NMBAQC

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Ring Test Bulletin – RTB#48

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RING TEST DETAILS

Ring Test #48
Type/Contents – Targeted/Syllidae and similar
Circulated – 18/12/2014
Completion Date – 06/02/2015
Number of Subscribing Laboratories – 21
Number of Participating Laboratories – 18
Number of Results Received – 18*
***multiple data entries per laboratory permitted**

Summary of differences

Specimen	Genus	Species	Total differences for 18 returns	
			Genus	Species
RT4801	*Exogone*	*naidina*	2	4
RT4802	*Sphaerosyllis*	*bulbosa*	2	4
RT4803	*Syllidia*	*armata*	3	3
RT4804	*Syllis*	*c.f. armillaris*	2	4
RT4805	*Prosphaerosyllis*	*c.f. tetralix*	4	9
RT4806	*Syllis*	*garciai / mauretanica*	0	5
RT4807	*Syllis*	*pontxioi / licheri*	0	8
RT4808	*Syllis*	*gracilis*	0	2
RT4809	*Syllis*	*c.f.armillaris*	1	8
RT4810	*Erinaceusyllis*	*c.f. belizensis*	7	17
RT4811	*Streptosyllis*	*websteri*	3	4
RT4812	*Parexogone*	*hebes*	1	2
RT4813	*Plakosyllis*	*brevipes*	0	0
RT4814	*Parapionosyllis*	*c.f. macaronesiensis*	4	15
RT4815	*Prosphaerosyllis*	*c.f. tetralix*	4	12
RT4816	*Sphaerosyllis*	*bulbosa*	2	4
RT4817	*Plakosyllis*	*brevipes*	1	1
RT4818	*Exogone*	*verugera*	1	2
RT4819	*Odontosyllis*	*ctenostoma*	1	1
RT4820	*Prosphaerosyllis*	*chauseyensis*	5	7
RT4821	*Trypanosyllis*	*coeliaca*	0	0
RT4822	*Syllis*	*variegata / alternata*	1	10
RT4823	*Syllis*	*variegata*	1	6
RT4824	*Sphaerosyllis*	*c.f. taylori*	3	11
RT4825	*Exogone*	*naidina*	1	2
		Total differences	49	141
		Average differences/lab.	2.7	7.8

Figure 1. The number of differences from the AQC identification of specimens distributed in RT48 for each of the participating laboratories. Arranged in order of increasing number of differences.

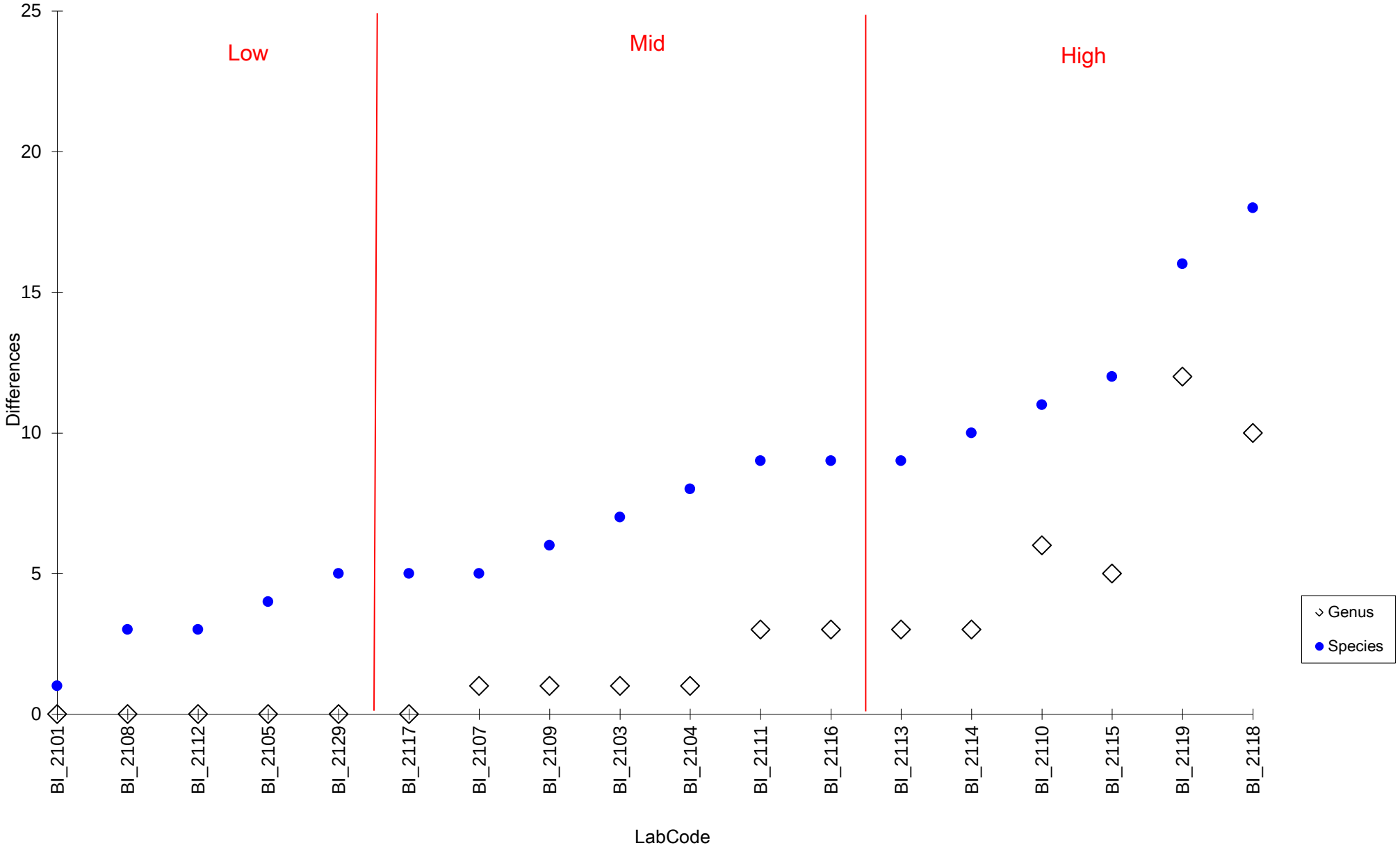

Table 1. The identification of fauna made by participating laboratories for RT48 (arranged by specimen). Names are given only where different from the AQC identification.

	RT4801	RT4802	RT4803	RT4804	RT4805	RT4806
Taxon	*Exogone naidina*	*Sphaerosyllis bulbosa*	*Syllidia armata*	*Syllis armillaris*	*Prosphaerosyllis tetralix*	*Syllis garciai*
BI_2101	- -	- -	- -	- -	- -	- -
BI_2103	- dispar	- -	- -	- -	- -	- cornuta
BI_2104	[Exogone (Exogone)] -	- -	- -	- -	- -	- -
BI_2105	- -	- -	- -	- hyalina	- campoyi	- -
BI_2107	- -	- -	- -	- -	- campoyi	- -
BI_2108	- -	- -	- -	- -	- -	- -
BI_2109	- -	- -	- -	- -	- -	- mauretanica
BI_2110	- -	Brania arminii	- -	- -	Sphaerosyllis taylori	- mauretanica
BI_2111	- -	- -	Nereimyra punctata	- parapari	- -	- -
BI_2112	- -	[Sphaeroyllis] -	- -	- -	- -	- -
BI_2113	- -	- -	- -	- -	- -	- cornuta
BI_2114	- dispar	- -	- -	- hyalina	- campoyi	- mauretanica
BI_2115	- -	- glandulata	Brania arminii	- amica	Sphaerosyllis bulbosa	- cornuta
BI_2116	- -	- -	- -	- -	Sphaerosyllis pirifera	- mauretanica
BI_2117	[Exogone (Exogone)] -	- -	- -	- hyalina	- campoyi	- -
BI_2118	Parexogone hebes	- taylori	Amblyosyllis madeirensis	Trypanosyllis coeliaca	- -	- gracilis
BI_2119	Parexogone convoluta	Brania arminii	- -	Trypanosyllis coeliaca	Sphaerosyllis perifera	- columbretensis
BI_2129	[Exogone (Exogone)] -	- -	- -	- -	- campoyi	- -

Table 1. The identification of fauna made by participating laboratories for RT48 (arranged by specimen). Names are given only where different from the AQC identification.

