



NMBQCC

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Fish Reverse Ring Test Bulletin – FRRT15

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MODULE / EXERCISE DETAILS

Module:	Fish Reverse Ring Test - FRRT
Exercises:	FRRT15
Specimen Request Circulated:	25 th March 2024
Specimen Submission Deadline:	4 th June 2024
Number of Subscribing Laboratories:	13
Number of Submissions Received:	12

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Table 1 Summary specimens and data received from participating laboratories FRRT15

Number of specimens submitted: **169**

Number of species: **69**

Number of taxonomic errors (TE): **3**

Number of taxonomic discrepancies (TD; *synonym, **unaccepted, ***other): **12**

Number of problematic taxa submitted (†): **0**

Class	Order	Family	Species	Common name	No. of spms	No. of TE	No. of TD
Elasmobranchii	Carcharhiniformes	Pentanchidae	<i>Galeus melastomus</i> Rafinesque, 1810	Blackmouth dogfish	1		
		Scyliorhinidae	<i>Scyliorhinus canicula</i> (Linnaeus, 1758)	Small spotted catshark	4		
			<i>Scyliorhinus stellaris</i> (Linnaeus, 1758)	Nursehound	1		
	Rajiformes	Rajidae	<i>Leucoraja naevus</i> (Müller & Henle, 1841)	Cuckoo ray	1		
			<i>Raja clavata</i> (Linnaeus, 1758)	Thornback ray	2		
Teleostei	Atheriniformes	Atherinidae	<i>Atherina presbyter</i> Cuvier, 1829	Sand smelt	3		
	Blenniiformes	Blenniidae	<i>Blennius ocellaris</i> Linnaeus, 1758	Butterfly blenny	1		
			<i>Lipophrys pholis</i> (Linnaeus, 1758)	Shanny	1		
	Callionymiformes	Callionymidae	<i>Callionymus lyra</i> Linnaeus, 1758	Common dragonet	5	1	
	Carangiformes	Carangidae	<i>Trachurus trachurus</i> (Linnaeus, 1758)	Horse mackerel	1		
			<i>Trachurus mediterraneus</i> (Steindachner, 1868)	Mediterranean horse mackerel	1		
	Clupeiformes	Clupeidae	<i>Clupea harengus</i> Linnaeus, 1758	Herring	7		1***
			<i>Sprattus sprattus</i> (Linnaeus, 1758)	Sprat	4		
			<i>Sardina pilchardus</i> (Walbaum, 1792)	Pilchard	2		
	Cypriniformes	Cyprinidae	<i>Gobio gobio</i> (Linnaeus, 1758)	Gudgeon	1		
	Eupercaria incertae sedis	Sparidae	<i>Boops boops</i> (Linnaeus, 1758)	Bogue	1		
			<i>Diplodus annularis</i> (Linnaeus, 1758)	Annular seabream	1		
			<i>Diplodus vulgaris</i> (Geoffroy Saint-Hilaire, 1817)	Common two-banded seabream	1		
		Cepolidae	<i>Oblada melanurus</i> (Linnaeus, 1758)	Saddled seabream	1		
			<i>Pagellus erythrinus</i> (Linnaeus, 1758)	Common pandora	1		
			<i>Spondyliosoma cantharus</i> (Linnaeus, 1758)	Black seabream	2		
			<i>Cepola macrophthalma</i> (Linnaeus, 1758)	Red bandfish	1		
			<i>Symphodus bailloni</i> (Valenciennes, 1839)	Baillon's wrasse	2		1**
		Labridae					

