

A Study on the Fishes of Edremit Bay (Aegean Sea)

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Abstract: This investigation was carried out for the determination of fish species living in Edremit Bay (Aegean Sea). Morphometric and meristic characters of fishes caught by trawl and various nets from five stations determined in Edremit Bay in the years 1996-1997 were examined. Some morphological and ecological properties, local names and distributions to stations of 68 determined species are given. These species are new records for Edremit Bay of Aegean Sea.

Key Words: Fish species, Systematic, Edremit Bay.

Edremit Körfezi (Ege Denizi) Balıkları Üzerine Bir Araştırma

Özet: Bu araştırma Edremit Körfezi'nde yaşayan balık türlerini belirlemek amacıyla yapılmıştır. 1996-1997 yıllarında körfez içinde beş istasyondan trol ve çeşitli ağlar ile yakalanan balıkların morfolojik ve meristik karakterleri incelenmiş ve saptanan 68 türün bazı morfolojik ve ekolojik özellikleri, yerel isimleri ile istasyonlara göre dağılımları verilmiştir. Türler Ege Denizi'nin Edremit Körfezi için yeni kayıttır.

Anahtar Sözcükler: Balık türleri, Sistematik, Edremit Körfezi.

Introduction

Taxonomic investigations for the determination of fish fauna of the Turkish seas were begun by foreign scientists at the beginning of the twentieth century. Tortonese listed 300 species (1), Papaconstantinou & Tsimenids (2) listed 33 species, and Papaconstantinou (3) listed 447 species for the Aegean Sea.

Slastenenko listed 200 species for the Sea Marmara and 189 species for the Black Sea. Tortonese reported 540 fish species in whole of the Mediterranean. Ben Tuvia and Demetropoulos & Neocleous gave a list of fishes for the Cypriot area (1). Whitehead et al. (4) reported 1256 species for the north-eastern Atlantic and the Mediterranean. Fischer et al. (5) reported 118 fish family for Mediterranean Sea.

Golani (6) listed 405 fish species belonging to 125 families, 32 of which were new records for the eastern Levant.

Some taxonomic investigations carried out by Turkish scientists follow:

Akşiray (7,8) made a description key of 360 fish species from the Turkish Seas, and later listed 454 fish species. Geldiay (9) reported 295 species for the Aegean Sea. Mater & Kaya (10) investigated systematic and

morphometric characters of the Gobidae in İzmir Bay. Kaya & Mater (11) reported three new gobies for the Turkish seas. Kaya et al. (12) reported a new fish species first seen along the coast of the Turkish Aegean Sea. Ünsal (13) investigated six species belonging to Triglidae in the Marmara Sea. Ünsal & Nuran (14) studied three species belonging to Bothidae in Sea of Marmara. Başusta (15) gave a list of fish species for İskenderun Bay.

Edremit Bay, in the northern Aegean Sea, is a place where two currents meet and it is rich in plankton because of upwelling. In addition, because the bottoms are suitable for trawl fishing and the area is fed by waters rich in nutrient from erosion through the vicinity of the bay and the Black Sea, there is a rich bottom fish fauna. With these facilities, Edremit Bay has a high potential for sea food, especially fish (16, 17). In spite of the fact that many fish fauna investigations have been carried out along the coasts of Turkey, no such investigation has been found for Edremit Bay. For these reasons, we hope that our investigations will be of use to Turkish fisheries.

Material and Methods

Pelagic and benthic samples were collected by trawl and local equipment at the following stations: Kız Adası,

Bozburun, Karaburun, Akçay Limanı and Kemer Koyu (Figure 1).

The obtained samples were washed up with fresh water immediately; after identification, they were kept in 70% alcohol or 4% formaldehyde solution and morphometric measurements were taken with a dial caliper of 0.05 mm accuracy and all of meristic characters were determined under binocular microscope.

Results

A total of 68 species belonging to 2 classes, 12 orders, 38 families, and 47 genera were collected.

Systematic categories are given according to Whitehead et al. (4) and Golani (6).

Phylum: Chordata

Subphylum: Vertebrata

Superclass: Gnathostomata

Class: Selachii (Chondrichthyes)

Order: Lamniformes

SCYLIORHINIDAE

***Scyliorhinus canicula* (Linnaeus, 1758)**

Common synonyms: None.

