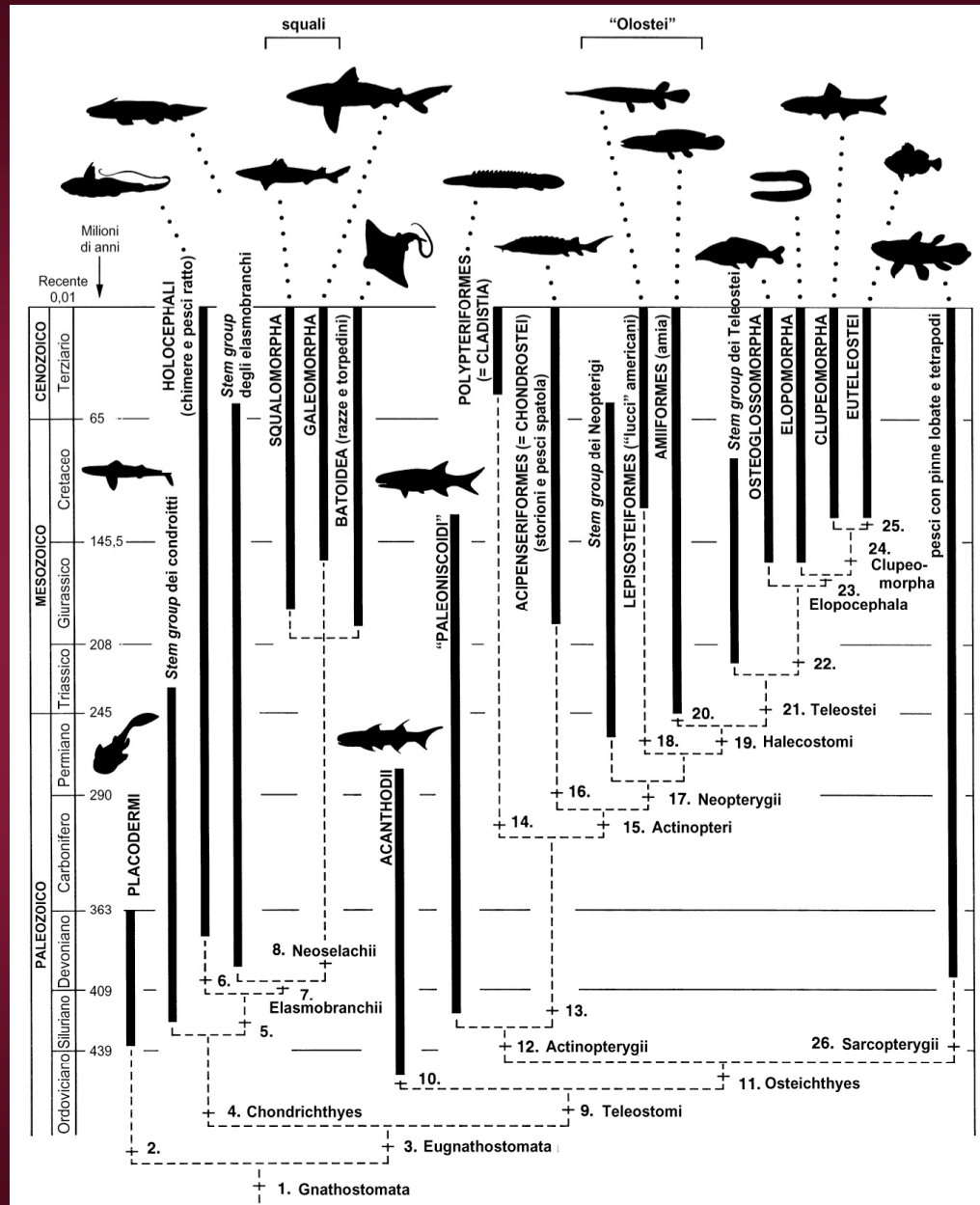


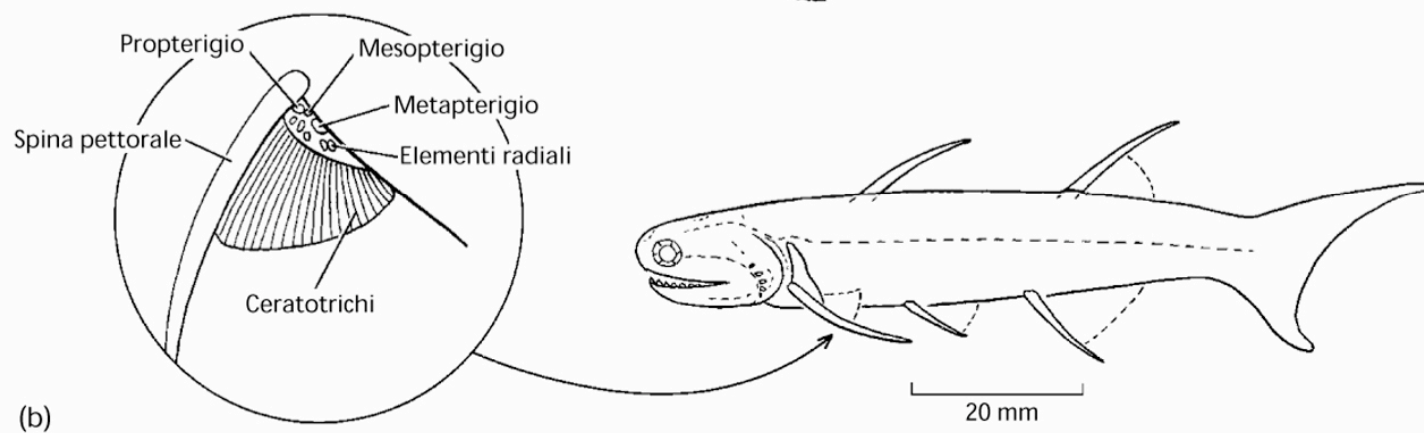
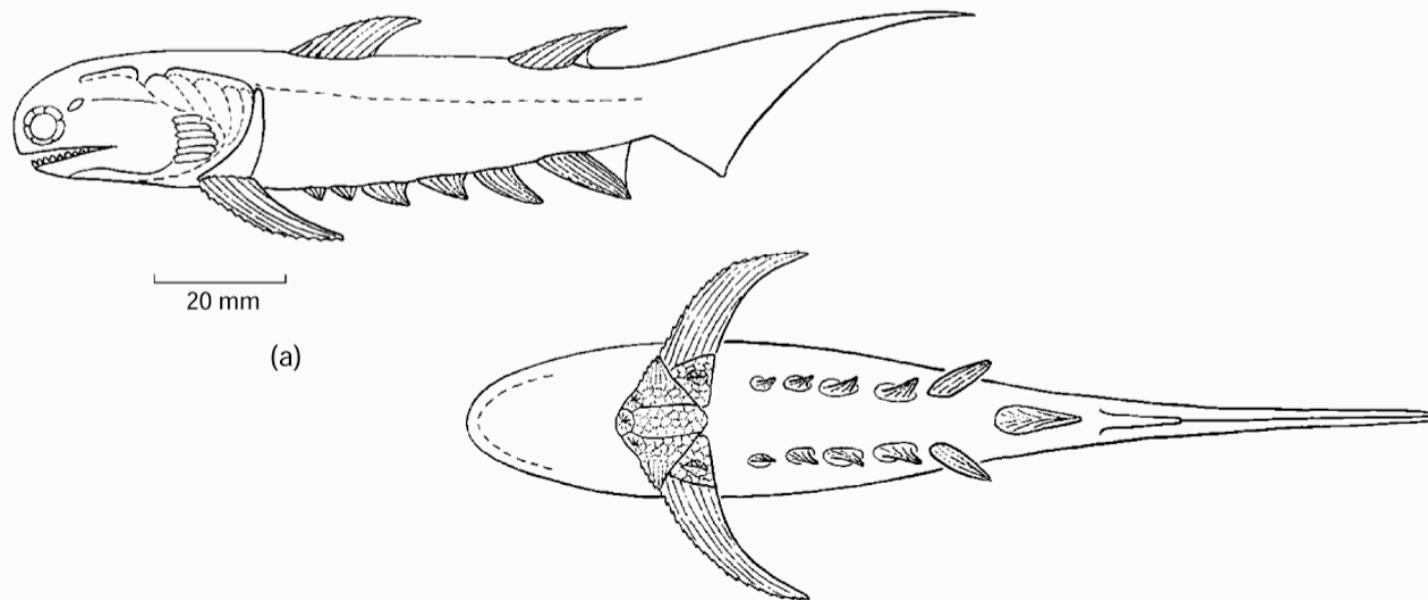
ACANTODI (PESCI SPINOSI)

