



Food and Agriculture Organization  
of the United Nations



**SPECIES PHOTOGRAPHIC PLATES  
MEDITERRANEAN SKATES, RAYS  
AND CHIMAERAS**

#### DISCLAIMER

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

This publication has been produced with the assistance of the European Union. The contents of this publication are the sole responsibility of FAO and can in no way be taken to reflect the views of the European Union.

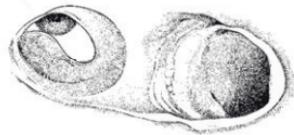
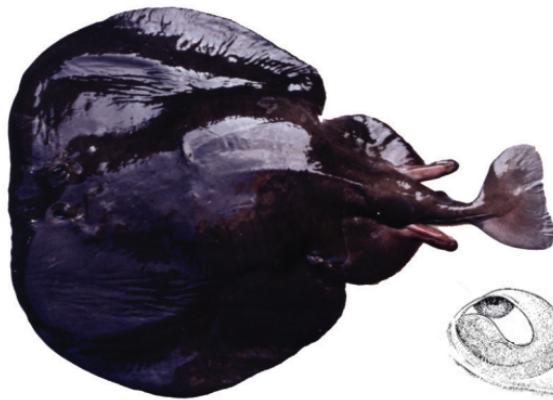
The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

© FAO, 2018

FAO encourages the use, reproduction and dissemination of material in this information product. Except where otherwise indicated, material may be copied, downloaded and printed for private study, research and teaching purposes, or for use in non-commercial products or services, provided that appropriate acknowledgement of FAO as the source and copyright holder is given and that FAO's endorsement of users' views, products or services is not implied in any way.

All requests for translation and adaptation rights, and for resale and other commercial use rights should be made via [www.fao.org/contact-us/licence-request](http://www.fao.org/contact-us/licence-request) or addressed to [copyright@fao.org](mailto:copyright@fao.org). FAO information products are available on the FAO website ([www.fao.org/publications](http://www.fao.org/publications)) and can be purchased through [publications-sales@fao.org](mailto:publications-sales@fao.org).

This publication has been printed using selected products and processes so as to ensure minimal environmental impact and to promote sustainable forest management.



### Tetronarce nobiliana

©L. Sion / © FAO\*

Torpedinidae				TTO		5 - 150m
EN	Electric Ray	FR	Torpille Noire	AB	رَأْيَةُ سُوَادِاءٍ	
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						



### Torpedo marmorata

©F. Serena / © FAO\*

Torpedinidae				TTR		10 - 100m
EN	Marbled Electric Ray	FR	Torpille Marbrée	AB	رَأْيَةُ مَرْمَرِيَّةٍ	
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						



### Torpedo sinuspersici

©B. Séret

Torpedinidae				TTJ		0 - 200m
EN	Variable Torpedo Ray	FR	Torpille Auréolée	AB	رَأْيَةُ الْخَلْجِ	
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						

EN English / FR French / AB Arabic

\* Measures on Conservation & Management



Max Length

Depth Range

Pelagic

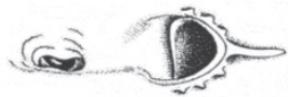
Sand

Sea Grass

Rock

Mud

Demersal



### *Torpedo torpedo*

©F. Serena / © FAO\*

Torpedinidae				TTV		0 - 70m
EN	Common Torpedo	FR	Torpille Ocellée	AB	رایه حَلْقِيَّة	
*SPA / BD PROTOCOL: II / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						



### *Glaucostegus cemiculus*

©F. Serena

Glaucostegidae				RBC		5 - 100m
EN	Blackchin Guitarfish	FR	Guitar de Mer Fouisseuse	AB	قيثارة سوداء الذقن	
*SPA / BD PROTOCOL: II / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						



### *Glaucostegus halavi*

©F. Serena

Glaucostegidae					0 - 40m
EN	Halavi Ray	FR		AB	
*SPA / BD PROTOCOL: II / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3					

