

## The status of the fishes described from Sicily by Rafinesque

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### Abstract

Rafinesque described and named 241 species of fishes from Sicily, Mediterranean Sea. The descriptions are reported in four publications printed in the 1810 and 1814. Among these nominal species 30 represent valid species, 130 are recognized as junior synonyms, and the remnant 81 are unplaced, having no status on the Eschmeyer's Catalog of Fishes (ECoF). This study reveals that most of these unplaced species can be synonymized with species that are well known from the area. In particular, it has been discovered that four nominal species predate well established fish name and are declared *nomina oblita*: they are *Blennius juloides*, *Blennius lanceolatus*, *Blennius lupus* and *Gadus gardone*. The corresponding junior synonym, *Parablennius rouxi* (Cocco, 1833), *Gaidropsarus vulgaris* (Cloquet, 1824), and *Gadiculus argenteus* Guichenot, 1850 are declared *nomina protecta*. The genus *Nemochirus* is here regarded as a new synonym of *Trachipterus* Goüan, 1770. Status of the genus *Diepinotus* is given in the appendix.

**Keywords:** *Parablennius rouxi*, *Gaidropsarus vulgaris*, *Gadiculus argenteus*, *Nomina oblita*.

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### Introduction

Constantine Samuel Rafinesque (22 October 1783-18 September 1840) was an eccentric self-taught naturalist, a passionate systematist and namer, an insatiable explorer and collector particular prodigal to describe new taxa, eager to publish his findings to gain priority of discovery of new genera and species. He was also attracted by themes falling well beyond the natural history, such as archaeology, ethnography and literature (Call 1895). Among the zoological subjects of his publications, ichthyology occupies together with malacology a predominant place. Rafinesque described and named 187 genera, of which 72 are valid and 395 species of fishes, of which 66 are valid (Fricke et al. 2019). Despite this significant contribution, Rafinesque was strongly criticized and often ridiculed by many of his contemporaries and for many years after his death. Factors playing a role in this attitude were certainly the way in which he described several fictitious fish from the Mediterranean Sea and North America and the frequent superficiality of his descriptions together with an apparent lack of critical judgment in his approach to taxonomy. Also, he compiled his accounts based on short notes taken on freshly specimens often collected by fishermen and never preserved them as usually performed by most accustomed ichthyologists (Call 1895).

In recent times, the contribution of Rafinesque was reevaluated as names he proposed become assimilated into scientific literature (Wheeler 1988). In the present study, I focused my attention to the fish nominal species named and described from the Mediterranean Sea (actually from the coast of Sicily, Italy) which are presently unrecognized, unplaced and as such ignored in current literature. As reported by the Eschmeyer's Catalog of Fishes (Fricke et al. 2019), there are 81 nominal species described from Sicily which lack a status or in few instances are regarded as doubtful species. A critical examination of the description of these species, the ichthyological literature in the years immediately following the death of Rafinesque, and the present knowledge of fish fauna around the type locality, I was able to attribute most of these unplaced binomials to well-known species, recognizing them as both junior and senior synonyms. In this latter case, Rafinesque's nominal species are here declared *nomina oblita* in order the preserve stability of current usage of specific names.

## Methods

No type material is available for the fish specimens described by Rafinesque. Therefore identification has been based on critical examination of the description and when available of the illustration produced by Rafinesque (1810a; b; 1814a; b).

## Results

Rafinesque described and named 241 species of fishes from Sicily. Among them 159 are reported in *Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia* published in the 1810, 68 in the *Indice d'Ittiologia Siciliana* published later in 1810, and 14 are described in 1814 (Rafinesque 1810a; b; 1814a; b). On the whole, 30 nominal species are currently recognized as valid (Table 1) and 130 are regarded as junior synonyms (Table 2). These allocations leave 81 nominal species unplaced and they represent the subject of the present study. The currently unplaced species are listed alphabetically according to the genus and each account includes pagination and illustration (if produced) as appear in the original publication, status as deduced from the present study, a translated description of the Rafinesque's species account and further comments if needed. The list includes also nominal species that have been already considered in previous works but no conclusions have been derived.

Rafinesque's descriptions are usually very concise and always made of two parts, the first containing a short diagnosis, and a second part labelled "Oss." standing for observations, reporting the vernacular name, additional morphological notes, varieties if noticed, comparisons with similar species and occasionally further comments concerning collection, references to old literature and general comments. Under the species account reported here, the vernacular name is usually omitted as it is often only one of the many dialectal names used by Sicilian fishermen. The translation reported in the present list includes both the diagnosis and the observations. In several instances, Rafinesque based his description on fishes illustrated by Cupani in the third volume of the *Panphyton Siculum*. The book has been digitalized and it is available at the site "DIFFONDO 3.0 - Digitalizzazione e Fruizione del FONdo BeNeDettino delle Biblioteche Riunite "Civica e A. Ursino Recupero". In examining this book each table is composed of two pages and the original handwritten plate number is barely visible on the upper part of the right page. However, I found discrepancy about the plate number reported by Rafinesque and the number present on the digitalized version and I decided to report both of them. The Cupani's species are well drawn and Döderlein wrote about them "rough, but generally quite recognizable and easy to recognize" (Massa 2009).

### *Argentina imperialis* Rafinesque, 1810

*Argentina imperialis* Rafinesque, 1810a:58, Pl. 5 (fig. 2).

= *Argentina sphyraena* Linnaeus, 1758. Argentinidae.

**Description:** Dorsal fin with nine rays, the first shorter, opposed to the anal fin with ten rays; caudal fin forked with base dark; no teeth on jaws. Most similar to *A. sphyraena* but is slightly bigger, it is silvery pale with yellow shadows on the head; eyes large, iris a little golden.

**Comments:** The figure lacks the typical adipose fin present in *Argentina sphyraena* Linnaeus, 1758, but the fin could have been detached after collection.

### *Atherina coroneda* Rafinesque, 1810

*Atherina coroneda* Rafinesque, 1810a:57, Pl. 5 (fig. 4).

= ? *Atherina boyeri* Risso, 1810

**Description:** Silvery; D1, 6; D2, 8; A, 10; teeth absent; the lower jaw more prolonged than the upper one; a

depressed head; caudal fin forked; lateral line straight, but slightly apparent; iris silvery.

**Comments:** Rafinesque said it is most similar to *A. hepsetus* but differs for the colour and the lower number of dorsal rays. This nominal species has not been recognized among the atherinids known from the Mediterranean since Valenciennes, who wrote under the account of *A. sarda*, presently a junior synonym of *A. boyeri* Risso: “Perhaps one may think that this is the species that Rafinesque named but his description fits badly with our species” (Cuvier and Valenciennes 1835: 436). Although fin ray count is below range for *A. boyeri*, of the four nominal species described by Rafinesque, *A. coroneda* is the only one that belong to the genus *Atherina* (Borsieri 1904).

***Atherina lattarina*** Rafinesque, 1810

*Atherina lattarina* Rafinesque, 1810a:57, Pl. 5 (fig. 3). Spelled *Iatarina* on plate.

= unrecognisable atherinomorph.

**Description:** No teeth on jaws; back brownish, with caeruleus shadowing, fin rays count as in *A. coroneda* except A, 8; it is distinguished by the presence of a number of longitudinal brownish stripes and two short red lines on the caudal peduncle; caudal fin forked.

**Comments:** Cuvier and Valenciennes (1835:436) wrote that no fish has been found with these characteristics. According to Borsieri (1904:137) this species does not belong to the genus *Atherina* and Jordan and Hubbs (1919) were unable to allocate both *A. coroneda* and *A. lattarina* as “descriptions contain little that is tangible.”

**Table 1.** List of 30 nominal species described by Rafinesque from Sicily and their present genus allocation, reported as valid in the ECoF (Fricke et al. (2019).

Nominal species	Present allocation	Family
<i>Ammodytes cicerelus</i>	<i>Gymnammodytes cicerelus</i>	Ammodytidae
<i>Bothus imperialis</i>	<i>Arnoglossus imperialis</i>	Bothidae
<i>Callionymus maculatus</i>	<i>Callionymus maculatus</i>	Callionymidae
<i>Carcharias taurus</i>	<i>Carcharias taurus</i>	Odontaspidae
<i>Centracanthus cirrus</i>	<i>Centracanthus cirrus</i>	Sparidae
<i>Chlopsis bicolor</i>	<i>Chlopsis bicolor</i>	Chlopsidae
<i>Cogrus maculatus</i>	<i>Ophichthus maculatus</i>	Ophichthidae
<i>Echelus rufus</i>	<i>Ophichthus rufus</i>	Ophichthidae
<i>Esox imperialis</i>	<i>Tylosurus imperialis</i>	Belonidae
<i>Exocoetus heterurus</i>	<i>Cheilopogon heterurus</i>	Exocoetidae
<i>Galeus melastomus</i>	<i>Galeus melastomus</i>	Pentanchidae
<i>Gonostoma denudata</i>	<i>Gonostoma denudatum</i>	Gonostomatidae
<i>Isurus oxyrinchus</i>	<i>Isurus oxyrinchus</i>	Lamnidae
<i>Lepimphis ruber</i>	<i>Callanthias ruber</i>	Callanthiidae
<i>Luvarus imperialis</i>	<i>Luvarus imperialis</i>	Luvaridae
<i>Monochirus hispidus</i>	<i>Monochirus hispidus</i>	Soleidae
<i>Myctophum punctatum</i>	<i>Myctophum punctatum</i>	Myctophidae
<i>Nerophis maculatus</i>	<i>Nerophis maculatus</i>	Syngnathidae
<i>Nettastoma melanura</i>	<i>Nettastoma melanura</i>	Nettastomatidae
<i>Oxycephas scabrus</i>	<i>Trachyrincus scabrus</i>	Macrouridae
<i>Phycis macrophthalmus</i>	<i>Molva macrophthalma</i>	Lotidae
<i>Salmo cettii</i>	<i>Salmo cettii</i>	Salmonidae
<i>Scomber alletteratus</i>	<i>Euthynnus alletteratus</i>	Scombridae
<i>Scorpaena notata</i>	<i>Scorpaena notata</i>	Scorpaenidae
<i>Sparus gibbosus</i>	<i>Dentex gibbosus</i>	Sparidae
<i>Spicara flexuosa</i>	<i>Spicara flexuosa</i>	Sparidae
<i>Squalus uyato</i>	<i>Centrophorus uyato</i>	Centrophoridae
<i>Sudis hyalina</i>	<i>Sudis hyalina</i>	Paralepididae
<i>Symphurus nigrescens</i>	<i>Symphurus nigrescens</i>	Cynoglossidae
<i>Tetrapturus belone</i>	<i>Tetrapturus belone</i>	Istiophoridae

**Table 2.** List of 130 nominal species and three varieties described by Rafinesque from Sicily, which are regarded as junior synonyms in current literature. Status is established by published work as reported by Fricke et al. (2019).