		<i>Symphodus melops</i> (Linnaeus, 1758)	Corkwing wrasse	1	1**
		<i>Labrus bergylta</i> (Ascanius, 1767)	Ballan wrasse	1	
	Moronidae	<i>Dicentrarchus labrax</i> (Linnaeus, 1758)	European sea bass	5	
	Lotidae	<i>Ciliata mustela</i> (Linnaeus, 1758)	Five-bearded rockling	3	
	Gaidropsaridae	<i>Gaidropsarus vulgaris</i> (Cloquet, 1824)	Three-bearded rockling	1	
Gadiformes	Merlucciidae	<i>Merluccius merluccius</i> (Linnaeus, 1758)	European hake	1	
	Gadidae	<i>Merlangius merlangus</i> (Linnaeus, 1758)	Whiting	7	1***
		<i>Micromesistius poutassou</i> (Risso, 1827)	Blue whiting	1	
		<i>Pollachius pollachius</i> (Linnaeus, 1758)	Pollack	1	
		<i>Trisopterus luscus</i> (Linnaeus, 1758)	Pouting/bib	5	
		<i>Trisopterus minutus</i> (Linnaeus, 1758)	Poor cod	1	
Gobiiformes	Gobiidae	<i>Aphia minuta</i> (Risso, 1810)	Transparent goby	3	
		<i>Gobius niger</i> Linnaeus, 1758	Black goby	2	
		<i>Pomatoschistus minutus</i> (Pallas, 1770)	Sand goby	5	
		<i>Pomatoschistus pictus</i> (Malm, 1865)	Painted goby	3	
		<i>Pomatoschistus microps</i> (Krøyer, 1838)	Common goby	2	1
Mugiliformes	Mugilidae	<i>Chelon labrosus</i> (Risso, 1827)	Thick-lipped grey mullet	2	
		<i>Chelon ramada</i> (Risso, 1827)	Thin-lipped grey mullet	2	2**
		<i>Chelon auratus</i> (Risso, 1810)	Golden grey mullet	2	2**
	Mullidae	<i>Mullus surmuletus</i> Linnaeus, 1758	Striped red mullet	6	
		<i>Mullus barbatus</i> Linnaeus, 1758	Red mullet	1	
Osmeriformes	Osmeridae	<i>Osmerus eperlanus</i> (Linnaeus, 1758)	Smelt	2	2***
Perciformes	Agonidae	<i>Agonus cataphractus</i> (Linnaeus, 1758)	Pogge/hooknose	5	
	Ammodytidae	<i>Ammodytes tobianus</i> Linnaeus, 1758	Lesser sandeel	3	
	Triglidae	<i>Chelidonichthys lucerna</i> (Linnaeus, 1758)	Tub gurnard	6	1**
		<i>Eutrigla gurnardus</i> (Linnaeus, 1758)	Grey gurnard	3	1*
	Trachinidae	<i>Echiichthys vipera</i> (Cuvier, 1829)	Lesser weever	2	
	Gasterosteidae	<i>Gasterosteus aculeatus</i> Linnaeus, 1758	Three-spined stickleback	1	
	Liparidae	<i>Liparis liparis</i> (Linnaeus, 1766)	Sea snail	2	
	Serranidae	<i>Serranus cabrilla</i> (Linnaeus, 1758)	Comber	1	
		<i>Serranus hepatus</i> (Linnaeus, 1758)	Brown comber	1	

Pleuronectiformes	Bothidae	<i>Arnoglossus laterna</i> (Walbaum, 1792)	Scaldfish	4	
	Soleidae	<i>Buglossidium luteum</i> (Risso, 1810)	Solenette	2	
		<i>Solea solea</i> (Linnaeus, 1758)	Common sole	9	
	Citharidae	<i>Citharus linguatula</i> (Linnaeus, 1758)	Spotted flounder	1	
	Pleuronectidae	<i>Limanda limanda</i> (Linnaeus, 1758)	Dab	4	
		<i>Microstomus kitt</i> (Walbaum, 1792)	Lemon sole	1	
		<i>Platichthys flesus</i> (Linnaeus, 1758)	Flounder	6	
		<i>Pleuronectes platessa</i> Linnaeus, 1758	Plaice	4	
		<i>Scophthalmus rhombus</i> (Linnaeus, 1758)	Brill	3	
		<i>Zeugopterus regius</i> (Bonnaterre, 1788)	Eckstrom's topknot	1	
Syngnathiformes	Syngnathidae	<i>Syngnathus rostellatus</i> (Nilsson, 1855)	Lesser pipefish	4	1
		<i>Syngnathus acus</i> (Linnaeus, 1758)	Greater pipefish	2	
Zeiformes	Zeidae	<i>Zeus faber</i> , (Linnaeus, 1758)	John dory	2	

Species names according to World Register of Marine Species (WoRMS) and FishBase, accessed Feb 2025

Table 2. Summary of taxonomic errors, discrepancies and problematic taxa for FRRT15

Laboratory identification		APEM Ltd. identification
Taxonomic errors		
F3006	<i>Callionymus reticulatus</i>	<i>Callionymus lyra</i> (Linnaeus, 1758)
F3007	<i>Pomatoschistus minutus</i>	<i>Pomatoschistus microps</i> , (Linnaeus, 1758)
F3009	<i>Syngnathus</i> ??	<i>Syngnathus rostellatus</i> (Nilsson, 1855)
Taxonomic discrepancies (unaccepted synonyms)		
F3003	<i>Trigla lucerna</i>	<i>Chelidonichthys lucerna</i> (Linnaeus, 1758)
F3008	<i>Liza ramada</i>	<i>Chelon ramada</i> (Risso, 1827)
F3010	<i>Crenilabrus bailloni</i>	<i>Symphodus bailloni</i> (Valenciennes, 1839)
F3010	<i>Liza aurata</i>	<i>Chelon auratus</i> (Risso, 1810)
F3010	<i>Crenilabrus melops</i>	<i>Symphodus melops</i> (Linnaeus, 1758)
F3010	<i>Liza ramada</i>	<i>Chelon ramada</i> (Risso, 1827)
F3015	<i>Liza aurata</i>	<i>Chelon auratus</i> (Risso, 1810)
Taxonomic discrepancies (synonyms/spelling)		
F3001	<i>Eutrigla gurnardius</i>	<i>Eutrigla gurnardus</i> (Linnaeus, 1758)
F3003	<i>Merlangius merlangus</i>	<i>Merlangius merlangus</i> (Linnaeus, 1758)
F3006	<i>Osmerus eperlanus</i>	<i>Osmerus eperlanus</i> (Linnaeus, 1758)
F3007	<i>Osmerus eperlanus</i>	<i>Osmerus eperlanus</i> (Linnaeus, 1758)
F3009	<i>Clupea harengus</i>	<i>Clupea harengus</i> Linnaeus, 1758

Taxonomic errors and problematic taxa

This section describes those submitted specimens that were found to have been identified incorrectly or noted as problematic taxa in the original submission. The key identification features to separate these and similar taxa are given.

