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Fish Reverse Ring Test Bulletin

F-RRT08

2016/2017

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Species Submitted	Number of Specimens	Size Range (Min - Max; mm)	Number of Taxonomic Errors	Number of Taxonomic Discrepancies	Thomson Unicomarine References
Lampetra fluviatilis; River Lamprey	1	210	0	0	Maitland & Herdson 2009
Mustelus asterias; Starry Smooth Hound	1	266	0	0	Maitland & Herdson 2009
Raja clavata; Thornback Ray	1	294	0	0	Maitland & Herdson 2009
Engraulis encrasicolus; Anchovy	2	70 - 143	0	0	Maitland & Herdson 2009
Clupea harengus; Herring	13	45 - 209	1	1	Maitland & Herdson 2009
Sardina pilchardus; Pilchard	3	47 - 75	0	0	Maitland & Herdson 2009
Sprattus sprattus; Sprat	12	46 - 119	0	0	Maitland & Herdson 2009
Unidentified Clupeid	1	16	0	0	Maitland & Herdson 2009 Henderson 2014
Leucaspius delineatus; Sunbleak	1	47	0	0	Maitland & Herdson 2009
Leuciscus leuciscus; Dace	1	43	0	0	Maitland & Herdson 2009
Phoxinus phoxinus; Minnow	1	18	0	0	Maitland & Herdson 2009
Osmerus eperlanus; Smelt	7	53 - 201	0	0	Maitland & Herdson 2009
Coregonus autumnalis; Pollan	1	94	0	0	Maitland & Herdson 2009
Thymallus thymallus; Grayling	1	115	0	0	Maitland & Herdson 2009
Salmo salar; Atlantic Salmon	1	101	0	0	Maitland & Herdson 2009
Salmo trutta; Brown Trout	2	88 - 220	0	0	Maitland & Herdson 2009
Gaidropsarus vulgaris; Three-bearded Rockling	1	281	0	0	Maitland & Herdson 2009
Gadus morhua; Cod	1	109	0	0	Maitland & Herdson 2009
Merlangius merlangus; Whiting	6	75 - 226	0	0	Maitland & Herdson 2009
Pollachius pollachius; Pollack	2	126 - 155	0	0	Maitland & Herdson 2009

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Species Submitted	Number of Specimens	Size Range (Min - Max; mm)	Number of Taxonomic Errors	Number of Taxonomic Discrepancies	Thomson Unicomarine References
Trisopterus luscus; Bib / Pouting	6	128 - 189	0	0	Maitland & Herdson 2009
Chelon labrosus; Thick-lipped Grey Mullet	3	58 - 205	2	0	Maitland & Herdson 2009 Henderson 2014
Liza ramada; Thin-lipped Grey Mullet	3	66 - 160	1	0	Maitland & Herdson 2009 Henderson 2014
Liza aurata; Golden Grey Mullet	2	35 - 44	0	0	Maitland & Herdson 2009
Unidentified Grey Mullet	1	40	0	0	Maitland & Herdson 2009
Atherina presbyter; Sand Smelt	8	51 - 87	0	0	Maitland & Herdson 2009
Zeus faber; John Dory	2	82 - 123	0	0	Maitland & Herdson 2009
Gasterosteus aculeatus; Three-spined Stickleback	1	30	0	0	Maitland & Herdson 2009
Spinachia spinachia; Fifteen-spined Stickleback	2	110 - 114	0	0	Maitland & Herdson 2009
Syngnathus rostellatus; Lesser Pipefish	11	65 - 136	0	0	Maitland & Herdson 2009
Syngnathus acus; Greater Pipefish	2	127 - 156	0	0	Maitland & Herdson 2009
Trigloporus lastoviza; Streaked Gurnard	1	341	0	0	Maitland & Herdson 2009 Fishbase.org website
Chelidonichthys lucerna; Tub Gurnard	2	57 - 70	1	0	Maitland & Herdson 2009
Eutrigla gurnardus; Grey Gurnard	2	121 - 278	0	0	Maitland & Herdson 2009
Taurulus bubalis; Long-spined Sea Scorpion	1	92	0	0	Maitland & Herdson 2009
Myoxocephalus scorpius; Bull Rout	2	64 - 121	1	0	Maitland & Herdson 2009
Taurulus lilljeborgi; Norway Bullhead	1	25	0	0	Maitland & Herdson 2009
Agonus cataphractus; Hooknose	7	39-109	0	0	Maitland & Herdson 2009

