## MarinTrust RS V2.0



# BYPRODUCT FISHERY ASSESSMENT TEMPLATE REPORT

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TABLE 1 APPLICATION DETAILS AND SUMMARY OF THE ASSESSMENT OUTCOME

	Species:	Argentine red shrimp, <i>Pleoticus Muellieri</i>
	Geographical area:	FAO Area 41 Atlantic Southwest
Fishery Under Assessment	Country of origin of the product:	Argentine
	Stock:	Southwest Atlantic
Date		February 2021
Report Code		312-2020
Assessor	\	/irginia 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: MUNDO BRAN	Name: MUNDO BRANCO S.A.						
Address:							
Country: Argentine		Zip:					
Tel. No.:		Fax. No.:					
Email address:		Applicant Code	e:				
Key Contact:		Title:	Title:				
<b>Certification Body Detail</b>	S						
Name of Certification	n Body:	Global Trust Cert	tification				
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval				
Virginia Polonio Géraldine Criquet 0.5 Initial							
Assessment Period February 2021							

Scope Details	
Main Species	Argentine red shrimp, <i>Pleoticus Muellieri</i>
Stock	Southwest Atlantic
Fishery Location	FAO 41 Atlantic Southwest
Management Authority (Country/ State)	Instituto Nacional de Desarrollo Pesquero del Gobierno de Argentina (INIDEP)
Gear Type(s)	Bottom trawls
Outcome of Assessment	
Peer Review Evaluation	Agree with the assessor's 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. Argentine red shrimp, *Pleoticus Muellieri* does not appear as Endangered or Critically Endangered on IUCN's Red List, nor does it appear in CITES appendices, therefore, Argentine red shrimp, *Pleoticus Muellieri* is eligible for approval for use as MarinTrust by-product raw material.

The harvesting strategy is based on an ongoing assessment of the daily CPUE (catches per hour and catches per day) as a proxy of shrimp abundance, the length frequency of the catches and the shrimp/hake ratio. This information allows for the periodic generation of estimates of future production scenarios and management tools appropriate to the variability of the resource. However, there is a lack of reference points or other status indicators as an objective of the evaluation system. Therefore, although there is a specific management plan the stock does not have reference points defined and it assesses under Category D. Due to the lack of scientific information on the stock status, a risk-assessment style approach was undertaken.

The results of the PSA is a Productivity attribute of 1.24 and a susceptibility attribute of 2.4. Therefore, the stocks PASSES Table D3.

Therefore, Argentine red shrimp, *Pleoticus Muellieri* in FAO Area 41 is **APPROVED** by the assessor for the production of fishmeal and fish oil under the current MarinTrust v 2.0 by-products standard.

#### **Peer Review Comments**

The assessor correctly classified Argentine red shrimp as category D. Although there are management measures in place, there are no reference points defined for the stock.

A PSA was performed. With an average productivity score of 1.25 and an average susceptibility score of 2.4, the stock thus passes Table D3.

Therefore, the peer reviewer agrees with the assessor's determination that the fishery passes Table D3 and Argentine red shrimp is thus is approved.

Notes for On-site Auditor	



#### SPECIES CATEGORISATION

<u>NB:</u> 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**

Byproduct 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.

Byproduct 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>
Argentine red shrimp	Pleoticus Muellieri	Southwest Atlantic	INIDEP	D	DD	No

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

<sup>&</sup>lt;sup>2</sup> 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.

<b>D1</b>	Species Name  Argentine red shrimp, Pleoticus Muellieri			
	Productivity Attribut	e	Value	Score
	Average age at maturity (years)		0.3	1
	Average maximum age (years)		2	1
	Fecundity (eggs/spawning)		No data available	Not scored
	Average maximum size (cm)		19	1
	Average size at maturity (cm)		2	1
	Reproductive strategy		Broadcast spawner	1
	Mean trophic level		3.2	2
	Susceptibility Attribute		Average Productivity Score	1.25
			Value	Score
	Overlap of adult species range with fishery		Not scored	Not scored
	Distribution		Limited range in the region*	2
	Habitat		Benthic	3
	Depth range		1-174	3
	Selectivity		Species < mesh size	1
	Post-capture mortality		Most death	3
			Average Susceptibility Score	2.4
			PSA Risk Rating (From Table D3)	PASS
			Compliance rating	PASS

#### References



\*Figure 1. Distribution maps for Pleoticus muelleri (Argentine red shrimp), with modelled year 2050 native range map based on IPCC RCP8.5 emissions scenario. www.aquamaps.org, version 10/2019

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.sealifebase.ca/summary/Pleoticus-muelleri.html

Bertuche, D., Fischbach, C., Roux, A., Fernandez, M. and Pinero, R. 1999. Ficha técnica Langostino: Pleoticus muelleri. INIDEP.

