

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).



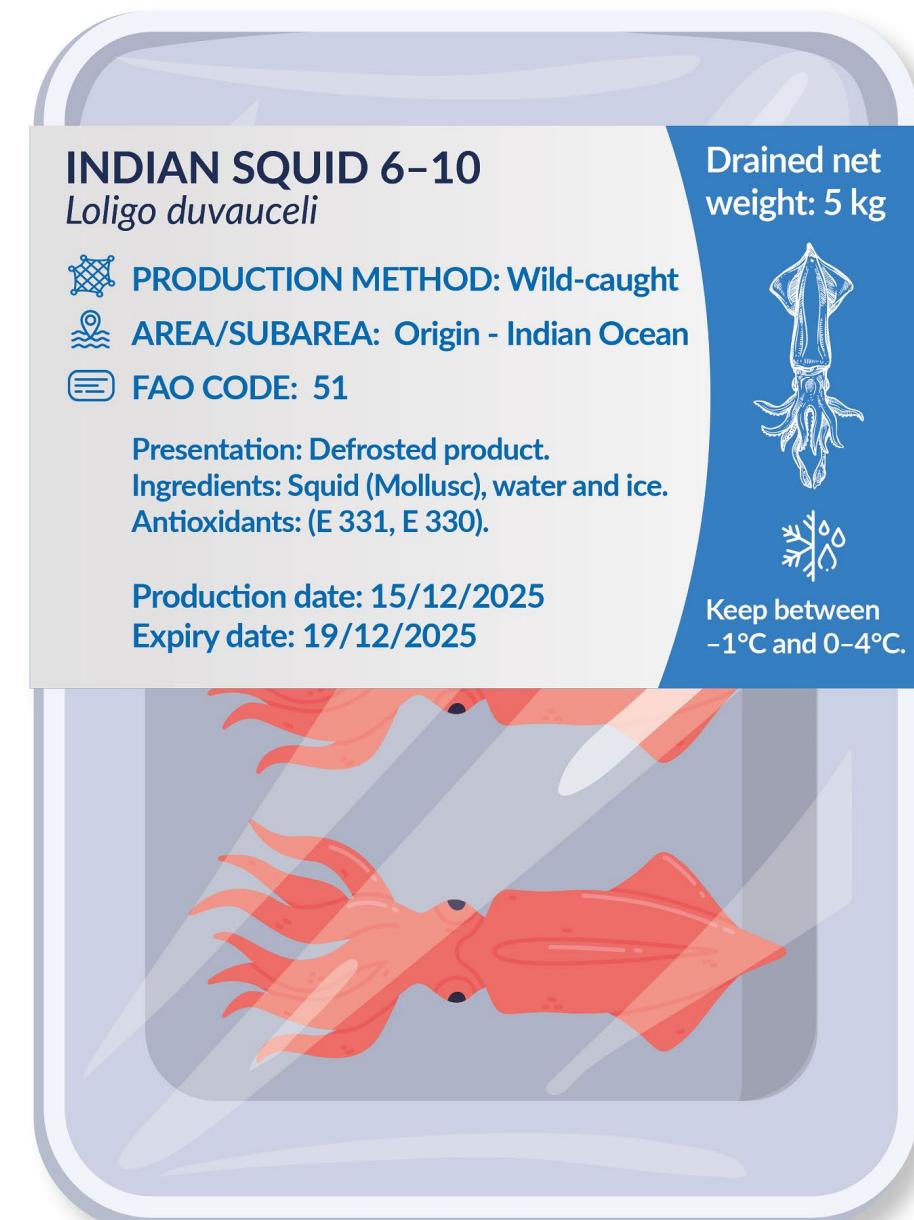
The **catch or production area**, including FAO fishing area.



The type of **fishing gear** used.