	RT4807	RT4808	RT4809	RT4810	RT4811	RT4812
Taxon	*Syllis pontxioi*	*Syllis gracilis*	*Syllis armillaris*	*Erinaceusyllis erinaceus*	*Streptosyllis websteri*	*Parexogone hebes*
BI_2101	- -	- -	- hyalina	- belizensis	- -	- -
BI_2103	- pulvinata	- -	- -	- -	- -	- -
BI_2104	- hyalina	- -	- hyalina	Prosphaerosyllis xarifae	- -	- -
BI_2105	- -	- -	- -	- -	- -	- -
BI_2107	- -	- -	- hyalina	- -	- -	- -
BI_2108	- -	- -	- hyalina	- -	- -	- -
BI_2109	- -	- -	- -	- -	Streptodonta exsulis	- -
BI_2110	- licheri	- amica	- krohni	Exogone (Parexogone) campoyi	Syllides convolutus	- -
BI_2111	- pulvinata	- -	- variegata	- -	- -	- -
BI_2112	- -	- -	- -	- cryptica	- -	- -
BI_2113	- fasciata	- -	- pontxioi	Sphaerosyllis hystrix	- -	- -
BI_2114	- krohni	- -	- licheri	Parexogone campoyi	- -	- -
BI_2115	- armillaris	- -	- vivipara	Sphaerosyllis hysterix	- -	- -
BI_2116	- -	- -	- fasciata	- -	Anoplosyllis edentula	- -
BI_2117	- licheri	- -	- hyalina	- -	- campoyi	- -
BI_2118	- caeca	- hyalina	- gracilis	Sphaerosyllis pirifera	- -	Exogone dispar
BI_2119	- fasciata	- -	Trypanosyllis aeolis	Brania arminii	- -	- campoyi
BI_2129	- licheri	- -	- -	- -	- -	- -

Table 1. The identification of fauna made by participating laboratories for RT48 (arranged by specimen). Names are given only where different from the AQC identification.

	RT4813	RT4814	RT4815	RT4816	RT4817
Taxon	*Plakosyllis brevipes*	*Parapionosyllis macaronesiensis*	*Prosphaerosyllis tetralix*	*Sphaerosyllis bulbosa*	*Plakosyllis brevipes*
BI_2101	- -	- -	- -	- -	- -
BI_2103	- -	Brania arminii	- -	- -	- -
BI_2104	- -	- brevicirra	- campoyi	- -	- -
BI_2105	- -	- brevicirra	- -	- -	- -
BI_2107	- -	Salvatoria clavata	- campoyi	- -	- -
BI_2108	- -	- minuta	- -	- -	- -
BI_2109	- -	- minuta	- laubieri	- pirifera	- -
BI_2110	- -	Eusyllis assimilis	- campoyi	- -	- -
BI_2111	- -	- -	Erinaceusyllis erinaceus	- -	- -
BI_2112	- -	- brevicirra	- -	[Sphaeroyllis] -	- -
BI_2113	- -	- brevicirra	Sphaerosyllis taylori	- -	- -
BI_2114	- -	- minuta	Erinaceusyllis erinaceus	- hystrix	Eurysyllis tuberculata
BI_2115	- -	- minuta	[Phosphaerosyllis] -	Paraexogone hebes	- -
BI_2116	- -	Brania arminii	- laubieri	- -	- -
BI_2117	- -	- minuta	- campoyi	- -	- -
BI_2118	- -	- minuta	Salvatoria limbata	- -	- -
BI_2119	- -	Eusyllis assimilis	- campoyi	Exogone verugera	- -
BI_2129	- -	- -	- campoyi	- -	- -

Table 1. The identification of fauna made by participating laboratories for RT48 (arranged by specimen). Names are given only where different from the AQC identification.

	RT4818	RT4819	RT4820	RT4821	RT4822
Taxon	*Exogone verugera*	*Odontosyllis ctenostoma*	*Prosphaerosyllis chauseyensis*	*Trypanosyllis coeliaca*	*Syllis variegata*
BI_2101	- -	- -	- -	- -	- -
BI_2103	- -	- -	- -	- -	- hyalina
BI_2104	[Exogone (Exogone)] naidina	- -	- -	[Trypanosyllis (Trypanosyllis)] -	- hyalina
BI_2105	- -	- -	- -	- -	- columbretensis
BI_2107	- -	- -	Sphaerosyllis bulbosa	- -	- -
BI_2108	- -	- -	- -	- -	- -
BI_2109	- -	- -	- tetralix	- -	- -
BI_2110	- -	- -	Parexogone hebes	- -	- hyalina
BI_2111	- -	- -	Sphaerosyllis pirifera	- -	- -
BI_2112	- -	- -	- -	- -	- -
BI_2113	- -	- -	- -	- [coelica]	- hyalina
BI_2114	- -	- -	- -	- -	- cornuta
BI_2115	- -	- -	Sphaerosyllis sp.	- -	- pulvinata
BI_2116	- -	- -	- tetralix	- -	- pontxioi
BI_2117	[Exogone (Exogone)] -	- -	- -	- -	- -
BI_2118	Parexogone hebes	- -	Sphaerosyllis hystrix	- -	- garciai
BI_2119	- -	Dioplosyllis cirrosa	- -	- -	Trypanosyllis zebra
BI_2129	[Exogone (Exogone)] -	- -	- -	[Trypanosyllis (Trypanosyllis)] -	- -

Table 1. The identification of fauna made by participating laboratories for RT48 (arranged by specimen). Names are given only where different from the AQC identification.

	RT4823	RT4824	RT4825
Taxon	*Syllis variegata*	*Sphaerosyllis taylori*	*Exogone naidina*
BI_2101	- -	- hystrix	- -
BI_2103	- armillaris	- -	- -
BI_2104	- hyalina	- glandulata	Exogone (Exogone) -
BI_2105	- -	- -	- -
BI_2107	- -	- hystrix	- -
BI_2108	- -	- hystrix	- -
BI_2109	- -	- -	- -
BI_2110	- -	- hystrix	- -
BI_2111	- columbretensis	- hystrix	- -
BI_2112	- -	- hystrix	- -
BI_2113	- -	0 0	- dispar
BI_2114	- -	- -	- -
BI_2115	- -	- -	- -
BI_2116	- sp.	- -	- -
BI_2117	- -	- -	- -
BI_2118	- cornuta	Prosphaerosyllis laubieri	Parexogone hebes
BI_2119	Trypanosyllis zebra	Parapionosyllis cabezali	- -
BI_2129	- -	- hystrix	[Exogone (Exogone)] -

Table 1. The identification of fauna made by participating laboratories for RT48 (arranged by specimen). Names are given only where different from the AQC identification.

	Taxon	BI_2101	BI_2103	BI_2104	BI_2105	BI_2107	BI_2108	BI_2109
RT4801	*Exogone naidina*	- -	- dispar	[Exogone (Exogone)] -	- -	- -	- -	- -
RT4802	*Sphaerosyllis bulbosa*	- -	- -	- -	- -	- -	- -	- -
RT4803	*Syllidia armata*	- -	- -	- -	- -	- -	- -	- -
RT4804	*Syllis armillaris*	- -	- -	- -	- hyalina	- -	- -	- -
RT4805	*Prosphaerosyllis tetralix*	- -	- -	- -	- campoyi	- campoyi	- -	- -
RT4806	*Syllis garciai*	- -	- cornuta	- -	- -	- -	- -	- mauretanica
RT4807	*Syllis pontxioi*	- -	- pulvinata	- hyalina	- -	- -	- -	- -
RT4808	*Syllis gracilis*	- -	- -	- -	- -	- -	- -	- -
RT4809	*Syllis armillaris*	- hyalina	- -	- hyalina	- -	- hyalina	- hyalina	- -
RT4810	*Erinaceusyllis erinaceus*	- belizensis	- -	Prosphaerosyllis xarifae	- -	- -	- -	- -
RT4811	*Streptosyllis websteri*	- -	- -	- -	- -	- -	- -	Streptodonta exsulis
RT4812	*Parexogone hebes*	- -	- -	- -	- -	- -	- -	- -
RT4813	*Plakosyllis brevipes*	- -	- -	- -	- -	- -	- -	- -
RT4814	*Parapionosyllis macaronesiensis*	- -	Brania arminii	- brevicirra	- brevicirra	Salvatoria clavata	- minuta	- minuta
RT4815	*Prosphaerosyllis tetralix*	- -	- -	- campoyi	- -	- campoyi	- -	- laubieri
RT4816	*Sphaerosyllis bulbosa*	- -	- -	- -	- -	- -	- -	- pirifera
RT4817	*Plakosyllis brevipes*	- -	- -	- -	- -	- -	- -	- -
RT4818	*Exogone verugera*	- -	- -	[Exogone (Exogone)] naidina	- -	- -	- -	- -
RT4819	*Odontosyllis ctenostoma*	- -	- -	- -	- -	- -	- -	- -
RT4820	*Prosphaerosyllis chauseyensis*	- -	- -	- -	- -	Sphaerosyllis bulbosa	- -	- tetralix
RT4821	*Trypanosyllis coeliaca*	- -	- -	[Trypanosyllis (Trypanosyllis)] -	- -	- -	- -	- -
RT4822	*Syllis variegata*	- -	- hyalina	- hyalina	- columbretensis	- -	- -	- -
RT4823	*Syllis variegata*	- -	- armillaris	- hyalina	- -	- -	- -	- -
RT4824	*Sphaerosyllis taylori*	- hystrix	- -	- glandulata	- -	- hystrix	- hystrix	- -
RT4825	*Exogone naidina*	- -	- -	Exogone (Exogone) -	- -	- -	- -	- -

Table 1. The identification of fauna made by participating laboratories for RT48 (arranged by specimen). Names are given only where different from the AQC identification.

