



ITALIAN ORGANIC AQUACULTURE: CHANCE OR CHALLENGE?

Domitilla Pulcini, Fabrizio Capoccioni
Coordinator: Luca Buttazoni

www.biobreed.it

info@biobreed.it

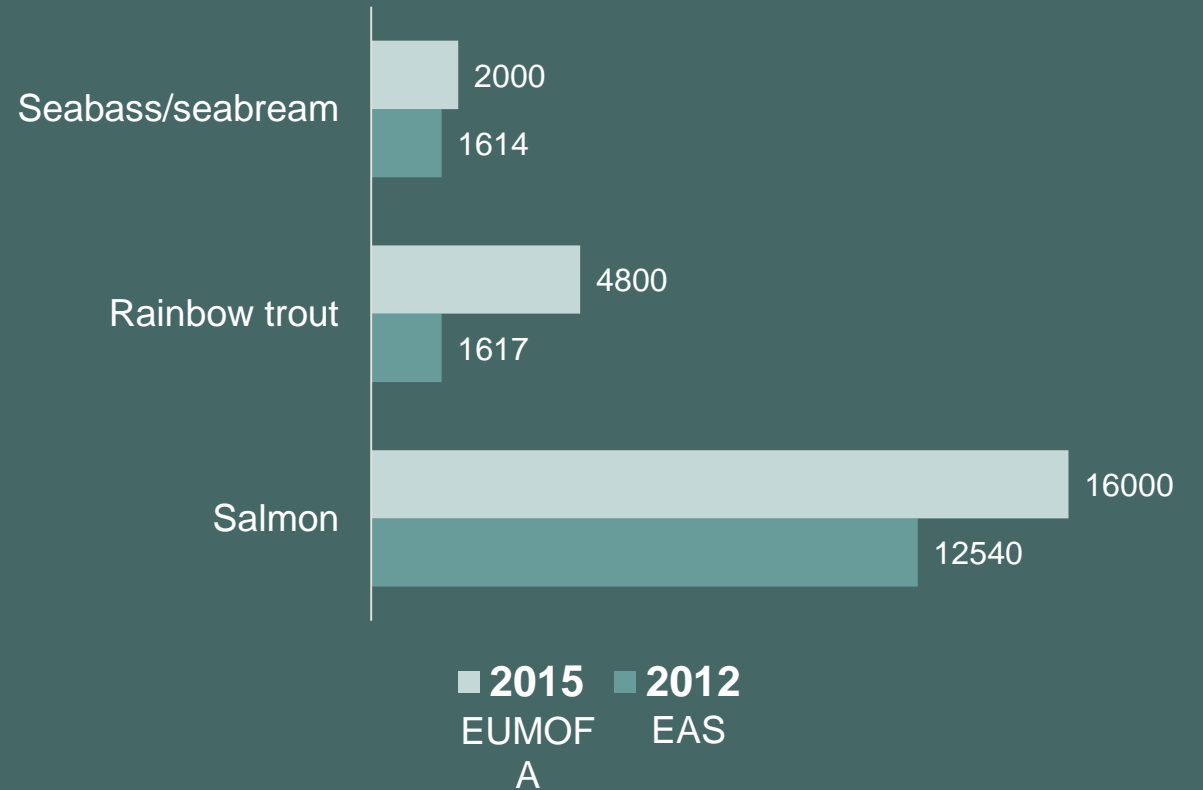


International exhibition and conference
for aquaculture, algaculture, vertical
farming and fishing industry
15-16 February 2018 – Pordenone



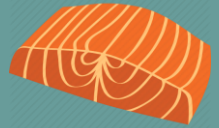
EU organic aquaculture had a strong increase between 2012-2015 for the major species but productive and economic performances are still not satisfactory

Organic production in 2015 accounted for **4%** of total aquaculture production



Species	Production 2015 (t)
<i>Mytilus galloprovincialis</i>	20,000
<i>Salmo salar</i>	16,000
<i>Cyprinus carpio</i>	6,000
<i>Oncorhynchus mykiss</i>	6,000
<i>Dicentrarchus labrax</i> , <i>Sparus aurata</i>	2,500

Source: EUMOFA (European Market Observatory for Fishery and Aquaculture Products)



