



# MUSSEL

## (*MYTILUS EDULIS* AND *MYTILUS GALLOPROVINCIALIS*)



*Mytilus edulis* (1) and *Mytilus galloprovincialis* (2)

Source : Information system on commercial designations [\(1\)](#) [\(2\)](#)

## BIOLOGY AND HABITAT

- Species description (Read more [\(1\)](#) [\(2\)](#))

The mussel is the common name used for members of several families of bivalve molluscs. *Mytilus edulis* (blue mussel) and *Mytilus galloprovincialis* (Mediterranean mussel) are the main species of the family Mytilidae consumed and produced in Europe.

- Geographical distribution and habitat (Read more [\(1\)](#) [\(2\)](#))

Mussels are found in a wide variety of habitats, from tidal areas to fully submerged zones, with a broad range of temperatures and salinities.

## RESOURCE, EXPLOITATION AND MANAGEMENT

- Production methods and fishing gears (Read more [\(1\)](#) [\(2\)](#))

Mussels are caught in the wild but mainly farmed. The main fishing gears used are dredges and trawls.

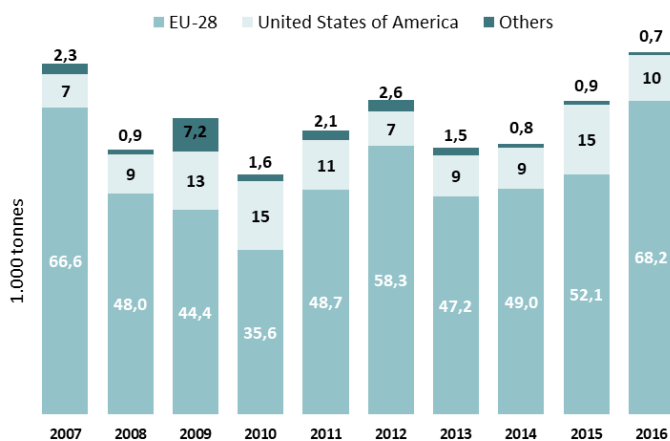
When farmed, mussels are produced using bottom culture techniques (sheltered beds) or suspended and off-bottom (rafts, bouchots, longlines).



## CATCHES

- At world level, 128.000 tonnes of mussels have been wild-caught in 2016, out of which 78.000 tonnes of *Mytilus edulis* and 1.100 tonnes of *Mytilus galloprovincialis*.
- The EU accounts for 87% of the total volume.

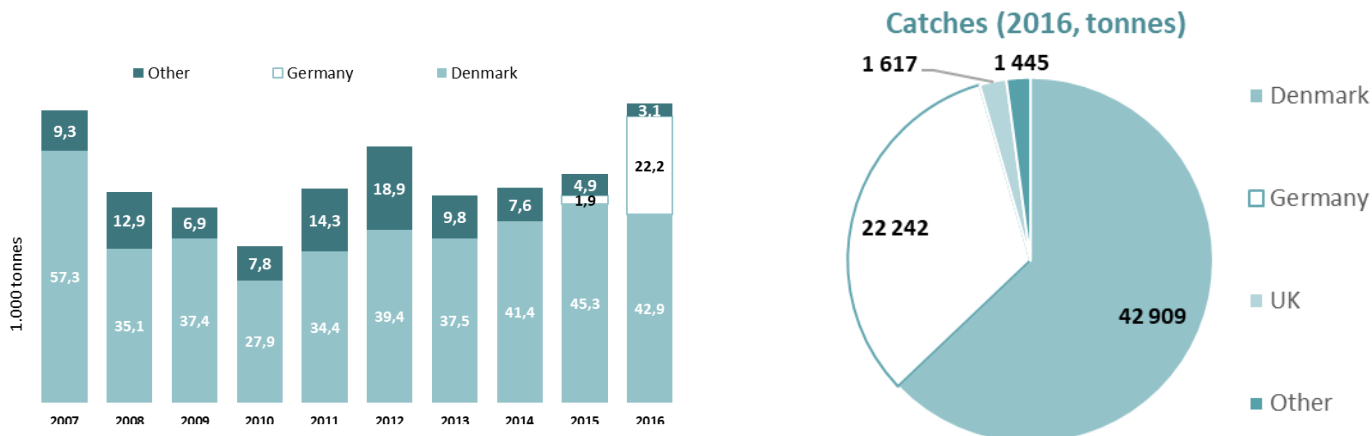
### Evolution of world catches (1.000 tonnes)



Source: FAO

### Evolution of EU catches (tonnes)

- Denmark and Germany provided **95%** of EU wild catches in 2016.