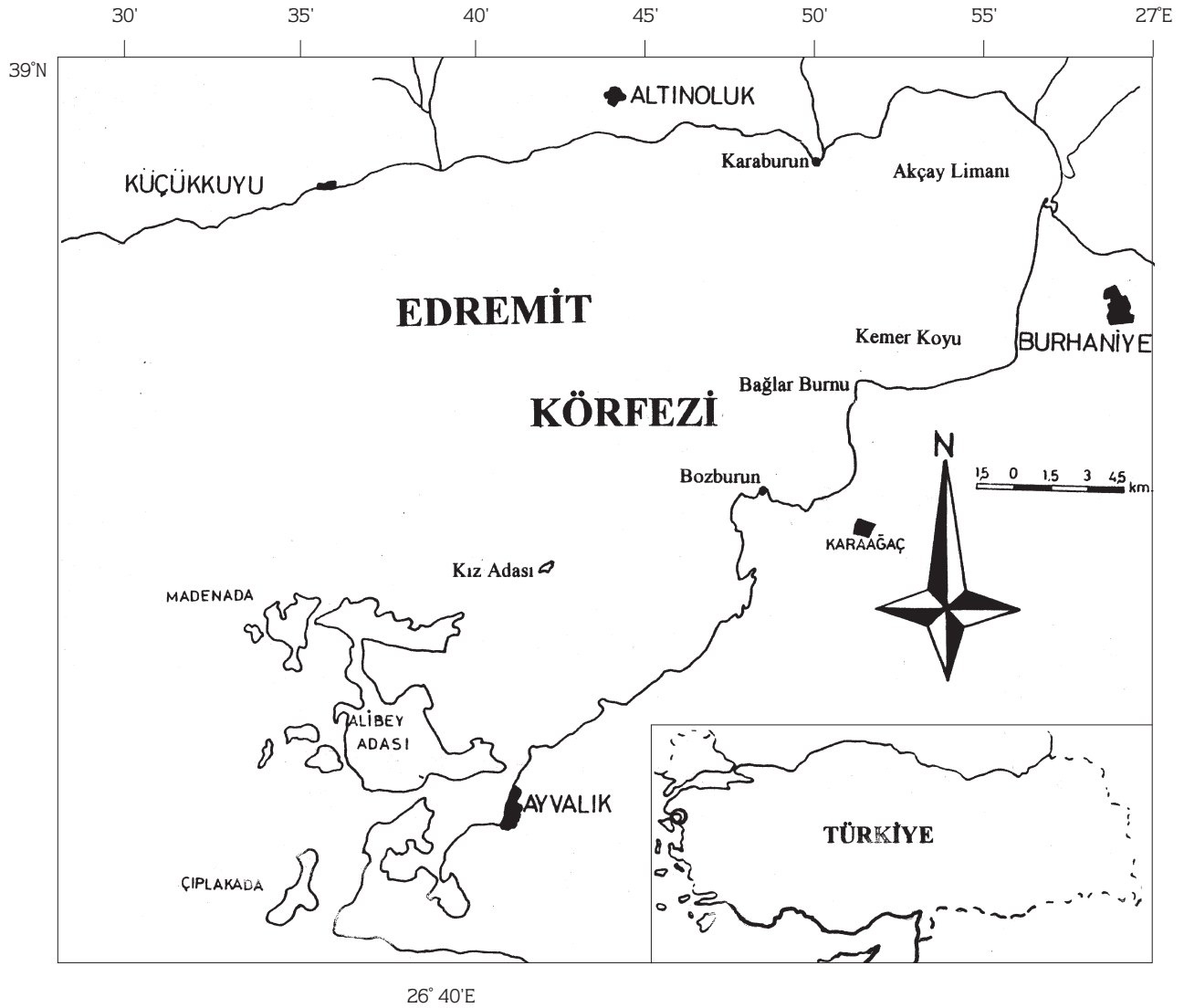


Figure 1. Sampling stations

Common name: Small-spotted catshark

Local name: Kedibaliđı

Ist: Kız Adası: 4, ranging 454-780 mm.

Morphological Characters:

TL/BD: 9.31

TL/HL: 5.20

BD/HL: 0.55

HL/ED: 4.43

Ecological Characters:

Habitat: Benthic over gravelly, sandy and muddy bottoms.

Distribution: An Atlanto-Mediterranean species.

TRIAKIDAE

***Mustelus mustelus* (Linnaeus, 1758)**

Common synonyms: None.

Common name: Smoothhound

Local name: Köpekbalıđı

Ist: Kız Adası: 3, ranging 750-1031 mm.

Morphological Characters:

TL/BD: 9.21

TL/HL: 5.07

BD/HL: 0.54

HL/ED: 7.71

Ecological Characters:

Habitat: Coastal demersal species, usually above 150 m.

Distribution: An Atlanto-Mediterranean species.

Order: Rajiformes

TORPEDINIDAE

***Torpedo marmorata* Risso, 1810**

Common synonym: *Torpedo (Torpedo) marmorata* Risso, 1810

Common name: Marbled electric ray

Local names: Ceryan, Elektrikli Vatoz

Ist: Kız Adası: 1, TL: 322 mm.

Morphological Characters:

TL/DW: 1.52

DW/DL: 1.08

Ecological Characters:

Habitat: Benthic on soft as well as stony bottoms down to about 40 m, occasionally to 100m.

Distribution: An Atlanto-Mediterranean species.

RAJIDAE

***Raja asterias* Delaroche, 1809**

Common synonym: *Raja (Raja) asterias* Delaroche, 1810

Common name: Starry ray

Local name: Vatoz

Ist: Kız Adası: 1, TL: 725 mm.

Morphological Characters:

TL/DW: 1.35

DW/DL: 1.29

Ecological Characters:

Habitat: Benthic, from inshore waters to about 100 m.

Distribution: An endemic species for the Mediterranean.

***Raja clavata* Linnaeus, 1758**

Common synonym: *Raja (Raja) clavata* Linnaeus, 1758

Common name: Thornback ray

Local name: Vatoz

Ist: Kız Adası: 1 (male), TL: 671 mm.

Morphological Characters:

TL/DW: 1.48

DW/DL: 1.26

Ecological Characters:

Habitat: Benthic, from very shallow waters to about 300 m.

Distribution: A cosmopolitan species.

***Raja miraletus* Linnaeus, 1758**

Common synonym: *Raja (Raja) miraletus* Linnaeus, 1758

Common name: Brown ray

Local name: Benekli Vatoz

Ist: Bozburun: 2, ranging 348-404 mm.

Morphological Characters:

TL/DW: 1.63

DW/DL: 1.24

Ecological Characters:

Habitat: Benthic, from shallow waters to 300 m.

Distribution: A cosmopolitan species.

***Raja radula* Delaroche, 1809**

Common synonyms: *Raja (Raja) radula* Delaroche, 1809

Raja atra Müller & Henle, 1841 (part)

Raja (Raja) atra: Capapé & Desoutter (1979)

Common name: Rough ray

Local name: Kelebek Vatoz

Ist: Kız Adası: 2 (male), ranging 319-457 mm.

Morphological Characters:

TL/DW: 1.62

DW/DL: 1.19

Ecological characters:

Habitat: Benthic, from coastal waters to about 300 m.

Distribution: An endemic species for Mediterranean Sea.

***Raja naevus* Müller&Henle, 1841**

Common synonym: *Raja (Leucoraja) naevus* Müller & Henle, 1841

Common name: Cuckoo ray

Local name: Vatoz

Ist: Bozburun: 2, ranging 324-459 mm.

Morphological Characters:

TL/DW: 1.59

DW/DL: 1.21

Ecological Characters:

Habitat: Benthic in coastal waters between 20 and 250 m.

Distribution: An Atlanto-Mediterranean species.

DASYATIDAE

***Dasyatis pastinaca* (Linnaeus, 1758)**

Common synonyms: None.

Common name: Common stingray

Local names: Ringa Balığı-Dikenli Vatoz

Ist: Kız Adası: 1, TL: 749 mm.

Morphological Characters:

TL/DW: 1.76

DW/DL: 1.16

Ecological Characters:

Habitat: Benthic over sandy and muddy bottoms.

Distribution: An Atlanto-Mediterranean species.

Class: Osteichthyes

Order: Anguilliformes

CONGRIDAE

***Conger conger* ([Artedi, 1738] Linnaeus, 1758)**

Common synonyms: None.

Common name: Conger eel

Local name: Miğrı

Ist: Kız Adası: 1, TL: 385 mm.

Morphological Characters:

LI: 49

TL/BD: 19.25

TL/HL: 7.12

BD/HL: 0.37

HL/ED: 6.00

Ecological Characters:

Habitat: Benthic on the shelf on rocky or sandy bottoms at 0-100 m.