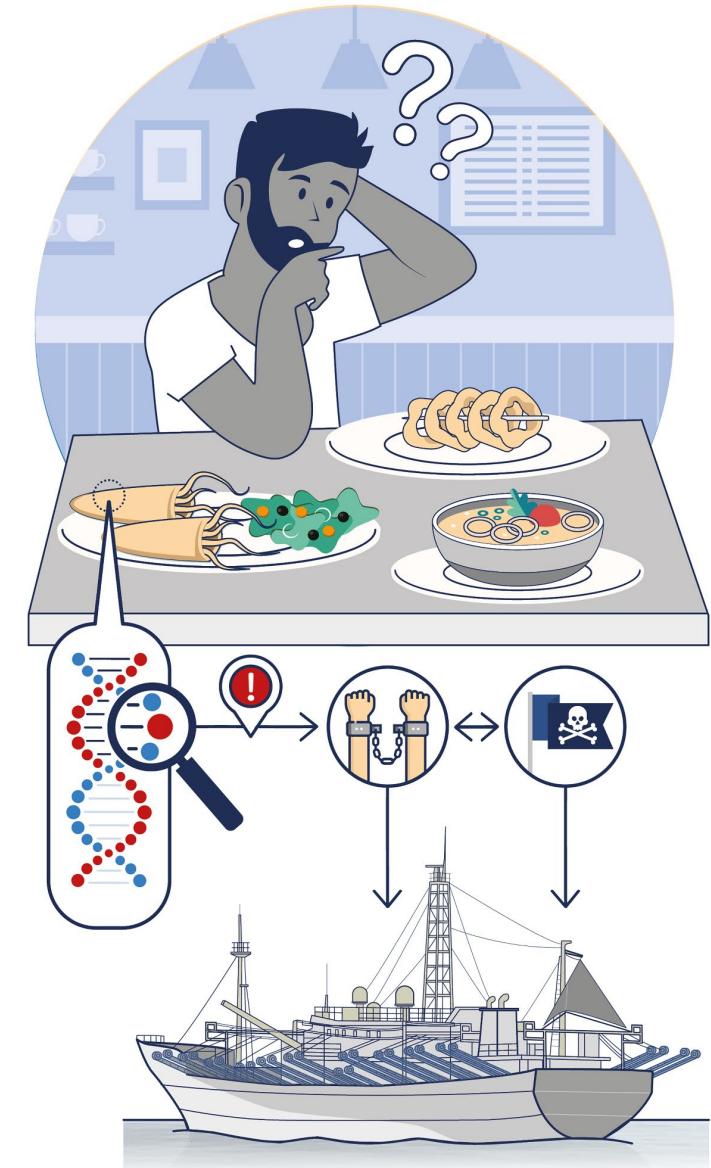


Whether the product has been defrosted, and the date of minimum durability



Falling through the net: Prepared, preserved and restaurant products

What are the risks?



Falling through the net: Prepared, preserved and restaurant products

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Ingredienti: Riso parzialmente cotto condito con curcuma, sugo 25% [brodo di pesce concentrato (acqua, cipolla), molluschi (totani, polpi), passata di pomodoro, brodo di vongole, amido di patate reidratato, olio extra vergine di oliva, olio di semi di girasole, peperoni grigliati, misto per soffritto in proporzione variabile (carota, cipolla, sedano), pasta d'acciughe (acciughe, sale, olio di semi di girasole), aglio, sale, vino bianco, doppio concentrato