- PRIMI GNATOSTOMI COMPARSI
- PICCOLI, DI ACQUA DOLCE
- PINNE PARI SORRETTE DA SPINE
- CODA ETEROCERCA
- VERTEBRE CON ARCHI NEURALI ED EMALI
MA PRIVE DI CENTRO
- ALIMENTAZIONE PLANCTONICA
(SPESSO PRIVI DI DENTI)



CARATTERI IN COMUNE CON GLI OSTEITTI (TELEOSTOMI)

- RAGGI BRANCHIOSTEGI
- ARTICOLAZIONE IOSTILICA
- OPERCOLO DERMICO OSSIFICATO



CONDROSTEI

ACTINOPTERIGI

OLOSTEI

OSTEITTI

TELEOSTEI

SARCOPTERIGI

CARATTERISTICHE PRINCIPALI DEGLI OSTEITTI

- SCHELETRO ALMENO PARZIALMENTE OSSEO
- BRANCIE (5 O MENO) CON OPERCOLO OSSEO
- OSSO PREMASCELLARE E MASCELLARE
- POLMONI O VESCICA NATATORIA DI NORMA PRESENTI
- SCAGLIE DERMICHE DI TIPO: COSMOIDE, GANOIDE ED ELASMOIDE

CLASSIFICAZIONE PIU' RECENTE DEGLI OSTEITTI ACTINOPTERIGI

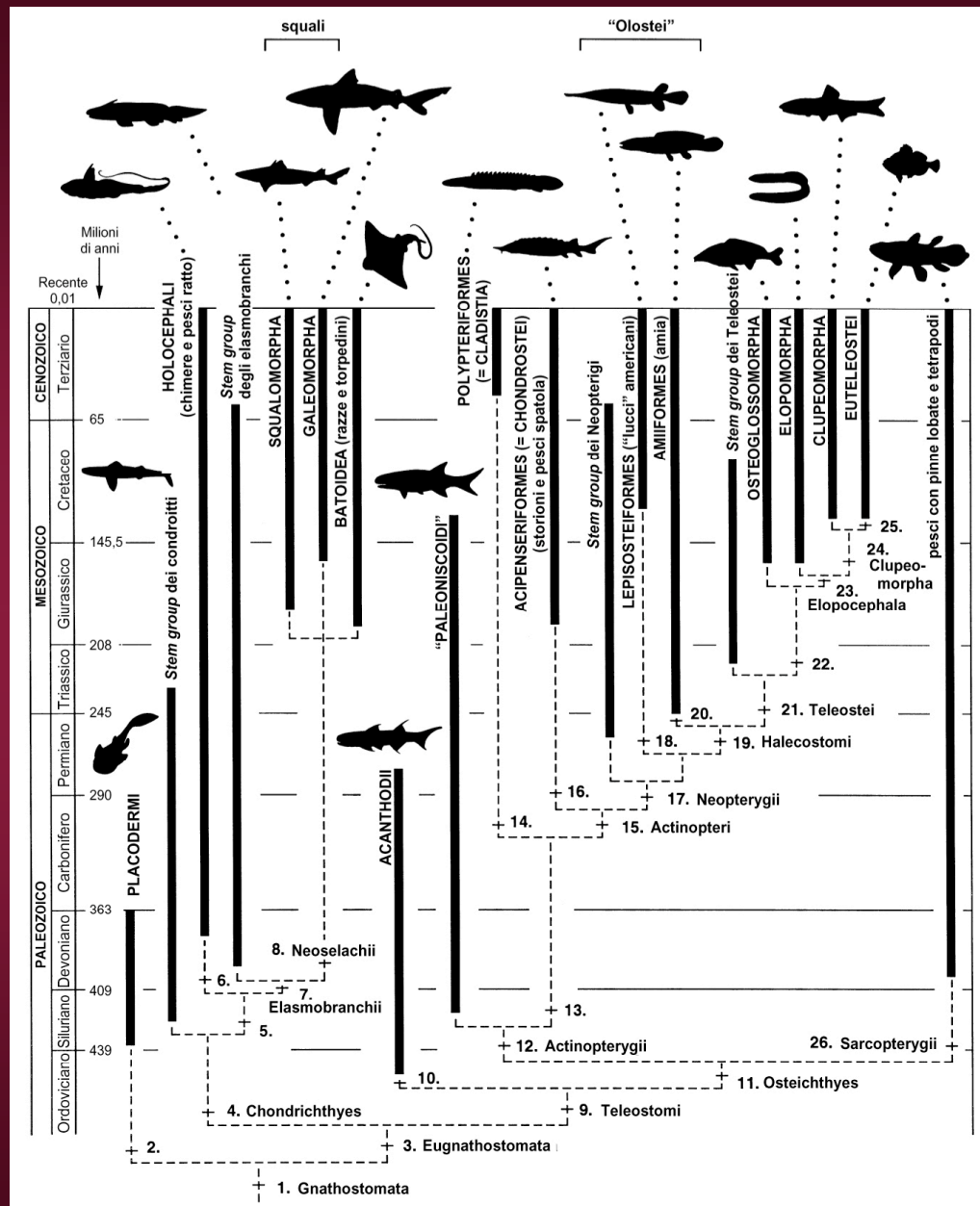
- CLADISTI (POLIPTERIDI)

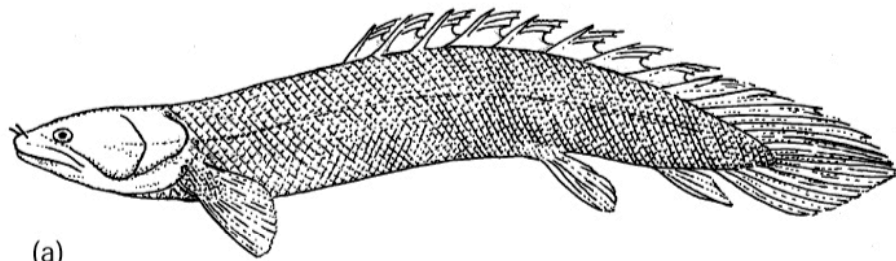
- CONDROSTEI (ACIPENSERIFORMI)