Distribution: An Atlanto-Mediterranean species.

Order: Clupeiformes

CLUPEIDAE

***Sardina pilchardus* (Walbaum, 1792)**

Common synonym: *Clupea pilchardus* Walbaum, 1792

Common name: European pilchard

Local name: Sardalya

Ist: Bozburun: 8, ranging 125-183 mm.

Morphological Characters:

D: 16-17; A: 17-21; V: 8; P: 16

TL/BD: 5.50±0.04

TL/HL: 3.99±0.03

BD/HL: 0.82±0.08

HL/ED: 3.81±0.12

Ecological Characters:

Habitat: Coastal pelagic, at 25-55 m by day and 15-35 m by night.

Distribution: An Atlanto-Mediterranean species.

ENGRAULIDAE

***Engraulis encrasicolus* (Linnaeus, 1758)**

Common synonyms: None.

Common name: European anchovy

Local name: Hamsi

Ist: Bozburun: 8, ranging 107-115.5 mm.

Morphological Characters:

D: 15-18; A: 15-16

TL/BD: 7.01±0.04

TL/HL: 4.33±0.06

BD/HL: 0.05±0.07

HL/ED: 4.33±0.09

Ecological Characters:

Habitat: Coastal pelagic, euryhaline.

Distribution: An Atlanto-Mediterranean species.

Order: Gadiformes

GADIDAE

***Trisopterus minutus capelanus* (Lacépède, 1800)**

Common synonym: *Gadus capelanus* Lacépède, 1800

Common name: Poor-cod

Local name: Tavuk Balığı

Ist: Kız Adası: 6, ranging 115-142 mm.

Morphological Characters:

D1: 12; D2: 18-20; D3: 15-16; A1: 25-26; A2: 17-18; V: 4-6; P: 12-15; SD: 19-20

TL/BD: 4.53±0.05

TL/HL: 4.15±0.08

BD/HL: 0.91±0.02

HL/ED: 2.49±0.13

Ecological Characters:

Habitat: At depths of 30-300 m.

Distribution: An Atlanto-Mediterranean species.

MERLUCCIIDAE

***Merluccius merluccius* (Linnaeus, 1758)**

Common synonym: *Gadus merlangius* Linnaeus, 1758

Common name: Hake

Local name: Berlam, Bakalyaro

Ist: Kız Adası: 4, ranging 193-216 mm.

Morphological Characters:

D1: 8-11; D2: 39; A: 36-37; V: 7; P: 10-11

TL/BD: 5.65

TL/HL: 3.83

BD/HL: 0.68

HL/ED: 5.59

Ecological Characters:

Habitat: Midwater or at bottom, chiefly at 100-300 m.

Distribution: An Atlanto-Mediterranean species.

Order: Batrachoidiformes

LOPHIIDAE

***Lophius piscatorius* Linnaeus, 1758**

Common synonyms: None.

Common names: Anglerfish, Monkfish

Local name: Fener Balığı

Ist: Kız Adası: 1, TL: 447.5 mm.

Morphological Characters:

D:II-VI, 11-12; A: 9

TL/BD: 17.04

TL/HL: 2.31

BD/HL: 0.32

HL/ED: 12.11

Ecological Characters:

Habitat: Benthic, from shallow, inshore waters to 500 m.

Distribution: An Atlanto-Mediterranean species.

Order: Cyprinodontiformes

BELONIDAE

***Belone belone gracilis* Lowe, 1839**

Common synonym: *Belone gracilis* Lowe, 1839

Common name: Garfish

Local name: Zargana

Ist: Karaburun: 4, ranging 334-392 mm.

Morphological Characters:

D: 16-17; A: 20-21; V: 6-7; P: 12-13; SD: 36-37

TL/BD: 17.04

TL/HL: 4.00

BD/HL: 0.23

HL/ED: 7.25

Ecological Characters:

Habitat: Epipelagic, neritic.

Distribution: An Atlanto-Mediterranean species.

Order: Atheriniformes

ATHERINIDAE

***Atherina hepsetus* Linnaeus, 1758**

Common synonym: *Atherina (Atherina) hepsetus* Linnaeus, 1758

Common names: None.

Local names: Gümüş Balığı, Çamuka

Ist: Karaburun: 6, ranging 100-115 mm.

Morphological Characters:

D1: IX; D2: I,10-12; A: I,11-12; V: 7; P: 15; lateral series 60

TL/BD: 7.12±0.29

TL/HL: 4.15±0.08

BD/HL: 0.91±0.02

HL/ED: 2.49±0.13

Ecological Characters:

Habitat: Pelagic, littoral, often near shore.

Distribution: An Atlanto-Mediterranean species.

Order: Zeiformes

ZEIDAE

***Zeus faber* Linnaeus, 1758**

Common synonym: *Zeus pungio* Valenciennes, 1835

Common name: John Dory

Local names: Dülger Balığı, Peygamber Balığı

Ist: Kız Adası: 4, ranging 219-323 mm.

Morphological Characters:

D: X,25; A: IV,22; V: I,7; P: 13

TL/BD: 2.64

TL/HL: 2.99

BD/HL: 1.12

HL/ED: 4.80

Ecological Characters:

Habitat: Near bottom or in midwater; mainly at 50-150 m.

Distribution: A cosmopolitan species.

Order: Scorpaeniformes

SCORPAENIDAE

***Scorpaena notata* Rafinesque 1810**

Common synonyms: *Scorpaena ustulata* Lowe, 1810

Scorpaena notata afimbria Slastenenko, 1934

Common name: Petite rascasse

Local name: Benekli İskorpit

Ist: Kız Adası: 3, ranging 110-146 mm.

Morphological Characters:

D1: XII,9; A: III,5-6; V: I,5; P: 17

TL/BD: 3.67

TL/HL: 3.01

BD/HL: 0.81

HL/ED: 3.91

Ecological Characters:

Habitat: Common in rocky littoral habitats.

Distribution: An Atlanto-Mediterranean species.

***Scorpaena porcus* Linnaeus, 1758**

Common synonyms: None.

Common name: Black scorpionfish

Local name: Lipsoz

Ist: Karaburun: 1, TL: 200 mm.

Morphological Characters:

D1: XII,9; A: III,6; V: I,5; P: 16

TL/BD: 3.05

TL/HL: 2.73

BD/HL: 0.89

HL/ED: 4.70

Ecological Characters:

Habitat: Benthic littoral species common among rocks and alga; may be found up to 800 m.