Callionymus lyra (Fabricius, 1780)

The specimen has nine fin rays and a striped pattern across the second dorsal fin (Figure 2). *C. lyra* can also be identified by the presence of four preopercular spines (Figure 2), unlike *Callionymus reticulatus*, which only has 3 spines.

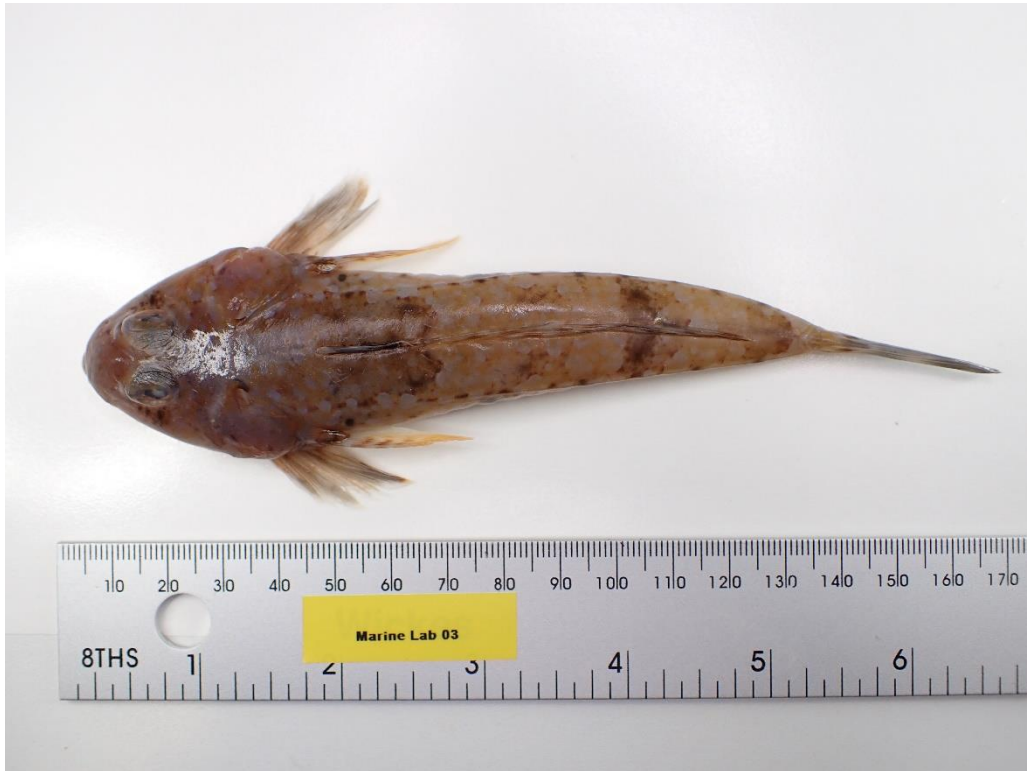


Figure 1 Submitted specimen of *Callionymus lyra*, (Linnaeus, 1758)



Figure 2 Key identification features of *Callionymus lyra*, (Linnaeus, 1758)

Pomatoschistus microps (Linnaeus, 1758)

Pomatoschistus microps (Figure 4) can be distinguished from *P. minutus* (Figure 3) by the arrangement of sensory papillae on the cheeks, the position of the branchiostegal membrane and the size of the scales. *P. microps* only has one row of sensory papillae, while *P. minutus* has several rows. The branchiostegal membrane in *P. microps* attaches to the anterior half of the isthmus, as opposed to the posterior that can be seen with *P. minutus* (Figure 5). *P. microps* has smaller scales (55-75 in lateral series) compared to the larger scales (39-52 in lateral series) found with *P. minutus*