-NEOPTERIGI

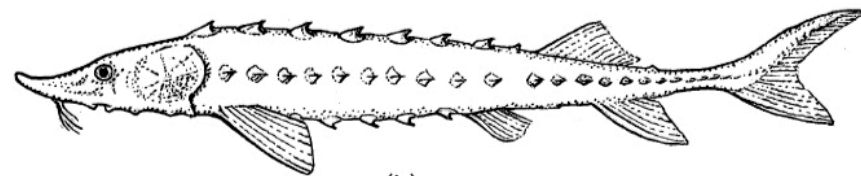
OLOSTEI

TELEOSTEI

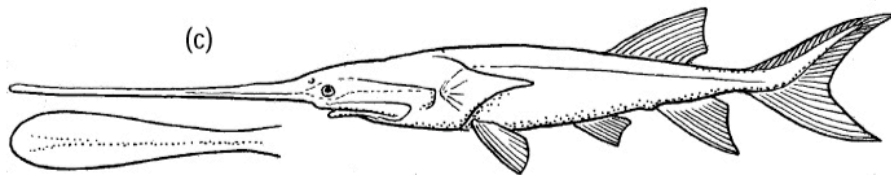




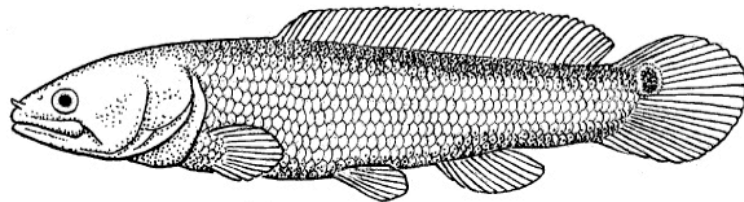
(a)



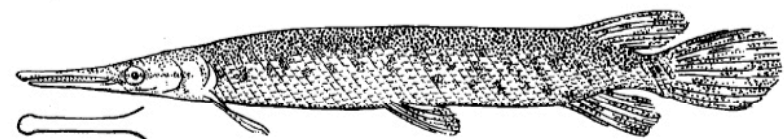
(b)



(c)



(e)



(d)



Classificazione e distribuzione geografica degli osteitti, i pesci ossei*

Osteichthyes (pesci ossei), circa 24 000 specie viventi conosciute

Sarcopterygii (pesci con pinna carnosa), 7 specie viventi

Dipnoi (pesci polmonati), 6 specie viventi; emisfero australe, acque dolci

“Ripidistia”[†]

Actinistia [Coelacanthiformes], 2 specie viventi; isole Comore e Sulawesi, acque marine profonde

Actinopterygii (pesci con pinna raggiata), 20 850 specie viventi

“Paleoniscoidi”[†]

Polipteriformes [cladistia] (biscir), 11 specie viventi; africani, acque dolci

Acipenseriformes (acipenseridi e poliodontidi), 25 specie viventi; emisfero boreale, acque marine costiere e acque dolci

Neopterygii[‡], 20 814 specie viventi (il numero di specie viventi è una stima prudente)

Lepisosteiformes [Ginglymodi] (lepisosteidi), 7 specie viventi; America settentrionale e centrale, acque dolci e salmastre

Amiiformes (amiidi), 1 specie vivente; America settentrionale, acque dolci

Teleostei

Osteoglossomorpha (osteoglossidi), 206 specie viventi; acque dolci tropicali di tutto il mondo

Elopomorpha (megalopidi e anguillidi), 633 specie viventi; cosmopoliti, principalmente marini

Clupeomorpha (engraulidi e clupeidi), 331 specie viventi; cosmopoliti, principalmente marini

Euteleostei, 19 636 specie viventi

Ostariophysi (siluridi e ciprinidi), 6050 specie viventi, cosmopoliti, acque dolci

“Protacanthopterygii” (salmonidi e loro parenti), 320 specie viventi, regioni temperate dell'emisfero australe e boreale, acque dolci

Scopelomorpha = “Myctophiformes” (mictofidi e loro parenti), 677 specie viventi, cosmopoliti, mesopelagici (media profondità), marini

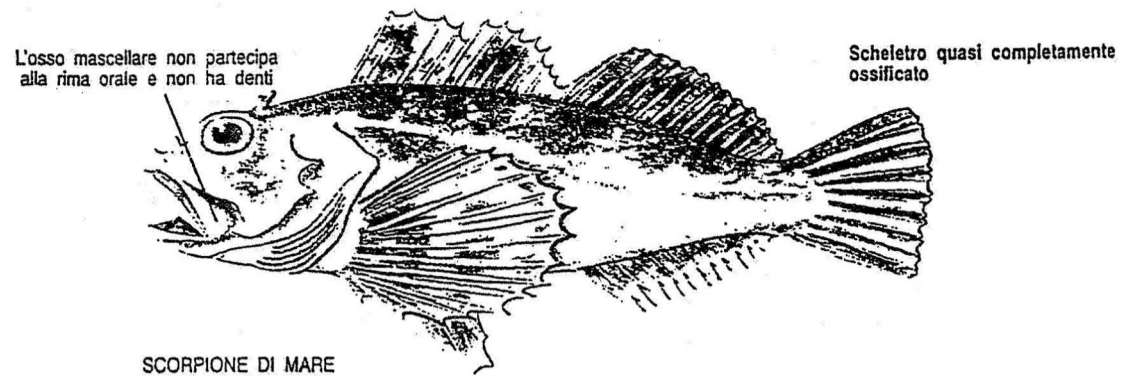
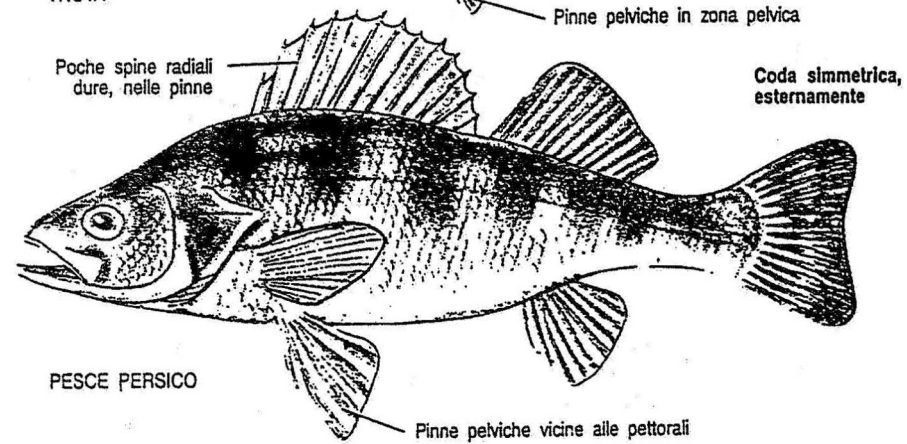
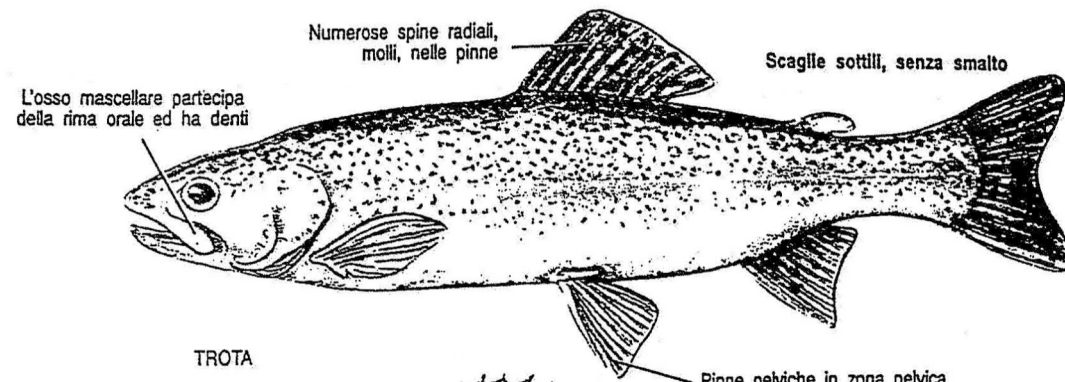
Paracanthopterygii (gadidi e lofidi), 1160 specie viventi; emisfero boreale, principalmente marini

