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TP 17 – PARTIE I

L'animal en lien avec son
environnement :
la Moule



Morphologie externe de la Moule

Stries d'accroissement

Charnière avec ligament élastique
→ région dorsale et antérieure



Byssus
FIXATION AU ROCHER

Bord presque rectiligne → région ventrale

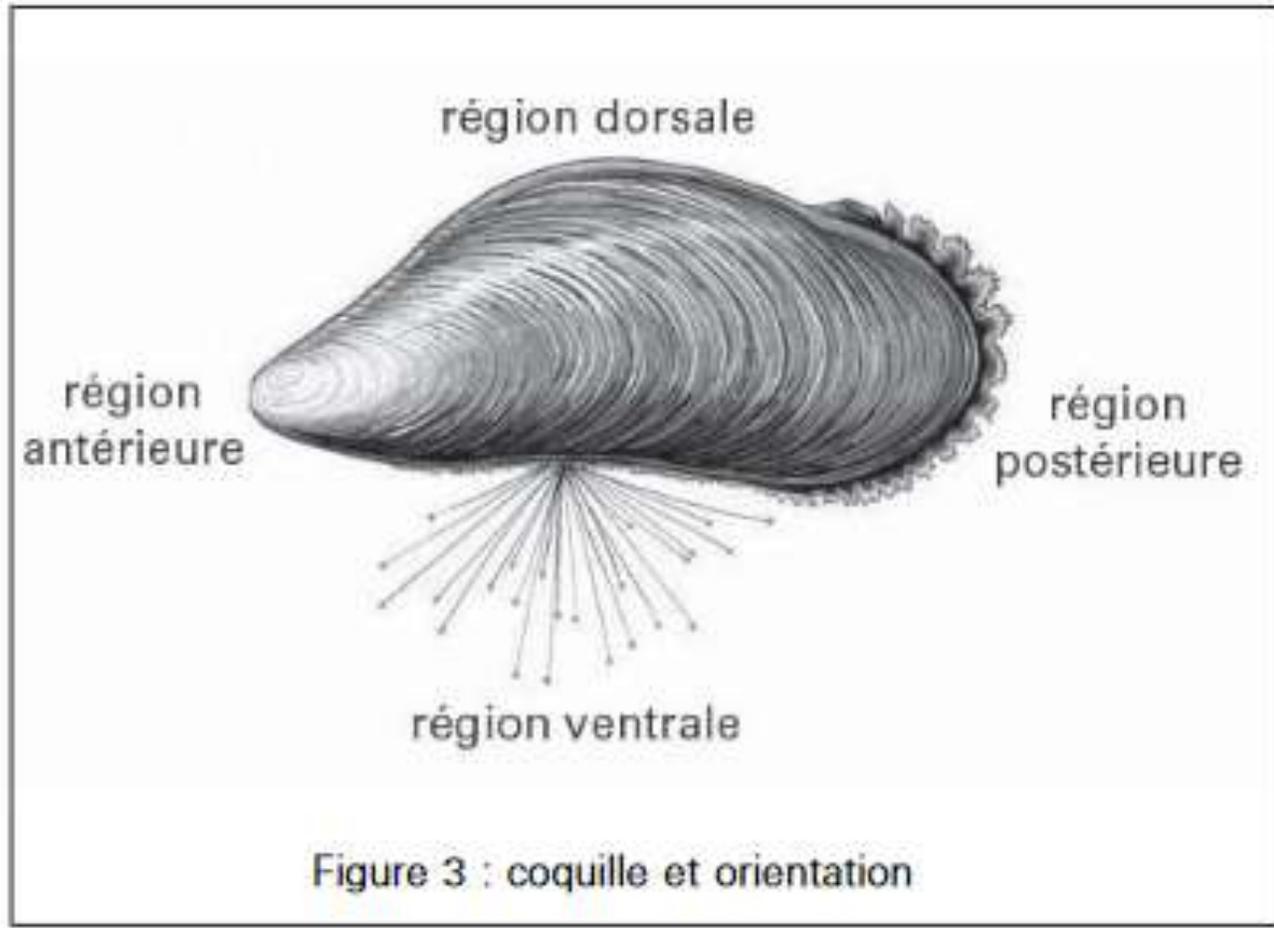
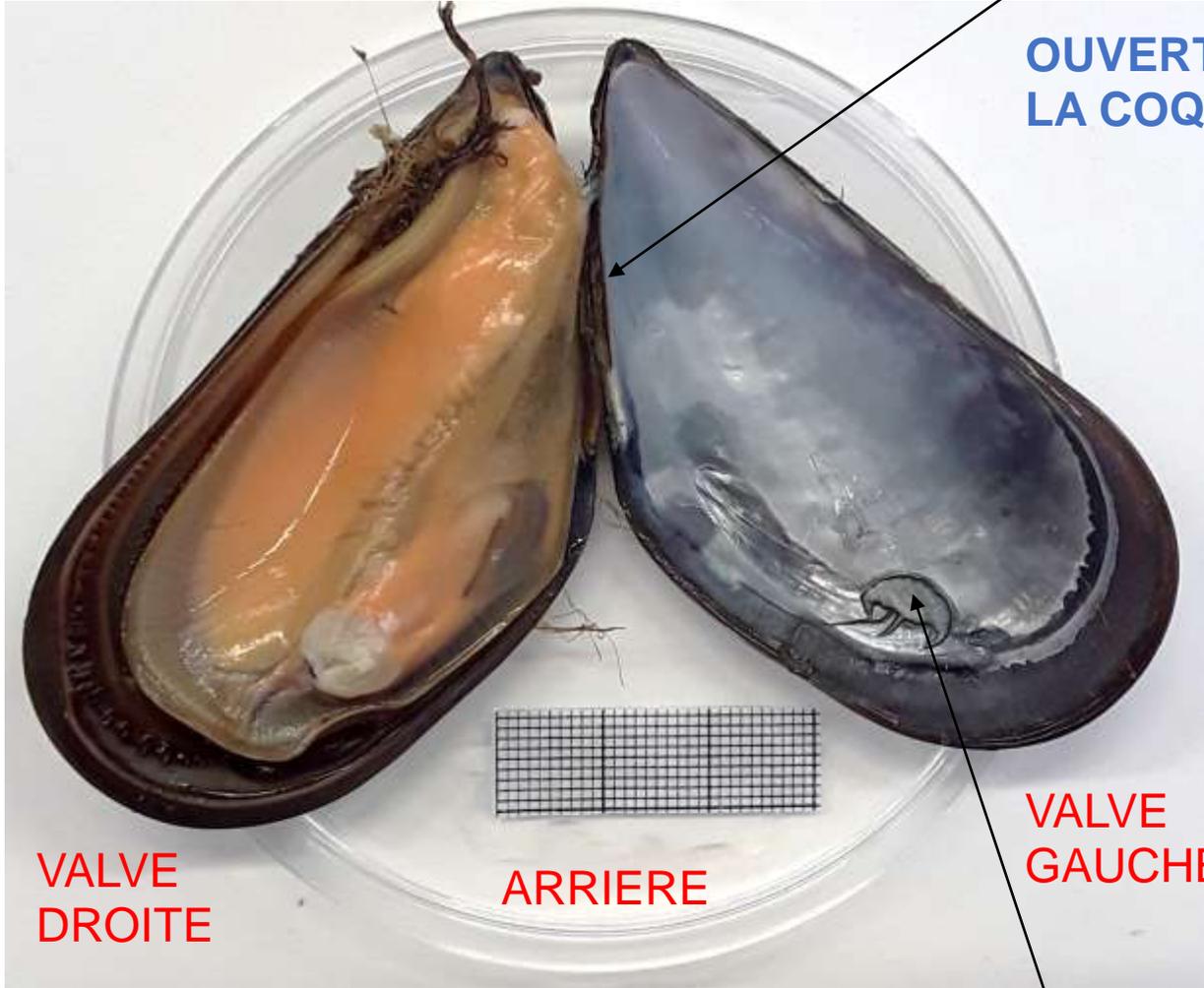


Figure 3 : coquille et orientation

Observation après ouverture de la coquille

AVANT



VALVE DROITE

ARRIERE

VALVE GAUCHE

FERMETURE DE LA COQUILLE

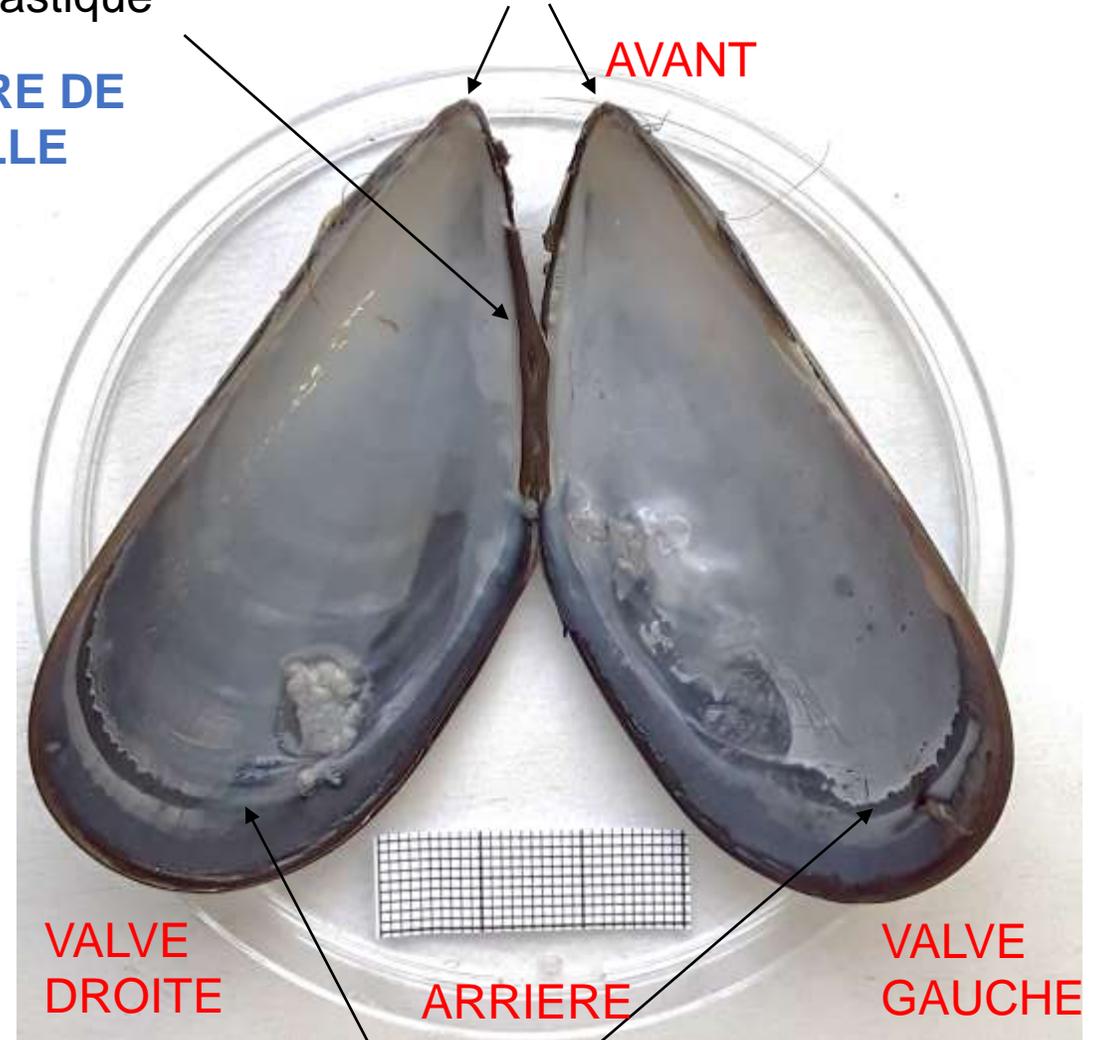
Trace d'insertion du muscle adducteur postérieur

