



# 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 [\(1\)](#) [\(2\)](#))

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 of Mytilidae consumed and produced in the EU.

- **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 [\(1\)](#) [\(2\)](#))

Even if mussels are also caught in the wild, they are mainly farmed. The main fishing gears used are dredges and trawls.

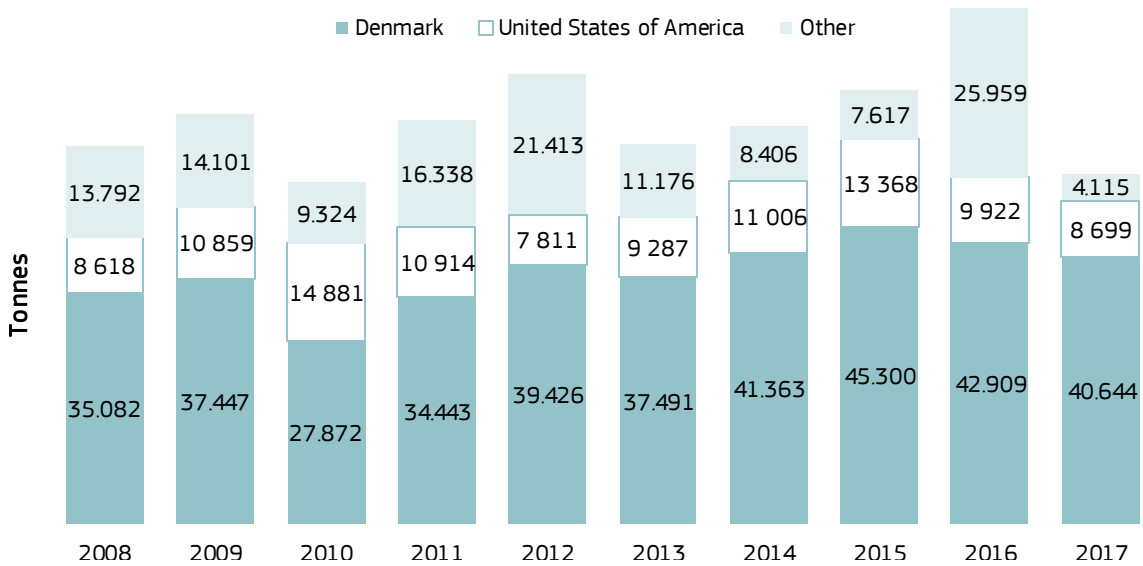
When farmed, mussels are produced using bottom culture techniques (sheltered beds) or suspended and off-bottom (rafts, *bouchots*, longlines).



# CATCHES

- At global level, catches of the two species of mussels amounted at 53.458 tonnes in 2017 (i.e. 0,057% of global catches), of which *Mytilus edulis* represented 97% and *Mytilus galloprovincialis* 3%.

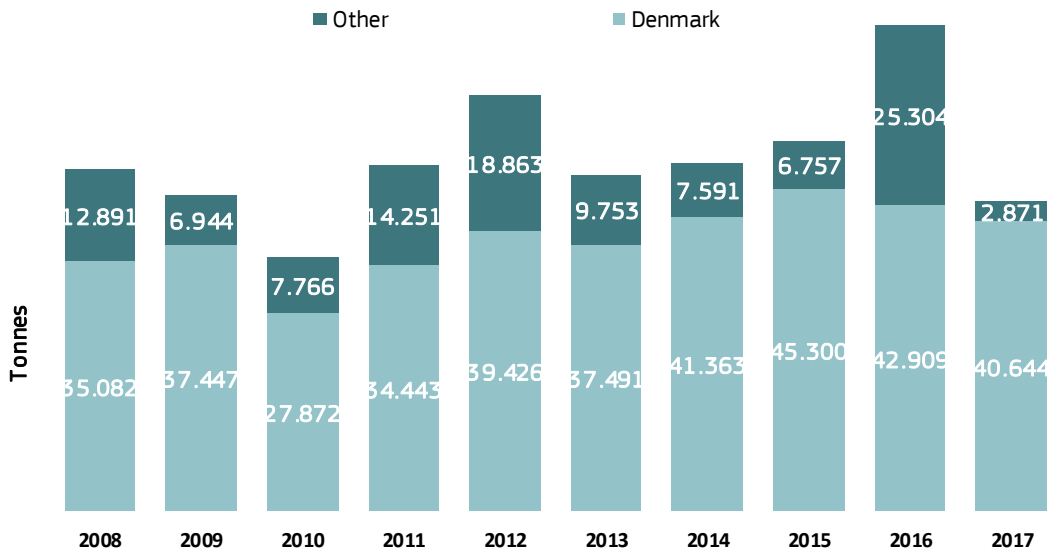
## Evolution of world catches



Source: FAO

## Evolution of EU catches

- In 2017, the EU accounted for 81% of the global catches of *Mytilus edulis* et *Mytilus galloprovincialis*.
- The same year, Denmark provided 93% of the EU catches of both species.



