

## MarinTrust Standard V2

# By-product Fishery Assessment CHL05

## Jack mackerel/jurel (*Trachurus murphyi*) in FAO 87, Chile EEZ Regions XV-X

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# Table 1 Application details and summary of the assessment outcome

	Species:	Jack mackerel/jurel (Trachurus murphyi)		
		FAO 87, Chilean EEZ Regions XV-X (from Arica y		
	Geographical area:	Parinacota to Los Lagos – north and central		
Fishery Under		Chilean coastal)		
Assessment	Country of origin of	Chile		
	the product:			
	Stock	Jack mackerel/jurel in FAO 87, Chilean EEZ		
	SLUCK.	Regions XV-X		
Date	December 2024			
Report Code	CHL05			
Assessor	Ana Elisa Almeida Ayres			
Country of origin of the	Pass (Chilo)			
product - PASS	Pass (Chile)			
Country of origin of the		NI/A		
product - FAIL				

#### Application details and summary of the assessment outcome

Company Name(s): Pesquera Fiordo Austral SA, Graneros SA (Fiordo Austral), San Vincente, Coronel (Camanchaca Pesca Sur SA), Alimentos Pesqueros SPA, Lota Protein, Sociedad Pesquera Landes SA, Coronel (Orizon SA), FoodCorp Chile SA

Country: Chile

Email address:		Applicant Code:		
Certification Body Details				
Name of Certification Bod	y:	NSF / Global Trust Certification Ltd		
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/Re-approval	
Ana Elisa Almeida Ayres	Matthew Jew	0.5	Surveillance 1	
Assessment Period	December 2024 – December 2025			

Scope Details				
Main Species	Jack mackerel/jurel ( <i>Trachurus murphyi</i> )			
Stock	Jack mackerel in the southeast Pacific			
Fishery Location	FAO 87, Chilean EEZ Regions XV-X			
Management Authority (Country/ State)	South Pacific Regional Fisheries Management Organisation (SPRFMO) and Chilean Undersecretary of Fisheries and Aquaculture (SUBPESCA)			
Gear Type(s)	Purse seine			
Outcome of Assessment				
Peer Review Evaluation	Agree with assessor's recommendation			
Recommendation	APPROVED			

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### Table 2. Assessment Determination

#### **Assessment Determination**

If any species is categorised as Endangered or Critically Endangered on Union for Conservation of Nature's Red List of Threatened Species - IUCN's Red List, or if it appears in the Convention on International Trade in Endangered Species of Wild Fauna and Flora - CITES appendices, it cannot be approved for use as MarinTrust raw material. Jack mackerel/jurel (*Trachurus murphyi*) is not categorised as Endangered or Critically Endangered on IUCN's Red List and does not appear in CITES appendices; therefore, Jack mackerel/jurel (*Trachurus murphyi*) is eligible for approval for use as Marin Trust by-product raw material.

Since December 2017 there is a management plan for Jack mackerel/jurel from XV – X regions (from Arica y Parinacota to Los Lagos – north and central Chilean coastal) elaborated for the Chilean Undersecretary of Fisheries and Aquaculture (SUBPESCA) and as a Commission Member of the South Pacific Regional Fisheries Management Organisation (SPRFMO), Chile adheres to the established regulations supported by the Jack Mackerel Science Working Group of the Commission. There is a robust management framework for the jack mackerel fishery, supported by science committees at national and international level. Thus, the stock was assessed under Category C.

In December 2024 the Chilean jack mackerel/jurel industrial purse seine fishery continues to meet applicable MSC requirements and the certification status of the fishery as certified remains unchanged. The last publication was the 4<sup>th</sup> surveillance <u>report</u> published on September 23<sup>rd</sup> 2024.

Catches are considered in the fishery assessment, the stock PASSES clause C.1.1. The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point, the stock PASSES C.1.2.

Therefore, Jack mackerel/jurel (*Trachurus murphyi*) in FAO 87, Chilean EEZ Regions XV-X is **APPROVED** for the production of fishmeal and fish oil under the current MarinTrust v2.3 by-products standard.

#### **Fishery Assessment Peer Review Comments**

The assessor correctly classified, Jack mackerel/jurel (*Trachurus murphyi*) in FAO 87 as Category C, the stock is subject to a specific management regime by Chiel and SPRFMO and reference points are defined.

Fishery removals are considered in the stock assessment process. The most recent stock assessment shows that the stock is above BMSY. Therefore, the stock is considered to have biomass above the target reference point (and limit reference point).

Jack mackerel/jurel (*Trachurus murphyi*) in FAO 87 passes both clauses (C1.1 and C1.2) and therefore should be approved under the MarinTrust Standard v.2.3

**Notes for On-site Auditor** 

N/A



## **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 <sup>1</sup>	CITES Appendix 1 <sup>2</sup>
Jack mackerel/ <i>jurel</i>	Scomber japonicus	Jack mackerel in the southeast Pacific	Yes	С	DD	No