Distribution: An Atlanto-Mediterranean species.

***Scorpaena scrofa* Linnaeus, 1758**

Common synonyms: *Scorpaena barbata* Lacepede, 1801

Scorpaena lutea Risso, 1810

Common name: Red scorpionfish

Local name: İskorpit, Adabeyi

Ist: Kız Adası: 1, TL: 135 mm.

Morphological Characters:

D: XII,10; A: III,5; V: I,5, P: 18

TL/BD: 3.45

TL/HL: 2.64

BD/HL: 0.67

HL/ED: 4.85

Ecological Characters:

Habitat: Benthic on rocky, sandy or muddy bottoms 20-200 m.

Distribution: An Atlanto-Mediterranean species.

TRIGLIDAE

***Trigla lucerna* Linnaeus, 1758**

Common synonyms: *Trigla hirundo* (nec Linnaeus): Bloch, 1785

Trigla corvus Risso, 1810

Trigla corax Bonaparte, 1834

Common name: Tub gurnard

Local name: Kırlangıç Balığı

Ist: Kız Adası: 3; ranging 233.5-271 mm.

Morphological Characters:

D1: VIII-IX; D2: 15-16; A: 15-16; V: I,5; P: 11+3

TL/BD: 6.81

TL/HL: 3.74

BD/HL: 0.55

HL/ED: 4.89

Ecological Characters:

Habitat: Sand, muddy sand or gravel bottoms from about 20 to 300 m depth.

Distribution: An Atlanto-Mediterranean species.

***Trigla lyra* Linnaeus, 1758**

Common synonyms: None.

Common name: Piper gurnard

Local names: Kırlangıç, Öksüz

Ist: Kız Adası: 1, TL: 196 mm.

Morphological Characters:

D1: IX; D2: 16; A: 15-16; V: I,5; P: 11+3

TL/BD: 6.55

TL/HL: 3.55

BD/HL: 0.54

HL/ED: 3.32

Ecological Characters:

Habitat: Mud, gravel and rock bottoms from about 10 to 700 m.

Distribution: An Atlanto-Mediterranean species.

***Trigloporus lastoviza* (Brünnich, 1768)**

Common synonym: *Trigla lineata* Gmelin, 1789

Common name: Streaked gurnard

Local names: Kırlangıç, Mazak

Ist: Kız Adası: 3, ranging 146-184 mm.

Morphological Characters:

D1: X; D2: 16-17; A: 15-16, V: I,5; P: 11+3

TL/BD: 5.95

TL/HL: 4.35

BD/HL: 0.73

HL/ED: 3.80

Ecological Characters:

Habitat: Found on rough rocky grounds or sand and muddy sand.

Distribution: An Atlanto-Mediterranean species.

PERISTEDIIDAE

***Peristedion cataphractum* (Linnaeus, 1758)**

Common synonym: None.

Common name: Armed gurnard

Local name: Dikenli Öksüz

Ist: Kız Adası: 1; TL: 253 mm.

Morphological Characters:

D1: 8; D2: 19; A: 17; V: 6; P: 10+2

TL/BD: 8.03

TL/HL: 2.78

BD/HL: 0.34

HL/ED: 6.06

Ecological Characters:

Habitat: Benthic on muddy or rocky bottoms of the shelf from 30 to 500 m. Depth.

Distribution: An Atlanto-Mediterranean species.

Order: Perciformes

SERRANIDAE

***Serranus cabrilla* (Linnaeus, 1758)**

Common synonyms: None.

Common name: Comber

Local name: Asil Hani

Ist: Akçay Limanı: 6, ranging 147-201 mm.

Morphological Characters:

D: XI,13-14; A: III,7-8; V: I,5; P: 13-15; LI.75-76

TL/BD: 4.53±0.15

TL/HL: 3.33±0.007

BD/HL: 0.73±0.03

HL/ED: 4.77±0.17

Ecological Characters:

Habitat: Benthic on the shelf and upper slope to about 500 m.

Distribution: An Atlanto-Mediterranean species.

***Serranus hepatus* (Linnaeus, 1758)**

Common synonyms: None.

Common name: Brown comber

Local name: Benekli Hani

Ist: Bozburun: 7; ranging 82-102 mm.

Morphological Characters:

D: X-XI,12; A: III,7; V: I,6; P: 11-13; LI. 46-48

TL/BD: 3.77±0.14

TL/HL: 3.00±0.10

BD/HL: 0.79±0.10

HL/ED: 3.91±0.19

Ecological Characters:

Habitat: Benthic on the shelf to about 100 m.

Distribution: An Atlanto-Mediterranean species.

***Serranus scriba* (Linnaeus, 1758)**

Common synonyms: None.

Common name: Painted comber

Local names: Yazılı Hani, Çizgili Hani

Ist: Karaburun: 4; ranging 104-143 mm.

Morphological Characters:

D: X,15; A: III,7-8; V: I,5; P: 11-13

TL/BD: 3.72

TL/HL: 2.82

BD/HL: 0.75

HL/ED: 5.75

Ecological Characters:

Habitat: Coastal, benthic on the shelf to about 150 m.

Distribution: An Atlanto-Mediterranean species.

POMATOMIDAE

***Pomatomus saltator* (Linnaeus, 1766)**

Common synonym: *Temnodon saltator* Valenciennes, 1833

Common name: Bluefish

Local name: Lüfer

Ist: Karaburun: 2, ranging 208-246 mm

Morphological Characters:

D1: VII-VIII; D2: I,23; A: II,24-25; V: I,5; P: I,15; LI. 98-100

TL/BD: 5.15

TL/HL: 4.53

BD/HL: 0.87

HL/ED: 5.43

Ecological Characters:

Habitat: Pelagic along the continental shelf at 0-200 m.

Distribution: An Atlanto-Mediterranean species.

CARANGIDAE

***Trachurus mediterraneus* (Steindachner, 1868)**

Common synonyms: *Trachurus mediterraneus ponticus* Aleev, 1956

Trachurus furnestini (Dardignac&Vincent)

Common name: Mediterranean horse-mackerel

Local name: Sarıkuyruk İstavrit

Ist: Bozburun: 2, ranging 182-209 mm.

Morphological Characters:

D1: VIII; D2: I,32; A: II+I,28; V: I,5; P: 39; LI. 75-80

TL/BD: 5.79

TL/HL: 4.29

BD/HL: 0.73

HL/ED: 3.71

Ecological Characters:

Habitat: Usually near bottom in 40-500 m.