Nominal species	Present allocation	Family
<i>Alopias macrourus</i>	<i>Alopias vulpinus</i> (Bonnaterre 1788)	Alopiidae
<i>Anguilla vulgaris</i>	<i>Anguilla anguilla</i> (Linnaeus 1758)	Anguillidae
<i>Apterurus fabroni</i>	<i>Mobula mobular</i> (Bonnaterre 1788)	Mobulidae
<i>Argentina aphia</i>	<i>Aphia minuta</i> (Risso 1810)	Gobiidae
<i>Argyctius quadrimaculatus</i>	<i>Trachipterus trachipterus</i> (Gmelin 1789)	Trachipteridae
<i>Blennius fluviatilis</i>	<i>Salaria fluviatilis</i> (Asso y del Rio 1801)	Blenniidae
<i>Blennius gibbosus</i>	<i>Salaria pavo</i> (Risso 1810)	Blenniidae
<i>Blennius gobioides</i>	<i>Salaria pavo</i> (Risso 1810)	Blenniidae
<i>Blennius gonocephalus</i>	<i>Salaria pavo</i> (Risso 1810)	Blenniidae
<i>Blennius mustea</i>	<i>Phycis phycis</i> (Linnaeus 1766)	Phycidae
<i>Bothus diaphanus</i>	<i>Bothus podas</i> (Delaroche 1809)	Bothidae
<i>Bothus rumolo</i>	<i>Bothus podas</i> (Delaroche 1809)	Bothidae
<i>Blennius patuvanus</i>	<i>Parablennius gattorugine</i> (Linnaeus 1758)	Blenniidae
<i>Carcharias lamia</i>	<i>Carcharodon carcharias</i> (Linnaeus 1758)	Lamnidae
<i>Centronotus binotatus</i>	<i>Trachinotus ovatus</i> (Linnaeus 1758)	Carangidae
<i>Centropomus luteus</i>	<i>Perca flavescens</i> (Mitchill 1814)	Percidae
<i>Cephalepis octomaculatus</i>	<i>Regalecus glesne</i> Ascanius 1772	Regalecidae
<i>Cephaletherus maculatus</i>	<i>Raja clavata</i> Linnaeus 1758	Rajidae
<i>Cepola marginata</i>	<i>Cepola macrophthalma</i> (Linnaeus 1758)	Cepolidae
<i>Clupea allectia</i>	<i>Sardinella aurita</i> Valenciennes 1847	Clupeidae
<i>Coryphaena aurata</i>	<i>Coryphaena equiselis</i> Linnaeus 1758	Coryphaenidae
<i>Coryphaena imperialis</i>	<i>Coryphaena hippurus</i> Linnaeus 1758	Coryphaenidae
<i>Coryphaena lineolata</i>	<i>Xyrichtys novacula</i> (Linnaeus 1758)	Labridae
<i>Dalatias nocturnus</i>	? <i>Centrophorus granulosus</i> (Bl. & Schn. 1801)	Dalatiidae
<i>Dalatias sparophagus</i>	<i>Dalatias licha</i> (Bonnaterre 1788)	Dalatiidae
<i>Dalophis bimaculata</i>	<i>Dalophis imberbis</i> (Delaroche 1809)	Ophichthidae
<i>Dasyatis ujo</i>	<i>Dasyatis pastinaca</i> (Linnaeus 1758)	Dasyatidae
<i>Diplanchias nasus</i>	<i>Mola mola</i> (Linnaeus 1758)	Molidae
<i>Dipterodon ruber</i>	<i>Apogon imberbis</i> (Linnaeus 1758)	Apogonidae
<i>Lopharis mediterraneus</i>	<i>Pomatomus saltatrix</i> (Linnaeus 1766)	Pomatomidae
<i>Echelus ciuciara</i>	<i>Ariosoma balearicum</i> (Delaroche 1809)	Congridae
<i>Echelus oxyrinchus</i>	<i>Ophisurus serpens</i> (Linnaeus 1758)	Ophichthidae
<i>Echelus punctatus</i>	<i>Echelus myrus</i> (Linnaeus 1758)	Ophichthidae
<i>Echeneis imperati</i>	<i>Remora remora</i> (Linnaeus 1758)	Echeneidae
<i>Epigonus macrophthalmus</i>	<i>Epigonus telescopus</i> (Risso 1810)	Epigonidae
<i>Etmopterus aculeatus</i>	<i>Etmopterus spinax</i> (Linnaeus 1758)	Etmopteridae
<i>Gaidropsarus mustellaris</i>	<i>Gaidropsarus mediterraneus</i> (Linnaeus 1758)	Lotidae
<i>Galeus vulpecula</i>	<i>Alopias vulpinus</i> (Bonnaterre 1788)	Alopiidae
<i>Gobius gorgione</i>	<i>Gobius niger</i> Linnaeus 1758	Gobiidae
<i>Gobius rubens</i>	? <i>Gobius cruentatus</i> Gmelin 1789	Gobiidae
<i>Gonenion serra</i>	<i>Pomatomus saltatrix</i> (Linnaeus 1766)	Pomatomidae
<i>Helmictis punctatus</i>	<i>Conger conger</i> (Linnaeus 1758)	Congridae
<i>Hippocampus heptagonus</i>	<i>Hippocampus hippocampus</i> (Linnaeus 1758)	Syngnathidae
<i>Isurus spallanzani</i>	<i>Isurus oxyrinchus</i> Rafinesque 1810	Lamnidae
<i>Labrus calioptthalmus</i>	<i>Symphodus tinca</i> (Linnaeus 1758)	Labridae
<i>Labrus cettii</i>	<i>Coris julis</i> (Linnaeus 1758)	Labridae
<i>Labrus chlorophthalmus</i>	<i>Symphodus tinca</i> (Linnaeus 1758)	Labridae
<i>Labrus chrysostoma</i>	<i>Symphodus tinca</i> (Linnaeus 1758)	Labridae
<i>Labrus ciavolus</i>	<i>Spicara maena</i> (Linnaeus 1758)	Sparidae
<i>Labrus donzella</i>	<i>Thalassoma pavo</i> (Linnaeus 1758)	Labridae
<i>Labrus fucii</i>	<i>Symphodus cinereus</i> (Bonnaterre 1788)	Labridae
<i>Labrus imperialis</i>	<i>Thalassoma pavo</i> (Linnaeus 1758)	Labridae
<i>Labrus lappanoides</i>	<i>Symphodus tinca</i> (Linnaeus 1758)	Labridae
<i>Labrus lappanus</i>	<i>Symphodus tinca</i> (Linnaeus 1758)	Labridae
<i>Labrus leo</i>	<i>Thalassoma pavo</i> (Linnaeus 1758)	Labridae

Table 2. Continued.

