

## The hidden cost of unlabelled seafood: the risk of consuming unethical and unsustainable seafood in Europe





# Consumer information for seafood products

The **Common Market Organisation (CMO)** Regulation in fishery and aquaculture products (EU) No 1379/2013.



The **commercial designation and scientific name** of the species.



The **production method** (i.e. caught, caught in freshwater, or farmed).



The **catch or production area**, including FAO fishing area.



The type of **fishing gear** used.

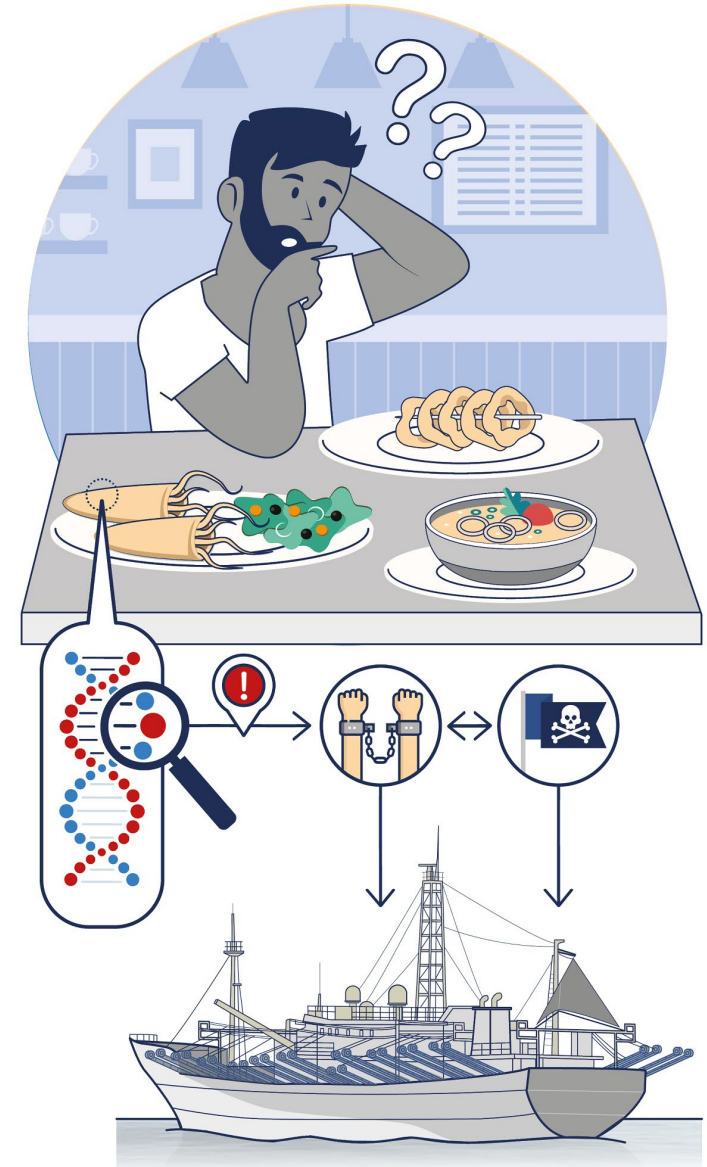


Whether the product has been defrosted, and the date of minimum durability



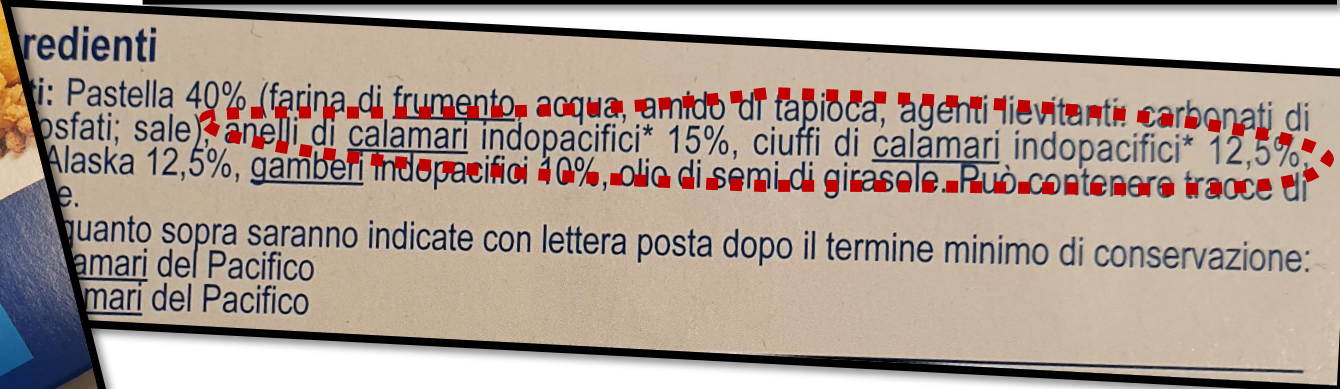
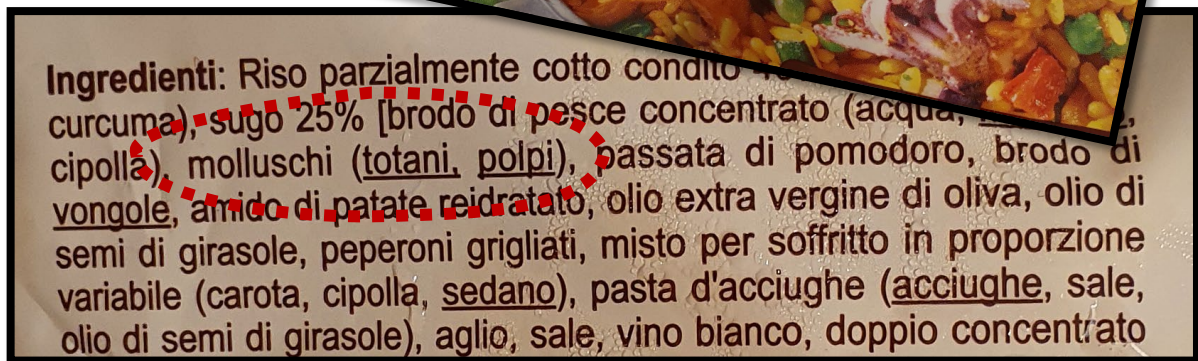
# Falling through the net: Prepared, preserved and restaurant products

What are the risks?