<sup>&</sup>lt;sup>1</sup> <u>https://www.iucnredlist.org/</u>

<sup>&</sup>lt;sup>2</sup> <u>https://cites.org/eng/app/appendices.php</u>

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## **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	Jack mackerel/jurel ( <i>Trachurus murphyi</i> )	
	Catego	ory C Stock Sta	atus - Minimum Requirements	
CI	C1.1	<b>1</b> Fishery removals of the species in the fishery under assessment are included in the stock assessment Pass		
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit Pass reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.		
			Clause outcome:	Pass
<ul> <li>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.</li> <li>For the past 11 years, the assessment of the jack mackerel stock has been conducted within the framework of the Scientific Committee (SC) of the South Pacific Regional Fisheries Management Organisation (SPRFMO). The management of the Chilean Jack mackerel fishery at the national level is based entirely on the recommendations issued by SPRFMO on a single Jack mackerel stock in the South Pacific. The SPRFMO SC carries out the joint evaluation of the fishery, establishes the fisheries management and emergine for all the countries that make it up and emergine fisheries and emergine fisheries management.</li> </ul>				
on this fishery. According to the Conservation and Management Measures (CMM) of the SPRFMO Commission, all Members participating in the jack mackerel/jurel fishery must report monthly catches within 20 days of the end of the calendar month, when total catches have reached 70% of their catch limit, reports are made every 15 days (SPRFMO 2023).				
Jack mackerel stock status is based on stock assessments conducted using the Joint Jack Mackerel (JJM) statistical catch-at-age model, as developed collaboratively by participants in 2010 (SPRFMO 2022a). The JJM assessment models use the following information: fleet, catch-at-age, catch-at-length, landings, CPUE, acoustic and daily egg production method (DEPM) survey data (SPRFMO 2022b).				
Database of historical catch data was published as Annex 1 of the Secretariat SC10-JM01 <i>Trachurus murphyi</i> catch history report, where the 2023 data are an estimate from part year results (Figure 1). The excel file is available for download: https://www.sprfmo.int/meetings/scientific-committee/12th-sc-2024/ Data are grouped in four distinct fleets: 1) coastal purse				

<u>https://www.sprfmo.int/meetings/scientific-committee/12th-sc-2024/</u> Data are grouped in four distinct fleets: 1) coastal purse seine fishery in northern Chile (Chilean administrative regions XV-II), 2) purse seine fishery in central-south Chile that extends into the high seas (Chilean administrative regions III-X), 3) far-north coastal purse seine fisheries occurring in the EEZs and Territorial waters of Ecuador and Peru, and 4) offshore trawl fleet operating solely in the SPRFMO Area (Figure 2). (SPRFMO 2022c). Fleets 1 and 2 cover the area of this assessment.





Figure 1. Cumulative catches of jack mackerel by year and fleet (fleets 1 and 2 are combined and include the area of this assessment)[SPRFMO, 2024a].

Fishery removals of the species in the fishery under assessment are included in the stock assessment process. C.1.1 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.

Following the approach adopted by the Scientific Committee (SC) since 2012, a comparison was conducted between the onestock (H1) and two-stock (H2) model configurations for jack mackerel on SPFRMO (2024b). Both models revealed similar patterns, showing an overall increase in biomass, high recruitment levels in recent years, and low fishing mortality rates (Figure 2).

The SC agreed to use a 10-year average of the dynamically estimated BMSY as the benchmark for forecasting. For the singlestock hypothesis, this BMSY value is estimated at 8.939 million tonnes in 2024. The estimated spawning stock biomass (SSB) of jack mackerel is approximately 17.7 million tonnes, significantly exceeding the BMSY threshold. Fishing mortality for 2024 is projected at 0.14, which is well below the long-term FMSY estimates (Figure 3). Recruitment levels, while not as high as in 2018-2019, remain elevated compared to previous years and far above the low productivity period observed around 2010.

The 2024 assessment shows an increase in recent SSB estimates compared to the 2023 assessment, primarily due to updates in abundance indices and age composition data. However, estimates for fishing mortality and recruitment have remained relatively consistent.





Figure 2. Jack mackerel in the southeast Pacific. Summary of stock assessment estimates over time showing spawning biomass (in thousands of tonnes; top), total fishing mortality (as an instantaneous rate per year; middle), and recruitment at age 1 (millions; bottom). Columns show results for the one-stock hypothesis (H1, left) and two-stock hypothesis (H2, right, "north" stock in yellow and "south" stock in blue). Shaded areas refer to the estimated uncertainties.

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		2023	2024
Fishing mortality in relation to:	Fmsy	Below	Below
Snawning stock biomass in relation to:	D. m.	Above	Above
spawning stock biomass in relation to.	DMSY		100%

Figure 3. Stock status summary for Jack mackerel in the southeast Pacific (SPRFMO 2024b).

The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy). C.1.2 is met.

References

SPRFMO. (2022a). 10th Scientific Committee Meeting Report. <u>https://www.sprfmo.int/assets/Meetings/SC/10th-SC2022/SC10-</u> <u>Report-Final-19Jan2023-v2.pdf</u>

SPRFMO. (2022b). 14th Scientific Committee Workshop Report, Jack Mackerel Benchmark Workshop (SCW14). <u>https://www.sprfmo.int/assets/Meetings/SC\_WS/SCW14-Jack-Mackerel/SPRFMO-SC-JM-Benchmark-Workshop-2022-</u> <u>ReportSCW14.pdf</u>

SPRFMO (2024). 12th MEETING OF THE SCIENTIFIC COMMITTEE 30 September to 5 October 2024, Lima, Peru SC12 – JM03 *Trachurus murphyi* catch history data Secretariat. <u>https://www.sprfmo.int/assets/Meetings/02-SC/12th-SC-2024/Jack-Mackerel/SC12-JM03-SEC-CJM-Catch-history-and-predicted-2023-catches.pdf</u>

SPRFMO (2024b). 12th Scientific Committee meeting report 113 p. Wellington, New Zealand 2024. https://www.sprfmo.int/assets/Meetings/02-SC/12th-SC-2024/SC12-Report\_rev1-15Nov2024-a.pdf

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