Nominal species	Present allocation	Family
<i>Labrus luvarus</i>	<i>Labrus mixtus</i> Linnaeus 1758	Labridae
<i>Labrus macrostomus</i>	<i>Symphodus rostratus</i> (Bloch 1791)	Labridae
<i>Labrus marmoratus</i>	<i>Symphodus tinca</i> (Linnaeus 1758)	Labridae
<i>Labrus mendovella</i>	<i>Symphodus ocellatus</i> (Linnaeus 1758)	Labridae
<i>Labrus oculusperdix</i>	<i>Symphodus roissali</i> (Risso 1810)	Labridae
<i>Labrus pitimoides</i>	<i>Symphodus rostratus</i> (Bloch 1791)	Labridae
<i>Labrus pittima</i>	<i>Symphodus mediterraneus</i> (Linnaeus 1758)	Labridae
<i>Labrus verdolidus</i>	<i>Symphodus rostratus</i> (Bloch 1791)	Labridae
<i>Labrus xantherythrus</i>	<i>Sparisoma cretense</i> (Linnaeus 1758)	Labridae
<i>Labrus zittoides</i>	<i>Labrus viridis</i> Linnaeus 1758	Labridae
<i>Labrus zittus</i>	<i>Labrus viridis</i> Linnaeus 1758	Labridae
<i>Leiobatus panduratus</i>	<i>Rhinobatos rhinobatos</i> (Linnaeus 1758)	Rhinobatidae
<i>Lepimphis hippuroides</i>	<i>Coryphaena hippurus</i> Linnaeus 1758	Coryphaenidae
<i>Lepodus saragus</i>	<i>Brama brama</i> (Bonnaterre 1788)	Bramidae
<i>Leptopus peregrinus</i>	<i>Lophotus lacepede</i> Giorna 1809	Lophotidae
<i>Luccijs vorax</i>	<i>Esox lucius</i> Linnaeus 1758	Esocidae
<i>Lutianus crapa</i>	<i>Serranus scriba</i> (Linnaeus 1758)	Serranidae
<i>Lutianus flavus</i>	<i>Symphodus ocellatus</i> (Linnaeus 1758)	Labridae
<i>Lutianus ruber</i>	<i>Symphodus ocellatus</i> (Linnaeus 1758)	Labridae
<i>Merluccius smiridus</i>	<i>Merluccius merluccius</i> (Linnaeus 1758)	Merlucciidae
<i>Mobula auriculata</i>	<i>Mobula mobular</i> (Bonnaterre 1788)	Mobulidae
<i>Mugil cephalus</i> var. <i>cestreo</i>	<i>Mugil cephalus</i> Linnaeus 1758	Mugilidae
<i>Mugil cephalus</i> var. <i>chelone</i>	<i>Mugil cephalus</i> Linnaeus 1758	Mugilidae
<i>Mugil cephalus</i> var. <i>myxone</i>	<i>Mugil cephalus</i> Linnaeus 1758	Mugilidae
<i>Mullus fuscatus</i>	<i>Mullus surmuletus</i> Linnaeus 1758	Mullidae
<i>Muraena punctata</i>	<i>Muraena helena</i> Linnaeus 1758	Muraenidae
<i>Muraena variegata</i>	<i>Muraena helena</i> Linnaeus 1758	Muraenidae
<i>Naucrates fanfarus</i>	<i>Naucrates ductor</i> (Linnaeus 1758)	Carangidae
<i>Nerophis vittata</i>	<i>Nerophis ophidion</i> (Linnaeus 1758)	Syngnathidae
<i>Notognidion scirenga</i>	<i>Polyprion americanus</i> (Bl. and Schn, 1801)	Polyprionidae
<i>Octonus olosteon</i>	<i>Peristedion cataphractum</i> (Linnaeus 1758)	Peristediidae
<i>Onus riali</i>	<i>Merluccius merluccius</i> (Linnaeus 1758)	Merlucciidae
<i>Ophidium fulvescens</i>	<i>Pholis gunnellus</i> (Linnaeus 1758)	Pholidae
<i>Ophidium maculatum</i>	<i>Ophidion barbatum</i> Linnaeus 1758	Ophidiidae
<i>Orthragus luna</i>	<i>Mola mola</i> (Linnaeus 1758)	Molidae
<i>Orthragus oblongus</i>	<i>Ranzania laevis</i> (Pennant 1776)	Molidae
<i>Piescephalus adherens</i>	<i>Lepadogaster lepadogaster</i> (Bonnaterre)	Gobiesocidae
<i>Raja fenestrata</i> [1]	<i>Raja undulata</i> Lacepède 1802	Rajidae
<i>Raja macrorhynchus</i>	<i>Dipturus batis</i> (Linnaeus 1758)	Rajidae
<i>Salmo tirus</i>	<i>Aulopus filamentosus</i> (Bloch 1792)	Aulopidae
<i>Sayris bimaculatus</i>	<i>Scomberesox saurus</i> (Walbaum 1792)	Scomberesocidae
<i>Sayris hians</i>	<i>Scomberesox saurus</i> (Walbaum 1792)	Scomberesocidae
<i>Sayris recurvirostra</i>	<i>Scomberesox saurus</i> (Walbaum 1792)	Scomberesocidae
<i>Sayris serrata</i>	<i>Scomberesox saurus</i> (Walbaum 1792)	Scomberesocidae
<i>Scarcina argyrea</i>	<i>Lepidopus caudatus</i> (Euphrasen 1788)	Trichiuridae
<i>Scomber bisus</i>	<i>Auxis rochei</i> (Risso 1810)	Scomberidae
<i>Scomber macrophthalmus</i>	<i>Scomber colias</i> Gmelin 1789	Scomberidae
<i>Scomber palamitus</i>	<i>Sarda sarda</i> (Bloch 1793)	Scomberidae
<i>Solea buglossa</i>	<i>Pleuronectes solea</i> Linnaeus 1758	Soleidae
<i>Solea rhomboide</i>	<i>Bothus podas</i> (Delaroche 1809)	Bothidae
<i>Sparus adottus</i>	<i>Polyprion americanus</i> (Bloch & Schneider)	Polyprionidae
<i>Sparus minutus</i>	<i>Boops boops</i> (Linnaeus 1758)	Sparidae [2]
<i>Sparus polinymus</i>	<i>Spicara smaris</i> (Linnaeus 1758)	Sparidae

[1] Misspelled *Raja fenestra* in the ECoF (Fricke et al., 2019).

[2] As personal communication by Parenti.

Table 2. Continued.

Nominal species	Present allocation	Family
<i>Sparus scirenga</i>	<i>Mycteroperca rubra</i> (Bloch 1793)	Serranidae
<i>Sparus sparlotus</i>	<i>Diplodus annularis</i> (Linnaeus 1758)	Sparidae
<i>Sparus trifasciatus</i>	<i>Diplodus cervinus</i> (Lowe 1838)	Sparidae
<i>Sparus varatulus</i>	<i>Diplodus sargus</i> (Linnaeus 1758)	Sparidae
<i>Sturio vulgaris</i>	<i>Acipenser sturio</i> Linnaeus 1758	Acipenseridae
<i>Symphodus fulvescens</i>	<i>Symphodus rostratus</i> (Bloch 1791)	Labridae
<i>Tetroras angiova</i>	? <i>Cetorhinus maximus</i> (Gunnerus 1765)	Cetorhinidae
<i>Tiphle hexagonus</i>	<i>Syngnathus tiphle</i> Linnaeus 1758	Syngnathidae
<i>Tirus marmoratus</i>	<i>Synodus saurus</i> (Linnaeus 1758)	Synodontidae
<i>Torpedo immaculata</i>	<i>Torpedo marmorata</i> Risso 1810.	Torpedinidae
<i>Torpedo maculata</i>	<i>Torpedo torpedo</i> (Linnaeus 1758)	Torpedinidae
<i>Torpedo ocellata</i>	<i>Torpedo torpedo</i> (Linnaeus 1758)	Torpedinidae
<i>Torpedo punctata</i>	<i>Torpedo marmorata</i> Risso 1810	Torpedinidae
<i>Torpedo variegata</i>	<i>Torpedo torpedo</i> (Linnaeus 1758)	Torpedinidae
<i>Trachinus vainus</i>	<i>Trachinus radiatus</i> Cuvier 1829	Trachinidae
<i>Trachurus aliciolus</i>	<i>Seriola dumerili</i> (Risso 1810)	Carangidae
<i>Trachurus fasciatus</i>	<i>Seriola dumerili</i> (Risso 1810)	Carangidae
<i>Trachurus imperialis</i>	<i>Pseudocaranx dentex</i> (Bloch & Schneider 1801)	Carangidae
<i>Trachurus saurus</i>	<i>Trachurus trachurus</i> (Linnaeus 1758)	Carangidae
<i>Trigla corvus</i>	<i>Chelidonichthys lucerna</i> (Linnaeus 1758)	Triglidae
<i>Trigla fagianus</i>	<i>Trigla lyra</i> Linnaeus 1758	Triglidae
<i>Trigla gonotus</i>	<i>Lepidotrigla cavillone</i> (Lacépède 1801)	Triglidae
<i>Trisopterus fasciatus</i>	<i>Trisopterus luscus</i> (Linnaeus 1758)	Gadidae
<i>Typhle heptagonus</i>	<i>Syngnathus acus</i> Linnaeus 1758	Syngnathidae
<i>Xypterus imperati</i>	<i>Regalecus glesne</i> Ascanius 1772	Regalecidae

***Atherina nunnata*** Rafinesque, 1810*Atherina nunnata* Rafinesque, 1810a:58.**Description:** Hyaline; D1, 10; D2, 24; A, 24; teeth present; lower jaw protruding.**Comments:** Rafinesque said this is a very common species, often confused with *Argentina aphia* (a gobiid, see Table 2), esteemed as fish food. This species is not an atherinid nor a gobiid. In particular, so high count of D2 and A among Mediterranean Gobiidae has only *Crystallogobius linearis*. However, Mediterranean Gobiidae have 5-7 spines in D1, while in *C. linearis* which is an exception D1 is absent or with only 2-3 spines, so D1 10 can't be gobiid species since differences are far larger than those that could be done only by imperfect description. Family position uncertain; doubtful species.***Balistes annularis*** Rafinesque, 1810*Balistes annularis* Rafinesque, 1810a:16, Pl. 8 (fig. 1).= *Balistes capriscus* Gmelin, 1789. Balistidae.**Description:** Grey-yellowish, first dorsal fin brownish with three rays, lower fin appendiculate at the base with 10 rays; caudal fin lunate; mouth small with eight pointed teeth in each jaw; second dorsal fin falciform with 27 rays; the anal fin has 25 rays; pectoral fin with 10 rays; caudal fin large with 12 rays.**Comments:** Description and illustration leave no doubt that *B. annularis* is a synonym of the only known balistid from the Mediterranean Sea, *Balistes capriscus* Gmelin, 1789. Rafinesque named this species by the presence of a greyish band at the caudal peduncle, a feature often visible in young specimens.***Blennius barbatus*** Rafinesque, 1810*Blennius barbatus* Rafinesque, 1810b:9.

= *Gaidropsarus mediterraneus* (Linnaeus, 1758). Lotidae.

**Comments:** a new name for *Blennius mediterraneus* Lacepède, 1800 and *Gadus mediterraneus* Linnaeus 1758.

***Blennius fasciatus*** Rafinesque, 1810

*Blennius fasciatus* Rafinesque, 1810a:30.

= *Clinitrachus argentatus* (Risso, 1810). Clinidae.

**Description:** A sharp snout without barbels or appendages, body violet with a series of colored spot below the lateral line and irregular vertical bands greyish to reddish brown. Three varieties were observed: 1, brownish bands, rounded dots; 2. Yellowish bands, very small dots; 3. greyish bands, irregular spots.

**Comments:** The genus *Blennius* has been used by Rafinesque to accommodate species belonging not only to Blenniidae but also to Clinidae, Lotidae, Merlucciidae and Phycidae. *Blennius fasciatus* is one of the several nominal species described by Rafinesque which has been synonymised with *Clinitrachus argentatus* as reported by Cuvier and Valenciennes (1836:359). This clinid is the representative of the family in the Mediterranean Sea and it is very common along the Italian coasts. It is mainly and easily distinguished from true blennies by its pointed snout and its dorsal fin with 28-31 spines and 3-4 soft rays deeply notched after the first three rays. Rafinesque never mentioned fin ray count and the identification is mainly based on colour pattern, which albeit highly variable is always characterize by rows of whitish spots on the flanks and between them series of dark dots and blotches.