	Taxon	BI_2110	BI_2111	BI_2112	BI_2113	BI_2114	BI_2115
RT4801	*Exogone naidina*	- -	- -	- -	- -	- dispar	- -
RT4802	*Sphaerosyllis bulbosa*	Brania arminii	- -	[Sphaeroyllis] -	- -	- -	- glandulata
RT4803	*Syllidia armata*	- -	Nereimyra punctata	- -	- -	- -	Brania arminii
RT4804	*Syllis armillaris*	- -	- parapari	- -	- -	- hyalina	- amica
RT4805	*Prosphaerosyllis tetralix*	Sphaerosyllis taylori	- -	- -	- -	- campoyi	Sphaerosyllis bulbosa
RT4806	*Syllis garciai*	- mauretanica	- -	- -	- cornuta	- mauretanica	- cornuta
RT4807	*Syllis pontxioi*	- licheri	- pulvinata	- -	- fasciata	- krohni	- armillaris
RT4808	*Syllis gracilis*	- amica	- -	- -	- -	- -	- -
RT4809	*Syllis armillaris*	- krohni	- variegata	- -	- pontxioi	- licheri	- vivipara
RT4810	*Erinaceusyllis erinaceus*	Exogone (Parexogone) campoyi	- -	- cryptica	Sphaerosyllis hystrix	Parexogone campoyi	Sphaerosyllis hysterix
RT4811	*Streptosyllis websteri*	Syllides convolutus	- -	- -	- -	- -	- -
RT4812	*Parexogone hebes*	- -	- -	- -	- -	- -	- -
RT4813	*Plakosyllis brevipes*	- -	- -	- -	- -	- -	- -
RT4814	*Parapionosyllis macaronesiensis*	Eusyllis assimilis	- -	- brevicirra	- brevicirra	- minuta	- minuta
RT4815	*Prosphaerosyllis tetralix*	- campoyi	Erinaceusyllis erinaceus	- -	Sphaerosyllis taylori	Erinaceusyllis erinaceus	[Phosphaerosyllis] -
RT4816	*Sphaerosyllis bulbosa*	- -	- -	[Sphaeroyllis] -	- -	- hystrix	Paraexogone hebes
RT4817	*Plakosyllis brevipes*	- -	- -	- -	- -	Eurysyllis tuberculata	- -
RT4818	*Exogone verugera*	- -	- -	- -	- -	- -	- -
RT4819	*Odontosyllis ctenostoma*	- -	- -	- -	- -	- -	- -
RT4820	*Prosphaerosyllis chauseyensis*	Parexogone hebes	Sphaerosyllis pirifera	- -	- -	- -	Sphaerosyllis sp.
RT4821	*Trypanosyllis coeliaca*	- -	- -	- -	- [coelica]	- -	- -
RT4822	*Syllis variegata*	- hyalina	- -	- -	- hyalina	- cornuta	- pulvinata
RT4823	*Syllis variegata*	- -	- columbretensis	- -	- -	- -	- -
RT4824	*Sphaerosyllis taylori*	- hystrix	- hystrix	- hystrix	0 0	- -	- -
RT4825	*Exogone naidina*	- -	- -	- -	- dispar	- -	- -

Table 1. The identification of fauna made by participating laboratories for RT48 (arranged by specimen). Names are given only where different from the AQC identification.

	Taxon	BI_2116	BI_2117	BI_2118	BI_2119	BI_2129
RT4801	*Exogone naidina*	- -	[Exogone (Exogone)] -	Parexogone hebes	Parexogone convoluta	[Exogone (Exogone)] -
RT4802	*Sphaerosyllis bulbosa*	- -	- -	- taylori	Brania arminii	- -
RT4803	*Syllidia armata*	- -	- -	Amblyosyllis madeirensis	- -	- -
RT4804	*Syllis armillaris*	- -	- hyalina	Trypanosyllis coeliaca	Trypanosyllis coeliaca	- -
RT4805	*Prosphaerosyllis tetralix*	Sphaerosyllis pirifera	- campoyi	- -	Sphaerosyllis perifera	- campoyi
RT4806	*Syllis garciai*	- mauretanica	- -	- gracilis	- columbretensis	- -
RT4807	*Syllis pontxioi*	- -	- licheri	- caeca	- fasciata	- licheri
RT4808	*Syllis gracilis*	- -	- -	- hyalina	- -	- -
RT4809	*Syllis armillaris*	- fasciata	- hyalina	- gracilis	Trypanosyllis aeolis	- -
RT4810	*Erinaceusyllis erinaceus*	- -	- -	Sphaerosyllis pirifera	Brania arminii	- -
RT4811	*Streptosyllis websteri*	Anoplosyllis edentula	- campoyi	- -	- -	- -
RT4812	*Parexogone hebes*	- -	- -	Exogone dispar	- campoyi	- -
RT4813	*Plakosyllis brevipes*	- -	- -	- -	- -	- -
RT4814	*Parapionosyllis macaronesiensis*	Brania arminii	- minuta	- minuta	Eusyllis assimilis	- -
RT4815	*Prosphaerosyllis tetralix*	- laubieri	- campoyi	Salvatoria limbata	- campoyi	- campoyi
RT4816	*Sphaerosyllis bulbosa*	- -	- -	- -	Exogone verugera	- -
RT4817	*Plakosyllis brevipes*	- -	- -	- -	- -	- -
RT4818	*Exogone verugera*	- -	[Exogone (Exogone)] -	Parexogone hebes	- -	[Exogone (Exogone)] -
RT4819	*Odontosyllis ctenostoma*	- -	- -	- -	Dioplosyllis cirrosa	- -
RT4820	*Prosphaerosyllis chauseyensis*	- tetralix	- -	Sphaerosyllis hystrix	- -	- -
RT4821	*Trypanosyllis coeliaca*	- -	- -	- -	- -	[Trypanosyllis (Trypanosyllis)] -
RT4822	*Syllis variegata*	- pontxioi	- -	- garciai	Trypanosyllis zebra	- -
RT4823	*Syllis variegata*	- sp.	- -	- cornuta	Trypanosyllis zebra	- -
RT4824	*Sphaerosyllis taylori*	- -	- -	Prosphaerosyllis laubieri	Parapionosyllis cabezali	- hystrix
RT4825	*Exogone naidina*	- -	- -	Parexogone hebes	- -	[Exogone (Exogone)] -

Specimen Images and Detailed Breakdown of Identifications

RT48 was designed to test the compatibility of syllid records from northern Europe and to test the effectiveness of current literature. It was circulated shortly before publication of the guide (San Martín & Worsfold, 2015) that resulted from the 2012 syllid workshop and the guide was circulated to participants in its then most up to date form along with the RT documentation. Several participants highlighted problems with the originally circulated identifications and specimens from four circulations (including that retained at APEM for photography), as well as several reference specimens of other species photographed for comparison, were sent to Prof. Guillermo San Martín (GSM) for examination. All specimens photographed for this bulletin were identified or confirmed by GSM, with the exception of those shown in Figures 3b-c, 10b, 22c and 24c-d. The results have identified several areas that require further research and some amendments that will be needed to the key. These are detailed under the specimen headings and in the discussion section below.

LabCodes are abbreviated in this report to exclude the Scheme year, *i.e.* BI_2101a = Lab 01a. An additional terminal character has been added within each LabCode (small case sequential letters) to permit multiple data entries from each 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 APEM Ltd.
(Figure codes: A=anterior; P=posterior; L=lateral; D=dorsal; V=ventral; Pa=Parapodia; M=Mid body)

RT4801 – *Exogone naidina* (Figure 1a)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Circalittoral (Upper Shelf). Geography: Southwest England. Condition: Good, Medium, Near complete, Some starting epitokous chaetae.

Fig. 1a. *Exogone naidina* (RT4801) – D

Two generic and four specific errors: Labs 03 and 14 identified as *Exogone dispar* (no image available) (which has a median antennae longer than the lateral antennae); Lab 18 identified as *Parexogone hebes* (Figure 12a) (which has a median antennae longer than the lateral antennae and all compound bidentate chaetae); Lab 19 identified as *Parexogone convoluta* (no image available) (which has all compound bidentate chaetae).

Labs 04, 17 and 29 included the subgenus: *Exogone (Exogone) naidina*. WoRMS uses names that include subgenera and subspecies as the preferred representation for some species but not others; the binomial name, with genus and species only, is accepted as an 'alternative representation'. After discussion with WoRMS editors, we have decided to standardize names as strictly binomial in all cases for consistency, although inclusion of subgenera is also correct.