Charnière avec ligament élastique

OUVERTURE DE LA COQUILLE

Deux valves (symétriques ici) → bivalves

AVANT



VALVE DROITE

ARRIERE

VALVE GAUCHE

Trace du bourrelet palléal

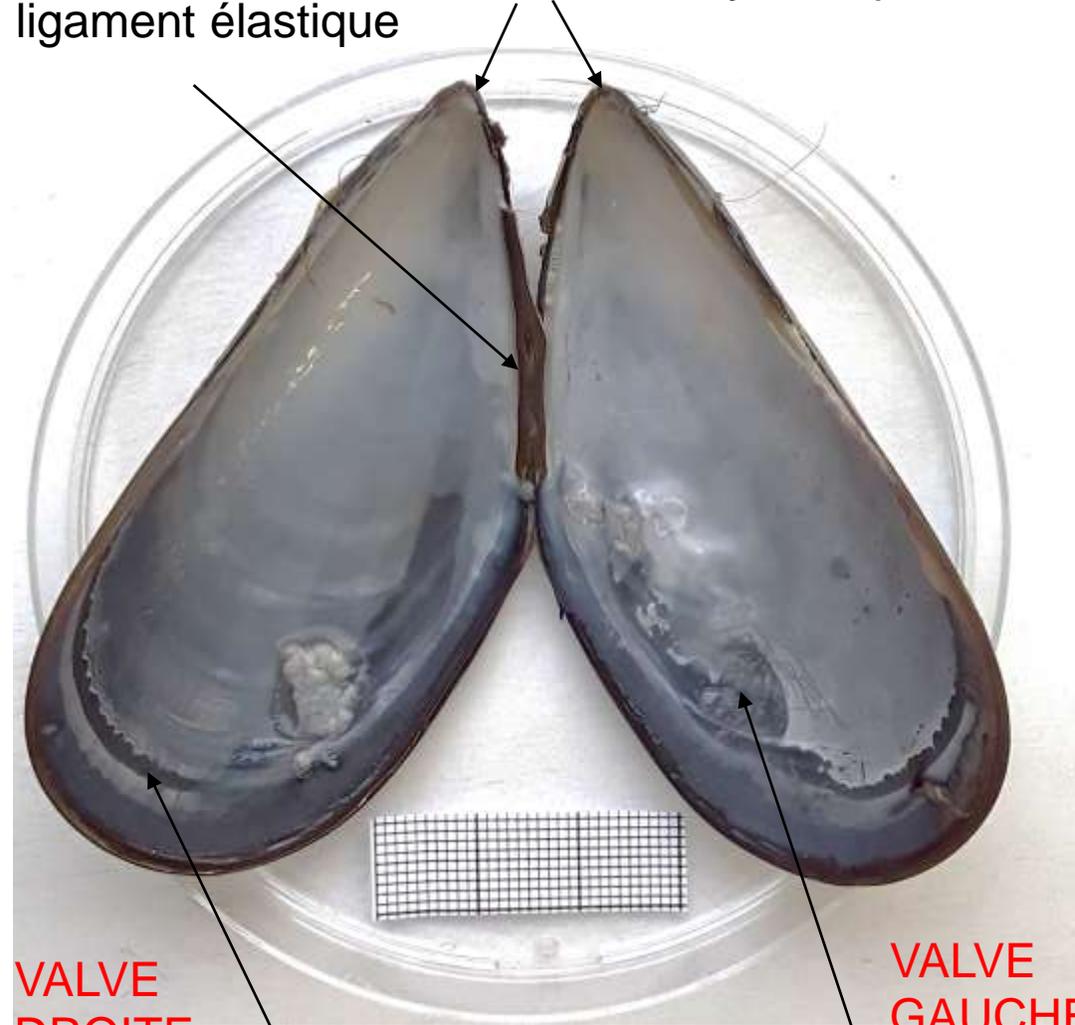
SECRETION COQUILLE + PERCEPTION

OUVERTURE DE LA COQUILLE

Charnière avec ligament élastique

Observation après ouverture de la coquille

Deux valves symétriques



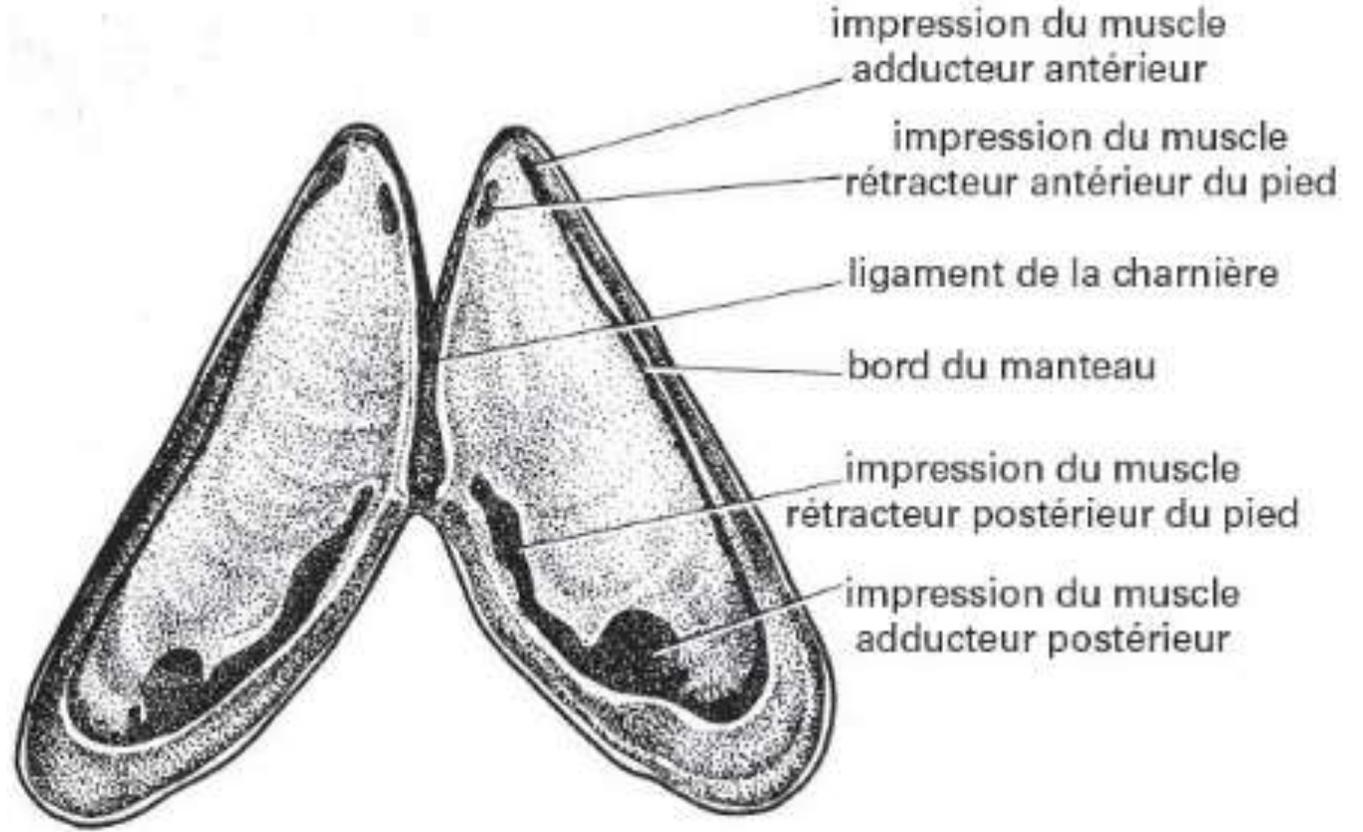
VALVE DROITE

VALVE GAUCHE

Trace du bourrelet palléal

SECRETION DE LA COQUILLE

Trace d'insertion du muscle adducteur postérieur



impression du muscle adducteur antérieur

impression du muscle rétracteur antérieur du pied

ligament de la charnière

bord du manteau

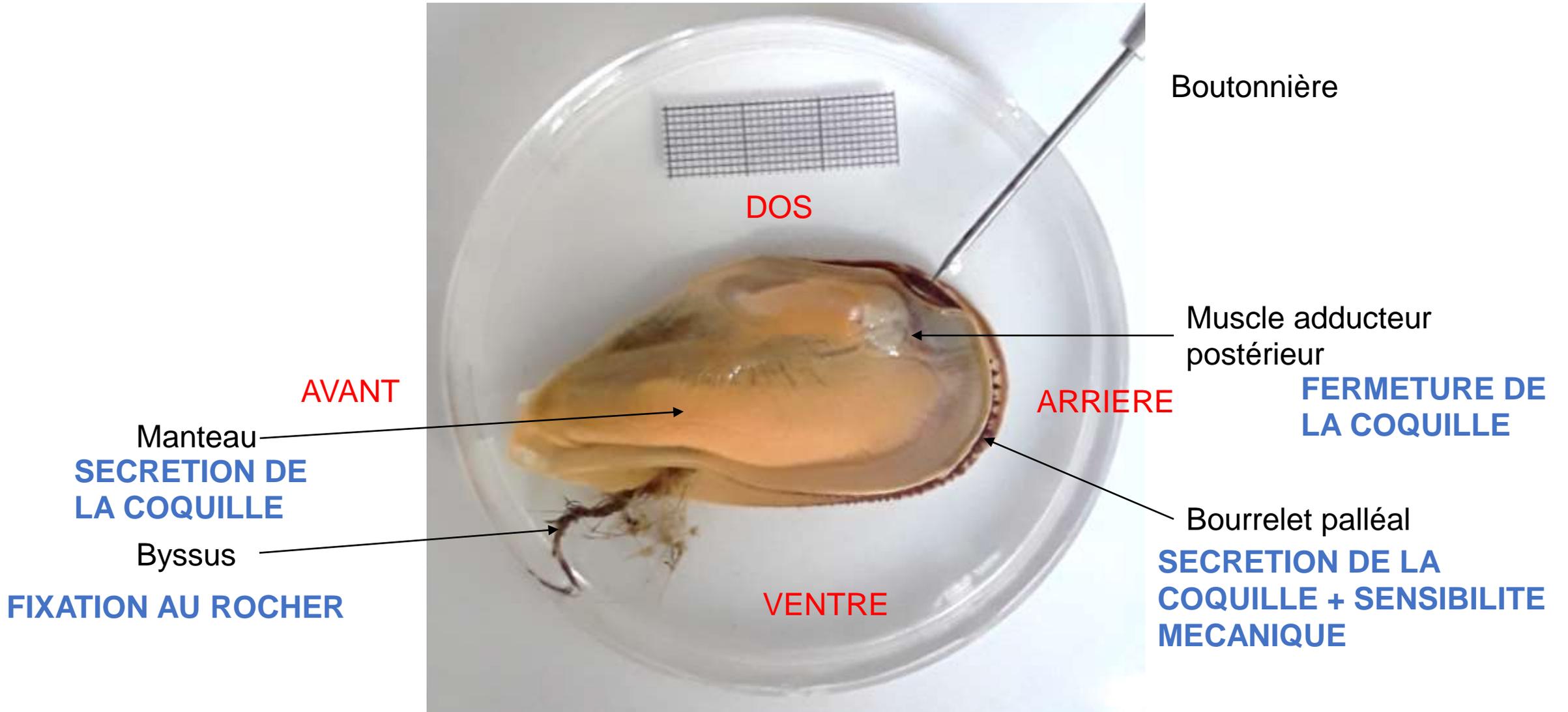
impression du muscle rétracteur postérieur du pied

impression du muscle adducteur postérieur

Figure 5 : face interne des valves (de W. Deconinck, 1971)

FERMETURE DE LA COQUILLE

Observation de l'animal extrait de sa coquille



Observation de l'animal extrait de sa coquille

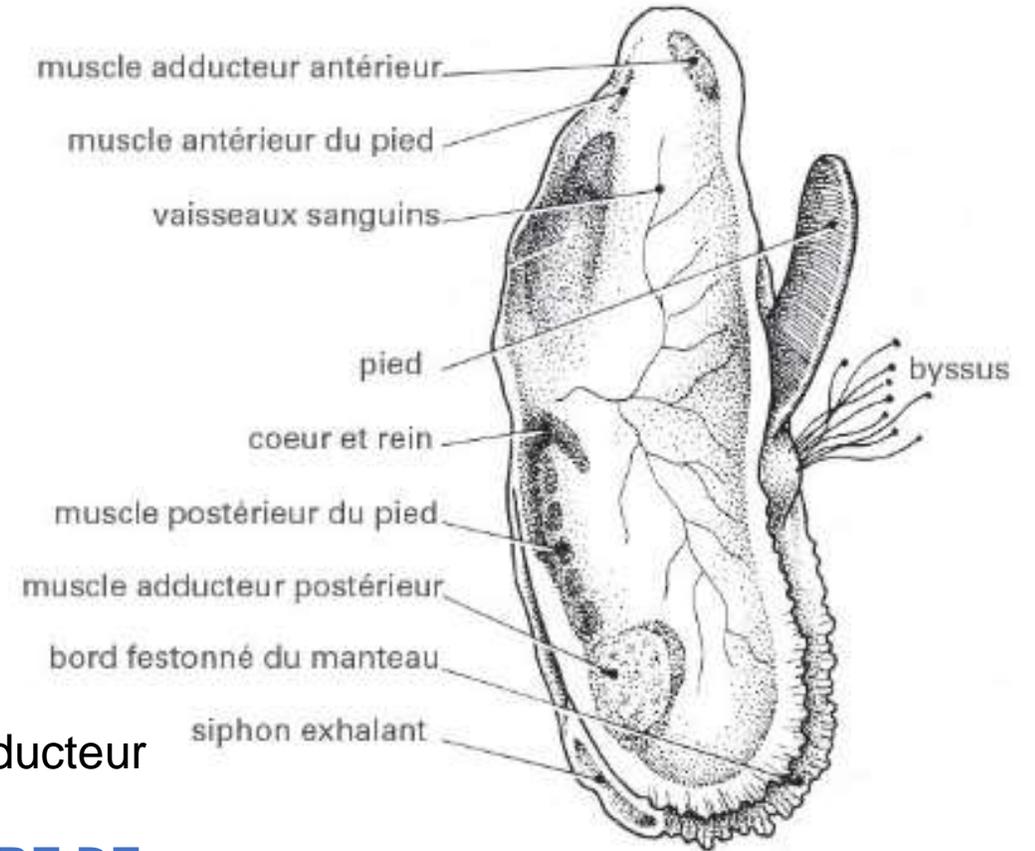
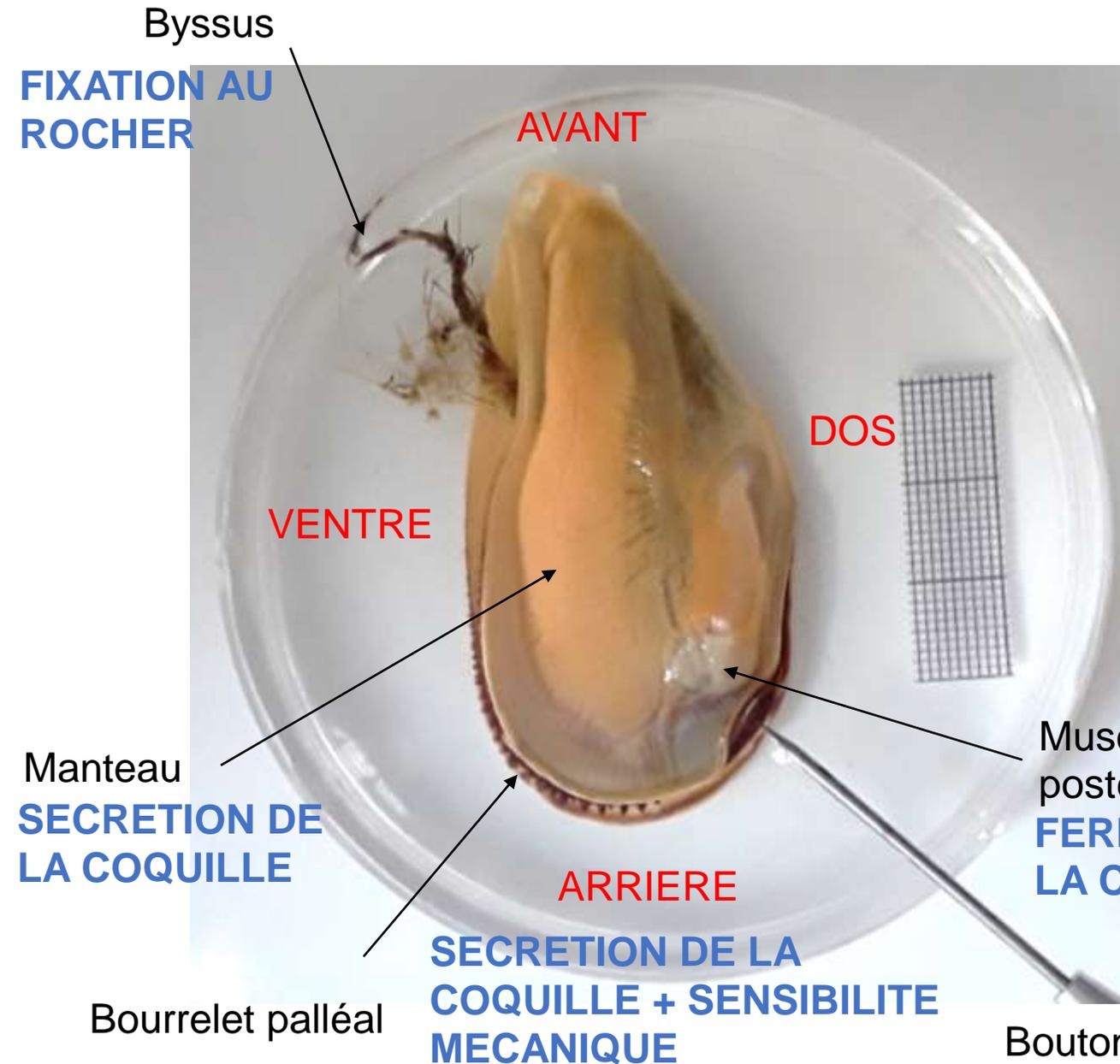
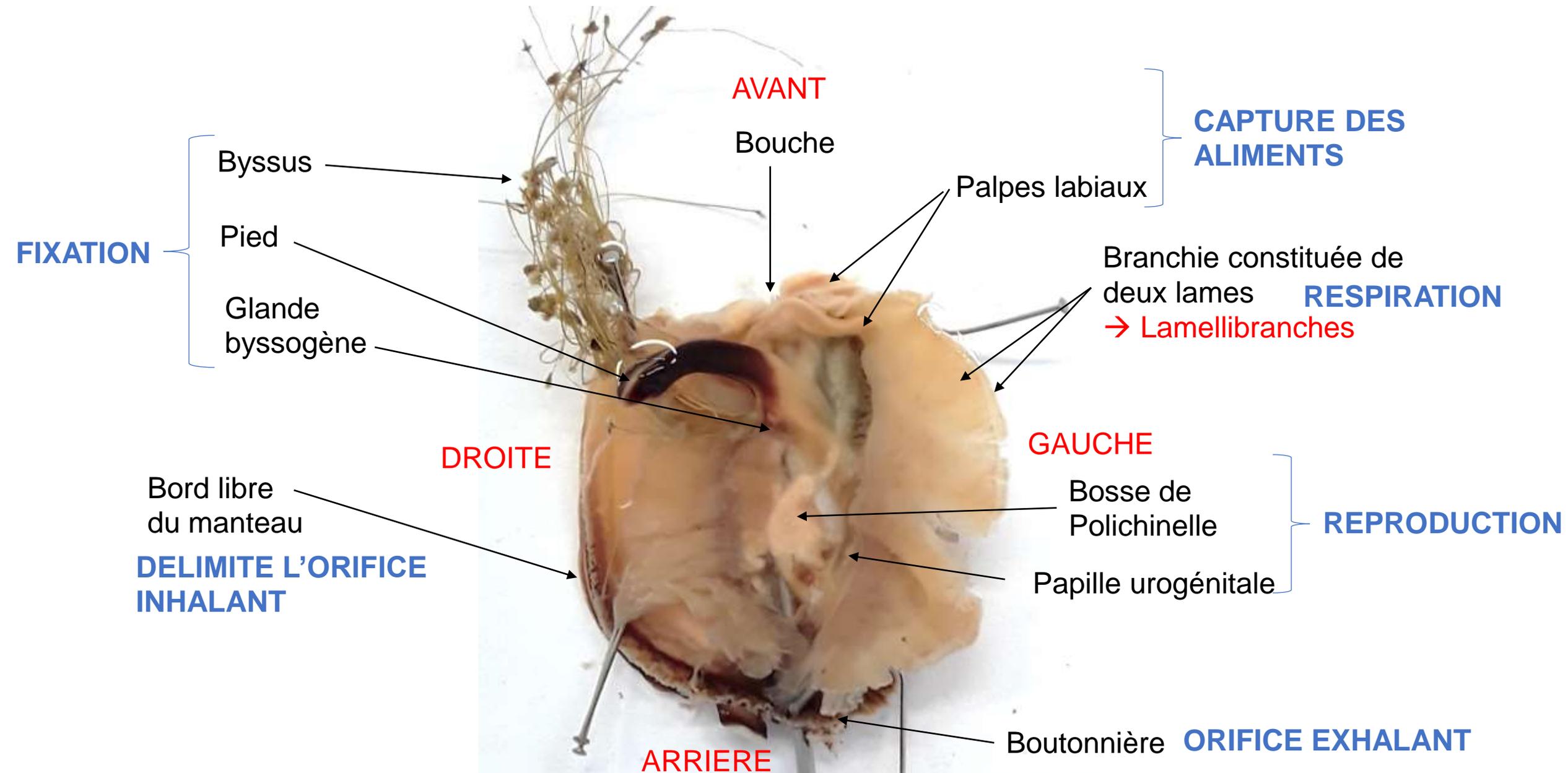
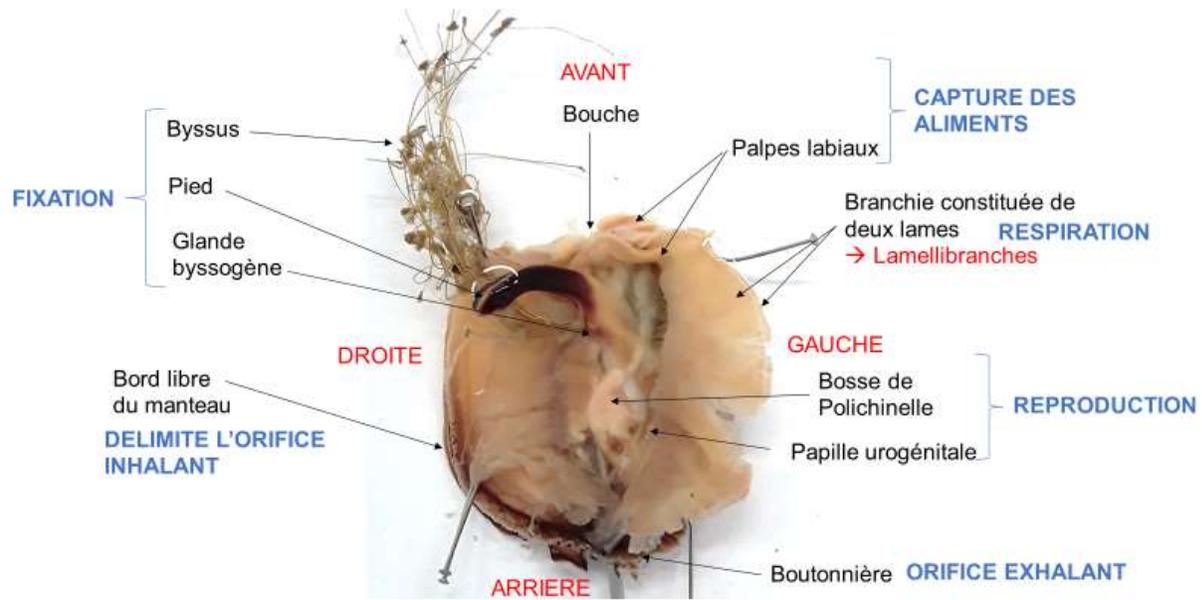


