Pseudorhombus sp. (පතාමැඩියා / Flat fish)

• **Body shape:** Oval-shaped dorsoventrally flattened body

• **Mouth type**: Terminal mouth

• **Teeth type**: Canine teeth

• **Feeding habit :** Bottom-feeding carnivore

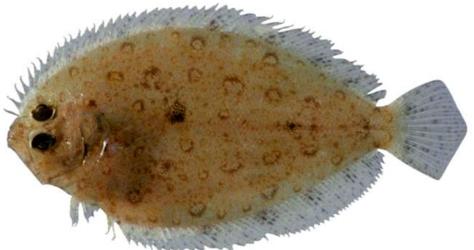
• **Habitat :** Shallow muddy-sandy or sandy bottoms from coastal areas to river mouths

• Scale type: Ctenoid scales on ocular side and cycloid scales on blind side

• Specification:

- ✓ Both eyes are located in one side of the body
- ✓ No pelvic fins and have pectoral, anal and caudal fins
- ✓ The continues dorsal fin starts in front of its upper eye
- ✓ Dorsal and anal fin not connected with caudal fin





Pseudorhombus sp. (පතාමැඩියා / Flat fish)



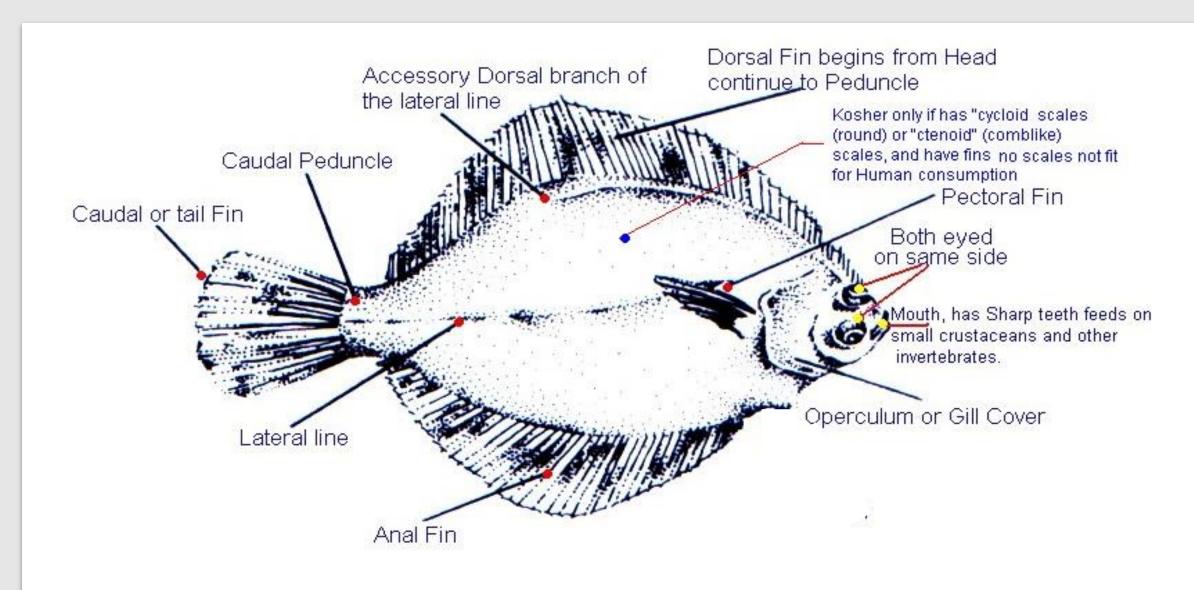


Figure 01: Labelled diagram of *Pseudorhombus* sp.

Mystus sp. (අභූලුවා / Catfish)

• Body shape: Moderately elongated; abdomen rounded

• **Mouth type :** Subterminal mouth

• **Teeth type**: Villiform teeth

• **Feeding habit :** Omnivore and predatory

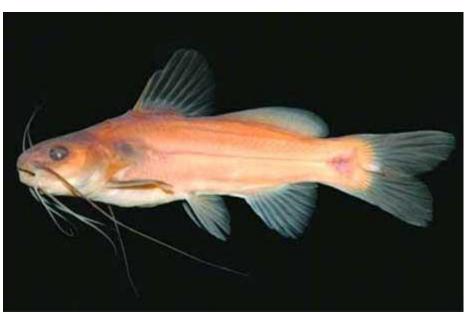
• **Habitat**: Fresh water habitat

• Scale type: Ctenoid scales

• Specification:

- ✓ 4 barbels pairs: 1 each of nasal and maxillary, 2 of mandibular, maxillary barbel extended beyond head
- ✓ Pectoral fins with a 1 spine and 7 rays
- ✓ Adipose dorsal fin present
- ✓ Caudal fin forked, lobed unequal
- ✓ Do not have scales
- ✓ Ornamental and food value.

