

ANNALES

Anali za istrske in mediteranske študije
Annali di Studi istriani e mediterranee
Annals for Istrian and Mediterranean Studies
Series Historia Naturalis, 33, 2023, 2





ANNALES

Anali za istrske in mediteranske študije
Annali di Studi istriani e mediterranee
Annals for Istrian and Mediterranean Studies

Series Historia Naturalis, 33, 2023, 2

ISSN 1408-533X
e-ISSN 2591-1783

UDK 5

Letnik 33, leto 2023, številka 2

**UREDNIŠKI ODBOR/
COMITATO DI REDAZIONE/
BOARD OF EDITORS:**

Alessandro Acquavita (IT), Nicola Bettoso (IT), Christian Capapé (FR), Darko Darovec, Dušan Devetak, Jakov Dulčić (HR), Serena Fonda Umani (IT), Andrej Gogala, Daniel Golani (IL), Danijel Ivajnskič, Mitja Kaligarič, Marcelo Kovačič (HR), Andrej Kranjc, Lovrenc Lipej, Vesna Mačič (ME), Alenka Malej, Patricija Mozetič, Martina Orlando-Bonaca, Michael Stachowitsch (AT), Tom Turk, Al Vrezec

**Glavni urednik/Redattore capo/
Editor in chief:**

Darko Darovec

**Odgovorni urednik naravoslovja/
Redattore responsabile per le scienze
naturali/Natural Science Editor:**

Lovrenc Lipej

Urednica/Redattrice/Editor:

Martina Orlando-Bonaca

Prevajalci/Traduttori/Translators:

Martina Orlando-Bonaca (sl./it.)

**Oblikovalec/Progetto grafico/
Graphic design:**

Dušan Podgornik, Lovrenc Lipej

Tisk/Stampa/Print:

Založništvo PADRE d.o.o.

Izdajatelj/Editori/Published by:Zgodovinsko društvo za južno Primorsko - Koper / *Società storica del Litorale - Capodistria*®Inštitut IRRIS za raziskave, razvoj in strategije družbe, kulture in okolja / *Institute IRRIS for Research, Development and Strategies of Society, Culture and Environment / Istituto IRRIS di ricerca, sviluppo e strategie della società, cultura e ambiente*®**Sedež uredništva/Sede della redazione/
Address of Editorial Board:**Nacionalni inštitut za biologijo, Morska biološka postaja Piran / *Istituto nazionale di biologia, Stazione di biologia marina di Pirano / National Institute of Biology, Marine Biology Station Piran*
SI-6330 Piran / *Pirano*, Fornace/*Fornace* 41, tel.: +386 5 671 2900, fax +386 5 671 2901;
e-mail: annales@mbss.org, **internet:** www.zdjp.si

Redakcija te številke je bila zaključena 23. 12. 2023.

**Sofinancirajo/Supporto finanziario/
Financially supported by:**

Javna agencija za raziskovalno dejavnost Republike Slovenije (ARRS) in Mestna občina Koper

Annales - Series Historia Naturalis izhaja dvakrat letno.**Naklada/Tiratura/Circulation:**

300 izvodov/copie/copies

Revija Annales, Series Historia Naturalis je vključena v naslednje podatkovne baze / *La rivista Annales, series Historia Naturalis è inserita nei seguenti data base / Articles appearing in this journal are abstracted and indexed in:* BIOSIS-Zoological Record (UK); Aquatic Sciences and Fisheries Abstracts (ASFA); Elsevier B.V.: SCOPUS (NL); Directory of Open Access Journals (DOAJ).To delo je objavljeno pod licenco / *Quest'opera è distribuita con Licenza / This work is licensed under a* Creative Commons BY-NC 4.0.Navodila avtorjem in vse znanstvene revije in članki so brezplačno dostopni na spletni strani <https://zdjp.si/en/p/annalesshn/> / *The submission guidelines and all scientific journals and articles are available free of charge on the website https://zdjp.si/en/p/annalesshn/* / *Le norme redazionali e tutti le riviste scientifiche e gli articoli sono disponibili gratuitamente sul sito https://zdjp.si/en/p/annalesshn/*

VSEBINA / *INDICE GENERALE* / CONTENTSSREDOZEMSKÉ HRUSTANČNICE
SQUALI E RAZZE MEDITERRANEE
*MEDITERRANEAN SHARKS AND RAYS***Christian CAPAPÉ, Christian REYNAUD & Farid HEMIDA**

