



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: | Bullet tuna, <i>Auxis rochei</i> |
| | Geographical area: | FAO Area 87, Pacific Southeast |
| | Country of origin of the product: | Ecuador |
| | Stock: | Eastern Pacific Ocean bullet tuna |
| Date | 18/10/2021 | |
| Report Code | BP212 | |
| Assessor | Virginia Polonio | |
| Country of origin of the product - PASS | Ecuador | |
| Country of origin of the product - FAIL | NA | |

| Application details and summary of the assessment outcome | | | |
|---|-------------------|----------------------------|-----------------------------------|
| Name: | | | |
| Address: | | | |
| Country: Ecuador | | Zip: | |
| Tel. No.: | | Fax. No.: | |
| Email address: | | Applicant Code: | |
| Key Contact: | | Title: | |
| Certification Body Details | | | |
| Name of Certification Body: | | Global Trust Certification | |
| Assessor | Peer Reviewer | Assessment Days | Initial/Surveillance/ Re-approval |
| Virginia Polonio | Geraldine Criquet | 0.5 | Surveillance 1 |
| Assessment Period | To October 2021 | | |

| Scope Details | |
|---------------------------------------|--|
| Main Species | Bullet tuna, <i>Auxis rochei</i> |
| Stock | Eastern Pacific Ocean bullet tuna |
| Fishery Location | FAO Area 87, Pacific Southeast |
| Management Authority (Country/ State) | Vice Ministry of Aquaculture and Fisheries of Ecuador (MPCEIP) and IATTC |
| Gear Type(s) | Purse seine and longlines |
| 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 MarinTrust raw material of Bullet tuna, <i>Auxis rochei</i>, do not appear as Endangered or Critically Endangered on IUCN’s Red List, nor do they appear in CITES appendices; therefore, of Bullet tuna, <i>Auxis rochei</i> in FAO 87 is eligible for approval for use as MarinTrust by-product raw material.</p> <p>Bullet tuna is considered together with similar species under Other tunas and tuna-like species. No stock management measures, or stock assessment are available for this stock.</p> <p>Hence, due to the lack of scientific information on the status of the stock a risk-assessment style approach was taken. The fishery was assessed using the risk-based Productivity, Susceptibility Analysis (PSA) approach as per MarinTrust v 2.0 procedures for Category D species. Therefore, following Marin Trust criteria, the stock is classified as Category D.</p> <p>Table D1 (PSA) has achieved a PASS therefore, the average for the PSA risk rating results in the species passing D1.</p> <p>Therefore, of Bullet tuna, <i>Auxis rochei</i> in FAO Area 87 is APPROVED area for the production of fishmeal and fish oil under the current MarinTrust v 2.0 by-products standard.</p> |
| Fishery Assessment Peer Review Comments |
| <p>The assessor correctly classified the Pacific Eastern Ocean bullet tuna stock as category D, reference points are not defined to assess status of the stock relative to.</p> <p>With an average productivity score of 1.57 and an average susceptibility score of 2, the Pacific Eastern Ocean bullet tuna PASSES Clause D1 in accordance with Table D3.</p> <p>Therefore, the Pacific Eastern Ocean bullet tuna should be approved.</p> |
| 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 |
|-------------|---------------------|--------------------------------|--|----------|-------------------------------------|-------------------------------|
| Bullet tuna | <i>Auxis rochei</i> | FAO Area 87, Pacific Southeast | Vice Ministry of Aquaculture and Fisheries of Ecuador (MPCEIP) and IATTC | D | LC | No |

¹ <https://www.iucnredlist.org/>

² <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.

| | | | |
|--------------------------|---|---|--------------|
| D1 | Species Name | Bullet tuna, (<i>Auxis rochei</i>) | |
| | Productivity Attribute | Value | Score |
| | Average age at maturity (years) | 2 | 2 |
| | Average maximum age (years) | 6 | 1 |
| | Fecundity (eggs/spawning) | 31,000 and 103,000 | 1 |
| | Average maximum size (cm) | 50 | 1 |
| | Average size at maturity (cm) | 35 | 2 |
| | Reproductive strategy | Open water / substratum egg scatterers | 1 |
| | Mean trophic level | 4.4 | 3 |
| | Average Productivity Score | | 1.57 |
| | Susceptibility Attribute | Value | Score |
| | Overlap of adult species range with fishery | No information | - |
| | Distribution | Throughout region / global distribution* | 1 |
| | Habitat | Epi-pelagic in neritic waters | Not used |
| | Depth range | 0-200m | 1 |
| | Selectivity | Mesh size 2.5-9cm | 3 |
| | Post-capture mortality | Most dead | 3 |
| | Average Susceptibility Score | | 2 |
| | PSA Risk Rating (From Table D3) | | PASS |
| | Compliance rating | | PASS |
| References | | | |
| 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 | 1) 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 size or >5 m length |
| 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.

| 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 | | | |
| D4.1 | 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 substantial evidence that the fishery has a significant negative impact on the species. | | |
| Outcome: | | | |
| Evidence | | | |
| D4.1: 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 substantial evidence that the fishery has a significant negative impact on the species. | | | |
| References | | | |
| Links | | | |
| MARINTRUST Standard clause | | 1.3.2.2, 4.1.4 | |
| FAO CCRF | | 7.5.1 | |
| GSSI | | D.5.01 | |