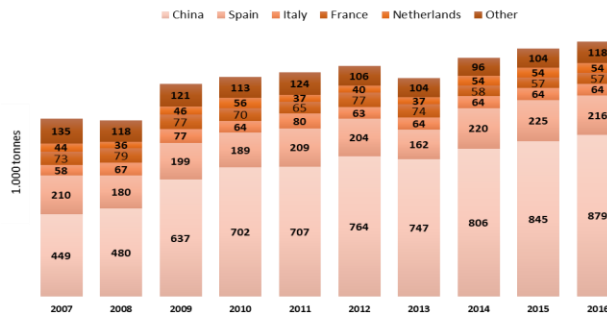
Source: EUROSTAT



# AQUACULTURE PRODUCTION

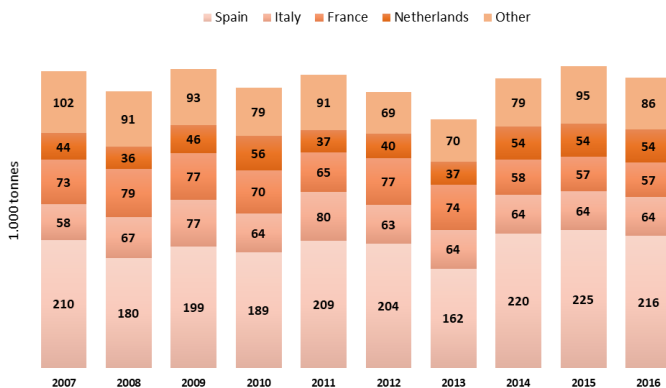
## Evolution of world aquaculture production (1.000 tonnes)

- From 2007 to 2016, the global farmed mussel production increased by **43%**, mainly as a consequence of the growth of China's production (+9% over the period).
- Global mussel aquaculture production reached 2.005.000 tonnes in 2016, out of which 183.000 tonnes of *Mytilus edulis* and 315.000 tonnes of *Mytilus galloprovincialis*.
- China contributes to 63% of the world production.



Source: FAO

## Evolution of EU aquaculture production (1.000 tonnes)



	Blue mussel	Mediterranean mussel	Sea mussels nei
Spain	93	215.855	
France	47.394	10.566	-
Italy		63.700	
Netherlands	54.000		
Denmark	45.130		
United-Kingdom	11.617		4.685
Greece		23.360	
Ireland	15.121		
Germany	22.264		
Other	2.776	5.424	374
TOTAL	198.395	318.905	5.059

Source: FAO

- The EU share in the global farmed mussel harvest is 34% in 2016 (vs. 50% in 2007).
- From 2007 to 2016, the EU production decreased by **2%**.
- The top-four EU producers (Spain, Italy, France, Netherlands) account for 75% of the production.
- The EU provides 78% of the global aquaculture production of blue mussel and 99% of that of Mediterranean mussel.

# Mussels



## PROCESSING (source PRODCOM)

- Mussels are mostly sold live, but can also be sold as processed products, canned, marinated or prepared dishes (mussels in sauce).
- 2 [PRODCOM](#) codes partly refer to these mussel products :
  - 10 20 32 50: “molluscs (scallop, mussels, cuttlefish, squid and octopus), frozen, dried, salted or in brine”.
  - 10 20 34 00: “crustaceans, molluscs and other aquatic invertebrates and seaweed, otherwise prepared or preserved”.
- The main mussel processor in the EU is Spain, which produced 13,530 tonnes of canned mussels (net weight) in 2016 (source: ANFACO).



# Mussels

## TRADE (source EUMOFA and COMEXT)

- EU imports-exports (Source: COMEXT)**

Concerning the genus *Mytilus*, the species of mussels produced in EU, trade is mainly intra-EU. Only prepared and preserved products are mostly imported from extra-EU countries.

