

# Age estimation of the gilthead bream from the Mediterranean Sea (Gulf of Lions)

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Gilthead bream  
*Sparus aurata*

Gilthead bream is found in North East Atlantic, from the British Islands (not commonly) to the Senegalese coastline, but also in the Mediterranean Sea and in the Black Sea.

This demersal fish lives from the coast to depth of 30 metres.

Gilthead bream is an hermaphrodite fish, which acquires its sexual maturity at 2 years old to become male, then female between 3 and 5 years old.

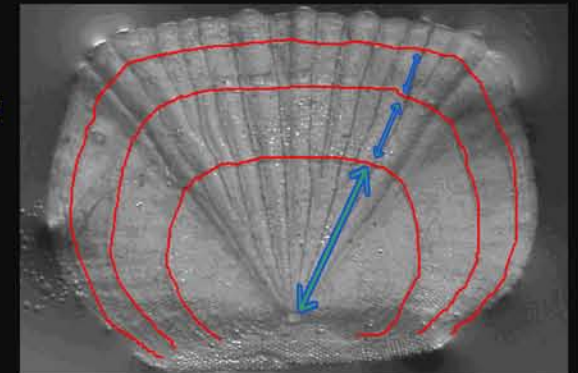


Ctenoid form of an elasmoid scale

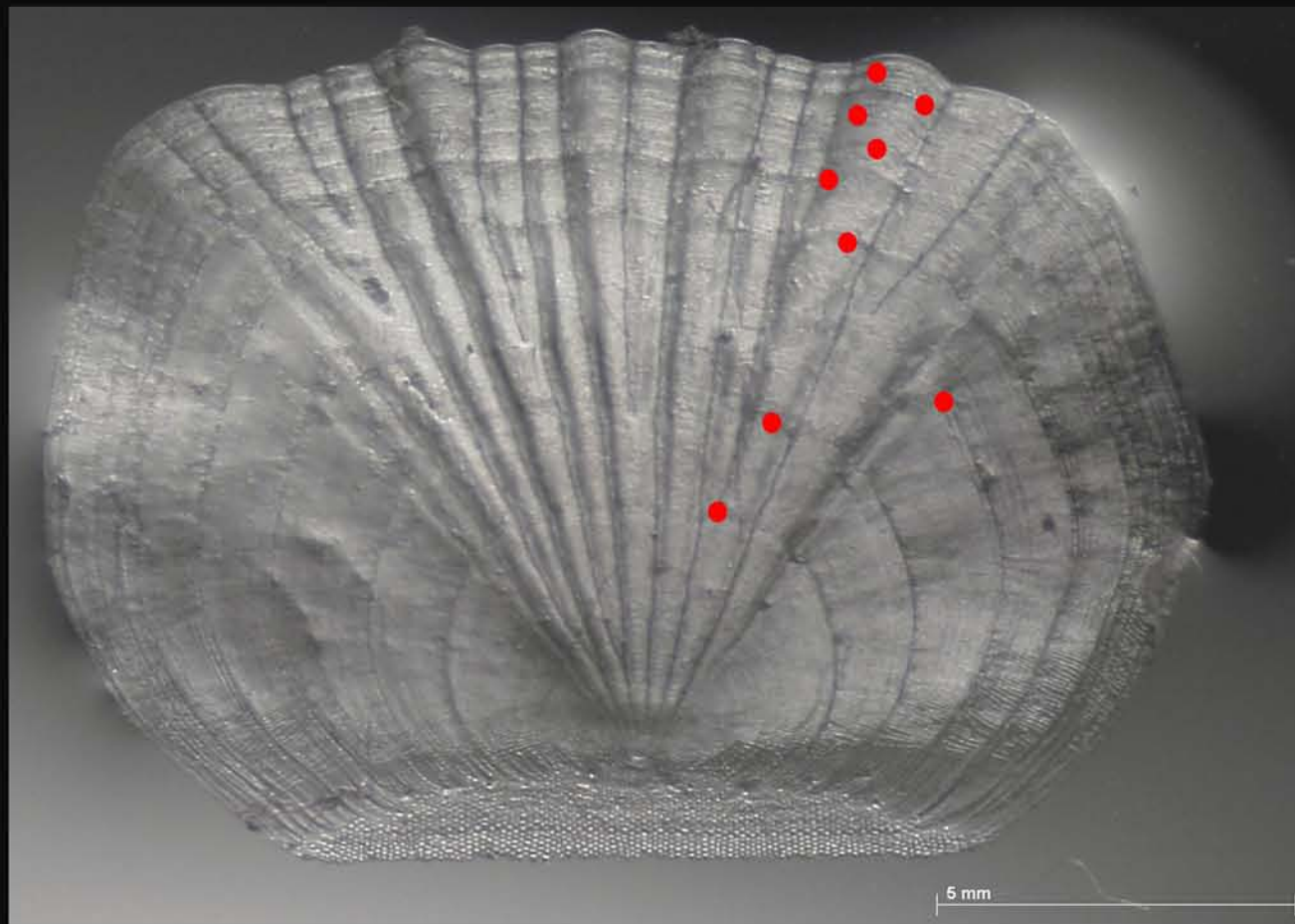