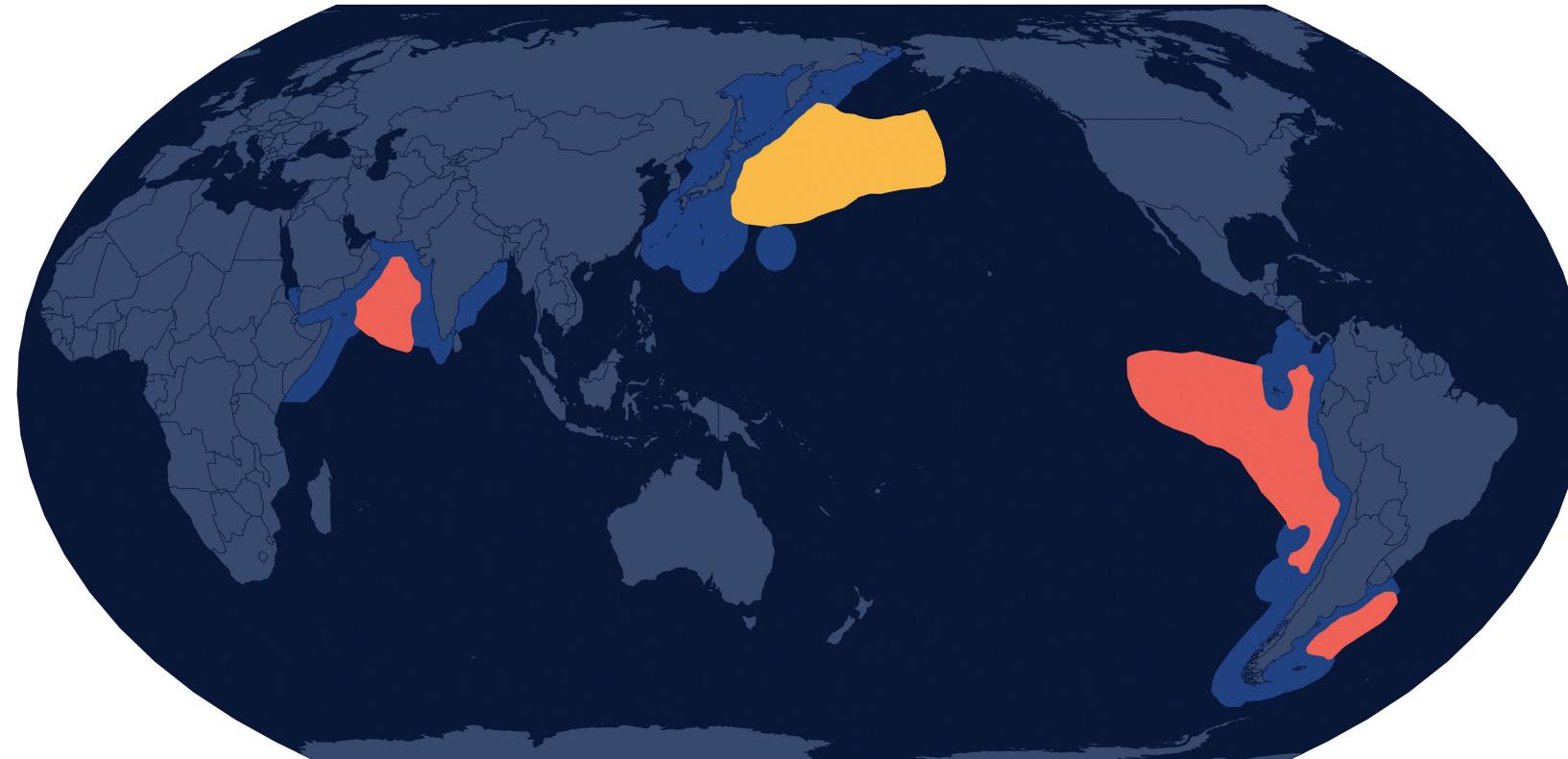
Ingredienti: Pastella 40% (farina di frumento, acqua, amido di tapioca, agenti lievitanti: carbonati di fosfati; sale), anelli di calamari indopacifici* 15%, ciuffi di calamari indopacifici* 12,5%, Alaska 12,5%, gamberi indopacifici 10%, olio di semi di girasole. Può contenere tracce di

quanto sopra saranno indicate con lettera posta dopo il termine minimo di conservazione: calamari del Pacifico, calamari del Pacifico



