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MARINE FISHES (TELEOSTEI / OSTEICHTHYES) OF SYRIA (EASTERN MEDITERRANEAN): AN UPDATED CHECKLIST

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ABSTRACT

An updated checklist of marine fishes (Teleostei / Osteichthyes) recorded to date in Syrian marine waters is presented here. Out of the 62 fish orders present in the whole oceans, 37 (60%) are found in the marine water of Syria. These orders comprise 303 species, 208 genera and 103 families. Sparidae is the most divers family (32 species), followed by Blenniidae (14 species) and Carangidae (13 species). Out of the 303 teleost species recorded in this checklist, 48 species were recorded during the period 2018-2025, accounting for 7 species per year and 17.1% of overall fish species previously recorded. This is noticeably higher than what was recorded by the previous checklist (32 species, 1.45%) during the entire period 2005-2018. Climate change, other environmental factors and human activities are thought to be the most acceptable reasons behind that.

Key words: Levantine Basin, Teleost, Syrian coast, Lessepsian species, native species

PESCI MARINI (TELEOSTEI / OSTEICHTHYES) DELLA SIRIA (MEDITERRANEO ORIENTALE): ELENCO AGGIORNATO

SINTESI

L'articolo presenta la lista aggiornata dei pesci marini (Teleostei / Osteichthyes) trovati fino ad oggi nelle acque marine siriane. Dei 62 ordini di pesci presenti in tutti gli oceani, 37 (60%) si trovano nelle acque marine della Siria. Questi ordini comprendono 303 specie, 208 generi e 103 famiglie. La famiglia più diversificata è quella degli Sparidae (32 specie), seguita dai Blenniidae (14 specie) e dai Carangidae (13 specie). Delle 303 specie di teleostei comprese in questa checklist, 48 specie sono state segnalate nel periodo 2018-2025, pari a 7 specie all'anno e al 17,1% delle specie ittiche complessivamente ritrovate in precedenza. Questo dato è notevolmente superiore a quello riportato dalla precedente checklist (32 specie, 1,45%) durante l'intero periodo 2005-2018. Si ritiene che i cambiamenti climatici, altri fattori ambientali e le attività umane siano le ragioni più plausibili alla base di tale fenomeno.

Parole chiave: bacino del Levante, Teleostei, costa siriana, specie lessepsiane, specie autoctone

INTRODUCTION

The Mediterranean Sea is a common biodiversity hotspot, hosting about 11% of marine species (more than 17,000) in less than 1% of the world's oceans area. It is hosting 28% of endemic species, 7.5% of the world's marine fauna, and 18% of its marine flora (UNEP/MAP & Bleu Plan, 2020). The Mediterranean Sea is rich in islands, unique habitats, major breeding areas and refuges for migratory species (Cheminée *et al.*, 2021; Azzurro *et al.*, 2022; Nota *et al.*, 2025). The intense and increasing human activities around the Mediterranean basin, climate changes, and the resulted species migration and pollution have all led to the present destruction of biodiversity composition (Aurelle *et al.*, 2022).

Despite the extensive scientific studies, our understanding of the biodiversity in the Mediterranean Sea remains incomplete, as new species are constantly being revealed (Garcia-Bustos, 2025). FAO (2022) report indicated that the number of species introduced to the Mediterranean Sea from the Indian Ocean, Red Sea, and Atlantic Ocean reached about 1,000 species, of which about 400 are fish species. In this context, since Suez Canal opening in 1869 and its expansion in 2015 to include a second canal, the arrival of non-native marine organisms from the Red Sea to the Mediterranean Sea has increased. For these reasons, the eastern Mediterranean basin is considered as a biodiversity hotspot. To date, over 70% of the exotic fishes found in the Mediterranean are found in the eastern basin: they arrived from the Indo-Pacific region through the Red Sea and Suez Canal; i.e. Lessepsian migrants (Zenetos *et al.*, 2010). To a lesser extent, Atlantic species arrived from the western Mediterranean basin, and few species originating from the Black Sea, had been found in the eastern Mediterranean (Harmelin & Dhondt, 1993).

Few studies have comprehensively surveyed the fish diversity of the Syrian coast: Gruvel (1931) identified 88 bony fish species (Osteichthyes) and 6 cartilaginous fish species. A Korean cooperation mission in 1976 revealed the presence of 93 fish species (Anon., 1976), and Sbaili (1994a) documented 150 species of bony fish, to which 8 species were later added (Saad, 1996). Ibrahim *et al.* (1999) had documented 5 new records from the sandy area of Jableh Bay – south of Lattakia city, bringing the number of bony fishes recorded until the year 1999 to 163 species.

Two checklists of Syrian bony fish species have been later produced: they were prepared by Saad (2005), where 224 species were included, and by Ali (2018), where 256 species were included (along with 40 species of Elasmobranchii and 2 species of holcephali). In addition, Saad & Khrema (2023), although focused on non-endogenous marine fish, they had stated that a total of 292 Actinopterygii fish species

(belonging to 98 families and 26 orders) present in Syrian marine water until the end of Aug. 2023; the majority of which are Teleost's species.

After 2018, (Ali, 2018), and even after 2023 (Saad & Khrema, 2023), many species were found in Syrian marine water and published in dispersed scientific journals. Therefore, the current work aimed to collect such newly published species and produce an updated comprehensive checklist of bony fishes available in Syrian marine water.