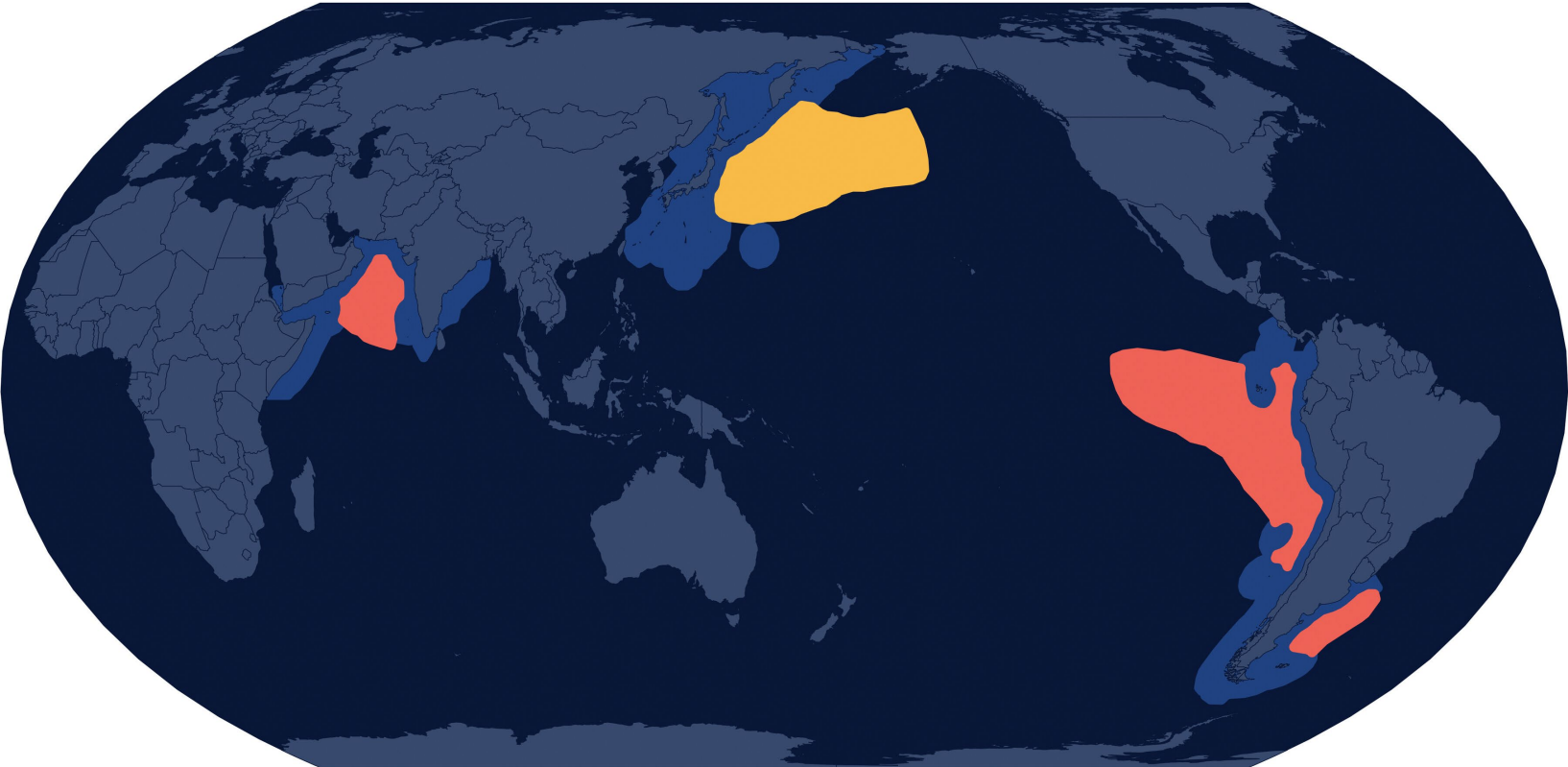
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