

# Sea bream

*Sparus aurata*



## Biology

Gilthead sea bream (*Sparus aurata*) is the only species of sea bream which is currently farmed on a large scale. It is common throughout the Mediterranean and is also found along the Eastern Atlantic coasts, from the United Kingdom to the Canary Islands. Its Latin name comes from the characteristic golden band between its eyes. It can live in marine waters as well as in the brackish waters of coastal lagoons. Commonly seen in rocky or sandy bottoms, it can also be found in sea-grass beds. During the spawning period (October to December), adults move into deeper waters. The young fry migrate to coastal or estuarine water in early spring. This species is hermaphrodite, maturing as a male throughout the first or second year of its life and then as a female throughout the second or third year. It feeds on molluscs, crustaceans and small fish.

## Farming

Traditionally, sea bream have been farmed extensively in the coastal lagoons and brackish ponds of northern Italy ('*vallicoltura*') and in southern Spain ('*esteros*'). In the 1980s it was successfully reproduced in captivity and intensive rearing systems (especially sea cages) were developed. Since then this species has become one of the main products of European aquaculture.

Initially, farming mainly involved capturing juveniles, but now most of the sea bream production comes from juveniles produced in technologically sophisticated hatcheries requiring skilled staff. Its hermaphroditism makes proper broodstock management essential. Adult fish are prepared for spawning by controlling exposure to daylight (photo-manipulation) and temperature. The male fertilises the female's eggs, which float on the water's surface. They are then collected and transported to incubation tanks, where they hatch 48 hours later. After three or four days the larvae will have absorbed their yolk sac and can start feeding: first on a diet of microscopic algae and zooplankton, then on artemia, and finally on high-protein inert feed.

In coastal lagoons, sea bream are generally reared with mullet, seabass and eels. Either they feed naturally under extensive systems, or they feed under semi-extensive systems where the available natural food is supplemented with additional feed. In intensive systems, sea bream are fattened with commercial pellets in land-based tanks or, for a large part of their production (in the Mediterranean and the Canary Islands) in sea cages.

On average, sea bream reach commercial size after one and a half years.

## Production and trade

Most sea bream come from aquaculture. The EU is by far the biggest producer worldwide, followed by Turkey. Within the EU, Greece is the largest producer, followed by Spain. Trade between the EU and third countries is very limited. On the other hand, intra-EU trade is substantial, Greece being the major exporter towards Italy, Portugal, France and Spain.



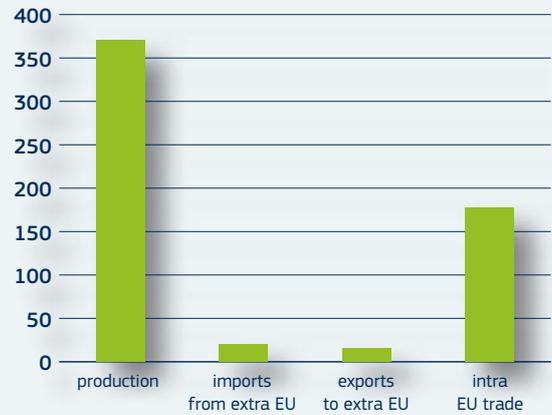
## Presentation on the market

Like seabass, sea bream is nearly always presented as a whole-portion sized fish in the chilled section of sales outlets.

## Nutritional value per 100 g (average)

Calories: 128 kcal
Protein: 21 g
Selenium: 7 µg
Vitamin D: 0,87 µg
EPA: 327mg
DHA: 555 mg

## EU sea bream supply and trade\* (2009) (million EUR)



\* from fishery and aquaculture.

Source: Eurostat.

## Sea bream with herbs and tapenade

### Recipe for 4 people

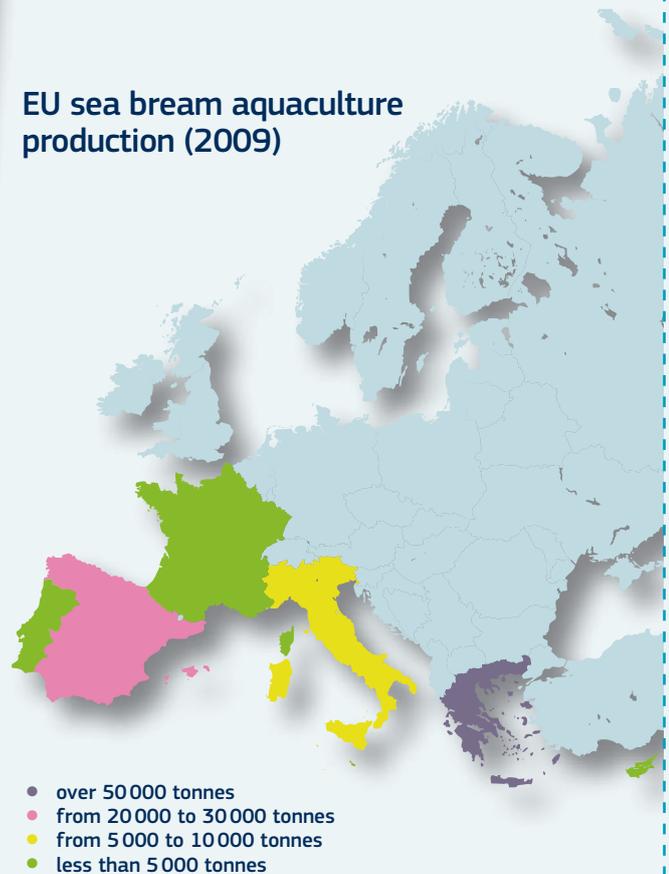
- 4 sea bream (each weighing approx. 300 g)
- 2 stems of basil
- 1 sprig of thyme
- 1 onion
- 4 garlic cloves
- 3 soup spoons of olive oil
- 1 small pot of tapenade
- 2 lemons
- 2 courgettes
- Salt and pepper

### Instructions

1. Thinly slice the onion, finely chop the herbs, crush one clove of garlic and thinly slice the other three.
2. Scale, gut, wash and dry the sea bream. Stuff the fish with half the chopped herbs mixed with the clove of garlic, one spoonful of tapenade, pepper and the grated zest of one lemon.
3. Place the fish on a plate and sprinkle with olive oil. Wrap the dish in cling film and leave in the fridge to marinate for at least one hour, or overnight.
4. Soften the onions and finely sliced garlic in frying pan on a medium-heat. Lightly season with salt and pepper and pour lemon juice over the mixture. Keep warm.
5. Using a peeler, cut long ribbons of courgette peel and blanch them in salted, boiling water. Drain the courgette ribbons and mix with the onion and garlic sauce.
6. Drain the sea bream and bake them at 180° for approximately fifteen minutes.
7. Place the fish on a warm plate surrounded by the courgette ribbons. Sprinkle over the remaining chopped herbs and serve with the tapenade.

Recipe provided by Chef David Monier (Euro-Toques Belgium)

## EU sea bream aquaculture production (2009)



Source: Eurostat.