MATERIAL AND METHODS

The current checklist focuses on information collected on bony fish species (Teleostei: Osteichthyes) found in Syrian marine water, starting from Al- Badrusiya area in the north (35.913232° N and 35.886477° E) to Sheikh Jaber area near the Lebanese border in the south (34.62128° N and 35.97190° E), passing through the areas of Ras Al-Basit, Latakia, Jableh, Baniyas, Tartous, and al-Hamidiyah (Fig. 1). The present checklist is based on information previously published in various scientific journals. Species and other taxa classification was updated and revised according to the recent taxonomic developments. Species recording-primacy were checked and corrected, and those species missed from previous checklists were also added. For ease of

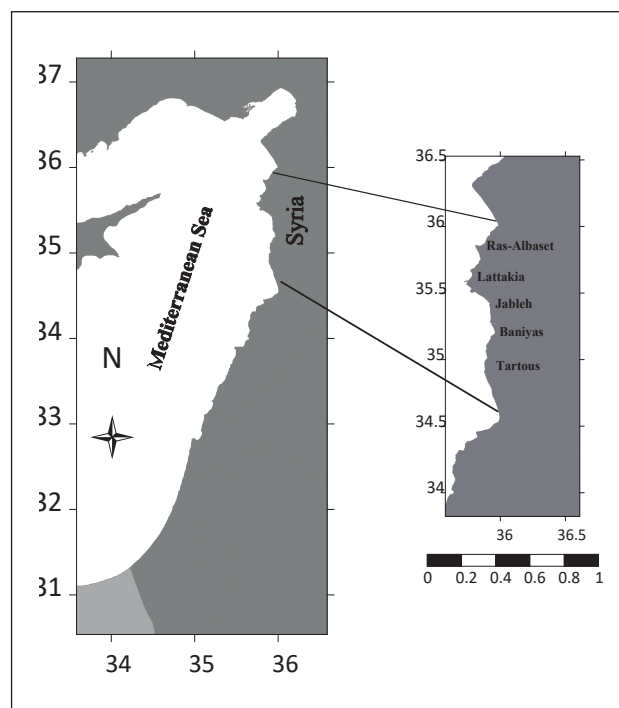


Fig. 1: Locations of Syrian marine waters where fishes were collected (reproduced from surfer16 software).

Sl. 1: Lokalizacije v sirskih morskih vodah, kjer so bile potrjene ribe (reproducirano iz programske opreme surfer16).

inspection, various taxa were presented alphabetically. When applicable, the original author(s) of the basionyms, was put in parentheses to indicate that a species is reclassified or removed to a different genus or rank: the fishbase portal was used for this purpose.

Overall, the following details are presented for each species: classification according to family and order, scientific name and first documentation. Some taxa, namely Carangaria, Eupercaria and Ovalentaria contain a series of families that are not yet definitively placed under a specific order; thus, the suffix “/misc”(i.e. miscellaneous) was assigned to those families that do not perfectly fit into any established order.

RESULTS AND DISCUSSION

The documented records of teleost fish species found in Syrian marine waters; their taxonomic affiliation and their first documentation are presented in Appendix 1. Three hundreds and three fish species (Teleost/Osteichthyes) were so far documented from Syrian marine water (eastern Mediterranean). Compared to the previously recorded species (Ali, 2018 as an example), 48 species were added to the checklist, as during the period 2018-2025; accounting for 7 species per year and 17.1% of overall fish species previously recorded. Detailed local and global distributions of these newly recorded species are given in Ibrahim *et al.* (2025). This number of species (48 species) is noticeably higher than what was recorded by Ali (2018) (32 species; 1.45%) during the entire period 2005-2018. This dramatic increase may due to climate change acceleration and the subsequent changes in water quality (Urdiales-Flores *et al.*, 2023) and to species behavior (Valente *et al.*, 2023), impact of human activities and/or the noticeable monitoring intensification of fish diversity along the Syrian coast.

In fact, the true number of fish species is most likely to be higher from what was stated in this article, since that some species were not considered here as they are not properly documented. In addition, many other species are already present in the neighboring eastern Mediterranean countries of similar environmental conditions (Golani *et al.*, 2021; Turan *et al.*, 2024; Golani, 2025) and most likely to exist in Syrian marine water.

In addition to those added species, the current checklist introduces the following additions to the previously published lists: Assignment of fish species to their taxonomic categories according to the most recent developments in scientific taxonomy (Froese & Pauly, 2025), corrections related to the precedence in species documentation and corrections related to species misidentification (as many species were given false scientific names).

Out of the 62 fish orders present in the global oceans (Froese & Pauly, 2025), 37 (60%) are found in the marine water of Syria (Appendix 1). These orders

comprise 103 families (20.2%), 208 genera (4.59%) and 303 species (0.99%). Spread of such species, especially those newly-arrived exotic species, over this wide range of families and genera indicates a pattern of successful adaptation and colonization to the new environment (Davidsen *et al.*, 2021). Understanding the spread patterns and detailed factors contributing to invasion is essential for developing effective and comprehensive management plan to control the spread of the exotic species (Marcolin *et al.*, 2025).

The content of Appendix 1 reveals that, Sparidae was the richest family in species composition (32 species), followed by Blenniidae (14 species), Carangidae (13 species) and each of Scombridae, Gobiidae and Labridae (12 species), besides Scorpaenidae and Epinephelidae (8 species each). Similarly, the families Triglidae, Mullidae, Mugilidae and Apogonidae have 7 species each, Tetraodontidae and Soleidae have 6 species each and Syngnathidae, Trachinidae and Sphyrinaeidae have 4 species each. Fourteen other families have 3 species each, 23 families have 2 species each and the remaining 49 families have 1 species each.

The checklist produced in this article can be a complimentary one to those checklists of other Mediterranean countries (eg. Golani *et al.*, 2012; Turan *et al.*, 2024; Golani, 2025), especially those of the neighboring ones (eg. Turan *et al.*, 2024; Bitar & Badreddine, 2021), to give a general updated view of the eastern Mediterranean fish fauna. This checklist would also be used for assessing the current state and monitoring potential future changes in fish diversity in the area.

CONCLUSIONS

A total of 303 teleost species (belong to 208 genera, 103 families and 37 orders) have been recorded in Syrian marine water by Oct. 2025, 48 of which have been categorized as exotic species documented for the first time during the period 2018-2025. These newly documented fish species account for 7 species per year and 17.1% of overall fish species previously recorded: this is noticeably higher than what was recorded by the previous checklist (32 species and 1.45%) during the entire period 2005-2018. Climate change (with the resulting changes in sea water characteristics) and human activities (such as Suez Canal opening and marine transportation) are thought to be the key reasons behind.

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Appendix 1: Species recorded from Syrian marine water, their taxonomic affiliation and their first documentation.
Priloga 1: Vrste, zabeležene v sirskem morju, njihova taksonomska pripadnost in prvi dokumentiran zapis o pojavljanju.