Falling through the net: Prepared, preserved and restaurant products

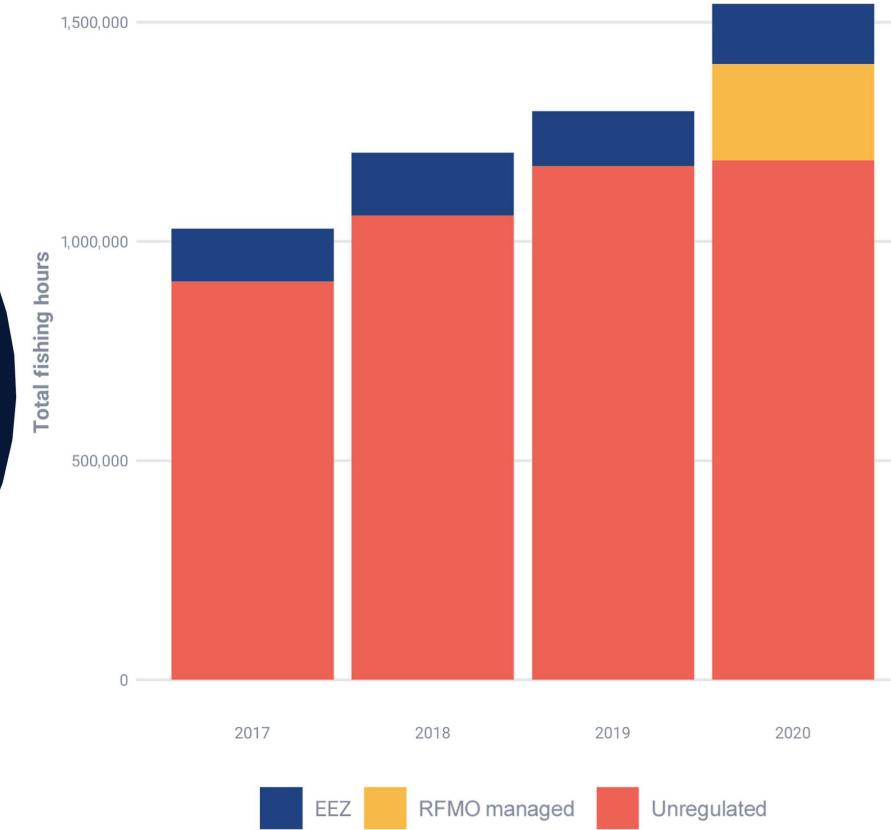
What are the risks?



Management statuses of squid fisheries in selected regions

EEZ RFMO managed Unregulated

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

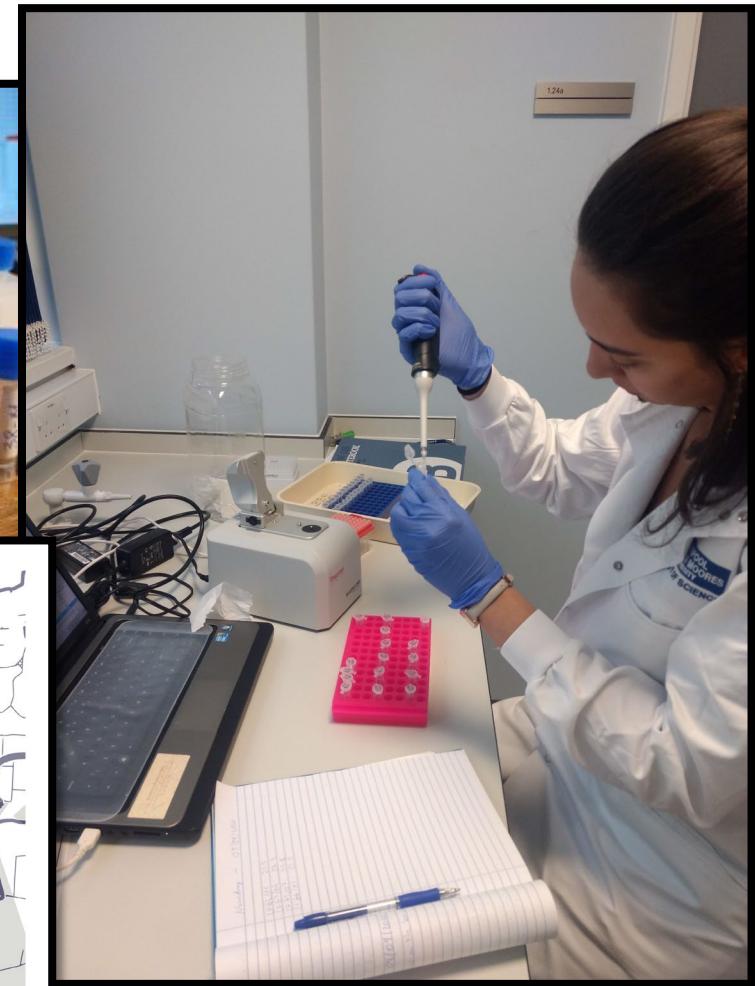
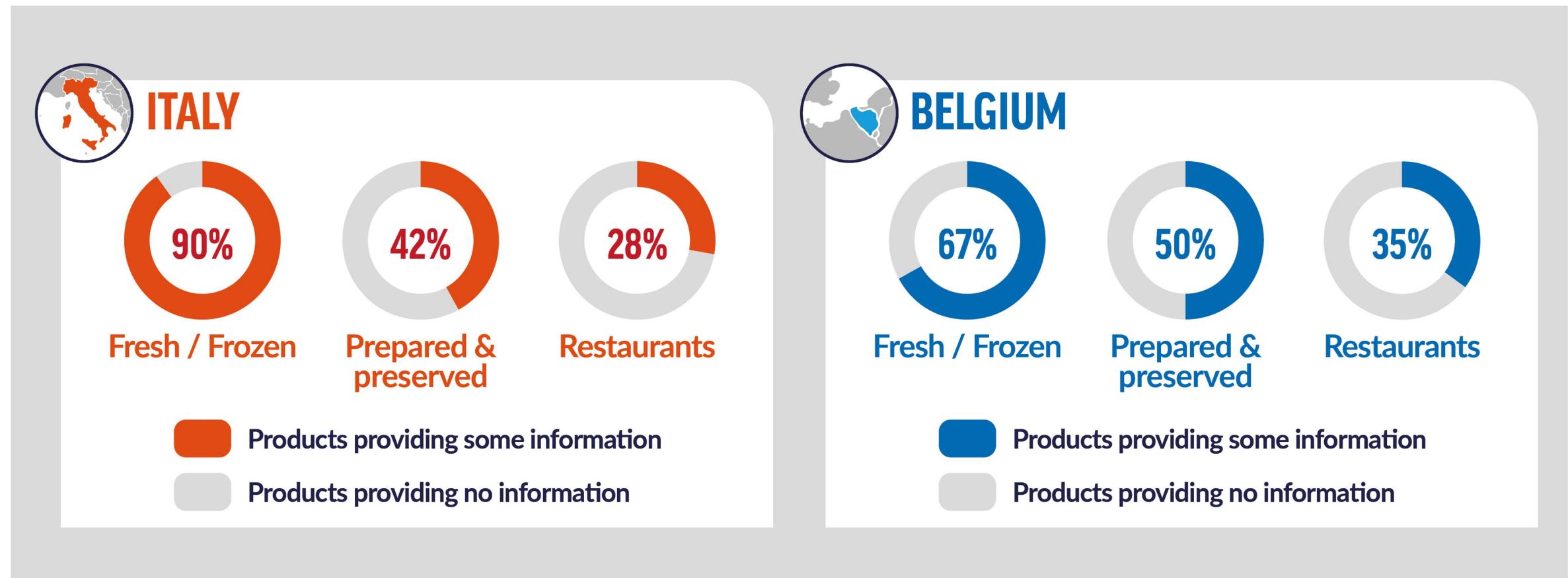