EN English / FR French / AB Arabic

\* Measures on Conservation & Management



Max Length

Depth Range

Pelagic

Sand

Sea Grass

Rock

Mud

Demersal



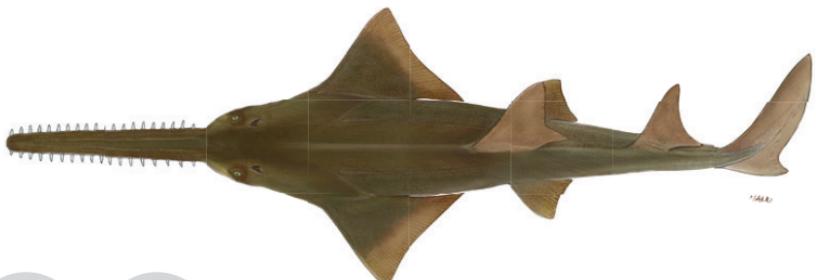
### *Rhinobatos rhinobatos*

Rhinobatidae					RBX		©F. Serena
EN	Common Guitarfish	FR	Guitar de Mer Commune	AB	قيشار شائعة		
*SPA/BD PROTOCOL: II / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3							



### *Pristis pectinata*

Pristidae					RPP		©H. Burgess
EN	Smalltooth Sawfish	FR	Poisson-scie Tident	AB	منشار ناعم		
*SPA/BD PROTOCOL: II / CITES: I / CMS: I & II / ICCAT: NA / GFCM: GFCM/36/2012/3							



### *Pristis pristis*

Pristidae					RPR		© FAO*
EN	Common Sawfish	FR	Poisson-scie Commune	AB	منشار شائع		
*SPA/BD PROTOCOL: II / CITES: I / CMS: I & II / ICCAT: NA / GFCM: GFCM/36/2012/3							

EN English / FR French / AB Arabic

\* Measures on Conservation & Management



Pelagic

Sand

Sea Grass

Rock

Mud

Demersal



### *Dipturus cf batis*

©J. Ellis / ©P. Bor

Rajidae					RJB	10 - 600m
EN	Blue Skate	FR	Pocheteau Gris	AB	سَقْنُ أَزْرَقٌ	 250cm
*SPA / BD PROTOCOL: II / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						



### *Dipturus nidarosiensis*

©M.C. Follesa / ©A. Titone

Rajidae					JAD	200-1000m
EN	Norwegian Skate	FR	Pocheteau de Norvège	AB	سَقْنُ نُروِيجِيٌّ	 200cm
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						



### *Dipturus oxyrinchus*

©F. Serena / ©C. Mancusi

Rajidae					RJO	90 - 900m
EN	Longnosed Skate	FR	Pocheteau Noir	AB	سَقْنُ مُؤَذَّفٌ	 150cm
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						

EN English / FR French / AB Arabic

\* Measures on Conservation & Management



Max Length

Depth Range

Pelagic

Sand

Sea Grass

Rock

Mud

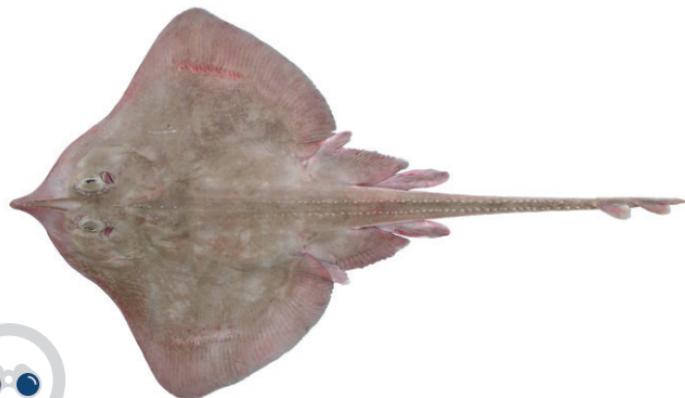
Demersal



### *Leucoraja circularis*

©F. Serena / ©P. Bor

Rajidae					RJI	70 - 300m
<b>EN</b>	Sandy Ray	<b>FR</b>	Raie Circulaire	<b>AB</b>	رایه رملیة	
*SPA / BD PROTOCOL: II / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						



### *Leucoraja fullonica*

©S.P. Iglesias / ©Ishiiara et al., 2012

Rajidae					RJF	30 - 600m
<b>EN</b>	Shagreen Ray	<b>FR</b>	Raie Chardon	<b>AB</b>	رایه مشوّكة	
*SPA / BD PROTOCOL: NA / CITES: I / CMS: I & II / ICCAT: NA / GFCM: GFCM/36/2012/3						



### *Leucoraja melitensis*

©F. Gravino / ©F. Gravino

Rajidae					JAM	50 - 600m
<b>EN</b>	Maltese Ray	<b>FR</b>	Raie de Malte	<b>AB</b>	رایه مالطا	
*SPA / BD PROTOCOL: II / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						

