



## MarinTrust Standard V2

# By-product Fishery Assessment Common dolphinfish (*Coryphaena hippurus*) in FAO 87 (southeast Pacific)

### MarinTrust Programme

Unit C, Printworks

22 Amelia Street

London

SE17 3BZ

E: [standards@marin-trust.com](mailto:standards@marin-trust.com)

T: +44 2039 780 819

**Table 1 Application details and summary of the assessment outcome**

Fishery Under Assessment	Species:	Common dolphinfish ( <i>Coryphaena hippurus</i> )["perico/dorado", in Spanish]
	Geographical area:	FAO 87 (southeast Pacific)
	Country of origin of the product:	Ecuador
	Stock:	Common dolphinfish ( <i>Coryphaena hippurus</i> ) in FAO 87 (southeast Pacific)
Date	17 October 2023	
Report Code	ECU06	
Assessor	Ana Elisa Almeida Ayres	
Country of origin of the product - PASS	Ecuador	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Company Name(s): Fortidex SA, Productos Pesqueros SA Produpes			
Country: Ecuador			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification/ NSF	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Ana Elisa Almeida Ayres	Mathew Jew	0.5	Re-approval
Assessment Period	October 2023 – October 2024		

Scope Details	
Main Species	Common dolphinfish ( <i>Coryphaena hippurus</i> ) ["perico/dorado", in Spanish]
Stock	Common dolphinfish ( <i>Coryphaena hippurus</i> ) in FAO 87 (southeast Pacific)
Fishery Location	FAO 87 (southeast Pacific)
Management Authority (Country/ State)	Inter-American Tropical Tuna Commission (IATTC), Vice-ministry of Aquaculture and Fisheries of Ecuador
Gear Type(s)	Longlines
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor's recommendation
Recommendation	<b>APPROVED</b>

**Table 2. Assessment Determination**

Assessment Determination
<p>If any species is categorised as Endangered or Critically Endangered on Union for Conservation of Nature's Red List of Threatened Species - IUCN's Red List, or if it appears in the Convention on International Trade in Endangered Species of Wild Fauna and Flora - CITES appendices, it cannot be approved for use as Marin Trust raw material. Common dolphinfish (<i>Coryphaena hippurus</i>) ["perico/dorado", in Spanish] is not categorised as Endangered or Critically Endangered on IUCN's Red List and does not appear in CITES appendices; therefore, common dolphinfish (<i>Coryphaena hippurus</i>) is eligible for approval for use as Marin Trust by-product raw material.</p> <p>A stock assessment of common dolphinfish (<i>Coryphaena hippurus</i>) in the South-East Pacific Ocean using data from 1988-2019 of two Peruvian fleets and two Ecuadorian fleets was performed and estimates for reference points were given<sup>1</sup>, however they were not formally adopted for this stock. Peru and Ecuador are working together for raising information regarding the shared stock<sup>2</sup>, but it is still managed separately. Peru is using reference points for assessing the status of common dolphinfish (<i>Coryphaena hippurus</i>) in its national waters, but it does not consider catches from Ecuador in the evaluation<sup>3</sup>. Moreover, Ecuador has not established reference points for the management of the stock and does not provide data of biomass or fishing mortality for this species, publishing mainly monthly size of catches data<sup>4</sup>. For these reasons, the stock was assessed as Category D, however, future assessments of this stock should confirm this remains appropriate.</p> <p>The stock was awarded a Productivity score of 1.57 and a Susceptibility score of 2.5, leading to a "Pass" rating against Table D3 of the Productivity-Susceptibility Analysis – PSA.</p> <p>Therefore, common dolphinfish (<i>Coryphaena hippurus</i>) in FAO 87 (southeast Pacific) is APPROVED for the production of fishmeal and fish oil under the current MarinTrust v2.3 by-products standard.</p>
Fishery Assessment Peer Review Comments
<p>The assessor correctly classified common dolphinfish (<i>Coryphaena hippurus</i>) in FAO 87 (southeast Pacific) as Category D, the stock is subject to a species-specific management regime and reference points are not defined.</p> <p>The assessor correctly identified the productivity and susceptibility attributes in the PSA and correctly assigned scores for each attribute. The assessor also correctly calculated the productivity score of 1.57 and the susceptibility score of 2.5.</p> <p>Common dolphinfish (<i>Coryphaena hippurus</i>) in FAO 87 (southeast Pacific) passes the PSA in accordance with Table D3 and therefore should be approved under the MarinTrust Standard v.2.3.</p>
Notes for On-site Auditor
N/A