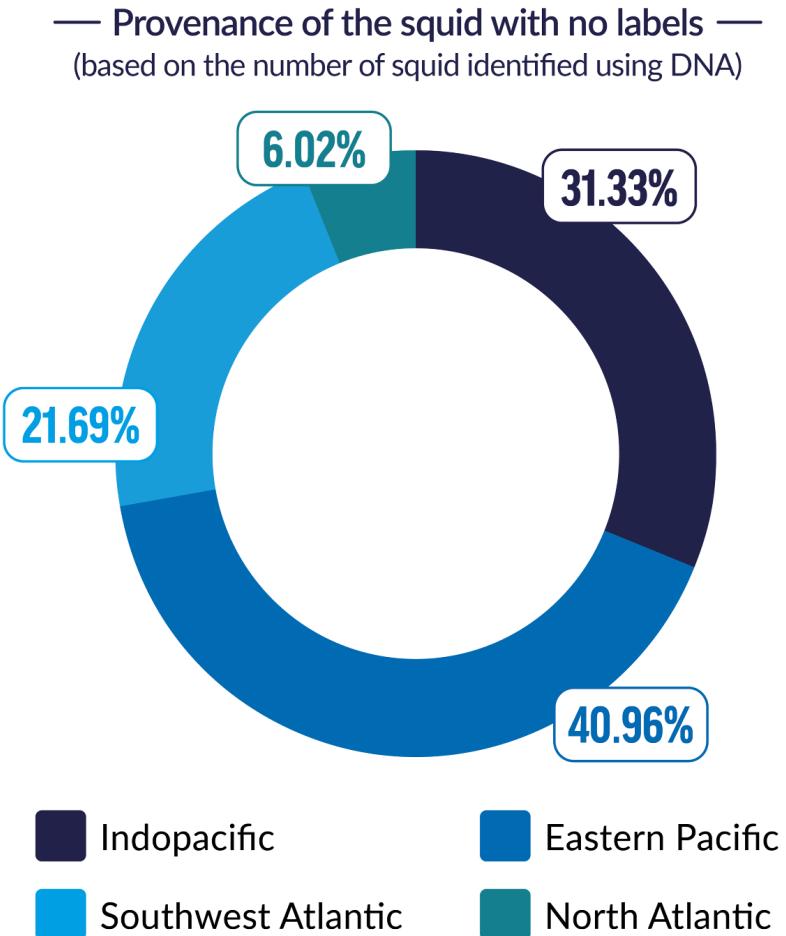
Figure 2. Proportion of squid products, divided by categories, that contained some information on either the species or the geographical catch location. This figure does not illustrate the compliance level with CMO requirements.