	Order	Family	Species	1 st documentation
1.	Acanthuriformes	Caproidae	<i>Capros aper</i> (Linnaeus, 1758)	Sbaihi (1994a)
2.		Chaetodontidae	<i>Chaetodon larvatus</i> Cuvier, 1831	Ali <i>et al.</i> (2017b)
3.			<i>Heniochus intermedius</i> Steindachner, 1893	Ibrahim <i>et al.</i> (2022)
4.		Leiognathidae	<i>Equulites berbis</i> (Valenciennes, 1835)	Alshawy <i>et al.</i> (2016)
5.			<i>Equulites klunzingeri</i> (Steindachner, 1898)	Gruvel (1931)
6.			<i>Equulites popei</i> (Whitley, 1932)	Ibrahim <i>et al.</i> (2020)
7.		Lutjanidae	<i>Lutjanus fulviflamma</i> (Forsskål, 1775)	Saad <i>et al.</i> (2022b)
8.		Lobotidae	<i>Lobotes surinamensis</i> (Bloch, 1790)	Gruvel (1931)
9.		Pomacanthidae	<i>Chromis chromis</i> (Linnaeus, 1758)	Sbaihi (1994a)
10.			<i>Pomacanthus maculosus</i> (Forsskål, 1775)	Capapé <i>et al.</i> (2023)
11.			<i>Pomacanthus imperator</i> (Bloch, 1787)	Saad <i>et al.</i> (2018)
12.		Priacanthidae	<i>Priacanthus hamrur</i> (Fabricius, 1775)	Capapé <i>et al.</i> (2022)
13.			<i>Priacanthus sagittarius</i> Starnes, 1988	Alshawy <i>et al.</i> (2019e)
14.		Siganidae	<i>Siganus javus</i> (Linnaeus, 1766)	Ibrahim <i>et al.</i> (2010)
15.			<i>Siganus luridus</i> (Ruppel, 1829)	Gruvel (1931)
16.			<i>Siganus rivulatus</i> Forsskal & Niebuhr, 1775	Gruvel (1931)
17.	Acropomatiformes	Champsodontidae	<i>Champsodon nudivittis</i> (Ogilby, 1895)	Ali <i>et al.</i> (2017a)
18.		Epigonidae	<i>Epigonus denticulatus</i> Dieuzeide, 1950	Ibrahim <i>et al.</i> (2023)
19.			<i>Epigonus constanciae</i> (Giglioli, 1880)	Sbaihi (1994a)
20.		Pempheridae	<i>Pempheris rhomboidea</i> Kossmann & Rauber, 1877	Sbaihi & Saad (1992) (as <i>P. vanicolensis</i>)
21.	Anguilliformes	Anguillidae	<i>Anguilla anguilla</i> (Linnaeus, 1758)	Gruvel (1931)
22.		Heterenchelyidae	<i>Panturichthys fowleri</i> (Ben-Tuvia, 1953)	Sbaihi (1994)
23.		Congridae	<i>Ariosoma balearicum</i> (Delaroche, 1809)	Ibrahim <i>et al.</i> (2002a)
24.			<i>Conger conger</i> (Linnaeus, 1758)	Gruvel (1931)
25.		Muraenidae	<i>Enchelycore anatina</i> (Lowe, 1838)	Saad (2005)
26.			<i>Gymnothorax unicolor</i> (Delaroche, 1809)	Ibrahim & Galiya (2004)
27.			<i>Muraena helena</i> Linnaeus, 1758	Ibrahim <i>et al.</i> (2002b)
28.		Nettastomatidae	<i>Nettastoma melanurum</i> Rafinesque, 1810	Ali (2018)
29.		Ophichthidae	<i>Dalophis imberbis</i> (Delaroche, 1809)	Capapé <i>et al.</i> (2021)
30.			<i>Echelus myrus</i> (Linnaeus, 1758)	Ibrahim <i>et al.</i> (2002b)
31.			<i>Ophisurus serpens</i> (Linnaeus, 1758)	Alshawy <i>et al.</i> (2019f)
32.	Argentiniformes	Argentinidae	<i>Argentina sphyraena</i> Linnaeus, 1758	Sbaihi (1994)
33.			<i>Glossanodon leioglossus</i> (Valenciennes, 1848)	Sbaihi (1994)
34.	Atheriniformes	Atherinidae	<i>Atherina boyeri</i> Risso, 1810	Saad <i>et al.</i> (2002)
35.			<i>Atherinomorus forskalii</i> (Ruppel, 1838)	Saad (2005)
36.			<i>Atherinomorus lacunosus</i> (Forster, 1801)	Othman <i>et al.</i> (2022)
37.	Aulopiformes	Aulopidae	<i>Aulopus filamentosus</i> (Bloch, 1792)	Saad (2005)
38.		Chlorophthalmidae	<i>Chlorophthalmus agassizi</i> Bonaparte, 1840	Ghanem <i>et al.</i> (2012)
39.		Paralepididae	<i>Sudis hyalina</i> Rafinesque, 1810	Ali <i>et al.</i> (2014)
40.		Synodontidae	<i>Saurida lessepsianus</i> Russell, Golani & Tikochinski, 2015	Anon. (1976) (as <i>S. undosquamis</i>)
41.			<i>Synodus saurus</i> (Linnaeus, 1758)	Ibrahim <i>et al.</i> (2002b)
42.	Beloniformes	Belonidae	<i>Ablennes hians</i> (Valenciennes, 1846)	Alshawy <i>et al.</i> (2019d)
43.			<i>Belone belone</i> (Linnaeus, 1760)	Gruvel (1931)
44.			<i>Tylosurus choram</i> (Ruppel, 1837)	Saad <i>et al.</i> (2002)
45.		Exocoetidae	<i>Cheilopogon heterurus</i> (Rafinesque, 1810)	Saad (2005)
46.			<i>Hirundichthys rondeletii</i> (Valenciennes, 1847)	Sbaihi (1994)
47.			<i>Parexocoetus mento</i> (Valenciennes, 1847)	Ibrahim <i>et al.</i> (2002a), Saad <i>et al.</i> (2002)
48.		Hemiramphidae	<i>Hemiramphus far</i> (Forsskal, 1775)	Gruvel (1931)
49.			<i>Hyporhamphus affinis</i> (Gunther, 1866)	Saad (2005)