Acanthopterygii (pesci raggiati spinosi), 10 349 specie viventi, includono gli Atherinomorpha (aterinidi), 1080 specie viventi; cosmopoliti, di superficie

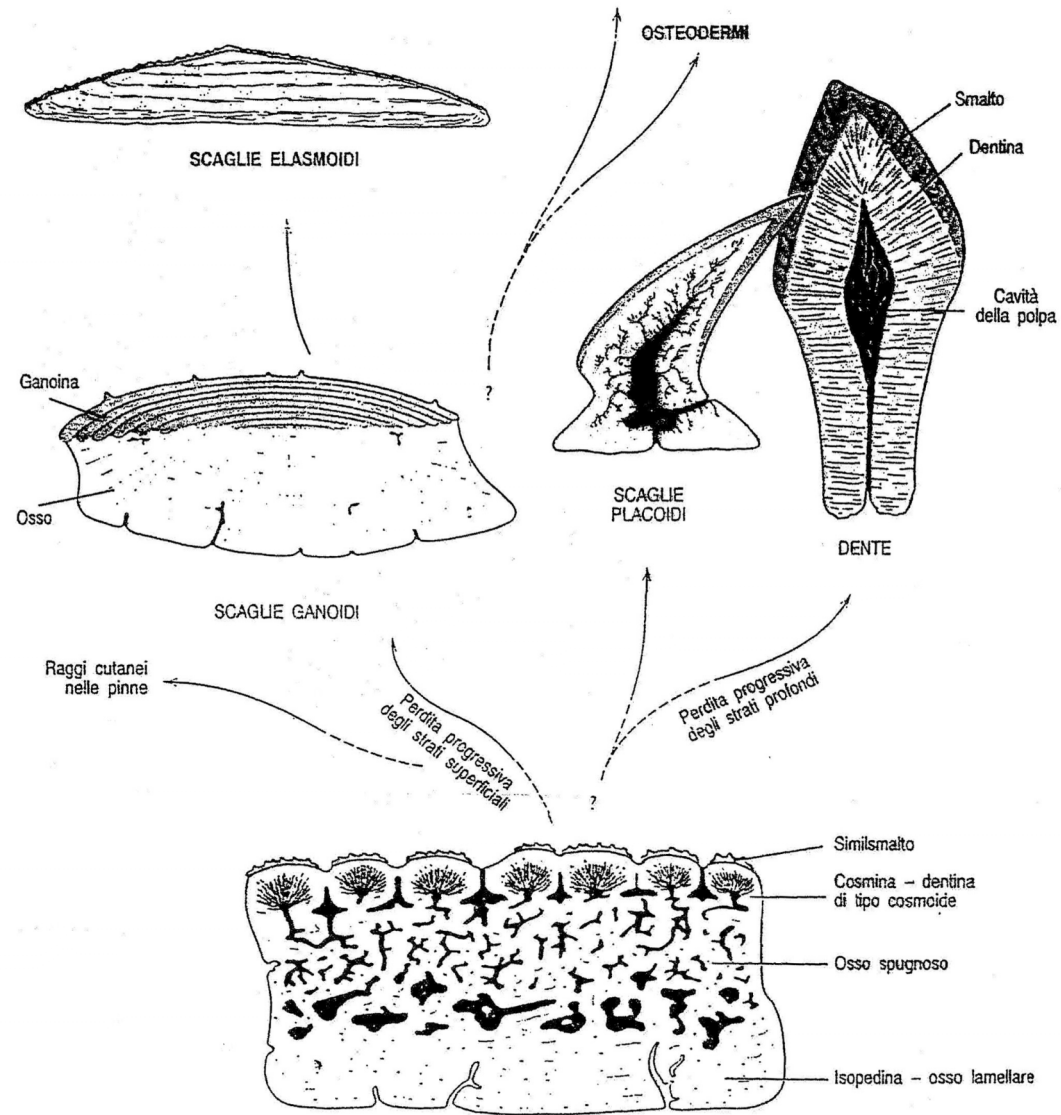
* I taxa con l'asterisco sono fittizi e le relazioni reciproche sono sconosciute.

[†] Estinto.

[‡] Le suddivisioni dei Nepterygii variano molto a seconda degli autori, così come il numero delle specie viventi rivendicati per i taxa più grandi.



OSSA DA MEMBRANA (ALLOSTOSA) DELLA TESTA,
DERMASCHELETRO E CINTO PETTORALE



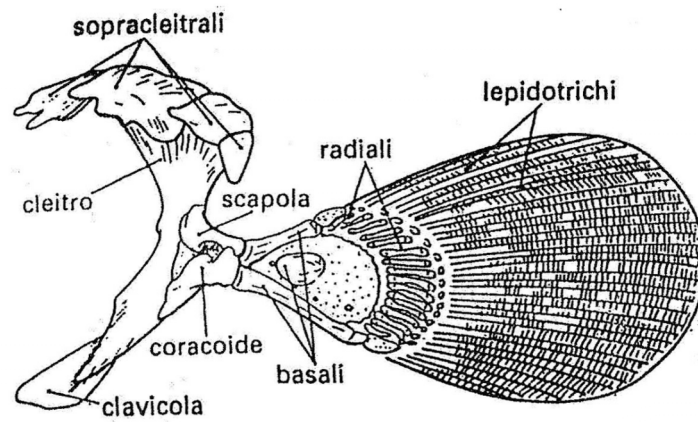


Fig. 4.38.