The First Substantiated Records of Smoothback Angelshark *Squatina oculata* (Squatinae) from the Algerian Coast (Southwestern Mediterranean Sea) 143
Prvi utemeljeni zapis o pojavljanju pegastega sklata Squatina oculata (Squatinae) iz alžirske obale (jugozahodno Sredozemsko morje)

Tanguy CARPAYE-TAILAMEE & Mattéo MAUREL

Perspective on Great White Sharks (*Carcharodon carcharias*) in the Northwestern Mediterranean and Recommendations for Further Field Research 151
Pogled na velikega belega morskega volka (Carcharodon carcharias) v severozahodnem Sredozemlju in priporočila za nadaljnje terenske raziskave

Hakan KABASAKAL

A Preliminary Social Media Survey of Sharks and Batoids Captured in North Aegean Sea Commercial Fisheries 165
Preliminarna raziskava o morskih psih in skatih, ujetih v komercialnem ribištvu severnega Egejskega morja na osnovi podatkov iz socialnih medijev

Farid HEMIDA, Christian REYNAUD & Christian CAPAPÉ

On The Occurrence of Norwegian Skate, *Dipturus nidarosiensis* (Rajidae) on the Algerian Coast (Southwestern Mediterranean Sea) 187
O pojavljanju norveške raže, Dipturus nidarosiensis (Rajidae), ob alžirski obali (jugozahodno Sredozemsko morje)

Alen SOLDÓ

The First Record of Complete Albinism in Common Stingray *Dasyatis pastinaca* (Linnaeus, 1758) 193
Prvi zapis o najdbi popolnega albinističnega primerka navadnega morskega biča, Dasyatis pastinaca (Linnaeus, 1758)

Christian CAPAPÉ, Christian REYNAUD & Farid HEMIDA

Capture of a Giant Round Fantail Stingray *Taeniurops grabatus* (Dasyatidae) from the Algerian Coast (Southwestern Mediterranean Sea) 199
Ulov okroglega morskega biča (Taeniurops grabatus) (Dasyatidae) iz alžirske obale (jugozahodno Sredozemsko morje)

IHTIOFAUNA**ITTIOFAUNA****ICHTHYOFAUNA****Nicola BETTOSO & Diego BORME**

Recent Record of the Atlantic Pomfret *Brama brama* (Bonnaterre, 1788) (Scombriformes: Bramidae) in the Gulf of Trieste (Northern Adriatic Sea) 207
Recentni zapis o pojavljanju kostanjevke Brama brama (Bonnaterre, 1788) (Scombriformes: Bramidae) v Tržaškem zalivu (severno Jadransko morje)

Alan DEIDUN, Bruno ZAVA, Alessio MARRONE, Johann GALTIES, Arnold SCIBERRAS & Maria CORSINI-FOKA

The Confirmed Occurrence of *Schedophilus medusophagus* (Cocco, 1839) and *Petromyzon marinus* Linnaeus, 1758 in Maltese Waters, Central Mediterranean 213
Potrjeno pojavljanje meduzojedca, Schedophilus medusophagus (Cocco, 1839), in morskega piškurja, Petromyzon marinus Linnaeus, 1758, v malteških vodah, osrednje Sredozemsko morje

Gianni INSACCO, Gildo GAVANELLI, Bruno ZAVA & Maria CORSINI-FOKA

An Overlooked Finding of *Mola alexandrini* (Ranzani, 1839) in the Adriatic Sea 221
Sprejeto najdba vrste Mola alexandrini (Ranzani, 1839) v Jadranskem morju

Borut MAVRIČ, Lovrenc LIPEJ, Jelena BELAMARIĆ, Dule BULAJA, Matea ŠPIK & Petar KRUŽIĆ

Additional Data on the Bump-Head Sunfish, *Mola alexandrini* (Ranzani, 1839) in the Adriatic Sea 229
Dodatni podatki o pojavljanju grbastega morskega meseca, Mola alexandrini (Ranzani, 1839) v Jadranskem morju

Lana KHREMA, Amina ALNESSER, Adib SAAD & Christian CAPAPÉ

First Substantiated Record of Painted Eel
Echelus myrus (Ophichthidae) from the Syrian
Marine Waters (Eastern Mediterranean Sea) 235
*Prvi utemeljeni zapis o pojavljanju pisane
jegalje, Echelus myrus (Ophichthidae),
iz morskih voda Sirije (vzhodno
Sredozemsko morje)*