Distribution: An Atlanto-Mediterranean species.

***Trachurus trachurus* (Linnaeus, 1758)**

Common synonym: *Trachurus capensis* Castelnau, 1861

Common name: Atlantic horse-mackerel

Local name: Karagöz İstavrit

Ist: Karaburun: 5, ranging 164-194 mm.

Morphological Characters:

D1: VIII; D2: I,33; A: II+I,26; V: I,5; P: 20

TL/BD: 5.75

TL/HL: 3.89

BD/HL: 0.67

HL/ED: 3.89

Ecological Characters:

Habitat: Usually over sandy bottom in 100-200 m.

Distribution: An Atlanto-Mediterranean species.

SPARIDAE

***Boops boops* (Linnaeus, 1758)**

Common synonym: *Box boops* Linnaeus, 1758

Common name: Boque

Local names: Kupes, Kupa

Ist: Karaburun: 7, ranging 133-190 mm.

Morphological Characters:

D: XV,14; A: III,16; V: I,4; P: 15-16; LI. 68-69

TL/BD: 5.32±0.18

TL/HL: 4.72±0.11

BD/HL: 0.88±0.03

HL/ED: 2.75±0.08

Ecological Characters:

Habitat: Inshore waters, demersal or semipelagic above various bottoms, to 200 m or 300 m.

Distribution: An Atlanto-Mediterranean species.

***Diplodus annularis* (Linnaeus, 1758)**

Common synonyms: None

Common name: Annular sea bream

Local name: İsparoz

Ist: Bozburun: 7, ranging 112-120 mm.

Morphological Characters:

D: XI,11-12; A: III,11-12; V: I,5; P: 10-12; LI. 50-52

TL/BD: 2.94±0.04

TL/HL: 4.03±0.07

BD/HL: 1.37±0.03

HL/ED: 3.38±0.09

Ecological Characters:

Habitat: Littoral, on Posidonia beds and sandy bottoms.

Distribution: An Atlanto-Mediterranean species.

***Diplodus vulgaris* (E. Geoffrey Saint-Hilaire, 1817)**

Common synonyms: None.

Common name: Common two-banded sea bream

Local name: Karagöz

Ist: Kemer Koyu: 3, ranging 108.5-148 mm.

Morphological Characters:

D: XII,15; A: III,13; V: I,5; P: 14; LI. 52-53

TL/BD: 2.93

TL/HL: 3.74

BD/HL: 1.26

HL/ED: 3.04

Ecological Characters:

Habitat: Littoral waters on rocky or sandy bottoms to 90 m.

Distribution: An Atlanto-Mediterranean species.

***Pagellus acarne* (Risso, 1826)**

Common synonyms: None.

Common name: Axillary sea bream

Local name: Yabani Mercan

Ist: Kemer Koyu: 4, ranging 179.5-182.5 mm.

Morphological Characters:

D: XII,10; A: III,9-10; V: I,5-6; P: 15-16; LI.70

TL/BD: 4.53

TL/HL: 3.73

BD/HL: 0.82

HL/ED: 3.39

Ecological Characters:

Habitat: Inshore waters, demersal on various bottoms.

Distribution: An Atlanto-Mediterranean species.

***Pagellus bogaraveo* (Brünnich, 1768)**

Common synonym: *Pagellus centrodonatus* Delaroche, 1809

Common name: Red Sea Bream

Local name: Mandagöz Mercan

Ist: Kız Adası: 1, TL: 179.5 mm.

Morphological Characters:

D: XII;11; A: III;11; V: 1,6; P: 16; LI. 65

TL/BD: 4.27

TL/HL: 3.81

BD/HL: 0.89

HL/ED: 3.35

Ecological Characters:

Habitat: Inshore waters above various bottoms to 400 and 700 m.

Distribution: An Atlanto-Mediterranean species.

***Pagellus erythinus* (Linnaeus, 1758)**

Common synonym: *Pagellus caneriensis* Valenciennes, 1838

Common name: Common pandora

Local name: Kirma Mercan

Ist: Kemer Koyu: 8, ranging 152-232 mm.

Morphological Characters:

D: XII,10-11; A: III,9; V: 1,5; P: 13; LI. 60-63

TL/BD: 4.02±0.08

TL/HL: 3.73±0.02

BD/HL: 0.92±0.02

HL/ED: 3.23±0.09

Ecological Characters:

Habitat: Inshore waters, demersal on various bottoms to 200 m or 300m.

Distribution: An Atlanto-Mediterranean species.

***Sarpa salpa* (Linnaeus, 1758)**

Common synonym: *Boops salpa* of authors

Common name: Salema

Local name: Salpa

Ist: Karaburun. 4, ranging 203-258.5 mm.

Morphological Characters:

D: XI,16; A: III,14; V: 1,6; P: 16; LI. 74

TL/BD: 3.88

TL/HL: 4.97

BD/HL: 1.27

HL/ED: 3.97

Ecological Characters:

Habitat: Littoral waters near rocks.

Distribution: An Atlanto-Mediterranean species.

***Sparus aurata* Linnaeus, 1758**

Common synonym: *Chrysophrys aurata* Linnaeus, 1758 non Bloch Schneider, 1801

Common name: Gilt-head sea bream

Local name: Çipura

Ist: Karaburun: 1, TL: 177 mm

Morphological Characters:

D: XI,14; A: III,10; V: III,11; P: 15; LI. 75

TL/BD: 3.68

TL/HL: 4.11

BD/HL: 1.11

HL/ED: 3.90

Ecological Characters:

Habitat: Littoral on sandy bottoms and Posidonia beds and in breakers.

Distribution: An Atlanto-Mediterranean species.

***Spondyliosoma cantharus* (Linnaeus, 1758)**

Common synonym: *Cantharus cantharus* Linnaeus, 1758

Common name: Black Sea Bream

Local name: Iskatari

Ist: Karaburun:1, TL: 177 mm

Morphological Characters:

D: XI,12; A: II,10; V: 1,5; P: 15; LI. 71

TL/BD: 2.89

TL/HL: 4.39

BD/HL: 1.51

HL/ED: 3.52

Ecological Characters:

Habitat: Inshore waters on rocky or sandy bottoms and Posidonia beds to 50 m and 300m.

Distribution: An Atlanto-Mediterranean species.