POLYPTERUS

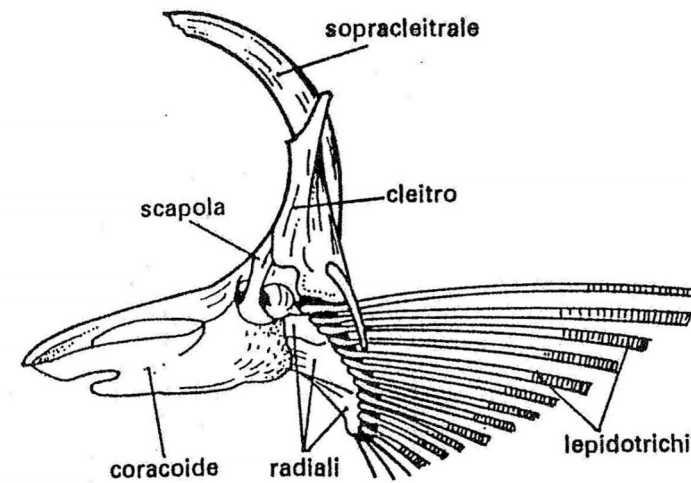
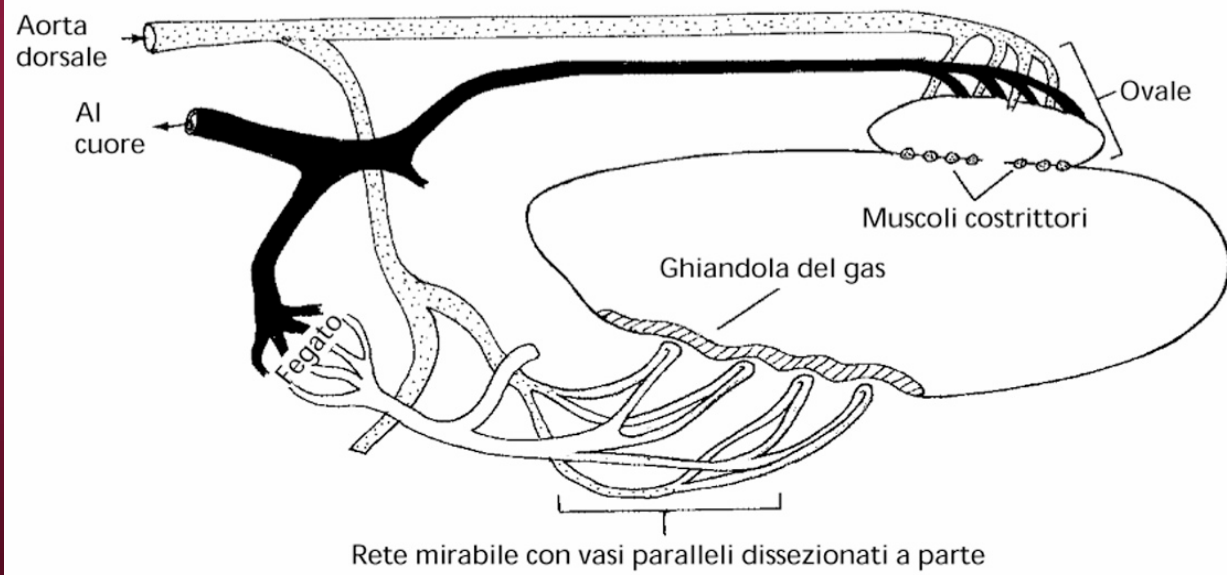
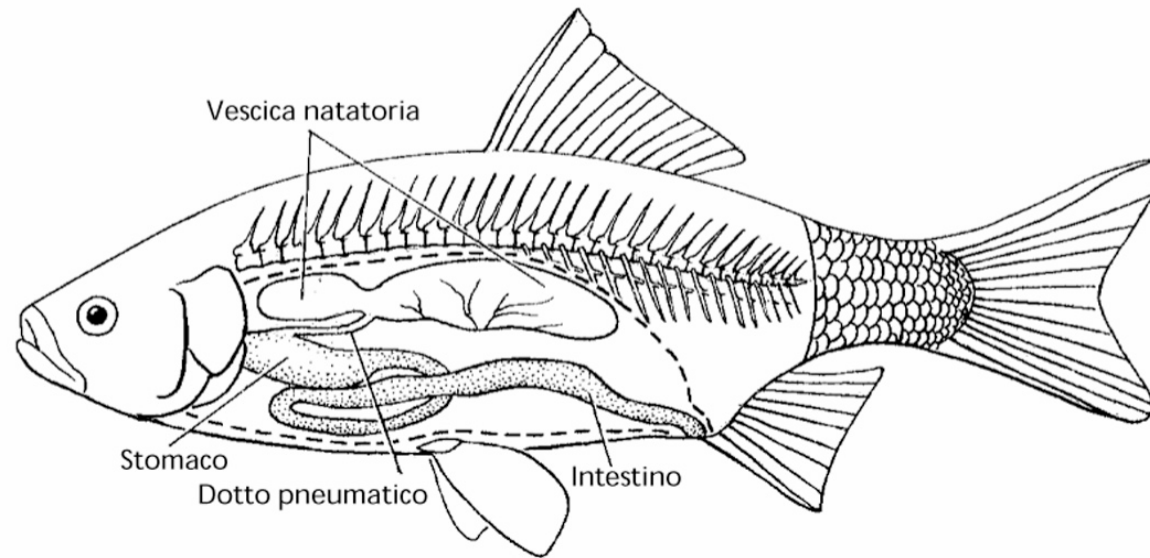
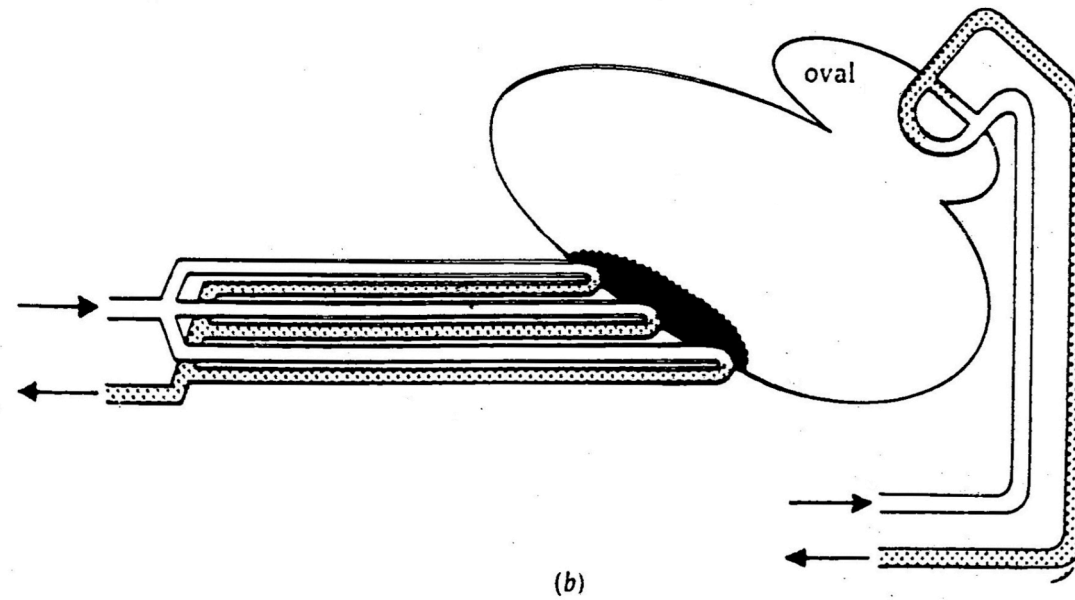
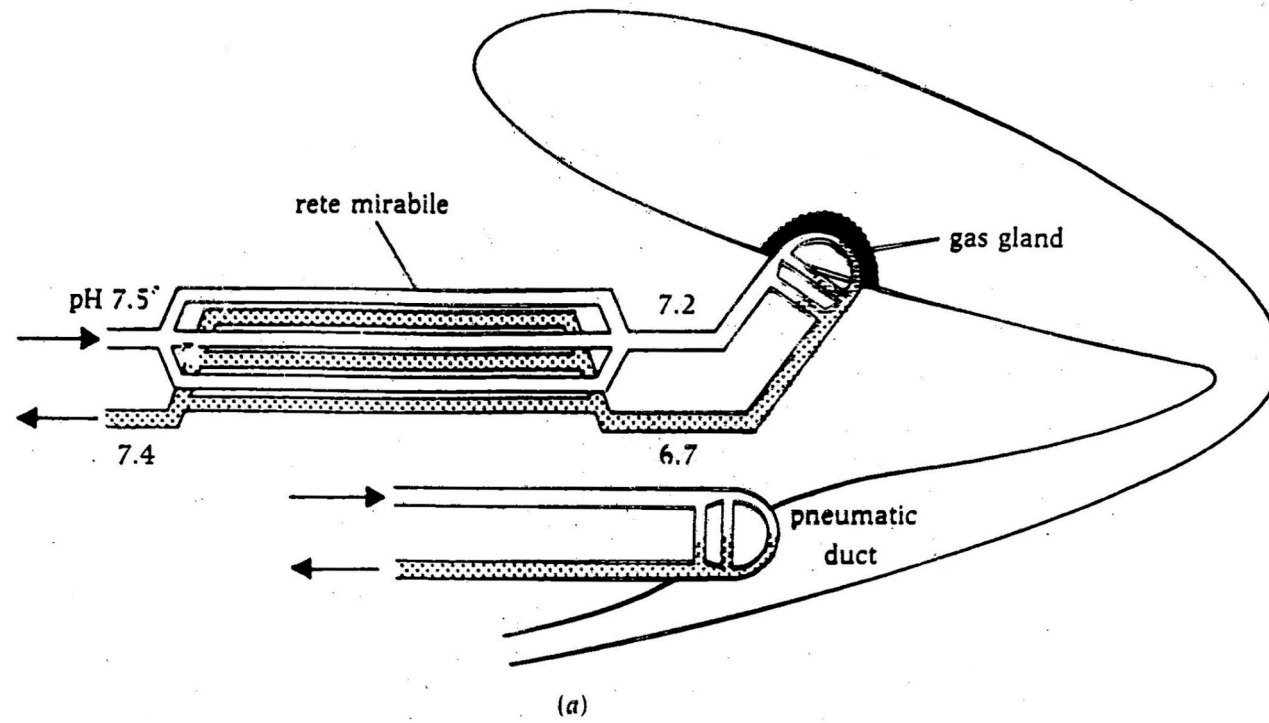
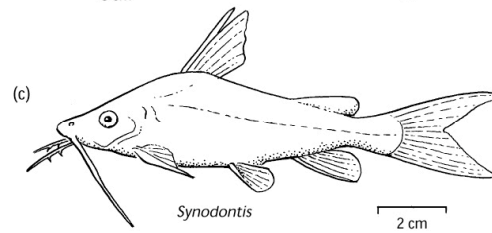
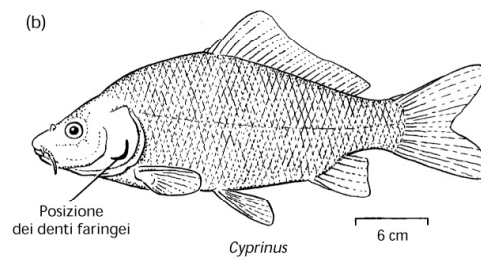
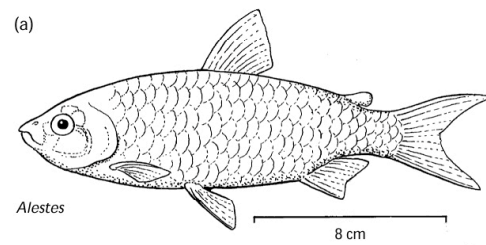
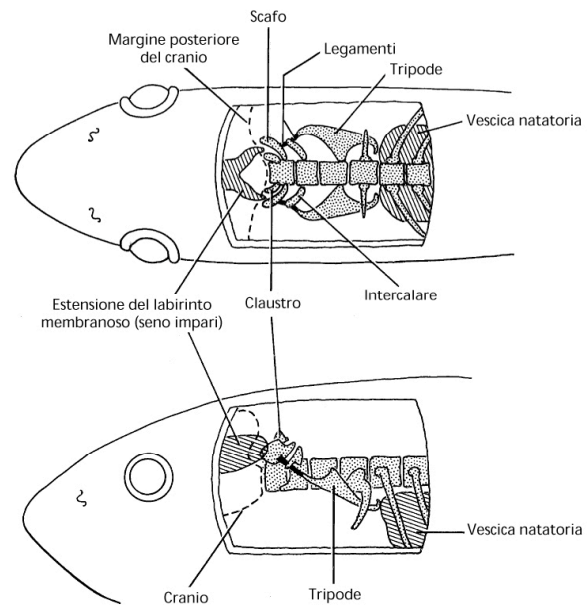


