



MarinTrust Standard V2

By-product Fishery Assessment ESP13 Mackerel in ICES Subareas 1-8 and Division 9a, Northeast Atlantic and adjacent waters

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Table 1 Application details and summary of the assessment outcome

	Species:	Mackerel, Scomber scombrus	
	Geographical area:	FAO 27	
Fishery Under Assessment	Country of origin of the product:	Spain, Portugal	
	Stock:	ICES Subareas 1-8 and Division 9a, Northeast Atlantic and adjacent waters	
Date		May 2023	
Report Code	ESP13		
Assessor	Sam Peacock		
Country of origin of the product - PASS		Spain, Portugal	
Country of origin of the product - FAIL		None	

Application details and	summary of the assess	ment outcome	
Company Name(s): Sa	rval Bio-Industries Nord	este S.A.U., S.A	A.U: Arteixo, Arteixo and Hijos de
Emilio Ramirez SA – Pe	scave		
Country:			
Email address:		Applicant Code	2:
Certification Body Deta	ails		
Name of Certification E	Body:		LRQA
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Sam Peacock	Jose Piero Crespo	0.2	Surveillance 2
Assessment Period		May 2023 -	- May 2024

Scope Details	
Main Species	Mackerel, Scomber scombrus
Stock	ICES Subareas 1-8 and Division 9a, Northeast Atlantic and adjacent waters
Fishery Location	FAO 27
Management Authority (Country/ State)	EU, UK, Norway, Iceland
Gear Type(s)	Purse seine & pelagic trawl
Outcome of Assessment	
Peer Review Evaluation	Pass
Recommendation	Pass



Table 2. Assessment Determination

Assessment Determination

Mackerel has been categorised by the IUCN as Least Concern and does not appear in the CITES appendices. Mackerel in the northeast Atlantic is managed relative to reference points and was assessed under Category C.

The most recent stock assessment was conducted in 2022 using catch and survey data, and concluded that stock biomass is substantially above the target and limit reference points. The byproduct therefore continues to meet the MT requirements and should remain approved for use as a raw material.

Fishery Assessment Peer Review Comments

The by-product fishery under assessment is the Mackerel (*Scomber scombrus*) caught using purse seine and pelagic trawls in ICES Subareas 1-8 and Division 9a, Northeast Atlantic and adjacent waters. The species is classified as LC in the IUCN red list. Mackerel is managed relative to biomass-based reference points in European waters and therefore assessed under category C.

Mackerel in ICES Subareas 1-8 and Division 9a, Northeast Atlantic and adjacent waters was last assessed by ICES in 2022. That assessment indicates that the spawning-stock size is above MSY Btrigger, Bpa, and Blim (limit reference point). Therefore, the stock passes category C.

The peer review supports the auditor's recommendation to pass the Mackerel purse seine and pelagic trawls fishery in ICES Subareas 1-8 and Division 9a, Northeast Atlantic and adjacent waters under the Marin Trust IFFO RS v2.0 by-fishery standard for the production of fishmeal and fish oil.

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 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
Mackerel	Scomber scombrus	Northeast Atlantic and adjacent waters	Yes	С	Least Concern ³	No

¹ https://www.iucnredlist.org/

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

³ https://www.iucnredlist.org/species/170354/18207463



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.

Spe	ecies	Name	Mackerel	
C1	Categ	ory C Stock Sta	atus - Minimum Requirements	
CI	C1.1		ovals of the species in the fishery under assessment are included in the stock assessment are considered by scientific authorities to be negligible.	PASS
	C1.2	reference po	s considered, in its most recent stock assessment, to have a biomass above the limit int (or proxy), OR removals by the fishery under assessment are considered by scientific o be negligible.	PASS
			Clause outcome:	PASS

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.

Mackerel in the northeast Atlantic is subject to annual stock assessment by the ICES Working Group on Widely Distributed Stocks (WGWIDE). The most recent stock assessment was carried out in 2022 using an age-based analytical model which incorporated catches in the model and the forecast. The assessment also used a range of indices from surveys and catch sampling. The stock assessment methodology was inter-benchmarked in 2019, and a long-term management strategy evaluation was conducted in 2020 (ICES 2022).