CENTRACANTHIDAE***Spicara flexusa* Rafinesque, 1810**

Common synonyms: *Smaris chryselis* Valenciennes, 1830

Smaris gagarella Valenciennes, 1830

Common name: Garizzo

Local name: İzmarit

Ist: Kız Adası: 2, ranging 148-152 mm

Morphological Characters:

D: XI,10; A: III,9-10; P: 14; LI. 65-68

TL/BD: 4.17

TL/HL: 4.29

BD/HL: 1.02

HL/ED: 3.18

Ecological Characters:

Habitat: On sand or muddy bottoms, down to about 130 m

Distribution: An endemic species for Mediterranean Sea.

***Spicara smaris* (Linnaeus, 1758)**

Common synonyms: *Sparus alcedo* Risso, 1810

Smaris vulgaris Valenciennes, 1830

Smaris gracilis Bonaparte, 1836

Smaris maurii Bonaparte, 1836

Common name: Zerro

Local name: Istrangilos, İzmarit

Ist: Kız Adası: 4 (male), ranging 113-138 mm

Morphological Characters:

D: XI,11; A: III,9; P: 14; LI. 70

TL/BD: 4.48

TL/HL: 4.22

BD/HL: 0.91

HL/ED: 3.11

Ecological Characters:

Habitat: *Posidonia* sp. beds and muddy bottoms at about 15-10 m.

Distribution: An Atlanto-Mediterranean species.

MULLIDAE***Mullus barbatus* Linnaeus, 1758**

Common synonyms: None.

Common names: Red Mullet, Striped Mullet

Local name: Barbun

Ist: Kız Adası: 8, ranging 149-175 mm

Morphological Characters :

D1: VII-VIII; D2: 1,7-8; A: II,6-7; LI. 31-35

TL/BD: 4.79±0.07

TL/HL: 4.96±0.10

BD/HL: 1.03±0.02

HL/ED: 3.92±0.10

Ecological Characters:

Habitat: Benthic species on muddy bottoms of the continental shelf between 100 and 300 m

Distribution: An Atlanto-Mediterranean species.

***Mullus surmuletus* Linnaeus, 1758**

Common synonyms: None.

Common name: Striped red mullet

Local name: Tekir

Ist: Karaburun: 4, ranging 148-257 mm

Morphological Characters:.

D1: VII-VIII; D2: 1,7-8; A: 1,6-7; V: 1,7; P: 16; LI. 42

TL/BD: 4.82

TL/HL: 4.64

BD/HL: 0.96

HL/ED: 3.97

Ecological Characters:

Habitat: Benthic on broken and rough ground.

Distribution: An Atlanto-Mediterranean species.

POMACENTRIDAE***Chromis chromis* (Linnaeus, 1758)**

Common synonyms: None.

Common name: Damsel fish

Local name: Papaz Balığı

Ist: Karaburun: 4, ranging 75-77.5 mm

Morphological Characters:.

D: XI,10-11; A: II,10; V: 1,5; P: 15; LI. 26-27

TL/BD: 3.28

TL/HL: 5.86

BD/HL: 1.70

HL/ED: 2.18

Ecological Characters:

Habitat: Littoral, mainly in rocky areas (depth 3-35 m)

Distribution: An Atlanto-Mediterranean species.

CEPOLIDAE

***Cepola rubescens* Linnaeus, 1766**

Common synonyms: *Cepola macrophthalmia* Linnaeus, 1758

Common name: Red bandfish

Local name: Kurdela Balığı

Ist: Akçay Limanı: 4, ranging 292-367mm

Morphological Characters:

D: 66-67; A: 58-59

TL/BD: 20.22

TL/HL: 12.11

BD/HL: 0.57

HL/ED: 2.98

Ecological Characters:

Habitat: Benthic on muddy and bottoms, between 15-200 m.

Distribution: An Atlanto-Mediterranean species.

MUGILIDAE

***Chelon labrosus* (Risso, 1826)**

Common synonyms: *Mugil chelo* Cuvier, 1829

Mugil provensalis of authors

Crenimugil labrosus of authors

Common name: Thicklip grey mullet

Local name: Kefal, Mavraki

Ist: Karaburun: 2, ranging 195.5-247 mm

Morphological Characters:

D1: IV; D2: I,9-10; A: III,9; V: I,5; **Phyloric chacea:**
15

TL/BD: 5.21

TL/HL: 5.25

BD/HL: 1.00

HL/ED: 2.64

Ecological Characters:

Habitat: Pelagic, usually inshore, entering lagoons.

Distribution: An Atlanto-Mediterranean species.

***Liza aurata* (Risso, 1810)**

Common synonym: *Mugil auratus* of authors

Common name: Golden grey mullet

Local name: Altınbaş Kefal, Miksinarya

Ist: Karaburun: 1, TL: 272 mm.

Morphological Characters:

D1: IV; D2: I,8; A: II,9; V: I,6

TL/BD: 5.23

TL/HL: 5.33

BD/HL: 1.01

HL/ED: 4.63

Ecological Characters:

Habitat: Pelagic, usually inshore, entering lagoons and estuaries.

Distribution: An Atlanto-Mediterranean species

LABRIDAE

***Coris julis* (Linnaeus, 1758)**

Common synonym: None.

Common name: Rainbow wrasse

Local name: Gelin-Güneş Balığı

Ist: Karaburun: 14 (11 female, 3 male), ranging 102-152 mm.

Morphological Characters:

D: IX,12; A: III,12; V: 6; P: 13; LI: 73-80

TL/BD: 5.99±0.12

TL/HL: 3.98±0.04

BD/HL: 0.66±0.01

HL/ED: 5.65±0.12

Ecological Characters:

Habitat: Littoral, near rocks and eel-grass beds (1-120 m).

Distribution: An Atlanto-Mediterranean species

***Symphodus ocellatus* Forsskål, 1775**

Common synonym: *Symphodus (Crenilabrus) ocellatus* Forsskål, 1775

Common name: Tordo

Local name: Çırçır, Ot Balığı

Ist: Karaburun: 6 (2 female, 4 male), ranging 70.5-92 mm.

Morphological Characters:

D: XV,10-11; D2: III,10; V: I,5; P: 11; LI. 32-33

TL/BD: 3.60±0.11

TL/HL: 2.98±0.07

BD/HL: 0.99±0.02

HL/ED: 4.46±0.14

Ecological Characters:

Habitat: Littoral, near rocks and eel-grass beds (1-30 m).

Distribution: An endemic species for Mediterranean Sea.

***Symphodus rostratus* (Bloch,1797)**

Common synonym: *Symphodus* (*Symphodus*) *rostratus* Bloch,1797

Common name: None

Local name: Çırçır, Ot Balığı

Ist: Karaburun: 2 , ranging 107-111 mm.