Fig. 4.39.

TELEOSTEO







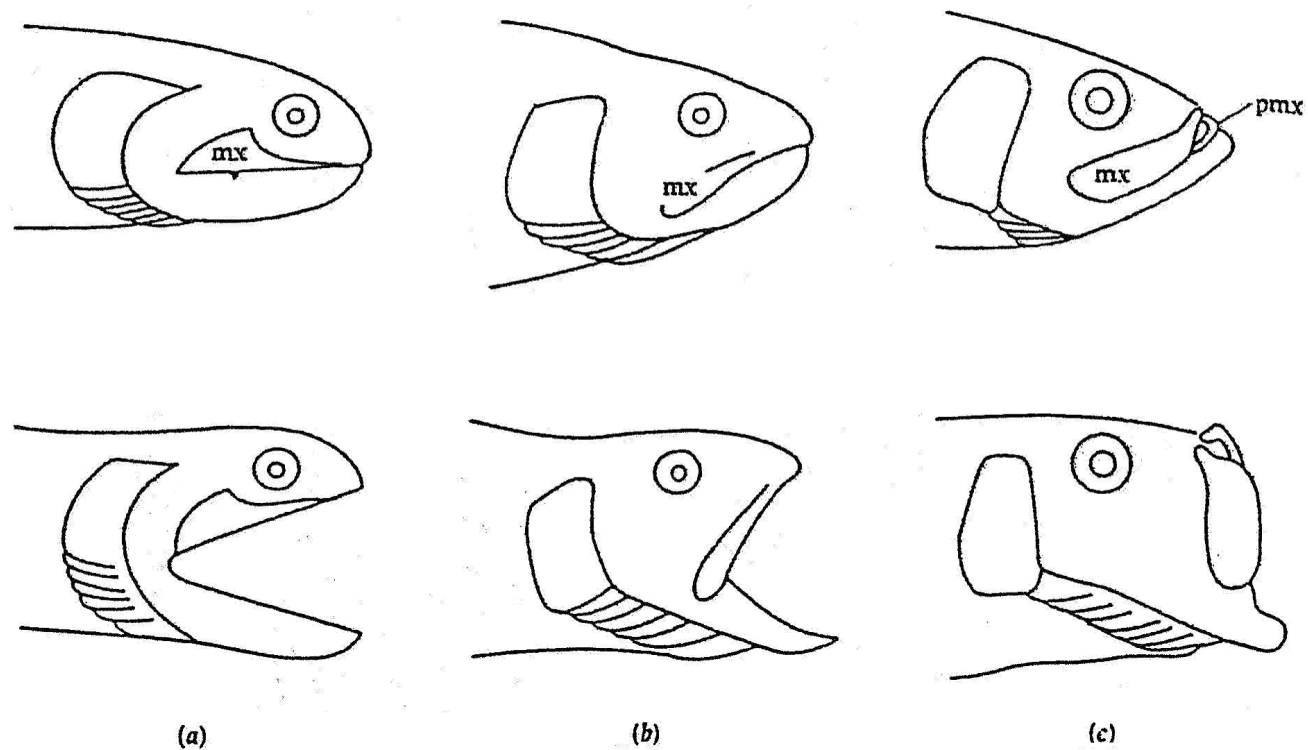
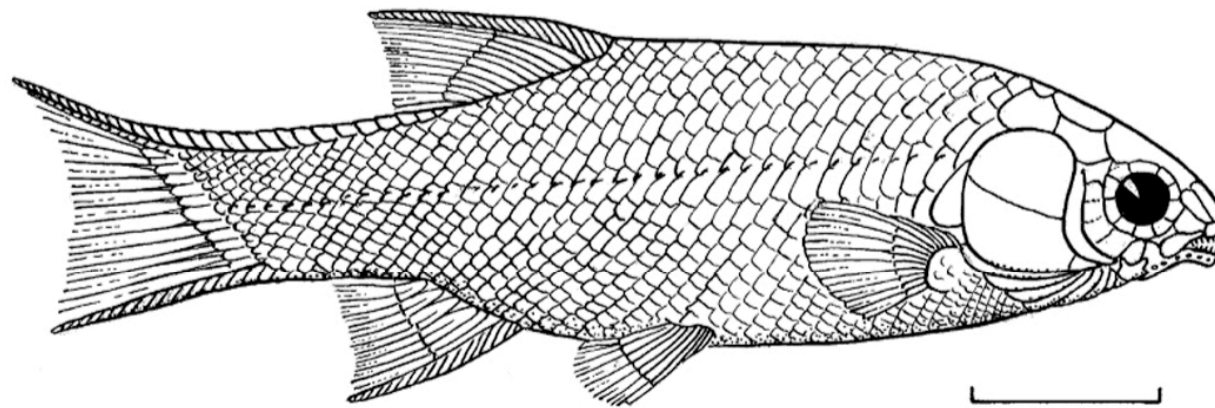
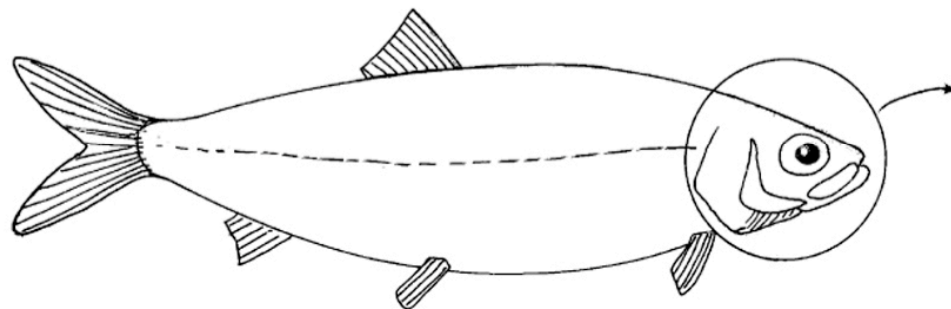
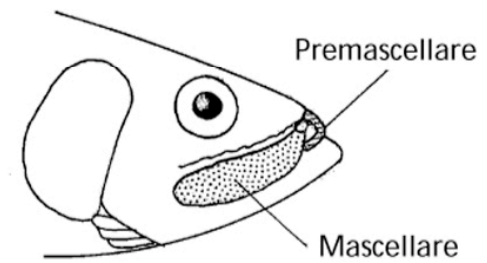


