

The emerging organic aquaculture: European and Italian state of art of a sustainable production model

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The EU organic aquaculture

In the EU, organic aquaculture products accounted in 2015 for 4% of the total production (~ 50,000 t). The main producer of organic farmed seafood is Ireland (44% of total EU production).

The main species produced in 2015 were:

- 1 Mussel – 20 000 t
- 2 Atlantic salmon – 16 000 t
- 3 Carp – 6 000 t
- 4 Trout – 6 000 t
- 5 Seabass and seabream – 3 400 t



Major concerns

FISH FARMERS

Recent regulation (EC 710/2009)

High production and certification costs

Finding appropriate feeds and organic-certified juveniles

LARGE RETAILERS

High prices and limited range/volumes of available products

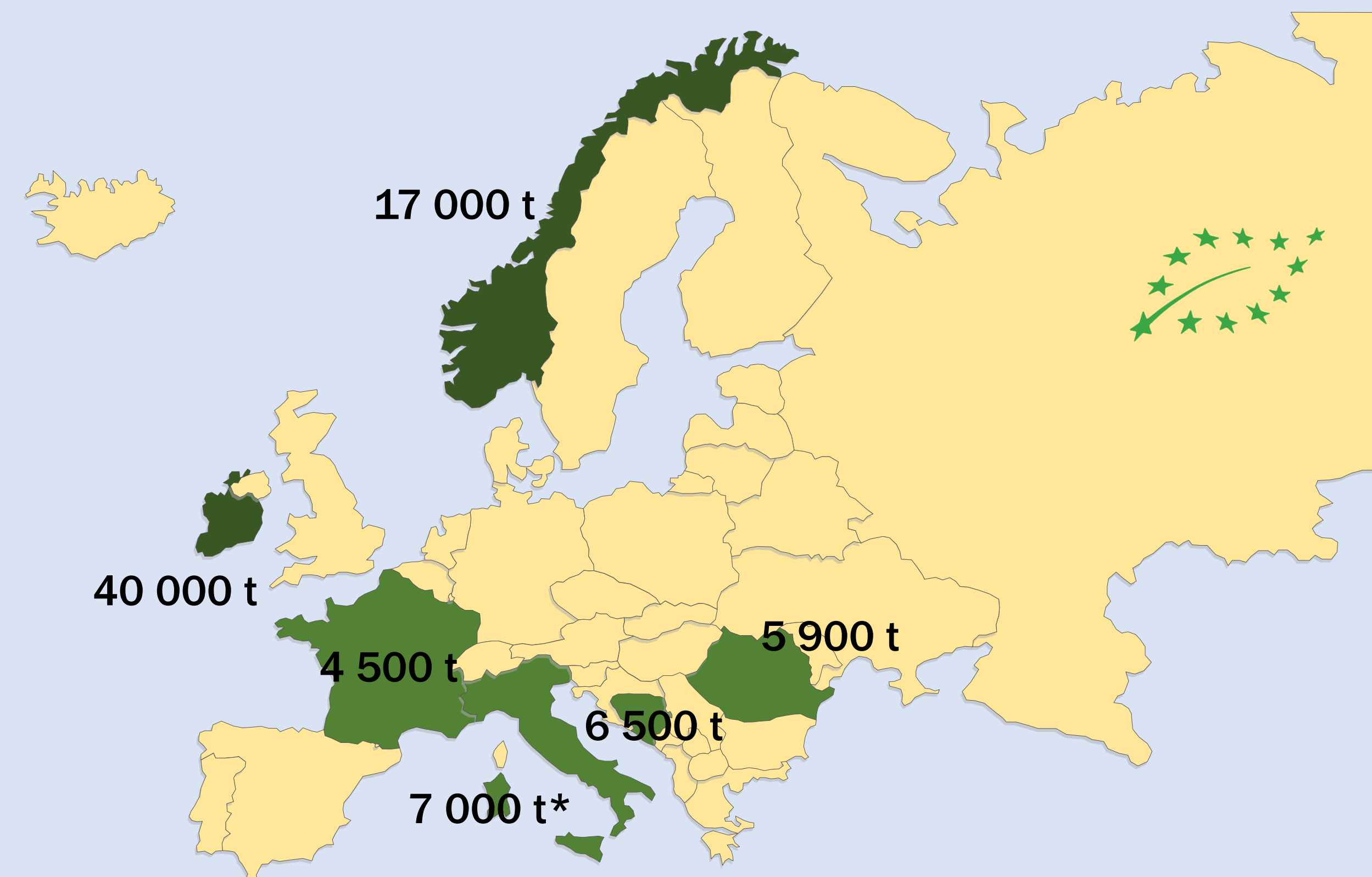
Competition with wild fish from responsible fisheries or fish farmed responsibly

CONSUMERS

Confusion: what is organic and what is not?