Source: FAO

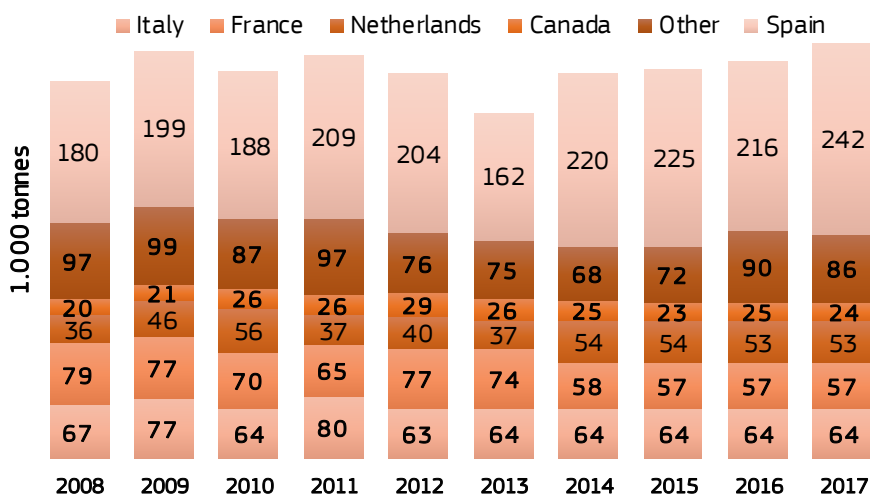


# Mussels

## AQUACULTURE PRODUCTION

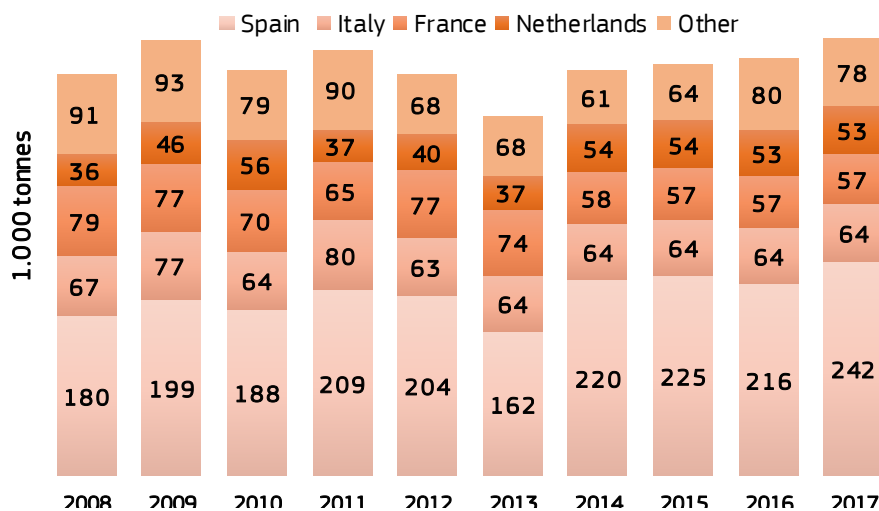
### Evolution of world aquaculture production

- From 2008 to 2017, the global farmed mussel production increased by **36%**, driven mainly by the growth of the Russian production.
- Global mussel aquaculture production reached circa 2.200.000 tonnes in 2017, out of which *Mytilus edulis* and *Mytilus galloprovincialis* represented 23%. The following chart focuses on the global production of these two species\*.



Source: FAO

### Evolution of EU aquaculture production



Source: FAO

- In 2017, the EU provided 23% of the global mussels production and 94% of the global production of *Mytilus galloprovincialis* and *Mytilus edulis*.
- From 2008 to 2017, the EU production of both species decreased by 5%.
- The top-four EU producers (Spain, Italy, France and Netherlands) accounted for 87% of the production in 2017.

