 06, 07, 11, 12, 14, 15, 16, and 17 identified as *Lipobranch(i)us jeffreysii* (Figure 5c) (which lacks branchiae);

Labs 19, 24, 25a, and 25c identified as *Asclerocheilus intermedius* (Figure 5d) (which has more distinct prostomial projections);

Lab 10 identified as *Sclerocheilus minutus*, a synonym of *Asclerocheilus intermedius*.



Fig. 5b. *Scalibregma inflatum* – L



Fig. 5c. *Lipobranch(i)us jeffreysii* – L



Fig. 5d. *Asclerocheilus intermedius* – L



**RT4206 – *Testudinalia testudinalis* (Figure 6a).**

Substratum: Rock. Salinity: Full. Depth: Intertidal. Geography: Orkney. Condition: Good, Medium (13 mm).

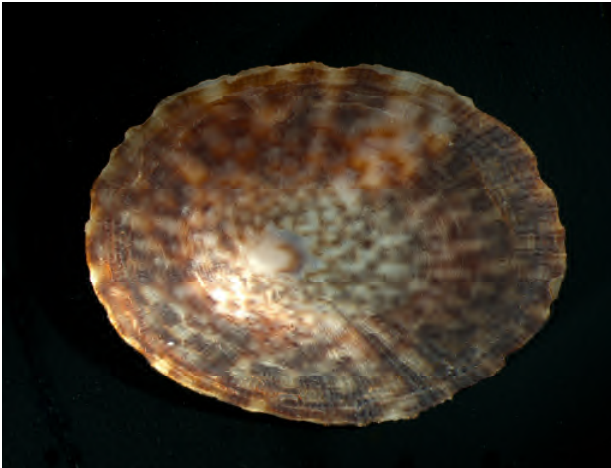


Fig. 6a. *Testudinalia testudinalis* (RT4206) – D

One generic and one specific difference:

Lab 02 identified as *Acmaea virginea* a synonym of *Tectura virginea* (Figure 6b) (which lacks dark pigment).

Lab 08 identified the synonym *Collisella tessulata*; Lab 13 identified the synonym *Tectura testudinalis*.

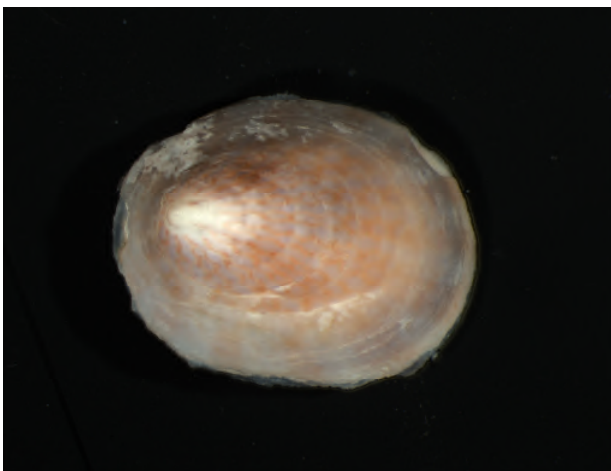


Fig. 6b. *Tectura virginea* – D

**RT4207 – *Fabricia stellaris* (Figure 7a).**

Substratum: Mixed. Salinity: High. Depth: Infralittoral. Geography: Orkney. Condition: Good, Medium (2-3 mm).



Fig. 7a. *Fabricia stellaris* (RT4207) – L

No generic or specific differences.

Labs 02, 12, 13, 25a, 25b, and 25c identified the synonym *Fabricia sabella*; Lab 15 identified the subspecies *Fabricia stellaris stellaris*.

**RT4208 – *Iphinoe serrata* (Figure 8a).**

Substratum: Mud. Salinity: Full. Depth: Circalittoral (Lower shelf). Geography: S.E. England. Condition: Good, Medium (6-7 mm).



Fig. 8a. *Iphinoe serrata* (RT4208) – L

One generic and two specific differences:

Lab 07 identified as *Iphinoe trispinosa* (Figure 8b) (which has fewer dorsal spines);

Lab 12 identified as *Leucon (Leucon) acutirostris* (no photograph available) (which lacks eyes).



Fig. 8b. *Iphinoe trispinosa* – L

**RT4209 – *Malacoceros fuliginosus* (Figure 9a).**

Substratum: Mud. Salinity: Full. Depth: Infralittoral. Geography: Shetland. Condition: Fair, Medium (Variable).



Fig. 9a. *Malacoceros fuliginosus* (RT4209) – AD

No generic or specific differences.

The current policy is to use the suggested species name of *Malacoceros fuliginosus*; however, the nomenclature is currently under review (V. Radashevsky, pers comm.).

Labs 02 and 13 incorrectly spelt the species.