Overlap with other concepts (sustainable, biological, ecological, wild)

Variety of ecolabels and organic logos

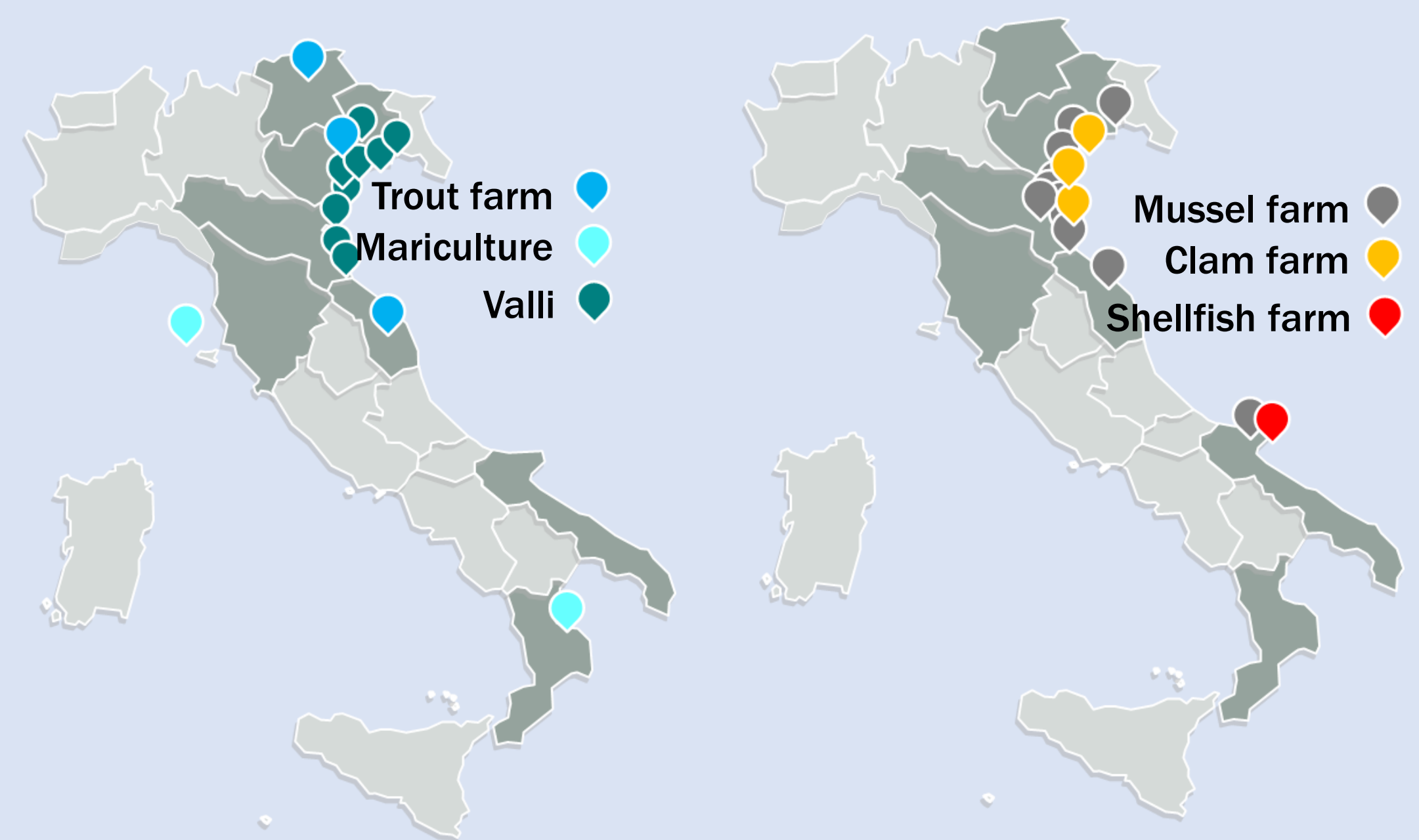


Organic production of aquaculture products (tons live weight) – All aquatic organisms – EUROSTAT updated to 24/04/2018

* Data collected by CREA – BioBreed-H₂O project funded by Italian Ministry of Agriculture