BIOTSKA GLOBALIZACIJA
GLOBALIZZAZIONE BIOTICA
BIOTIC GLOBALIZATION

Deniz ERGUDEN, Deniz AYAS & Zafer KUŞATAN

The Presence of *Hippocampus fuscus* Rüppell,
1838, in the Northeastern Mediterranean Sea 243
*Pojavljanje morskega konjička vrste
Hippocampus fuscus Rüppell, 1838,
v severovzhodnem Sredozemskem morju*

Christian CAPAPÉ & Adib SAAD

Confirmed Occurrence of Pharaoh
Cardinal Fish *Apogonichthyoides
pharaonis* (Osteichthyes: Apogonidae)
from the Syrian Coast
(Eastern Mediterranean Sea) 249
*Potrjeno pojavljanje faraonskega
kraljička Apogonichthyoides
pharaonis (Osteichthyes: Apogonidae)
iz sirske obale (vzhodno
Sredozemsko morje)*

Deniz ERGUDEN, Deniz AYAS & Cemal TURAN

First Record of *Epinephelus areolatus*
(Epinephelidae) from the South-Eastern
Mediterranean, Turkey 255
*Prvi zapis o pojavljanju rdečepikčaste
kirnje Epinephelus areolatus
(Epinephelidae) v jugovzhodnem
Sredozemskem morju (Turčija)*

FAVNA
FAUNA
FAUNA

Andrea LOMBARDO & Giuliana MARLETTA

First Record of the Marine Heterobranch
Spinoaglaja wildpretii (Ortea, Bacallado &
Moro, 2003) (Cephalaspidea: Aglajidae)
in Sicily (Ionian Sea) with Notes on
Its Biology and Ecology 263
*Prvi zapis o pojavljanju morskega zaškrgarja
vrste Spinoaglaja wildpretii (Ortea,
Bacallado & Moro, 2003) (Cephalaspidea:
Aglajidae) na Siciliji (Jonsko morje) z
zapiski o njeni biologiji in ekologiji*

**Marco FANTIN, Saul CIRIACO, Lisa FARESI,
Chiara SCRIGNER, Juri VECCHI,
Domen TRKOV & Lovrenc LIPEJ**

First Evidence of the Presence of *Okenia
picoensis* Paz-Sedano, Ortigosa & Pola,
2017 (Gastropoda: Nudibranchia)
in the Adriatic Sea 271
*Prvi zapis o pojavljanju vrste gološkrgarja
Okenia picoensis Paz-Sedano, Ortigosa &
Pola, 2017 (Gastropoda: Nudibranchia)
iz Jadranskega morja*

FLORA
FLORA
FLORA

Amelio PEZZETTA & MARCO PAOLUCCI

La flora di Lama dei Peligni (Abruzzo,
Italia): aggiornamento sistematico e
nuove segnalazioni 279
*Flora občine Lama dei Peligni
(Abruci, Italija): sistematična
posodobitev in nove najdbe*

MISCELLANEA

Al VREZEC

Bird (Aves) Descriptions of Joannes
Antonius Scopoli (1723-1788):
General Overview 327
*Opisi ptic (Aves) Joannesa Antoniusa Scopolija
(1723-1788): osnovni pregled*

OCENE IN POROČILA
RECENSIONI E RELAZIONI
REVIEWS AND REPORTS

Mitja KALIGARIČ

Recenzija knjige:
Podobe iz modrine 365

IN MEMORIAM

Elide CATALFAMO

Ricordo del professor Guido Bressan 369

Kazalo k slikam na ovitku 371

Index to images on the cover 371

received: 2023-06-01

DOI 10.19233/ASHN.2023.30

CONFIRMED OCCURRENCE OF PHARAOH CARDINAL FISH
APOGONICHTHYOIDES PHARAONIS (OSTEICHTHYES: APOGONIDAE)
FROM THE SYRIAN COAST (EASTERN MEDITERRANEAN SEA)

Christian CAPAPÉ

Laboratoire d'Ichtyologie, case 104, Université de Montpellier, 34 095 Montpellier cedex 5, France
e-mail: christian.capape@umontpellier.fr

Adib SAAD

Al-Andalus University, Tartus, Syria

ABSTRACT

The paper documents the capture of a second specimen of pharaoh cardinal fish Apogonichthyoides pharaonis (Bellotti, 1874) from the Syrian coast. The specimen was an adult measuring 97 mm in total length (TL), 75 mm in standard length (SL), and weighing 19 g. This capture serves as confirmation of the presence of a viable population of A. pharaonis in the area, indicating it has found here adequate resources for development and reproduction.