EN English / FR French / AB Arabic

\* Measures on Conservation & Management



Max Length

Depth Range

Pelagic

Sand

Sea Grass

Rock

Mud

Demersal



### *Leucoraja naevus*

©EAF-Nansen Project / ©Maya et al., 2015

Rajidae					RJN		20 - 250m
EN	Cuckoo Ray	FR	Raie Fleurie	AB			70cm
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3							



### *Raja asterias*

©F. Serena / ©F. Serena

Rajidae					JRS		2 - 200m
EN	Mediterranean Starry Ray	FR	Raie Étoilée	AB	رَأْيَةُ نَجْمَيْةٍ		80cm
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3							



### *Raja brachyura*

©G. Morey / ©C. Mancusi

Rajidae					RJH		10 - 100m
EN	Blonde Ray	FR	Raie Lisse	AB			
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3							

EN English / FR French / AB Arabic

\* Measures on Conservation & Management



Max Length

Depth Range

Pelagic

Sand

Sea Grass

Rock

Mud

Demersal



### *Raja clavata*

©F. Serena / ©F. Serena

Rajidae				RJC		20 - 700m
<b>EN</b>	Thornback Ray	<b>FR</b>	Raie Bouclée	<b>AB</b>	راية مشوكة الظهر	
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						

\*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3

### *Raja miraletus*

©F. Serena / ©C. Mancusi

Rajidae				JAI		10 - 450m
<b>EN</b>	Brown Ray	<b>FR</b>	Raie Miroir	<b>AB</b>	راية إم عيون	
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						

\*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3



### *Raja montagui*

©S.P. Iglesia / ©C. Mancusi

Rajidae				RJM		10 - 650m
<b>EN</b>	Spotted Ray	<b>FR</b>	Raie Douce	<b>AB</b>	راية مبرقشة	
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						

\*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3

**EN** English / **FR** French / **AB** Arabic

\* Measures on Conservation & Management



Max Length

Depth Range

Pelagic

Sand

Sea Grass

Rock

Mud

Demersal



### *Raja polystigma*

©F. Serena / ©C. Mancusi

Rajidae				JAY		100 - 400m
<b>EN</b>	Speckled Ray	<b>FR</b>	Raie Tachetée	<b>AB</b>	رَأْيَةٌ مُنَقَّطَةٌ	
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						



### *Raja radula*

©C. Mancusi / ©C. Mancusi

Rajidae				JAR		20 - 350m
<b>EN</b>	Rough Ray	<b>FR</b>	Raie Râpe	<b>AB</b>	رَأْيَةٌ خشنَةٌ	
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						



### *Raja undulata*

©F. Serena / ©CMaya et al., 2015

Rajidae				RJU		10 - 300m
<b>EN</b>	Undulate Ray	<b>FR</b>	Raie Brunette	<b>AB</b>	رَأْيَةٌ مُوْجَةٌ	
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						

EN English / FR French / AB Arabic

\* Measures on Conservation & Management



Max Length

Depth Range

Pelagic

Sand

Sea Grass

Rock

Mud

Demersal



### *Rostroraja alba*

©F. Serena / ©G. Morey

Rajidae				RJA		40 - 550m
EN	White Skate	FR	Raie Blanche	AB		
<b>*SPA / BD PROTOCOL: II / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3</b>						



### *Bathyrajia centroura*

©R. Silvestri

Dasyatidae				RDC		10 - 300m
EN	Roughtail Stingray	FR	Pastenague Épineuse	AB	رایة لاسعة مشوكة	
<b>*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3</b>						



### *Dasyatis marmorata*

©M.L. Kattoura

Dasyatidae				RDQ		10-65m
EN	Marble Stingray	FR	Pastenague Marbrée	AB	رایة لاسعة رخامية	
<b>*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3</b>						



EN English / FR French / AB Arabic

\* Measures on Conservation & Management



Max Length

Depth Range

Pelagic

Sand

Sea Grass

Rock

Mud

Demersal



### Dasyatis pastinaca

©M. Dalu

Dasyatidae					JDP		10 - 200m
EN	Common Stingray	FR	Pastenague Commune	AB	رایه لاسعة شائعة		
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3							

140 cm DW

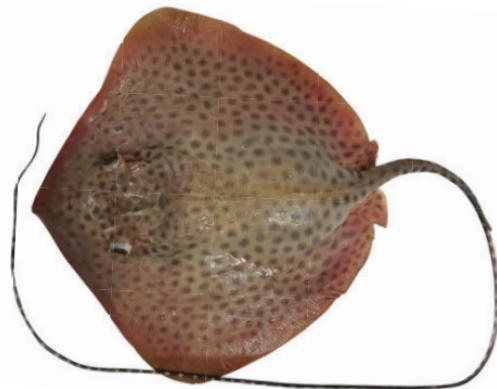


### Dasyatis tortonesei

©C. Capapé

Dasyatidae					JDP		0 - 100m
EN	Tortonese's Stingray	FR	Pastenague de Tortonese	AB			
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3							