<sup>1</sup> <https://www.iattc.org/GetAttachment/6d3cf4f6-d196-4d82-905b-7a957ab9ee7d/INF-O.%20Stock%20assessment%20dorado%20South%20EPO>

<sup>2</sup> <https://institutopesca.gob.ec/wp-content/uploads/2023/07/Informacion-Convenio-IPIAP-IMARPE.pdf>

<sup>3</sup> <https://www.gob.pe/institucion/imarpe/informes-publicaciones/3589453-informe-sobre-el-desarrollo-de-la-pesqueria-de-perico-coryphaena-hippurus>

<sup>4</sup> <https://institutopesca.gob.ec/dorado/>

## Species Categorisation

**NB:** If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in CITES Appendix 1, it **cannot** be approved for use as a MarinTrust raw material.

### IUCN Red list Category

By-product material from a species listed by IUCN (the International Union for Conservation of Nature) under the Red List for the following categories shall immediately fail the assessment;

- EXTINCT (E) AND EXTINCT IN THE WILD (EW)
- CRITICALLY ENDANGERED (CR) facing an extremely high risk of extinction in the wild.
- ENDANGERED (EN) facing a very high risk of extinction in the wild.

By-product material may be used from the following categories provided that all clauses in the MarinTrust standard are passed.

- VULNERABLE (VU) facing a high risk of extinction in the wild.
- NEAR THREATENED (NT) does not qualify for above now, but is close or is likely to qualify for, a threatened category in the near future.
- LEAST CONCERN (LC) Widespread and abundant.
- DATA DEFICIENT (DD) and NOT EVALUATED (NE)

## Table 3 Species Categorisation Table

Common name	Latin name	Stock	Management	Category	IUCN Red List Category <sup>5</sup>	CITES Appendix 1 <sup>6</sup>
Common dolphinfish [“perico/dorado”, in Spanish]	<i>Coryphaena hippurus</i>	Common dolphinfish ( <i>Coryphaena hippurus</i> ) in FAO 87 (southeast Pacific)	Inter-American Tropical Tuna Commission (IATTC), Vice - ministry of Aquaculture and Fisheries of Ecuador	D	LC	No

<sup>5</sup> <https://www.iucnredlist.org/>

<sup>6</sup> <https://cites.org/eng/app/appendices.php>

## CATEGORY D SPECIES

Category D species are those which are not subject to a species-specific management regime. In the case of mixed trawl fisheries, Category D species may make up the majority of landings. The comparative lack of scientific information on the status of the population of the species means that a risk-assessment style approach must be taken.