RT4802 – Sphaerosyllis bulbosa (Figure 2a & 2b)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Infralittotal. Geography: North of Ireland. Condition: Good, Large, Complete.

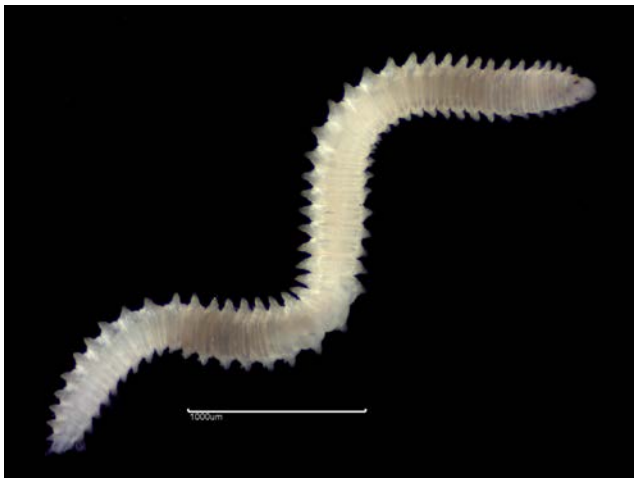

Fig. 2a. *Sphaerosyllis bulbosa* (RT4802) – D

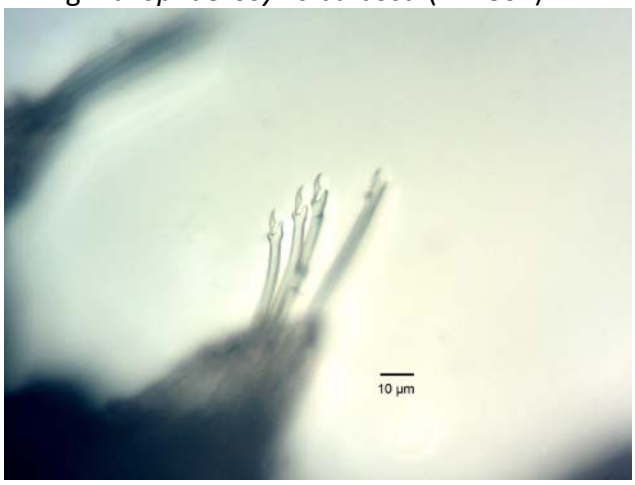

Fig. 2b. *Sphaerosyllis bulbosa* (RT4802_2105) – PaM

Two generic and four specific errors: Labs 10 and 19 identified as *Brania arminii* (no image available) (which has no papillae covering the body and two pairs of tentacular cirri); Lab 15 identified as *Sphaerosyllis glandulata* (no image available) (which has parapodial glands containing glandular material); Lab 18 identified as *Sphaerosyllis taylori* (Figure 24a shows *S. c.f. taylori*) (which lacks the distal swelling on the aciculae and has parapodial glands containing fibrillar material).

Lab 12 incorrectly spelt the genus.

RT4803 – *Syllidia armata* (Figure 3a)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Infralittoral. Geography: Southwest England. Condition: Fair, Variable, Pharynx in.

Fig. 3a. *Syllidia armata* (RT4803) - D

Three generic and three specific differences: Lab 11 identified as *Nereimyra punctata* (Figure 3b) (which has transverse dark green bands on the dorsum and lacks dark jaws); Lab 15 identified as *Brania arminii* (no image available) and Lab 18 identified as *Amblyosyllis madeirensis* (Figure 3c shows *A. formosa*) (which both have a prominent proventriculus).

Fig. 3b. *Nereimyra punctata* (8532) - D

Fig. 3c. *Amblyosyllis formosa* (8285) - D

RT4804 – *Syllis c.f. armillaris* (Figure 4a-d)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Infralittoral. Geography: Southwest England. Condition: Fair, Small, Near complete.

Fig. 4a. *Syllis armillaris* (RT4804_2107) – D

This specimen was originally circulated as *S. armillaris* (Figure 4a-b). Two generic and four specific differences: Lab 11 identified as *Syllis parapari* (Figures 4e-f) (which has spiniger-like compound chaetae), Lab 15 identified as *Syllis amica* (no image available) (which has a single thick simple chaeta on each parapodium), Labs 18 and 19 identified as *Trypanosyllis coeliaca* (Figure 21a) (which is dorsoventrally flattened).

Labs 05, 14 and 17 identified as *Syllis hyalina*. Some of the specimens checked by GSM were identified as *S. hyalina* (Figure 4c-d; note bidentate blades) and a possible third species was noted for RT4809 (see below); identifications of *S. armillaris* or *S. hyalina* have been marked as correct.

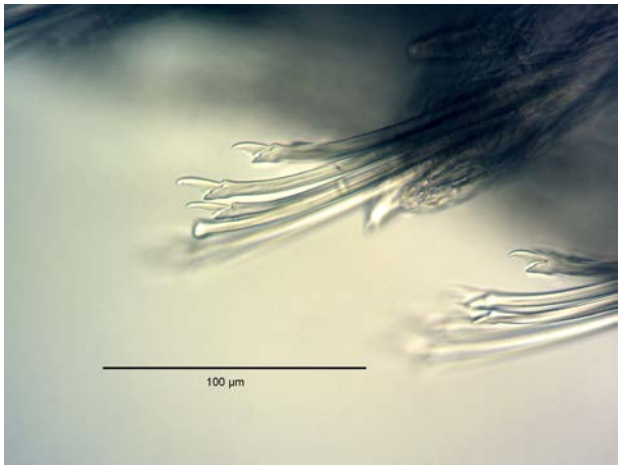

Fig. 4b. *Syllis armillaris* (RT4804_2107) – PaM

Fig. 4c. *Syllis hyalina* (RT4804) – D

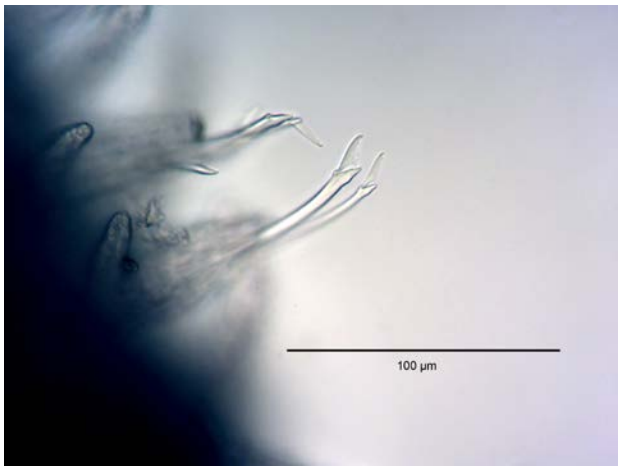

Fig. 4d. *Syllis hyalina* (RT4804_2105) – PaM

Fig. 4e. *Syllis parapari* (8530) – AD

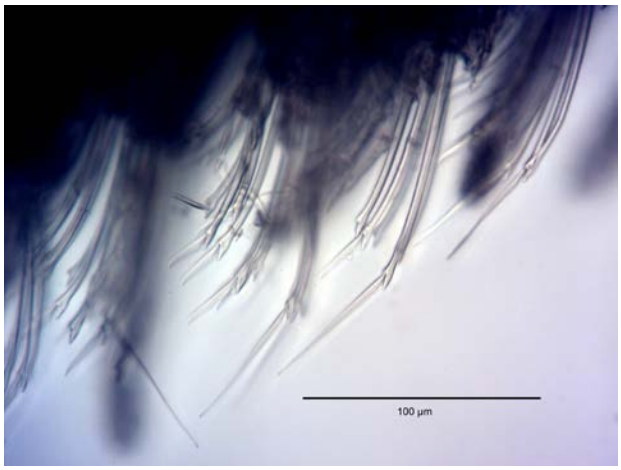

Fig. 4f. *Syllis parapari* (8530) – PaM

RT4805 – *Prosphaerosyllis c.f. tetralix* (Figure 5a)

Substratum: Diamicton. Salinity: Variable (Euryhaline). Depth: Infralittoral. Geography: Southwest England. Condition: Good, Medium, Near complete.

Fig. 5a. *Prosphaerosyllis c.f. tetralix* (RT4805)– D

Four generic and nine specific differences: Lab 10 identified as *Sphaerosyllis taylori* (Figure 24a shows *S. c.f. taylori*), Lab 15 identified as *Sphaerosyllis bulbosa* (Figures 2a & 16a) and Labs 16 and 19 identified as *Sphaerosyllis pirifera* (no image available) (all of which lack anterior eyespots).

Labs 14, 17 and 29 identified as *P. campoyi*. GSM noted that some specimens resembled this species but that they were more likely to be *P. tetralix* (see below).