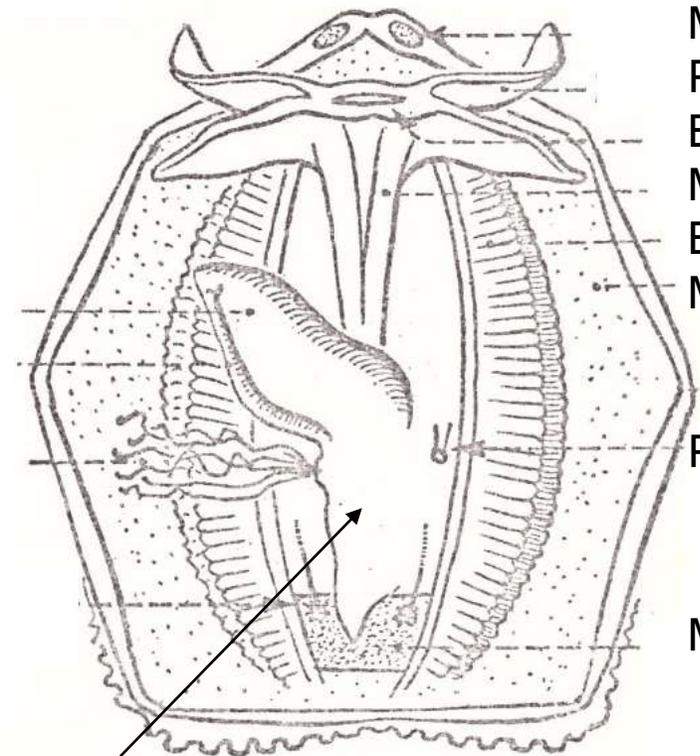
Figure 6 : moule sortie de sa coquille – côté droit (de W. Deconinck, 1971)

Les organes en place dans la cavité palléale





Pied
 Branchie
 Byssus
 Rein

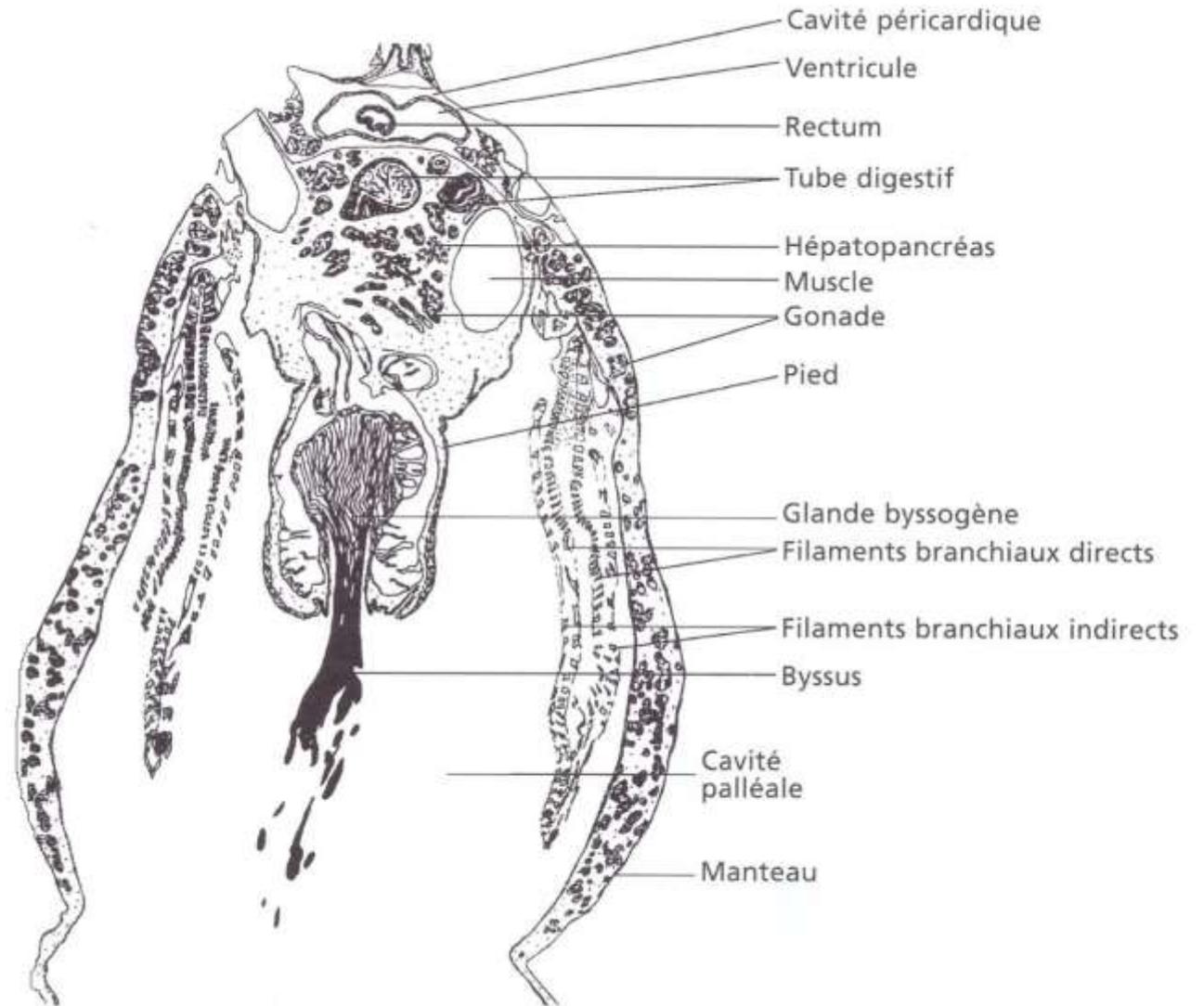
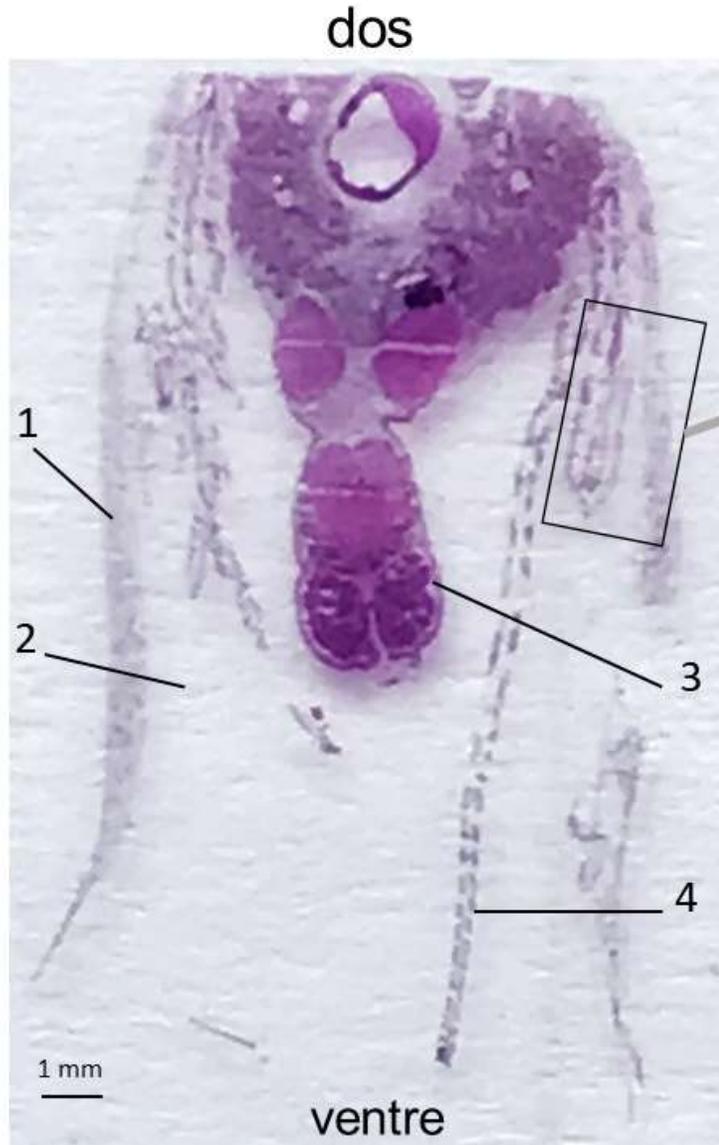


Muscle adducteur antérieur
 Palpes labiaux
 Bouche
 Muscle antérieur du pied
 Branchie
 Manteau
 Papille uro-génitale
 Muscle adducteur postérieur

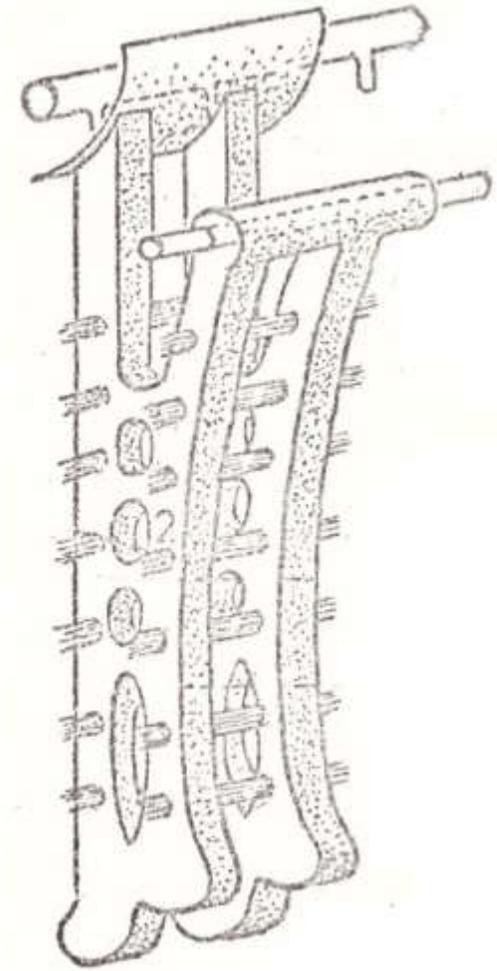
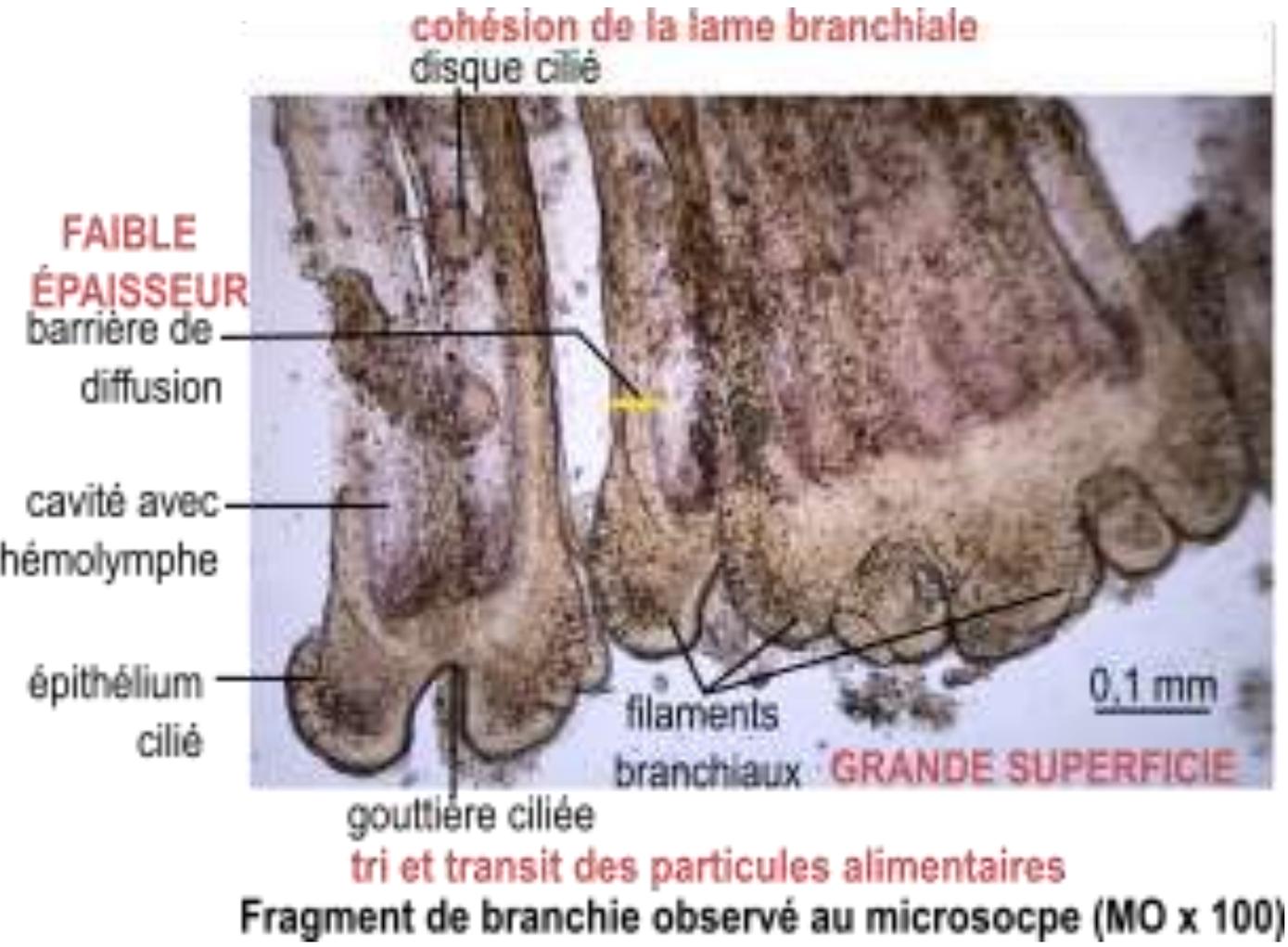
Bosse de Polichinelle
 (gonades)

Les organes en place dans la cavité palléale

Moule en CT

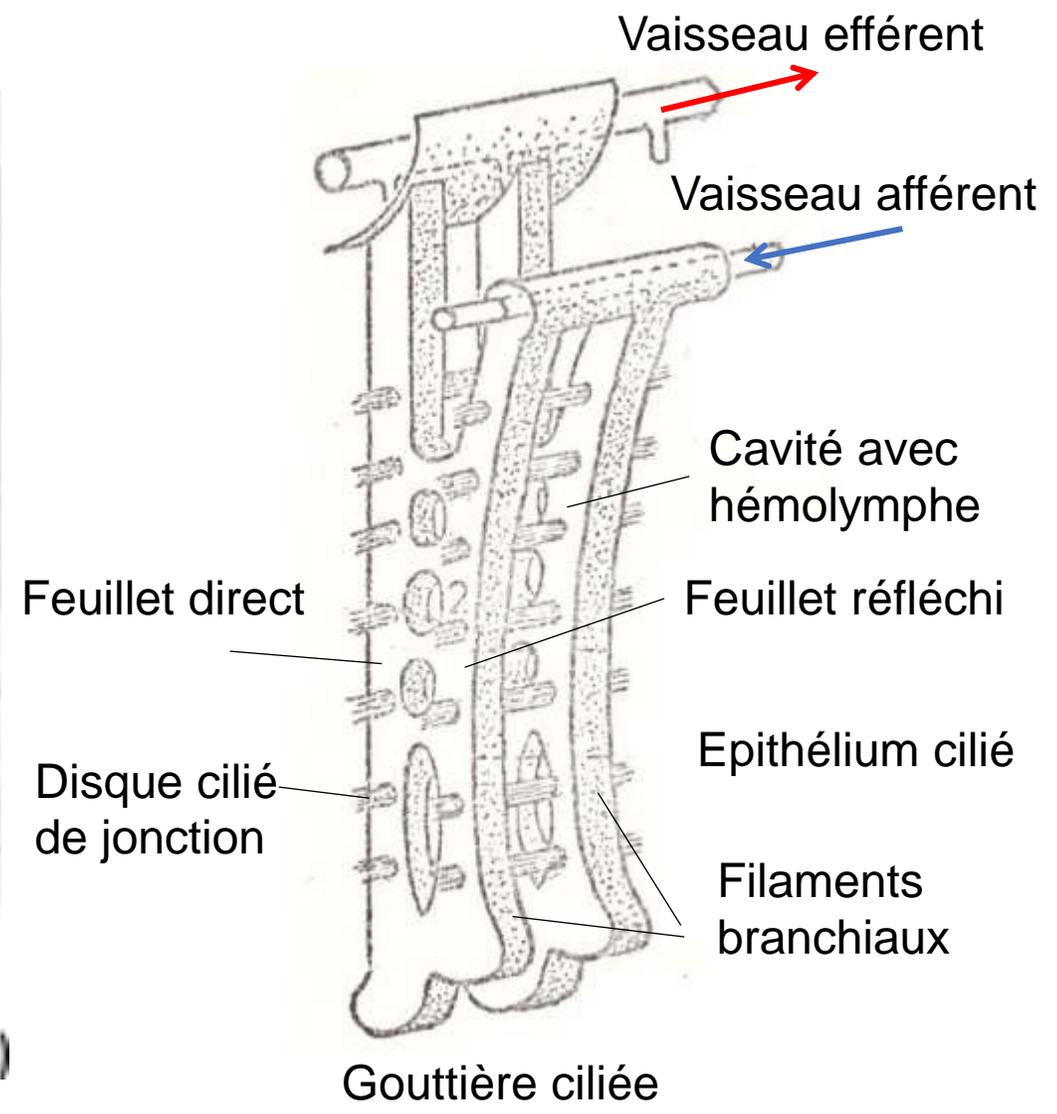
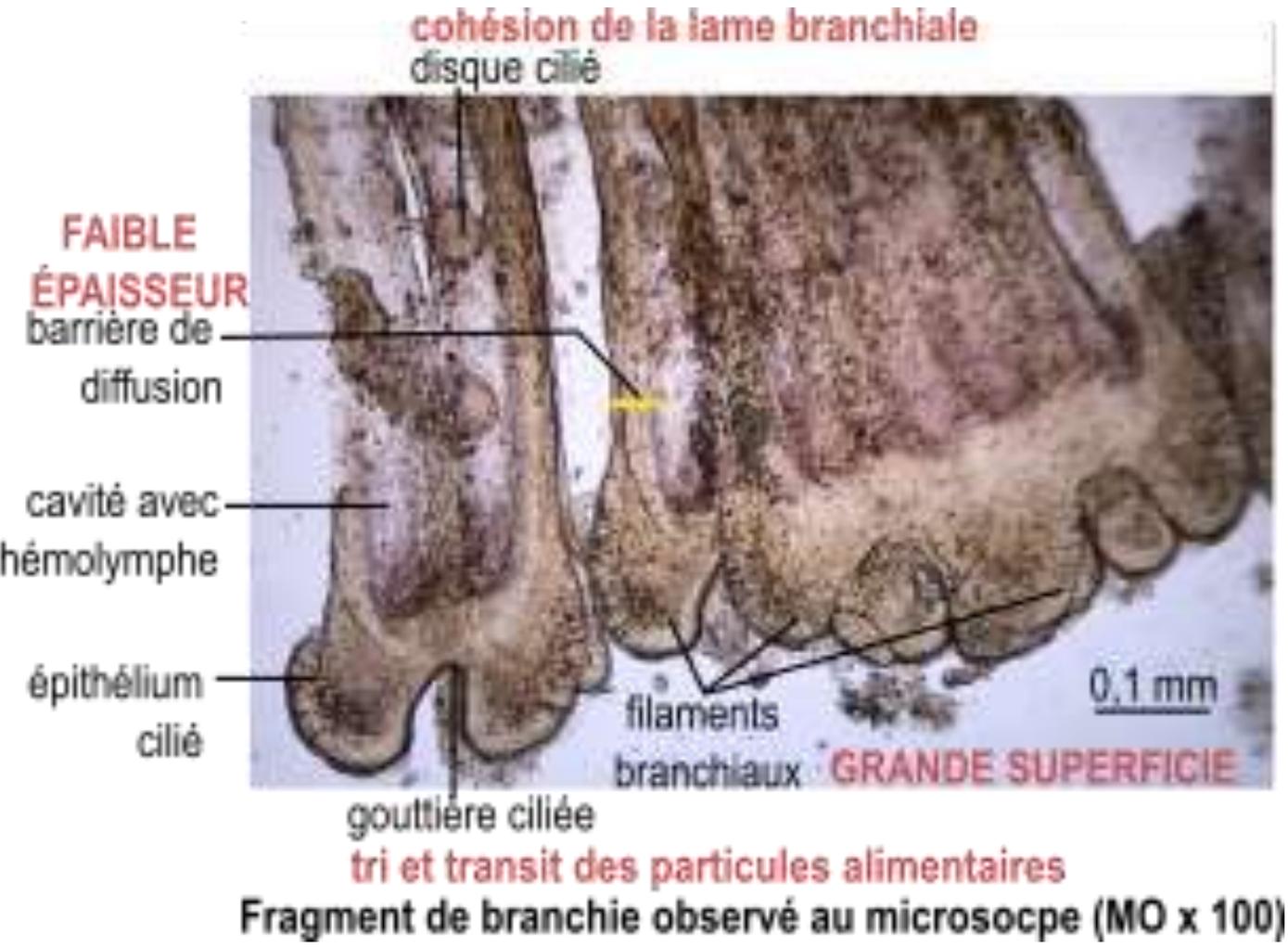


