

## Grunt / *Haemulon* sp.



### A - IMMATURE

TRANSPARENT TO  
TRANSLUCID GONADS



### B - DEVELOPING

OPAQUE GONADS IN  
TWISTED SHAPE

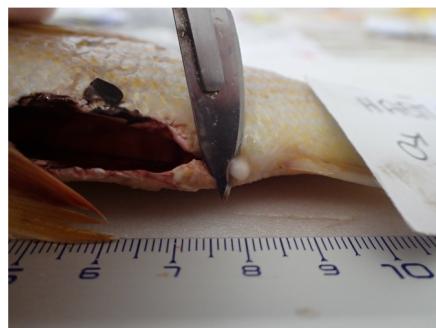
NON-FLOWING  
GONADS



### C - SPAWNING

FLOWING GONADS

OPAQUE AND  
WHITISH GONADS



### D - REGRESSION/REGENERATION

BLOOD RESIDUE IN  
TISSUES

FLABBY GONADS

MLIT RESIDUALS



**Grunt / *Haemulon* sp.****E - OMITTED SPAWNING**

UNDETERMINABLE WITH THE NAKED EYE

**F - ABNORMAL**NECROSIS,  
SCLEROSIS OR  
INTERSEX

Picture	Sex	Species	First maturity size
		Haemulon carbonarium	NA
		Haemulon flavolineatum	NA
		Haemulon parra	NA
		Haemulon plumieri	NA
		Haemulon sciurus	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