RT4806 – *Syllis garciai / mauretanica* (Figure 6a-b)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Circalittoral (Upper Shelf). Geography: Southwest England. Condition: Good, Medium, Complete.

Fig. 6a. *Syllis garciai* (RT4806_2107) – D

This specimen was originally circulated as *S. garciai* (Figure 6a-b). No generic and five specific differences: Labs 03, 13, and 15 identified as *Syllis cornuta* (Figure 6e-f) (which has thick, straight, protruding posterior aciculae); Lab 18 identified as *S. gracilis* (Figure 8a) (which has thick simple, Y-shaped chaetae in mid body); Lab 19 identified as *S. columbretensis* (Figure 6g) (which lacks spiniger-like compound chaetae).

Labs 09, 10, 14 and 16 identified as *S. mauretanica* and some of the specimens checked by GSM were identified as *S. mauretanica* (Figure 6c-d). Identifications of *S. garciai* or *S. mauretanica* have been marked as correct.

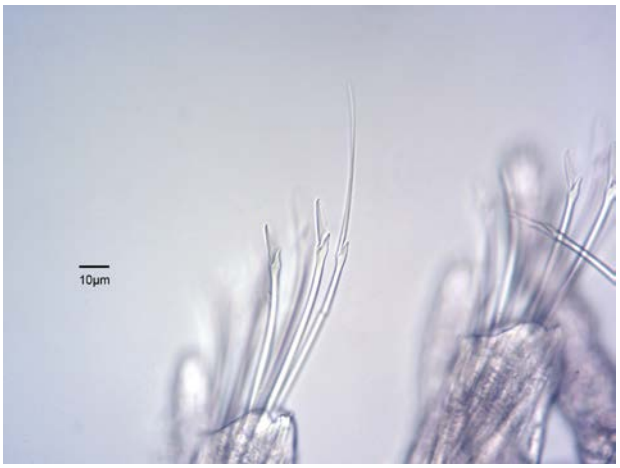

Fig. 6b. *Syllis garciai* (RT4806_2107) – PaM

Fig. 6c. *Syllis mauretanica* (RT4806) – D

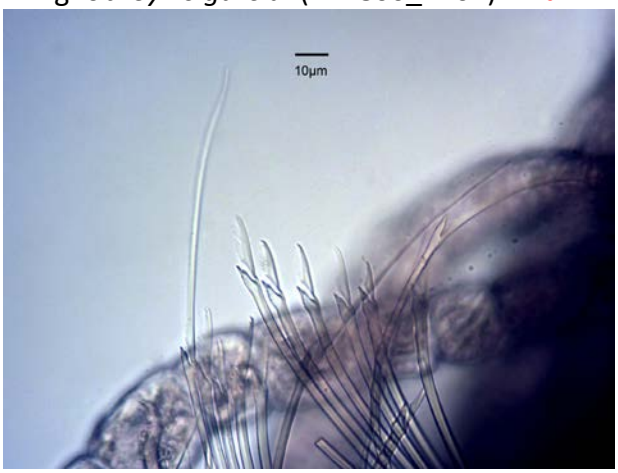

Fig. 6d. *Syllis mauretanica* (RT4806) – PaM

Fig. 6e. *Syllis cornuta* (945) – D

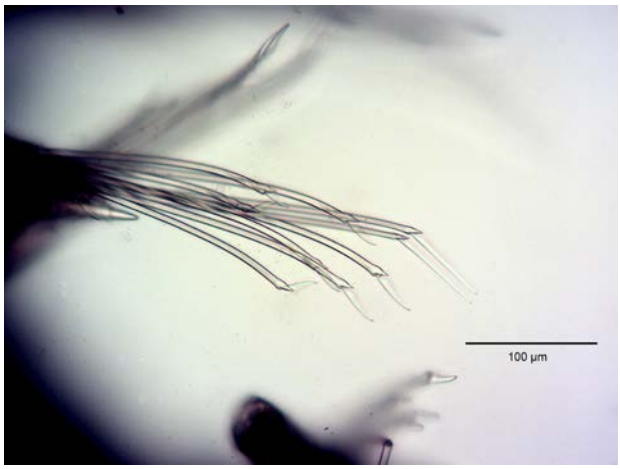

Fig. 6f. *Syllis cornuta* (945) - PaM

Fig. 6g. *Syllis columbretensis* (7039) - D

RT4807 – *Syllis pontxioi / licheri* (Figure 7a-d)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Circalittoral (Upper Shelf). Geography: Southwest England. Condition: Good, Medium, Complete, + and - pharynx.

Fig. 7a. *Syllis pontxioi* (RT4707) – D

Fig. 7b. *Syllis pontxioi* (RT4707_2107) - PaP

This specimen was originally circulated as *S. pontxioi* (Figure 7a-b). No generic and eight specific differences. Labs 03 and 11 identified as *Syllis pulvinata* (no image available) (which has posterior aciculae bent at an angle); Lab 04 identified as *S. hyalina* (Figures 4c-d) and Lab 15 identified as *S. armillaris* (Figures 4a-b) (both of which have short, fusiform dorsal cirri); and Labs 13 and 19 identified as *S. fasciata* (no image available) (which has longer dorsal cirri); Lab 14 identified as *S. krohni* (no image available) (which lacks thick, straight, protruding posterior aciculae); Lab 18 identified as *S. caeca* (no image available) (which has spiniger like compound chaetae).

Labs 10, 17 and 29 identified as *S. licheri* (Figure 7c-d; note hooked, not bidentate, blades). Some of the specimens checked by GSM were identified as *S. licheri* (Figure 7b) (see below); identifications of *S. pontxioi* or *S. licheri* have been marked as correct.

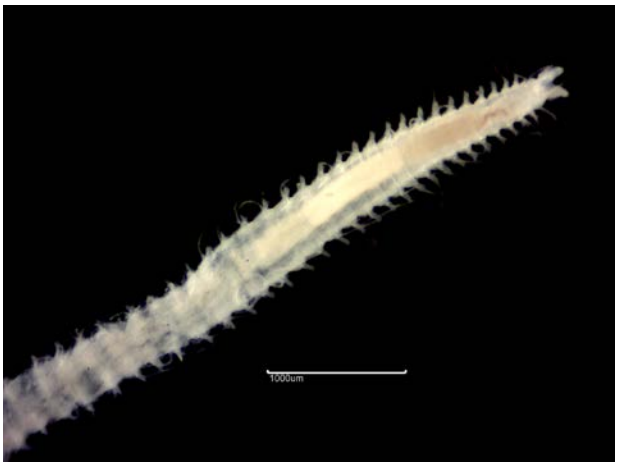

Fig. 7c. *Syllis licheri* (RT4707_2107) - D

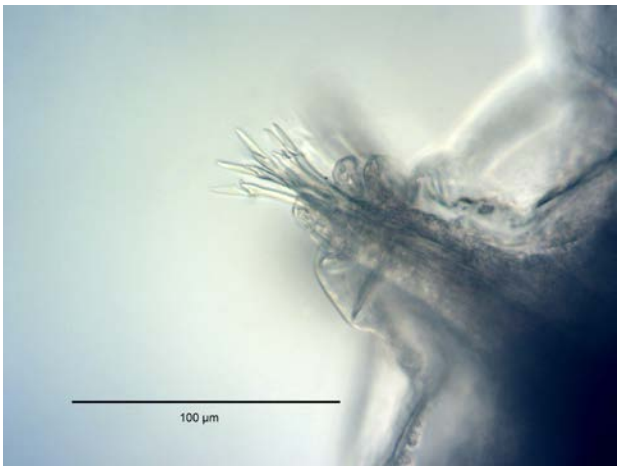

Fig. 7d. *Syllis licheri* (RT4707_2107) - PaP

RT4808 – *Syllis gracilis* (Figure 8a)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Infralittoral. Geography: Southwest England. Condition: Poor-fair, Variable, Variable length, Pigment feint or not present.

Fig. 8a. *Syllis gracilis* (RT4808) – D

No generic and two specific differences: Lab 10 identified as *Syllis amica* (no image available) (which has thick, simple chaetae in the mid-body formed by loss of the blade, not Y-shaped through fusion of the blade) and Lab 18 identified as *S. hyalina* (see RT specimens 4 & 9) (which lacks thick, simple chaetae in the mid-body).

RT4809 – *Syllis c.f. armillaris* (Figure 9a)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Circalittoral (Upper Shelf). Geography: Southwest England. Condition: Good, large, near complete.