Observation microscopique d'un fragment de branchie



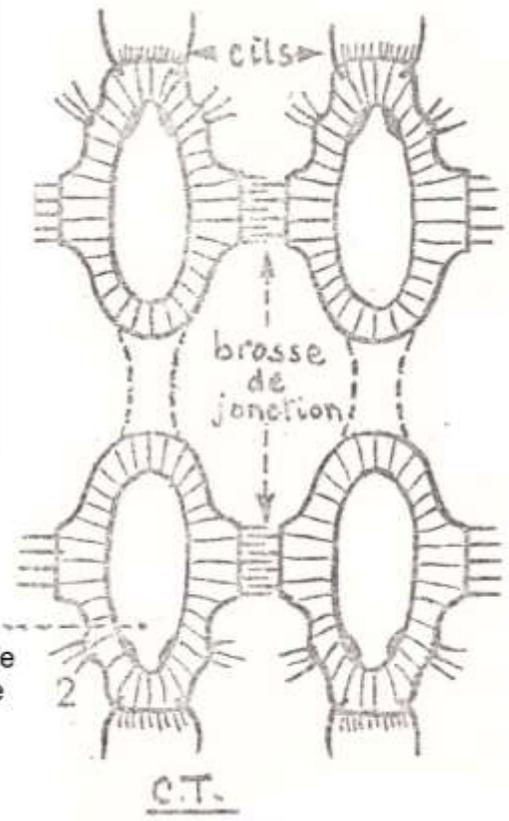
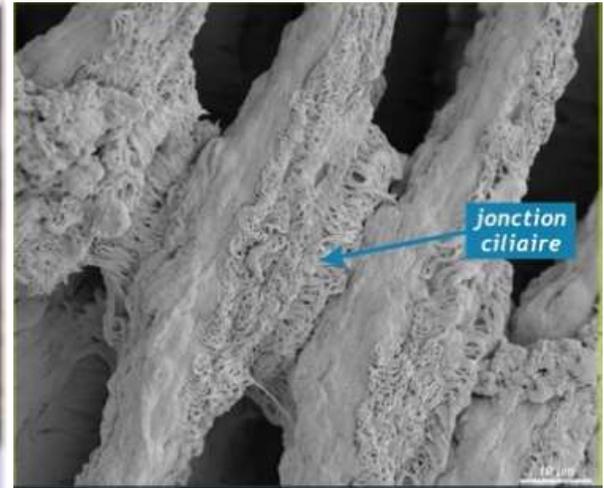
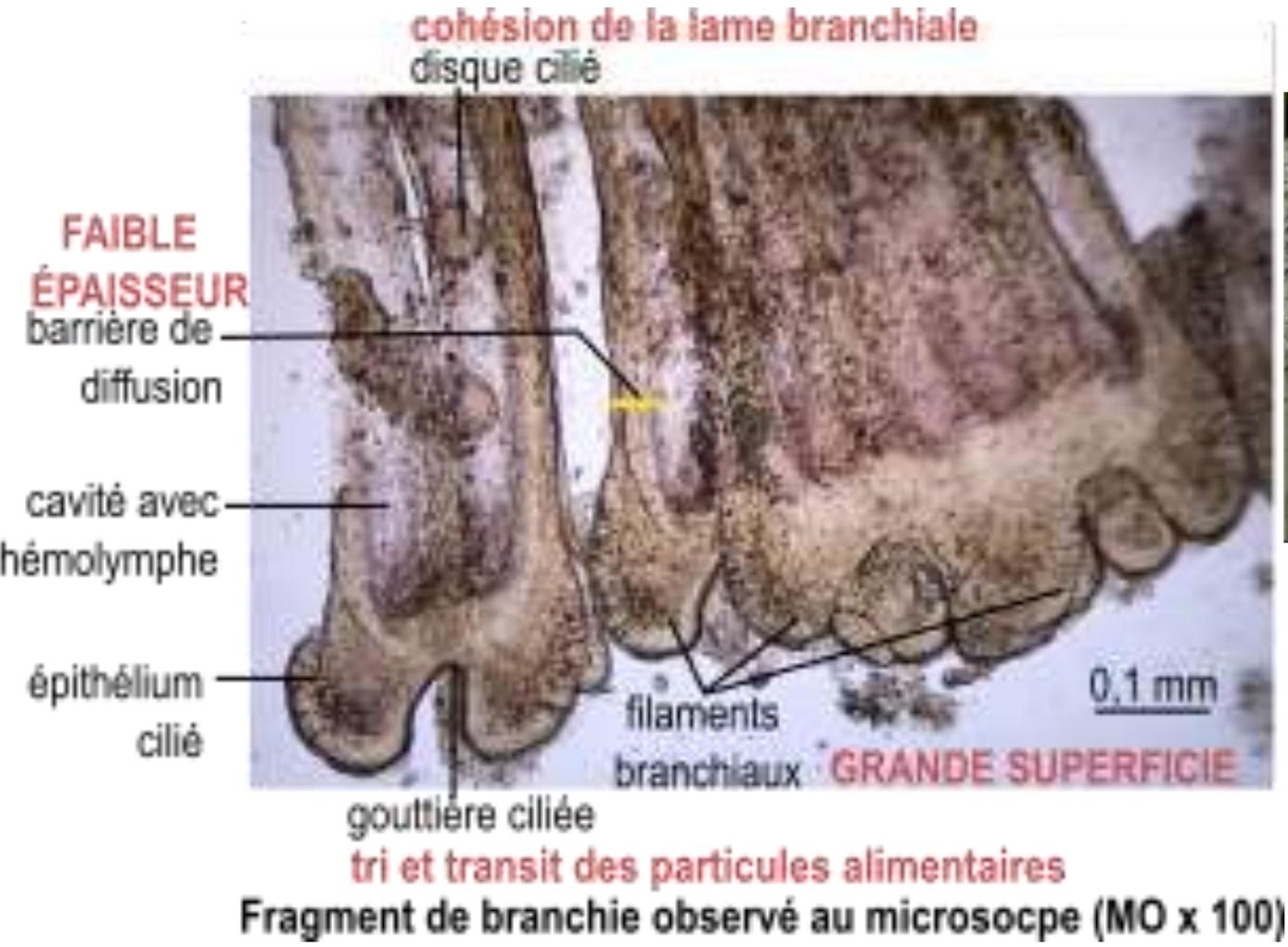
Organisation d'une lame branchiale

Observation microscopique d'un fragment de branchie

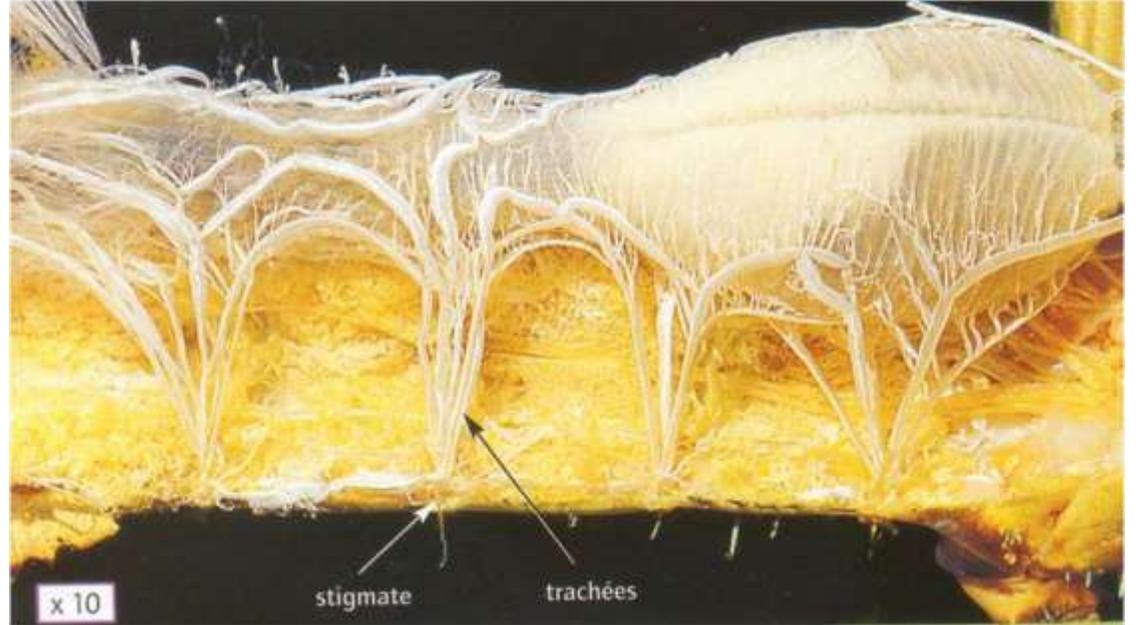
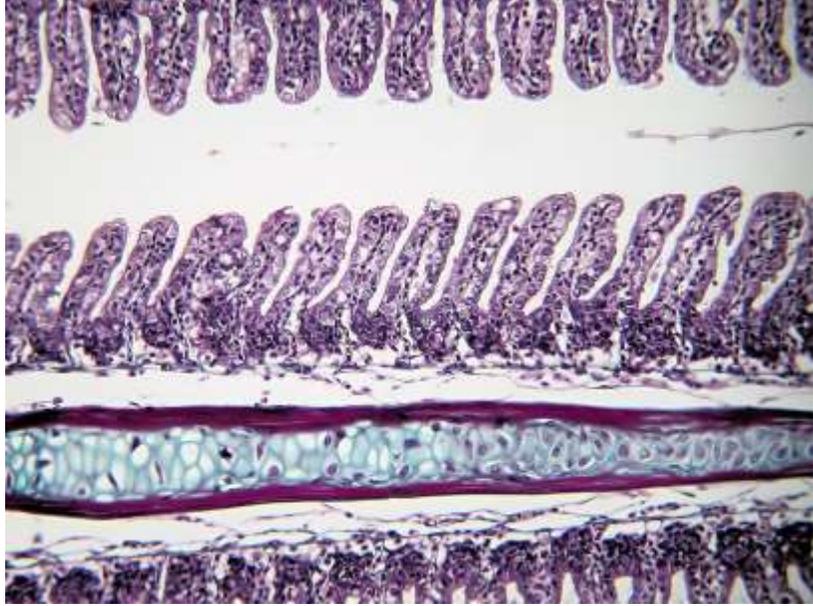


Organisation d'une lame branchiale

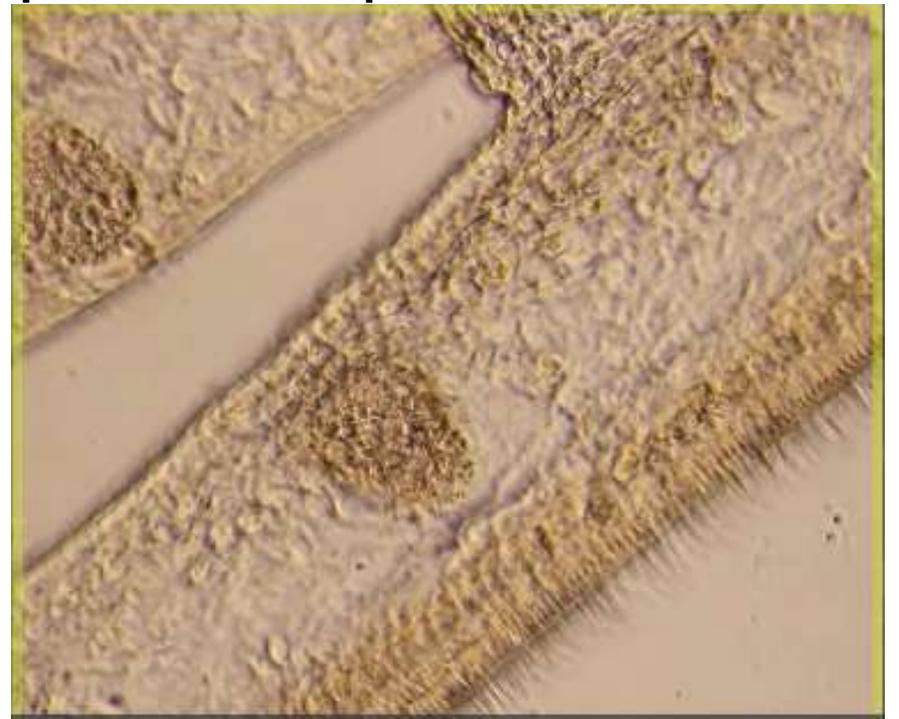
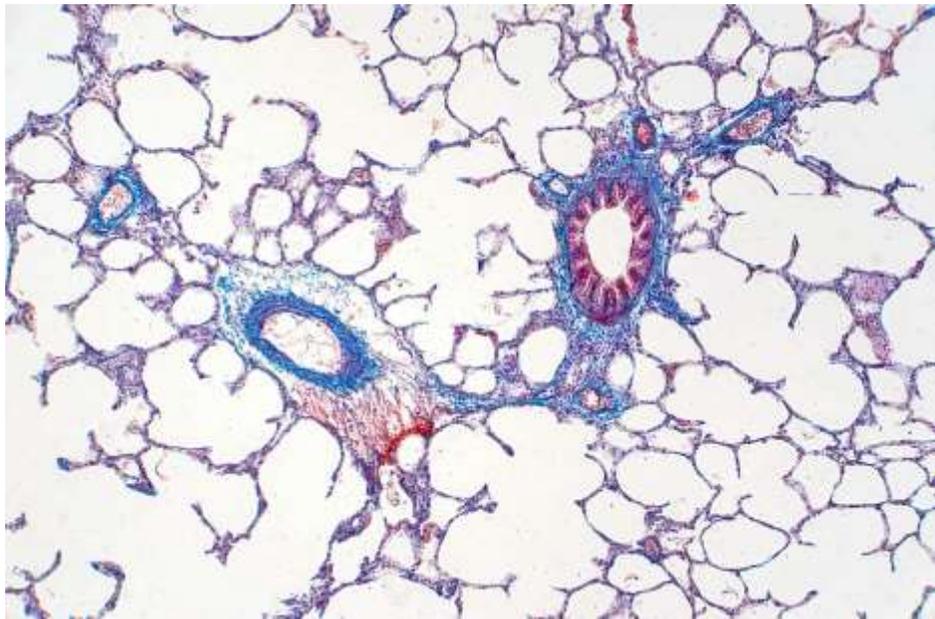
Observation microscopique d'un fragment de branchie

