



MarinTrust Standard V2

By-product Fishery Assessment Albacore tuna (*Thunnus alalunga*) in FAO 51, Western Indian Ocean

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Albacore tuna (<i>Thunnus alalunga</i>)
	Geographical area:	FAO Area 51 (Western Indian Ocean)
	Country of origin of the product:	Flag country not provided by client
	Stock:	Albacore tuna from FAO 51 Western Indian Ocean
Date	7 October 2022	
Report Code	MUS03	
Assessor	Matthew Jew	
Country of origin of the product - PASS	Flag country not provided by client	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Company Name(s): Marine Biotechnology Products Ltd.: Riche Terre			
Country: Mauritius			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Matthew Jew	Léa Lebechnech	0.5	Reapproval
Assessment Period	Up to October 2022		

Scope Details	
Main Species	Albacore tuna (<i>Thunnus alalunga</i>)
Stock	Albacore tuna from FAO 51 Western Indian Ocean
Fishery Location	FAO Subarea 51 (Western Indian Ocean)
Management Authority (Country/ State)	Indian Ocean Tuna Commission (IOTC)
Gear Type(s)	Purse seine, longline, line, gillnet, baitboat
Outcome of Assessment	
Peer Review Evaluation	Agree with the assessor's recommendation of approval
Recommendation	APPROVED

Table 2. Assessment Determination

Assessment Determination
<p>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 Marin trust raw material. Albacore tuna (<i>Thunnus alalunga</i>) do not appear as Endangered or Critically Endangered on IUCN's Red List, nor do they appear in CITES appendices; therefore, <i>Thunnus alalunga</i> is eligible for approval for use as Marin trust by-product raw material.</p> <p>The most recent stock assessment for Indian Ocean albacore tuna was conducted in 2019 with plans to reassess the stock in 2022. Because this stock is not assessed annually, this report will reflect most of the same information presented in the initial Marin Trust 2021 by-product assessment. The assessment considers albacore tuna in the Indian Ocean (which includes FAO Area 51) to be a single stock and this is the only stock under assessment. The 2019 assessment was carried out using Stock Synthesis III (SS3), a fully integrated model that is currently also used to provide scientific advice for the three tropical tuna stocks in the Indian Ocean. The stock is subject to a specific management regime, therefore it was assessed under Category C.</p> <p>Fishery removals are included in the stock assessment and it PASSES Clause C1.1. The stock is considered, in its most recent stock assessment, to have biomass above the limit reference point, it PASSES Clause C1.2.</p> <p>Therefore, albacore tuna in the Western Indian Ocean (FAO Area 51) is APPROVED for the production of fishmeal and fish oil under the current MarinTrust v2.0 by-products.</p>
Fishery Assessment Peer Review Comments
<p>The internal peer reviewer agrees with the assessor's determination, who correctly classified the Indian Ocean albacore tuna stock under category C, as reference points are defined to assess status of the stock relative to.</p> <p>Fishery removals are included in the stock assessment process and Indian Ocean albacore tuna stock is considered, in its most recent stock assessment, to have a biomass above the limit reference point, so it PASSES Clauses C1.1 and C1.2.</p> <p>Therefore, Indian Ocean albacore tuna should be approved.</p>
Notes for On-site Auditor
<p>Determine which flag states are supplying albacore tuna.</p>

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 a 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
Albacore tuna	<i>Thunnus alalunga</i>	Albacore tuna from FAO 51 Western Indian Ocean	IOTC	C	LC	No

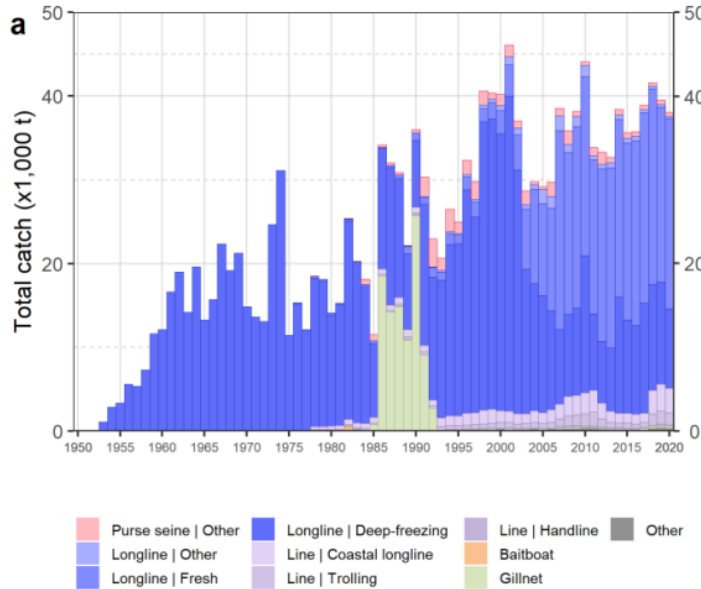
¹ <https://www.iucnredlist.org/>

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

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.