Key words: Apogonidae, distribution, population, Levant Basin

PRESENZA CONFERMATA DI *APOGONICHTHYOIDES PHARAONIS* (OSTEICHTHYES:
APOGONIDAE) LUNGO LA COSTA SIRIANA (MAR MEDITERRANEO ORIENTALE)

SINTESI

L'articolo documenta la cattura di un secondo esemplare di Apogonichthyoides pharaonis (Bellotti, 1874) lungo le coste siriane. L'esemplare in questione è un adulto di 97 mm di lunghezza totale (TL), 75 mm di lunghezza standard (SL) e 19 g di peso. Questa cattura conferma la presenza di una popolazione vitale di A. pharaonis nell'area, indicando che la specie abbia trovato qui risorse adeguate allo sviluppo e la riproduzione.

Parole chiave: Apogonidae, distribuzione, popolazione, Bacino del Levante

INTRODUCTION

The pharaoh cardinal fish *Apogonichthyoides pharaonis* (Bellotti, 1874) is a Lessepsian migrant (*sensu* Por, 1971), originating from the Red Sea and the western Indian Ocean, which entered the Mediterranean Sea through the Suez Canal. The first recorded instances occurred off Port-Saïd, Egypt (Norman, 1927) and subsequently in the Palestinian coast, but the species was initially misidentified as *Apogon taeniatus* by Haas & Steinitz (1947). *A. pharaonis* has since been reported in various areas of the eastern Mediterranean, particularly the

Tab. 1: Morphometric measurements with percentages of total length (TL), counts and total body weight recorded in the specimen reported by Sbahi & Saad (1995) and in the present specimen.

Tab. 1: Morfometrične meritve z deležem totalne dolžine, merističnim štetjem in celokupno težo primerkov, ki ju navajata Sbahi in Saad (1995) in iz pričujoče raziskave.

References	Sbahi & Saad (1995)		This study	
Morphometric measurements	mm	% TL	mm	% TL
Total length	105	100.0	97	100.0
Standar length	93	88.6	75	77.3
Body depth	34	32.4	32.	32.9
Head length	32	30.4	32	32.9
Eye diameter	8	7.6	8	8.2
Length of dorsal fin base	-	-	14	14.4
Length of Anal fin base	-	-	13	13.4
Pre-pectoral length	-	-	30	30.9
Pre-anal length	-	-	52	53.6
Pre-pelvic length	-	-	28	28.9
Meristic counts				
First dorsal fin rays	VII		VII	
Second dorsal fin rays	I + 8		I + 8	
Ventral fin rays	-		I + 5	
Pectoral fin rays	-		15	
Anal fin rays	II + 6		II + 6	
Total body weight in gram	-		19	