Organic salmon and trout leads to significant price premiums
Demand is strong

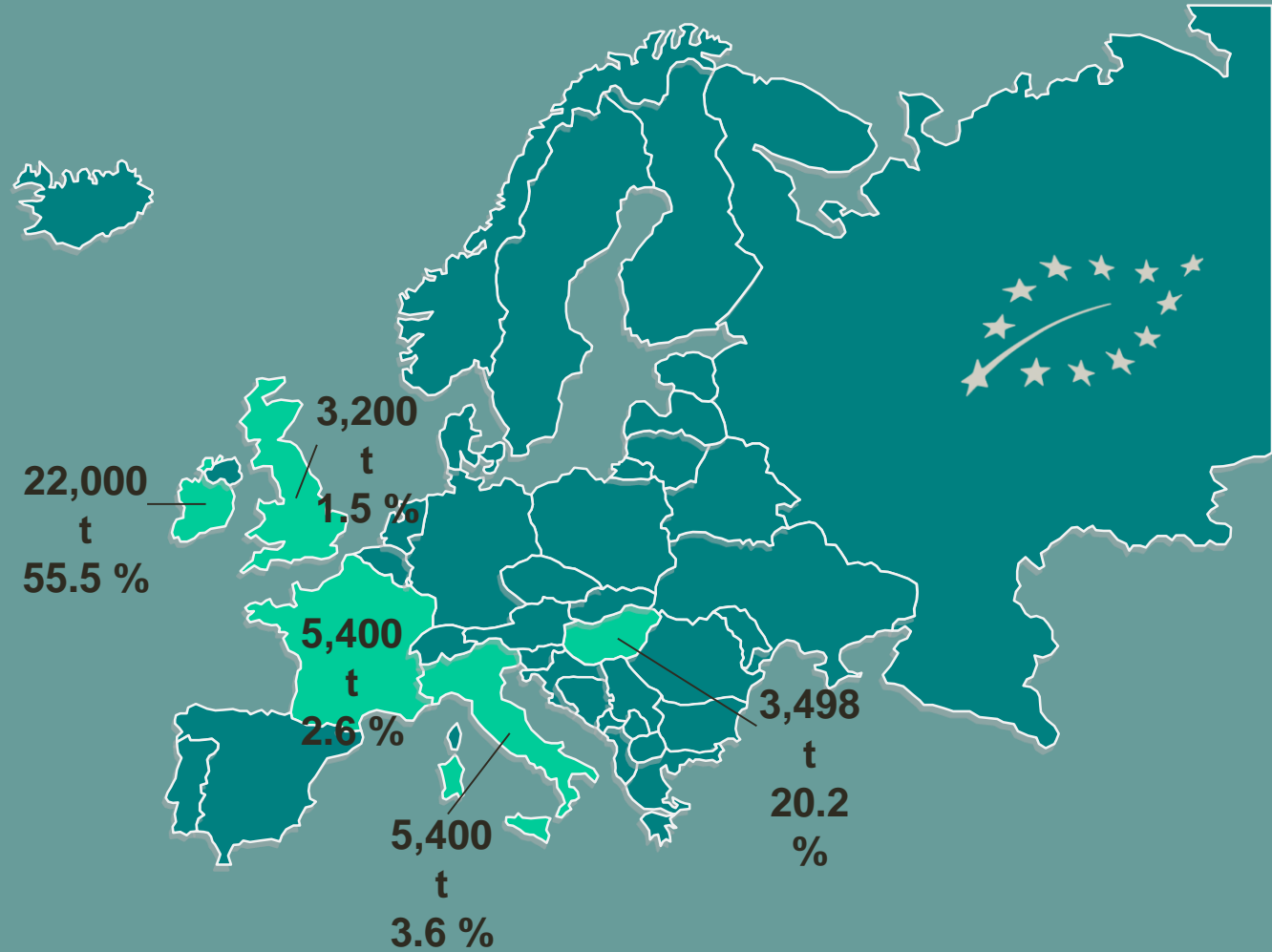


Organic mussel farming developed recently
20% price premiums
Strong demand



Organic carp cannot cover its extra costs

Organic farming of seabass and seabream provides sales premiums lower than the additional costs
Limited market expansion



MAJOR CONCERNS

FISH FARMER



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

CONSUMER



Confusion: what is organic and what is not?

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

Variety of ecolabels and organic logos





GOALS

1

DATA COLLECTION
number, position , typology of
Italian farms; total annual
production



2

**PROMOTE APPEAL FOR ORGANIC
AQUACULTURE**

Large and small retailers, GAS,
canteens



3

**OUTLINE THE ITALIAN ORGANIC FISH
CONSUMER AND PROMOTE
AWARENESS**



4

**PROMOTE COMMUNICATION AND
INFORMATION EXCHANGE AMONG
STAKEHOLDERS**

(farmers, feed companies,
certification bodies, researchers,
institutions, retailers, consumers)



STRATEGY

1

Create continuous and direct interaction with farmers



2

Explore market opportunities along the entire distribution



Interviews, surveys, questionnaires

3

Try to meet consumer's requirements



Workshops, informative material, questionnaire

4

Use different communication channels



Scientific reports, associations websites and magazines, social media, workshops, congresses and information days

ITALIAN ORGANIC AQUACULTURE 2016 IN NUMBERS



29 Organic certified farms
(**40** in 2015)

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)

14 Fish farms

3 Trout farms

2 Off-shore
mariculture

9 *Valli*



ORGANIC FARMS POSITION



ITALIAN ORGANIC AQUACULTURE 2016 IN NUMBERS



29 Organic certified farms
(**40** in 2015)

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)