Kingdom: Animalia
Phylum: Chordata
Class: Actinopterygii
Order: Siluriformes



Mystus sp. (අභූලවා / Catfish)

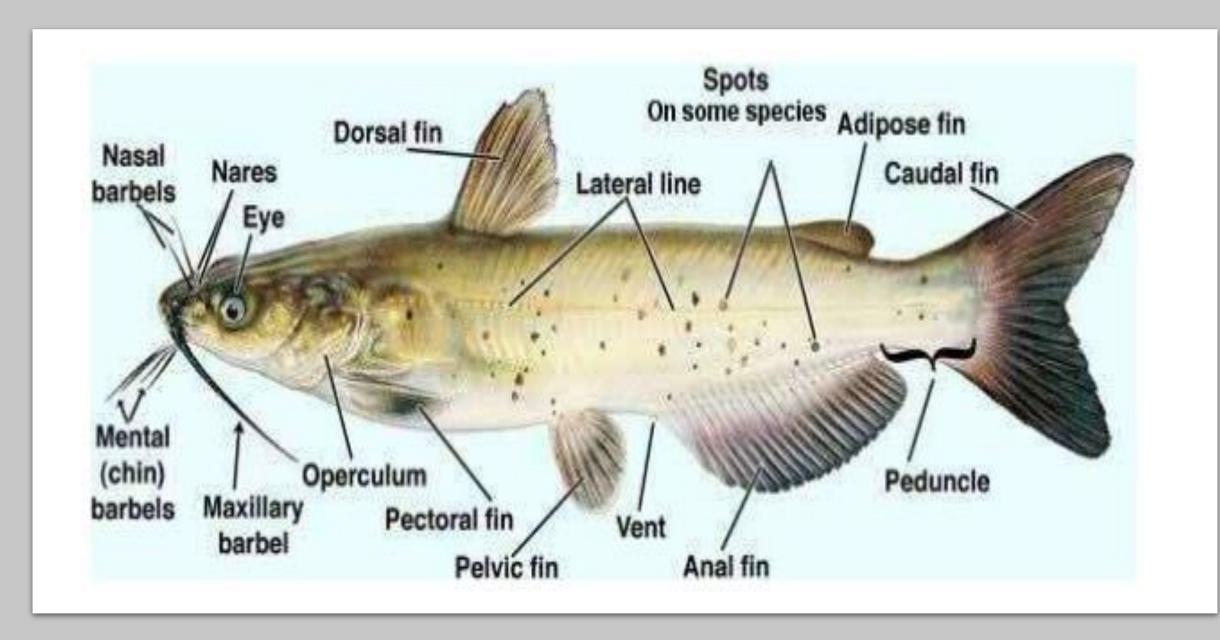


Figure 02: Labelled diagram of *Mystus* sp.

Cheilopogon sp. (පියාමැස්සා / Flying fish)

• Body shape: Elongated cylindrical body

• Mouth type: Superior mouth, small, short, blunt, lower jaw slightly longer than top jaw

• **Teeth type**: Palatine teeth

• **Feeding habit :** Omnivore

• **Habitat**: Surface pelagic, offshore

• Scale type : Ctenoid

• Specification:

✓ Have wing like pectoral fins

✓ Capable of leaping out of the water and gliding for long distances above the surface





Cheilopogon sp. (පියාමැස්සා / Flying fish)