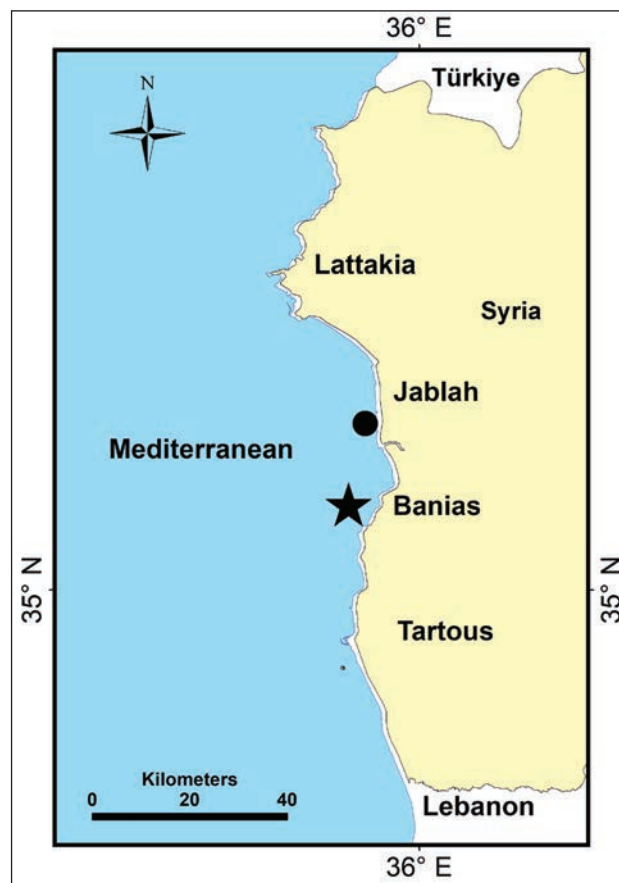


Fig. 1: Map of the Syrian coast indicating the capture sites of the two *Apogonichthyoides pharaonis* specimens, with the black star marking the specimen collected in the present study and the black circle representing the specimen described in Sbahi & Saad (1995).

Sl. 1: Zemljevid sirske obale z označenimi lokalitetami ulova dveh primerkov vrste *Apogonichthyoides pharaonis*. Črna zvezdica označuje lokaliteto ulova primerka iz pričujoče raziskave, črni krogec pa označuje lokaliteto ulova primerka iz raziskave Sbahi in Saad (1995).

Levant Basin, where a viable population is successfully established (Golani *et al.*, 2021). To the west, the species has been recorded off the Egyptian coast (Ragheb *et al.*, 2019) and as far as Libyan waters (Al Mabruk *et al.*, 2021).

The first specimen of *A. pharaonis* was recorded from the Syrian coast in 1992, but was originally misidentified as *A. taeniatus* following Sbahi & Saad (1995). Subsequent investigations focussing on non-indigenous species, conducted in Syrian marine waters, and actively supported by local fishermen, allowed the researchers to collect the *A. pharaonis* specimen that is herein described in detail and provided with comments about the species' distribution.



Fig. 2. Specimen of *Apogonichthyoides pharaonis* captured off Baniyas, Syrian coast (scale bar = 20 mm).

Sl. 2: Primerek vrste *Apogonichthyoides pharaonis*, ujet v vodah pri lokaliteti Baniyas ob sirski obali (merilo = 20 mm).

MATERIAL AND METHODS

The present specimen of *A. pharaonis* was caught on 22 September 2022, by a spear fisher at a depth of 12 metres, on sandy-pebbly bottom, south of Baniyas, a city located on the Syrian coast (at 35°63'45" N and 35°53'12" E, Fig. 1). The measurements of the specimen were taken using callipers and recorded to the nearest millimetre; its total body weight (TBW) was determined and rounded to the nearest gram. Morphometric measurements with percentages of total length are provided in Table 1, along with data pertaining to the specimen discovered by Sbahi & Saad (1995). The more recently captured specimen was fixed in a 10% buffered formaldehyde solution, preserved in 75% ethanol, and deposited in the collection of the Marine Sciences Laboratory at Tishreen University, catalogue number MSL 24-2023.

RESULTS AND DISCUSSION

This particular specimen of *A. pharaonis* measured 97 mm in total length (TL), 75 mm in standard length (SL), and weighed 19 g in TBW (Fig. 2). It was identified as *A. pharaonis* based on a combination of distinct morphological characters: body oblong and laterally compressed; two distinct dorsal fins, the first displaying two very short spines and a longer third one, and the second exhibiting a single spine; origin of the pelvic fin under the base of the pectoral fin; truncate tail; relatively large eyes; three vertical black bars on a grey-brown background, with the first bar located under the first dorsal fin and featuring a black eye-like spot encircled by a yellow ring at the midside, the second bar starting under the second dorsal fin and extending to the tip of the fin, and the third bar positioned on the caudal peduncle; a fourth brownish bar was noted

at the base of the caudal fin. The patterns observed in the present specimen were consistent with those documented by Sbahi & Saad (1995). The description, measurements, counts and coloration are in complete agreement with Gon & Randall (2003), Al Mabruk *et al.* (2021), and Golani *et al.* (2021).