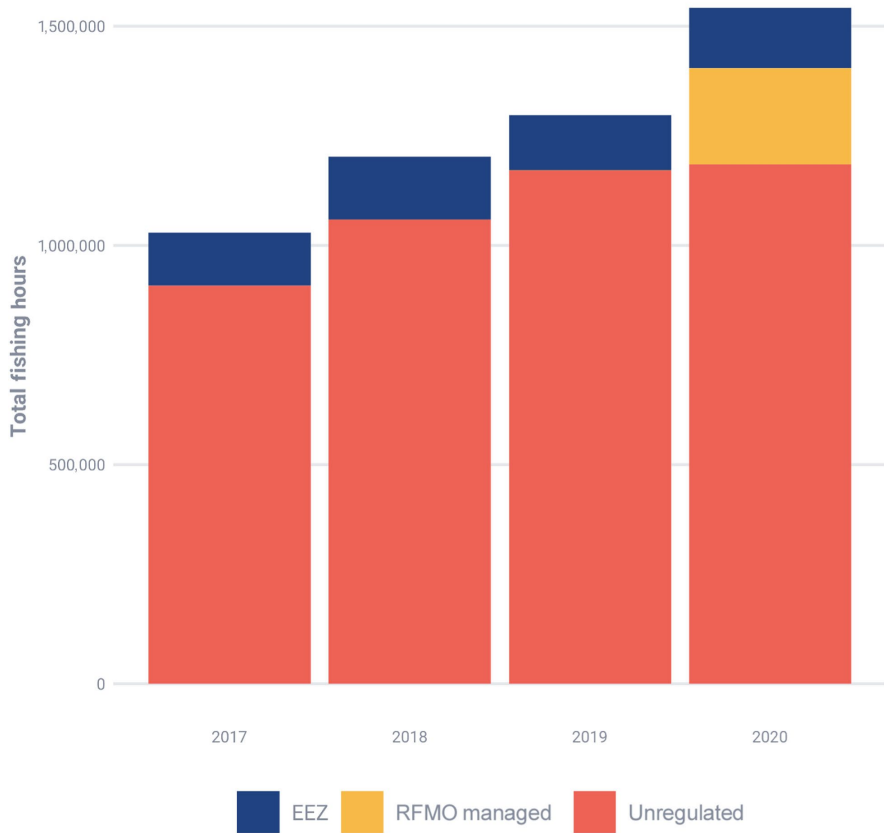


