



MarinTrust Standard V2

By-product Fishery Assessment

Pacific harvestfish (Peprilus medius)

FAO 87- Southeast Pacific, Ecuador EEZ

MarinTrust Programme

Unit C, Printworks

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Pacific harvestfish (<i>Peprilus medius</i>)
	Geographical area:	FAO 87
	Country of origin of the product:	Ecuador
	Stock:	Southeast Pacific – Ecuador EEZ
Date	February 2024	
Report Code	ECU10	
Assessor	Blanca Gonzalez	
Country of origin of the product - PASS	Ecuador	
Country of origin of the product - FAIL	None	

Application details and summary of the assessment outcome			
Company Name(s): Fortidex SA			
Country: Mexico			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Blanca Gonzalez	Sam Peacock	0.5	Surveillance 1
Assessment Period	February 2024 – February 2025		

Scope Details	
Main Species	Pacific harvestfish (<i>Peprilus medius</i>)
Stock	Southeast Pacific – Ecuador EEZ
Fishery Location	FAO 87
Management Authority (Country/ State)	Ecuador
Gear Type(s)	Purse seine
Outcome of Assessment	
Peer Review Evaluation	Agree with recommendation
Recommendation	PASS

Table 2. Assessment Determination

Assessment Determination
<p>Pacific harvestfish (<i>Peprilus medius</i>) is categorised by the IUCN as Least Concern, do not appear in the CITES appendices, and there is no species-specific management in place or establish reference points for the species in Ecuador. Thus, it was assessed under Category D.</p> <p>In the Productivity-Susceptibility Analysis (PSA) the Pacific harvestfish awarded an average productivity score of 1.33 and an average susceptibility score of 2.25 passing against Table D3, indicating that the stock is not vulnerable to the fisheries in the Ecuadorian EEZ.</p> <p>The Pacific harvestfish by-product meets the Marin Trust requirements and it should be remained approved for use as a raw material.</p>
Fishery Assessment Peer Review Comments
<p>The peer reviewer agrees that Pacific harvestfish is eligible for assessment and has been correctly assessed under Category D. The PSA has been conducted correctly and sufficient supporting evidence is provided to support the conclusions. The peer reviewer agrees that this byproduct should remain approved for use as a raw material.</p>
Notes for On-site Auditor

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 ¹	CITES Appendix 1 ²
Pacific harvestfish	<i>Peprilus medius</i>	Southeast Pacific – Ecuador EEZ	No	D	Least Concern ³	No

¹ <https://www.iucnredlist.org/>

² <https://cites.org/eng/app/appendices.php>

³ <https://www.iucnredlist.org/species/183339/8096349>

CATEGORY C SPECIES

In a by-product assessment, Category C species are those which are subject to a species-specific management regime and are usually targeted species in fisheries for human consumption.

Clause C1 should be completed for each Category C species. If there are no Category C species in the fishery under assessment, this section can be deleted. Where a species fails this Clause, it should be assessed as a Category D species instead.

Species Name		N/A	
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	
			Clause outcome:
<p>C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.</p> <p>C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.</p>			
References			
Links			
MarinTrust Standard clause		1.3.2.2	
FAO CCRF		7.5.3	
GSSI		D.3.04, D5.01	

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	Pacific harvestfish (<i>Peprilus medius</i>)	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	0.8 ¹	1
	Average maximum age (years)	3 ¹	1
	Fecundity (eggs/spawning)	Unknown	-
	Average maximum size (cm)	31.6 ¹	1
	Average size at maturity (cm)	19.4 ¹	1
	Reproductive strategy	Broadcast spawner ¹	1
	Mean trophic level	4.0 ¹	3
	Average Productivity Score		1.33
	Susceptibility Attribute	Value	Score
	Availability (area overlap)	<10 % overlap ²	1
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)	Medium overlap ⁴⁻⁵	2
	Selectivity of gear type	Individuals < size at maturity are frequently caught ⁶	3
	Post-capture mortality	Retained	3
	Average Susceptibility Score		2.25
	PSA Risk Rating (From Table D3)		PASS
	Compliance rating		PASS
	<p>Further justification for susceptibility scoring (where relevant) <i>For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision</i></p> <p>Area overlap: The fishery occurs in the Exclusive Economic Zone from Ecuador and the Pacific harvestfish distributes in coastal waters from Mexico to Peru (Figure 1).</p> <p>Encounterability: Pacific harvestfish is a benthopelagic that can be found in coastal water to over bottom of continental shelf in depths ranging between 10 to 60 m¹; but they have preference for sandy-silty bottoms³. Pacific harvestfish is an associated species to the small pelagic fish fishery in Ecuador. Associated species are those which inhabit or are linked to the seabed and due to their migrations in the water column, are accessible to interact with the purse seine at the time of their fishing operation. 21.4% of the small pelagic fish fishery activity occurs on sandy-silty bottoms, in ranges between 0 – 50 m and 50 – 200 m⁴, and the Pacific harvestfish catch in the small pelagic fish fishery activity from 2015 to 2022 represents from 0.21% to 5.52% of the total catch.⁵</p> <p>Selectivity of gear type: Individuals < size at maturity are frequently caught, since fishing regulations in Ecuador states that small pelagic fish fisheries should use a minimum mesh size of 1 1/8" (2.85 cm).⁶</p>		



Figure 1. map distribution of Pacific harvestfish ².

References

- 1 Fishbase 2023. Pacific harvestfish. <https://www.fishbase.se/summary/Peprilus-medius.html>
- 2 IUCN 2023. Pacific harvestfish. <https://www.iucnredlist.org/species/183339/8096349>
- 3 <https://www.institutopesca.gob.ec/wp-content/uploads/2018/01/Ficha-Pesquera-Pampano-DLM-013.pdf>
- 4 Análisis de la interacción de la pesquería de red de cerco con jareta de peces pelágicos pequeños y el hábitat físico, durante 2020. <https://www.institutopesca.gob.ec/wp-content/uploads/2018/01/Informe-Impactos-HABITAT-2020.pdf>
- 5 <https://institutopesca.gob.ec/wp-content/uploads/2023/05/Capturas-pela%CC%81gicos-pequen%CC%83os-2015-2022.pdf>
- 6 Acuerdo Nº MRCEIP-SRP-2019-0160-A – Medidas de ordenamiento, regulación y control para las embarcaciones pesqueras industriales provistas de redes de cerco de jareta que capturan peces pelágicos pequeños. <https://faolex.fao.org/docs/pdf/ecu196232.pdf>

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.

D3		Average Susceptibility Score		
		1 - 1.75	1.76 - 2.24	2.25 - 3
Average Productivity Score	1 - 1.75	PASS	PASS	PASS
	1.76 - 2.24	PASS	PASS	TABLE D4
	2.25 - 3	PASS	TABLE D4	TABLE D4

D4 Species Name		N/A	
Impacts On Species Categorised as Vulnerable by D1-D3 - Minimum Requirements			
D4.1	The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.		
D4.2	There is no substantial evidence that the fishery has a significant negative impact on the species.		
Outcome:			
Evidence			
D4.1: The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.			
D4.2 There is no substantial evidence that the fishery has a significant negative impact on the species.			
References			
Links			
MarinTrust Standard clause		1.3.2.2, 4.1.4	
FAO CCRF		7.5.1	
GSSI		D.5.01	