### EU trade of mussels of the genus *Mytilus* in 2017 (tonnes – product weight)

CN code	Product	EU imports		EU exports	
		Intra-EU	Extra-EU	Intra-EU	Extra-EU
03073110	Mussels " <i>Mytilus spp.</i> ", Live, fresh or chilled	158.000	81	184.128	1.826
03073210	Mussels " <i>Mytilus spp.</i> ", frozen	6.073	43	12.472	210
03073920	Mussels " <i>Mytilus spp.</i> ", smoked, dried, salted or in brine	1.172	-	3.709	99
16055310	Mussels, prepared or preserved, in airtight containers	12.339	8.741	12.040	828
16055390	Mussels, prepared or preserved, other	4.643	34.925	4.531	563

#### Main **extra-EU suppliers** are:

- for prepared/preserved mussels : Chile (43.587 tonnes in 2017);
- for fresh mussels : Norway (81 tonnes).

#### Main **extra-EU destinations** are:

- for fresh mussels : Switzerland (680 tonnes) and Norway (306 tonnes);
- for prepared/preserved mussels: Switzerland (183 tonnes), USA (173 tonnes) and Cuba (149 tonnes).

Some quantities of *Perna* mussels are also imported, mostly frozen from New Zealand (4.872 tonnes in 2017).



# Mussels

## PRICES ALONG THE SUPPLY CHAIN (EUR/kg)

### First-sale (fresh)

First-sale prices are presented for the top-3 EU producers.

	2010	2011	2012	2013	2014	2015	2016	2017	Source
<b>Spain</b>	nd	nd	nd	nd	nd	1.72	1.31	1.63	EUMOFA
<b>Italy</b>	nd	nd	1.04	0.98	1.22	1.44	1.31	1.36	EUMOFA
<b>France</b>	1.62	1.73	1.57	0.93	1.08	2.17	2.70	0.51	EUMOFA

### Wholesale (fresh)

Wholesale prices are given for the largest seafood wholesale market in the EU, Madrid.

Mean price	2010	2011	2012	2013	2014	2015	2016	2017	Source
Spain	nd	1.81	1.66	1.92	1.92	1.92	1.90	1.97	Mercamadrid

### Retail/consumption (fresh)

Retail prices refer to Spain and France, major consuming countries in the EU.

Mytilus	2010	2011	2012	2013	2014	2015	2016	2017	Source
<b>Spain</b>	nd	nd	nd	6.94	7.03	7.22	7.38	7.67	EUMOFA
<b>France</b>	9.61	9.97	9.86	10.14	10.28	10.39	10.92	11.13	EUMOFA

### Import (fresh)

Import prices are presented for the Netherlands, Italy and France, which are the main fresh mussel importers in the EU.

Mytilus	2010	2011	2012	2013	2014	2015	2016	2017	Source
<b>Netherlands</b>	0.85	1.31	1.11	1.47	1.59	1.28	1.15	1.57	EUMOFA
<b>Italy</b>	0.73	0.78	0.69	0.69	0.65	0.69	0.73	0.73	EUMOFA
<b>France</b>	0.97	1.02	0.99	1.00	1.01	0.97	0.97	0.99	EUMOFA

### Export (fresh)

Export prices refer to the Netherlands, Italy and France as they are the main fresh mussel exporters in the EU.

Mytilus	2010	2011	2012	2013	2014	2015	2016	2017	Source
<b>Netherlands</b>	2.21	2.62	2.69	2.94	2.73	2.25	2.03	2.24	EUMOFA
<b>Italy</b>	0.88	0.94	0.92	0.93	0.95	1.12	1.23	1.74	EUMOFA
<b>France</b>	2.33	2.54	2.44	2.07	2.47	2.78	2.59	2.63	EUMOFA



## MARKETING ASPECTS

- Commercial designations in all EU official languages (Read more [\(1\)](#) [\(2\)](#))
- Mussels are not covered by marketing standards

## CONSUMPTION

- Mussel apparent consumption per capita in 2016: **1,27 kg** live weight equivalent (source: [The EU Fish Market – 2018 edition](#), EUMOFA).
- Nutritional value (Blue mussel, Atlantic, cooked, values per 100 g – source : NUTRAQUA/AQUIMER)

Nutritional value	Blue mussel
kilo calories (kcal)	103
Kilojoule (kJ)	435
Water (g)	74,1
Ashes (g)	1,5
Proteins (g)	17,2
Carbohydrates (g)	6,2
Lipids (g)	1
Cholesterol (mv)	59
Omega 6 (mg)	107
Omega 3 (mg)	684
EPA (mg)	340
DHA (mg)	214