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	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 or<br="" size="">&gt;5 m length</mesh>	
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.

GSSI



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						
	<b>D4.1</b> 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 substantia species.	al evidence that the fishery has a significant negative impact on the				
			Outcome:				
reason D4.2 T	hable me	easures are taken to mir	ishery on this species are considered during the management processimise these impacts.  that the fishery has a significant negative impact on the species.	ss, and			
Refere	ences						
Links		·		·			
MARIN	NTRUST	Standard clause	1.3.2.2, 4.1.4				
FAO C	FAO CCRF 7.5.1						

D.5.01



#### **SOCIAL CRITERION**

In addition to the scored criteria listed above, applicants must commit to ensuring that vessels operating in the fishery adhere to internationally recognised guidance on human rights. They must also commit to ensuring there is no use of enforced or unpaid labour in the fleet(s) operating upon the resource.



## Appendix B: From MARINTRUST Standard V2.0 Annex 2: Fish By-product Assessment Methodology

#### **Definition of a Fish By-product**

A by-product is a useful and marketable product that is not the primary product being produced. A marketable by-product is from a process that can technically not be avoided. This includes materials that may be traditionally defined as waste such as industrial scrap that is subsequently used as a raw material in a different manufacturing process.

"Fish By-products" refers to commodities that are manufactured from fish, including shellfish, and crustaceans in a form that is different than conventional foods and which are intended for human consumption (either directly or as a food ingredient). Fish By-products include, but are not limited to:

- By-products derived from fish, including fish cartilage, fish oils, and fish proteins; and
- By-products derived from the carapaces of crustaceans; but do not include marine plants or marine plant products.

#### (Canadian Food Inspection Agency Definition)

In addition, a whole fish which is rejected on an intrinsic quality ground e.g. does not meet the specification for human consumption due to physical damage or the quality is substandard. These whole fish shall in these cases be classified as a by-product from the human consumption fishery, and can be used for marine ingredients production.

A whole catch of fish that is rejected by a fish processing factory on economic grounds is not considered to be a fish by-product. This fish can only be used for marine ingredients production if the fishery has been assessed and approved under the requirements of the IFFO Responsible Sourcing Standard.

#### Why utilise Fish By-products?

#### **FAO Code of Conduct for Responsible Fisheries**

#### **General Principles Article 6**

**6.7** The harvesting, handling, processing and distribution of fish and fishery products should be carried out in a manner which will maintain the nutritional value, quality and safety of the products, reduce waste and minimize negative impacts on the environment.

#### Responsible fish utilisation Article 11.1

**11.1.8** States should encourage those involved in fish processing, distribution and marketing to reduce post-harvest losses and waste.

#### Benefits of Including Fish By-Products in the MARINTRUST Standard:

- 1. Improved fish resource utilisation
- 2. Reduction in waste for nutritional value
- 3. 35% of fish by-products are currently used to make quality fishmeal and oil
- 4. Excellent Economic return
- 5. Better compliance with FAO Code of Conduct for Responsible Fisheries

#### What Fish By-products cannot be used?



#### 1. IUCN

Fishery By-products shall Not be taken from a species listed by IUCN (the International Union for Conservation of Nature) under the Red List for certain categories;

- 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.

Fish By-product material may be used from the vulnerable category, but it shall incur a fishery surveillance conducted by the certification body prior to it being included in the scope of this standard.

• VULNERABLE (VU) facing a high risk of extinction in the wild.

The Fish By-product material from these species will be acceptable for use in the scope of this standard;

- 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.

Fish By-product material may be used from the following category, but it shall incur a fishery surveillance prior to it being included in the scope of this standard;

DATA DEFICIENT (DD) and NOT EVALUATED (NE)

The fishery surveillance conducted by the certification body will review the following areas:

#### **Stock Assessment**

- From a recognised Institution
- Fisheries are recognised as legal
- Fisheries do not contradict scientific opinion

#### 2. FAO Code of Conduct for Responsible Fisheries

In addition the Fish By-products shall not come from fisheries that do not comply with the following criteria;

- 1. Fisheries should prohibit dynamiting, poisoning and other comparable destructive fishing practices.
- **2.** Fishery material shall not be from IUU fishing activity nor sourced from vessels officially listed as engaging in illegal, unreported and unregulated (IUU) fishing activity.

#### **Sources of Information**

- 1. Food Standards Agency
- 2. Canadian Food Inspection Agency
- 3. DEFRA
- 4. GAA Feed mill BAP standard gfio
- 5. EU Commission
- 6. IUCN