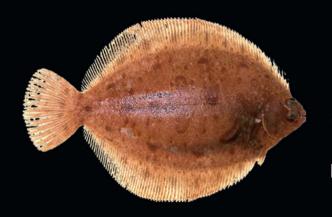


## Age estimation of the lemon sole from the southern North Sea

Centre Manche-Mer du Nord - Département Halieutique Laboratoire Ressources Halieutiques de Boulogne sur mer





Lemon sole Microstomus kitt

Its Geographical distribution is North-east Atlantic, from northem Norway and Iceland to the Bay of Biscay.

This benthic fish lives on hard substrata (rock shelf), gravels or shelly sand between 40 and 200 m in depth. The species is mainly found in temperate marine waters.

Lemon sole acquires its sexual maturity between 2 and 6 years old and its longevity is estimated at 23 years.



Concave et convex sides of the otolith

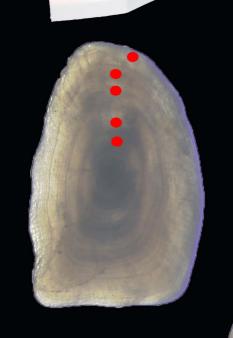
## Preparation and observation:

Otolith is directly read (*in toto*) without any preliminary preparation.

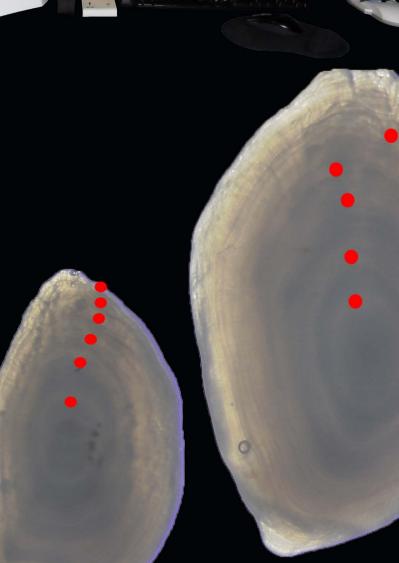
Its observation is realized under a binocular after immersing the whole on its convex side in an water solution.







5 years old



7 years old

6 years old



4 years old

## **Growth increments:**

Age estimation is obtained by counting translucent increments ( = winter rings)

## Age estimation:

If the otolith displays a translucent increment at the ventral margin during the first half-year, this one is counted.

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