Falling through the net: Prepared, preserved and restaurant products

What are the risks?



Annual counts of total fishing hours by EEZ, RFMO managed, and unregulated zones (2017-2020)



Seto et al., 2023 – Science Advances





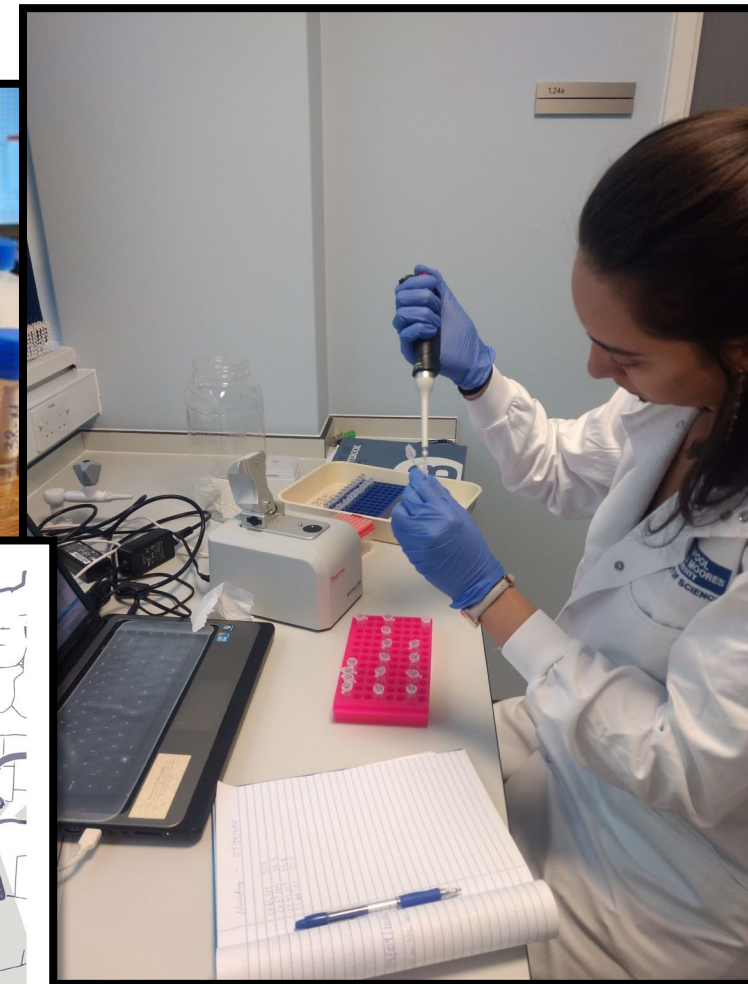
TOTAL = 198 samples

# Oceana squid DNA analysis

## Methods



**Sampled in Milan & Brussels:**  
60 fresh and frozen  
72 prepared & preserved  
66 restaurant dishes

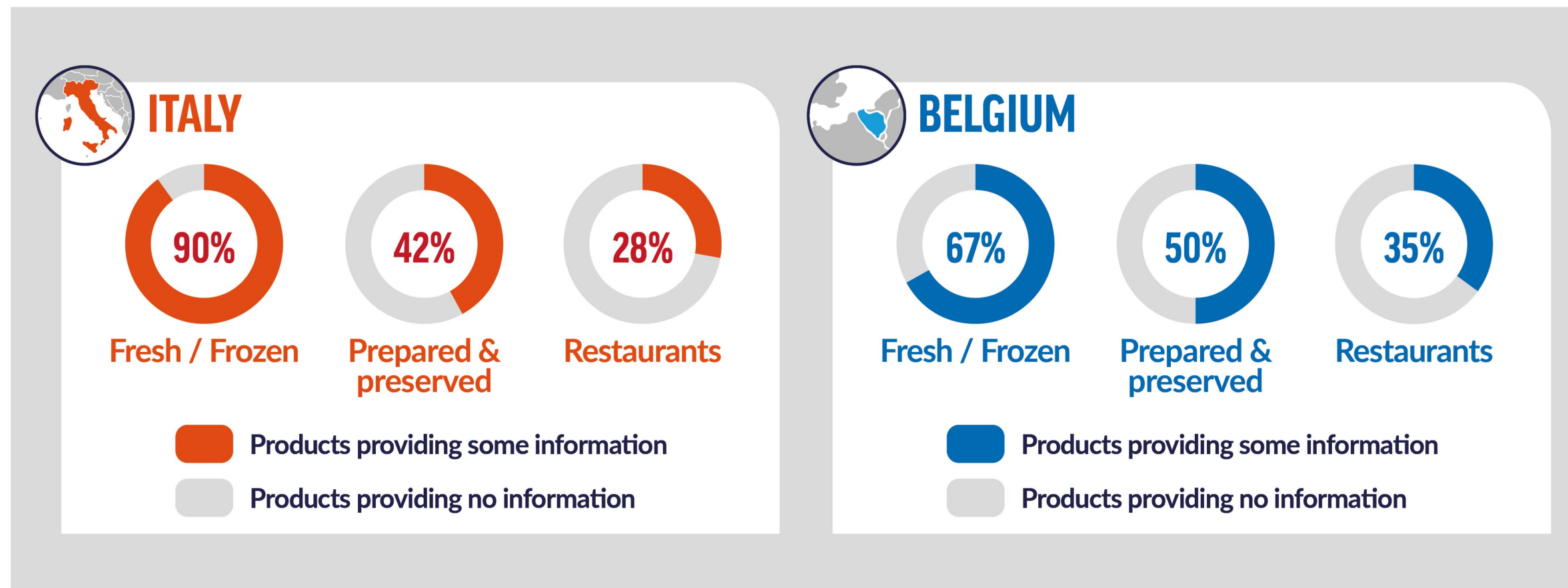




# Oceana squid DNA analysis

## Results

Figure 2. Proportion of squid products, divided by categories, that contained some information on either the species or the geographical catch location. This figure does not illustrate the compliance level with CMO requirements.