The Italian organic aquaculture in numbers

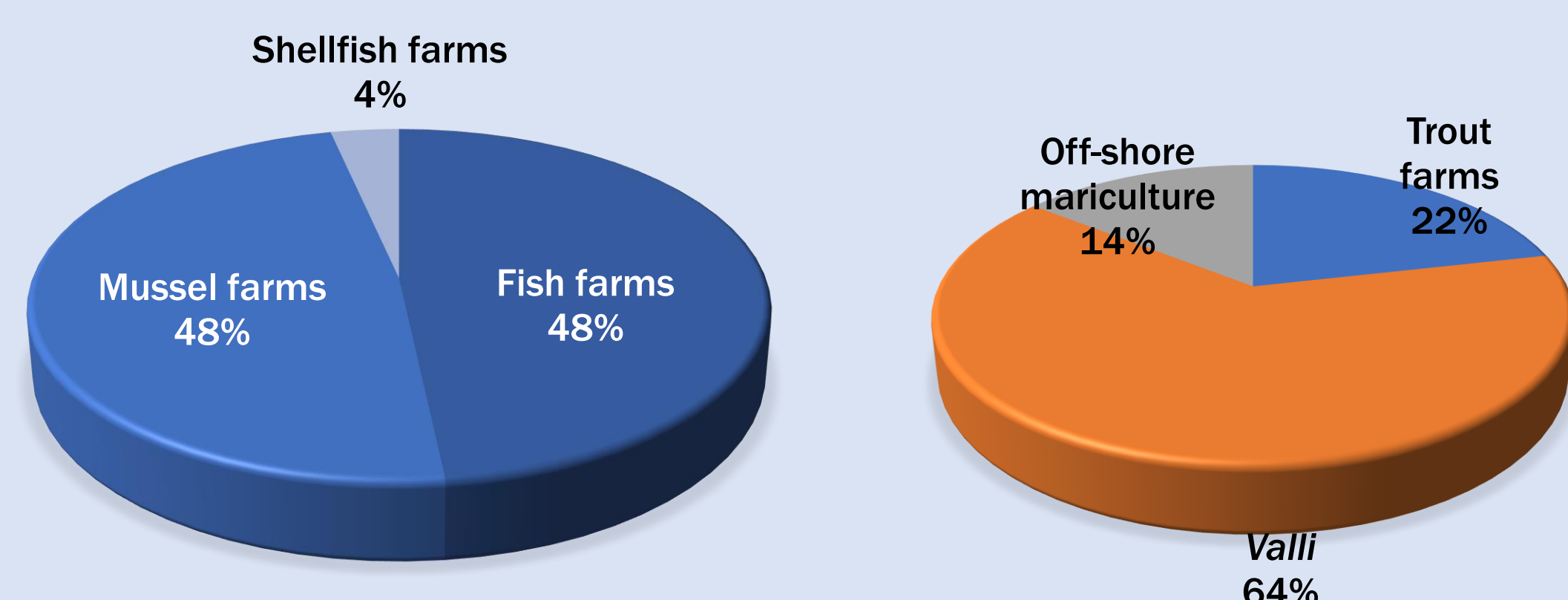
- 29 Organic certified farms
 - 24 in business in 2016
 - 5 started organic production in 2017
 - 6 Different farm typologies
 - 10 major species produced
- (Other EU countries have less diversified production)



Organic farms position

Data collected by CREA – BioBreed-H₂O project funded by Italian Ministry of Agriculture

Italian organic aquaculture experienced an early growing season in the last decade, but is actually stagnating cos of technical difficulties (larvae and juveniles supply, organic aquafeed sourcing), high certification costs, limited demand for organic seafood products and large retailers reluctance to launching new brands. The total organic production in 2016 increased respect to 2015 from 4 540 t to 6 920 t, even if must be considered that, in 2015, data from eight mussel farms were not provided. Mussel farms and coastal lagoons were the most abundant, then trout farms, clam farms and seabream and seabass off-shore cages. The 79.3% of organic farms were located in the North of Italy (Veneto and Emilia-Romagna).



Organic farms typology

Data collected by CREA – BioBreed-H₂O project funded by Italian Ministry of Agriculture

TOP 5 LIST TOP FIVE SPECIES PRODUCED 2016

- 1 *Mytilus galloprovincialis* 5,898 t
- 2 *Oncorhynchus mykiss* 900 t
- 3 *Ruditapes philippinarum* 263.6 t
- 4 *Sparus aurata* 96.9 t
- 5 Mullet (several species) 89 t

THE OTHER FIVE 2016

- 6 *Dicentrarchus labrax* 10.2 t
- 7 *Perna perna* 5 t
- 8 *Ostrea edulis* 4 t
- 9 *Anguilla anguilla* 3.3 t
- 10 *Atherina boyeri* 2.5 t