***Blennius julioides*** Rafinesque, 1810

*Blennius julioides* Rafinesque, 1810a:28. Also appeared in Rafinesque 1810b:11.

= *Parablennius rouxi* (Cocco, 1833). Blenniidae.

**Description:** Blunted head without barbels or appendages, body with beautiful colours and longitudinal violaceous and yellow stripes; ventral fins with two rays joined for most of their length; this fish looks like a little *Labrus julis* but is much more rare than this latter.

**Comments:** Regarded as probable senior synonym of *Parablennius rouxi* (Cocco, 1833) by Fricke et al. (2019), this synonymy has been already recognized by Facciola (1884:29). Although Rafinesque did not mention the presence of the short spinous ray in the ventral fins, there is no doubt that *Blennius julioides* is the species presently known as *Parablennius rouxi* (Cocco, 1833). *Blennius julioides* predates *Parablennius rouxi*, but it has never been used as valid name after 1899 and therefore it can be invalidated by reversal of precedence (Art. 23.9). *Parablennius rouxi* (Cocco, 1833) is here declared *nomen protectum* whereas *Blennius julioides* Rafinesque, 1810 is here regarded as *nomen oblitum*. To give evidence that the conditions of Article 23.9.1.2 are met the following list of 25 works are included: Economidis (1973), Zander and Berg (1984), Zander (1986), Papaconstantinou (1988), Oliveira et al. (1992), Amori et al. (1993), Golani (1996), Bath (1996), Biagi et al. (1998), Kovačić and Miller (2000), Nieder et al. (2000), Quignard and Tomasini (2000), Almada et al. (2001), Louisy (2001), Bilecenoglu et al. (2002), Almada et al. (2005), Saad (2005), Fricke et al. (2007), Patzner et al. (2009), Watson (2009), Lipej and Dulčić (2010), Psomadakis et al. (2012), Levy et al. (2013), Goren (2014) and Artüz and Fricke (2019),

***Blennius labrus*** Rafinesque, 1810

*Blennius labrus* Rafinesque, 1810a:28, Pl. 3 (fig. 2).

= *Gaidropsarus mediterraneus* (Linnaeus, 1758). Lotidae.

**Description:** Head elongated, lower jaw shorter with a barbell on chin, body brownish with two rows of whitish spots below the lateral line, which is straight and no much evident, ventral fin with two joined rays. It is found

as *Blennius lupus* near shore around Palermo.

**Comments:** The figure produced by Rafinesque is quite bad lacking the first dorsal fin and the two barbels on the snout. Redescribed by Costa (1844:17) as *Motella communis*, which incidentally is here regarded as a new synonym, there is no doubt about his taxonomic position. Costa also correctly included in the synonymy *Gadus tricirratus* Bloch, 1786, Pl. 160, *Gadus fuscus* Risso, 1810, *Onus mustellus* Rafinesque, 1810b, and *Phycis punctatus* Rafinesque, 1810. Incidentally, during this study I encountered the nominal species *Motella fusca* Swainson, 1838, which represents an additional new synonym of *G. mediterraneus*.

***Blennius lanceolatus*** Rafinesque, 1814

*Blennius lanceolatus* Rafinesque, 1814a:17.

= *Gaidropsarus vulgaris* (Cloquet, 1824). Lotidae.

**Description:** Description includes the presence of a barbel on chin; body elongated and compressed, spotted with brown, back brown-greenish; caudal fin acute.

**Comments:** The name predates *Gaidropsarus vulgaris* (Cloquet, 1824) and it is here declared as *nomen oblitum*. For the list of works needed for maintaining prevailing usage according the Art. 23.9 of the Code see comments under *Blennius lupus*.

***Blennius longus*** Rafinesque, 1810

*Blennius longus* Rafinesque, 1810a:28. Also appeared in Rafinesque 1810b:11.

= *Clinitrachus argentatus* (Risso, 1810). Clinidae.

**Description and comments:** Rafinesque described this species with elongated head and as the thinner and the longest among the blennid of the area and he said the common name of this fish is “bavosella”, the common name for the single representative of the family Clinidae in the Mediterranean Sea.

***Blennius lupus*** Rafinesque, 1810

*Blennius lupus* Rafinesque, 1810:27, Pl. 3 (fig. 3). Also appeared in Rafinesque 1810:10.

= *Gaidropsarus vulgaris* (Cloquet, 1824). Lotidae.

**Description and comments:** This nominal species represents a senior synonym of *Gaidropsarus vulgaris* (Cloquet 1824). In his brief description, Rafinesque mentioned that the fish is common around Palermo and it has an elongated body, lower jaw shorter, a barbel on chin and two rows of reddish spot on the body which is brown-yellowish; lateral line straight and no much evident. Redescribed and illustrated by Costa as *Motella maculata* (Costa, 1844:39, Pl. xxxviii<sup>bis</sup>), Costa mentions in synonymy *Onos maculata* Risso, 1827, *Onos mustella* Risso, 1827, *Mustela maculata* Cuvier, 1829, and *Motella mediterranea* Bonaparte, 1846, all current synonyms of *Gaidropsarus vulgaris* (Cloquet 1824). The figure produced by Rafinesque lacks some details as highlighted by Costa, but general aspect leaves no doubt about its positive identification. Thus, *Blennius lupus* Rafinesque, 1810 predates *Gaidropsarus vulgaris* (Cloquet 1824) but in accordance with the Article 23.9 of the Code *Blennius lupus* Rafinesque, 1810 is here regarded as *nomen oblitum*, whereas *Gaidropsarus vulgaris* (Cloquet 1824) is treated as *nomen protectum* and as valid name for this species. In order to satisfy this condition as required by the Art. 29.3.1.2 the following list of 25 works is provided: Svetovidov (1973, 1986), Nijssen and de Groot (1974), Šoljan (1975), Kotlyar (1984), Papaconstantinou (1988), Sanches (1989), Cohen in Cohen et al. (1990), Robins et al. (1991), Lanfranco (1996), Arruda (1997), Fricke (1999), Quignard and Tomasini (2000), Bilecenoğlu et al. (2002), O’Sullivan et al. (2004), Fricke et al. (2007), Pais et al. (2008), Lipej and Dulčić (2010), Psomadakis et al. (2012), Francisco et al. (2014), Barros-García et al. (2017), Quigley et al. (2017), Biscoito and Saldanha (2018), Martins and Carneiro (2018), and Artüz and Fricke (2019),



***Blennius nebulosus*** Rafinesque, 1810

*Blennius nebulosus* Rafinesque, 1810a:30. Also appeared in Rafinesque 1810b:10.

= ? *Lipophrys trigloides* (Valenciennes, 1836). Blenniidae.

**Description:** Snout blunted without barbels or appendages; body olive to brown-reddish, variegated and maculated of greyish and yellowish; dorsal fin starts over the head.

**Comments:** Based on fish illustrated by Cupani (1713: pl. 61 [= pl. 9 in Rafinesque]) as *Alauda non cristata*. *Blennius nebulosus* is here regarded as doubtful synonym of *Lipophrys trigloides* (Valenciennes, 1836); if further studies will be able to confirm this synonymy this nominal species should be declared *nomen oblitum*.

***Blennius physophthalmus*** Rafinesque, 1810

*Blennius physophthalmus* Rafinesque, 1810a:26, Pl. 4 (fig. 1). Also appeared in Rafinesque 1810:11.

= *Merluccius merluccius* (Linnaeus, 1758). Merluccidae.

**Description:** Pointed head without barbel or appendages, eyes large, swelled, covered by a pellucid membrane; body whitish without spots; mouth large with many irregular teeth; pelvic fins with six rays.

**Comments:** Risso (1827:200) described this species as *Merlucius [sic] esculentus* and included *physophthalmus* of Rafinesque (as *Phycis physophthalmus*) into synonymy, remarking that Rafinesque forgot the first dorsal fin.

***Blennius sperdottus*** Rafinesque, 1810

*Blennius sperdottus* Rafinesque, 1810a:30.

= *Clinitrachus argentatus* (Risso, 1810). Clinidae.

**Description:** Species characterized by a pointed head without barbels or appendages, presence of two rows of spots on the body and general colour variable from brownish to yellowish, caudal fin yellow or not; ventral fin with two equal rays.

**Comments:** A synonym of *Clinitrachus argentatus* (Risso 1810) as recognized since Cuvier and Valenciennes (1836:359) and Bonaparte (1846:68).

***Blennius variabilis*** Rafinesque, 1810

*Blennius variabilis* Rafinesque, 1810a:29, Pl. 4 (fig. 4).

= *Clinitrachus argentatus* (Risso, 1810). Clinidae.

**Description:** Pointed head without barbels or appendages; body without bands, with a row of colored spots below the lateral line; ventral fins with two rays of equal length. Further observations: the genus *Blennius*, together with *Labrus* and *Sparus* contains the majority of Sicilian species and when a genus contains many species is often difficult to distinguish them. Moreover when varieties are present this difficulty increases; in particular for this species seven colour variations are reported: 1. Olive with golden spots on the head; 2. Yellowish, golden spots, ventral and caudal fin yellow; 3. Darkish, with golden dots; 4. Olive, with black dots among golden dots; 5. Yellowish, large golden spots with black dots over them; 6. Variegated of greyish and brownish, small silvery dots; 7. Brownish, silvery dots, caudal fin yellow.

**Comments:** The illustration produced by Rafinesque is quite bad, but description is based on a fish illustrated with more details by Cupani (1713: pl. 30 [= pl. 64 of Rafinesque]) as *Julis subfusca argenté punctata vulgo Spirda*; clearly a synonym of *Clinitrachus argentatus* (Risso 1810) already recognized by Cuvier and Valenciennes (1836:359).

***Blennius variegatus*** Rafinesque, 1810

*Blennius variegatus* Rafinesque, 1810a:30.

= *Lipophrys pholis* (Linnaeus, 1758). Blenniidae.