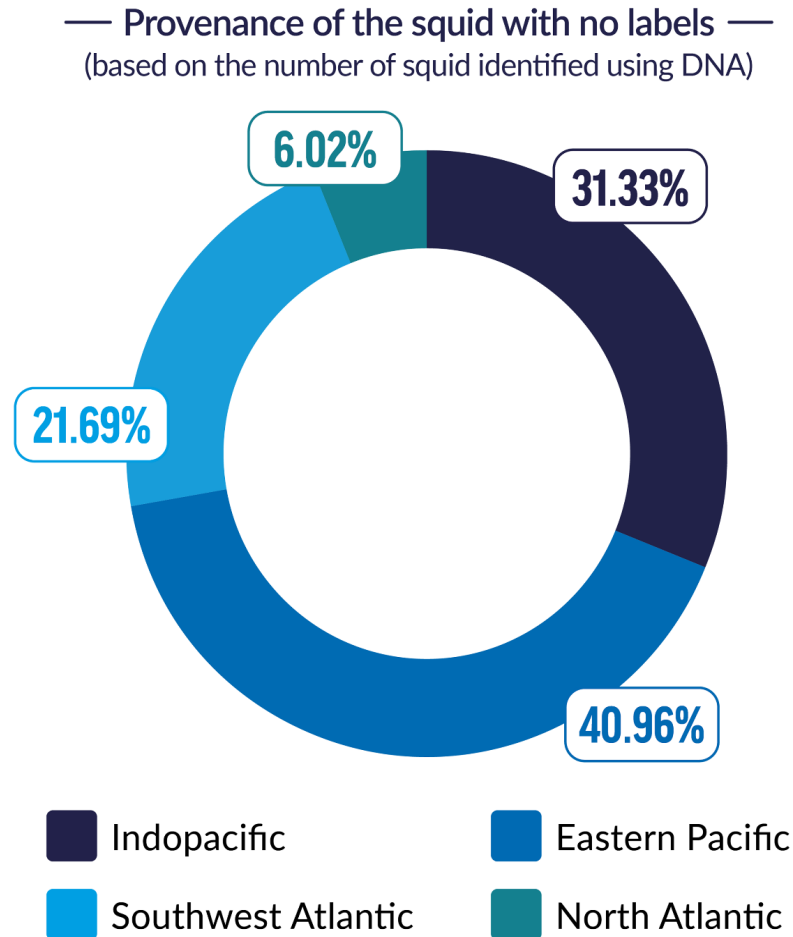
# Oceana squid DNA analysis

## Results



**TOTAL = 198 samples**

Figure 4. The geographical origin of 83 sampled squid products for which no consumer information was available regarding species and/or catch location, as evidenced by DNA barcoding and metabarcoding.

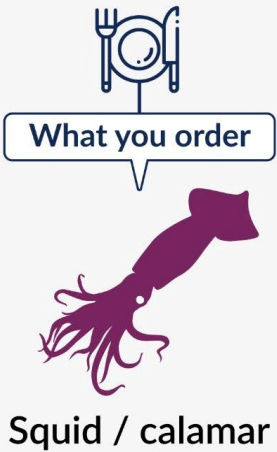




Oceana squid DNA analysis

Results

Squid provenance from Brussels restaurants



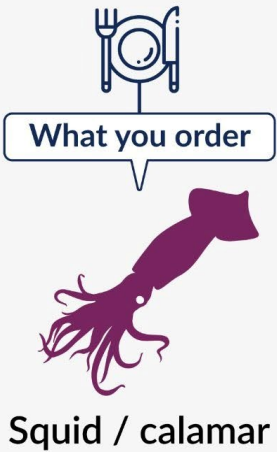
What you get	Percentage	Distribution Map
Jumbo flying squid ( <i>Dosidicus gigas</i> )	55%	
Argentine shortfin squid ( <i>Illex argentinus</i> )	10%	
European squid ( <i>Loligo vulgaris</i> )	10%	
Purpleback flying squid ( <i>Sthenoteuthis oualaniensis</i> )	6%	
Indian squid ( <i>Uroteuthis duvaucelii</i> )	6%	
Swordtip squid ( <i>Uroteuthis edulis</i> )	6%	
Opalescent inshore squid ( <i>Doryteuthis opalescens</i> )	3%	
Neon flying squid ( <i>Ommastrephes bartramii</i> )	3%	