**RT4210 – *Protodorvillea kefersteini* (Figure 10a).**

Substratum: Mixed. Salinity: Full. Depth: Infralittoral. Geography: Shetland. Condition: Fair, Medium (Variable).



Fig. 10a. *Protodorvillea kefersteini* (RT4210) – AD

No generic or specific differences.

Lab 03 incorrectly spelt the species.

**RT4211 – *Ditrupa arietina* (Figure 11a).**

Substratum: Muddy Sand. Salinity: Full. Depth: Circalittoral. Geography: N. North Sea. Condition: Good, Large (2.5-3.5 cm).



Fig. 11a. *Ditrupa arietina* (RT4211) – L

No generic or specific differences.

**RT4212 – Pterolysippe vanelli (Figure 12a).**

Substratum: Mud. Salinity: Full. Depth: Circalittoral (Lower Shelf). Geography: N. North Sea. Condition: Fair, Medium.

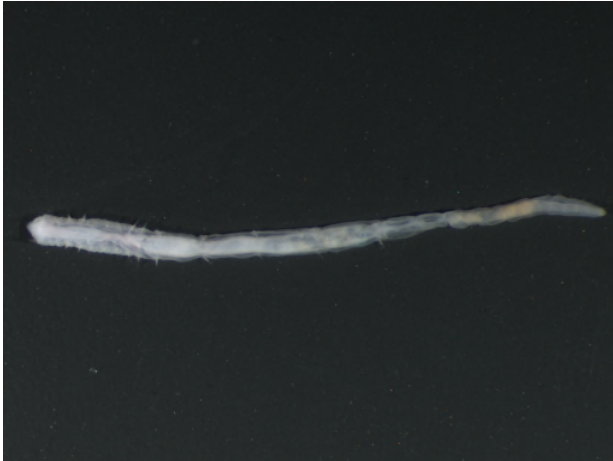


Fig. 12a. *Pterolysippe vanelli* (RT4212) – D

Two generic and two specific differences:

Lab 02 identified as *Anobothrus gracilis* (Figure 12b);

Lab 12 identified as *Amythasides macroglossus* (Figure 12c) (both of which lack elongated mid body segments).

Lab 09b and 14 identified the synonym *Eclysippe vanelli*;

Lab 19 identified the synonym *Auchenoplax vanelli*.



Fig. 12b. *Anobothrus gracilis* - DL



Fig. 12c. *Amythasides macroglossus* – D

**RT4213 – Paramphinome jeffreysii (Figure 13a).**

Substratum: Mud. Salinity: Full. Depth: Circalittoral (Lower Shelf). Geography: N. North Sea. Condition: Good, Medium.



Fig. 13a. *Paramphinome jeffreysii* (RT4213) – L

Two generic and two specific differences:

Labs 25b and 25c identified as *Linopherus hemuli* (no photograph available) (which lacks large anteriorly directed hooks on chaetiger 1).



**RT4214 – *Omalogyra atomus* (Figure 14a).**

Substratum: Algae. Salinity: Full. Depth: Infralittoral. Geography: W. Scotland. Condition: Good, Small (1mm).

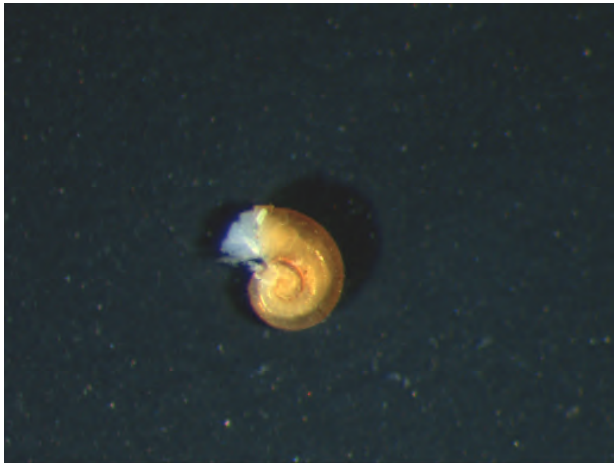


Fig. 14a. *Omalogyra atomus* (RT4214) – L

No generic or specific differences.

**RT4215 – *Lacuna vincta* (Figure 15a).**

Substratum: Algae. Salinity: Full. Depth: Infralittoral. Geography: W. Scotland. Condition: Good, Medium.



Fig. 15a. *Lacuna vincta* (RT4215) – L

One generic and three specific differences:  
Lab 02 identified as *Cingulopsis fulgida*, a synonym of *Eatonina fulgida* (Figure 15b) (which has more tumid whorls and lacks an umbilical chink);  
Labs 10 and 12 identified as *Lacuna parva* (Figure 15c) (which has a shorter spire).