Fig. 9a. *Syllis c.f. monilaris* (RT4809) – D

This specimen was originally circulated as *S. armillaris*. One generic and eight specific differences: Lab 10 identified as *S. kronhi* (no image available), Lab 11 identified as *S. variegata* (Figure 23a) and Lab 16 identified as *S. fasciata* (no image available) (all of which have elongated dorsal cirri); Lab 13 identified as *S. pontxioi* and Lab 14 identified as *S. licheri* (See RT specimen 7) (which have short, narrow dorsal cirri); Lab 15 identified as *S. vivipara* (no image available) (which has posterior aciculae which are distally rounded and hollow); Lab 18

Fig. 9b. *Trypanosyllis zebra* (7038) – L

identified as *S. gracilis* (Figure 8a) (which has thick simple, Y-shaped chaetae in mid body); Lab 19 identified as *Trypanosyllis aeolis* (Figure 9b shows *T. zebra*) (which is dorsoventrally flattened).

Labs 01, 04, 07, 08, and 17 identified as *Syllis hyalina*. GSM considered that a possible third species (similar to *S. monilaris*) was present amongst these specimens (see below); identifications of *S. armillaris* or *S. hyalina* have been marked as correct.

RT4810 – *Erinaceusyllis c.f. belizensis* (Figure 10a)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Infralittoral. Geography: Southwest England. Condition: Fair, Small, Most complete.

Fig. 10a. *Erinaceusyllis c.f. belizensis* (RT4810) - D

Fig. 10b. Sphaerosyllis hystrix (8576) – AD

This specimen was originally circulated as *E. erinaceus*. Lab 01 identified as *Erinaceusyllis belizensis* and the specimens checked by GSM were identified as *E. belizensis* (see below). Seven generic and seventeen specific differences: Labs 03, 05, 07, 08, 09, 11, 16, 17 and 29 identified as *E. erinaceus* (no image available) (which lacks bidentate chaetal blades); Lab 12 identified as *Erinaceusyllis cryptica* (no image available) (in which all chaetal blades are bifid); Lab 04 identified as *Prosphaerosyllis xarifae* (no image available) (which has short antennae and wide pharynx); Labs 10 and 14 identified as *Parexogone campoyi* (no image available) (which is unpapillated); Labs 13 and 15 identified as *Sphaerosyllis hystrix* (Figure 10b); Lab 18 identified as *Sphaerosyllis pirifera* (no image available) (which have no anterior eyespots); Lab 19 identified as *Brania arminii* (no image available) (which has two pairs of tentacular cirri).

RT4811 – *Streptosyllis websteri* (Figure 11a)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Circalittoral (Upper shelf). Geography: Southwest England. Condition: Fair, Variable, Variable length.

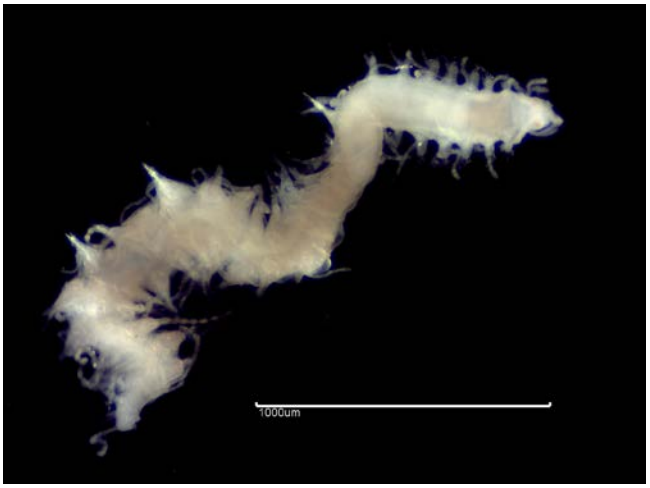

Fig. 11a. *Streptosyllis websteri* (RT4811) – D

Three generic and four specific differences: Lab 09 identified as *Streptodonta exsulis* (Figure 11b) (which has enlarged aciculae in more than 20 segments); Lab 10 identified as *Syllides convolutus* (Figure 11c shows *Syllides japonicus*) and Lab 16 identified as *Anoplosyllis edentula* (no image available) (both of which lack modified aciculae); Lab 17 identified as *Streptosyllis campoyi* (no image available) (which has enlarged aciculae in chaetigers 2-6).

Fig. 11b. *Streptodonta exsulis* (10115) – AD

Fig. 11c. *Syllides japonicus* (8532) – AD

RT4812 – *Parexogone hebes* (Figure 12a)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Circalittoral (Upper Shelf). Geography: Southwest England. Condition: Fair, Small, Pharynx in & out (most in).

Fig. 12a. *Parexogone hebes* (RT4812) – D

One generic and two specific differences: Lab 18 identified as *Exogone dispar* (no image available) (which has elongated spiniger-like falcigers); Lab 19 identified as *Parexogone campoyi* (no image available) (which has long blades on the compound chaetae of the anterior segments).

RT4813 – *Plakosyllis brevipes* (Figure 13a)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Infralittoral. Geography: Southwest England. Condition: Fair, Medium.

Fig. 13a. *Plakosyllis brevipes* (RT4813) – D

No generic and no specific differences.

RT4814 – *Parapionosyllis c.f. macaronesiensis* (Figure 14a)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Circalittoral (Upper Shelf). Geography: Southwest England. Condition: Fair, Medium, Near complete.

Fig. 14a. *Parapionosyllis c.f. macaronesiensis* (RT4814) – D

Fig. 14b. *Eusyllis assimilis* (7126) – AD

Four generic and 15 specific differences: Labs 03 and 16 identified as *Brania arminii* (no image available) (which has 2 pairs of tentacular cirri); Labs 04, 05, 12 and 13 identified as *Parapionosyllis brevicirra* (no image available) (which has a swelling partly covering the prostomium); Labs 08, 09, 14, 15, 17 and 18 identified as *Parapionosyllis minuta* (no image available) (which has short chaetal blades); Labs 10 and 19 identified as *Eusyllis assimilis* (Figure 14b) (which has long tentacular and dorsal cirri).

Lab 07 identified as *Salvatoria clavata* and the specimen returned did prove to be a *Salvatoria*. We can only assume that this was an error with the circulation and have counted it as correct.

RT4815 – *Prosphaerosyllis c.f. tetralix* (Figure 15a)

Substratum: Diamicton. Salinity: Variable (Euryhaline). Depth: infralittoral. Geography: Southwest England. Condition: Good, Medium, Epitokous with budding juveniles.

Fig. 15a. *Prosphaerosyllis c.f. tetralix* (RT4815)–D

Fig. 15b. *Salvatoria clavata* (7130) – L

Four generic and twelve specific differences: Labs 09 and 16 identified as *P. laubieri* (no image available) (which has dorsal cirri of similar lengths and not arranged in four rows); Labs 11 and 14 identified as *Erinaceusyllis erinaceus* (Figure 10a shows *E. cf. belizensis*) (which has a slender pharynx and elongate blades on the compound chaetae); Lab 13 identified as *Sphaerosyllis taylori* (Figure 24a) (which has four eyes and no additional eyespots); Lab 18 identified as *Salvatoria limbata* (Figure 15b shows *S. clavata*) (which has two pairs of tentacular cirri).

Labs 04, 07, 10, 17, 19 and 29 identified as *Prosphaerosyllis campoyi*. GSM noted that some specimens did resemble *P. campoyi*; but that *P. tetralix* was more likely (see below).

Lab 15 incorrectly spelt the genus.

RT4816 – *Sphaerosyllis bulbosa* (Figure 16a)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Infralittoral. Geography: North of Ireland. Condition: Good, Large, Near complete.

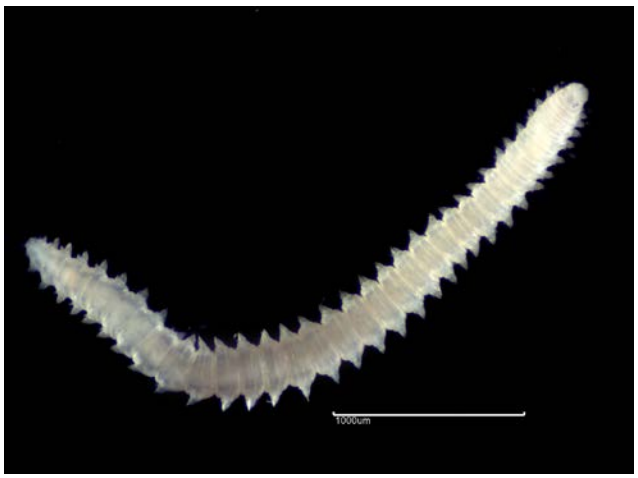

Fig. 16a. *Sphaerosyllis bulbosa* (RT4816) – D

Two generic and four specific differences: Lab 09 identified as *Sphaerosyllis pirifera* (no image available), Lab 14 identified as *S. hystrix* (Figure 24c-d), Lab 15 identified as *Parexogone hebes* (Figure 12a) and Lab 19 identified as *Exogone verugera* (Figure 18a) (which all lack bulbous aciculae).

Lab 12 incorrectly spelt the genus.

RT4817 – *Plakosyllis brevipes* (Figure 17a)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Infralittoral. Geography: Southwest England. Condition: Good, Medium, Complete.