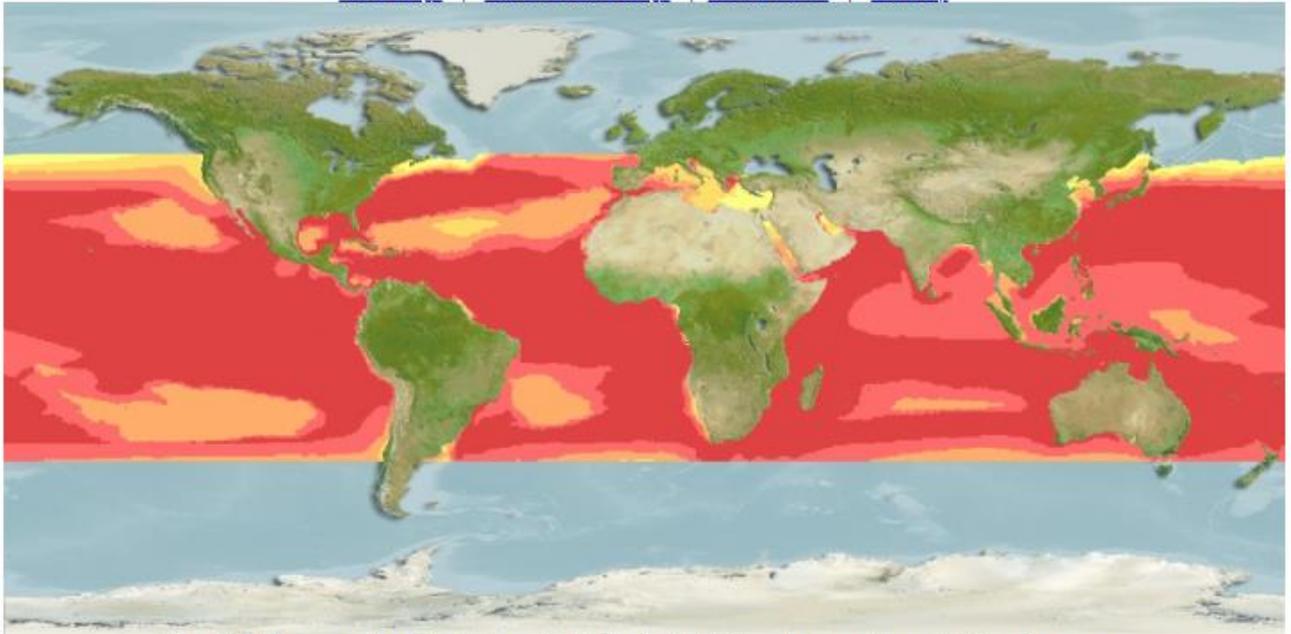
D1	Species Name	Common dolphinfish ( <i>Coryphaena hippurus</i> ) [“perico/dorado”, in Spanish]	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	0.5	1
	Average maximum age (years)	2.6	1
	Fecundity (eggs/spawning)	299,684	1
	Average maximum size (cm)	153	2
	Average size at maturity (cm)	76.5	2
	Reproductive strategy	Broadcast spawner	1
	Mean trophic level	4.4	3
	<b>Average Productivity Score</b>		<b>1.57</b>
	Susceptibility Attribute	Value	Score
	Availability (area overlap)	<10% overlap	1
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)	Target	3
	Selectivity of gear type	Retained	3
	Post-capture mortality	Retained	3
	<b>Average Susceptibility Score</b>		<b>2.5</b>
	<b>PSA Risk Rating (From Table D3)</b>		<b>Pass</b>
	<b>Compliance rating</b>		<b>Pass</b>
	<b>Further justification for susceptibility scoring (where relevant)</b>		
	<i>For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision.</i>		
	According to Froese and Pauly (2023), the species is found in Atlantic, Indian and Pacific: in tropical and subtropical waters (Figure 1).		



Computer Generated **Native Distribution Map** for *Coryphaena hippurus* (Common dolphinfish), with modelled year 2050 native range map based on IPCC RCP8.5 emissions scenario

Currently known distribution: Atlantic, Indian and Pacific: in tropical and subtropical waters. Highly migratory species, Annex I of the 1982 Convention on the Law of the Sea (Ref. 26139).

[Native Range](#) | [Year 2050 Native Range](#) | [Suitable Habitat](#) | [Point Map](#)



**Note:** Distribution range colours indicate degree of suitability of habitat which can be interpreted as probabilities of occurrence.