\* For Spain, data are reported under the statistical category 'sea mussels nei', which actually correspond to *Mytilus galloprovincialis* and to lesser extent to *Mytilus edulis*. For UK, 2017 data are reported under the category *Metilidea*.



## PROCESSING

- Mussels are mostly sold live, but can also be sold processed, 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”.

Spain is the main producer of processed mussel in the EU (mainly canned mussels). In 2018, it produced 14.055 tonnes of canned mussels (net weight) (Source: Spanish association of canned fish: *Asociación Nacional de Fabricantes de Conservas de Pescados*, ANFACO).



## TRADE

- EU imports-exports**

Concerning the genus *Mytilus*, which is produced in EU, trade is mainly intra-EU. Only prepared and preserved mussels (including different mussel's species) are imported from extra-EU countries.

### EU trade of mussels of the genus *Mytilus* (tonnes - 2018)

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	149.332	34	176.029	2.040
03073210	Mussels " <i>Mytilus spp.</i> ", frozen	8.324	23	7.532	286
03073920	Mussels " <i>Mytilus spp.</i> ", smoked, dried, salted or in brine	891	-	1.790	82
16055310	Mussels, prepared or preserved, in airtight containers	6.506	9.738	10.923	774
16055390	Mussels, prepared or preserved, other	5.157	31.112	12.273	616

#### Main extra-EU suppliers are:

- for prepared/preserved mussels (16055310 + 16055390): Chile (40.777 tonnes)

#### Main extra-EU destinations are:

- for fresh mussels : Switzerland (865 tonnes) and Norway (310 tonnes);
- for prepared/preserved mussels: USA (223 tonnes), Switzerland (193 tonnes), and Cuba (125 tonnes).

Source: EUROSTAT-COMEXT



## Mussels

# PRICES ALONG THE SUPPLY CHAIN (EUR/kg)

## First-sale (live/fresh)

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

	2010	2011	2012	2013	2014	2015	2016	2017	2018	Source
Denmark (Blue mussel)	0,14	0,15	0,16	0,20	0,24	0,26	0,32	0,33	0,33	EUMOFA
Italy (Med. mussel)	n.a.	n.a.	1,04	0,98	1,22	1,44	1,31	1,36	1,64	EUMOFA
Spain (Blue mussel)	n.a.	n.a.	n.a.	n.a.	n.a.	2,43	2,34	2,64	1,06	EUMOFA
Spain (Med. mussel)	n.a.	n.a.	n.a.	n.a.	n.a.	0,91	0,71	1,49	1,80	EUMOFA

## Wholesale (fresh)

Wholesale prices are provided for the largest seafood wholesale market in the EU, Mercamadrid.

Most frequent prices	2011	2012	2013	2014	2015	2016	2017	2018	Source
Spain	1,81	1,66	1,92	1,92	1,92	1,90	1,97	1,91	Mercamadrid

## Retail/consumption (fresh)

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

	2010	2011	2012	2013	2014	2015	2016	2017	2018	Source
Denmark	7,76	7,61	6,21	4,85	3,88	4,52	3,8	5,36	4,71	EUMOFA
Spain	3,09	3,09	3,03	2,83	2,85	2,94	2,98	3,02	3,13	EUMOFA
France (in bulk)	3,61	3,7	3,8	3,9	4,08	4,21	4,32	4,5	4,72	EUMOFA

## Import (fresh)

Import prices are provided for France, the Netherlands and Italy, the main fresh mussel importers in the EU in 2018.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	Source
France	0,97	1,02	0,99	1,00	1,01	0,97	0,97	0,99	1,05	EUMOFA
Netherlands	0,85	1,31	1,11	1,47	1,59	1,28	1,39	1,60	1,54	EUMOFA
Italy	0,73	0,78	0,69	0,69	0,65	0,69	0,73	0,73	0,68	EUMOFA

## Export (fresh)

Export prices refer to the Netherlands, Spain and Denmark, the main fresh mussel exporters in the EU in 2018.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	Source
Netherlands	2,21	2,62	2,69	2,94	2,73	2,25	2,05	2,25	2,78	EUMOFA
Spain	0,67	0,76	0,70	0,68	0,63	0,68	0,74	0,75	0,67	EUMOFA
Denmark	0,87	1,30	1,12	1,01	1,06	0,76	0,61	0,56	0,61	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 2017: **1,28 kg** live weight equivalent (source: [The EU Fish Market – 2019 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