50.			<i>Aidablennius sphynx</i> (Valenciennes, 1836)	Hallom <i>et al.</i> (2014)
51.			<i>Blennius ocellaris</i> Linnaeus, 1758	Galiya (2000)
52.			<i>Coryphoblennius galerita</i> (Linnaeus, 1758)	Saad (2005)
53.			<i>Lipophrys trigloides</i> (Valenciennes, 1836)	Saad (2005)
54.			<i>Microlipophrys canevae</i> (Vinciguerra, 1880)	Saad (2005)
55.			<i>Microlipophrys nigriceps</i> (Vinciguerra, 1883)	Saad (2005)
56.			<i>Parablennius incognitus</i> (Bath, 1968)	Saad (2005)
57.	Blenniiformes	Blenniidae	<i>Parablennius rouxi</i> (Cocco, 1833)	Saad (2005)
58.			<i>Parablennius tentacularis</i> (Brunnich, 1768)	Saad (2005)
59.			<i>Parablennius gattorugine</i> Linnaeus, 1758)	Galiya (2000)
60.			<i>Parablennius sanguinolentus</i> (Pallas, 1814)	Galiya (2000)
61.			<i>Petroscirtes ancydon</i> Ruppell, 1835	Saad (2005)
62.			<i>Salaria pavo</i> (Risso, 1810)	Gruvel (1931)
63.			<i>Scartella cristata</i> (Linnaeus, 1758)	Sbaihi (1994)
64.		Clinidae	<i>Clinitrachus argentatus</i> (Risso, 1810)	Sbaihi (1994)
65.		Tripterygiidae	<i>Tripterygion delaisi</i> Cadenat & Blanche, 1970	Sbaihi (1994)
66.			<i>Tripterygion melanurum</i> Guichenot, 1850	Sbaihi (1994)
67.			<i>Tripterygion tripteronotum</i> (Risso, 1810)	Saad (2005)
68.	Callionymiformes	Callionymidae	<i>Callionymus filamentosus</i> Valenciennes, 1837	Ibrahim <i>et al.</i> (2002b) (as <i>L. aurata</i>)
69.			<i>Synchiropus phaeton</i> (Günther, 1861)	Othman & Galiya (2024)
70.			<i>Sphyræna chrysotaenia</i> Klunzinger, 1884	Ibrahim <i>et al.</i> (2002a) Saad (2002)
71.	Carangaria/misc	Sphyrænidae	<i>Sphyræna flavicauda</i> Ruppell, 1838	Saad <i>et al.</i> (2002)
72.			<i>Sphyræna sphyræna</i> (Linnaeus, 1758)	Gruvel (1931)
73.			<i>Sphyræna viridensis</i> Cuvier, 1829	Gruvel (1931)
74.			<i>Alectis alexandrina</i> (Geoffroy Saint-Hilaire, 1817)	Gruvel (1931)
75.			<i>Alepes djedaba</i> (Forsskal, 1775)	Bauchot (1987)
76.			<i>Caranx crysos</i> (Mitchill, 1815)	Sbaihi (1994)
77.			<i>Caranx rhonchus</i> Geoffroy saint-Hilaire, 1817	Anon. (1976)
78.			<i>Lichia amia</i> (Linnaeus, 1758)	Gruvel (1931)
79.			<i>Naucrates ductor</i> (Linnaeus, 1758)	Ali-Basha <i>et al.</i> (2021)
80.			<i>Pseudocaranx dentex</i> (Bloch & Schneider, 1801)	Saad (2005)
81.			<i>Seriola dumerili</i> (Risso, 1810)	Gruvel (1931)
82.	Carangiformes		<i>Seriola fasciata</i> (Bloch, 1793)	Jawad <i>et al.</i> (2015)
83.			<i>Trachinotus ovatus</i> (Linnaeus, 1758)	Gruvel (1931)
84.			<i>Trachurus mediterraneus</i> (Steindachner, 1868)	Sbaihi (1994)
85.			<i>Trachurus picturatus</i> (Bowdich, 1825)	Saad (2005)
86.			<i>Trachurus trachurus</i> (Linnaeus, 1758)	Anon. (1976)
87.		Coryphaenidae	<i>Coryphaena hippurus</i> Linnaeus, 1758	Gruvel (1931)
88.		Echeneidae	<i>Echeneis naucrates</i> Linnaeus, 1758	Gruvel (1931)
89.		Istiophoridae	<i>Tetrapturus belone</i> Rafinesque, 1810	Saad <i>et al.</i> (2024)
90.		Xiphiidae	<i>Xiphias gladius</i> Linnaeus, 1758	Gruvel (1931)
91.	Centrarchiformes	Terapontidae	<i>Pelates quadrilineatus</i> (Bloch, 1790)	Saad (2005)
92.			<i>Terapon puta</i> (Cuvier, 1829)	Saad (2005)
93.		Alosidae	<i>Alosa fallax</i> (Lacepede, 1803)	Gruvel (1931)
94.	Clupeiformes		<i>Sardina pilchardus</i> (Walbaum, 1792)	Saad (2005)
95.		Clupeidae	<i>Sprattus sprattus</i> (Linnaeus, 1758)	Gruvel (1931)
96.			<i>Herklotsichthys punctatus</i> (Ruppell, 1837)	Saad (2005)
97.		Dorosomatidae	<i>Sardinella aurita</i> Valenciennes, 1847	Gruvel (1931)
98.			<i>Sardinella gibbosa</i> (Bleeker, 1849)	Fortič <i>et al.</i> (2023)
99.			<i>Sardinella maderensis</i> (Lowe, 1838)	Gruvel (1931)
100.			<i>Dussumieria elopsoidea</i> Bleeker, 1849	Saad (2002)
101.		Dussumieriidae	<i>Etrumeus golanii</i> DiBattista, Randall & Bowen, 2012	Sbaihi (1994b), Ibrahim <i>et al.</i> (2002b) (as <i>E. teres</i>)
102.		Engraulidae	<i>Engraulis encrasicolus</i> (Linnaeus, 1758)	Gruvel (1931)
103.	Cyprinodontiformes	Aphaniidae	<i>Aphanius dispar dispar</i> (Ruppell, 1829)	Saad (2005)
104.	Dactylopteriformes	Dactylopteridae	<i>Dactylopterus volitans</i> (Linnaeus, 1758)	Gruvel (1931)

