

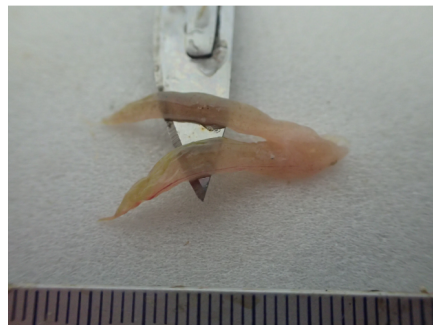
# Grouper / *Epinephelinae* sp.



## A - IMMATURE

TRANSPARENT TO  
TRANSLUCID GONADS

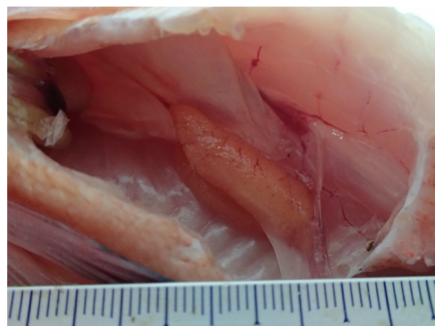
WITHOUT EGGS



## B - DEVELOPING

non-hydrated eggs  
SOMETIMES visible

OPAQUE GONADS



## C - SPAWNING

AT LEAST 1 VISIBLE  
HYDRATED EGG



## D - REGRESSION/REGENERATION

FEW HYDRATED  
EGGS STILL PRESENT  
FLABBY GONADS AND  
THICK INNER LAYER

General aspect  
"stunted"



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## E - OMITTED SPAWNING

UNDETERMINABLE WITH THE NAKED EYE

## F - ABNORMAL

NECROSIS,  
SCLEROSIS OR  
INTERSEX

| Picture | Sex | Species              | First maturity size |
|---------|-----|----------------------|---------------------|
|         |     | Cephalopholis fulva  | NA                  |
|         |     | Epinephelus guttatus | NA                  |
|         |     | Epinephelus striatus | NA                  |

## References/Photos :

ICES (WKASMSF 2018 &amp; WKMATCH 2012),

IFREMER Quéro J-C. et Vayne J-J.2008. Les poissons de mer des pêches françaises : delachaux et niestlé, 304