The pharaoh cardinal fish is one of the earliest non-indigenous fish species documented in the Mediterranean Sea (Golani *et al.*, 2021). This second discovery of this Lessepsian migrant in Syrian waters, occurring approximately 30 years after its first record, provides unequivocal confirmation that *A. pharaonis* has become part of the Syrian ichthyofauna. The current finding could also indicate that a viable population of *A. pharaonis* has successfully established itself in the studied area, mirroring the situation observed in the entire Levant Basin. It should be noted that, based on its initial record, the pharaoh cardinal fish has been recognised as an established Lessepsian species in Syrian waters (Ali, 2018). The common size range of *A. pharaonis* individuals is between 50 and 80 mm, with

a maximum reported size of 120 mm (Golani *et al.*, 2021) and the smallest mature female on record attaining only 34 mm in total length (Gon & Randall, 2003). Consequently, both *A. pharaonis* specimens caught in Syrian waters were large adult individuals, suggesting that the species is able to find sufficient resources for growth and reproduction in the region. However, *A. pharaonis* still appears to be relatively uncommon in the area, likely due to a combination of factors. Its small size and lack of a streamlined swimmer morphology may render the fish vulnerable to predators, thus limiting its abundance. Also, being small, it can easily escape through the meshes of fishing nets and is most often caught by spear fishers (see Al Mabruk *et al.*, 2021), as was the case in our study. Finally, monitoring the species' abundance is challenging due to its nocturnal habits, and its relatively low economic value further discourages thorough observation. Additionally, it is likely that, as in other Mediterranean regions (Ragheb *et al.*, 2019), *A. pharaonis* is discarded by fishermen in Syria after capture.

POTRjeno POJAVLJANJE FARAONskega KRALJičKA *APOGONICHTHYOIDES PHARAONIS* (OSTEICHTHYES: APOGONIDAE) IZ SIRSKE OBALE
(VZHODNO SREDOZEMSKO MORJE)

Christian CAPAPÉ

Laboratoire d'Ichtyologie, case 104, Université de Montpellier, 34 095 Montpellier cedex 5, France
e-mail: christian.capape@umontpellier.fr

Adib SAAD

Al-Andalus University, Tartus, Syria

POVZETEK

Avtorja poročata o najdbi drugega primerka faraonskega kraljička, *Apogonichthyoides pharaonis* (Bellotti, 1874), iz sirske obale. Primerek je bil odrasel in meril 97 mm v celokupno dolžino (TL), 75 mm v standardno dolžino (SL) in tehtal 19 g. Ta ulov potrjuje prisotnost viabilne populacije vrste *A. pharaonis* na obravnavanem območju in kaže, da je tu našla primerne vire za razvoj in razmnoževanje.

Ključne besede: Apogonidae, razširjenost, populacija, levantski bazen

REFERENCES

- Ali, M. (2018):** An updated Checklist of marine fishes from Syria with an emphasis on alien species. *Medit. Mar. Sci.*, 19, 388-393.
- Al Mabruk, S.A.A., B. Zava, A. Abdulghani, M. Corsini-Foka & M. Deidun (2021):** The first record of the pharaoh cardinal fish *Apogonichthyoides pharaonis* (Actinopterygii: Perciformes: Apogonidae) from Libyan waters. *Acta Ichthyol. Piscat.*, 51(1), 113-118.
- Golani, D., E. Azzurro, J. Dulčić, E. Massuti & L. Orsi-Relini (2021):** Atlas of Exotic Fishes in the Mediterranean Sea. Second edition. [F. Briand, Ed.]. CIESM Publishers, Paris, Monaco, 365 pp.
- Gon, O. & J.E. Randall (2003):** A review of the cardinal fishes (Perciformes: Apogonidae) of the Red Sea. *Smithiana Pub. Aquat. Biodiv. Bull.*, 1, 1-46
- Haas, G. & H. Steinitz (1947):** Erythrean fishes on the Mediterranean coast of Palestine. *Nature*, 160(4053), 28 pp.
- Norman, J.R. (1927):** XXV. Report on the fishes. In: Cambridge expedition to the Suez Canal, 1924. *Trans. Zool. Soc. London*, 22(3), 375-389.
- Por, F.D. (1971):** One hundred years of Suez Canal- A century of Lessepsian migration: retrospect and viewpoints. *Systems Biol.*, 20(2), 138-159.
- Ragheb, E., E.H.K Akel & S.I. Rizkalla (2019):** Analyses of the non-target catch from the Egyptian Mediterranean trawlers, off Port-Saïd. *Egypt. J. Aquat. Res.*, 45(3), 239-246.
- Sbahi, M. & A. Saad (1995):** The existence of 4 immigrant fish species from the Red Sea in the Syrian coast (the oriental Mediterranean). *Rapp. Comm. inter. Mer Médit.*, 34, 257.