Figure 3. Submitted specimen of *Pomatoschistus minutus*



Figure 4. Submitted specimen of *Pomatoschistus microps*

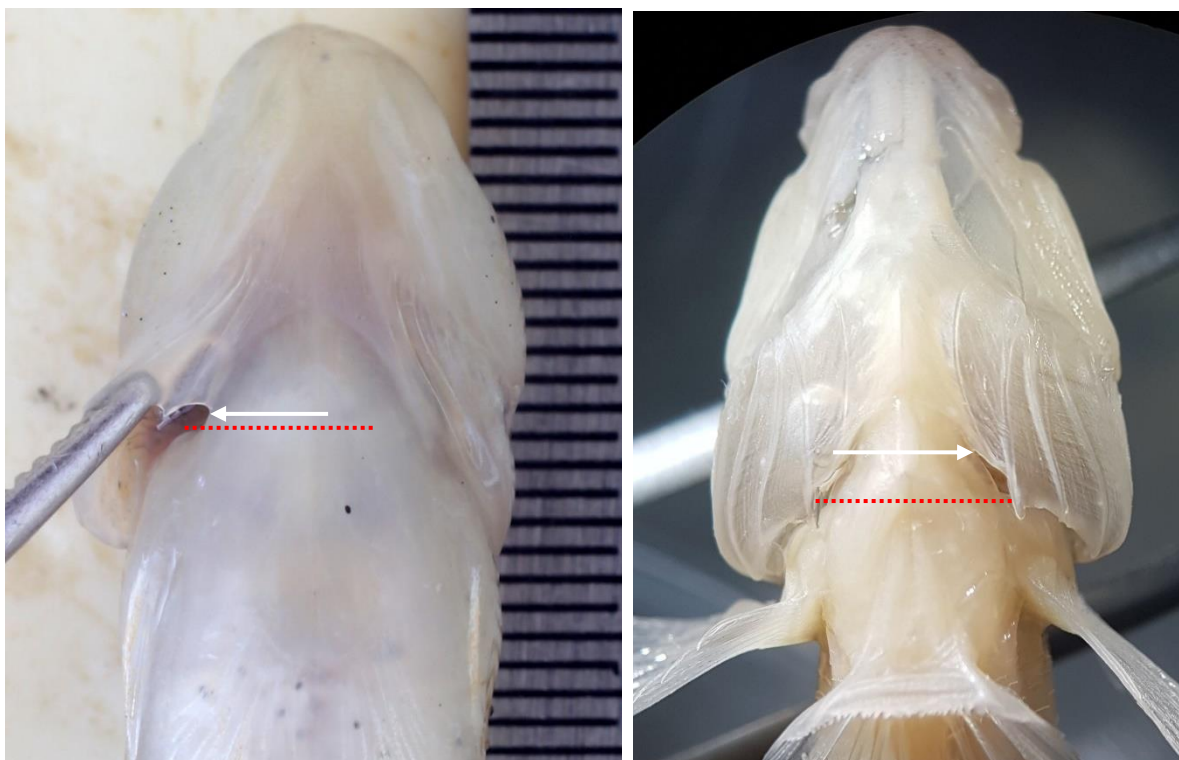


Figure 5. *Pomatoschistus microps* (left) and *Pomatoschistus minutus* (preserved specimen, right); position of branchiostegal membrane attachment arrowed, posterior end of isthmus indicated in red (Taken from FRT14 - FRT1403 and Blackwater Estuary).

Taxonomic discrepancies

This section provides further information on those submitted specimens for which other taxonomic irregularities (e.g. spelling mistakes, synonyms) were noted.

Synonyms

The World Register of Marine Species (WoRMS) and FishBase, accessed February 2025, were used for currently valid species names. Six specimens were submitted with an unaccepted synonym, see Table 2 for the list of submissions against the correct names.

Authority errors

Only 15 specimen names were submitted with an authority. The authority and year were correct for those submitted. Authority errors are not counted as taxonomic discrepancies.

Synonyms/spelling

Three specimens (of two species) were submitted with slight spelling errors.

Species of interest

This year we received a specimen of *Mullus barbatus* (Linnaeus, 1758) (Figure 6) and several specimens of *Mullus surmuletus* (Linnaeus, 1758) (Figure 7). *M. surmuletus* can be found off the coast of the UK, however, *M. barbatus* is most likely not going to be found north of the Bay of Biscay and has a more southerly distribution. Adult *M. surmuletus* can be distinguished from adult *M. barbatus* with the presence of yellow banding along the sides of the specimen. The head profile of *M. surmuletus* is steep, almost vertical whereas *M. barbatus* is more arched.



Figure 6. Submitted specimen of *Mullus barbatus*, Red mullet



Figure 7. Submitted specimen of *Mullus surmuletus*, Surmullet, striped red mullet

Acknowledgements

We would like to thank all participants for contributing a wide array of species to this year's ring test.

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APPENDIX

FRRT15 individual summary reports for participating laboratories with specimen details as provided by participants and taxonomic errors, discrepancies and comments (updated) given by APEM

EXERCISE DETAILS

Fish Reverse Ring Test (F-RT15)

Return Deadline - 04/05/24

Laboratory Code – F3001

Key to codes:

TE - Taxonomic error

TD - Taxonomic discrepancy

* - Problem taxa indicated

Specimen No.	Laboratory identification (scientific name; common name)	APEM identification (if different)	Code / Comments
RRT15_F3001_01	<i>Sprattus sprattus</i> , Sprat	-	-
RRT15_F3001_02	<i>Limanda limanda</i> , dab	-	-
RRT15_F3001_03	<i>Eutrigala gurnardius</i> , Grey Gurnard	<i>Eutrigla gurnardus</i>	TD - Spelling
RRT15_F3001_04	<i>Trachurus trachurus</i> , Atlantic horse mackerel/Scad	-	-
RRT15_F3001_05	<i>Syngnathus rostellatus</i> , Nilsson's pipefish (S. rostellatus)	-	-
RRT15_F3001_06	<i>Mullus surmuletus</i> , Red Mullet	-	-
RRT15_F3001_07	<i>Aphia minuta</i> , Transparent Goby	-	-
RRT15_F3001_08	<i>Callionymus lyra</i> , Common Dragonet	-	-
RRT15_F3001_09	<i>Merlangius merlangus</i> , Whiting	-	-
RRT15_F3001_10	<i>Liparis liparis</i> , common seasnail	-	-
RRT15_F3001_11	<i>Ammodytes tobianus</i> , Lesser sandeel	-	-
RRT15_F3001_12		-	-
RRT15_F3001_13		-	-
RRT15_F3001_14		-	-
RRT15_F3001_15		-	-