Fig. 14.7. Sketches of (a) a palaeoniscoid, (b) a typical holostean or primitive teleost, and (c) a herring (*Clupea*), showing the mouth closed and open. *pmx*, premaxilla; *mx*, maxilla.

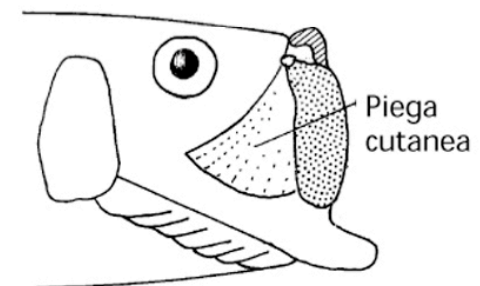


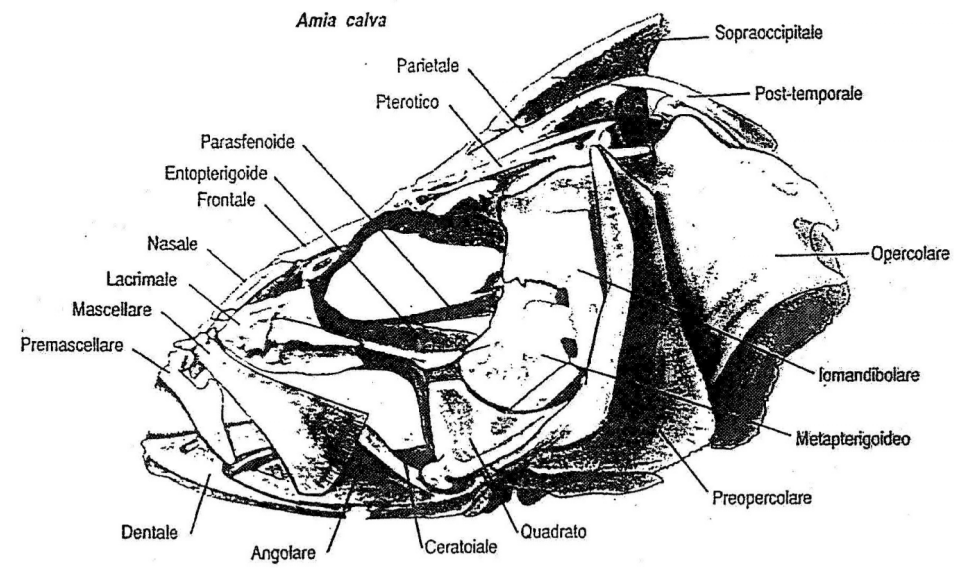
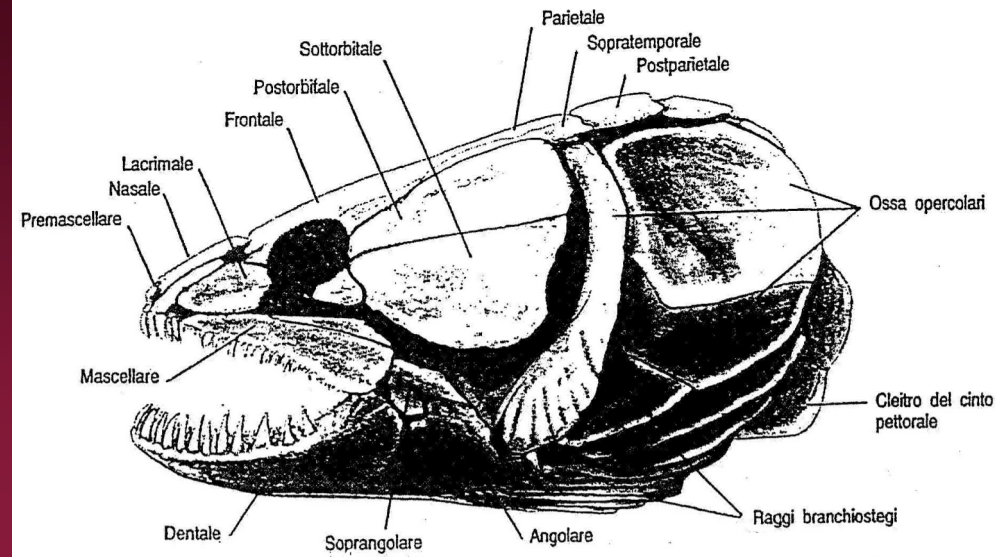
(a)