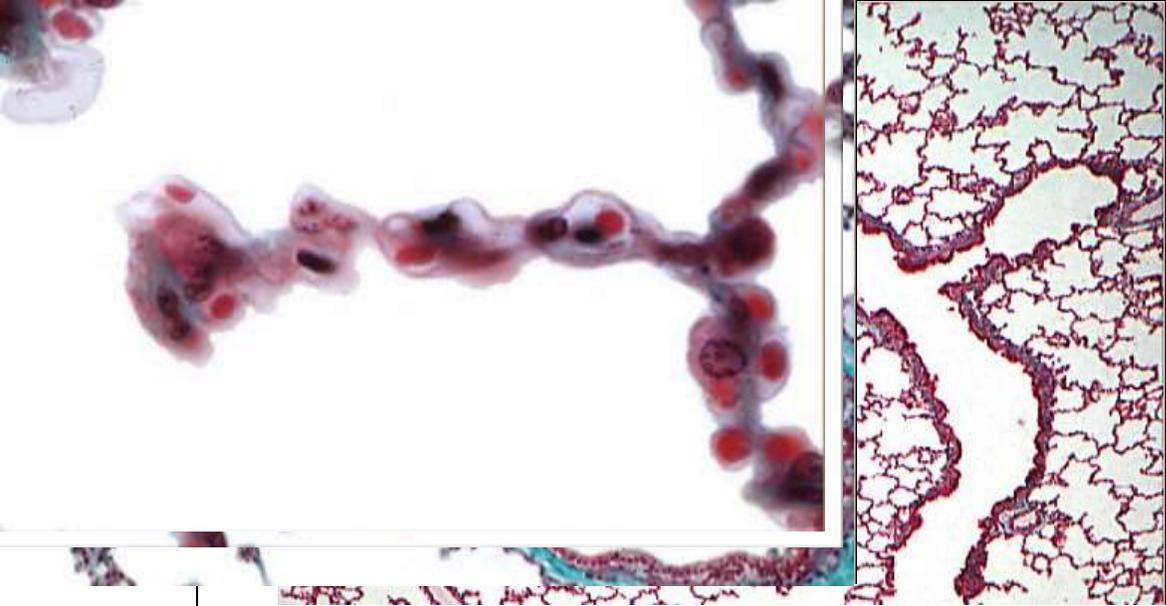


Organisation d'une lame branchiale

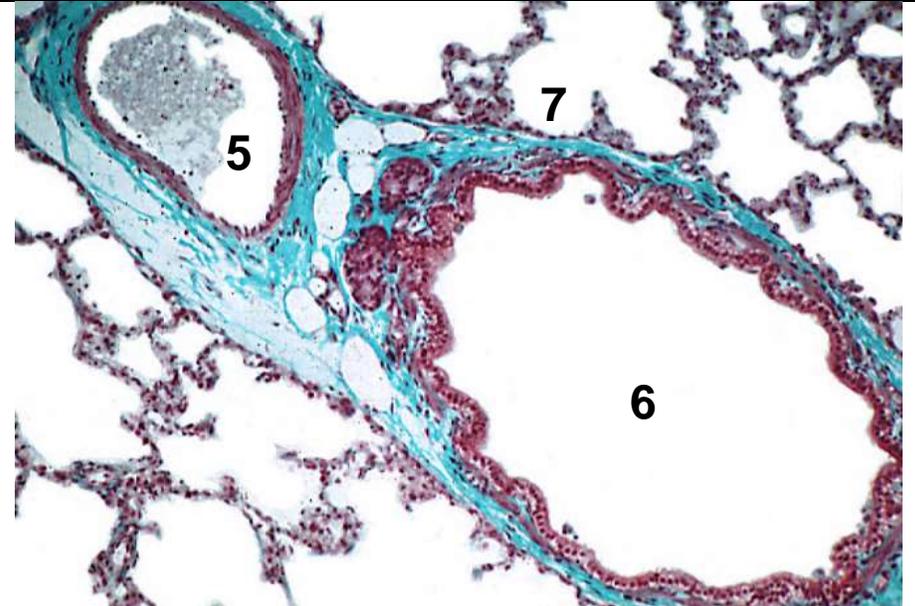


TP 17 – PARTIE II Etude comparative des appareils respiratoires des Métazoaires étudiés

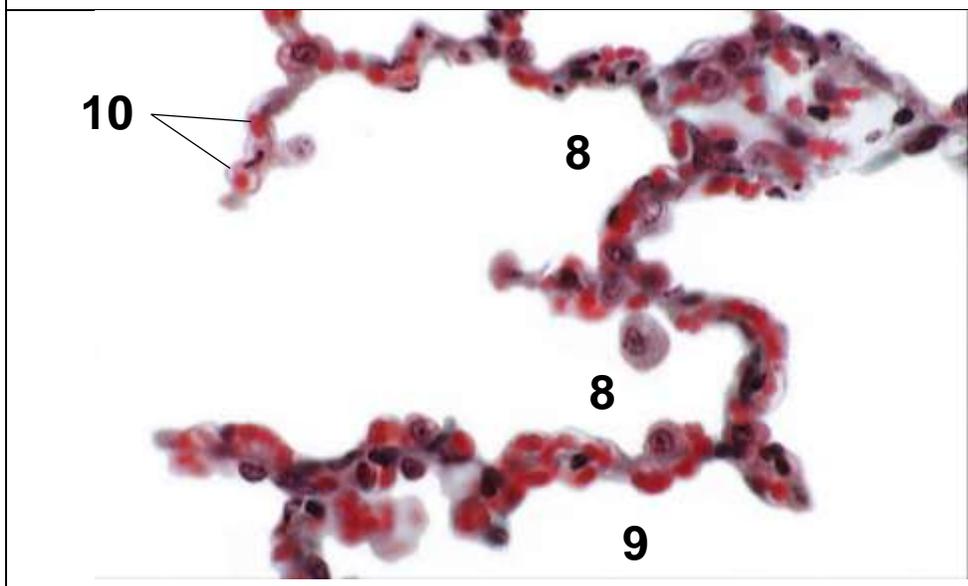




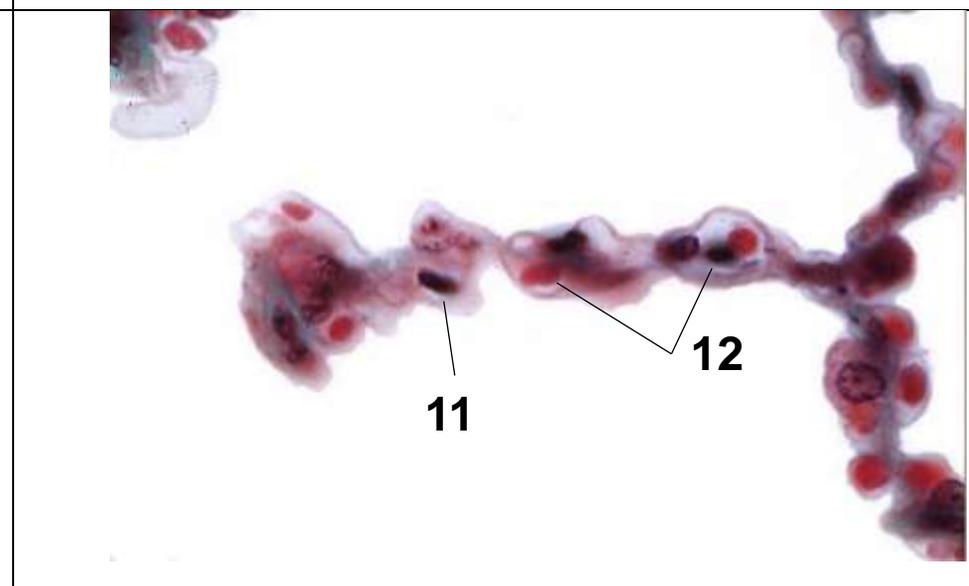
MO x 25

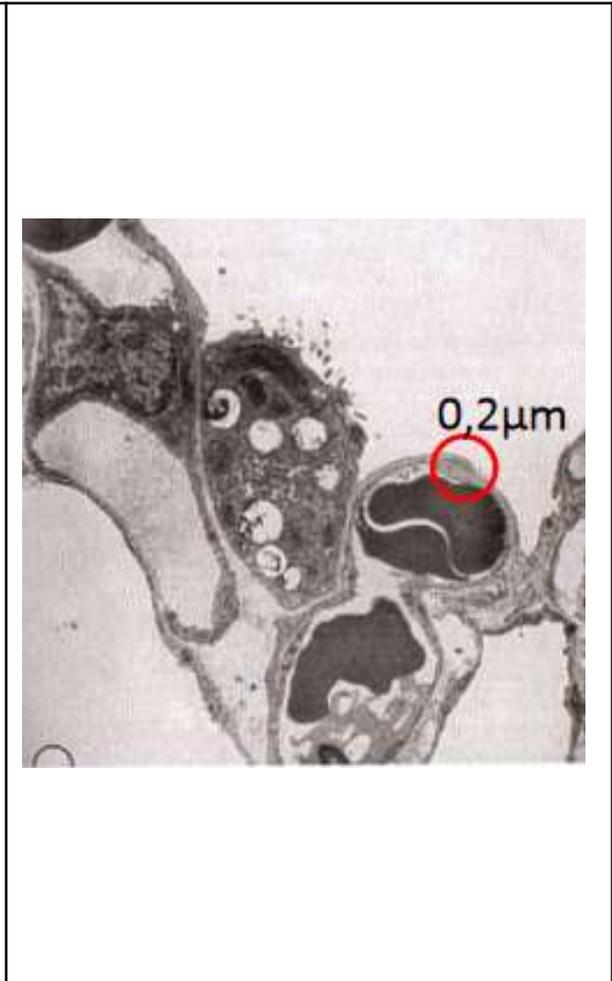
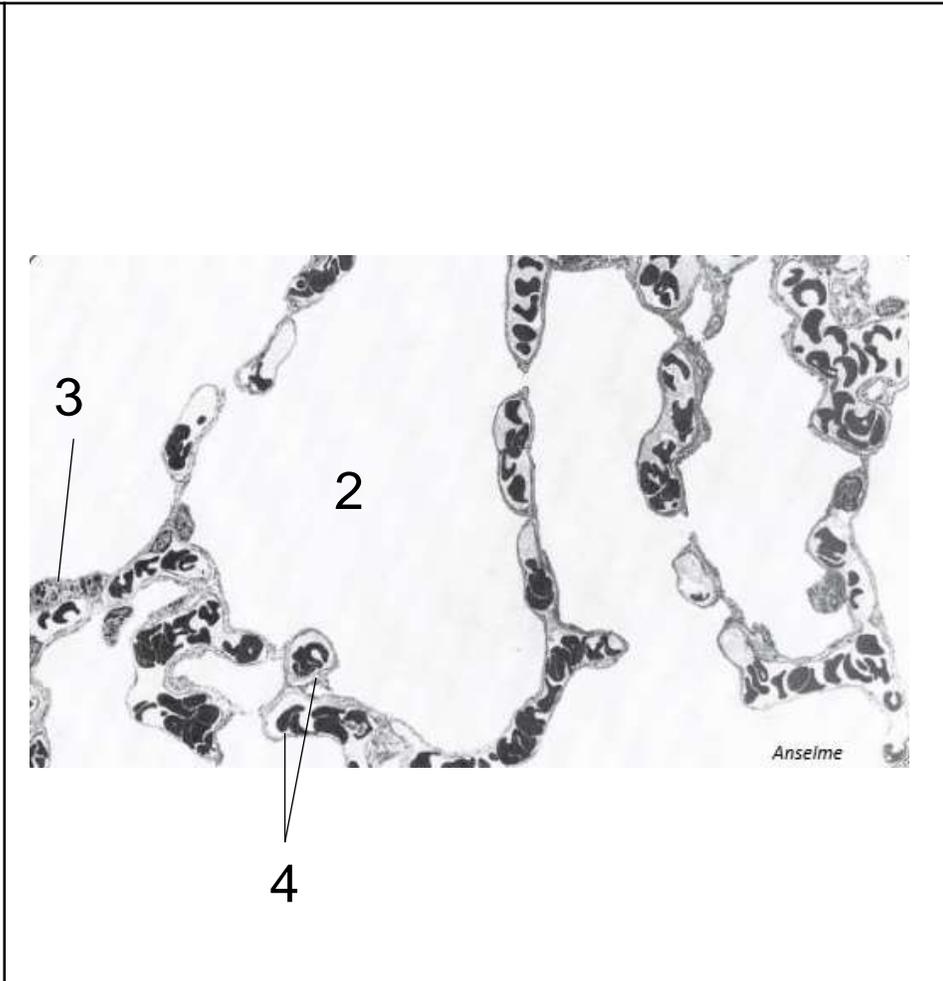
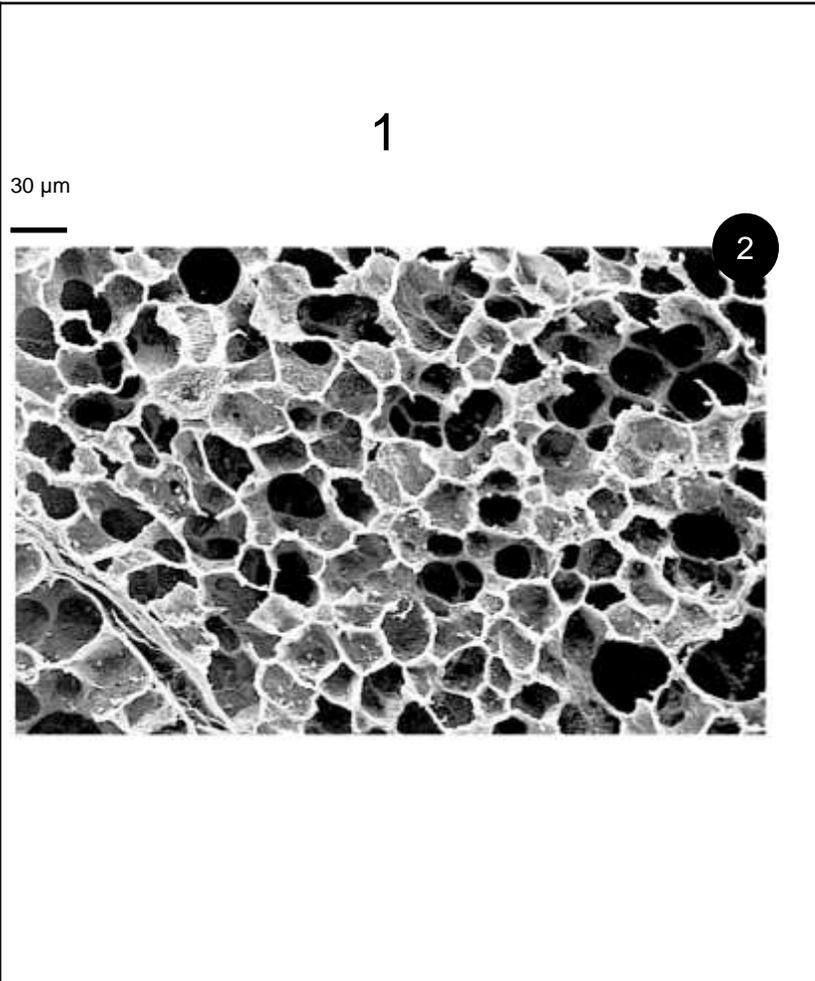


MO x 100



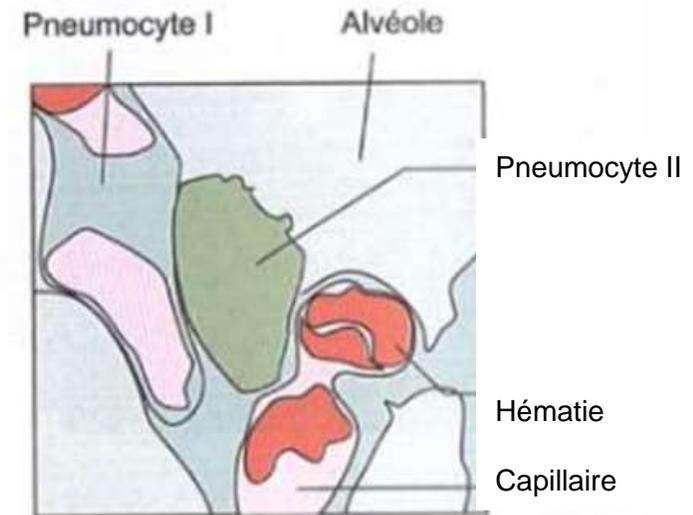
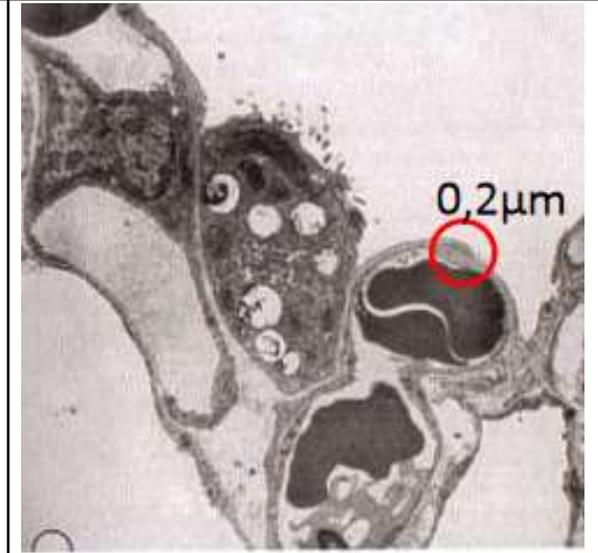
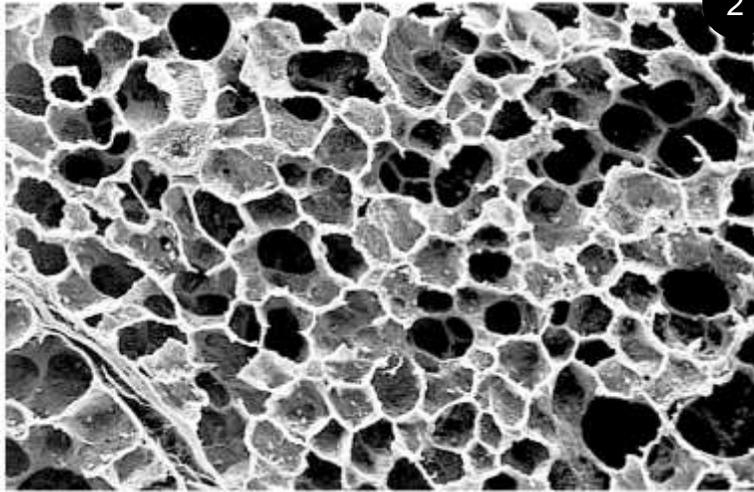
MO x 1200



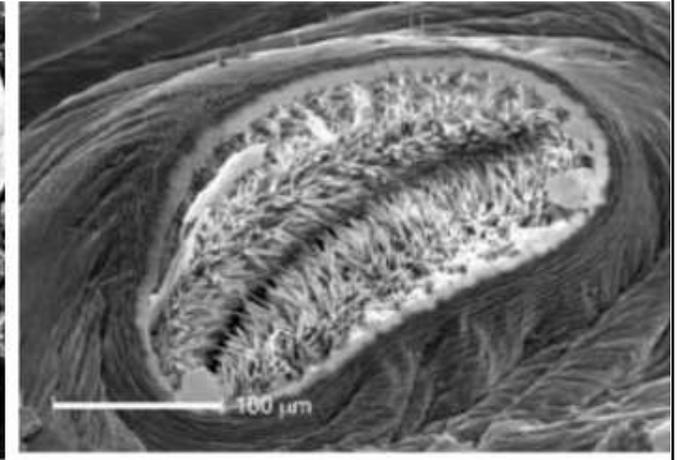
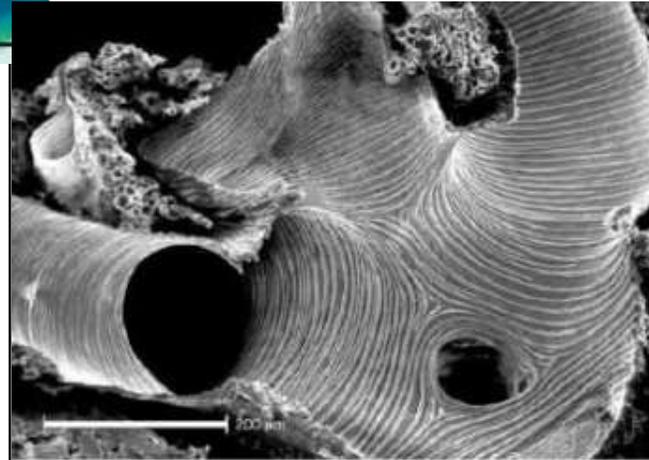
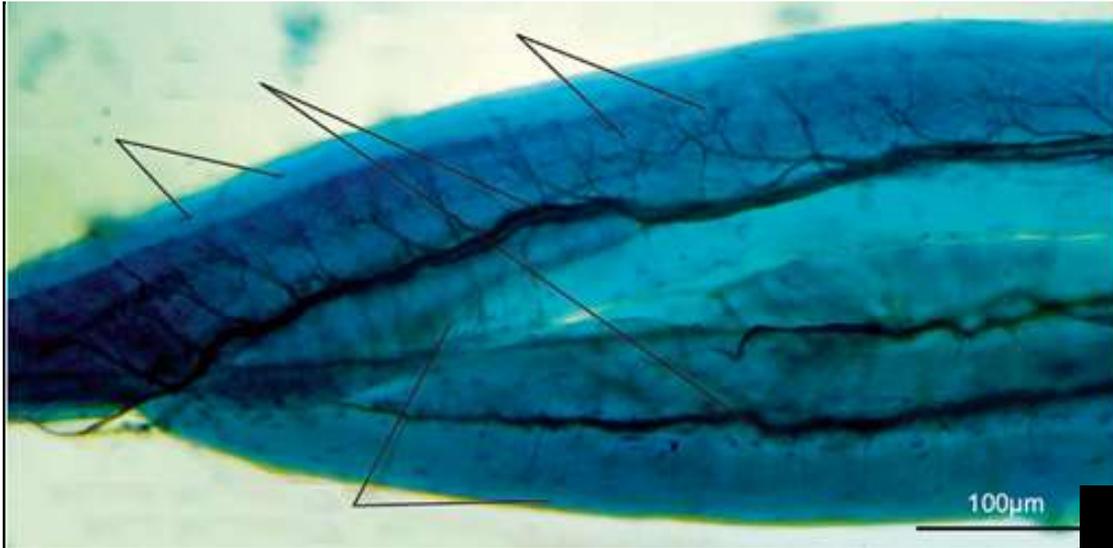


Document 2. CT de poumon de Mammifère observé en MET.