**Description:** head without barbels or appendages; body short, ovoid, with vertical bands; dorsal fin starting behind the head with a slight depression in the middle; lateral line curved; ventral fin with two rays.

**Comments:** the species is based on a fish illustrated by Cupani as *alauda non cristata fasciata* (Cupani 1713: pl. 63, left [= pl. 71 of Rafinesque]); a synonym of *Lipophrys pholis* (Linnaeus, 1758) based on the opinion of Valenciennes (Cuvier & Valenciennes 1836:272). Rafinesque overlooked the short spine in the ventral fin and counted only two rays.

***Blennius violaceus*** Rafinesque, 1810

*Blennius violaceus* Rafinesque, 1810b:10.

= *Clinitrachus argentatus* (Risso, 1810). Clinidae.

**Comments:** A new name of *Blennius fasciatus* Rafinesque, 1810.

***Blennius vividus*** Rafinesque, 1810

*Blennius vividus* Rafinesque, 1810a:28, Pl. 4 (fig. 3).

= *Salaria pavo* (Risso, 1810). Blenniidae.

**Description:** Blunted head without barbels or appendages; body olive, dorsal part with short cerulean transversal lines; three rows of cerulean spots, one above and two below the lateral line.

**Comments:** The colour pattern leaves no doubt about the synonymy of this species with *Salaria pavo* (Risso 1810) as already recognized by Risso (1826:235), Cuvier and Valenciennes (1836:243) and Bonaparte (1846:67).

***Bothus diagrammus*** Rafinesque, 1814

*Bothus diagrammus* Rafinesque, 1814a:16

=? *Bothus podas* (Delaroche, 1809). Bothidae.

**Description:** Left side reddish without blotches, right side whitish; two lateral lines, the upper one almost straight, the lower one curved backward; dorsal fin starting in front of the opercle.

***Bothus punctatus*** Rafinesque, 1814

*Bothus punctatus* Rafinesque, 1814a:17.

= ? *Arnoglossus imperialis* (Rafinesque, 1810). Bothidae.

**Description:** Body white reddish spotted with brown in the upper portion; dorsal fin starting over the mouth.

***Bothus tappa*** Rafinesque, 1810

*Bothus tappa* Rafinesque, 1810a:23. Also appeared in Rafinesque 1810b:15.

= ? *Arnoglossus grohmanni* (Bonaparte, 1837). Bothidae.

**Description:** Body depth almost half of the length; dorsal fin starting above the eye; lateral line curved in anterior part; body colour light greyish, almost transparent, without spot; caudal fin rounded.

**Comments:** Regarded as a doubtful synonym of *Arnoglossus grohmanni* by Bonaparte (1846:47).

***Capriscus porcus*** Rafinesque, 1810

*Capriscus porcus* Rafinesque, 1810b:41.

= *Balistes capriscus* Gmelin, 1789. Balistidae.

**Comments:** *Capriscus porcus* is the type species of *Capriscus* Rafinesque, 1810 a junior synonym of *Balistes* Linnaeus, 1758 (Fricke et al., 2019).

*Cerictius macrourus* Rafinesque, 1810

*Ceritius* [*sic*] *macrourus* Rafinesque, 1810a:12 (misspelled *Ceritius* by Rafinesque)

**Description and Comments:** The genus *Cerictius* has been regarded as “doubtless founded on factitious specimens” by Gill (1862:375) and Jordan (1917:78). The genus is placed by Rafinesque among the cartilaginous fishes and it is characterized by the presence of two bone appendages in form of horns over the head; spiracle absent; five branchial slits, two dorsal fins, the second larger. The presence of the two horns, wrote Rafinesque, makes this fish unique and well distinguished from the others. Locally known as Pesce diavolo (= Devil fish), it is possible that Rafinesque based his *Cerictius* on *Mobular mobula*. A second species, *Cerictius caniscus*, is described in the *Indice ittiologico*.

*Cerictius caniscus* Rafinesque, 1810

*Cerictius caniscus* Rafinesque, 1810b:45, 60

**Comments:** See comments under *Cerictius macrourus*.

*Corystion mustazola* Rafinesque, 1810

*Corystion mustazola* Rafinesque, 1810a:24.

= *Trachinus draco* Linnaeus, 1758. Trachinidae.

**Comments:** The genus *Corystion* Rafinesque 1810a:24 is a synonym of *Trachinus* Linnaeus 1758 (Wheeler 1973:449). *Corystion mustazola* is the type species of the genus; it was described having an oblique pattern on flanks, a feature that, among the four species of Trachinidae found in the area, leaves no doubt about its positive identification.

*Corystion striatus* Rafinesque, 1810

*Corystion striatus* Rafinesque, 1810:13

= *Trachinus draco* Linnaeus, 1758. Trachinidae.

**Comments:** An unneeded new name for *Corystion mustazola* Rafinesque 1810.

*Dalophis major* Rafinesque, 1810

*Dalophis major* Rafinesque, 1810b:68

=? *Ophisurus serpens* (Linnaeus, 1758). Ophichthidae.

**Description:** Differs from *D. serpa* for the length which is twice than that of *D. serpa*, the head more slender and the anus closer to the head; body greyish on the back, whitish on venter; spots absent.

*Dalophis serpa* Rafinesque, 1810

*Dalophis serpa* Rafinesque, 1810a:69, Pl. 7 (fig. 3). Also appeared in Rafinesque 1810b:43.

= *Dalophis imberbis* (Delaroche, 1809). Ophichthidae.

**Description:** Dorsal fin starting behind the branchial slit, which is yellowish; all the body except the venter covered by tiny black dots.

*Diodon echinus* Rafinesque, 1810

*Diodon echinus* Rafinesque, 1810b:40, 58.

=? *Diodon hystrix* Linnaeus, 1758. Diodontidae.

**Comments:** Status uncertain (Tortonese 1973:648). Rafinesque described this species differing from *D. hystrix* by the absence of spots on the body and having more slender and densely packed spines than in *hystrix*.

***Echelus auratus*** Rafinesque, 1810

*Echelus auratus* Rafinesque, 1810a:66, Pl. 16 (fig. 3). Also appeared in Rafinesque 1810b:42.

= *Ariosoma balearicum* (Delaroche, 1809). Ophichthidae.

**Description:** Body olive-yellow with golden reflexions on the flanks; jaws pointed, the upper one humpy; pectoral fins elongated, blunt, reddish; dorsal fin and lateral line starting over the pectorals; dorsal and anal fins almost hyaline with a greyish-olive margin. Caudal fin blunt.

***Echelus gruncus*** Rafinesque, 1810

*Echelus gruncus* Rafinesque, 1810a:65, Pl. 17 (fig. 2). Also appeared in Rafinesque 1810b:42.

= ? *Conger conger* (Linnaeus, 1758). Congridae.

**Description:** Olive-grey with a row of longitudinal whitish points anteriorly; jaws very blunt and toothed; pectoral fin roundish; dorsal fin starting over the pectorals and lateral line before them; tail blunt. Additional observations: The head and the belly are a little whitish, dorsal and anal fin with black margins posteriorly; iris silvery.

***Echelus macropterus*** Rafinesque, 1810

*Echelus macropterus* Rafinesque, 1810a:64, Pl. 17 (fig. 3). Also appeared in Rafinesque 1810b:42.

= *Conger conger* (Linnaeus, 1758). Congridae.

**Description:** Body blackish, without spots, jaws obtuse, pectoral fins linear and acute, insertion of the dorsal fin over the end of pectoral fins and lateral line passing over them. Eye large placed over the angle of the mouth as in all congeners.

**Comments:** Described by Risso as *Muraena nigra*, a junior synonym of *C. conger*.

***Echelus microphthalmus*** Rafinesque, 1810

*Echelus microphthalmus* Rafinesque, 1810a:64. Also appeared in Rafinesque 1810b:42, spelled *microphthalmus*.

= *Ophisurus serpens* (Linnaeus, 1758). Ophichthidae.

**Description and comments:** Recognized by Rafinesque as most similar to *E. oxyrinchus* differing only by smaller eye.

***Echelus nebulosus*** Rafinesque, 1810

*Echelus nebulosus* Rafinesque, 1810a:64. Also appeared in Rafinesque 1810b:42.

=? *Gnathophis mystax* (Delaroche, 1809). Congridae.

**Description:** Large eyes, generally greyish, maculated with whitish, whitish ventrally; jaws blunt and toothed; pectoral fins lanceolate, pointed; dorsal fin starting behind them; eye large; dorsal and anal fins bluish towards the caudal fin, which is pointed.

**Comments:** Regarded as a synonym of *Muraena mystax* Delaroche by Bonaparte (1846:38).

***Echelus polyrinus*** Rafinesque, 1810

*Echelus polyrinus* Rafinesque, 1810b:69.

= *Echelus myrus* (Linnaeus, 1758). Ophichthidae.

**Description:** Greyish above; upper jaw longer than lower jaw and with two appendages and ten pores; pectoral fins longer than larger, dorsal fin starting behind them; dorsal and anal fin with black margin; caudal fin almost blunt.

***Echeneis mediterraneus*** Rafinesque, 1810

*Echeneis mediterraneus* Rafinesque, 1810a:35. Also appeared in Rafinesque 1810b:29.

= *Remora remora* (Linnaeus, 1758). Echeneidae.

**Comments:** Rafinesque wrote the specimen have less than 20 ridges on the sucker. *Echeneis naucrates* has 20-24 ridges.

***Esox reticulatus*** Rafinesque, 1814

*Esox reticulatus* Rafinesque, 1814a:18.

= *Synodus saurus* (Linnaeus, 1758). Synodontidae.

**Description and comments:** The genus *Esox* has been used in the past to accommodate 58 nominal species not belonging to Esocidae and in particular Albulidae, Belonidae, Fundulidae, Galaxiidae, Hemiramphidae, Lepisosteidae, Scomberesocidae, Sphyrænaeidae, Stomiidae, and Synodontidae. Rafinesque named his fish based on a black-bluish reticulated colour pattern and characterized by the following morphological traits: mouth large and armed with sharp teeth, whitish fins, 16 rays in the dorsal and the anal fin, and caudal fin forked.