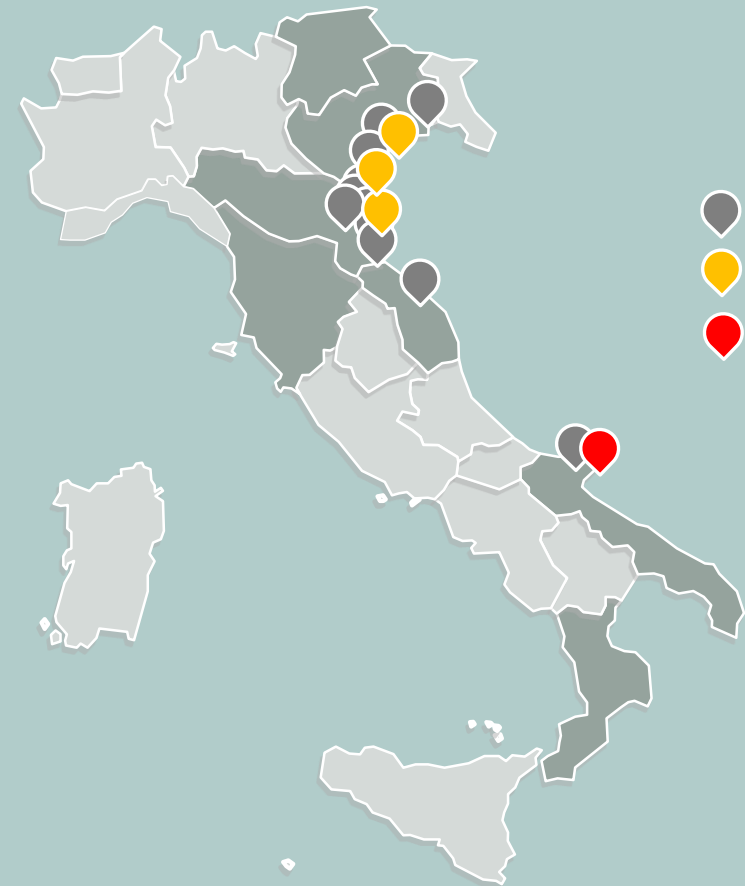
14 Molluscs farms
(**11** mussel farms, **3** clam farms, oyster produced in **1** farm)






1 Shellfish farm




ORGANIC FARMS POSITION





-  Mussel farm
-  Clam farm
-  Shellfish farm

TOP
5
LISTTOP 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 *Penaeus japonicus* **5 t**
- 8 *Ostrea edulis* **4 t** 
- 9 *Anguilla anguilla* **3.3 t** 
- 10 *Atherina boyeri* **2.5 t** 



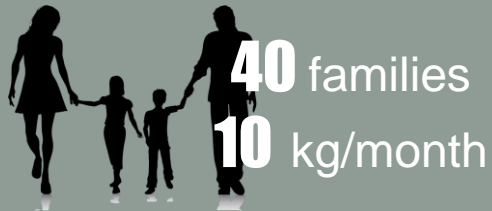
ENHANCING ITALIAN ORGANIC AQUACULTURE



The potential actors of the organic aquaculture chain

PURCHASING GROUPS

1546 contacts



Purchase fish/molluscs/crustaceans?

NO	YES
52.6%	47.4%
	50% sustainable

Purchase aquaculture products?

NO	YES
71.9%	28%
	56% organic

Logistic issues
Lack of information





QUESTIONNAIRE AIMS

Outline the Italian consumer of farmed fish

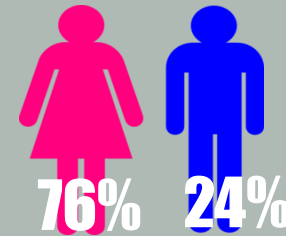
Investigate Italian consumer's responsive behavior to organic aquaculture products

Understand the Italian consumer concerns for sustainability



Guide stakeholders towards suitable productive and marketing strategies

COMPOSITION OF THE SAMPLE



Nord 37%

Centro 46%

Sud 17%

* PRELIMINARY OUTCOME BASED ON 7300

ANSWERS

FISH CONSUMPTION



58%



80%

1-5 kg/month



93%



64%



Fresh

82%



50%



Frozen

40%



60%

ORGANIC CONSUMER OR NOT?



Exclusively **4%**
Occasionally **68%**



Pay more for
organic fish



Meat & Fish **30%**

NO **YES**
33.5% **66.5%**

WHAT ABOUT ORGANIC FISH?

ORGANIC
FISH is

SUSTAINABLE
28%
HEALTHY & SAFE
33%



Reduced treatments **55%**
Environmental friendly **31%**
Strictly regulated **42%**



Thank you for your attention

www.biobreed.it
info@biobreed.it