



MarinTrust Standard V2

By-product Fishery Assessment, MAR005

Atlantic Chub Mackerel (Scomber colias), FAO 34

MarinTrust Programme

Unit C, Printworks

22 Amelia Street

London

SE17 3BZ

E: standards@marin-trust.com

T: +44 2039 780 819

Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Atlantic chub mackerel (<i>Scomber colias</i>)
	Geographical area:	FAO 34, Atlantic, Eastern Central
	Country of origin of the product:	Morocco
	Stock:	FAO 34, Atlantic, Eastern Central
Date	October 2023	
Report Code	MAR005	
Assessor	Blanca Gonzalez	
Country of origin of the product - PASS	Morocco	
Country of origin of the product - FAIL	None	

Application details and summary of the assessment outcome			
Company Name(s): CIBEL I, CIBEL II, Copelit SARL, KB Fish , Nouvelle Ougala, Pescasud SARLAU, Protein and Oil Industry, Sovapec, TANTASAR			
Country: Morocco			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Blanca Gonzalez	Jose Peiro Crespo	0.5	Re-approval
Assessment Period	October 2023 – October 2024		

Scope Details	
Main Species	Atlantic chub mackerel (<i>Scomber colias</i>)
Stock	FAO 34, Atlantic, Eastern Central
Fishery Location	FAO 34, Atlantic, Eastern Central
Management Authority (Country/ State)	European Commission (EC), Morocco Ministry of Agriculture and Marine Fisheries (MAMF)
Gear Type(s)	Purse seine
Outcome of Assessment	
Peer Review Evaluation	Pass
Recommendation	Approve

Table 2. Assessment Determination

Assessment Determination
<p>Atlantic chub mackerel (<i>Scomber colias</i>) stock was assessed as a category C species considering that it is a Least Concern species by the IUCN, it is not included in any CITES Appendixes, and the FAO Working Group on the Assessment of Small Pelagic Fish off Northwest Africa meets annually to update stock assessments and provide advice for management for the main small pelagic species and stocks in the region.</p> <p>The last stock assessment for this species was carried out in 2022 and results indicate that the stock is fully exploited, which means that the fishery operates within the limits of sustainability, and current fishing pressure seems sustainable and can be maintained. Catches have been recorded since 1990 and this data is included in the stock assessment. Since no specific information about the stock biomass in reference to the BMSY was included in the available summary report of the results of the work of the CECAF Working Group on the Assessment of Small Pelagic Fish off Northwest Africa, and considering that the stock is fully exploited, the chub mackerel was assessed also as category D species.</p> <p>In the Productivity-Susceptibility Analysis (PSA) the Atlantic chub mackerel was awarded an average productivity score of 1.29 and an average susceptibility score of 2.5, and it passed against Table D3.</p> <p>The Atlantic chub mackerel Byproduct meets the Marin Trust requirements and it should remain approved for use as a raw material.</p>
Fishery Assessment Peer Review Comments
<p>The by-product fishery under assessment is the Atlantic chub mackerel (<i>Scomber colias</i>) purse seine fishery in FAO 34 – Atlantic, Eastern Central. The species is classified as LC by the IUCN. The stock is managed using biomass reference points. Therefore, it is assessed under category C.</p> <p>The most recent assessment conducted by the CECAF working group subgroup North indicates that the stock is below the target reference point ($B_{0.1}$). However, no information is given about the status of the stock in regard to the limit reference point (B_{MSY}). Therefore, a precautionary approach is taken, the assessor considers that it fails category C, and it is then assessed under category D.</p> <p>In the Productivity-Susceptibility Analysis (PSA) the Atlantic chub mackerel awards an average productivity score of 1.29 and an average susceptibility score of 2.5, and there it passed category D.</p> <p>The peer review supports the auditor’s recommendation to pass the Atlantic chub mackerel purse seine fishery in the Atlantic, Eastern Central (FAO area 34) under the Marin Trust IFFO RS v2.0 by-fishery standard for the production of fishmeal and fish oil.</p>
Notes for On-site Auditor
<p>There are no concerns that requires attention from the on-site assessor.</p>

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
Atlantic chub mackerel	<i>Scomber colias</i>	FAO 34, Atlantic, Eastern Central	Yes	C	Least Concern ³	No

¹ <https://www.iucnredlist.org/>

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

³ <https://www.iucnredlist.org/species/170357/6767497>

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		Atlantic chub mackerel (<i>Scomber colias</i>)	
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.	PASS
	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.	FAIL

Clause outcome: FAIL

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.