Fig. 17a. *Plakosyllis brevipes* (RT4817) – D

One generic and one specific difference: Lab 14 identified as *Eurysyllis tuberculata* (Figure 17b) (which has dorsal tubercles and fused palps).

Fig. 17b. *Eurysyllis tuberculata* (7122) - D

RT4818 – *Exogone verugera* (Figure 18a)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Infralittoral. Geography: North of Ireland. Condition: Fair, Medium, Near complete.

Fig. 18a. *Exogone verugera* (RT4818) – D

One generic and two specific differences: Lab 04 identified as *Exogone naidina* (Figure 1a) (which has very short chaetae with long basal spines on the first 2-3 anterior parapodia); Lab 18 identified as *Parexogone hebes* (Figure 1c) (which has only compound bidentate chaetae).

Labs 04, 17 and 29 used the representation *Exogone (Exogone)*; see note for specimen 01.

Several specimens were checked by GSM and it was noted that British material had a longer proventriculus than in Mediterranean specimens; see note below.

RT4819 – *Odontosyllis ctenostoma* (Figure 19a)

Substratum: Faunal turf. Salinity: Full (Euhaline). Depth: Intertidal. Geography: Southwest England. Condition: Poor, Variable, Incomplete.

Fig. 19a. *Odontosyllis ctenostoma* (RT4819) – D

Fig. 19b. *Dioplosyllis cirrosa* (10196) – D

One generic and one specific difference: Lab 19 identified as *Dioplosyllis cirrosa* (Figure 19b) (which has a pharyngeal tooth and long dorsal cirri).

RT4820 – *Prosphaerosyllis chauseyensis* (Figure 20a)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Circalittoral (Upper Shelf). Geography: Southwest England. Condition: Poor, Medium, Some epitokous.

Fig. 20a. *Prosphaerosyllis chauseyensis* (RT4820) – D

Five generic and seven specific differences: Lab 11 identified as *S. pirifera* (no image available), Lab 07 identified as *Sphaerosyllis bulbosa* (Figures 2a & 16a), Lab 18 identified as *S. hystrix* (Figure 24b) and Labs 09 and 16 identified as *Prosphaerosyllis tetralix* (Figures 5a & 15a show *P. c.f. tetralix*) (all of which lack papillae on the dorsal cirri); Lab 10 identified as *Parexogone hebes* (Figure 12a) (which has no dorsal papillae); Lab 15 identified as *Sphaerosyllis* sp. (which lack papillae on the dorsal cirri; identification is required to species for RT exercises).

RT4821 – *Trypanosyllis coeliaca* (Figure 21a)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Circalittoral (Upper Shelf). Geography: Southwest England. Condition: Variable, Medium, Variable length.

Fig. 21a. *Trypanosyllis coeliaca* (RT4821) – AD

No generic and no specific differences.

Labs 04 and 29 used the representation *Trypanosyllis (Trypanosyllis)*; see note for Specimen 01.

Lab 13 incorrectly spelt the species.

RT4822 – *Syllis variegata / alternata* (Figure 22a-b)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Circalittoral (Upper Shelf). Geography: Southeast England. Condition: Good, Large, Pharynx out; pigment at time of preparation (as shown in Figure 22c; quickly fades in alcohol).

Fig. 22a. *Syllis variegata* (RT4822_2107) – AD

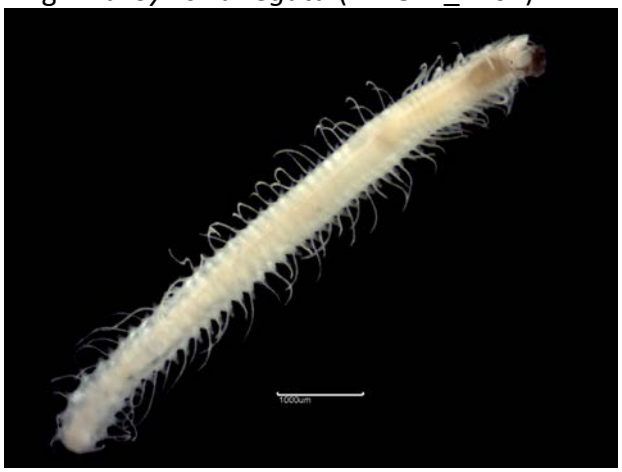

Fig. 22b. *Syllis c.f. alternata* (RT4822) – AD

One generic and ten specific differences: Labs 03, 04, 10 and 13 identified as *Syllis hyalina* (see RT specimens 4 & 9) (which has more fusiform dorsal cirri); Lab 05 identified as *S. columbretensis* (Figure 6g) (which has more strongly bidentate chaetal blades and a diamond pigment pattern in the centre of each segment); Lab 14 identified as *S. cornuta* (Figure 6e) and Lab 18 identified as *S. garciai* (Figure 6a) (both of which have spiniger-like compound chaetae); Lab 15 identified as *S. pulvinata* (no image available) (which has bent posterior aciculae); Lab 16 identified as *S. pontxioi* (Figure 7a) (which has shorter dorsal cirri and some posterior aciculae recurved); Lab 19 identified as *Trypanosyllis zebra* (Figure 9b) (which is dorsoventrally flattened).

It was noted by GSM that British specimens have a longer proventriculus than those from the Mediterranean and that some specimens have more alternation in the length of the dorsal cirri and may be *S. alternata* (see below). It is also noted that the distinctive pigment pattern (Figure 22c) fades rapidly in alcohol (Figures 22a-b).

Fig. 22c. *Syllis variegata* (12306) – AD

RT4823 – *Syllis variegata* (Figure 23)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Circalittoral (Upper Shelf). Geography: Southeast England. Condition: Fair, Medium, Pharynx in fine pigment.

Fig. 23a. *Syllis variegata* (RT4823) – D

One generic and six specific differences: Lab 03 identified as *Syllis armillaris*; Lab 04 identified as *S. hyalina* (see RT specimens 4 & 9) (both of which have fusiform dorsal cirri); Lab 11 identified as *S. columbretensis* (Figure 6g) (which has more strongly bidentate chaetal blades and a diamond pigment pattern in the centre of each segment); Lab 18 identified as *S. cornuta* (Figure 6e) (which has spiniger-like compound chaetae); Lab 19 identified as *Trypanosyllis zebra* (Figure 9b) (which is dorsoventrally flattened). Lab 16 identified as *Syllis sp.* (identification is required to species for RT exercises).

RT4824 – *Sphaerosyllis c.f. taylori* (Figure 24a & b)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Circalittoral (Upper Shelf). Geography: Southwest England. Condition: Good, Small/Medium.

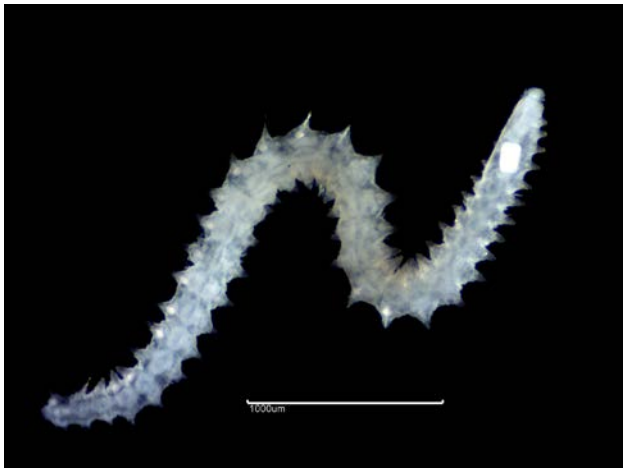

Fig. 24a. *Sphaerosyllis c.f. taylori* (RT4824) – D

Three generic and 11 specific differences: Labs 01, 07, 08, 10, 11, 12 and 29 identified as *Sphaerosyllis hystrix* (Figure 24c-d) (which has longer compound chaetal blades and more marked gradation in their length); Lab 04 identified as *S. glandulata* (no image available) (which has parapodial glands containing glandular material rather than fibrillar material); Lab 18 identified as *Prosphaerosyllis laubieri* (no image available) (which has 2 anterior eyespots); Lab 19 identified as *Parapionosyllis cabezali* (no image available) (which lacks papillations).

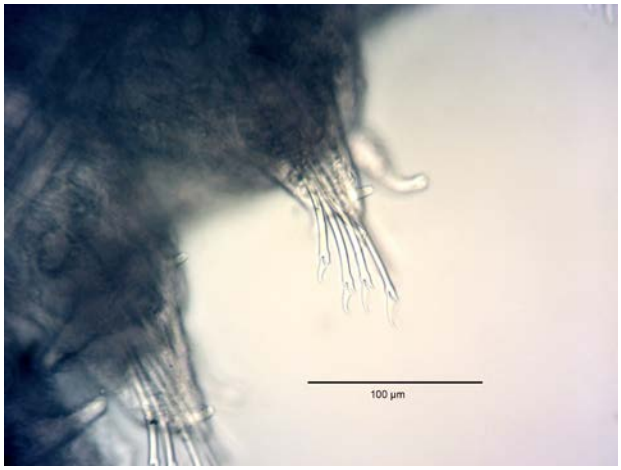

Fig. 24b. *Sphaerosyllis c.f. taylori* (RT4824_2105) – PaM

Lab 13 did not attempt identification.