TOTAL = 198 samples

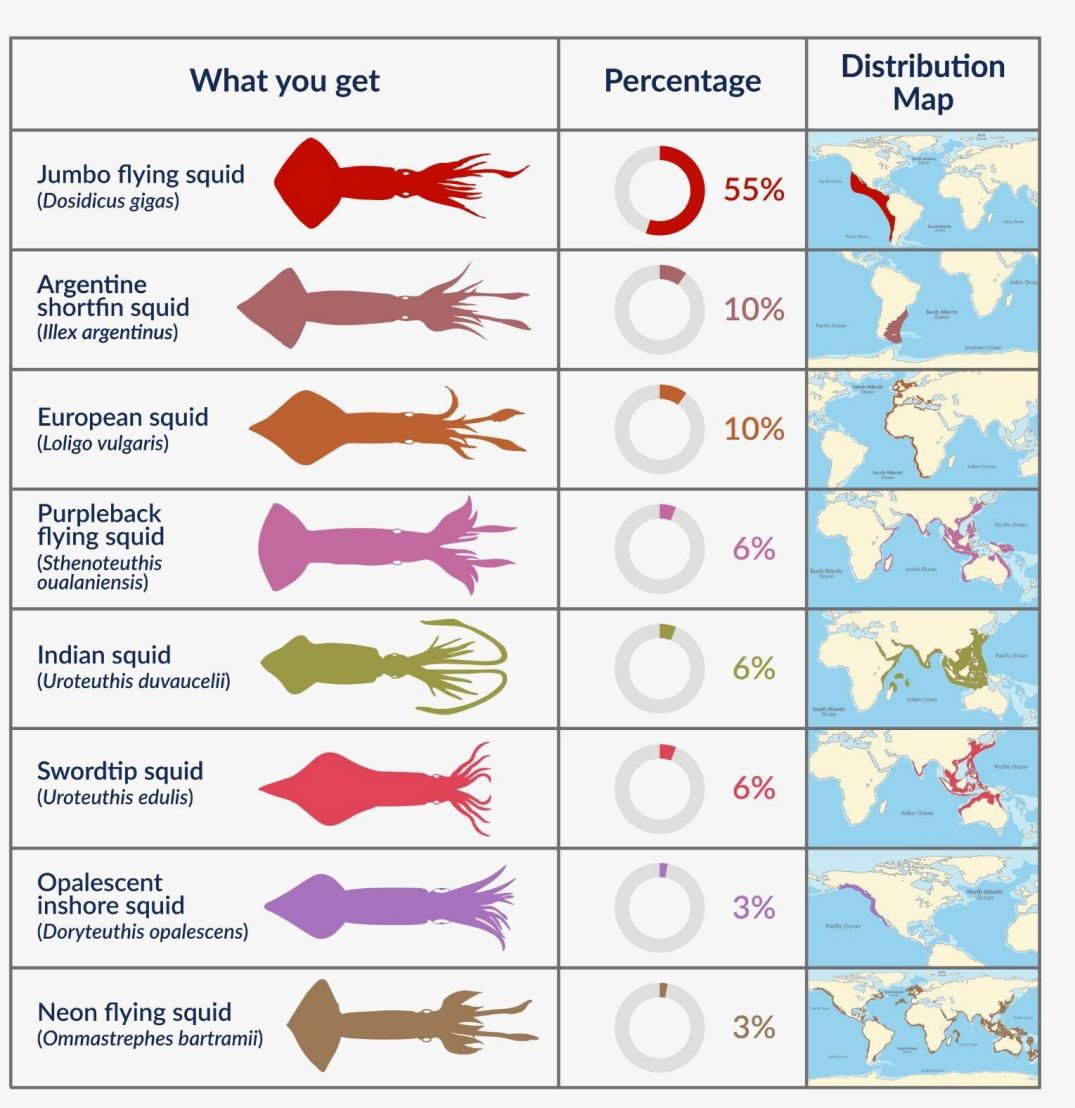
Figure 4. The geographical origin of 83 sampled squid products for which no consumer information was available regarding species and/or catch location, as evidenced by DNA barcoding and metabarcoding.



