



MarinTrust Standard V2

By-product Fishery Assessment Report Template

MarinTrust Programme

Unit C, Printworks

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Pacific Chub Mackerel (<i>Scomber japonicus</i>)
	Geographical area:	FAO 71 Pacific Western Central
	Country of origin of the product:	Thailand
	Stock:	Pacific Northwest
Date	18/06/2021	
Report Code	BP108	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	Thailand	
Country of origin of the product - FAIL		

Application details and summary of the assessment outcome			
Name:			
Address:			
Country: Thailand		Zip:	
Tel. No.:		Fax. No.:	
Email address:		Applicant Code:	
Key Contact:		Title:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Virginia Polonio	Geraldine Criquet	0.5	Surveillance 1
Assessment Period	To June 2021		

Scope Details	
Main Species	Pacific Chub Mackerel (<i>Scomber japonicus</i>)
Stock	Pacific Western Central
Fishery Location	FAO 71 Pacific Western Central
Management Authority (Country/ State)	Thailand Fisheries Management Authorities
Gear Type(s)	Pelagic trawls
Peer Review Evaluation	
	Agree with the assessor's determination
Recommendation	APPROVED

Table 2. Assessment Determination

Assessment Determination
<p>If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in the CITES appendices, it cannot be approved for use as Marin Trust raw material. Pacific chub mackerel (<i>Scomber japonicus</i>) does not appear as Endangered or Critically Endangered on the IUCN Red List, nor does it appear in the CITES appendices; and is therefore eligible for approval for use as Marin Trust raw material.</p> <p>There are several stock assessments carried out by Japan, China or Russia. However, reference points are not agreed by all parties. Pacific chub mackerel in Thailand is not subject to a specific research and management regime. Therefore, it is categorised as Category D.</p> <p>The fishery was assessed using the risk-based Productivity, Susceptibility Analysis (PSA) as per Marin Trust v 2.0 procedures for Category D species.</p> <p>The species has passed this risk-based assessment (Table D3) with an average productivity of 1.33 and an average susceptibility of 1.8. The Pacific Chub Mackerel in FAO Area 61 is APPROVED for the production of fishmeal and fish oil under the Marin Trust v 2.0 by-products standard.</p>
Fishery Assessment Peer Review Comments
<p>The assessor correctly classified Pacific Northwest chub mackerel as category D, reference points are not defined to assess the stock status relative to.</p> <p>A PSA was performed. With an average productivity score of 1.33 and an average susceptibility score of 1.8, the fishery passed Table D3.</p> <p>Therefore, the reviewer agrees with the assessor’s determination that the fishery passes Table D3 and Pacific Northwest chub mackerel is thus approved.</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 an MARINTRUST raw material.

IUCN Redlist 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 chub mackerel	<i>Scomber japonicus</i>	Pacific Northwest	Internationally, North Pacific Fisheries Commission	D	LC	No

¹ <https://www.iucnredlist.org/>

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

CATEGORY D SPECIES

Category D species are those which make up less than 5% of landings and 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 Chub Mackerel (<i>Scomber japonicus</i>)	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	2	2
	Average maximum age (years)	7.9	1
	Fecundity (eggs/spawning)	135,962 eggs	1
	Average maximum size (cm)	64	2
	Average size at maturity (cm)	22	1
	Reproductive strategy	Open water egg scatterer	1
	Mean trophic level	3.4	3
	Average Productivity Score		1.33
	Susceptibility Attribute	Value	Score
	Overlap of adult species range with fishery	Not scored	Not scored
	Distribution	Global distribution	1
	Habitat	Pelagic	1
	Depth range	50-200 m	2
	Selectivity	1 or 2 times mesh sizes	2
	Post-capture mortality	Mostly dead	3
	Average Susceptibility Score		1.8
	PSA Risk Rating (From Table D3)		PASS
	Compliance rating		PASS

References

North Pacific Fisheries Commission. 2021. NPFC Yearbook 2020. 139 pp. (Available at www.npfc.int)



Figure 1. Computer generated distribution maps for *Scomber japonicus* (Chub mackerel), with modelled year 2050 native range map based on IPCC RCP8.5 emissions scenario.

Scarponi, P., G. Coro, and P. Pagano. A collection of Aquamaps native layers in NetCDF format. Data in brief 17 (2018): 292-296.

<https://www.fishbase.se/Summary/SpeciesSummary.php?ID=117&AT=pacific+chub+mackerel>

Standard clauses 1.3.2.2

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	Low productivity/ High risk	Medium productivity/ Medium risk	High productivity/ Low risk
	Score 3	Score 2	Score 1
Average age at maturity (years)	>4	2 to 4	<2
Average maximum age (years)	>30	10 to 30	<10
Fecundity (eggs/spawning)	<1 000	1 000 to 10 000	>10 000
Average maximum size (cm)	>150	60 to 150	<60
Average size at maturity (cm)	>150	30 to 150	<30
Reproductive strategy	Live bearer, mouth brooder or significant parental investment	Demersal spawner "berried"	Broadcast spawner
Mean trophic level	>3.25	2.5–3.25	<2.5

Susceptibility attributes		High susceptibility/ High risk	Medium susceptibility/ Medium risk	Low susceptibility/ Low risk
		Score 3	Score 2	Score 1
Availability	1) Overlap of adult species range with fishery	>50% of stock occurs in the area fished	Between 25% and 50% of the stock occurs in the area fished	<25% of stock occurs in the area fished
	2) Distribution	Only in the country/ fishery	Limited range in the region	Throughout region/ global distribution
Encounterability	1) Habitat	Habitat preference of species make it highly likely to encounter trawl gear (e.g. demersal, muddy/sandy bottom)	Habitat preference of species make it moderately likely to encounter trawl gear (e.g. rocky bottom/reefs)	Depth or distribution of species make it unlikely to encounter trawl gear (e.g. epi-pelagic or meso-pelagic)
	2) Depth range	High overlap with trawl fishing gear (20 to 60 m depth)	Medium overlap with trawl fishing gear (10 to 20 m depth)	Low overlap with trawl fishing gear (0 to 10 m, >70 m depth)
Selectivity		Species >2 times mesh size or up to 4 m length	Species 1 to 2 times mesh size or 4 to 5 m length	Species <mesh size or >5 m length
Post capture mortality		Most dead or retained Trawl tow >3 hours	Alive after net hauled Trawl tow 0.5 to 3 hours	Released alive Trawl tow <0.5 hours

Note: Availability 2 is only used when there is no information for Availability 1; the most conservative score between Encounterability 1 and 2 is used.

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	
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	