Morphological Characters:

D: XIV,10-12; A: III,10; V: I,5; P: 32; LI. 32

TL/BD: 3.72

TL/HL: 3.18

BD/HL: 0.85

HL/ED: 4.72

Ecological Characters:

Habitat: Littoral, near rocks mainly in eel-grass beds (1-20 m).

Distribution: An endemic species for Mediterranean Sea.

***Symphodus tinca* (Linnaeus, 1758)**

Common synonym: *Symphodus* (*Crenilabrus*) *tinca* Linnaeus, 1758

Symphodus (*Crenilabrus*) *pavo* Brunnichius, 1768

Common name: Peacock wrasse

Local name: Çırçır, Ot Balığı

Ist: Karaburun: 5 (3 female, 2 male), ranging 173.0-198.5 mm.

Morphological Characters:

D: XV,10-12; A: III,10-12; V: I,5; P: 14; LI. 32-39

TL/BD: 4.01±0.07

TL/HL: 3.72±0.04

BD/HL: 0.92±0.06

HL/ED: 4.77±0.28

Ecological Characters:

Habitat: Littoral, near rocks mainly in eel-grass beds (1-50 m).

Distribution: An Atlanto-Mediterranean species.

TRACHINIDAE

***Trachinus draco* Linnaeus, 1758**

Common synonym: None.

Common name: Greater weever

Local name: Trakonya

Ist: Akçay Limanı: 3; ranging 228-293 mm.

Morphological Characters:

D: VI; D2: 29; A: II,29; V: I,5; LI. 77-80

TL/BD: 6.32

TL/HL: 4.22

BD/HL: 0.66

HL/ED: 5.50

Ecological Characters:

Habitat: Littoral and benthic.

Distribution: An Atlanto-Mediterranean species.

URANOSCOPIDAE

***Uranoscopus scaber* Linnaeus, 1758**

Common synonym: None.

Common name: Stargazer

Local name: Tiryaki Balığı-Kurbağa Balığı

Ist: Kız Adası: 3; ranging 183-233 mm.

Morphological Characters:

D1: III;IV; D2: 13-14; A: I,12-12; V: 5; P: 14

TL/BD: 6.48

TL/HL: 3.32

BD/HL: 0.52

HL/ED: 8.80

Ecological Characters:

Habitat: Benthic species, on sandy or muddy bottoms.

Distribution: An Atlanto-Mediterranean species.

BLENNIDAE

***Blennius ocellaris* Linnaeus, 1758**

Common synonyms: None.

Common name: Butterfly blenny

Local name: Horozbina

Ist: Bozburun: 4, ranging 118-133 mm

Morphological Characters:

D: XI,14-15; A: II,16; V: I,3; P: 11-12

TL/BD: 4.99

TL/HL: 4.32

BD/HL: 0.79

HL/ED: 3.52

Ecological Characters:

Habitat: From 30 m (Mediterranean) to 100 m , on hard bottoms.

Distribution : An Atlanto-Mediterranean species.

CALLIONYMIDAE

***Callionymus maculatus* Rafinesque, 1810**

Common synonyms: None.

Common name: Spotted dragonet

Local name: Üzgün Balığı

Ist: Kız Adası: 1 (female), TL: 228,5 mm

Morphological Characters:

D1: IV; D2: 10; A: 9; V: I,5; P: 20

TL/BD: 12.02

TL/HL: 3.57

BD/HL: 0.29

HL/ED: 3.87

Ecological Characters:

Habitat: Benthic, sandy bottoms, at 45-450 m.

Distribution: an Atlanto-Mediterranean species.

***Callionymus risso* Le Sueur, 1814**

Common synonyms: *Callionymus belenus* Risso, 1826

Callionymus morissonii Risso, 1826

Common name: Fardatgo

Local name: Üzgün Balığı

Ist: Kız Adası: 1 (female), TL: 161 mm

Morphological Characters:

D1: IV; D2: 8-10; A: 9-10; V: I,6; P: 21

TL/BD: 16.1

TL/HL: 3.35

BD/HL: 0.20

HL/ED: 5.33

Ecological Characters:

Habitat: Benthic on sandy and muddy grounds, at 10-150 m.

Distribution: An endemic species for Mediterranean.

***Callionymus lyra* Linnaeus, 1758**

Common synonym: *Callionymus dracunculus* Linnaeus, 1758

Common name: Dragonet

Local name: Üzgün Balığı

Ist: Kız Adası: 2 (male), ranging 244-259 mm

Morphological Characters:

D1: IV; D2: 9-10; A: 9; V: I,5; P: 21

TL/BD: 14.40

TL/HL: 3.64

BD/HL: 0.25

HL/ED: 3.63

Ecological Characters:

Habitat: Benthic, on sandy and muddy bottoms, sublittoral to 430 m.

Distribution: An Atlanto-Mediterranean species.

GOBIIDAE

***Gobius niger* Linnaeus, 1758**

Common synonym: *Gobius jazo* Linnaeus, 1758

Common name: Black goby

Local name: Kömürcü Kayabalığı

Ist: Karaburun: 4 (2 female, 2 male), ranging 95-130 mm

Morphological Characters:

D1: VI; D2: I,12; A: I,12; P: 17-19

TL/BD: 5.95

TL/HL: 6.54

BD/HL: 0.89

HL/ED: 2.52

Ecological Characters:

Habitat: Estuaries, lagoons and inshore waters, to 50-75 m.

Distribution: An Atlanto-mediterranean species.

TRICHIURIDAE

***Lepidopus caudatus* (Euphrasen, 1788)**

Common synonym: None.

Common name: Silver scabbard fish

Local names: Palaska Balığı, Kayış Balığı

Ist: Kız Adası: 1, TL: 327 mm

Morphological Characters:

D: IX,90-107; A: II,60-65; V:I; P: 12

TL/BD: 14.21

TL/HL: 6.54

BD/HL: 0.46

HL/ED: 5.26

Ecological Characters:

Habitat: Benthopelagic on continental shelf and along its edge down to 400 m.; usually over sandy and muddy bottoms at 100-250 m.

Distribution: A cosmopolitan species.