30 μm



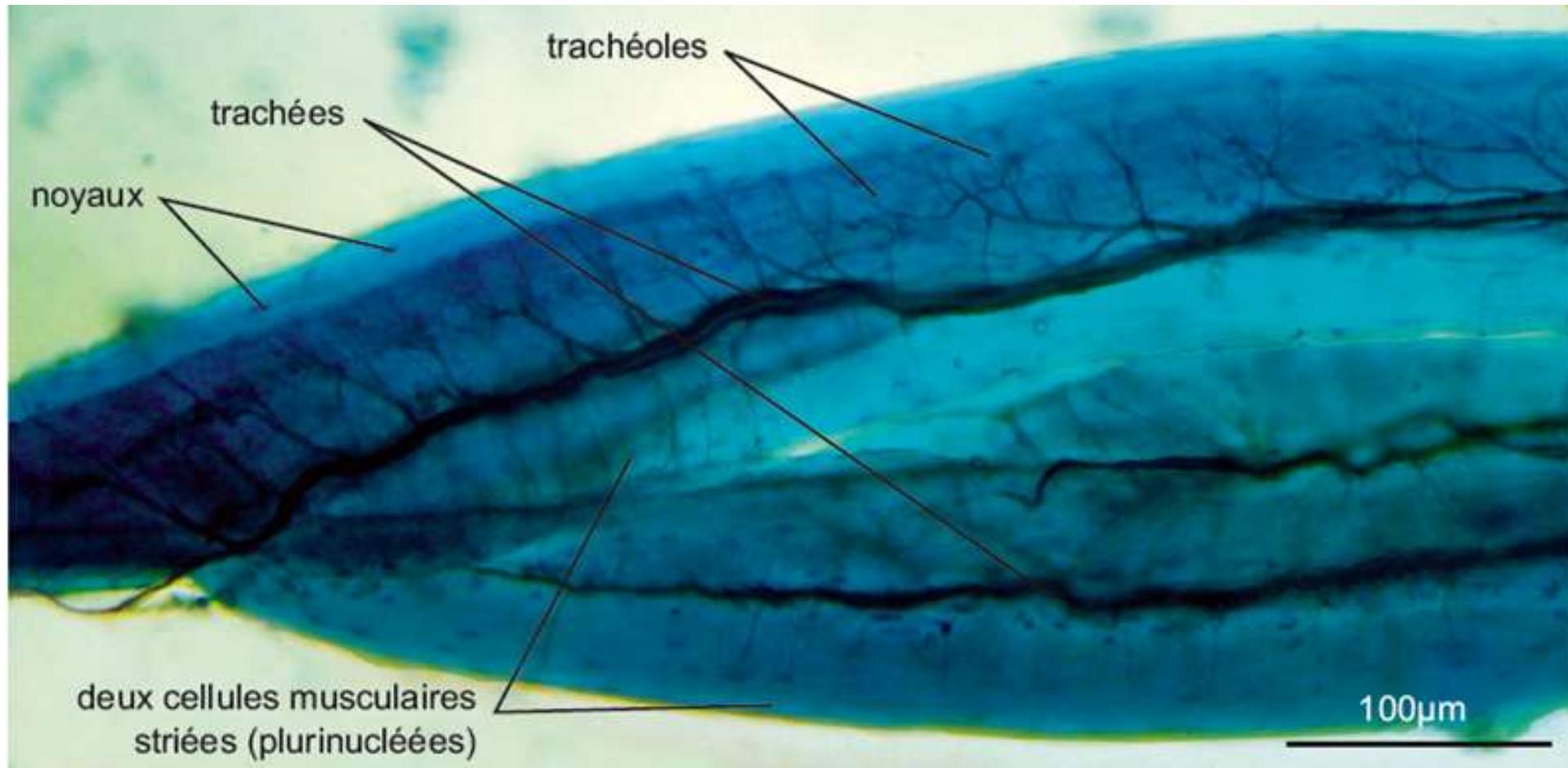
Document 2. CT de poumon de Mammifère observé



Système trachéen au contact de cellules musculaires striées (MO)

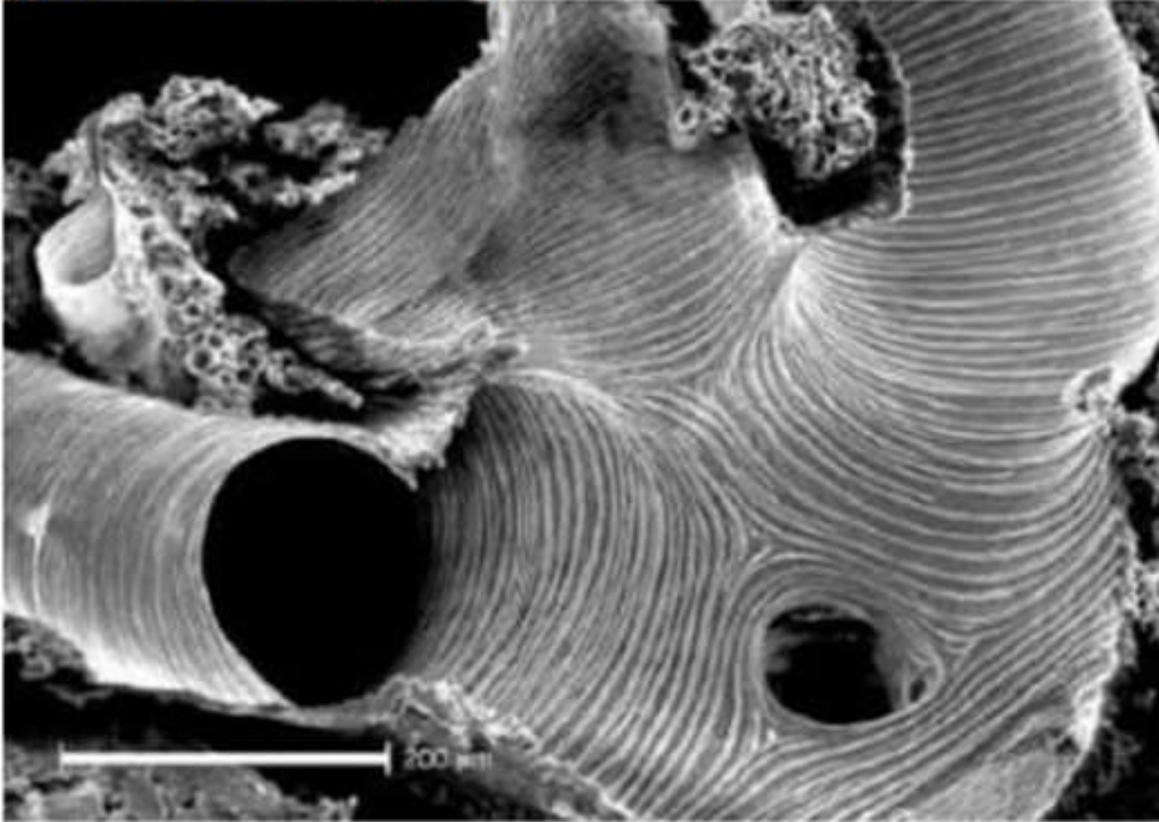
Images en MEB de structures de l'appareil trachéen du Criquet

Document 3. L'appareil trachéen du Criquet.

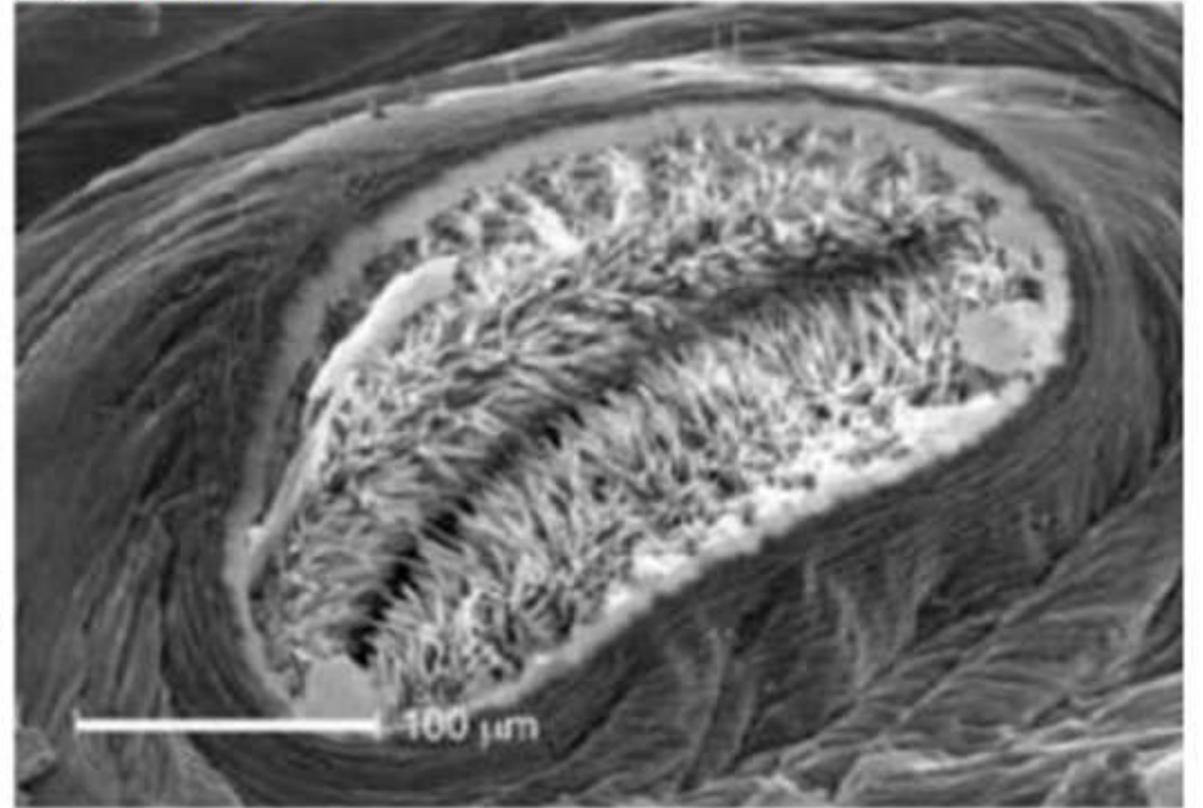


Système trachéen au contact de cellules musculaires striées (MO)

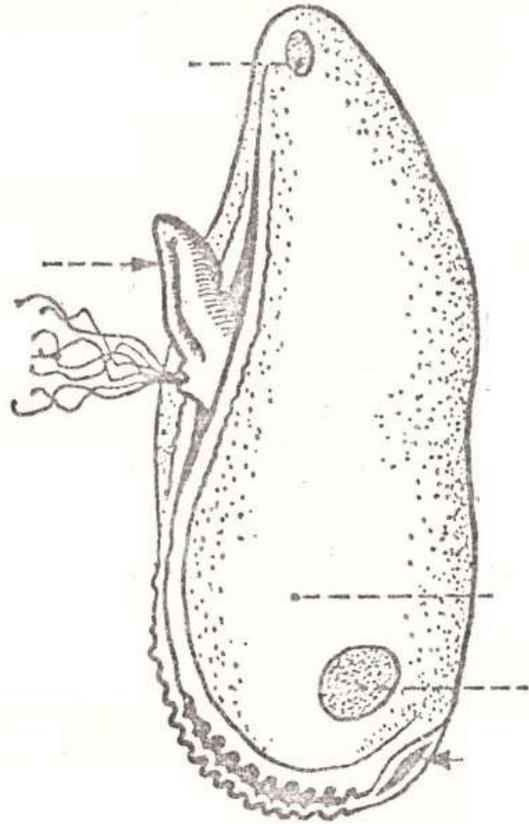
Système trachéen (MEB)



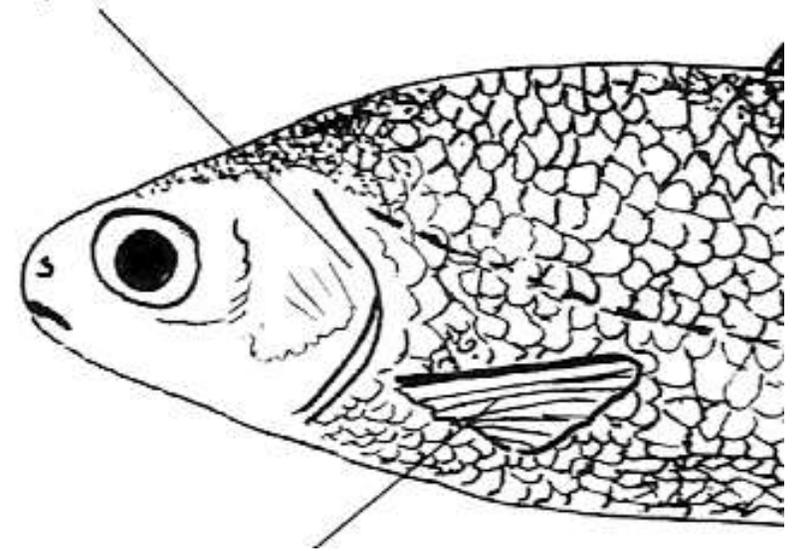
Stigmate (MEB)



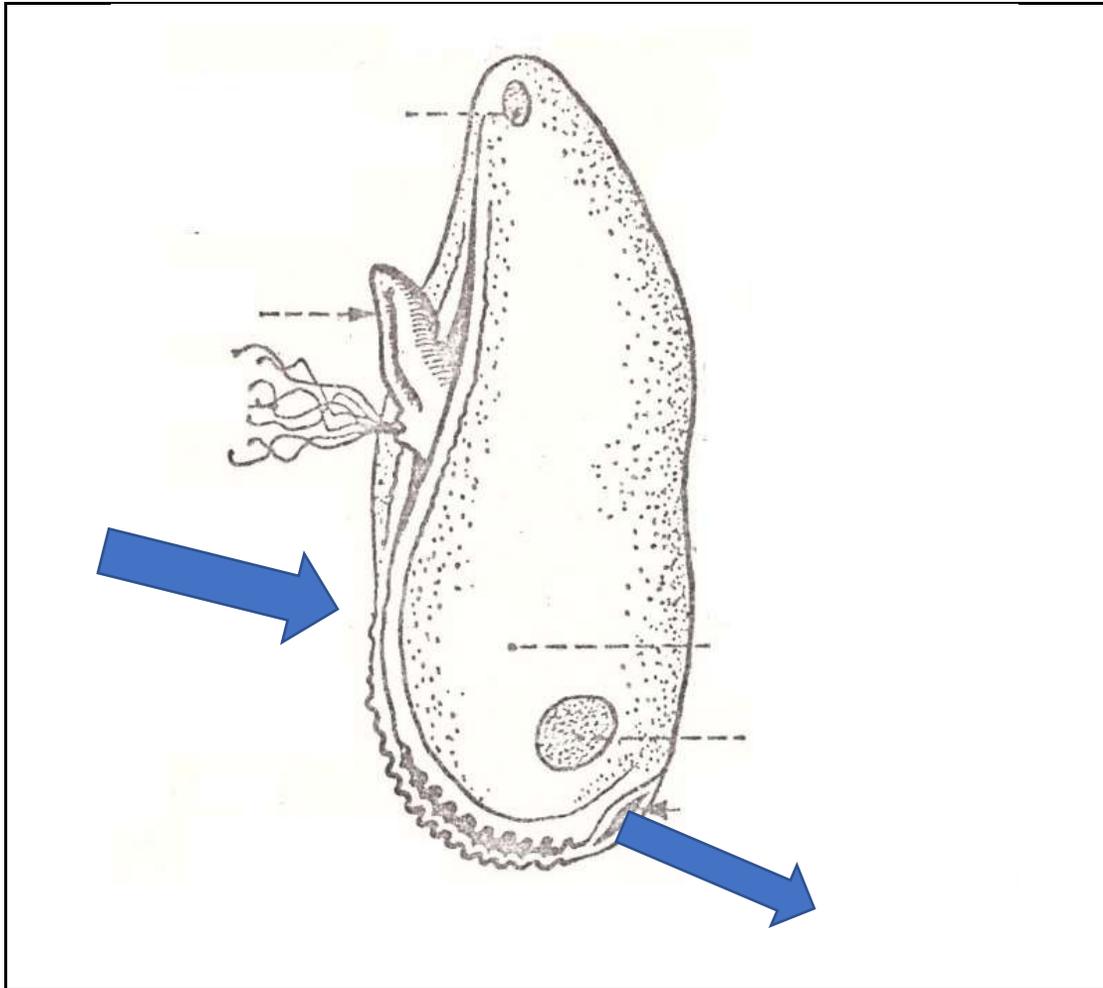
Images en MEB de structures de l'appareil trachéen
du Criquet



