

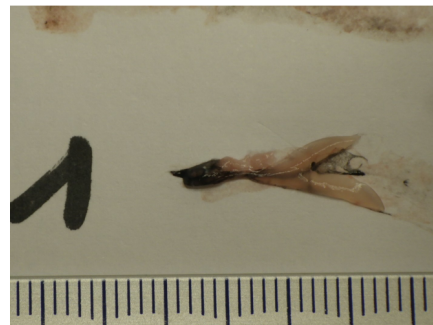
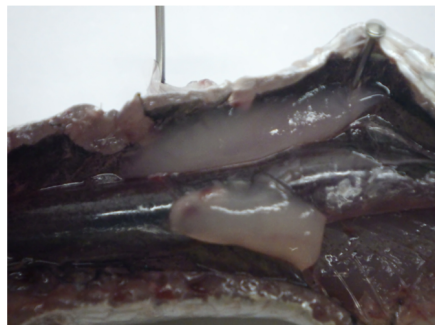
# Sardine / *Sardina pilchardus*



## A - IMMATURE

FILIFORM and flattened  
knife-shaped surface

TRANSLUCID



## B - DEVELOPING

Gonads are filling and  
becoming opaque

NON-FLOWING  
GONADS



## C - SPAWNING

FLOWING GONADS

OPAQUE AND  
WHITISH GONADS



## D - REGRESSION/REGENERATION

BLOOD RESIDUE IN  
TISSUES

FLABBY, FLAT AND  
RELAXED GONADS


MILT RESIDUALS



**Sardine / *Sardina pilchardus*****E - OMITTED SPAWNING**

UNDETERMINABLE WITH THE NAKED EYE

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

Picture	Sex	Species	First maturity size
	♂	<i>Sardina pilchardus</i>	12 - 17 cm

**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