EXERCISE DETAILS

Fish Reverse Ring Test (F-RT15)

Return Deadline - 04/05/24

Laboratory Code – F3003

Key to codes:

TE - Taxonomic error

TD - Taxonomic discrepancy

* - Problem taxa indicated

Specimen No.	Laboratory identification (scientific name; common name)	APEM identification (if different)	Code / Comments
RRT15_F3003_01	<i>Syngnathus rostellatus</i> , Lesser Pipefish	-	-
RRT15_F3003_02	<i>Solea solea</i> , Common Sole	-	-
RRT15_F3003_03	<i>Trachurus trachurus</i> , Horse Mackerel	-	-
RRT15_F3003_04	<i>Aphia minuta</i> , Transparent Goby	-	-
RRT15_F3003_05	<i>Callionymus lyra</i> , Common Dragonet	-	-
RRT15_F3003_06	<i>Zeus faber</i> , John Dory	-	-
RRT15_F3003_07	<i>Arnoglossus laterna</i> , Scaldfish	-	-
RRT15_F3003_08	<i>Eutrigla gurnardus</i> , Grey Gurnard	-	-
RRT15_F3003_09	<i>Buglossidium luteum</i> , Solenette	-	-
RRT15_F3003_10	<i>Raja clavata</i> , Thornback Ray	-	-
RRT15_F3003_11	<i>Pomatoschistus minutus</i> , Sand Goby	-	-
RRT15_F3003_12	<i>Mullus surmuletus</i> , Striped Red Mullet	-	-
RRT15_F3003_13	<i>Trisopterus luscus</i> , Pouting	-	-
RRT15_F3003_14	<i>Pleuronectes platessa</i> , Plaice	-	-
RRT15_F3003_15	<i>Trigla lucerna</i> , Tub Gurnard	<i>Chelidonichthys lucerna</i>	TD - unaccepted

EXERCISE DETAILS

Fish Reverse Ring Test (F-RT14)

Return Deadline - 04/05/24

Laboratory Code – F3004

Key to codes:

TE - Taxonomic error

TD - Taxonomic discrepancy

* - Problem taxa indicated

Specimen No.	Laboratory identification (scientific name; common name)	APEM identification (if different)	Code / Comments
RRT15_F3004_01	<i>Pleuronectes platessa</i> , Plaice	-	-
RRT15_F3004_02	<i>Mullus surmuletus</i> , Striped red mullet	-	-
RRT15_F3004_03	<i>Buglossidium luteum</i> , Solonette	-	-
RRT15_F3004_04	<i>Syngnathus rostellatus</i> , lesser pipefish	-	-
RRT15_F3004_05	<i>Zeus faber</i> , John Dory	-	-
RRT15_F3004_06	<i>Callionymus lyra</i> , common Dragonet	-	-
RRT15_F3004_07	<i>Arnoglossus laterna</i> , Scaldfish	-	-
RRT15_F3004_08	<i>Pomatoschistus minutus</i> , sand Goby	-	-
RRT15_F3004_09	<i>Pomatoschistus pictus</i> , painted Goby	-	-
RRT15_F3004_10	<i>Solea solea</i> , common Sole	-	-
RRT15_F3004_11	<i>Chelidonichthys lucerna</i> , tub Gurnard	-	-
RRT15_F3004_12	<i>Gobius niger</i> , black Goby	-	-
RRT15_F3004_13	<i>Symphodus bailloni</i> , Baillon's Wrasse	-	-
RRT15_F3004_14	<i>Pomatoschistus pictus</i> , painted Goby	-	-
RRT15_F3004_15	<i>Symphodus bailloni</i> , Baillon's Wrasse	-	-

EXERCISE DETAILS

Fish Reverse Ring Test (F-RT14)

Return Deadline - 04/05/24

Laboratory Code – F3005

Key to codes:

TE - Taxonomic error

TD - Taxonomic discrepancy

* - Problem taxa indicated

Specimen No.	Laboratory identification (scientific name; common name)	APEM identification (if different)	Code / Comments
RRT15_F3005_01	<i>Agonus cataphractus</i> , Pogge	-	-
RRT15_F3005_02	<i>Pleuronectes platessa</i> , Plaice	-	-
RRT15_F3005_03	<i>Scyliorhinus canicula</i> , Common Dogfish	-	-
RRT15_F3005_04	<i>Trisopterus luscus</i> , Bib	-	-
RRT15_F3005_05	<i>Merlangius merlangus</i> , Whiting	<i>Merlangius merlangus</i>	TD - Spelling
RRT15_F3005_06	<i>Raja clavata</i> , Thornback Ray	-	-
RRT15_F3005_07	<i>Syngnathus rostellatus</i> , Lesser Pipefish	-	-
RRT15_F3005_08	<i>Ciliata mustela</i> , 5 Bearded Rockling	-	-
RRT15_F3005_09	<i>Eutrigla gurnardus</i> , Grey Gurnard	-	-
RRT15_F3005_10	<i>Solea solea</i> , Common Sole	-	-
RRT15_F3005_11	<i>Callionymus lyra</i> , Common Dragonet	-	-
RRT15_F3005_12	<i>Limanda limanda</i> , Dab	-	-
RRT15_F3005_13	<i>Arnoglossus laterna</i> , Scaldfish	-	-
RRT15_F3005_14	<i>Scyliorhinus stellaris</i> , Nursehound	-	-
RRT15_F3005_15	<i>Clupea harengus</i> , Herring	-	-