105.		Callanthiidae	<i>Callanthias ruber</i> (Rafinesque, 1810)	Saad (2005)
106.		Cepolidae	<i>Cepola macrophthalma</i> (Linnaeus, 1758)	Sbahi (1994)
107.		Haemulidae	<i>Pomadasys incisus</i> (Bowdich, 1825)	Sbahi (1994)
108.			<i>Pomadasys stridens</i> (Forsskal, 1775)	Saad (2005)
109.		Labridae	<i>Acantholabrus palloni</i> (Risso, 1810)	Saad (2005)
110.			<i>Coris julis</i> (Linnaeus, 1758)	Gruvel (1931)
111.			<i>Labrus merula</i> Linnaeus, 1758	Whitehead <i>et al.</i> (1984)
112.			<i>Labrus mixtus</i> Linnaeus, 1758	Foulquié & Dupuy de la Grandrive (2003)
113.			<i>Pteragogus trispilus</i> Randall, 2013	Ibrahim <i>et al.</i> (2019b),
114.			<i>Symphodus bailloni</i> (Valenciennes, 1839)	Khrema <i>et al.</i> (2022)
115.			<i>Symphodus cinereus</i> (Bonnaterre, 1788)	Saad (2005)
116.			<i>Symphodus mediterraneus</i> (Linnaeus, 1758)	Saad (2005)
117.			<i>Symphodus roissali</i> (Risso, 1810)	Saad (2005)
118.			<i>Symphodus tinca</i> (Linnaeus, 1758)	Sbahi (1994)
119.			<i>Thalassoma pavo</i> (Linnaeus, 1758)	Sbahi (1994)
120.			<i>Xyrichtys novacula</i> (Linnaeus, 1758)	Anon. (1976)
121.	Eupercaria/misc	Moronidae	<i>Dicentrarchus labrax</i> (Linnaeus, 1758)	Sbahi (1994)
122.			<i>Dicentrarchus punctatus</i> (Bloch, 1792)	Sbahi (1994)
123.		Nemipteridae	<i>Nemipterus randalli</i> Russell, 1986	Ali <i>et al.</i> (2013)
124.		Scaridae	<i>Scarus ghobban</i> Forsskal, 1775	Ali (2018)
125.			<i>Sparisoma cretense</i> (Linnaeus 1758)	Gruvel (1931)
126.		Sciaenidae	<i>Argyrosomus regius</i> (Asso, 1801)	Saad (2005)
127.			<i>Sciaena umbra</i> Linnaeus, 1758	Gruvel (1931)
128.			<i>Umbrina cirrosa</i> (Linnaeus, 1758)	Gruvel (1931),
129.		Sillaginidae	<i>Sillago suezensis</i> Golani, Fricke & Tikochinski, 2013	Ibrahim <i>et al.</i> (2002b) (as <i>S. sihama</i>)
130.		Sparidae	<i>Acanthopagrus bifasciatus</i> (Forsskal, 1775)	Saad <i>et al.</i> (2022c)
131.			<i>Boops boops</i> (Linnaeus, 1758)	Gruvel (1931)
132.			<i>Centracanthus cirrus</i> Rafinesque, 1810	Sbahi (1994)
133.			<i>Crenidens crenidens</i> (Forsskal, 1775)	Saad <i>et al.</i> (2002)
134.			<i>Dentex dentex</i> (Linnaeus, 1758)	Anon. (1976)
135.			<i>Dentex gibbosus</i> (Rafinesque, 1810)	Anon. (1976)
136.			<i>Dentex macrophthalmus</i> (Bloch, 1791)	Gruvel (1931)
137.			<i>Dentex maroccanus</i> Valenciennes, 1830	Gruvel (1931)
138.			<i>Diplodus annularis</i> (Linnaeus, 1758)	Gruvel (1931)
139.			<i>Diplodus cervinus</i> (Lowe, 1838)	Gruvel (1931)
140.			<i>Diplodus puntazzo</i> (Walbaum, 1792)	Sbahi (1994)
141.			<i>Diplodus sargus</i> (Linnaeus, 1758)	Gruvel (1931)
142.			<i>Diplodus vulgaris</i> (Geoffroy Saint-Hilaire, 1817)	Gruvel (1931)
143.			<i>Evynnis ehrenbergii</i> (Valenciennes, 1830)	Saad (2005)
144.			<i>Lithognathus mormyrus</i> (Linnaeus, 1758)	Gruvel (1931)
145.			<i>Oblada melanura</i> (Linnaeus, 1758)	Gruvel (1931)
146.			<i>Pagellus acarne</i> (Risso, 1827)	Gruvel (1931)
147.			<i>Pagellus bellottii</i> Steindachner, 1882	Sbahi (1994)
148.			<i>Pagellus bogaraveo</i> (Brünnich, 1768)	Saad <i>et al.</i> (2020a)
149.			<i>Pagellus erythrinus</i> (Linnaeus, 1758)	Gruvel (1931)
150.			<i>Pagrus auriga</i> Valenciennes, 1843	Gruvel (1931)
151.			<i>Pagrus caeruleostictus</i> (Valenciennes, 1830)	Sbahi (1994)
152.			<i>Pagrus major</i> (Temminck & Schlegel, 1843)	Saad <i>et al.</i> (2022d)
153.			<i>Pagrus pagrus</i> (Linnaeus, 1758)	Gruvel (1931)
154.			<i>Rhabdosargus hafara</i> (Forsskal, 1775)	Saad (2005)
155.			<i>Rhabdosargus sarba</i> (Forsskal, 1775)	Hamwi & Ali-Basha (2021)
156.			<i>Sarpa salpa</i> (Linnaeus, 1758)	Gruvel (1931)
157.			<i>Sparus aurata</i> Linnaeus, 1758	Gruvel (1931)
158.			<i>Spicara flexuosum</i> Rafinesque, 1810	Sbahi (1994)
159.			<i>Spicara maena</i> (Linnaeus, 1758)	Sbahi (1994)

