



MarinTrust Standard V2

By-product Fishery Assessment Report Template

MarinTrust Programme

Unit C, Printworks

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Japanese Pilchard <i>Sardinops sagax melanostictus</i>
	Geographical area:	FAO Area 61 Pacific Northwest and FAO &1 Western central Pacific
	Country of origin of the product:	Thailand
	Stock:	Pacific Ocean stock and Tsushima Warm Current stock
Date	22/12/2021	
Report Code	BP224	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	Thailand	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name:			
Address:			
Country: Thailand		Zip:	
Tel. No.:		Fax. No.:	
Email address:		Applicant Code:	
Key Contact:		Title:	
Certification Body Details			
Name of Certification Body:			
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Virginia Polonio	Vito Romito	0.5	Surveillance 2
Assessment Period	To December 2021		

Scope Details	
Main Species	Japanese pilchard, <i>Sardinops sagax</i> (synonym <i>S. melanostictus</i>)
Stock	Pacific Ocean stock and Tsushima warm current stock
Fishery Location	FAO 61 Northwest and FAO 71 Western Central pacific
Management Authority (Country/ State)	Central Fisheries Research Institute of Japan's Fisheries Research Agency (FRA).
Gear Type(s)	Purse seine
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor's recommendation
Recommendation	APPROVED

Table 2. Assessment Determination

Assessment Determination
If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in the CITES appendices, it cannot be approved for use as MarinTrust raw material. Japanese Pilchard does not appear as Endangered or Critically Endangered on the IUCN Red List, nor does it appear in CITES appendices, therefore Japanese Pilchard is eligible for approval for use as MarinTrust raw material. There are two stocks, the Pacific Ocean stock and the Tsushima Warm Current Stock. Both stocks are assessed separately but managed together under a single TAC for combined stocks. The annual stock assessment is undertaken by the Central Fisheries Research Institute of Japan's Fisheries Research Agency (FRA). Therefore, the species is subject to a species-specific research and management regime sufficient to pass a Category C assessment. The species has passed the category C clauses. Japanese Pilchard is approved for the production of fishmeal and fish oil under the MarinTrust v 2.0 by-products standard
Fishery Assessment Peer Review Comments
The assessor correctly classified both Japanese pilchard stocks in FAO Area 61 Pacific Northwest as category C, stocks are managed and reference points are defined to assess stocks status against. Fishery removals from the stocks are considered in the stock assessment process. The most recent stock assessment shows that both stocks are considered to have a biomass above the limit reference point. The Pacific Ocean and the Tsushima Warm Current Japanese pilchard stocks in FAO Area 61 Pacific Northwest pass both C1.1 and C1.2 and are therefore approved.
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
Japanese pilchard	<i>Sardinops sagax</i> (synonym <i>S. melanostictus</i>)	Pacific Ocean stock and Tsushima warm current stock	Central Fisheries Research Institute of Japan's Fisheries Research Agency (FRA).	C	LC	No

¹ <https://www.iucnredlist.org/>

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 should be assessed as a Category D species instead.

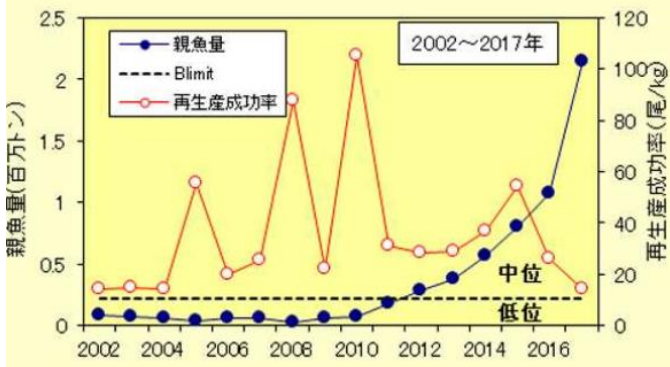
Species Name		Japanese pilchard, <i>Sardinops sagax</i> (synonym <i>S. melanostictus</i>)	
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	Yes
	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.	Yes
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.			
For both stocks, key sources of input data include total landings, numbers of fish caught by age and year (based on body length composition in survey catches and market landings), egg production (based on research surveys), a recruitment index (based on surveys of juveniles), and fish distributions (based on pelagic fish surveys).			
Purse seine vessel CPUE is used as an abundance indicator (Furuichi et al. 2018). The pelagic fish surveys appear to be fishery-independent and may include adults, but survey data are used to determine fish distributions rather than to generate a fishery-independent abundance index.			
Therefore, fishery removals of the species in the fishery under assessment are included in the stock assessment process and the fishery PASSES clause C1.1			
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.			
Pacific stock			
The last report available in FRA has shown that the biomass in 2019 was set at 4,061,000 tons assuming a recruitment in 2017 set at 2,150,000 tons hence, recruitment has been considered relatively high in recent years. Further, in the last five years, the biomass has shown an increasing trend, consequently, the reference point Blimit is still defined at 221,000 tons and in the last stock assessment this limit is kept until 2024. Fishing mortality has been defined at 0.24, 20% less than previous years (Figure 1).			
			