## Preparation and observation technique :

Scale is immersed in aqueous solution, then observed under microscope with transmitted light to estimate the age.



● Translucent increments  
↔ Opaque increments



9 years old

All observations are realized under transmitted light.

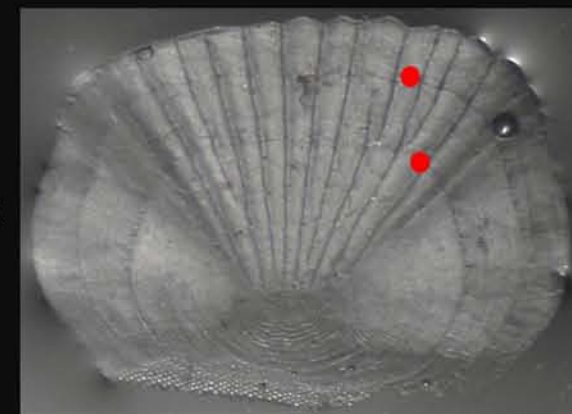


0 year old

1 year old



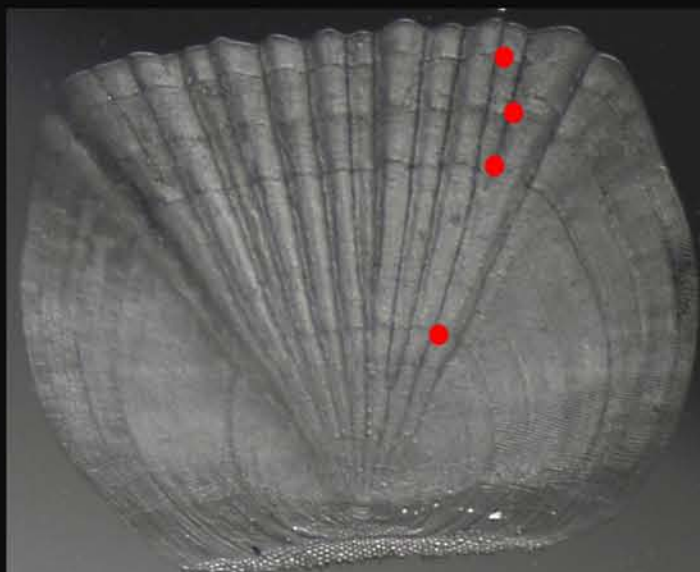
2 years old



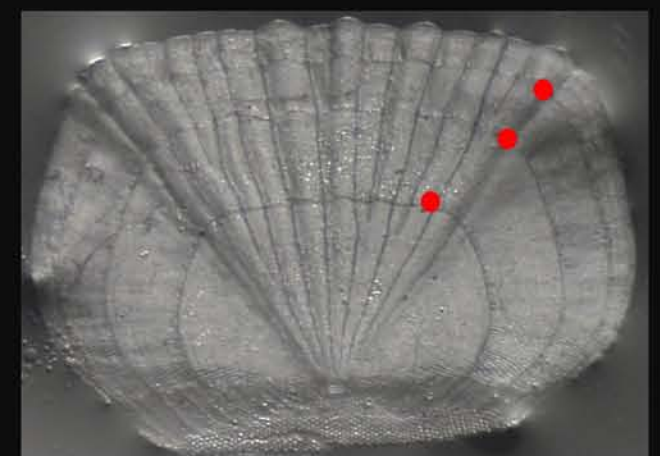
## Age estimation :

If the scale margin displays a translucent increment during the first half of the year, this one is counted.

During the second half of the year, the translucent increment at the margin is not counted.



4 years old



3 years old

All exhibited scales have been sampled during the second half of the year.