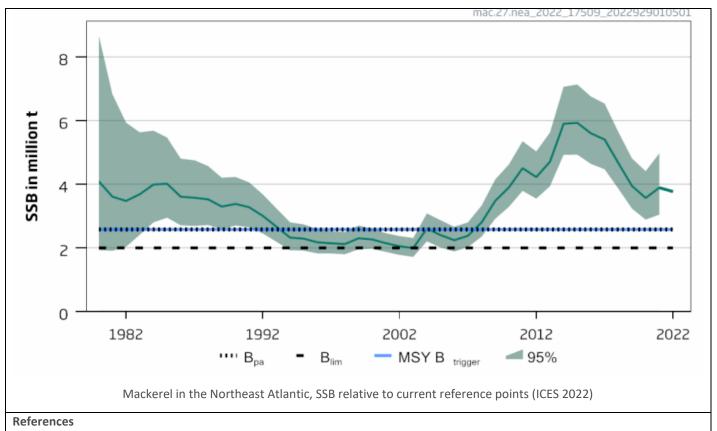
Fishery removals are considered in the stock assessment process, and C1.1 is met.

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 2022 catch advice provides an indication of the current stock status relative to the established reference points. The target reference points MSY $B_{trigger}$ and B_{pa} have been set at 2,580,000t. The limit reference point B_{lim} is set at 2,000,000t. The catch advice indicates that biomass at spawning time in 2022 was projected to be 3,769,326t, and states "spawning-stock size is above MSY $B_{trigger}$, B_{pa} , and B_{lim} " (ICES 2022).

The most recent stock assessment concluded that stock biomass is substantially greater than the limit reference point, and C1.2 is met.





ICES (2022). Mackerel (*Scomber scombrus*) in subareas 1-8 and 14 and division 9.a (the Northeast Atlantic and adjacent waters). In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, mac.27.nea. https://doi.org/10.17895/ices.advice.7789

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			
	Productivity Attribut	e	Value	Score
	Average age at maturity (years)			
	Average maximum age (years)			
	Fecundity (eggs/spawning)			
	Average maximum size (cm)			
	Average size at maturity (cm)			
	Reproductive strategy			
	Mean trophic level			
			Average Productivity Score	
	Susceptibility Attribu	te	Value	Score
	Availability (area overlap)			
	Encounterability (the position of the s	tock/species		
	within the water column relative to the	e fishing gear)		
	Selectivity of gear type			
	Post-capture mortality			
			Average Susceptibility Score	
		l l	PSA Risk Rating (From Table D3)	
			Compliance rating	
	Further justification for susceptibility For susceptibility attributes, please pri uncertainty affecting your decision		•	e there may be
Refere	nces			
	ard clauses 1.3.2.2			
Junut	11 4 6144363 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		ow susceptibility ow risk, score = 1)		edium susceptibility nedium risk, score = 2)		igh susceptibility igh risk, score = 3)
Areal overlap (availability) Overlap of the fishing effort with the species range	<1	0% overlap	10	-30% overlap	>3	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	fis	w overlap with hing gear (low counterability).		edium overlap with hing gear.	fis en De	igh overlap with hing gear (high neounterability). efault score for rget species
Selectivity of gear type	а	Individuals < size at maturity are rarely caught	а	Individuals < size at maturity are regularly caught.	а	Individuals < size at maturity are frequently caught
Potential of the gear to retain species	b	Individuals < size at maturity can escape or avoid gear.	Ь	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	re	ridence of majority eased post-capture d survival.	rel	idence of some eased post-capture d survival.	m	etained species or ajority dead when leased.



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

D4	Spe	ecies Name	
	Impac	ts 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:	
Eviden	ice		
D4 2 T			
D7.2 1	here is r	no substantial evidence that the fishery has a significant negative impact on the species.	
Refere		no substantial evidence that the fishery has a significant negative impact on the species.	
		no substantial evidence that the fishery has a significant negative impact on the species.	
Refere	ences	andard clause 1.3.2.2, 4.1.4	

D.5.01

GSSI