Trajet de l'eau chez la Moule



Trajet de l'eau chez le poisson Téléostéen



Trajet de l'eau chez la Moule



Vue latérale gauche de la moule sortie de sa coquille

Ouïe

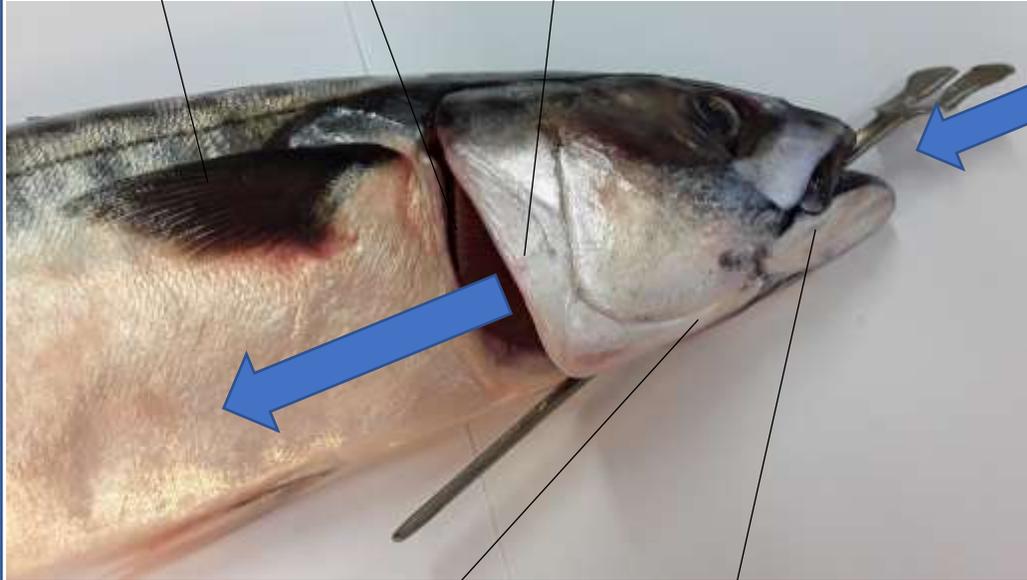
Orifice exhalant

Opercule

Protection des branchies

Nageoire pectorale

Ventilation

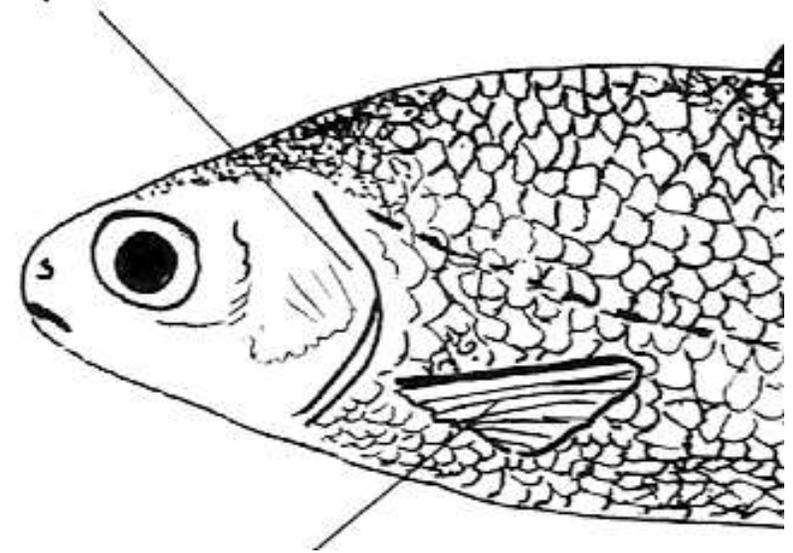


Plancher buccal (et
Muscles de la cavité oro-
pharyngienne)

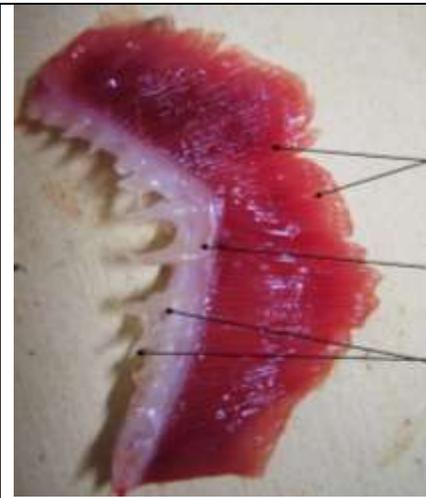
Ventilation

Bouche

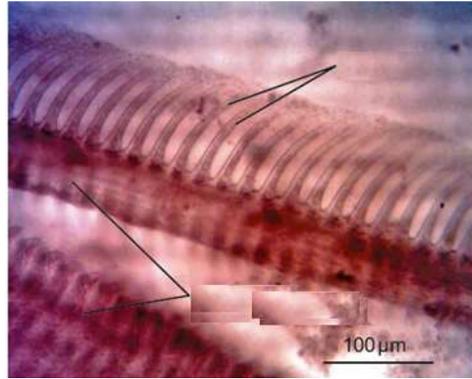
Orifice inhalant



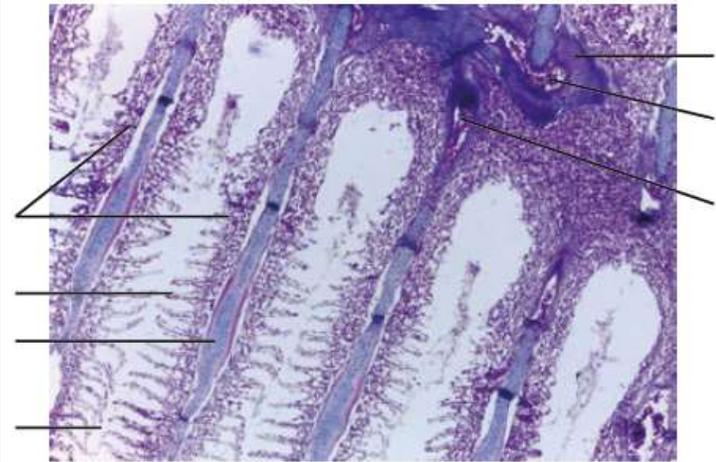
Trajet de l'eau chez le poisson Téléostéen



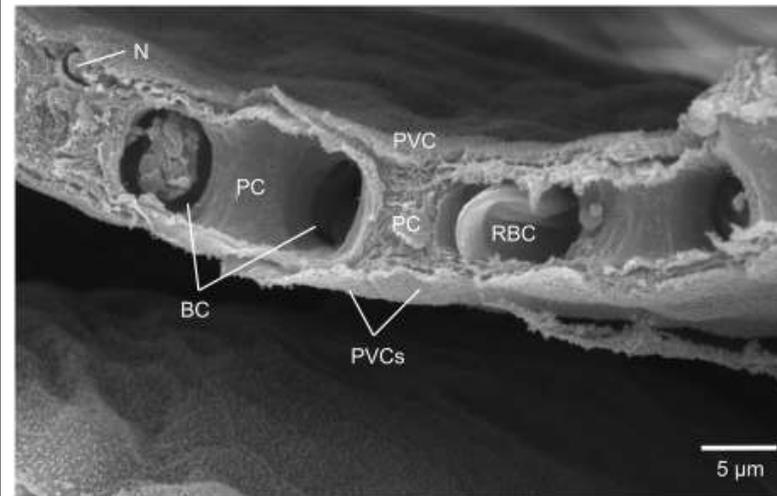
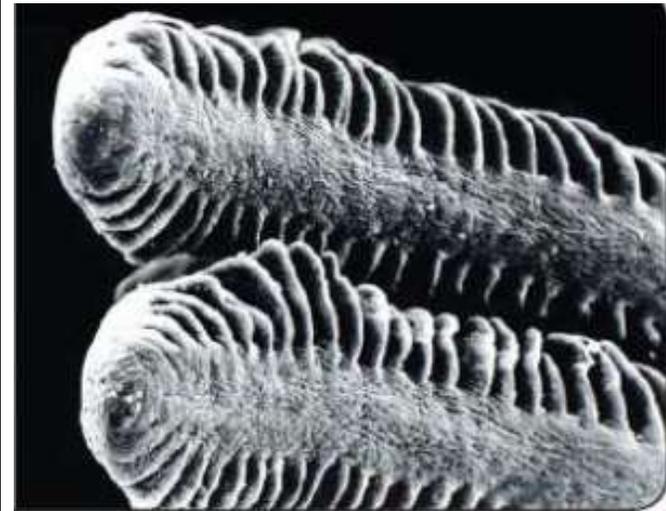
Observation à la loupe binoculaire



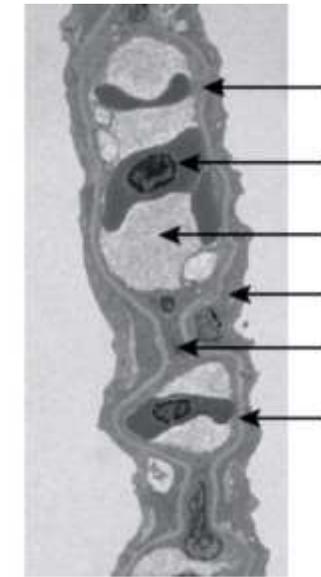
Observation en MO



Observation en MO (CT x 100)



Observations en MEB



Observation en MET

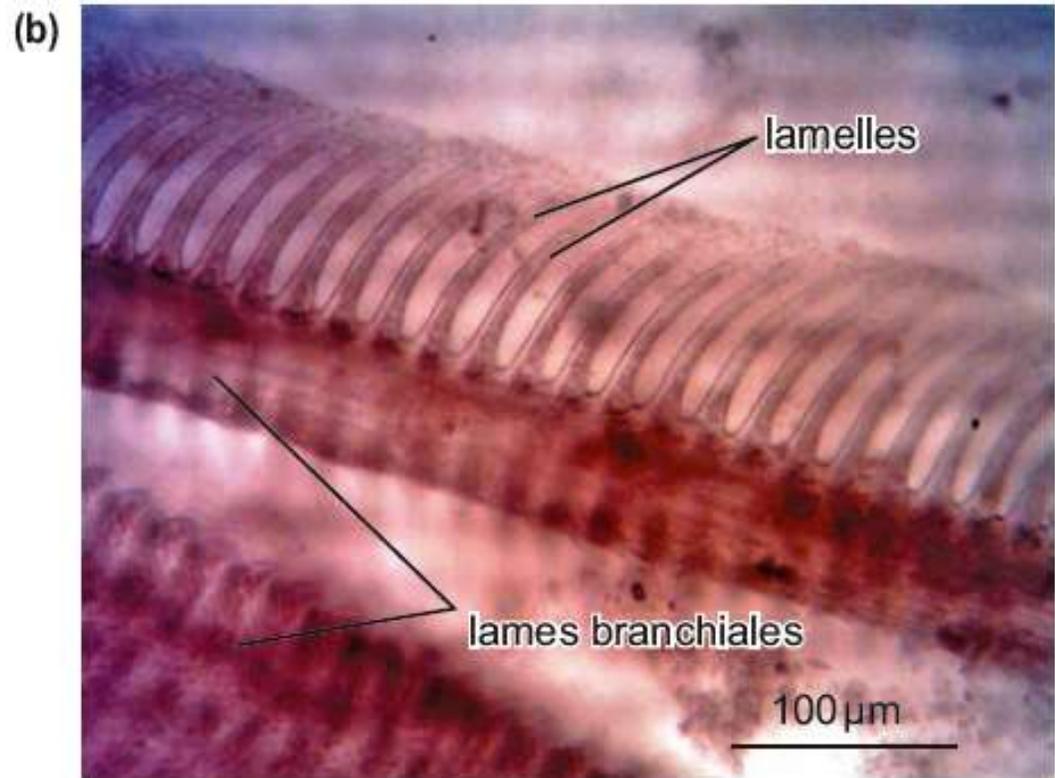
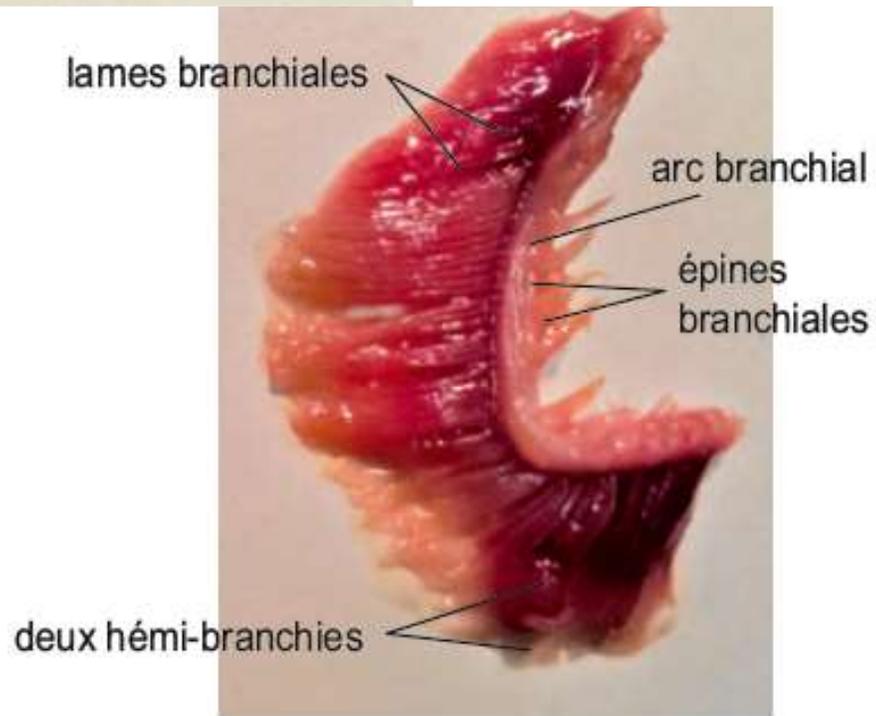
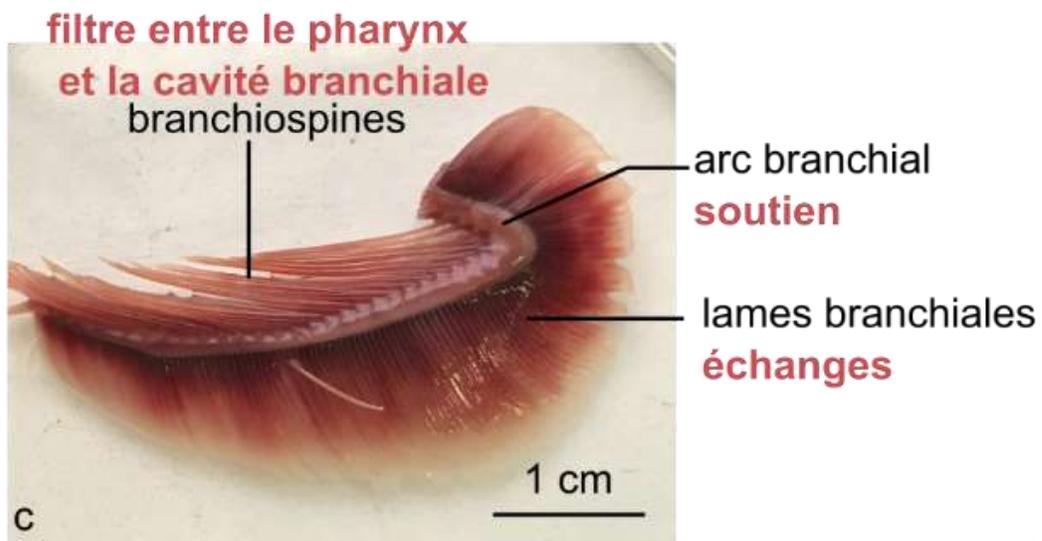


FIGURE TP1.12 (a) Branchie isolée ;
(b) fragment de lame branchiale en microscopie optique (MO × 400).