10 mm

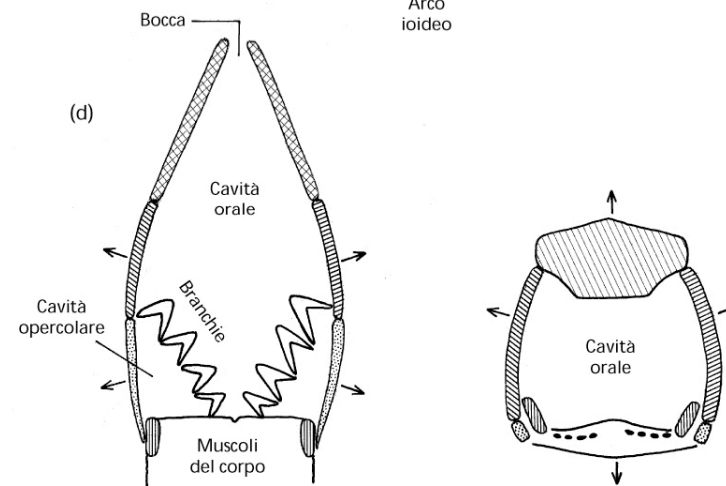
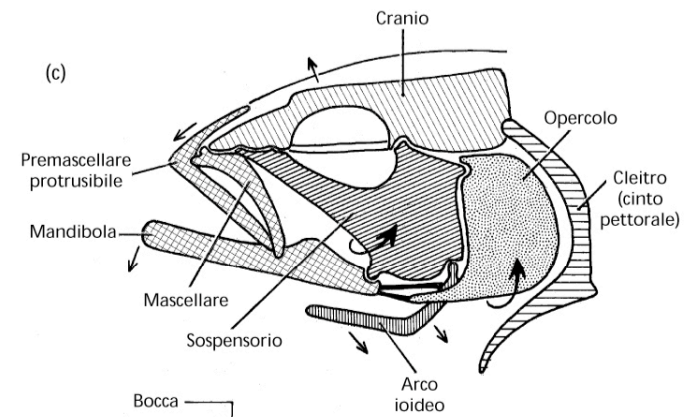
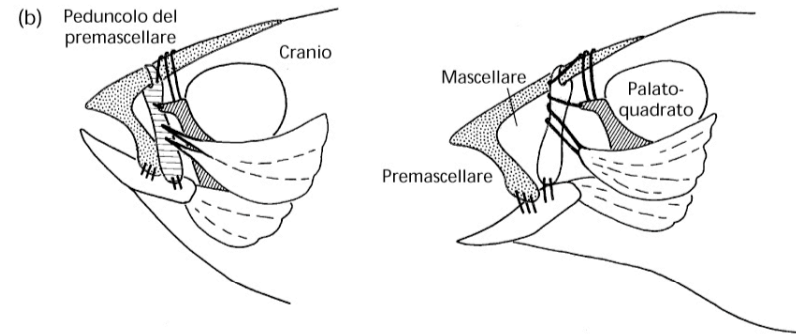
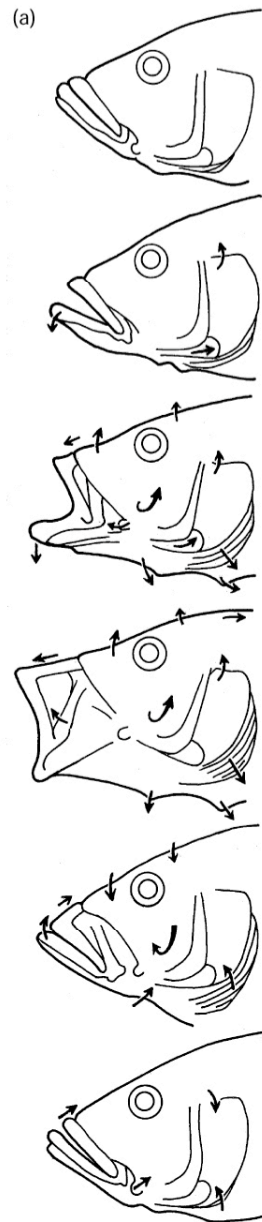


(b)





Roccus saxatilis



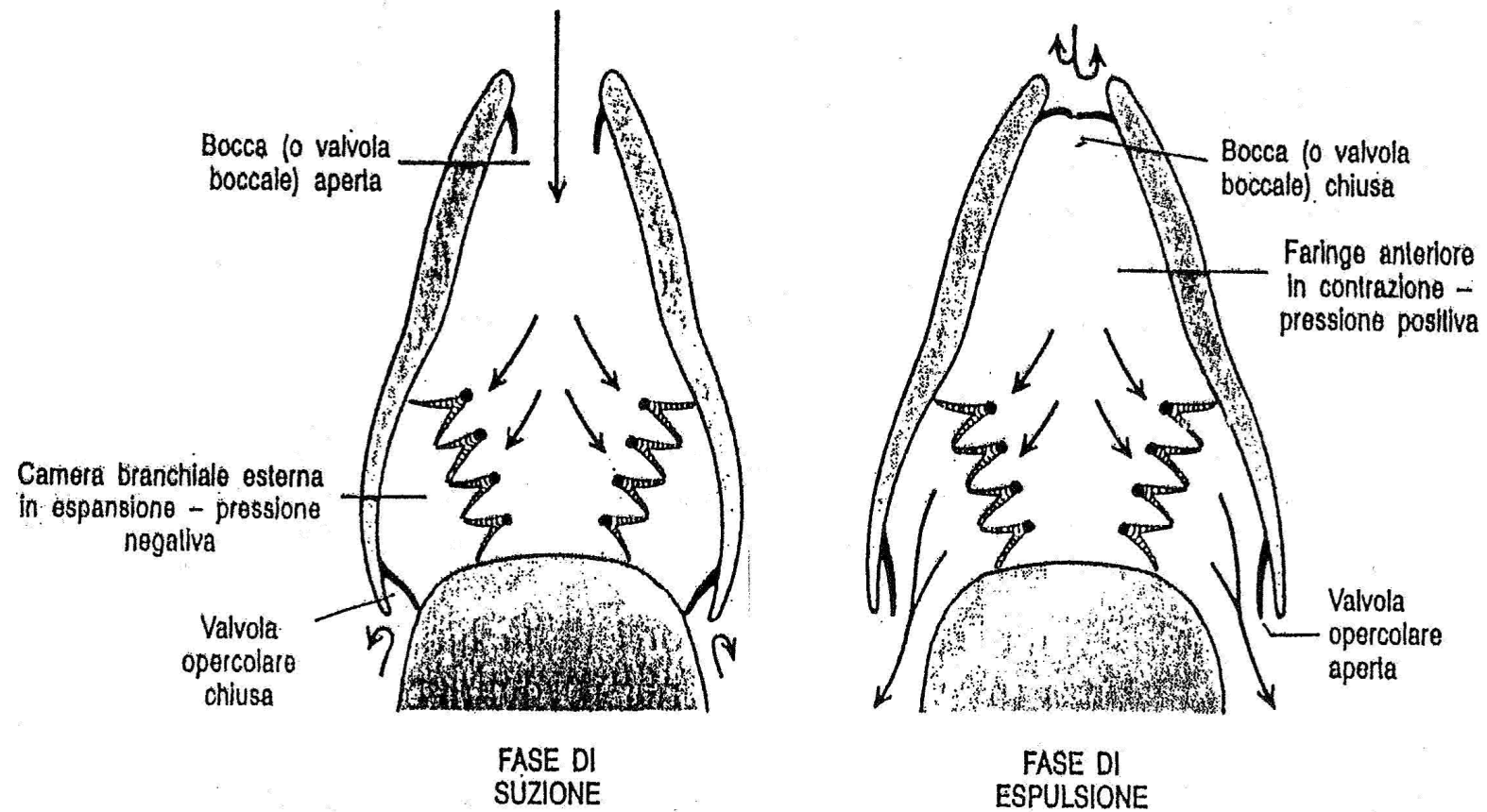


Figura 13.6. Irrorazione delle branchie nei teleostei. Sezioni frontali.