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Species Submitted	Number of Specimens	Size Range (Min - Max; mm)	Number of Taxonomic Errors	Number of Taxonomic Discrepancies	Thomson Unicomarine References
Dicentrarchus labrax; Sea Bass	8	53 - 88	0	0	Maitland & Herdson 2009
Perca fluviatilis; Perch	1	43	0	0	Maitland & Herdson 2009
Trachurus trachurus; Scad/Atlantic Horse Mackerel	1	60	0	0	Maitland & Herdson 2009
Decapterus macarellus; Mackerel Scad	1	85	1	0	Maitland & Herdson 2009; Lythgoe & Lythgoe (1991) Fishbase.org website
Spondyliosoma cantharus; Black Sea-Bream	1	44	0	0	Maitland & Herdson 2009
Mullus surmuletus; Striped Red mullet	3	59 - 113	0	0	Maitland & Herdson 2009
Crenilabrus bailloni; Baillon's Wrasse	1	42	0	0	Maitland & Herdson 2009
Crenilabrus melops; Corkwing Wrasse	4	34 - 133	0	0	Maitland & Herdson 2009
Ctenolabrus rupestris; Goldsinny	1	43 - 47	0	0	Maitland & Herdson 2009
Labrus bergylta; Ballan Wrasse	1	66	0	0	Maitland & Herdson 2009
Zoarces viviparus; Viviparous Blenny	1	188	0	0	Maitland & Herdson 2009
Pholis gunnellus; Butterfish	1	102	0	0	Maitland & Herdson 2009
Ammodytes tobianus; Lesser Sandeel	10	56 - 150	0	0	Maitland & Herdson 2009
Hyperoplus lanceolatus; Greater Sandeel	2	95 - 198	0	0	Maitland & Herdson 2009
Echiichthys vipera; Lesser Weever	3	36 - 129	0	0	Maitland & Herdson 2009
Lipophrys pholis; Shanny	1	55	0	0	Maitland & Herdson 2009
Diplecogaster bimaculata; Two-spotted Clingfish	1	24	0	0	Maitland & Herdson 2009
Callionymus lyra; Common Dragonet	8	34 - 154	0	0	Maitland & Herdson 2009
Callionymus reticulatus; Reticulated Dragonet	1	86	1	0	Maitland & Herdson 2009

Table 1. Summary of data and specimens received from participating laboratories for the eighth fish reverse ring test - FRRT_08.

Species Submitted	Number of Specimens	Size Range (Min - Max; mm)	Number of Taxonomic Errors	Number of Taxonomic Discrepancies	Thomson Unicomarine References
Aphia minuta; Transparent Goby	1	26	0	0	Maitland & Herdson 2009
Gobius couchi; Couch's Goby	1	49	0	0	Maitland & Herdson 2009
Gobius niger; Black Goby	3	57 - 100	0	0	Maitland & Herdson 2009
Gobius paganellus; Rock Goby	2	45 - 47	0	0	Maitland & Herdson 2009
Gobiusculus flavescens; Two-spotted Goby	4	42 - 59	0	0	Maitland & Herdson 2009
Pomatoschistus lozanoi; Lozano's Goby	1	45	1	0	Maitland & Herdson 2009
Pomatoschistus microps; Common Goby	9	34 - 52	1	0	Maitland & Herdson 2009
Pomatoschistus minutus; Sand Goby	18	34 - 70	1	0	Maitland & Herdson 2009
Pomatoschistus pictus; Painted Goby	2	33 - 36	0	0	Maitland & Herdson 2009
Unidentified Goby	1	42	0	0	Maitland & Herdson 2009
Scomber scombrus; Mackerel	3	132 - 183	0	0	Maitland & Herdson 2009
Phrynorhombus norvegicus; Norwegian Topknot	1	73	0	0	Maitland & Herdson 2009
Zeugopterus punctatus; Topknot	2	51 - 96	1	0	Maitland & Herdson 2009
Hippoglossoides platessoides; Long Rough Dab	1	73	0	0	Maitland & Herdson 2009
Limanda limanda; Dab	5	42 - 258	0	0	Maitland & Herdson 2009
Microstomus kitt; Lemon Sole	1	114	0	0	Maitland & Herdson 2009
Platichthys flesus; Flounder	10	26 - 284	0	0	Maitland & Herdson 2009
Pleuronectes platessa; Plaice	6	35 - 235	0	0	Maitland & Herdson 2009
Arnoglossus laterna; Scaldfish	3	63-116	0	0	Maitland & Herdson 2009
Buglossidium luteum; Solenette	1	79	0	0	Maitland & Herdson 2009
Solea solea; Common Sole	4	58 - 144	0	0	Maitland & Herdson 2009

Table 2. Summary of taxonomic errors / discrepancies by participating laboratories for the eighth fish reverse ring test; FRRT _08, sorted by taxonomic group.

