

MarinTrust Standard V2

By-product Fishery Assessment Report Template

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

	Species: Chub Mackerel (Scomber colias ~Scombe japonicus)		
Fishery Under	Geographical area: FAO Area 41 Atlantic Southwest		
Fishery Under Assessment	Country of origin of the product:	Argentine	
	Stock:	Mar del Plata Stock N of 41S	
Date	December 2021		
Report Code	BP 217		
Assessor	Virginia Polonio		
Country of origin of the product - PASS	Argentine		
Country of origin of the product - FAIL	NA		

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



Scope Details				
Main Species	Chub Mackerel (Scomber colias ~Scomber japonicus)			
Stock	Mar del Plata Stock N of 41S			
Fishery Location	FAO 41 Atlantic Southwest			
Management Authority (Country/ State)	INIDEP			
Gear Type(s)	Pelagic trawls			
Outcome of Assessment				
Peer Review Evaluation	luation Agree with recommendation			
Recommendation	APPROVED			

Table 2. Assessment Determination

Assessment Determination

If any species is categorised as Endangered or Critically Endangered on IUCN's Red List, or if it appears in the CITES appendices, it cannot be approved for use as MARINTRUST raw material. Chub Mackerel, *Scomber japonicus* do not appear as Endangered or Critically Endangered on IUCN's Red List, nor do they appear in CITES appendices; therefore, Chub mackerel is eligible for approval for use as MARINTRUST by-product raw material.

The species is subject to a species-specific management plan, stock assessments are carried out by using age-structured models. Reference points are defined, and management measures are established related to those limits. Therefore, the species has been assessed under Category C.

In order to achieve a pass, the species need to comply with clauses C1.1 and C1.2. Removals of the species are considered in the stock assessment and the stock is above biomass reference points in the 2020 stock assessment. Therefore, the fishery PASSES clauses C1.1 and C1.2.

Therefore, with the information above, Chub Mackerel in Mar del Plata N of 41S is **APPROVED** for the production of fishmeal and fish oil under the current MARINTRUST v2 by-product standard.

Fishery Assessment Peer Review Comments

The stock is correctly assessed under category C. Catches are taken into account in the assessment model and the most recent biomass index is very high and well above target and limit reference point. Therefore, chub mackerel in Mar del Plata N of 41S should be approved for the production of fishmeal and fish oil under the current Marin Trust v 2.0 by-products.

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
Chub Mackerel	(Scomber colias ~Scomber japonicus)	Mar del Plata Stock N of 41S	INIDEP	С	LC	NO

¹ <u>https://www.iucnredlist.org/</u>

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

CATEGORY C SPECIES

In a whole fish assessment, Category C species are those which make up less than 5% of landings, but which are subject to a species-specific management regime. In most cases this will be because they are a commercial target in a fishery other than the one under assessment.

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 may be assessed as a Category D species instead, EXCEPT if there is evidence that it is currently below the limit reference point.

Spe	Species Name Chub Mackerel (Scomber colias ~Scomber japonicus)					
C1	Category C Stock Status - Minimum Requirements					
CI	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment PASS				
		process, OR are considered by scientific authorities to be negligible.				
	C1.2	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.	PΔSS		

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.

Fishery data are collected from fishery dependent sampling and acoustic surveys; however, some uncertainties have been taken into account in the allocation of the total catch due to the lack of acoustic surveys in recent year. Commercial catches from 1991 to 2019 are used in the models along with other data such as: weights, ages and lengths estimations. Natural mortality is also considered and in the 2020 stock assessment it was estimated at 0.38 for all the years classes. Biomass from 3 to 10 ages calculated in the INIDEP surveys were included as well as the biomass estimation from year 2 from the 2012 survey.

Therefore, fisheries removals are included in the stock assessment and the species PASSES clauses C 1.1 (Figure 1)

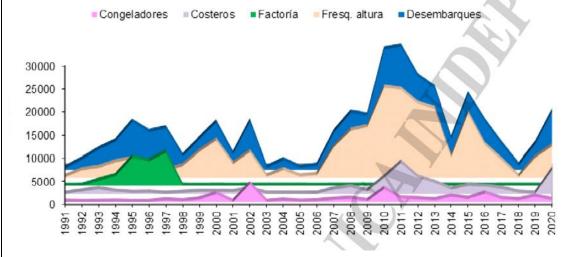


Figure 1. Landings from 1991 to 2020. Source: INIDEP.

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.

An analysis of spawning biomass per recruit has led to the definition of biological reference points BR60 was taken as the target reference point and BR40 as the limit reference point. Reference points are defined for this species and are reviewed periodically. In the 2021 stock assessment reference points were defined as follows:



Table 1. Reference points defined in the 2021 stock assessment. "Tasa" corresponds to fishing mortality, CBA is the TAC set up in the year, BRLP is the recruitment and BRL is the biomass limit. Source: Buratti et. Al 2021

Tasa	Punto de Referencia	BRLP media	Riesgo BRLP <brl< th=""><th>CBA₂₀₂₁</th><th>Captura largo plazo</th></brl<>	CBA ₂₀₂₁	Captura largo plazo
0,31	BR Objetivo = BR ₆₀	75.871	0%	15.645	14.200
0,36	F _{0,2}	71.547	1%	18.121	15.200
0,38	F = M	70.000	1%	19.000	15.500
0,59	F _{0,1}	56.500	7%	27.100	17.900
0,70	F_{ref}	53.000	10%	30.900	18.800
0,79	BR Límite = BR ₄₀	49.000	22%	33.991	19.289

According to the assessment the stock of mackerel is stable and is fished below its potential. In the 2021 stock assessment the total biomass estimated was 114,000 t. Recruitment was defined as 86,626 t (Av=106,952 tonnes - CV 25%). Catches reported in 2020 were 8,300 t well below the CBA recommended in 20 (31,000t). For this year, the TAC at 10% of risk (BRLP<BRL) has been recommended as 30,000 t to encourage the importance of performing the acoustic surveys for the direct estimation of the biomass.

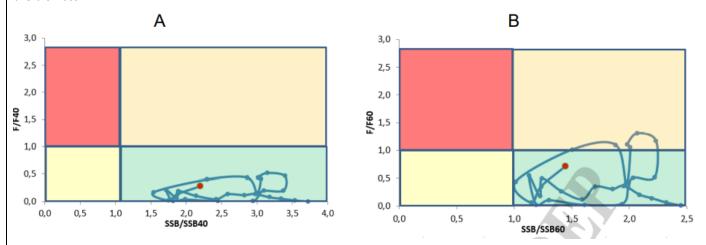


Figure 1. Kobe diagram; A) related to Blimit. B) related to BMSY. Source: INIDEP 2021

Therefore, as the average biomass estimated is well above the reference points BR40 and BR60 (49,000t and 75,871t respectively) the stock is considered in the last stock assessment above limits and it **PASSES** clause C1.2.

References

Orlando, P., Buratti, C. C., Garciarena A.D., Buratti G.E. Estado de la población de caballa al sur de 39° s y recomendaciones de capturas biológicamente aceptables durante el año 2021.

Buratti, C. C., Orlando, P,. Garciarena. Estado de la población de caballa al sur de 39° s y recomendaciones de capturas biológicamente aceptables durante el año 2020.

Links			
MARINTRUST Standard clause	1.3.2.2		
FAO CCRF	7.5.3		
GSSI	D.3.04, D5.01		