Fig. 15b. *Eatonina fulgida* – L

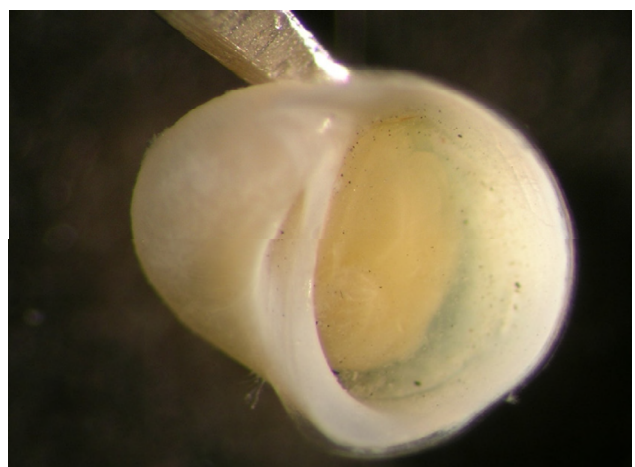


Fig. 15c. *Lacuna parva* – L

**RT4216 – *Gammarus locusta* (Figure 16a).**

Substratum: Mixed. Salinity: Full. Depth: Infralittoral. Geography: W. Scotland. Condition: Fair/ No Uropod 3, Medium/Large.



Fig. 16a. *Gammarus locusta* (RT4216) – L

One generic and one specific difference:

Lab 13 identified as *Echinogammarus pirloti* (no photograph available) (which has uropod 3 with a very small inner ramus, whereas in *Gammarus locusta* the inner ramus is at least one third of the outer ramus length).

**RT4217 – *Skeneopsis planorbis* (Figure 17a).**

Substratum: Algae. Salinity: Full. Depth: Infralittoral. Geography: W. Scotland. Condition: Good/Fair, Medium.



Fig. 17a. *Skeneopsis planorbis* (RT4217) – L

No generic or specific differences.

**RT4218 – *Ecrobia ventrosa* (Figure 18a).**

Substratum: Mud. Salinity: Reduced. Depth: Intertidal. Geography: N. Scotland. Condition: Fair, Medium.



Fig. 18a. *Ecrobia ventrosa* (RT4218) – L

Fifteen generic and fourteen specific differences:  
Lab 23a identified as *Peringia ulvae* (Figure 18b) (which has less tumid whorls);  
Labs 02, 08, and 25b identified as *Hydrobia ulvae*, a synonym of *P. ulvae*;  
Lab 09a identified as *Hydrobia acuta* and Lab 11 identified as *Hydrobia acuta neglecta*, a subspecies of *Hydrobia acuta* (no photograph available) (which lacks a filiform tip to the penis);  
Lab 12 identified as *Potamopyrgus antipodarum* (Figure 18c) (which is larger for the same number of whorls);  
Lab 13 identified as *Odostomia scalaris* (no photograph available) (which has a columellar tooth);  
Lab 20 identified as *Ecrobia truncata* (no photograph available) (which is not known from European waters);  
Labs 23b and 25c identified as *Mercuria confusa* (Figure 18d) (which has stronger axial sculpture and a broader shell);  
Lab 24 identified as *Marstoniopsis scholtzi* (no photograph available) (which is found only in fully fresh water and has a less tapering spire);  
Lab 25a identified as *Pusillina sarsii* (Figure 18e) (which has some apical pigment).

Lab 03 identified the synonym *Hydrobia ventrosa*;  
Lab 14 identified the synonym *Ventrosia ventrosa*;  
Lab 10 did not submit data for this specimen (identification is required to species for RT exercises).



Fig. 18b. *Peringia ulvae* – L



Fig. 18c. *Potamopyrgus antipodarum* – L



Fig. 18d. *Mercuria confusa* – L



Fig. 18e. *Pusillina sarsii* – L

**RT4219 – *Onoba aculeus* (Figure 19a).**

Substratum: Algae. Salinity: Full. Depth: Infralittoral. Geography: W. Scotland. Condition: Good, Medium/Large.



Fig. 19a. *Onoba aculeus* (RT4219) – L

No generic and two specific differences: Labs 11 and 23a identified as *Onoba semicostata* (Figure 19b) (which has a smaller protoconch).



Fig. 19b. *Onoba semicostata* – L



**RT4220 – *Timoclea ovata* (Figure 20a).**

Substratum: Mud. Salinity: Full. Depth: Circalittoral (Lower Shelf). Geography: N. North Sea. Condition: Good, Small.



Fig. 20a. *Timoclea ovata* (RT4220) – L

No generic or specific differences.

**RT4221 – *Onoba aculeus* (Figure 21a).**

Substratum: Algae. Salinity: Full. Depth: Infralittoral. Geography: W. Scotland. Condition: Good, Small (1 mm).