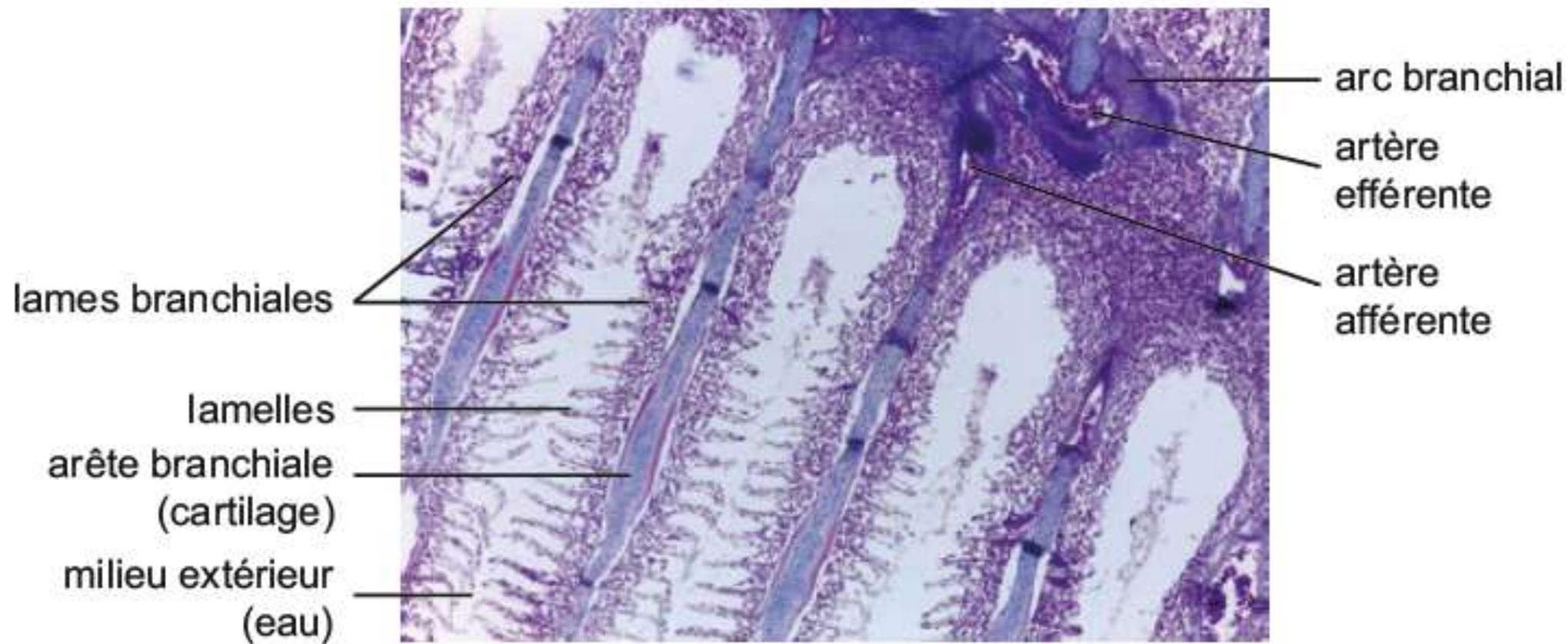
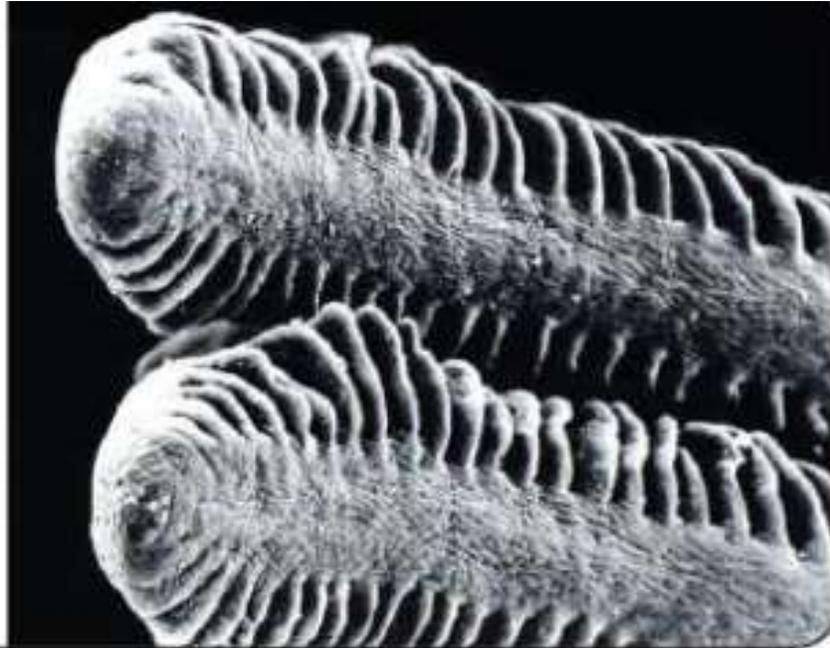


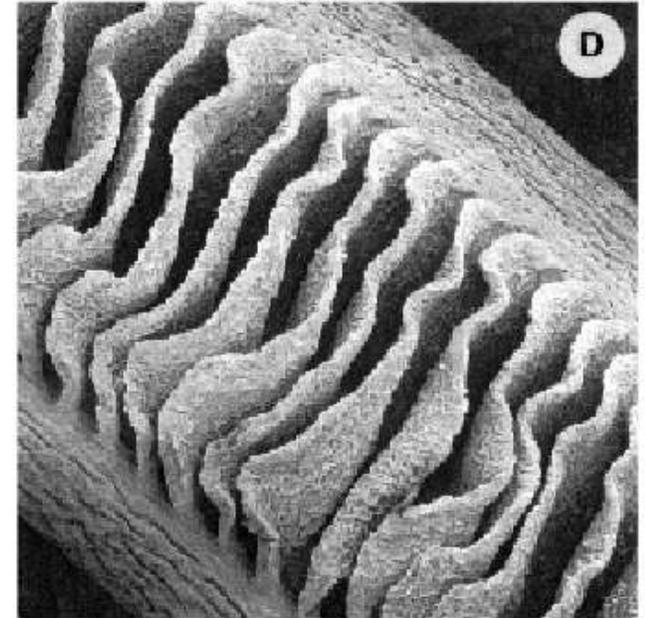
FIGURE TP1.13 Structure histologique de branchie de poisson, vue d'ensemble (MO \times 100).

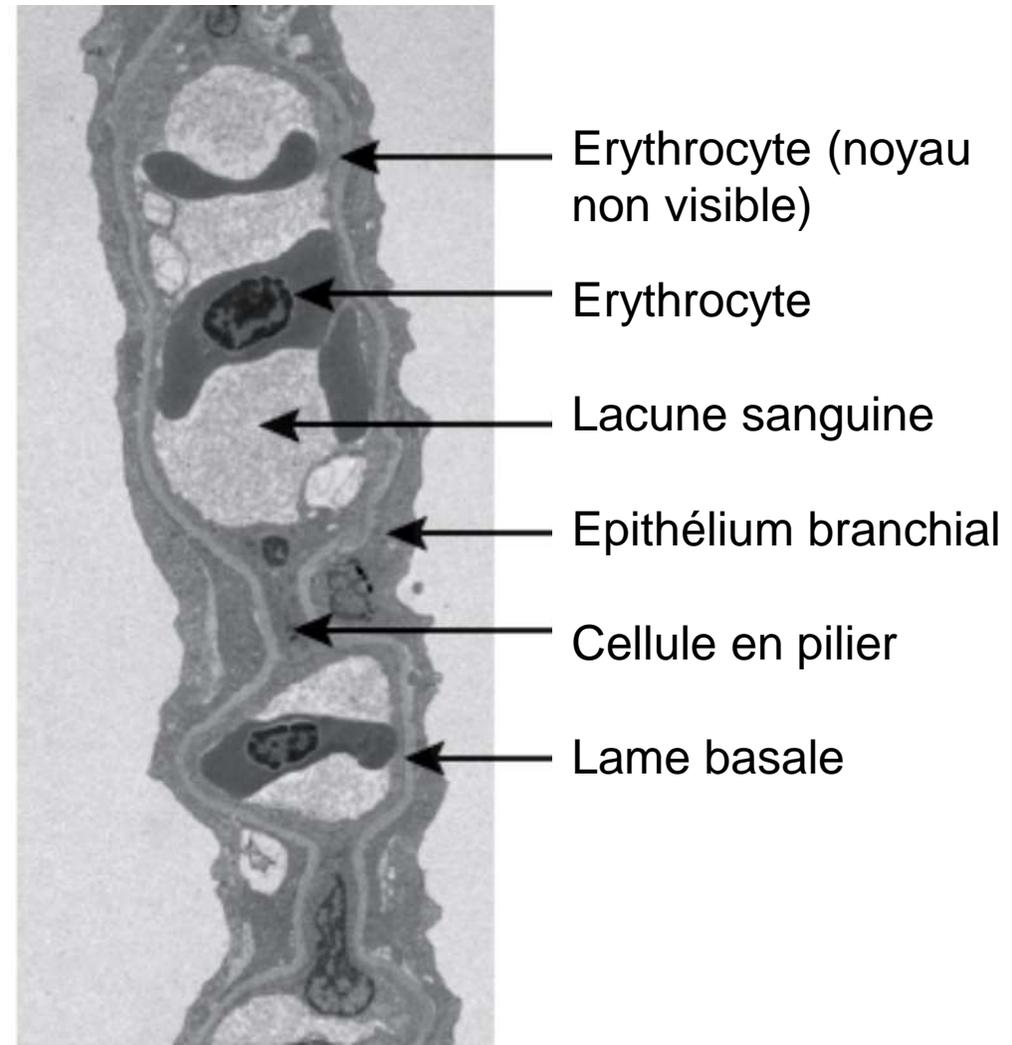
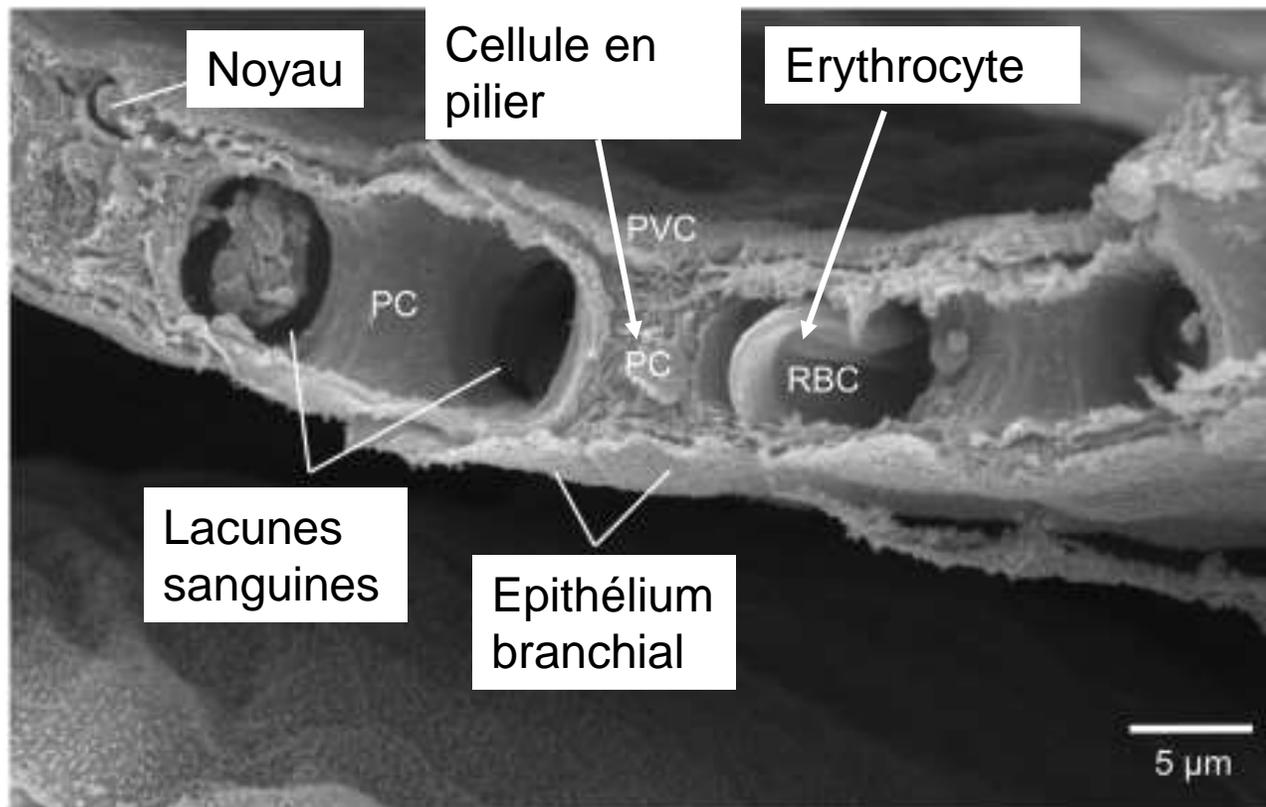
**Lame branchiale et
lamelles branchiales
d'un poisson téléostéen
MEB**

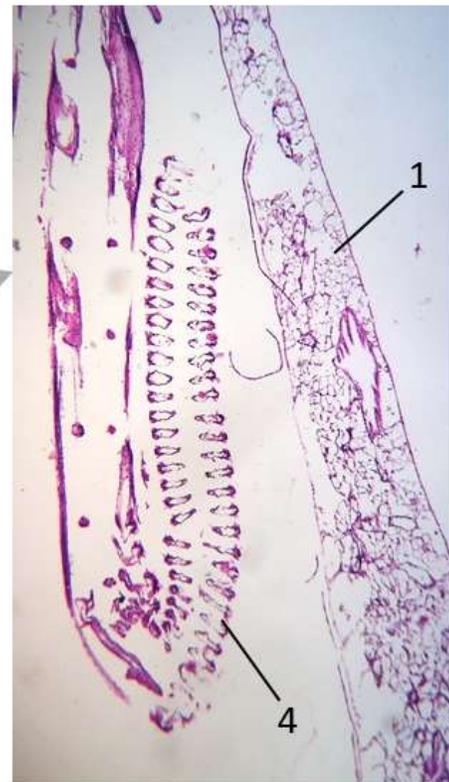
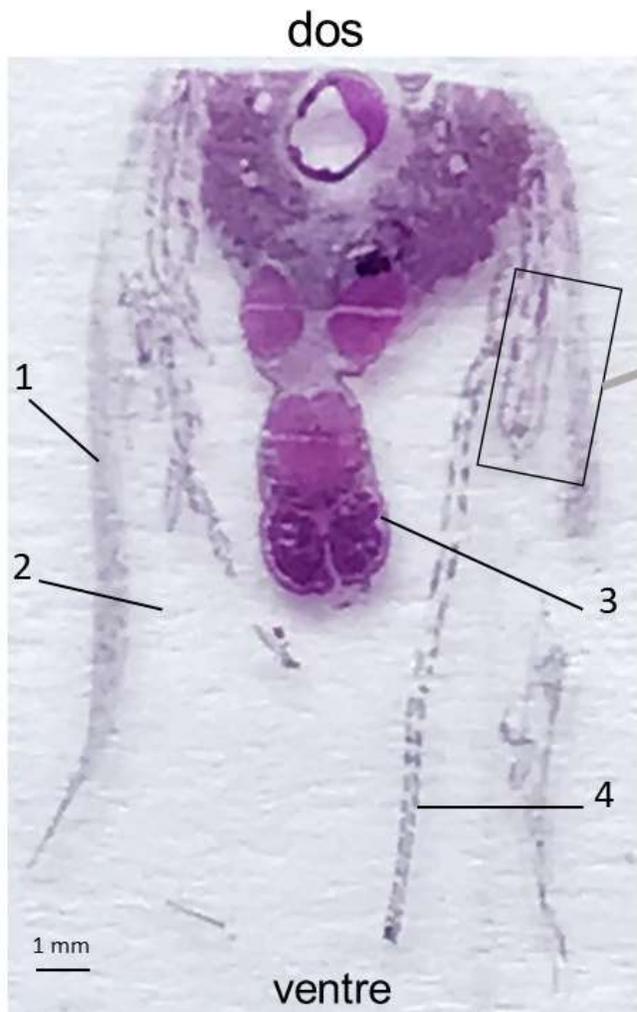
Anselme



Segment de lame branchiale
de sole (MEB)







filament branchial

épithélium

cavité palléale

jonction
interfilament

jonction
interfeuille

cavité
hémolympatique

feuille branchial

cils branchiaux

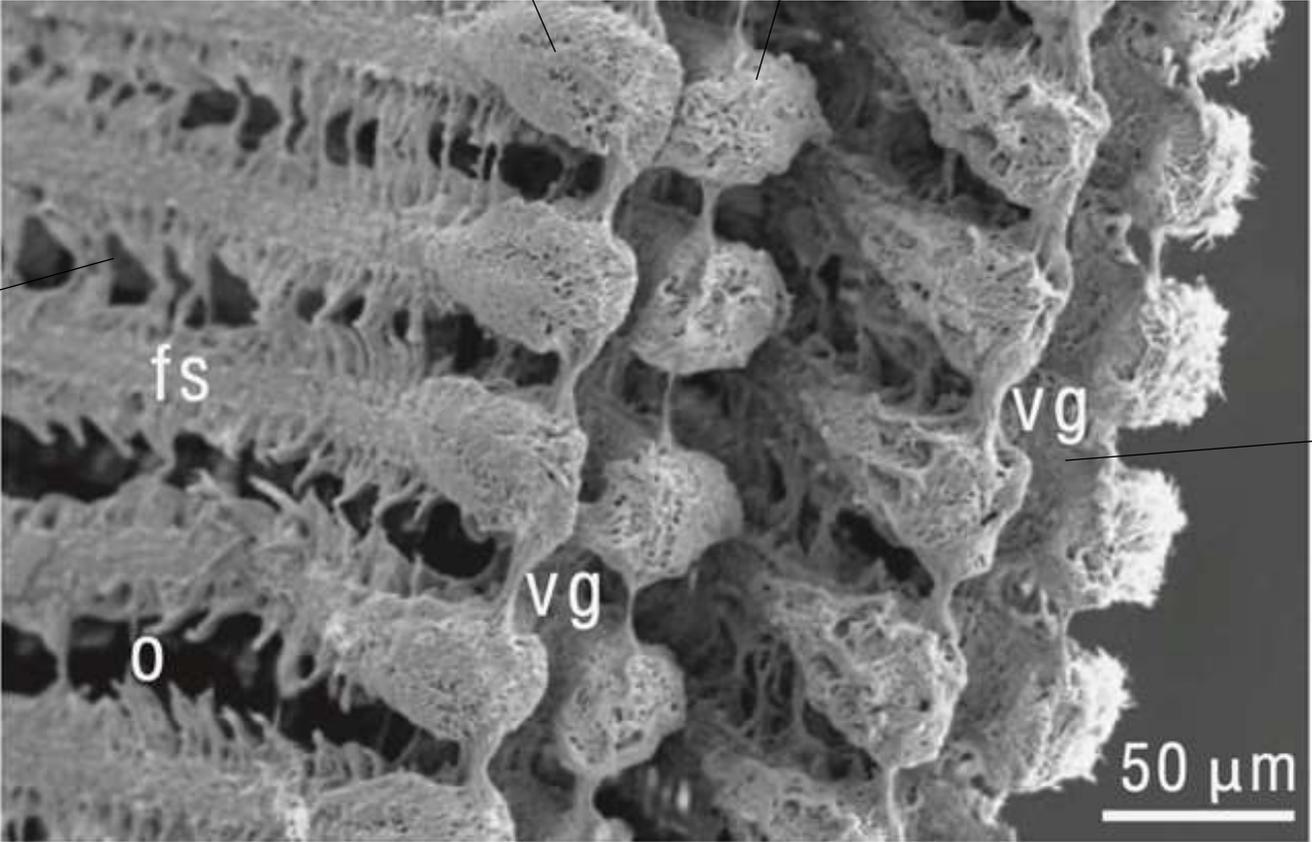
lame branchiale

100 μ m

Filament
réfléchi

Filament
direct

Disque
cilié
de jonction



Gouttière
ciliée

fs

vg

vg

o

50 μ m