Oceana squid DNA analysis

Results

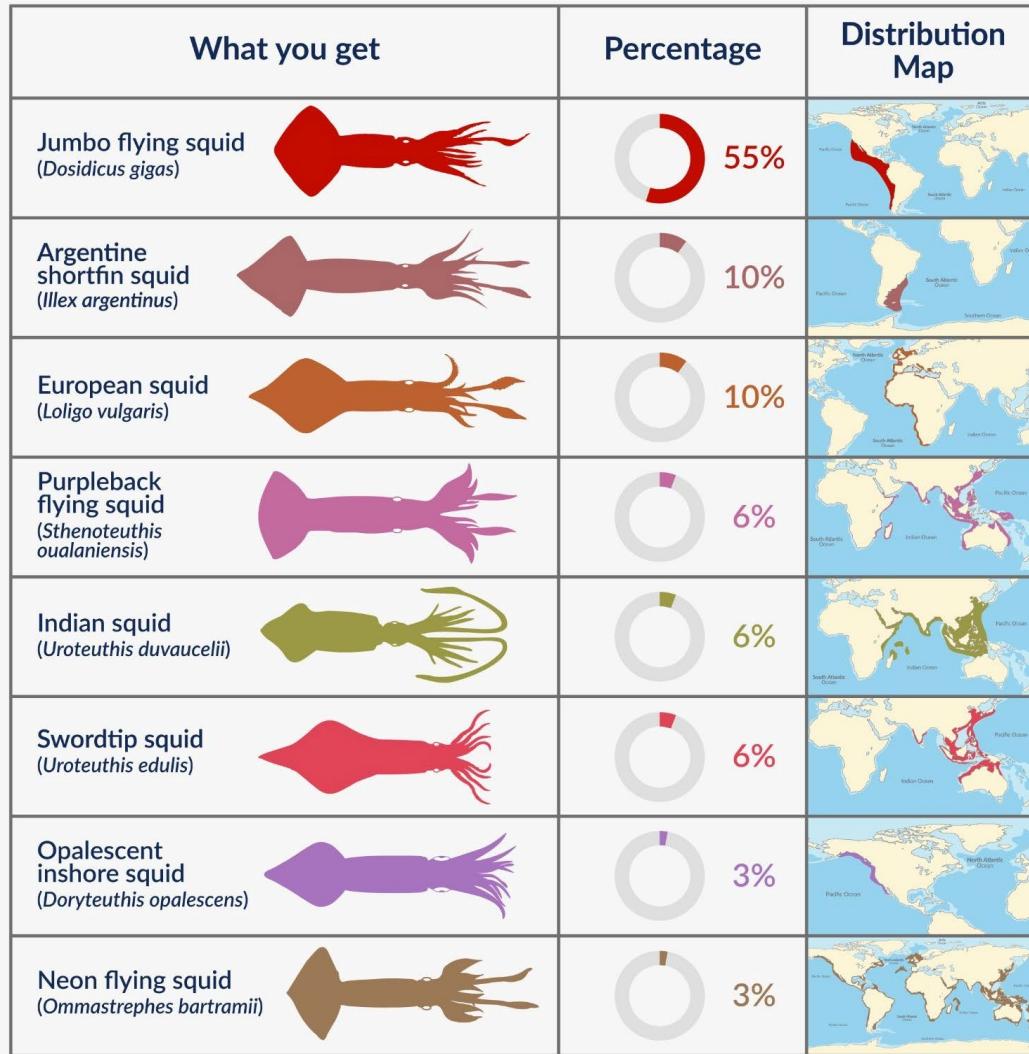
Squid provenance from Brussels restaurants