84 cm DW



### Himantura leoparda

©N. Yücel

Dasyatidae					DHV		0 - 70m
EN	Honeycomb Stingray	FR	Pastenague Indienne	AB	رایه لاسعة هندية		
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3							

140 cm DW

EN English / FR French / AB Arabic

\* Measures on Conservation & Management



Max Length

Depth Range

Pelagic

Sand

Sea Grass

Rock

Mud

Demersal



### *Himantura uarnak*

©R. Bonfil

Dasyatidae				DHV		10 - 200m
<b>EN</b>	Honeycomb Stingray	<b>FR</b>	Pastenague Indienne	<b>AB</b>	رایه لاسعة هندية	
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						



### *Pteroplatytrygon violacea*

©N. Ungaro

Dasyatidae				PLS		0 - 100m
<b>EN</b>	Pelagic Stingray	<b>FR</b>	Pastenague Violette	<b>AB</b>	رایة لاسعة بنفسجية	
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						



### *Taeniurus grabatus*

©F. Serena

Dasyatidae				RTB		10 - 100m
<b>EN</b>	Round Stingray	<b>FR</b>	Pastenague Africaine	<b>AB</b>		
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						

\*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3

EN English / FR French / AB Arabic  
\* Measures on Conservation & Management

Max Length  
Depth Range      Pelagic      Sand      Sea Grass      Rock      Mud      Demersal



### Gymnura altavela

©P. Psomadakis

Gymnuridae					RGL		10 - 100m
<b>EN</b>	Spiny Butterfly Ray	<b>FR</b>	Raie-papillon Épineuse	<b>AB</b>	راية الفراشة		<b>400 cm DW</b>
*SPA / BD PROTOCOL: II / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3							



### Myliobatis aquila

©F. Serena

Myliobatidae					MYL		10 - 200m
<b>EN</b>	Common Eagle Ray	<b>FR</b>	Aigle Commun	<b>AB</b>	عقاب البحر		<b>80 cm DW</b>
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3							



### Aetomylaeus bovinus

©F. Serena

Myliobatidae					MPO		5 - 100m
<b>EN</b>	Bull Ray	<b>FR</b>	Aigle Vachette	<b>AB</b>	راية بقرة		<b>250 cm DW</b>
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3							

EN English / FR French / AB Arabic

\* Measures on Conservation & Management



Max Length

Depth Range

Pelagic

Sand

Sea Grass

Rock

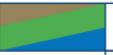
Mud

Demersal



### Rhinoptera marginata

©M. Ducrocq

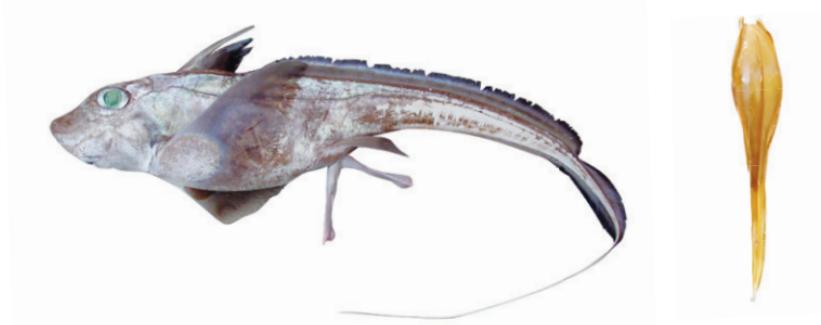
Rhinopteridae					MRM		5 - 100m
EN	Lusitanian Cownose Ray	FR	Mourine Lusitanienne	AB	رایه طائرة		200 cm DW
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3							



### Mobula mobular

©F. Serena

Mobulidae					RMM		0 - 200m
EN	Devil Fish	FR	Mante	AB	شيطان البحر		300 cm DW
*SPA / BD PROTOCOL: II / CITES: II / CMS: I & II / ICCAT: NA / GFCM: GFCM/36/2012/3							



### *Chimaera monstrosa*

©F. Serena / ©F. Serena

Chimaeridae					CMO	200 - 1000m
EN	Rabbit Fish	FR	Chimère Commune	AB	خرافة	
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						50cm SL/100 cm TL



