



## MarinTrust Standard V2

# By-product Fishery Assessment Albacore tuna (*Thunnus alalunga*) in FAO Areas 51 and 57 (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 51 and 57(Western Indian Ocean)
	Country of origin of the product:	Mauritius
	Stock:	Albacore tuna ( <i>Thunnus alalunga</i> ) in in the Indian Ocean
Date	17 October 2023	
Report Code	MUS03	
Assessor	Ana Elisa Almeida Ayres	
Country of origin of the product - PASS	Mauritius	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Company Name(s): Marine Biotechnology Products Ltd			
Country: Mauritius			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification/ NSF	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Ana Elisa Almeida Ayres	Matthew Jew	0.5	Surveillance 1
Assessment Period	October 2023 – October 2024		

Scope Details	
Main Species	Albacore tuna ( <i>Thunnus alalunga</i> )
Stock	Albacore tuna ( <i>Thunnus alalunga</i> ) in the Indian Ocean
Fishery Location	FAO 51 and 57 (Western Indian Ocean)
Management Authority (Country/ State)	Indian Ocean Tuna Commission (IOTC)
Gear Type(s)	Purse seine, baitboat, gillnet and pole-and-line
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor's recommendation
Recommendation	APPROVED

**Table 2. Assessment Determination**

Assessment Determination
<p>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 Marin Trust raw material. Albacore tuna - <i>Thunnus alalunga</i> is not categorised as Endangered or Critically Endangered on IUCN's Red List and does not appear in CITES appendices; therefore, albacore tuna - <i>Thunnus alalunga</i> is eligible for approval for use as Marin Trust by-product raw material.</p> <p>The stock is subject to regular stock assessment by the Indian Ocean Tuna Commission (IOTC). The most recent was conducted in 2022, and fishery removals were considered, achieving a PASS against Clause C1.1. Spawning biomass is above the limit reference point and the assessment indicated that the stock is not overfished and is not subject to overfishing. Thus, the stock PASS against C1.2.</p> <p>Albacore tuna - <i>Thunnus alalunga</i> in Food and Agriculture Organization of the United Nations - FAO fishing areas 51 and 57 – Indian Ocean (Western and Eastern) is APPROVED for the production of fishmeal and fish oil under the current MarinTrust v2.3 by-products standard.</p>
Fishery Assessment Peer Review Comments
<p>The assessor correctly classified albacore tuna (<i>Thunnus alalunga</i>) in FAO areas 51 and 57 as Category C, the stock is subject to a specific management regime (IOTC) and reference points are defined.</p> <p>Fishery removals are included in the stock assessment process so the stock PASSES Clause C1.1. 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 Clause C1.2.</p> <p>albacore tuna (<i>Thunnus alalunga</i>) in FAO areas 51 and 57 passes both clauses (C1.1 and C1.2) and therefore should be approved under the MarinTrust Standard v.2.3.</p>
Notes for On-site Auditor
<p>N/A</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 <sup>1</sup>	CITES Appendix 1 <sup>2</sup>
Albacore tuna	<i>Thunnus alalunga</i>	Albacore tuna ( <i>Thunnus alalunga</i> ) in the Indian Ocean	Indian Ocean Tuna Commission (IOTC)	C	LC	No

<sup>1</sup> <https://www.iucnredlist.org/>

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

## CATEGORY C SPECIES

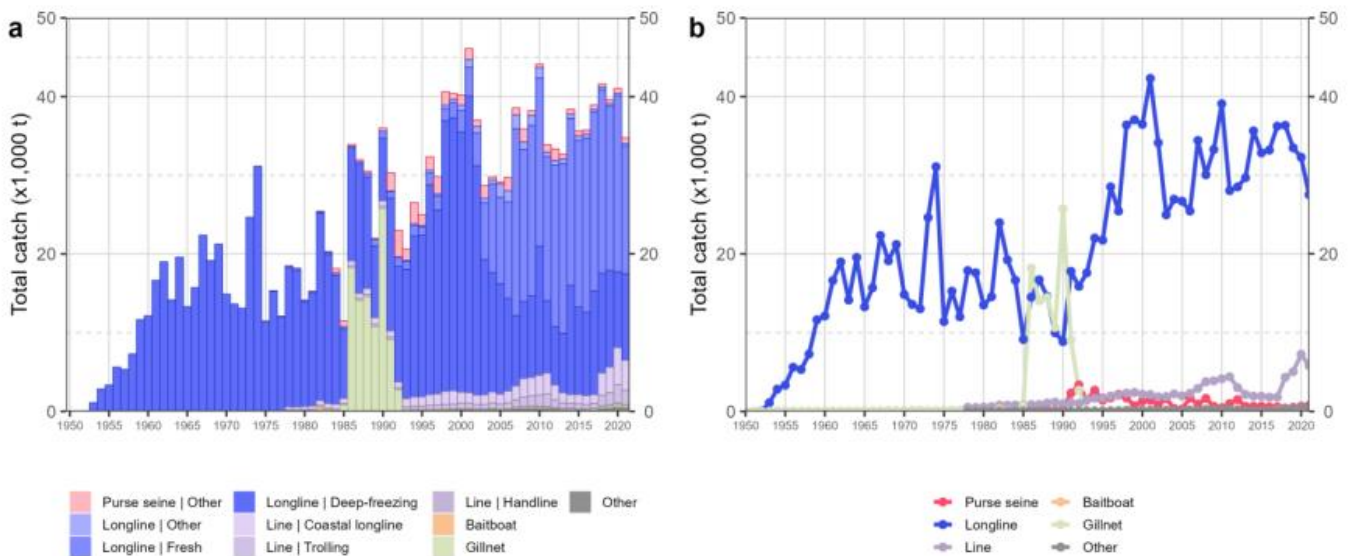
In a by-product assessment, Category C species are those which are subject to a species-specific management regime and are usually targeted species in fisheries for human consumption.