160.			<i>Spicara smaris</i> (Linnaeus, 1758)	Gruvel (1931)
161.			<i>Spondyliosoma cantharus</i> (Linnaeus, 1758)	Gruvel (1931)
162.		Bregmacerotidae	<i>Bregmaceros nectabanus</i> Whitley, 194	Othman & Galiya (2019)
163.		Gadidae	<i>Gadiculus argenteus</i> Guichenot, 1850	Sbahi (1994)
164.			<i>Micromesistius poutassou</i> (Risso, 1827)	Sbahi (1994)
165.			<i>Coelorinchus caelorhincus</i> (Risso, 1810)	Ali <i>et al.</i> (2016a), Hussein (2023)
166.	Gadiiformes	Macrouridae	<i>Hymenocephalus italicus</i> Giglioli, 1884	Ali (2018)
167.			<i>Nezumia aequalis</i> (Günther, 1878)	Othman & Galiya (2023)
168.		Merlucciidae	<i>Merluccius merluccius</i> (Linnaeus, 1758)	Anon. (1976)
169.			<i>Phycis blennoides</i> (Brünnich, 1768)	Anon. (1976)
170.		Phycidae	<i>Phycis phycis</i> (Linnaeus, 1766)	Anon. (1976)
171.	Gobiesociformes	Gobiesocidae	<i>Lepadogaster candolii</i> Risso 1810	Sbahi (1994)
172.			<i>Lepadogaster lepadogaster</i> (Bonnaterre, 1788)	Sbahi (1994)
173.			<i>Aphia minuta</i> (Risso, 1810)	Saad (2005)
174.			<i>Chromogobius quadrivittatus</i> (Steindachner, 1863)	Saad (2005)
175.			<i>Deltentosteus quadrimaculatus</i> (Valenciennes, 1837)	Saad (2005)
176.			<i>Gobius cobitis</i> Pallas, 1811	Gruvel (1931)
177.			<i>Gobius cruentatus</i> Gmelin, 1789	Saad (2005)
178.	Gobiiformes	Gobiidae	<i>Gobius geniporus</i> Valenciennes, 1837	Saad <i>et al.</i> (2022a)
179.			<i>Gobius niger</i> Linnaeus, 1758	Gruvel (1931)
180.			<i>Gobius paganellus</i> Linnaeus, 1758	Saad (2005)
181.			<i>Lesueurigobius friesii</i> (Malm, 1874)	Saad (2005) ,
182.			<i>Oxyurichthys petersii</i> (Valenciennes, 1837)	Saad (2005)
183.			<i>Silhouettea aegyptia</i> (Chabanaud, 1933)	Sbahi (1994)
184.			<i>Zebrus zebrus</i> (Risso, 1827)	Saad (2005)
185.	Holocentriformes	Holocentridae	<i>Sargocentron rubrum</i> (Forsskal, 1775)	Anon. (1976)
186.			<i>Apogon atradorsatus</i> Heller & Snodgrass, 1903	Alshawy <i>et al.</i> (2019c)
187.			<i>Apogon imberbis</i> (Linnaeus, 1758)	Sbahi (1994)
188.			<i>Apogonichthyoides pharaonis</i> (Bellotti, 1874)	Sbahi & Saad (1992)
189.	Kurtiformes	Apogonidae	<i>Cheilodipterus novemstriatus</i> (Ruppell, 1838)	Ali <i>et al.</i> (2018)
190.			<i>Ostorhinchus fasciatus</i> (White, 1790)	Alshawy <i>et al.</i> (2019a)
191.			<i>Jaydia smithi</i> Kotthaus, 1970	Alshawy <i>et al.</i> (2017)
192.			<i>Jaydia queketti</i> (Gilchrist, 1903)	Alshawy <i>et al.</i> (2019g)
193.	Lampriformes	Lophotidae	<i>Lophotus lacepede</i> Giorna, 1809	Ali <i>et al.</i> (2021)
194.	Lophiiformes	Lophiidae	<i>Lophius budegassa</i> Spinola, 1807	Saad (2005)
195.			<i>Lophius piscatorius</i> Linnaeus, 1758	Saad (2005)
196.			<i>Chelon auratus</i> (Risso, 1810)	Gruvel (1931), Ibrahim <i>et al.</i> (2002b) (as <i>Liza aurata</i>)
197.			<i>Chelon labrosus</i> (Risso, 1827)	Gruvel (1931)
198.	Mugiliformes	Mugilidae	<i>Chelon ramada</i> (Risso, 1827)	Saad (2005) (as <i>Liza ramada</i>)
199.			<i>Chelon saliens</i> (Risso, 1810)	Gruvel (1931)
200.			<i>Liza carinata</i> (Valenciennes, 1836)	Saad (1995)
201.			<i>Mugil cephalus</i> Linnaeus, 1758	Ibrahim <i>et al.</i> (2002b)
202.			<i>Oedalechilus labeo</i> (Cuvier, 1829)	Gruvel (1931)
203.			<i>Mullus barbatus barbatus</i> Linnaeus, 1758	Gruvel (1931)
204.			<i>Mullus surmuletus</i> Linnaeus, 1758	Anon. (1976)
205.			<i>Parupeneus forsskali</i> (Fourmanoir & Gueze, 1976)	Ali <i>et al.</i> (2016b)
206.	Mulliiformes	Mullidae	<i>Parupeneus rubescens</i> (Lacepède, 1801)	Sabour & Masri (2022)
207.			<i>Parupeneus spilurus</i> (Bleeker, 1854)	Baddour <i>et al.</i> (2025)
208.			<i>Upeneus moluccensis</i> (Bleeker, 1855)	Gruvel (1931)
209.			<i>Upeneus pori</i> Ben-Tuvia & Golani, 1989	Sbahi & Saad (1992)
210.	Myctophiformes	Myctophidae	<i>Myctophum punctatum</i> Rafinesque, 1810	Saad (2005)