### *Hydrolagus mirabilis*

©M.M.S. Farrag

Chimaeridae					CYH	450 - 1900m
EN	Large-eyed Rabbitfish	FR	Borrico	AB		
*SPA / BD PROTOCOL: NA / CITES: NA / CMS: NA / ICCAT: NA / GFCM: GFCM/36/2012/3						40cm SL/80 cm TL

## PREPARATION OF THIS DOCUMENT

The aim of this document is to provide species photographic plates to supplement the field guide and cards available for the Mediterranean skates, rays and chimaeras in the FAO fishing area 37 (see: Serena, 2005. FAO, 2010. Bariche, 2012). The plates are intended to extend and update the photographic collection of the field guides into waterproof plates, in view to become a practical photo collection tool for data collectors in the field. These species photographic plates follow the systematic organization proposed by Eschmeyer, Fricke, and Van der Laan (2017) and the species inside the families are mentioned in alphabetical order according to genus. For each species, the International measures on conservation and management of sharks are up to date to 2016 and the full references are provided below. This document was prepared within the framework of the FAO EastMed Project Scientific and Institutional Cooperation to Support Responsible Fisheries in the Eastern Mediterranean.

## ACRONYMS AND ABBREVIATIONS

SPA/BD Protocol:	Protocol of the Barcelona Convention concerning the Specially Protected Areas and Biological Diversity in the Mediterranean.
CITES:	Convention on International Trade in Endangered Species of Wild Fauna and Flora.
CMS:	Convention on the Conservation of Migratory Species of Wild Animals.
GFCM:	General Fisheries Commission for the Mediterranean.
ICCAT:	International Commission for the Conservation of Atlantic Tunas.



This symbol refers to the species that must be released unharmed and alive to the extent possible and cannot be retained on board, transhipped, landed, transferred, stored, sold or displayed or offered for sale. Incidental taking, release and/or discarding events of these species must be recorded by the ship-owners, who are invited to refer to the relevant GFCM and ICCAT regulation.



This symbol refers to the species that are very rare or the species whose presence in Mediterranean is considered questionable by the authors, thus their presence need to be confirmed in the region. It is extremely important to look carefully at these species, not only taking photographic and genetic samples, but preserving the whole specimen.

## REFERENCES

- CITES, 2006 Convention on International Trade In Endangered Species of Wild Fauna And Flora Appendices I, II and III valid from 21 November 2016.
- CMS, 2015 Appendices I and II of the Convention on the Conservation of Migratory Species of Wild Animals (CMS). Effective 8 February 2015.
- GFCM, 2012 Recommendation GFCM/36/2012/3 on fisheries management measures for conservation of sharks and rays in the GFCM area.
- UNEP, 2013 Protocol concerning specially protected areas and biological diversity in the Mediterranean. Annex II. List of endangered or threatened species. United Nations Environment Programme, Mediterranean Action Plan, Regional Activity Centre for Specially Protected Areas.
- UNEP, 2013 Protocol concerning specially protected areas and biological diversity in the Mediterranean. Annex III. List of species whose exploitation is regulated. United Nations Environment Programme, Mediterranean Action Plan, Regional Activity Centre for Specially Protected Areas.

Eschmeyer, W. N., R. Fricke and R. van der Laan (eds), 2017. Catalog of Fishes: Genera, Species, References. (<http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>). Electronic version accessed 10 February 2017.

Bariche, M. 2012. Field identification guide to the living marine resources of the Eastern and Southern Mediterranean. FAO Species Identification Guide for Fishery Purposes. Rome, FAO. 2012. 610 pp.

FAO. 2010. Sharks and rays of the Mediterranean and Black Sea. FAO Species Identification cards. Rome.

Serena, F. 2005. Field identification guide to the sharks and rays of the Mediterranean and Black Sea. FAO Species Identification Guide for Fishery Purposes. Rome, FAO. 2005. 97p. 11 colour plates + egg cases.

## ACKNOWLEDGEMENTS

The authors would like to thank Michel Bariche and Chourouk Benkabbour for their help with the Arabic language. Peter Psomadakis and Edoardo Mostarda are acknowledged for their suggestions on technical matters. Thankfulness is extended to Manuela D'Antoni for the provision of the FAO drawings and to all the authors of the photos included in the plates.



This publication has been produced with the assistance of the European Union.  
The contents of this publication are the sole responsibility of FAO and  
can in no way be taken to reflect the views of the European Union.