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
<b>Clause outcome:</b>			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.**

Albacore in the Indian Ocean is subject to regular stock assessment by the Indian Ocean Tuna Commission (IOTC). The most recent was conducted in 2022 using Stock Synthesis III, and utilised international catch and CPUE data. There are several CPUE indices available – including those for the North-Western and South-Western fisheries, and several eastern indices – which indicate trends in separate components of the Indian Ocean albacore stock. According to IOTC (2022), the catch estimates for 2020 (41,051 t) were below the estimated maximum sustainable yield - MSY levels. Fishing mortality represented as  $F_{2020}/F_{MSY}$  is 0.68 (0.42–0.94). Fishing mortality was considered to be below the interim target reference point of  $F_{MSY}$ , and therefore, below the interim limit reference point of  $1.4 * F_{MSY}$ .



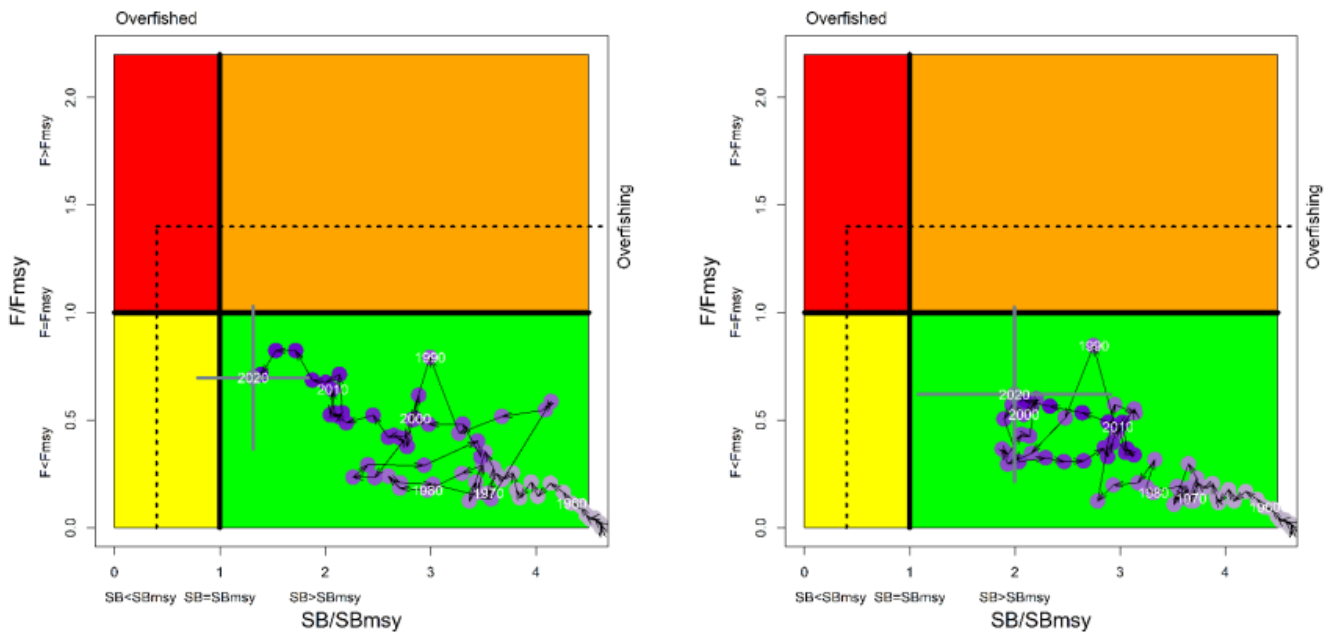
**Fig. 1.** Annual time series of (a) cumulative nominal catches (metric tonnes; t) by fishery and (b) individual nominal catches (metric tonnes; t) by fishery group for albacore during 1950-2021. Purse seine | Other: coastal purse seine, purse seine of unknown association type, ring net; Longline | Other: swordfish and sharks-targeted longlines; Other: all remaining fishing gears

Figure 1. Source: IOTC (2022).

Fishery removals of albacore tuna are incorporated into the stock assessment process and therefore C1.1 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.

According to IOTC (2022), biomass is estimated to be above the target reference point of  $SB_{MSY}$  level (1.56 (0.89– 2.24)), and, therefore, above the limit reference point of  $0.4 \cdot SB_{MSY}$ . The stock status in relation to the Commission’s interim  $B_{MSY}$  and  $F_{MSY}$  target reference points indicates that the stock is not overfished and is not subject to overfishing.



**Fig. 3.** Albacore: SS3 Indian Ocean assessment Kobe plot for the two model options considered: (i) Model fitted to the North-western CPUE; (ii) Model fitted to the South-western CPUE. Purple circles indicate the trajectory of the point estimates for the spawning biomass (SB) ratio and fishing mortality (F) ratio for each year 1950–2020 (the grey lines represent the 95 percentiles of the 2020 estimate). Target ( $F_{target}$  and  $SB_{target}$ ) and limit ( $F_{lim}$  and  $SB_{lim}$ ) reference points are shown

Figure 2. Source: IOTC (2022).

The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), C1.2 is met.

**References**

IOTC (2022). Albacore tuna stock status and advice, executive summary, 2022. [https://iotc.org/sites/default/files/content/Stock\\_status/2022/Albacore2022E.pdf](https://iotc.org/sites/default/files/content/Stock_status/2022/Albacore2022E.pdf)

**Links**

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