Figure 1. Stock assessment of Japanese sardine *S. melanostictus* over the period 1976 – 2017. Blue line shows biomass, red line shows catch ratio. Left scale shows stock volume (million tonnes, t) and right scale shows catch ratio (%). Catch ratio is the ratio of catch volume to resource volume. Source: FRA- Fy2018 National Resource Assessment Report Meeting Material 1-1.

Therefore, the species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy) and it **PASSES** clause C1.2

Tsushima warm current stock

The last report available in FRA has shown that the biomass in 2019 was set at 711,000 tons assuming a recruitment in 2017 set at 197,000 tons, hence, recruitment has been considered relatively high in recent years. Further, in the last five years, the biomass has shown an increasing trend, consequently, the reference point Blimit is still defined at 100,000 tons and in the last stock assessment this limit is kept until 2024. Fishing mortality has been defined at 0.25, 20% less than previous years. The resource levels have been classified at a medium level with increasing trends in biomass and recruitment (figure 2)

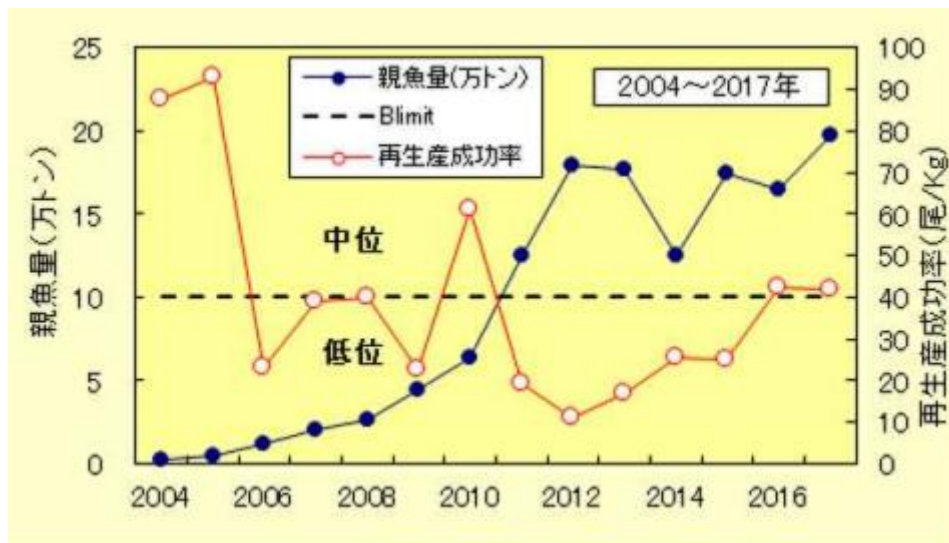


Figure 2. Stock assessment of Japanese sardine *S. melanostictus* over the period 1976 – 2017. Blue line shows biomass, red line shows catch ratio. Left scale shows stock volume (million tonnes, t) and right scale shows catch ratio (%). Catch ratio is the ratio of catch volume to resource volume. Source: FRA- Fy2018 National Resource Assessment Report Meeting Material 1-1.

Therefore, the species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy) and it **PASSES** clause C1.2

References

- Gaughan, D., Di Dario, F. & Hata, H. 2018. *Sardinops sagax* (errata version published in 2019). The IUCN Red List of Threatened Species 2018: e.T183347A143831586. <https://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T183347A143831586.en>.
- Furuichi, S., C. Watanabe, R. Yukami, Y. Uemura, C. Isu, and M. Udagawa. 2018. 2017 stock assessment of the Japanese Pacific stock of Japanese pilchard. Fisheries Research and Education Agency of Japan. <http://abchan.fra.go.jp/digests2017/details/201701.pdf>
- FRA- Fy2018 National Resource Assessment Report Meeting Material 1-1. Pacific group [Microsoft PowerPoint - 1. マイワシ統合版 \(fra.go.jp\)](#)
- FRA- Fy2018 National Resource Assessment Report Meeting Material 1-1. Tsushima warm group [Microsoft PowerPoint - 1. マイワシ統合版 \(fra.go.jp\)](#)

Links

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