***Gadus grondoni*** Rafinesque, 1810

*Gadus grondoni* Rafinesque, 1810:63.

= *Gadiculus argenteus* Guichenot, 1850. Gadidae.

**Description:** No barbels on chin, body silvery, lower jaw longer than upper jaw, lateral line almost straight, caudal fin sombre; three dorsal fins: D1 with 10 rays, D2 with 20 rays, D3 with 16 rays. It differs from *Gadus carbonarius* Linnaeus by the smaller size and by a lower number of dorsal fin rays.

**COMMENTS:** *Gadus grondoni* is clearly the species later described by Guichenot as *Gadiculus argenteus*. *Gadus carbonarius* Linnaeus [= *Pollachius virens* (Linnaeus 1758)] is not present in the Mediterranean Sea. Rafinesque named this species after the Colonel Grondone from Cagliari (Sardinia, Italy), therefore the specific name should be emended to *grondonei*. *Gadus grondoni* Rafinesque, 1810 has never been used as valid name for this species and it is here declared *nomen oblitum*, whereas *Gadiculus argenteus* Guichenot, 1850 is here declared *nomen protectum* as established by the Art. 29.3 of the Code. In order to meet the conditions needed for this decision to be applied the following list of 25 works is provided: Svetovidov (1973, 1986), Conway (1980), Haedrich and Merrett (1988), Cohen (1990), Cohen et al. (1990), Amori et al. (1990), Costa (1991), Du Buit (1991), Casadevall et al. (1994), Golani (1996), Arruda (1997), Santos et al. (1997), Demestre et al. (2000), Bilecenoğlu et al. (2002), Cabral and Murta (2002), Borges et al. (2003), Filiz and Bilge (2004), Bozzano et al. (2005), Byrkjedal and Høines (2007), Fricke et al. (2007), Bañon et al. (2010), Lipej and Dulčić (2010), Martins and Carneiro (2018), Artüz and Fricke (2019).

***Gobius aterrimus*** Rafinesque, 1814

*Gobius aterrimus* Rafinesque, 1814a:18.

= ? *Gobius niger* Linnaeus, 1758.

**Description:** Completely black, cheek inflated, lateral line straight, caudal fin roundish, first dorsal fin with 5 rays.

**Comments:** Description is very concise and identification is tentative. Gobiidae don't have five rays in the dorsal fin nor a lateral line; however this latter feature was not completely understood by ichthyologists at the time of Rafinesque who were probably misled by the colour pattern along the midlateral line. Also Valenciennes in describing *Gobius niger* wrote: "La ligne laterale paraît marcher en ligne droite le long du milieu du corps; mais elle est si peu marquée qu'on pourrait contester son existence" (Cuvier and Valenciennes 1837:12).

***Holocentrus ruber*** Rafinesque, 1814

*Holocentrus ruber* Rafinesque, 1814a:18

= *Helicolenus dactylopterus* (Delaroche, 1809). Sebastidae.

**Description:** Light reddish, a violaceous blotch on the margin on the posterior opercle; a series of dark blotches on the back; caudal fin truncate; lateral line curved posteriorly.

**Comments:** There are no holocentrid from the coast of Italy; the combinations of the characters, in particular general coloration, the violaceous opercular blotch and the caudal fin lead to the conclusion that this is the sebastid known as the vernacular “Scorpena bastarda”.

***Labrus melanotus*** Rafinesque, 1810

*Labrus melanotus* Rafinesque, 1810a:40, Pl. 12 (fig. 4). Also appeared in Rafinesque 1810b:23.

= Labridae *incertae sedis*.

**Comments:** Described as blackish above, reddish below and caudal fin greyish, dark at its base. Regarded as unidentifiable by Parenti and Randall (2000:62). Labridae.

***Labrus porcus*** Rafinesque, 1810

*Labrus porcus* Rafinesque, 1810a:37. Also appeared in Rafinesque 1810b:23.

=? *Labrus mixtus* Linnaeus, 1758. Labridae.

**Comments:** Regarded as unidentifiable by Parenti and Randall (2000:62). It was described as brown-reddish with dispersed regular caeruleus spots.

***Lepterus fetula*** Rafinesque, 1810

*Lepterus fetula* Rafinesque, 1810a:53.

= *Stromateus fiatola* Linnaeus, 1758. Stromateidae.

**Description:** Blackish above, whitish below, lateral line curved, caudal fin forked, dorsal fin with 2 spine and 30 rays, anal fin 15 rays of which the first is spinous, pectoral fin with 20 rays, and pelvic fin with 6 rays, the first spinous; few small teeth on jaws anteriorly. The vernacular name for this fish in Sicily is *fetula*. The total length is about half a foot.

**Comments:** Rafinesque erected the new genus *Lepterus* described on p.52, which has been regarded as a synonym of *Stromateus* Linnaeus (Jordan 1917:80). The genus is characterized by the following morphological traits: head truncated, scalesless; teeth only in the lower jaw; opercle double, the external spinous, the internal serrated; the dorsal and anal fin base are covered by scales; a single dorsal fin with few spinous rays. Under the species description, the presence of pelvic fins and the size of the specimen suggest that Rafinesque’s description is based on a young individual. Although, fin rays count reported is largely outside the range of *S. fiatola* (D. 42-51; A. 33-38) the only fish species which mostly fits with the description is *S. fiatola*.

***Lutianus erythrophthalmus*** Rafinesque, 1810

*Lutianus erythrophthalmus* Rafinesque, 1810b:67.

= Labridae *incertae sedis*.

**Description and comments:** An unidentifiable labrid according to Parenti and Randall (2000:63). It was described as reddish with several lighter longitudinal lines, dorsal fin with 17 spines and 7 soft rays.

**Genus *Nemochirus*** Rafinesque, 1814

**Description:** Body lanceolate, very compressed, ensiform; forehead diagonal; mouth toothed; longitudinal dorsal

fin without loose rays; caudal fin loose; anal fin absent; pectoral fin filiform and placed under the throat in place of the ventral fin.

**Comments:** The genus is unplaced on the ECoF and, based on the description of the single species included, it is here regarded as a new synonym of *Trachipterus* Gouan, 1770.

*Nemochirus erythropterus* Rafinesque, 1814

*Nemochirus erythropterus* Rafinesque, 1814:100

= *Trachipterus trachipterus* (Gmelin 1789). Trachipteridae.

**Diagnosis:** Body silvery, fins red, tail lunate, with an intermediate mucronate, loose, filiform, very long ray; three dark spots on the flanks.

**Description:** Total length two palms (= 15.4 cm), snout blunt, lower jaw shorter, with acute teeth; eyes small, black; iris large, silvery, circled with red; dorsal fin red, continuous starting over the eye until the caudal fin, which is red; pelvic fins red, filiform.

**Comments:** The description fits also with *Trachipterus arcticus* (Brünnich 1788) but this species has never been recorded from the Italian coasts (Relini and Lanteri 2010) and also its presence in Mediterranean Sea is highly doubtful. Tortonese (1970: 477) regarded the photographic record of *T. arcticus* at the Columbretes Islands, Spain (Planas and Vives 1956) as misidentification of *T. trachipterus*.

*Ophidium chrysocephalum* Rafinesque, 1810

*Ophidium chrysocephalum* Rafinesque, 1810a:19. Also appeared in Rafinesque 1810b:38.

= *Parophidion vassali* (Risso, 1810). Ophidiidae.

**Description:** Chin with four yellowish barbels; head and iris goldish, body yellowish; caudal fin red, blunted.

*Ophidium physocephalum* Rafinesque, 1810

*Ophidium physocephalum* Rafinesque, 1810a:19. Also appeared in Rafinesque 1810b:38.

= *Ophidion barbatum* Linnaeus, 1758. Ophidiidae.

**Description:** Chin with four whitish barbels, head swollen, iris silvery; body white yellowish; dorsal and anal fins black marginated; tail acute blackish.

*Ophidium punctatum* Rafinesque, 1810

*Ophidium punctatum* Rafinesque, 1810a:19, Pl. 15 (fig. 4). Also appeared in Rafinesque 1810b:38.

= *Carapus acus* (Brünnich, 1768). Carapidae.

**Description:** Chin without barbels; head and body hyaline, covered by many blackish and reddish dots; caudal fin very pointed; teeth small.

**Comments:** This species was placed in synonymy of *Notopterus fontanesii* Risso, 1810 by Facciola (1885:65), a synonym of *C. acus*.

*Ostracion agonus* Rafinesque, 1810

*Ostracion agonus* Rafinesque, 1810b:40, 58. Type species: whereabouts unknown.

= Ostracidae *incertae sedis*.

**Description:** Body elliptical, without edges; one dorsal spine directed toward the head and one spine ventrally directed toward the tail, which is rounded.

**Comments:** Rafinesque said he observed this fish at the Museum of Principe di Biscari, Catania, together with *Diodon echinus*, both caught in the gulf of Catania. Rafinesque added the specimen differs from the congeners

for the two strong spines, the colour of the body, sombre, covered by a cuirass with rhomboidal plates which have a protruding line in the middle. No Ostraciidae are present in the Mediterranean Sea. Both *Ostracion agonus* and *Diodon echinus* could have been collected in the eastern Atlantic or in the Indo-Pacific. Thus, *Ostracion agonus* could belong to *Acanthostracion* or *Lactoria* whose species are characterized by pair of prominent spines projecting from in front of eyes and a second pair of spines at lower rear corners of the cuirass. The collection of the Prince Biscari has been donated to the Museum of the Ursino Castle in Catania, Sicily. A search among the material coming from Biscari's collection was unable to find specimens of the two fishes mentioned by Rafinesque.

***Oxystomus hyalinus*** Rafinesque, 1810

*Oxystomus hyalinus* Rafinesque, 1810b:49, 62.

= Notacanthidae *incertae sedis*.

**Description:** Body strongly compressed and very long, head small and pointed, jaws toothed, lower jaw longer than upper jaw, body hyaline, lateral line barely visible, no fins.