Total Number of Entries – 245

Total Number of Taxonomic differences - 17

LabCode	Laboratory identification	Thomson Unicomarine identification	Reason for Taxonomic Error (TE) / Taxonomic Discrepancy (TD) / Problem Taxa (*)
2304	*Clupea clupea*; Herring	*Clupea harengus;* Herring	TD - Scientific name
2316	*Clupea harengus*; Herring	*Sprattus sprattus;* Sprat	TE - Dorsal fin origin not in front of pelvic fin base, it is behind the pelvic fin base. Scale count on belly between throat and pelvic fin origin and between pelvic fin and vent too low to be herring.
2311	Unknown species - juvenile clupeid	Juvenile Mugilidae; most likely *Chelon labrosus;* Thick-lipped Grey Mullet	* Pelvic fin short and does not reach eye when folded forwards, (makes it not *L. aurata*) pre-orbital bone rounded and coarsely toothed makes it *C. labrosus*, but position of anal fin more forward than *C. labrosus* makes it possibly *L. ramada*, although this feature is not strong. Also, appears to be papillae on upper lips, which makes it *C. labrosus*. *Note: condition of fish was poor, therefore some of the defining features were not always clear.
2308	*Chelon labrosus;* Thick lip mullet	*Liza aurata;* Golden Grey Mullet	TE - Top lip depth less than half eye diameter. Golden tint on gill cover. Underside of head, midline space broadens near snout - this is narrower in thick-lipped mullets. Pectoral fin does not reach past pupil of eye when folded forwards.
2324	*Chelon labrosus;* Thick-lipped Grey Mullet	*Liza ramada;* Thin-Lipped Grey Mullet	TE - Top lip depth less than half eye diameter. Pectoral fin does not reach eye when folded forwards. Underside of head has more pronounced gap toward snout. Slight pigmentation at top of pectoral fin base.

Table 2. Summary of taxonomic errors / discrepancies by participating laboratories for the eighth fish reverse ring test; FRRT _08, sorted by taxonomic group.

LabCode	Laboratory identification	Thomson Unicomarine identification	Reason for Taxonomic Error (TE) / Taxonomic Discrepancy (TD)
2303	*Liza ramada*; Thin-lipped grey mullet	Juvenile Mugilidae; most likely *Chelon labrosus*	TE - Pelvic fin short, does not reach eye when folded forwards, (makes it not *L. aurata*) pre-orbital bone rounded and coarsely toothed makes it *C. labrosus*, but position of anal fin more forward than *C. labrosus* makes it possibly *L. ramada*. But this feature is not strong. Also appears to be papillae on upper lips, which makes it *C. labrosus*. *Note: condition of fish was poor, therefore some of the defining features were not always clear.
2306	Unidentified Mugilidae; Thin-lipped?	Juvenile Mugilidae; most likely *Chelon labrosus*	* Pelvic fin short, does not reach eye when folded forwards, (makes it not *L. aurata*) pre-orbital bone rounded and coarsely toothed makes it *C. labrosus*, but position of anal fin more forward than *C. labrosus* makes it possibly *L. ramada*. But this feature is not strong. Also appears to be papillae on upper lips, which makes it *C. labrosus*. *Note: condition of fish was poor, therefore some of the defining features were not always clear.
2314	*Chelidonichthys lucerna*; Tub Gurnard	*Trigla lyra;* Piper	TE - Pectoral fins extend past vent. Large spine above pectoral fin. Two flattened plates on snout. Head spines well developed. Head profile like that of Piper, not as elongated as Tub Gurnard.
2323	*Myoxocephalus scorpius; Short spined sea scorpion*	*Taurulus bubalis; Long-spined Sea Scorpion*	TE - White barbels present on corner of mouth (upper jaw). Preopercular spine longer than eye diameter. Spines present on lateral line, but absent on skin either side of lateral line. Flap under throat absent.

Table 2. Summary of taxonomic errors / discrepancies by participating laboratories for the eighth fish reverse ring test; FRRT _08, sorted by taxonomic group.

LabCode	Laboratory identification	Thomson Unicomarine identification	Reason for Taxonomic Error (TE) / Taxonomic Discrepancy (TD)
2314	*Decapterus macarellus;* Mackerel Scad	*Trachurus trachurus;* Scad	TE - Two spines prior to anal fin. Scale count out of range for *Decapterus macarellus*, within range of *Trachurus trachurus*. Dorsal sensory canal run along dorsal fins from before first dorsal to near end of second dorsal fin.
2313	*Callionymus reticulatus*; Reticulated Dragonet	*Callionymus lyra;* Common Dragonet	TE - Four spines on preoperculum, one of which is at base and faces forward. Second dorsal fin has 9 rays.
2321	*Pomatoschistus lozanoi;* Lozano's Goby	*Pomatoschistus microps;* Common Goby	TE - Scale count along lateral line 50, shape of gill attachment to isthmus. No scales present on nape.
2314	*Pomatoschistus microps*; Common Goby	*Pomatoschistus minutus;* Sand Goby	TE - Scales present on nape and breast. Number of scales along lateral line too high for Common Goby.
2327	*Pomatoschistus minutus*; Sand Goby	*Pomatoschistus microps;* Common Goby	TE - Scale count out of range of Sand Goby, no scales on nape, shape of gill attachment to isthmus.
2303	Unidentified Goby	*Pomatoschistus pictus;* Painted Goby	* Pectoral fins upper rays not free or feathered. Rows of spots on first and second dorsal fins. Peduncle nearly length of head. Smooth membrane on pelvic disc. No scales present on nape.
2301	*Zeugopterus punctatus;* Topknot (Common)	*Zeugopterus regius;* Eckstrom's Topknot	TE - Pelvic fins not joined to anal fin. Snout deeply notched in front of upper eye. Dorsal fin origin behind snout and has distinct lengthened first ray. Distinct dark blotch with lighter centre on lateral line towards tail.

Appendix 1

References

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