EXERCISE DETAILS

Fish Reverse Ring Test (F-RT14)

Return Deadline - 04/05/24

Laboratory Code – F3006

Key to codes:

TE - Taxonomic error

TD - Taxonomic discrepancy

* - Problem taxa indicated

Specimen No.	Laboratory identification (scientific name; common name)	APEM identification (if different)	Code / Comments
RRT15_F3006_01	<i>Syngnathus acus</i> , Greater Pipefish	-	-
RRT15_F3006_02	<i>Osmerus eperlanus</i> , Smelt	<i>Osmerus eperplanus</i>	TD - Spelling
RRT15_F3006_03	<i>Clupea harengus</i> , Herring	-	-
RRT15_F3006_04	<i>Echiichthys vipera</i> , Lesser Weever	-	-
RRT15_F3006_05	<i>Mullus surmuletus</i> , Red Mullet	-	-
RRT15_F3006_06	<i>Platichthys flesus</i> , European Flounder	-	-
RRT15_F3006_07	<i>Trisopterus luscus</i> , Pouting	-	-
RRT15_F3006_08	<i>Dicentrarchus labrax</i> , European Sea Bass	-	-
RRT15_F3006_09	<i>Agonus cataphractus</i> , Pogge	-	-
RRT15_F3006_10	<i>Limanda limanda</i> , Dab	-	-
RRT15_F3006_11	<i>Callionymus reticulatus</i> , Reticulated Dragonet	<i>Callionymus lyra</i> , Common Dragonet	TE – four spines on preoperculum
RRT15_F3006_12	<i>Pomatoschistus minutus</i> , Sand Goby	-	-
RRT15_F3006_13	<i>Merlangius merlangus</i> , Whiting	-	-
RRT15_F3006_14	<i>Solea solea</i> , Common Sole	-	-
RRT15_F3006_15	<i>Scyliorhinus canicula</i> , Small Spotted Catshark	-	-

EXERCISE DETAILS

Fish Reverse Ring Test (F-RT14)

Return Deadline - 04/05/24

Laboratory Code – F3007

Key to codes:

TE - Taxonomic error

TD - Taxonomic discrepancy

* - Problem taxa indicated

Specimen No.	Laboratory identification (scientific name; common name)	APEM identification (if different)	Code / Comments
RRT15_F3007_01	<i>Clupea harengus</i> , Herring	-	-
RRT15_F3007_02	<i>Ciliata mustela</i> , 5 Bearded Rockling	-	-
RRT15_F3007_03	<i>Osmerus eperlanus</i> , Smelt	<i>Osmerus eperplanus</i>	TD - Spelling
RRT15_F3007_04	<i>Syngnathus acus</i> , Greater Pipefish	-	-
RRT15_F3007_05	<i>Scyliorhinus canicula</i> , Lesser Spotted Dogfish	-	-
RRT15_F3007_06	<i>Dicentrarchus labrax</i> , Sea Bass	-	-
RRT15_F3007_07	<i>Platichthys flesus</i> , Flounder	-	-
RRT15_F3007_08	<i>Echiichthys vipera</i> , Lesser Weever	-	-
RRT15_F3007_09	<i>Agonus cataphractus</i> , Pogge	-	-
RRT15_F3007_10	<i>Trisopterus luscus</i> , Pouting	-	-
RRT15_F3007_11	<i>Merlangius merlangus</i> , Whiting	-	-
RRT15_F3007_12	<i>Limanda limanda</i> , Dab	-	-
RRT15_F3007_13	<i>Solea solea</i> , Common Sole	-	-
RRT15_F3007_14	<i>Pomatoschistus minutus</i> , Sand Goby	<i>Pomatoschistus microps</i> , Common Goby	TE – position of branchiostegal membrane attachment
RRT15_F3007_15	<i>Chelidononichtys lucerna</i> , tub Gurnard	-	-

EXERCISE DETAILS

Fish Reverse Ring Test (F-RT14)

Return Deadline - 04/05/24

Laboratory Code – F3008

Key to codes:

TE - Taxonomic error

TD - Taxonomic discrepancy

* - Problem taxa indicated

Specimen No.	Laboratory identification (scientific name; common name)	APEM identification (if different)	Code / Comments
RRT15_F3008_01	<i>Scophthalmus rhombus</i> , Brill	-	-
RRT15_F3008_02	<i>Merlangius merlangus</i> , Whiting	-	-
RRT15_F3008_03	<i>Pleuronectes platessa</i> , Plaice	-	-
RRT15_F3008_04	<i>Ciliata mustela</i> , Five bearded rockling	-	-
RRT15_F3008_05	<i>Clupea harengus</i> , Herring	-	-
RRT15_F3008_06	<i>Sprattus sprattus</i> , Sprat	-	-
RRT15_F3008_07	<i>Dicentrarchus labrax</i> , Sea Bass	-	-
RRT15_F3008_08	<i>Pomatoschistus minutus</i> , Sand Goby	-	-
RRT15_F3008_09	<i>Platichthys flesus</i> , Flounder	-	-
RRT15_F3008_10	<i>Pomatoschistus microps</i> , Common Goby	-	-
RRT15_F3008_11	<i>Ammodytes tobianus</i> , Lesser Sandeel	-	-
RRT15_F3008_12	<i>Liza ramada</i> , Thin-lipped Grey Mullet	<i>Chelon ramada</i>	TD - Unaccepted
RRT15_F3008_13	<i>Agonus cataphractus</i> , Hooknose	-	-
RRT15_F3008_14	<i>Solea solea</i> , Common Sole	-	-
RRT15_F3008_15		-	-

EXERCISE DETAILS

Fish Reverse Ring Test (F-RT14)

Return Deadline - 04/05/24

Laboratory Code – F3009

Key to codes:

TE - Taxonomic error

TD - Taxonomic discrepancy

* - Problem taxa indicated

Specimen No.	Laboratory identification (scientific name; common name)	APEM identification (if different)	Code / Comments
RRT15_F3009_01	<i>Aphia minuta</i> , Transparent Goby	-	-
RRT15_F3009_02	<i>Agonus cataphractus</i> , Pogge	-	-
RRT15_F3009_03	<i>Pomatoschistus minutus</i> , Sand Gobby	-	-
RRT15_F3009_04	<i>Pollachius pollachius</i> , Pollack	-	-
RRT15_F3009_05	<i>Merlangius merlangus</i> , Whiting	-	-
RRT15_F3009_06	<i>Dicentrarchus labrax</i> , Bass	-	-
RRT15_F3009_07	<i>Mullus surmuletus</i> , Stripped Red Mullet	-	-
RRT15_F3009_08	<i>Atherina presbyter</i> , Sand smelt	-	-
RRT15_F3009_09	<i>Sprattus sprattus</i> , Sprat	-	-
RRT15_F3009_10	<i>Clupea harengus</i> , Herring	<i>Clupea harengus</i>	TD - Spelling
RRT15_F3009_11	<i>Solea solea</i> , Common Sole	-	-
RRT15_F3009_12	<i>Chelidonichthys lucerna</i> , Tub Gurnard	-	-
RRT15_F3009_13	<i>Sardina pilchardus</i> , Pilchard	-	-
RRT15_F3009_14	Syngnathus ?, Pipefish	<i>Syngnathus rostellatus</i> , Lesser Pipefish	TE – 13 abdominal rings
RRT15_F3009_15		-	-

EXERCISE DETAILS

Fish Reverse Ring Test (F-RT14)

Return Deadline - 04/05/24

Laboratory Code – F3010

Key to codes:

TE - Taxonomic error

TD - Taxonomic discrepancy

* - Problem taxa indicated

Specimen No.	Laboratory identification (scientific name; common name)	APEM identification (if different)	Code / Comments
RRT15_F3010_01	<i>Atherina presbyter</i> , Sand smelt	-	-
RRT15_F3010_02	<i>Trisopterus luscus</i> , Pouting/bib	-	-
RRT15_F3010_03	<i>Platichthys flesus</i> , Flounder	-	-
RRT15_F3010_04	<i>Solea solea</i> , Common sole	-	-
RRT15_F3010_05	<i>Dicentrarchus labrax</i> , Sea bass	-	-
RRT15_F3010_06	<i>Clupea harengus</i> , Herring	-	-
RRT15_F3010_07	<i>Gobius niger</i> , Black goby	-	-
RRT15_F3010_08	<i>Crenilabrus bailloni</i> , Baillion's wrasse	<i>Symphodus bailloni</i>	TD – unaccepted
RRT15_F3010_09	<i>Liza aurata</i> , Golden grey mullet	<i>Chelon auratus</i>	TD – unaccepted
RRT15_F3010_10	<i>Spondyliosoma cantharus</i> , Black sea bream	-	-
RRT15_F3010_11	<i>Crenilabrus melops</i> , Corkwing wrasse	<i>Symphodus melops</i>	TD – unaccepted
RRT15_F3010_12	<i>Chelon labrosus</i> , Thick-lipped grey mullet	-	-
RRT15_F3010_13	<i>Liza ramada</i> , Thin-lipped grey mullet	<i>Chelon ramada</i>	TD – unaccepted
RRT15_F3010_14	<i>Lipophrys pholis</i> , Shanny	-	-
RRT15_F3010_15	<i>Pomatoschistus pictus</i> , Painted goby	-	-

EXERCISE DETAILS

Fish Reverse Ring Test (F-RT14)

Return Deadline - 04/05/24

Laboratory Code – F3015

Key to codes:

TE - Taxonomic error

TD - Taxonomic discrepancy

* - Problem taxa indicated

Specimen No.	Laboratory identification (scientific name; common name)	APEM identification (if different)	Code / Comments
RRT15_F3015_01	<i>Solea solea</i> , Common sole	-	-
RRT15_F3015_02	<i>Scophthalmus rhombus</i> , Brill	-	-
RRT15_F3015_03	<i>Gasterosteus aculeatus</i> , Three-spined stickleback	-	-
RRT15_F3015_04	<i>Ammodytes tobianus</i> , Lesser sand eel	-	-
RRT15_F3015_05	<i>Liparis liparis</i> , Sea snail	-	-
RRT15_F3015_06	<i>Dicentrarchus labrax</i> , Sea Bass	-	-
RRT15_F3015_07	<i>Chelidonichthys lucerna</i> , tub Gurnard	-	-
RRT15_F3015_08	<i>Merlangius merlangus</i> , Whiting	-	-
RRT15_F3015_09	<i>Atherina presbyter</i> , Sand smelt	-	-
RRT15_F3015_10	<i>Liza aurata</i> , Golden grey mullet	<i>Chelon auratus</i>	TD – unaccepted
RRT15_F3015_11	<i>Platichthys flesus</i> , Flounder	-	-
RRT15_F3015_12	<i>Clupea harengus</i> , Herring	-	-
RRT15_F3015_13	<i>Sprattus sprattus</i> , Sprat	-	-
RRT15_F3015_14	<i>Gobio gobio</i> , Gudgeon	-	-
RRT15_F3015_15	<i>Chelon labrosus</i> , Thicklip grey mullet	-	-

EXERCISE DETAILS

Fish Reverse Ring Test (F-RT14)

Return Deadline - 04/05/24

Laboratory Code – F3019

Key to codes:

TE - Taxonomic error

TD - Taxonomic discrepancy

* - Problem taxa indicated

Specimen No.	Laboratory identification (scientific name; common name)	APEM identification (if different)	Code / Comments
RRT15_F3019_01	<i>Leucoraja naevus</i> , Cuckoo Ray	-	-
RRT15_F3019_02	<i>Scophthalmus rhombus</i> , Brill	-	-
RRT15_F3019_03	<i>Labrus bergylta</i> , Ballan Wrasse	-	-
RRT15_F3019_04	<i>Gaidropsarus vulgaris</i> , Three-Bearded rockling	-	-
RRT15_F3019_05	<i>Galeus melastomus</i> , Blackmouth Dogfish	-	-
RRT15_F3019_06	<i>Scyliorhinus canicula</i> , Lesser Spotted Dogfish	-	-
RRT15_F3019_07	<i>Platichthys flesus</i> , Flounder	-	-
RRT15_F3019_08	<i>Merluccius merluccius</i> , European Hake	-	-
RRT15_F3019_09	<i>Micromesistius poutassou</i> , Blue Whiting	-	-
RRT15_F3019_10	<i>Sardina pilchardus</i> , Pichard	-	-
RRT15_F3019_11	<i>Trisopterus minutus</i> , Poor Cod	-	-
RRT15_F3019_12	<i>Microstomus kitt</i> , Lemon Sole	-	-
RRT15_F3019_13	<i>Blennius ocellaris</i> , Butterfly Blenny	-	-
RRT15_F3019_14	<i>Symphodus melops</i> , Corkwing	-	-
RRT15_F3019_15	<i>Zeugopterus regius</i> , Eckstrom's Topknot	-	-

EXERCISE DETAILS

Fish Reverse Ring Test (F-RT14)

Return Deadline - 04/05/24

Laboratory Code – F3021

Key to codes:

TE - Taxonomic error

TD - Taxonomic discrepancy

* - Problem taxa indicated

Specimen No.	Laboratory identification (scientific name; common name)	APEM identification (if different)	Code / Comments
RRT15_F3021_01	<i>Mullus barbatus</i> , Red mullet	-	-
RRT15_F3021_02	<i>Mullus surmuletus</i> , Surmullet, striped red mullet	-	-
RRT15_F3021_03	<i>Citharus linguatula</i> , Spotted flounder	-	-
RRT15_F3021_04	<i>Arnoglossus laterna</i> , Mediterranean scaldfish	-	-
RRT15_F3021_05	<i>Cepola macrophthalma</i> , Red bandfish	-	-
RRT15_F3021_06	<i>Chelidonichthys lucerna</i> , Tub gurnard	-	-
RRT15_F3021_07	<i>Spondyliosoma cantharus</i> , Black seabream	-	-
RRT15_F3021_08	<i>Pagellus erythrinus</i> , Common pandora	-	-
RRT15_F3021_09	<i>Oblada melanurus</i> , Saddled seabream	-	-
RRT15_F3021_10	<i>Serranus cabrilla</i> , Comber	-	-
RRT15_F3021_11	<i>Serranus hepatus</i> , Brown comber	-	-
RRT15_F3021_12	<i>Diplodus annularis</i> , Annular seabream	-	-
RRT15_F3021_13	<i>Boops boops</i> , Bogue	-	-
RRT15_F3021_14	<i>Trachurus mediterraneus</i> , Mediterranean horse mackerel	-	-
RRT15_F3021_15	<i>Diplodus vulgaris</i> , Common two-banded seabream	-	-