211.	Ophidiiformes	Ophidiidae	<i>Ophidion barbatum</i> Linnaeus, 1758	Sbaihi (1994)
212.			<i>Ophidion rochei</i> Müller, 1845	Othman <i>et al.</i> (2020)
213.	Ovalentaria/misc	Pomacentridae	<i>Abudefduf vaigiensis</i> (Quoy & Gaimard, 1825)	Saad <i>et al.</i> (2020a)
214.	Perciformes	Anthiadiidae	<i>Anthias anthias</i> (Linnaeus, 1758)	Sbaihi (1994)
215.		Epinephelidae	<i>Epinephelus aeneus</i> (Geoffroy Saint- Hilaire,1817)	Gruvel (1931)
216.			<i>Epinephelus areolatus</i> (Forsskål, 1775)	Hassan & Alchikh Ahmad (2023)
217.			<i>Epinephelus costae</i> (Steindachner, 1878)	Gruvel (1931)
218.			<i>Epinephelus fasciatus</i> (Forsskal, 1775)	Ibrahim <i>et al.</i> (2002b) (as <i>E. alexandrinus</i>)
219.			<i>Epinephelus malabaricus</i> (Bloch & Schneider, 1801)	Ibrahim & Galiya (2004)
220.			<i>Epinephelus marginatus</i> (Lowe, 1834)	Gruvel (1931)
221.			<i>Hyporthodus haifensis</i> (Ben-Tuvia, 1953)	Gruvel (1931) (As <i>Epinephelus haifensis</i>)
222.			<i>Mycteroperca rubra</i> (Bloch, 1793)	Saad (2005)
223.		Peristediidae	<i>Peristedion cataphractum</i> (Linnaeus, 1758)	Ibrahim <i>et al.</i> (2002b)
224.		Platycephalidae	<i>Platycephalus indicus</i> (Linnaeus, 1758)	Saad <i>et al.</i> (2002)
225.		Serranidae	<i>Serranus cabrilla</i> (Linnaeus, 1758)	Sbaihi (1994)
226.			<i>Serranus hepatus</i> (Linnaeus, 1758)	Anon. (1976)
227.			<i>Serranus scriba</i> (Linnaeus, 1758)	Gruvel (1931)
228.		Sebastidae	<i>Helicolenus dactylopterus</i> (Delaroche, 1809)	Ibrahim <i>et al.</i> (2002b)
229.		Scorpaenidae	<i>Parascorpaena mcadamsi</i> (Fowler, 1938)	Ali <i>et al.</i> (2025)
230.			<i>Pterois miles</i> (Bennet, 1828)	Ali <i>et al.</i> (2016a)
231.			<i>Pterois volitans</i> (Linnaeus, 1758)	Fandi <i>et al.</i> (2022)
232.			<i>Scorpaena elongata</i> Cadenat, 1943	Saad (2005)
233.			<i>Scorpaena maderensis</i> Valenciennes, 1833	Saad (2005)
234.			<i>Scorpaena notata</i> Rafinesque, 1810	Saad (2005)
235.			<i>Scorpaena porcus</i> Linnaeus, 1758	Sbaihi (1994)
236.			<i>Scorpaena scrofa</i> Linnaeus, 1758	Gruvel (1931)
237.		Synanceiidae	<i>Synanceia verrucosa</i> Bloch & Schneider, 1801	Ibrahim <i>et al.</i> (2019a)
238.		Trachinidae	<i>Echiichthys vipera</i> (Cuvier, 1829)	Saad (2005)
239.			<i>Trachinus araneus</i> Cuvier, 1829	Gruvel (1931)
240.			<i>Trachinus draco</i> Linnaeus, 1758	Gruvel (1931)
241.			<i>Trachinus radiatus</i> Cuvier, 1829	Saad (2005)
242.	Triglidae	<i>Chelidonichthys cuculus</i> (Linnaeus, 1758)	Anon. (1976)	
243.		<i>Chelidonichthys lastoviza</i> (Bonnaterre, 1788)	Sbaihi (1994), Ibrahim <i>et al.</i> (2002b) (as <i>Trigloporus lastoviza</i>)	
244.		<i>Chelidonichthys lucerna</i> (Linnaeus, 1758)	Anon. (1976), Ibrahim <i>et al.</i> (2002b) (as <i>Trigla lucerna</i>)	
245.		<i>Eutrigla gurnardus</i> (Linnaeus, 1758)	Saad (2005)	
246.		<i>Lepidotrigla cavillone</i> (Lacepede, 1801)	Anon. (1976) Saad (2005)	
247.		<i>Lepidotrigla dieuzeidei</i> Blanc & Hureau, 1973	Gruvel (1931)	
248.		<i>Trigla lyra</i> Linnaeus, 1758	Gruvel (1931)	
249.		Uranoscopidae	<i>Uranoscopus scaber</i> Linnaeus, 1758	Gruvel (1931)

