

## Surgeonfish / *Acanthurus* sp.



### A - IMMATURE

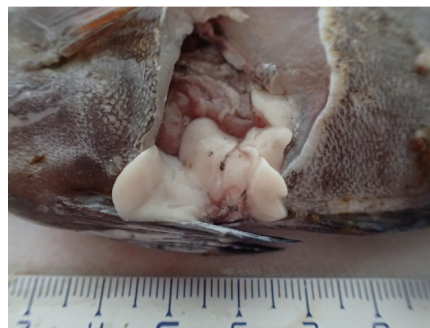
TRANSPARENT TO  
TRANSLUCID GONADS



### B - DEVELOPING

OPAQUE GONADS IN  
TWISTED SHAPE

NON-FLOWING  
GONADS



### C - SPAWNING

FLOWING GONADS

OPAQUE AND  
WHITISH GONADS



### D - REGRESSION/REGENERATION

BLOOD RESIDUE IN  
TISSUES

FLABBY GONADS

MILT RESIDUALS



Surgeonfish / *Acanthurus* sp.

## E - OMITTED SPAWNING

UNDETERMINABLE WITH THE NAKED EYE

## F - ABNORMAL

NECROSIS,  
SCLEROSIS OR  
INTERSEX

| Picture | Sex | Species                     | First maturity size |
|---------|-----|-----------------------------|---------------------|
|         |     | <i>Acanthurus bahianus</i>  | NA                  |
|         |     | <i>Acanthurus chirurgus</i> | NA                  |

## References/Photos :

ICES (WKASMSF 2018 & WKMATCH 2012),  
IFREMER,

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

© J. Baudrier - Ifremer Martinique