Fig. 21a. *Onoba aculeus* (RT4221) – L

Ten generic and twelve specific differences:

Lab 02 identified as *Cingulopsis fulgida*, a synonym of *Eatonina fulgida* (Figure 15b) (which lacks spiral sculpture);

Labs 06, 07, 11, 13, 17, 19, and 25b identified as *Obtusella intersecta* (Figure 21b) (which has weaker sculpture and a broader shell);

Labs 23b and 24 identified as *Onoba semicostata* (Figure 19b) (which has a smaller protoconch);

Labs 25a and 25c identified as *Rissoella diaphana* (Figure 21c) (which lacks spiral sculpture).

Lab 03 incorrectly spelt the species.



Fig. 21b. *Obtusella intersecta* – L



Fig. 21c. *Rissoella diaphana* – L

**RT4222 – *Bittium reticulatum* (Figure 22a).**

Substratum: Algae. Salinity: Full. Depth: Infralittoral. Geography: W. Scotland. Condition: Good, Medium (4-5 mm).



Fig. 22a. *Bittium reticulatum* (RT4222) – L

No generic or specific differences.

**RT4223 – *Turtonia minuta* (Figure 23a).**

Substratum: Algae. Salinity: Full. Depth: Infralittoral. Geography: W. Scotland. Condition: Good, Small (1 mm).



Fig. 23a. *Turtonia minuta* (RT4223) – L

Nine generic and nine specific differences:

Labs 06, 08, and 13 identified as *Kurtiella bidentata* (Figure 23c);

Lab 02 identified as *Mysella bidentata*, a synonym of *K. bidentata* (Figure 23b) (which has a more oblong shell);

Labs 12 and 23a identified as *Tellimya ferruginosa* (Figure 23d) (which has a more elongate shell);

Labs 16 and 21 identified as *Lasaea adansoni* (Figure 23e);

Lab 25b identified as *Kellia suborbicularis* (Figure 23f) (both of which have larger larval shells).



Fig. 23b. *Kurtiella bidentata* – L



Fig. 23d. *Tellimya ferruginosa* – L



Fig. 23e. *Lasaea adansoni* – L



Fig. 23f. *Kellia suborbicularis* – L

**RT4224 – *Ampharete falcata* (Figure 24a).**

Substratum: Mud. Salinity: Full. Depth: Circalittoral (Lower Shelf). Geography: N. North Sea. Condition: Fair, Small (6 mm).



Fig. 24a. *Ampharete falcata* (RT4224) – AD

Three generic and six specific differences:

Lab 02 identified as *Ampharete lindstroemi* (Figure 24b);

Lab 13 identified as *Ampharete grubei*, which is a misspelling (Figure 24c) (both of which have longer palae);

Lab 15 identified as *Pterolysippe vanelli* (Figure 12a) (which has elongate posterior thoracic segments);

Lab 25b identified as *Amage adpersa* (no photograph available) (which has dorsal bristles on seventeen segments);

Lab 12 identified as *Amythasides macroglossus* (Figure 24d) (which has three pairs of branchiae).

Lab 21 identified as *Ampharete* sp. (identification is required to species for RT exercises).



Fig. 24b. *Ampharete lindstroemi* – L



Fig. 24c. *Ampharete grubei* – AD



Fig. 24d. *Amythasides macroglossus* – AD

**RT4225 – *Maxmuelleria lankesteri* (Figure 25a).**

Substratum: Mud. Salinity: Full. Depth: Infralittoral. Geography: W. Scotland. Condition: Fair, Small (up to 25 mm).



Fig. 25a. *Maxmuelleria lankesteri* (RT4225) – L

Seven generic and seven specific differences:  
 Labs 07, 09a, 09b, 12, and 24 identified as *Thalassema thalasseum* (no photograph available) (which is found in rock crevices, has a more southerly distribution and a pointed proboscis);  
 Lab 13 identified as *Echiurus echiurus* (Figure 25b) (which has posterior chaetae);  
 Lab 15 identified as *Falcidens crossotus* (Figure 25c) (which has spicules).

Lab 08 incorrectly spelt the species.



Fig. 25b. *Echiurus echiurus* – L



Fig. 25c. *Falcidens crossotus* – L

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**Acknowledgements**

We would like to thank Inga Williamson (Biotikos) for donating Specimens 06 & 09, and Naveed Bhatti (SEPA) for donating Specimens 05, 18 & 25.

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### **Ring Test Specimen Return Instructions**

**Please return all ring test specimens as soon as possible.**

These are reference specimens and must be returned to our collection. Your laboratory will be ineligible for future ring tests if specimens are not returned.

Return address: **Ruth Barnich, Thomson Unicomarine Ltd., Units 6 - 9 Business Centre East,  
Fifth Avenue, Letchworth, Hertfordshire SG6 2TS, UK**