<p>Relative probabilities of occurrence</p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: red; margin-right: 5px;"></span> 0.80 - 1.00</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: orange; margin-right: 5px;"></span> 0.60 - 0.79</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> 0.40 - 0.59</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: lightyellow; margin-right: 5px;"></span> 0.20 - 0.39</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: paleyellow; margin-right: 5px;"></span> 0.01 - 0.19</li> </ul>	<p><b>Explore:</b></p> <ul style="list-style-type: none"> <li><a href="#">Native range map</a></li> <li><a href="#">Suitable habitat map</a></li> <li><a href="#">Point map</a></li> <li><a href="#">Show mapping parameters</a></li> <li><a href="#">Create your own map</a></li> </ul>	<p><b>Download native range data:</b></p> <ul style="list-style-type: none"> <li><a href="#">csv format</a></li> <li><a href="#">NetCDF (view in Godiva)</a></li> <li><a href="#">About AquaMaps</a></li> </ul>	<p><b>More species info:</b></p> <ul style="list-style-type: none"> <li><a href="#">List of countries</a></li> <li><a href="#">List of FAO areas</a></li> <li><a href="#">List of ecosystems</a></li> <li><a href="#">Comments &amp; Corrections</a></li> </ul>	<p><b>Session no. 10</b></p> <p><a href="#">-Close window-</a></p> <p><i>Please use -Close window-link just above to exit instead of the browser's X button.</i></p>
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**Figure 1.** Distribution of Common dolphinfish (*Coryphaena hippurus*) [“perico/dorado”, in Spanish]. Source: AquaMaps (2019).

**References**

AquaMaps. 2019. Computer generated distribution maps for *Coryphaena hippurus* (Common dolphinfish), with modelled year 2050 native range map based on IPCC RCP8.5 emissions scenario. [https://www.aquamaps.org/receive.php?type\\_of\\_map=regular&map=cached](https://www.aquamaps.org/receive.php?type_of_map=regular&map=cached)

Froese, R. and D. Pauly. Editors. 2023. FishBase. World Wide Web electronic publication. <https://www.fishbase.se/summary/6>

Standard clauses 1.3.2.2

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	High productivity (Low risk, score = 1)	Medium productivity (medium risk, score = 2)	Low productivity (high risk, score = 3)
Average age at maturity	<5 years	5-15 years	>15 years
Average maximum age	<10 years	10-25 years	>25 years
Fecundity	>20,000 eggs per year	100-20,000 eggs per year	<100 eggs per year
Average maximum size	<100 cm	100-300 cm	>300 cm
Average size at maturity	<40 cm	40-200 cm	>200 cm
Reproductive strategy	Broadcast spawner	Demersal egg layer	Live bearer
Mean Trophic Level	<2.75	2.75-3.25	>3.25

Susceptibility attributes	Low susceptibility (Low risk, score = 1)	Medium susceptibility (medium risk, score = 2)	High susceptibility (high risk, score = 3)
Areal overlap (availability) Overlap of the fishing effort with the species range	<10% overlap	10-30% overlap	>30% overlap
Encounterability The position of the stock/species within the water column relative to the fishing gear, and the position of the stock/species within the habitat relative to the position of the gear	Low overlap with fishing gear (low encounterability).	Medium overlap with fishing gear.	High overlap with fishing gear (high encounterability). Default score for target species
Selectivity of gear type Potential of the gear to retain species	a Individuals < size at maturity are rarely caught	a Individuals < size at maturity are regularly caught.	a Individuals < size at maturity are frequently caught
	b Individuals < size at maturity can escape or avoid gear.	b Individuals < half the size at maturity can escape or avoid gear.	b Individuals < half the size at maturity are retained by gear.
Post-capture mortality (PCM) The chance that, if captured, a species would be released and that it would be in a condition permitting subsequent survival	Evidence of majority released post-capture and survival.	Evidence of some released post-capture and survival.	Retained species or majority dead when released.

<b>D3</b>		<b>Average Susceptibility Score</b>		
		<b>1 - 1.75</b>	<b>1.76 - 2.24</b>	<b>2.25 - 3</b>
<b>Average Productivity Score</b>	<b>1 - 1.75</b>	PASS	PASS	PASS
	<b>1.76 - 2.24</b>	PASS	PASS	TABLE D4
	<b>2.25 - 3</b>	PASS	TABLE D4	TABLE D4