SCOMBRIDAE

***Scomber japonicus* Houttuyn, 1782**

Common synonym: *Pneumatophorus colias* (Gmelin, 1788)

Common name: Chub mackerel

Local name: Kolyoz

Ist: Kız Adası: 4, ranging 235-292 mm

Diagnostic Characters:

D1: VIII-X; D2: 12; A: 11-12; AP: 5; DP: 5; V: 7-8; P: 16-17

TL/BD: 6.33

TL/HL: 4.41

BD/HL: 0.65

HL/ED: 3.05

Ecological Characters:

Habitat: Epipelagic or mesodemersal in depths to 250-300 m.

Distribution: A cosmopolitan species.

***Scomber scombrus* Linnaeus, 1758**

Common synonyms: None.

Common name: Atlantic mackerel

Local name: Uskumru

Ist: Kız Adası:4, ranging 147,5-272 mm

Morphological Characters:

D1: XI-XIII; D2: 11; DP: 5; AP: 5; A: 11-12; V: 7; P: 17

TL/BD: 6.87

TL/HL: 4.33

BD/HL: 0.63

HL/ED: 4.75

Ecological Characters:

Habitat: Epipelagic or mesodemersal in depths of 200-250 m.

Distribution: An Atlanto-Mediterranean species.

CITHARIDAE

***Citharus linguatula* (Linnaeus, 1758)**

Common synonym: *Citharus macrolepidatus* Bloch, 1787

Common name: Spotted flounder

Local name: Kancaağız Pisi Balığı

Ist: Kız Adası: 5, ranging 143-224 mm.

Morphological Characters:

D: 64-67; A: 43-45; V: I,5; P: 9-10; LI.36-37

TL/BD: 3.20

TL/HL: 4.05

BD/HL: 1.26

HL/ED: 5.80

Ecological Characters:

Habitat: Benthic on continental shelf.

Distribution: An Atlanto-Mediterranean species.

BOTHIDAE

***Arnoglossus laterna* (Walbaum, 1792)**

Common synonym: *Arnoglossus macrostoma* Kyle, 1913

Common name: Scaldfish

Local name: Küçük Pisi Balığı

Ist: Kız Adası: 2, ranging 148 159 mm.

Morphological Characters:

D: 84-85; A: 63-64; V: 6; P: 10-12; LI. 52-53

TL/BD: 3.03

TL/HL: 3.90

BD/HL: 1.28

HL/ED: 6.06

Ecological Characters:

Habitat: Benthic on mixed or muddy bottoms down to about 200 m.

Distribution: An Atlanto-Mediterranean species.

***Arnoglossus thori* Kyle, 1913**

Common synonym: *Arnoglossus moltoni* Torchto, 1961

Common name: Peludilla

Local name: Küçük Pisi Balığı

Ist: Kız Adası: 1, TL: 110,5 mm

Morphological Characters:

D: 78; A: 56; V: 6; P: 8; Ll. 51

TL/BD: 2.79

TL/HL: 4.91

BD/HL: 1.75

HL/ED: 4.09

Ecological Characters:

Habitat: Benthic on the upper 100 m of the continental shelf.

Distribution: An Atlanto-Mediterranean species.

SCOPHTHALMIDAE

***Scophthalmus rhombus* (Linnaeus, 1758)**

Common synonym: *Rhombus laevis* Turton, 1802

Common name: Brill

Local name: Dişi Kalkan, Çivisiz Kalkan

Ist: Bozburun: 3, ranging 214-259 mm

Morphological Characters:

D: 75; A: 59; V: 5; P: 12

TL/BD: 2.39

TL/HL: 3.61

BD/HL: 1.51

HL/ED: 6.88

Ecological Characters:

Habitat: On sandy bottoms on the shallow part of the continental shelf.

Distribution: An Atlanto-Mediterranean species.

SOLEIDAE

***Solea lascaris* (Risso, 1810)**

Common synonym: *Pegusa nasuta* of authors

Common name: Sand sole

Local name: Dil Balığı

Ist: Kız Adası: 2, ranging 188.5-326 mm

Morphological Characters:

D: 74-78; A: 55-58; V: 3; P: 7-8, Ll. 120-121

TL/BD: 3.24

TL/HL: 5.40

BD/HL: 1.66

HL/ED: 5.41

Ecological Characters:

Habitat: Benthic on sand in shallow waters.

Distribution: An endemic species for the Mediterranean.

***Microchirus variegatus* (Donovan, 1808)**

Common synonym: *Solea variegata* of authors

Common name: Thickback sole

Local name: Lekeli Dil Balığı

Ist: Kız Adası: 1, TL: 136 mm

Morphological Characters:

D: 72; A: 57; Ll. 58

TL/BD: 3.48

TL/HL: 5.44

BD/HL: 1.56

HL/ED: 5.55

Ecological Characters:

Habitat: Benthic on sand and mud of continental shelf and slope, at depths of 80-400 m.

Distribution: An Atlanto-Mediterranean species.

Discussion

In this investigation, fish species living at Edremit Bay were determined; for this purpose, fishes comprising 68 species and 47 genera and a total of 38 family were caught mostly by trawl hauls. Of these, 9 were cartilaginous species and 59 bony. The morphometric and meristic characters of all the species were examined. All

the species reported by Whitehead et al. (4) Akşiray (7, 8) for Turkish seas and by Mater & Meriç (1) were also caught from Edremit Bay.

Of the Rajidae, *R. asterias*, *R. clavata* and *R. miraletus*, *R. radula*, reported by Fischer et al. (5) for Turkish seas, were also caught from Edremit Bay. Of the Sparidae, Mater (18) gave a list enumerating 16 species from İzmir Bay. Of those mentioned above, *B. boops*, *D. annularis*, *D. vulgaris*, *P. acarne*, *P. bogaraveo*, *P. erythinus*, *S. salpa*, *S. aurata* and *S. cantharus* were also caught from Edremit Bay. The absence of a black blotch at the base of pectoral fins of *P. bogaraveo* is considered to be an indication of juvenility.

Of the Labridae, *S. tinca* also reported by Kaya et al.

(16) was given under the name of *Crenilabrus tinca* at in a study entitled "Labrid Species of Bosphorus and Marmara Sea" by Erazi (1943).

Of the Soleidae, *S. nasuta* is synonymized under *S. lascaris* in a study entitled "A taxonomic reappraisal of the Atlanto-Mediterranean soles *Solea solea*, *S. senegalensis* and *S. lascaris*" by Ben Tuvia (1990).

In the present study, it was not possible to carry out any comparison of morphometric and meristic characters of fish species at Edremit Bay because of no study on fish taxonomy at this locality. In the future, new fish species may be added to the present fish fauna at Edremit Bay with better equipment. It is hoped that this investigation will lead to further ones at Edremit Bay.

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