

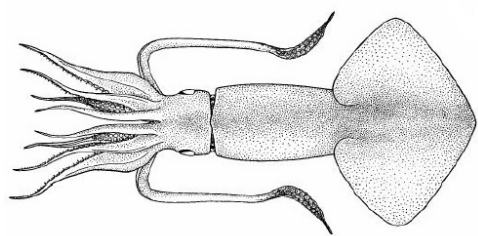


# Jumbo flying squid SE Pacific

 Fishery:  Peruvian  Peru/SPRFMO  Peru  Pole-lines hand operated

## IDENTIFICATION



### SCIENTIFIC NAME

*Dosidicus gigas*

### SPECIES NAME(S)

Jumbo flying squid

### COMMON NAMES

calamar gigante, calamar rojo, Humboldt squid, jibia, pota

### STOCK IDENTIFICATION

Jumbo flying squid in the Eastern Pacific extends from the waters off Chile to the North American coast. The **NE Pacific** and **SE Pacific** represent genetically different stocks with some migration among them, in a genetic structure apparently influenced by oceanic currents ([Sandoval-Castellanos et al. 2010](#)).

Three intraspecific groups have been identified for Giant or Jumbo flying squid (*Dosidicus gigas*) in the Southeast Pacific, based on size-at-maturity ([Nigmatullin et al. 2001](#)), but as no genetic difference has been found between the three proposed sub-unit populations, thus it is still considered to constitute a single stock ([Xu et al. 2017](#)).



### RELATED LINKS:

- [Ministry of Production - Peru \(PRODUCE\)](#), [South Pacific Regional Fisheries Management Organization \(SPRFMO\)](#)
- [Marine Institute of Peru \(IMARPE\)](#)

## ASSESSMENT

### Strengths

- The stock is considered healthy.
- Managers comply fully with scientific advice.
- Bycatch is considered null due to selectivity of jigs and the interaction with the seabed ecosystem is regarded as minimal.

### Weaknesses

- No management exists at a whole-stock level, and there is thus scope for high-seas fleets to increase their catch levels at any time, potentially jeopardizing stock health.
- Ongoing uncertainty regarding the stock structure (three functionally independent stocks or one semi-mixed stock) combined with high annual/environmental variability hampers efforts to forecast and manage the stock(s) across national boundaries and in the high seas.
- Assessment of the full stock needs improvement in fishery-independent and dependent data from Peru and Chile and the SPRFMO area.
- Regulations do not reflect the artisanal nature of the fishery.
- Monitoring has been flag as ineffective.

## SCORES

### Management Quality:

Management Strategy	Managers Compliance	Fishers Compliance
< 6 to ≥ 6	2.1 to 10	< 6 to ≥ 6

### Stock Health:

Current Health	Future Health
≥ 6 to 10	≥ 6 to 10

## FIPS

No related FIPs

## MSC

No related MSC fisheries

## RECOMMENDATIONS

### RETAILERS & SUPPLY CHAIN

- Work with the South Pacific RFMO and its members to define the population structure and agree on the approach to stock assessments, ensuring that the models incorporate appropriate fisheries, environmental, and biological data from the entire stock(s).
- Develop a common management strategy covering the entire population unit(s) and seek its adoption by all management authorities (RFMO and states). The common management strategy will include clear management objectives, specific management measures, and use of biological reference points and harvest control rules.
- Design and implement an effective fishery monitoring program that covers both national and international waters, assuring standardized and regular data collection covering all fleets required to support stock assessment. Ensure transparency and share data with all management authorities in the South Pacific RFMO.
- Design and implement a research programme aimed at determining biological parameters and the effects of environmental variability on the stock(s).
- Implement effective surveillance and enforcement mechanisms to ensure compliance with conservation and management measures (CMMs) within both national and international waters.
- Engage in and support the work of CALAMASUR in advocating for better science and management for jumbo flying squid fisheries in the Pacific.