250.	Pleuronectiformes	Bothidae	<i>Arnoglossus kessleri</i> Schmidt, 1915	Saad (2005)
251.			<i>Arnoglossus laterna</i> (Walbaum, 1792)	Ibrahim <i>et al.</i> (2002b)
252.			<i>Bothus podas</i> (Delaroche, 1809)	Sbaihi (1994)
253.		Citharidae	<i>Citharus linguatula</i> (Linnaeus, 1758)	Sbaihi (1994)
254.		Cynoglossidae	<i>Cynoglossus sinusarabici</i> (Chabanaud, 1931)	Saad & Sbaihi (1992)
255.		Scophthalmidae	<i>Symphurus nigrescens</i> Rafinesque, 1810	Saad (2005)
256.			<i>Lepidorhombus boscii</i> (Risso, 1810)	Saad (2005)
257.			<i>Lepidorhombus whiffiagonis</i> (Walbaum, 1792)	Saad (2005)
258.			<i>Scophthalmus rhombus</i> (Linnaeus, 1758)	Sbaihi (1994)
259.			<i>Dicologlossa cuneata</i> (Moreau, 1881)	Ali <i>et al.</i> (2015b)
260.		Soleidae	<i>Microchirus ocellatus</i> (Linnaeus, 1758)	Ibrahim & Galiya (2004)
261.			<i>Pegusa impar</i> (Bennett, 1831)	Ali <i>et al.</i> (2018)
262.			<i>Pegusa lascaris</i> (Risso, 1810)	Sbaihi (1994)
263.			<i>Solea solea</i> (Linnaeus, 1758)	Anon. (1976) (as <i>S. vulgaris</i>)
264.			<i>Synapturichthys kleinii</i> (Risso, 1827)	Ali <i>et al.</i> (2015a)
265.	Scombriformes	Bramidae	<i>Brama brama</i> (Bonnaterre, 1788)	Sbaihi (1994)
266.		Centrolophidae	<i>Schedophilus ovalis</i> (Cuvier, 1833)	Badran & Ghanem (2024)
267.		Pomatomidae	<i>Pomatomus saltatrix</i> (Linnaeus, 1766)	Gruvel (1931)
268.		Scombridae	<i>Auxis rochei rochei</i> (Risso, 1810)	Sbaihi (1994)
269.			<i>Auxis thazard</i> (Lacepède, 1800)	Othman <i>et al.</i> (2023a)
270.			<i>Euthynnus alletteratus</i> (Rafinesque, 1810)	Sbaihi (1994)
271.			<i>Katsuwonus pelamis</i> (Linnaeus, 1758)	Sbaihi (1994)
272.			<i>Orcynopsis unicolor</i> (Geoffroy Saint-Hilaire, 1817)	Saad (2005)
273.			<i>Sarda sarda</i> (Bloch, 1793)	Gruvel (1931)
274.			<i>Scomber colias</i> Gmelin, 1789	Sbaihi (1994) (as <i>S. japonicus</i>)
275.			<i>Scomber indicus</i>	Othman <i>et al.</i> (2023b)
276.			<i>Scomber scombrus</i> Linnaeus, 1758	Gruvel (1931)
277.			<i>Scomberomorus commerson</i> (Lacepède, 1800)	Anon. (1976)
278.			<i>Thunnus obesus</i> (Lowe, 1839)	Hamwi (2024b)
279.			<i>Thunnus thynnus</i> (Linnaeus, 1758)	Hamwi (2024a)
280.		Trichiuridae	<i>Lepidopus caudatus</i> (Euphrasen, 1788)	Saad (2005)
281.			<i>Trichiurus lepturus</i> Linnaeus, 1758	Gruvel (1931)
282.	Siluriformes	Plotosidae	<i>Plotosus lineatus</i> (Thunberg, 1787)	Ali <i>et al.</i> (2015c)
283.	Stomiiformes	Stomiidae	<i>Stomias boa boa</i> (Risso, 1810)	Ali (2018)
284.	Syngnathiformes	Centriscidae	<i>Macroramphosus scolopax</i> (Linnaeus, 1758)	Gruvel (1931)
285.		Fistulariidae	<i>Fistularia commersonii</i> Ruppell, 1838	Galiya (2003)
286.			<i>Fistularia petimba</i> Lacepède, 1803	Hussein <i>et al.</i> (2019)
287.		Syngnathidae	<i>Hippocampus guttulatus</i> Cuvier, 1829	Saad (2005)
288.			<i>Hippocampus hippocampus</i> (Linnaeus, 1758)	Sbaihi (1994)
289.			<i>Syngnathus abaster</i> Risso, 1827	Saad (2005)
290.			<i>Syngnathus acus</i> Linnaeus, 1758	Saad (2005)

291.		Balistidae	<i>Balistes caprisicus</i> Gmelin, 1789	Gruvel (1931), Ibrahim <i>et al.</i> (2002b) (as <i>B. carolinensis</i>)
292.			<i>Odonus niger</i>	Ali <i>et al.</i> (2024)
293.		Molidae	<i>Mola mola</i> (Linnaeus, 1758)	Saad (2005)
294.	Tetraodontiformes	Monacanthidae	<i>Stephanolepis diaspros</i> Fraser-Brunner, 1940	Gruvel (1931)
295.		Ostraciidae	<i>Tetrosomus gibbosus</i> (Linnaeus, 1758)	Saad (2002)
296.		Tetraodontidae	<i>Lagocephalus sceleratus</i> (Gmelin, 1789)	Khalaf <i>et al.</i> (2014)
297.			<i>Lagocephalus guentheri</i> (Miranda Ribeiro, 1915)	Anon. (1976), Ibrahim <i>et al.</i> (2002b) (as <i>L. spadiceus</i>)
298.			<i>Lagocephalus lagocephalus</i> (Linnaeus, 1758)	Alshawy <i>et al.</i> (2019b)
299.			<i>Lagocephalus suezensis</i> Clark & Gohar, 1953)	Saad <i>et al.</i> (2002)
300.			<i>Sphoeroides pachygaster</i> (Muller & Troschel, 1848)	Rahman <i>et al.</i> (2014)
301.			<i>Torquigener flavimaculosus</i> Hardy & Randall, 1983	Sabour <i>et al.</i> (2014)
302.	Trachichthyiformes	Trachichthyidae	<i>Hoplostethus mediterraneus</i> Cuvier, 1829	Gruvel (1931)
303.	Zeiformes	Zeidae	<i>Zeus faber</i> Linnaeus, 1758	Gruvel (1931)

MORSKE RIBE (TELEOSTEI / OSTEICHTHYES) SIRIJE (VZHODNO SREDOZEMSKO MORJE):
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POVZETEK

Avtorji predstavljajo posodobljen seznam morskih rib (*Teleostei* / *Osteichthyes*), ki so bile do danes zabeležene v sirskih morskih vodah. Od 62 ribjih redov, ki so prisotni v oceanih, jih 37 (60%) najdemo v morskih vodah Sirije. Ti redovi obsegajo 303 vrste, 208 rodov in 103 družine. Najštevilčnejša družina je *Sparidae* (32 vrst), sledijo ji *Blenniidae* (14 vrst) in *Carangidae* (13 vrst). Od 303 vrst kostnic iz seznama morskih rib, je bilo v obdobju 2018–2025 zabeleženih 48 vrst, kar predstavlja 7 vrst na leto in 17,1% vseh prej zabeleženih vrst rib. To je znatno več kot je bilo zabeleženo na prejšnjem seznamu vrst (32 vrst, 1,45%) v celotnem obdobju 2005–2018. Podnebne spremembe, drugi okoljski dejavniki in človekove dejavnosti veljajo za najbolj sprejemljive razloge za to.

Ključne besede: levantski bazen, kostnice, sirska obala, lesepske selivke, domorodne vrste

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