Species Name		Albacore tuna (<i>Thunnus alalunga</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.			
<p>Fishery removals of the species in the fishery under assessment are included in the stock assessment process via Indian Ocean Tuna Commission (IOTC) processes. The stock was last assessed in 2019 and used a Stock Synthesis (SS3) model which incorporates catch, size frequency, tagging, and CPUE indices in the model and forecast (IOTC, 2021). The total catch series is shown in Figure 1 below.</p>			
			
<p>Figure 1. Albacore tuna total catch 1950 – 2020 by main fishing gear group. Source: IOTC 2021.</p>			
<p>Therefore, fishery removals of the stock, including from the fishery under assessment, are included in the stock assessment process. The stock PASSES Clause C1.1.</p>			
<p>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.</p>			

Resolution 15/10 was agreed to which defined interim target and limit reference points for the stock. Four model variates were conducted on the stock and the consensus results follow. Fishing mortality is considered to be 35% ($F/F_{MSY}=1.346$) above the interim target reference point of F_{MSY} and below the interim limit reference point of $1.4 * F_{MSY}$ (IOTC, 2021; Figure 2). Spawning biomass is considered to be 28% ($SB/SB_{MSY}=1.281$) above the interim target reference point of SB_{MSY} and above the interim limit reference point of $0.4 * SB_{MSY}$ (IOTC, 2021; Figure 2).

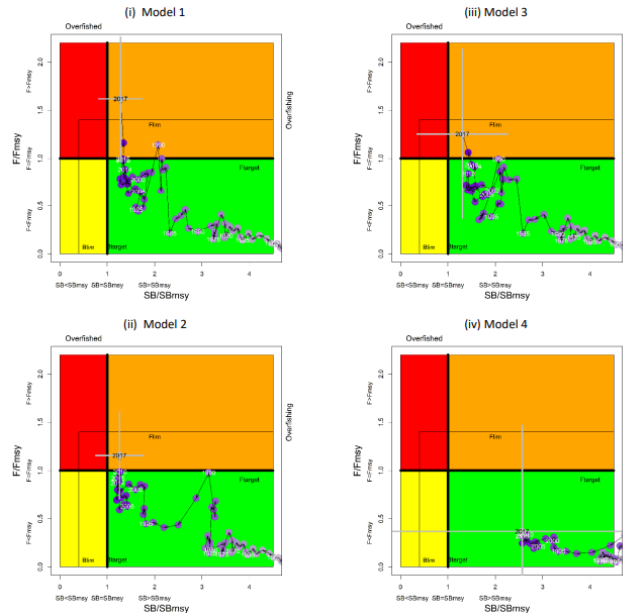


Figure 2. Albacore tuna SS3 Kobe plot for the four different model variates. Purple dot represents the trajectory of point estimates for spawning biomass (SB) and fishing mortality (F) ratio for each year from 1950 to 2017. Limit and target reference points for SB and F are shown as vertical and horizontal lines, respectively. Source: IOTC 2021.

Therefore, the stock is considered, in its most recent stock assessment, to have biomass above the limit reference point. The stock PASSES Clause C1.2.

References

IOTC. 2021. Executive Summary: Albacore Tuna (2021). Indian Ocean Tuna Commission and the Food and Agriculture Organization of the United Nations: https://iotc.org/sites/default/files/documents/science/species_summaries/english/1_Albacore2021E.pdf.

Collette, B.B., Boustany, A., Fox, W., Graves, J., Juan Jorda, M. & Restrepo, V. 2021. *Thunnus alalunga*. The IUCN Red List of Threatened Species 2021: e.T21856A46911332. <https://dx.doi.org/10.2305/IUCN.UK.2021-2.RLTS.T21856A46911332.en>. Accessed on 07 October 2022.

Links

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