Oceana squid DNA analysis

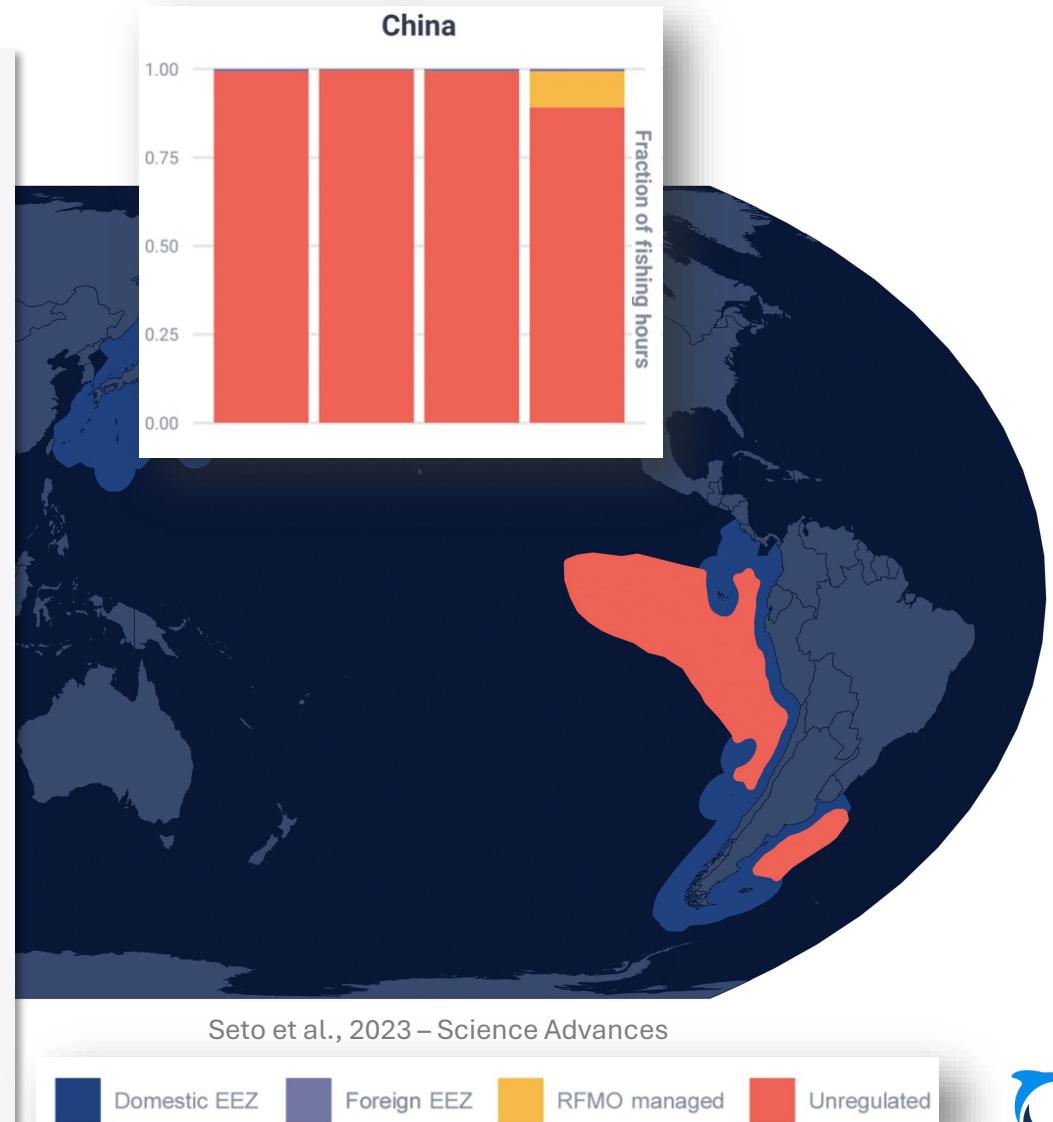
Results

Squid provenance from Brussels restaurants



Squid / calamar

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



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