**Comments:** Based on a post-metamorphic *Serrivomer* according to McCosker (1977:82) but no Serrivomeridae are present in the Mediterranean Sea. In Nemichthyidae according to Tortonese (1970:350). Questionably in the genus *Tilurus* K  lliker, 1853 (Smith 1989:956). Notacanthidae.

***Oxyurus vermiformis*** Rafinesque, 1810

*Oxyurus vermiformis* Rafinesque, 1810a:19. Also appeared in Rafinesque 1810b:37.

= Congridae *incertae sedis*.

**Description:** One dorsal fin and one anal fin only; tail very pointed; body yellowish, almost cylindrical.

**Comments:** Rafinesque wrote that the genus *Oxyurus* and *Leptocephalus* form a natural assemblage characterized by the presence of only two fins. Based on leptocephalus, probably of *Conger* (Castle 1969:9).

***Perca nebulosa*** Rafinesque, 1814

*Perca nebulosa* Rafinesque, 1814a:18.

= *Umbrina cirrosa* (Linnaeus, 1758)

**Description:** Body brownish variegated and reddish; lower jaw shorter with a small barbel; nape keeled; lateral line almost straight; caudal fin truncate; first dorsal fin with 10 rays.

**Comments:** All morphological traits fit with the shi drum *Umbrina cirrosa*.

***Phycis agrammus*** Rafinesque, 1814

*Phycis agrammus* Rafinesque, 1814a:17.

**Description:** Brown-reddish, two longitudinal row of whitish spots; first dorsal fin with 20 rays; ventral fin with 5 rays of different length; no barbels on chin; two appendices on the nostrils.

**Comments:** An unidentifiable gadiform.

***Phycis fuscus*** Rafinesque, 1810

*Phycis fuscus* Rafinesque, 1810b:67.

= ? *Gaidropsarus mediterraneus* (Linnaeus, 1758). Lotidae.

**Description:** Olive sombre; head pointed, upper jaw with two barbels, one short barbel on chin; pelvic fins with four rays; first dorsal fin with 70 rays; caudal fin rounded.

**Comments:** doubtful synonymy is related to the dorsal fin ray count, which is out of range for *G. mediterraneus*.



***Phycis lepus*** Rafinesque, 1810

*Phycis lepus* Rafinesque, 1810b:11.

= *Phycis phycis* (Linnaeus, 1766). Phycidae.

**Comments:** A new name for *Blennius phycis* Linnaeus, 1766.

***Phycis macronemus*** Rafinesque, 1814

*Phycis macronemus* Rafinesque, 1814a:16.

= *Phycis blennoides* (Brünnich, 1768). Phycidae.

**Description:** White reddish; caudal fin obtuse blackish; first dorsal fin with ten rays and blackish at the margin, the second dorsal has two blackish spots; pectorals yellow; ventral fins white as long as the body with two rays of different length; a barbell on chin; lateral line curved.

***Phycis punctatus*** Rafinesque, 1810

*Phycis punctatus* Rafinesque, 1810a:26. Also appeared in Rafinesque 1810b:12.

= *Gaidropsarus mediterraneus* (Linnaeus, 1758). Lotidae.

**Description:** Body elongated, row of dots on flanks, two barbell above the upper jaw, ventral fin with two rays; caudal fin rounded.

**Comments:** Imperfectly described with ventrals having only two rays, the description is based on a fish illustrated by Cupani (1713: pl. 72, left [not pl. 108 as reported by Rafinesque]) as *Mustella sicula*: the figure show a barbel also on chin a detail not mentioned by Rafinesque. Costa (1844) recognized this nominal species as a synonym of his *Motella communis*. See comments under *Blennius labrus*.

***Pterurus flexuosus*** Rafinesque, 1810

*Pterurus flexuosus* Rafinesque, 1810b:43, 59.

= *Dalophis imberbis* (Delaroche, 1809). Ophichthidae.

**Description:** Jaws pointed, the upper one prolonged; body flexuous, hyaline, caudal fin pointed.

**Comments:** Status based on synonymy of *Pterurus* with *Dalophis* (McCosker 1977:71). *Pterurus flexuosus* is the type species and *Dalophis imberbis* is the only species of the genus present in the Mediterranean Sea.

***Raja ciodera*** Rafinesque, 1810

*Raja ciodera* Rafinesque, 1810a:15. Also appeared in Rafinesque 1810b:47.

= *Rhinobatos rhinobatos* (Linnaeus, 1758). Rajidae.

**Description:** Shape of body narrow and elongated; smooth; teeth pointed; brown-reddish above, white below; head pointed, obtuse; nostrils with appendixes.

***Raja pigara*** Rafinesque, 1810

*Raja pigara* Rafinesque, 1810a:15. Also appeared in Rafinesque 1810b:47.

= ? *Raja montagui* Fowler, 1910. Rajidae.

**Description:** Teeth rounded; grey, olive and maculated above; whitish below; snout obtuse, caudal fin as long as the body with three orders of spinous tubercle above.

**Comments:** On the basis of the shape of the teeth *Raja pigara* should represent a young specimen *Raja montagui* Fowler, 1910. The species appears as doubtful synonym of *Raja maculata* Montagu in Bonaparte (1850:13), a true synonym of *R. maculata* Montagu in Facciola (1884:147), therefore predating *Raja montagui* Fowler, 1910. *Raja pigara* is rare along the coast of Italy, but it is more abundant in Sicily.

***Scarcina imperialis*** Rafinesque, 1810

*Scarcina imperialis* Rafinesque, 1810a:21. Also appeared in Rafinesque 1810:39.

= ? *Trachipterus trachipterus* (Gmelin, 1789). Trachipteridae.

**Description:** Snout roundish, jaws equal; a longitudinal caeruleus band; dorsal fin starting over the pectorals; caudal fin slightly forked. Additional observations: the name *imperiale* is attributed to rare and extraordinary fishes and this is the case, to distinguish them from other with which they have similarities; it is smaller than *Scarcina argyrea* (= *Lepidopus caudatus*) and it has four teeth in each jaw.

**Comments:** The genus *Scarcina* is a synonym of *Lepidopus* Goüan, 1770 (Fricke et al., 2019). It is diagnosed by having highly compressed body, dorsal fin very long, anal fin very short and far from the anus, caudal fin separated, and teeth evident on jaws. *Scarcina imperialis* is described by having a roundish mouth and jaws equal as in *S. quadrimaculata*.

***Scarcina punctata*** Rafinesque, 1810

*Scarcina punctata* Rafinesque, 1810a:20. Also appeared in Rafinesque 1810b:38.

= *Lepidopus caudatus* (Euphrasen, 1788). Trichiuridae.

**Description:** Lower jaw prolonged, body whitish with a series of brownish spots on flanks; dorsal fin starting over the head; caudal fin forked.

**Comments:** Rafinesque based this species on a fish illustrated by Cupani as *Serpens marinus taeniae specie* (Cupani 1713: pl 77 [= pl. 112 of Rafinesque]). Examination of the figure leaves no doubts about the positive identification of *S. punctata* as a synonym of *Lepidopus caudatus*.

***Scarcina quadrimaculata*** Rafinesque, 1810

*Scarcina quadrimaculata* Rafinesque, 1810a:20. Also appeared in Rafinesque 1810b:39.

= *Trachipterus trachipterus* (Gmelin, 1789). Trachipteridae.

**Description:** Snout roundish; jaws almost equal; whitish silvery with two brownish spots on each flank; dorsal fin starting over the pectorals; caudal fin almost lunate, with four rays. Additional observations: reaches two feet of length; the lower jaw possesses several teeth.

**Comment:** Based on a fish illustrated by Cupani as *Tenia Aristotelis Rondeleti* (Cupani 1713: pl.65 [= pl. 50 of Rafinesque]). The fish is characterized by laterally very compressed body mentioned in the diagnosis of the and examination of the figure lead to the conclusion that *Scarcina quadrimaculata* do not belong to *Lepidopus* but it is a junior synonym of *Trachipterus trachipterus*. Erroneously placed in Trichiuridae in the ECoF (Fricke et al., 2019).

***Scophthalmus diurus*** Rafinesque, 1810

*Scophthalmus diurus* Rafinesque, 1810b:14, 53.

= ? *Platichthys flesus* (Linnaeus, 1758). Scophthalmidae.

**Description:** Caudal fin deeply forked; body rhomboidal as large as long, sombre on the left side with reddish brown blotches, lateral line bending, dorsal fin starting over the eyes.

**Comments:** Based on *Alia passeris* species of Rondelet lib. II cap. 8. Rafinesque was wrong in describing the caudal fin deeply forked: perhaps it was based on a damaged specimen.

***Siphostoma viridis*** Rafinesque, 1810

*Siphostoma viridis* Rafinesque, 1810b:37, 56

= *Syngnathus typhle* Linnaeus, 1758. Syngnathidae.

**Description:** Olive-green, with a row of roundish whitish dots on flanks, yellowish below; body with 53 rings, dorsal fin with 35 rays; mouth very compressed; caudal fin cuneiform.

*Solea arnoglossa* Rafinesque, 1810

*Solea arnoglossa* Rafinesque, 1810b:14, 52.

= *Arnoglossus latera* (Walbaum 1792). Soleidae.

**Description:** Caudal fin almost pointed, body elongated, whitish; the length just about three times the depth, dorsal fin insertion over the eyes; lateral line almost straight; scales tiny.

**Comments:** Based on the *Arnoglossus* of Rondelet, lib. II, cap. 14 (1554:324), described and named by Walbaum (1792:121) as *Pleuronectes latera*, by Bloch and Schneider (1801:157) as *Pleuronectes arnoglossus* and by Shaw (1803:309) as *Pleuronectes diaphanous*.

*Solea cithara* Rafinesque, 1810

*Solea cithara* Rafinesque, 1810b:14, 52.

= *Citharus linguatula* (Linnaeus, 1758). Citharidae.

**Description:** Tail straight; body lanceolate, the length three times the depth, dorsal fin insertion over the eyes; lateral line bending; scales large, rhomboidal, smooth; teeth on jaws.