The identification of *Sphaerosyllis* sent out in RT44 was changed from *S. taylori* to *S. hystrix* in the bulletin. It has been noted that the species usually recorded as *S. taylori* from UK waters may belong to a different species with some features intermediate between those of *S. taylori* and *S. hystrix*. As there is a separate species in British waters that corresponds more closely to *S. hystrix*, the name *S.* c.f. *taylori* should be used for the present species until further studies are published.

Fig. 24c. *Sphaerosyllis hystrix* (8576) – AD

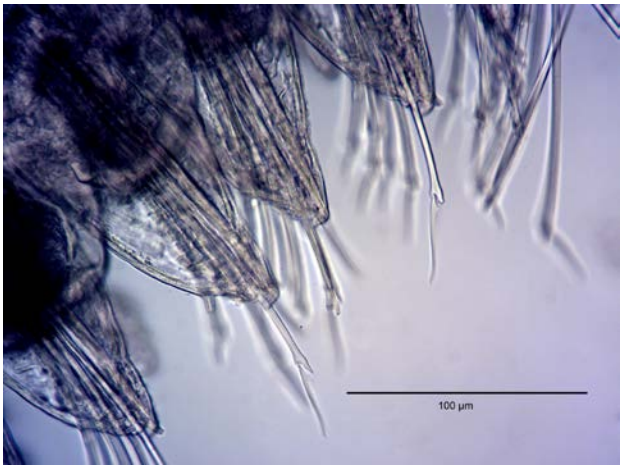

Fig. 24d. *Sphaerosyllis hystrix* (5964) – PaM

RT4825 – *Exogone naidina* (Figure 25a)

Substratum: Diamicton. Salinity: Full (Euhaline). Depth: Infralittoral. Geography: Southwest England. Condition: Fair, Small, Epitokous.

Fig. 25a. *Exogone naidina* (RT4825) – D

One generic and two specific differences; Lab 13 identified as *Exogone dispar* (no image available) (which has a median antenna longer than the lateral antennae); Lab 18 identified as *Parexogone hebes* (Figure 12a) (which has a median antennae longer than the lateral antennae and all chaetal blades of a similar structure).

Labs 04 and 29 used the representation *Exogone (Exogone) naidina* (see notes for RT specimen 01).

Taxonomic and Identification policy problems highlighted by this RT

The ring test was circulated at the same time as the release of an updated key to British syllids and it was anticipated that it would highlight areas for further work. Several participants submitted comments and photographs following submission of the initial results. All of the specimens from three circulations (from labs 01, 05 and 07) and the retained photographed specimens were sent to GSM for re-identification. The following taxonomic and identification problems were highlighted through this exercise.

Prosphaerosyllis c.f. tetralix. GSM identified Specimens 05 and 15 as similar to *P. campoyi* from the circulations to lab 05. He noted that some *P. tetralix* had relatively short blades but that the spines on the blades were not very long and suggests that specimens from the Atlantic are more likely *P. tetralix*, as the spines of the chaetae of the anterior parapodia are not long enough to be *P. campoyi*. Further work may be needed to resolve these species. For this ring test we have accepted identifications of *P. tetralix* as correct. We would recommend that such specimens are referred to *P. c.f. tetralix* in data until completion of future work.

Sphaerosyllis c.f. *taylori*. GSM noted that European specimens have slight dorsoventral gradation on anterior parapodia but the blades are shorter than those of *S. hystrix* and lack the strongly marked spines on the margin. They may represent an undescribed species. Typical *S. hystrix* are also found in UK waters and they are recognisably distinct. We have, therefore accepted only identifications of *S. taylori* as correct in the ring test and the same species circulated in RT44 as *S. hystrix* should also be considerded as *S.* c.f. *taylori*. We recommend that this species, which has historically been distinguished from *S. hystrix* and recorded as *S. taylori* from many UK surveys be recorded as *S.* c.f. *taylori* until publication of further taxonomic studies.

Erinaceusyllis c.f. belizensis. GSM identified Specimen 10 as *E. belizensis* from the circulations to labs 01, 05 and 07, and the photographed specimen. We have amended the identity of this specimen from *E. erinaceus* to *E. c.f. belizensis* and note that the species may be found in the area (it was not in the workshop key); the type locality suggests that further taxonomic revision is possible.

Syllis armillaris/hyalina. GSM identified Specimen 04 as possibly *S. armillaris* from circulations to labs 01 and 07; as possibly *S. hyalina* from the circulation to lab 05 and the photographed specimen. Specimen 09 from the circulation to lab 07 was also identified as possibly *S. hyalina*, while the photographed specimen and the circulations to lab 01 and 05 were considered to be a possible third species intermediate between *S. armillaris* and *S. hyalina*, with morphological characters that agree with *Syllis monilaris*; they are awaiting further study. GSM noted that *Syllis armillaris* and *Syllis hyalina* are species complexes, recorded worldwide, and that there are probably several species mixed. Those from the N Atlantic are not the same as those from the Mediterranean and there are specimens which it is not possible to assign to either species. A specimen selected for comparison as *S. hyalina* was identified as *S. cruzi*, which is not included in the key. For the ring test, we have accepted identifications of either *S. armillaris* or *S. hyalina* as correct. We recommend that members of this group be recorded as *S.* c.f. *armillaris* until publication of taxonomic updates.

Syllis garciai/mauretanica. GSM identified Specimen 06 as *S. mauretanica* from the circulation to lab 05 and the photographed specimen. He noted that these species are very similar and that after examining specimens sent by participants in the workshop, he realized that there are probably two very similar species, both with spiniger-like chaetae and long spines on the margins of the

blades, that are difficult to distinguish. *S. mauretanica* may have longer dorsal cirri and longer blades with shorter spines. It would be useful to carry out molecular studies to differentiate these species. For the ring test we have accepted either *S. garciai* or *S. mauretanica* as correct and accept that a mixture was circulated. We recommend continued effort to separate these similar species from samples.

Syllis pontxioi/licheri. GSM identified Specimen 07 as *S. licheri* from the circulation to labs 01 and 07. For the ring test we have accepted either *S. pontxioi* or *S. licheri* as correct and accept that a mixture was circulated. We recommend continued effort to separate these similar species from samples. GSM points out that the main difference is in the posterior chaetae.

Syllis variegata/alternata. GSM identified Specimen 22 as possibly *S. alternata* from the circulation to lab 05 and the photographed specimen; they had longer dorsal cirri, alternating in length. *S. variegata* from British samples have a longer proventriculus than those from the Mediterranean and may prove to be distinct. The distinctive colour pattern of *S. variegata* seems to rapidly fade in alcohol but was noted on all specimens circulated as RT4822 before postage. For this ring test we have accepted identifications of either *S. alternata* or *S. variegata* as correct. We would recommend that the taxon is referred to *S.* c.f. *variegata* in data until completion of future work.

Exogone verugera. GSM noted that Atlantic specimens have a longer proventriculus than those from the Mediterranean. The differences may be related to depth (longer in specimens from deep sediments, shorther in those from hard, shallow substrata), although they may prove to be distinct species.

Update notes for key

The following edit notes are provided for inclusion in the key:

Couplet 1 of *Streptosyllis* key; note that *S. nunezi* has weakly enlarged aciculae;
Couplet 4 of subfamily key; note that *Xenosyllis* lacks pharyngeal armature but should key to couplet 6 (Syllinae);
Couplet 3 of Syllinae genera key; note that *Eurysyllis* has 4 rows of tubercles, not 2;
Couplet 4 of *Syllis* key; add *S. cruzi*: some mid body and posterior chaetal blades with subdistal tooth larger than terminal tooth;
Couplet 15 of *Syllis* key; note that the route to Couplet 14 should be re-numbered, as 14 has already been used previously.

Acknowledgements

We are very grateful to Guillermo San Martín for examination of many of the specimens and for many helpful comments on the identification of the species circulated. We would also like to thank Jamie Dyson (Fugro), Liz Hewitt (Hebog Environmental), Will Musk (IECS), Grant Rowe (Fugro EMU) and Salma Shalla (CMACS) for useful discussion on the identity of these specimens and, especially, for their photographs.

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Ring Test Specimen Return Instructions

Please return all ring test specimens by end August 2015. These are reference collection specimens and must be returned to our museum. Your laboratory will be ineligible for future ring tests if specimens are not returned.

Return address: **David Hall, APEM Ltd., 7a Diamond Centre,**
Works Road, Letchworth, Hertfordshire SG6 1LW, UK