The clause is met considering that:

The Atlantic chub mackerel catches have been recorded since 1990. In the last stock assessment carried out in 2022 by the Small pelagic fish Working Group North of the Fishery Committee for the Eastern Central Atlantic (CECAF). The chub mackerel catches constituted 21% of overall catches in 2021 (480,000t) (figure 1), this is 26% increase from catch levels in 2020. This information was considered to run several models such as: XSA, ICA and a Schaefer model, to set the basis for scientific advice (FAO 2022).

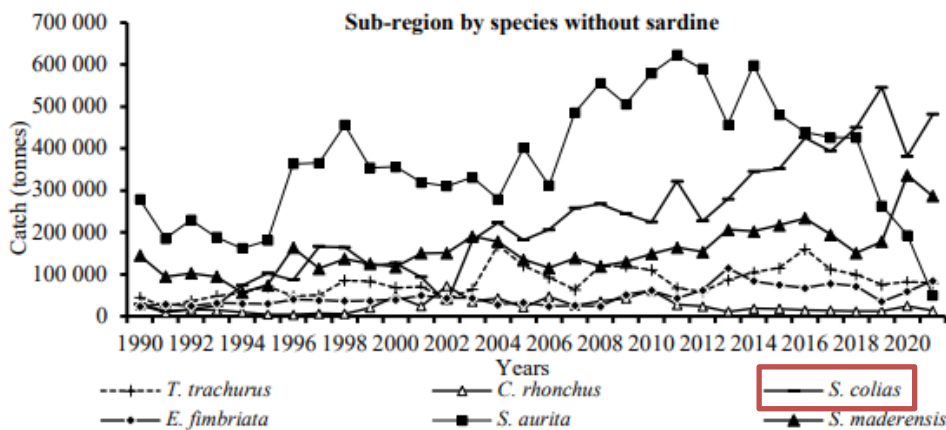


Figure 1. Small pelagic fish catches in the sub-region without considering sardines (FAO 2022).

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.

The clause is not met considering that:

The stock assessment results indicates that the chub mackerel is fully exploited and that the current level of capture is not sustainable and would induce a decrease in spawning biomass and target biomass (B0.1). Despite the fishery is operating within the limits of sustainability, current fishing pressure seems sustainable and can be maintained if the maximum catch is limited to 340,000t, which correspond to a 29% reduction of the 2021 catch (FAO 2022).

Since no specific information about the Atlantic chub mackerel stock biomass in reference to the BMSY was included in the available summary report of the results of the work of the CECAF Working Group on the Assessment of Small Pelagic Fish off Northwest Africa, and considering that the stock is fully exploited, a precautionary approach is considered and it is assessed under category D.

References

FAO 2022. Fishery Committee for the Eastern Central Atlantic. Small pelagic fish Working Group North. <https://www.fao.org/3/cc3286b/cc3286b.pdf>

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	Atlantic chub mackerel (<i>Scomber colias</i>)	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	1.9 ¹	1
	Average maximum age (years)	7.7 ¹	1
	Fecundity (eggs/spawning)	41,325 – 494,500 ¹	1
	Average maximum size (cm)	55 ¹	1
	Average size at maturity (cm)	22.9 ¹	1
	Reproductive strategy	Broadcast spawners ¹	1
	Mean trophic level	3.9 ¹	3
	Average Productivity Score		1.29
	Susceptibility Attribute	Value	Score
	Availability (area overlap)	<10% overlap ¹⁻³	1
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)	High overlap with fishing gear ¹	3
	Selectivity of gear type	Individuals < size at maturity are frequently caught ²	3
	Post-capture mortality	Retained ²	3
	Average Susceptibility Score		2.5
	PSA Risk Rating (From Table D3)		PASS
	Compliance rating		PASS
	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>		
References			
1 https://www.fishbase.se/summary/Scomber-colias.html			
2 FAO 2022. Fishery Committee for the Eastern Central Atlantic. Small pelagic fish Working Group North. https://www.fao.org/3/cc3286b/cc3286b.pdf			
3 https://www.fao.org/fishery/en/area/34/en			
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			
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	