**Comments:** Based on Rondelet, lib. I, cap. 5; Spinola (1807:374) described with great details this fish as *Pleuronectes citharus*, a junior synonym of *Citharus linguatula* (Linnaeus 1758).

*Solea cynoglossa* Rafinesque, 1810

*Solea cynoglossa* Rafinesque, 1810b:14, 53.

= *Microchirus variegatus* (Donovan, 1808). Soleidae.

**Description:** Tail straight; body oval, the length two times the depth, body sombre, dorsal fin insertion over the eyes of which the inferior is behind the superior one; lateral line bending.

**Comments:** Based on *Cynoglossus* of Rondelet Lib. 11 cap. 13, fig.

*Sparus auratoides* Rafinesque, 1810

*Sparus auratoides* Rafinesque, 1810a:51. Also appeared in Rafinesque 1810b:25.

= *Sparus aurata* Linnaeus, 1758). Sparidae.

**Description:** Silvery, opercle reddish, dorsal and caudal fins red-brownish; caudal fin forked with black margin; lateral line bending posteriorly. Additional observations: this species differs from *S. aurata* because it lacks both longitudinal lines and black spot on the tail.

**Comments:** A synonym of *Sparus aurata* Linnaeus 1758) (Parenti 2019).

*Sparus dubius* Rafinesque, 1810

*Sparus dubius* Rafinesque, 1810b:68.

= ? *Diplodus annularis* (Linnaeus, 1758). Sparidae.

**Description:** Caudal fin forked with a dark circle at its base; lateral line almost straight; opercle arches, silvery caeruleus with longitudinal caeruleus stripes; dorsal fin with 12 spines and 10 soft rays; eyes small; it differs from *S. oblada* Linnaeus by the number of spines, whereas it has the general aspect of *S. salpa*.

**Comments:** A doubtful synonym of *Diplodus annularis* (Linnaeus, 1758).

***Sparus gaiolus*** Rafinesque, 1810

*Sparus gaiolus* Rafinesque, 1810a:47. Also appeared in Rafinesque 1810b:25 as *Sparus gajolus*.

= *Lithognathus mormyrus* (Linnaeus, 1758). Sparidae.

**Comments:** The only leiognathid fish registered in the Mediterranean is *Equulites klunzingeri*, an immigrant through the Suez Canal. Also, the construction started well after the times of Rafinesque. This nominal species is clearly a synonym of *Lithognathus mormyrus* (Linnaeus, 1758): it was described having several transversal dark stripes alternatively large and narrow on dorsal part of the body. Rafinesque added the fins are red-brownish, ventral fins almost yellowish and it is most similar to *S. sparus mormyrus*.

***Sparus mupa*** Rafinesque, 1810

*Sparus mupa* Rafinesque, 1810a:48. Also appeared in Rafinesque 1810b:25.

= ? *Pagellus bogaraveo* (Brünnich, 1768). Sparidae.

**Description:** Pale reddish above, silvery below; opercle arched; a single row of small, acute teeth on jaw; pectorals long; lateral line bending posteriorly; caudal fin forked.

**Comments:** Based on colour pattern a probable synonym of *Pagellus bogaraveo* (Brünnich 1768), although Rafinesque did not mention the presence of the typical black spot at the front end of the lateral line.

***Sparus ophthalmicus*** Rafinesque, 1810

*Sparus ophthalmicus* Rafinesque, 1810a:48. Also appeared in Rafinesque 1810b:26.

= *Oblada melanura* (Linnaeus, 1758). Sparidae.

**Description:** A series of longitudinal dark stripes; lateral line bending; dorsal fin with 10 spines, no circled caudal peduncle; caudal fin forked.

**Comments:** Rafinesque said it is very similar to *S. oblada* but differs for the presence of a black circle at caudal fin base and for having only seven spines in the dorsal fin. This is clearly erroneous since there are no sparids with seven spines. Synonymy established by Parenti (2019).

***Sparus sparulus*** Rafinesque, 1810

*Sparus sparulus* Rafinesque, 1810a:48. Also appeared in Rafinesque 1810b:25.

= *Diplodus annularis* (Linnaeus, 1758). Sparidae.

**Description:** Silvery with short dark longitudinal lines; opercle arched; a sombre circle at the base of the caudal fin; lateral line almost straight. Additional observations: this is the smallest among the Sicilian sparoides being no more than three inches, and for this reason it is named *Sparaglione*; caudal fin truncate, roughly reddish brown; ventral and anal fin yellowish; back olive-coloured.

**Comments:** Recognized as synonym of *Diplodus annularis* by Cuvier and Valenciennes (1830:44); synonymy confirmed by Parenti (2019).

***Sparus spicaroides*** Rafinesque, 1810

*Sparus spicaroides* Rafinesque, 1810b:68.

= *Spicara maena* (Linnaeus, 1758). Sparidae.

**Description:** Caudal fin forked, lateral line straight, opercle angled, back reddish; flank with few longitudinal yellowish lines, dorsal fin with 11 spines and 10 soft rays. Additional observations: it is smaller than *S. spicara*, jaws with small teeth, only the upper jaw protrusible, a pointed scale is present between the pelvic fins, dorsal, pectoral and anal fin are yellowish as in the *S. massiliensis* of Lacepède, whereas the belly with the pelvic and the anal *Spicara maena* fin is whitish; anal fin with 3 spines and 9 soft rays.

**Comments:** Ray fin count and colour pattern are those of *Spicara maena*. The typical dark blotch on the flank, which characterize the species of *Spicara* but it is not mentioned by Rafinesque, is sometimes less evident in this species.

***Sparus zipolus*** Rafinesque, 1810

*Sparus zipolus* Rafinesque, 1810a:50. Also appeared in Rafinesque 1810b:26 as *Sparus zippolus*.

= *Spondyliosoma cantharus* (Linnaeus, 1758). Sparidae.

**Description:** Striped longitudinally with red-brownish, olive and greyish-silvery; lateral line curved; caudal fin forked. Further observations: it is called *tanuta* and its back is olive, head brown-reddish, iris white, dorsal and caudal fin almost brown-reddish, pectorals reddish; teeth large and pointed.

**Comments:** Synonymy established by Parenti (2019).

***Strinsia tinca*** Rafinesque, 1810

*Strinsia tinca* Rafinesque, 1810b:52.

= Macrouridae *incertae sedis*.

**Comments:** The neotype designation by Torchio was regarded as invalid (see Cohen and Torchio 1964). Bonaparte (1846:42) regarded as a doubtful synonym of *Pteridium ater* Swainson, 1839:302. As a *nomen dubium*, possibly a macrourid according to Cohen and Torchio (1963).

***Syngnathus punctatus*** Rafinesque, 1810

*Syngnathus punctatus* Rafinesque, 1810b:37, 57.

= Syngnathidae *incertae sedis*.

**Comments:** Briefly described as a *Syngnathus* with a recurved mouth, a series of small light blue spot on the body, and dorsal fin very long. Unidentifiable; no diagnostic features included.

***Trachurus aguilus*** Rafinesque, 1810

*Trachurus aguilus* Rafinesque, 1810:42, Pl. 11 (fig. 3). Also appeared in Rafinesque 1810:20.

= *Argyrosomus regius* (Asso y del Rio, 1801). Sciaenidae.

**Description and comments:** Status uncertain in Carangidae according to Fricke et al. (2019). Renamed *Seriola rafinesquii* by Risso (1827:425) but the fish described and illustrated by Rafinesque do not fit with a species of *Seriola*: first dorsal more elevated than second dorsal and with 10 spines *vs* first dorsal low with eight spines in *Seriola*; anterior part of the second dorsal not elevated *vs* second dorsal distinctly falciform; anal fin short not falciform with 9 rays *vs* anal fin falciform with 20-22 rays, caudal fin truncate, bordered with black *vs* caudal fin deeply forked greyish to yellowish. Therefore, I regard *Trachurus aguilus* as a junior synonym of *Argyrosomus regius* (Asso, 1801).

***Uranoscopus cocius*** Rafinesque, 1810

*Uranoscopus cocius* Rafinesque, 1810a:24. Also appeared in Rafinesque 1810b:13.

= *Uranoscopus scaber* Linnaeus, 1758. Uranoscopidae.

**DESCRIPTION:** Back without spinous scales, opercle with two spines of different size; first dorsal fin with 6 spines and completely black, pectorals brown reddish, anal fin sombre, belly striated longitudinally, tail long and cuneiform. Additional observations: *U. scaber* of Linnaeus differs from this species because it has the first dorsal fin with four rays and only partially black, the anal fin black, a different colour of the body and the other fins. My species has the back sombre with longitudinal narrow stripes more pale, the ventral fins reddish and

the caudal fin sombre.

**Comments:** A single species of the genus *Uranoscopus* is present in Sicily marine waters.

**Appendix:** Status of the genus *Diepinotus* Rafinesque, 1814

The genus *Diepinotus* is recorded as *nomen nudum* by the ECoF (Fricke et al. 2019) based on Rafinesque (1815:91) and placed in the synonymy of *Trichiurus* Linnaeus 1758. However *Diepinotus* appeared early in Rafinesque (1814:102) in an article on the new genus *Nemochirus*. Rafinesque wrote: “Il genere *Regalecus* differisce dal *Nemochirus* perché ha l’ala dorsale unita alla caudale e provvista anteriormente di aculei sciolti, oltre le ali pettorali radiate, ed il mio N.G. *Diepinotus* (*Regalecus lanceolatus* Lacep.) perché ha due ale dorsali, senza aculei sciolti e la ali pettorali radiate”. Therefore, *Diepinotus* is briefly diagnosed and the type species *Regalecus lanceolatus* Lacepède is indicated. *Regalecus lanceolatus* is a gobiid fish (Bauchot 1970:47) and a synonym of *Synechogobius hasta* (Temminck & Schlegel, 1845) (now moved to *Acanthogobius*) according to Bleeker (1873:129) and Weber and de Beaufort (1911:335). I conclude that *Diepinotus* Rafinesque, 1814 is a new synonym of *Acanthogobius* Gill, 1859.

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