Oceana squid DNA analysis

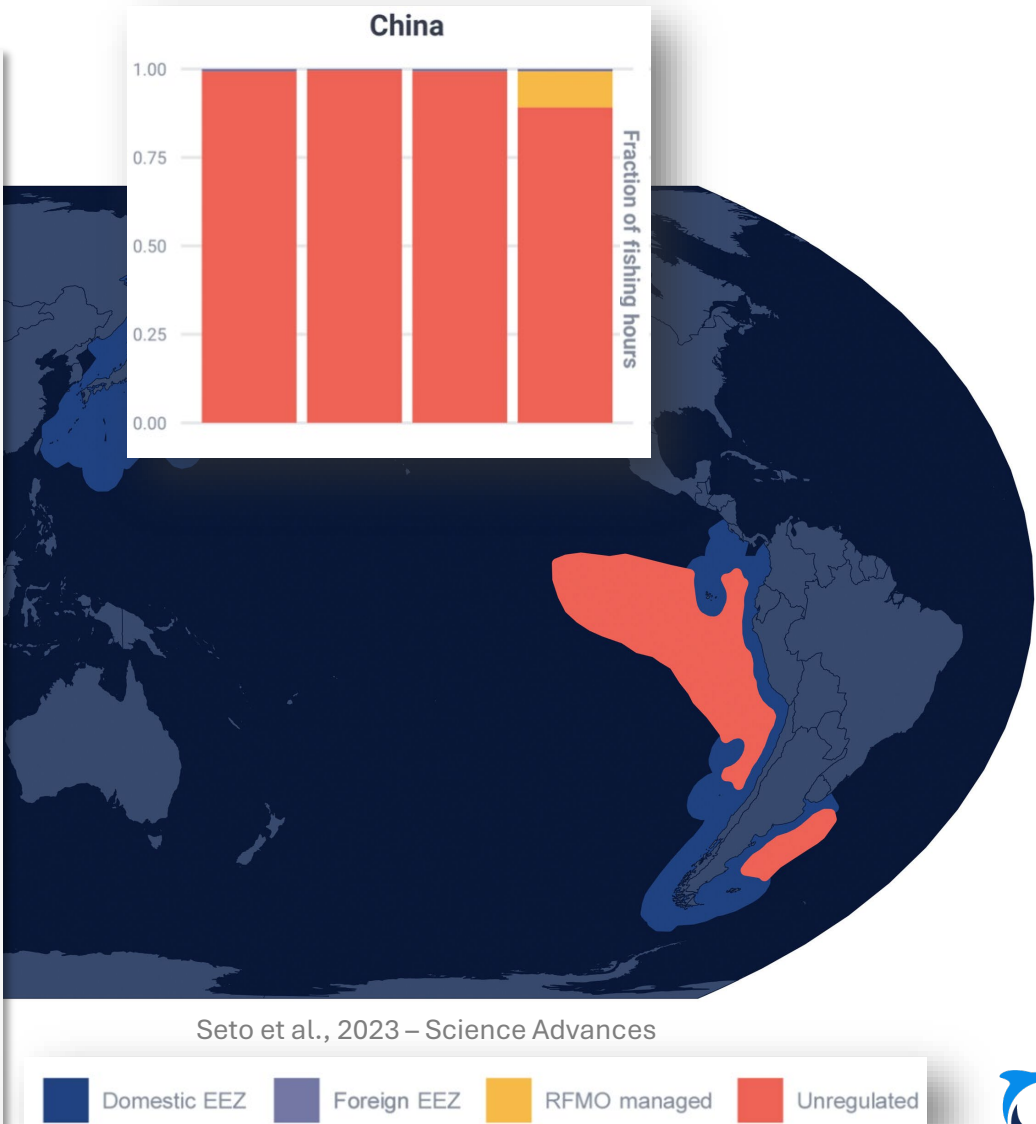
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# Oceana squid DNA analysis

## Results



## Conclusion & Recommendations



Require basic information for prepared and preserved products



Require HoReCa sector to provide basic information to customers



Require flag State information