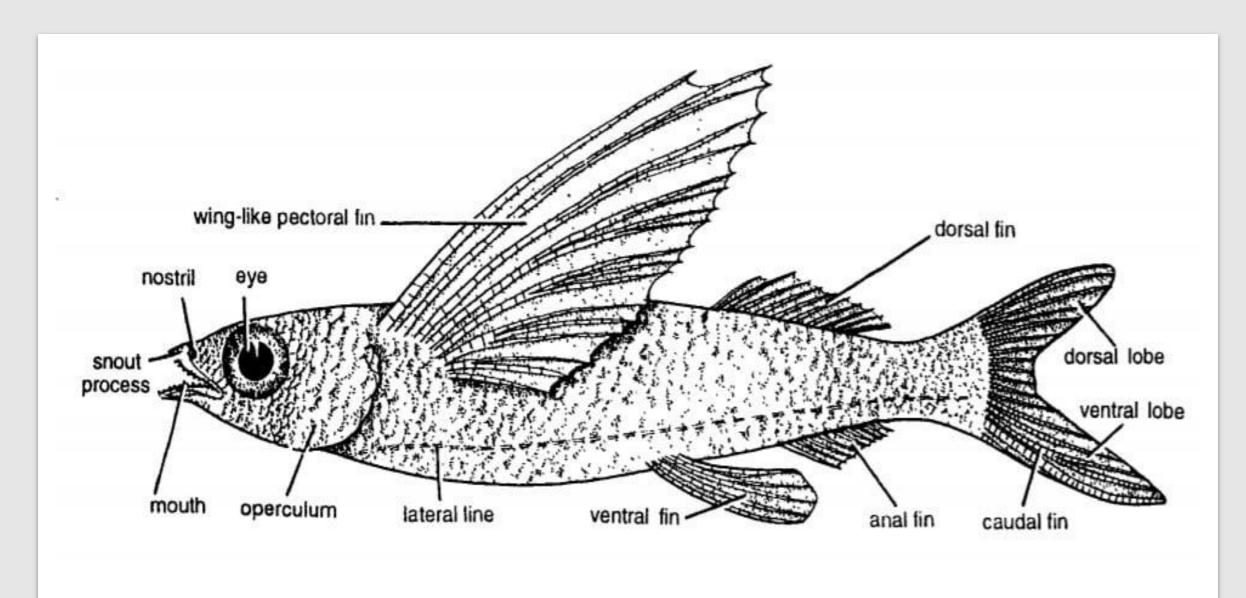


Figure 03: Labelled diagram of Cheilopogon sp.

Scatphagus sp. (ඉලක්කයා) / Spotted scat

- **Body shape :** Pentagonal shape. Strongly laterally compressed body, Dorsal head profile steep
- **Mouth type:** Terminal mouth, Mouth small, horizontal, not protractile
- **Teeth type :** Villiform, in several rows on jaws
- **Feeding habit :** Carnivore
- Habitat: Marine; freshwater; brackish; reef-associated
- **Scale type**: Ctenoid
- Specification :
 - ✓ Dark spots over the body
 - ✓ Continues dorsal fin with rays and spines separated by a deep notch

Kingdom:	<u>Animalia</u>
Phylum:	<u>Chordata</u>
Class:	Actinopterygii
Order:	<u>Perciformes</u>



Scatphagus sp. (ඉලත්තයා) / Spotted scat

Chirocentrus sp. (කටුවල්ලා) / Wolf herring

• **Body shape**: Elongated and cylindrical body

• **Mouth type**: Superior mouth

• **Teeth type**: Canine teeth

• Feeding habit : Carnivore

• **Habitat**: Marine and brackish or estuarine waters

• Scale type : Cycloid

• Specification:

✓ Black marking on the upper part of the dorsal fin

✓ Food fish





Chirocentrus sp. (කටුවල්ලා) / Wolf herring

Lepturacanthus savala (සාවාලයා) / Hairtail fish

• **Body shape :** Extremely elongate, compressed and ribbon like body

• **Mouth type**: Terminal mouth

• **Teeth type**: Strong canine teeth

• **Feeding habit :** Carnivore

• **Habitat**: Benthopelagic, in coastal waters

• **Scale type**: No scales

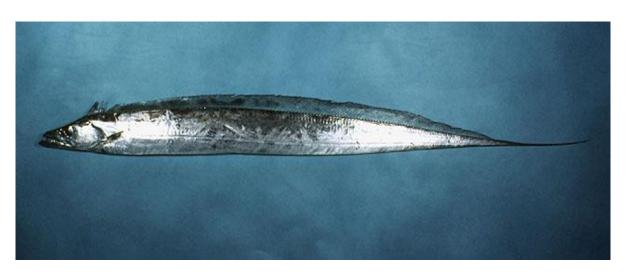
• Specification :

✓ Pelvic and caudal fins absent

✓ Anal fin reduced to spinules

✓ Dorsal fin is continuous and begins shortly behind eye





Lepturacanthus savala (සාවාලයා) / Hairtail fish

Euthynnus sp. (ඇටවල්ලා) / Mackerel tuna

• **Body shape:** Somewhat elongated body

• **Mouth type**: Terminal mouth

• **Teeth type**: Canine teeth

• **Feeding habit :** Carnivore

• **Habitat**: Near-shore continental shelf areas

• Scale type: Cycloid

• Specification:

- ✓ Upper body green blue with darker stripes
- ✓ Lower body silver with 3 5 dark spots near pectoral fins
- ✓ Short pectoral fins
- ✓ Dark caudal keel and finlets





Euthynnus sp. (ඇටවල්ලා) / Mackerel tuna

Chanos chanos (වේක්කයා) / Milk fish

• **Body shape :** Fusiform, elongated, moderately compressed, smooth, and streamlined body

• **Mouth type**: Terminal small mouth

• **Teeth type**: Toothless

• Feeding habit: Planktivory

• **Habitat :** Tropical offshore marine waters around islands and along continental shelves

• **Scale type**: Cycloid

• Specification:

- ✓ Large deeply forked caudal fin
- ✓ Ideal fish which has less deviations
- ✓ Important seafood verity





Chanos chanos (වේක්කයා) / Milk fish

Hemiramphus sp. (මමාරැල්ලා) / Halfbeak fish

• **Body shape**: Cylindrical elongated body

• Mouth type: Halfbeak shape mouth. Lower jaw is elongated

• **Teeth type**: Canine teeth

• **Feeding habit :** Omnivore

• **Habitat**: Surface of warm temperate and tropical sea

• Scale type : Cycloid

• Specification :

- ✓ Reef-associated marine species
- ✓ Valued commercial fish in tropical countries both dried salted and fresh forms.





Hemiramphus sp. (මොරල්ලා) / Halfbeak fish

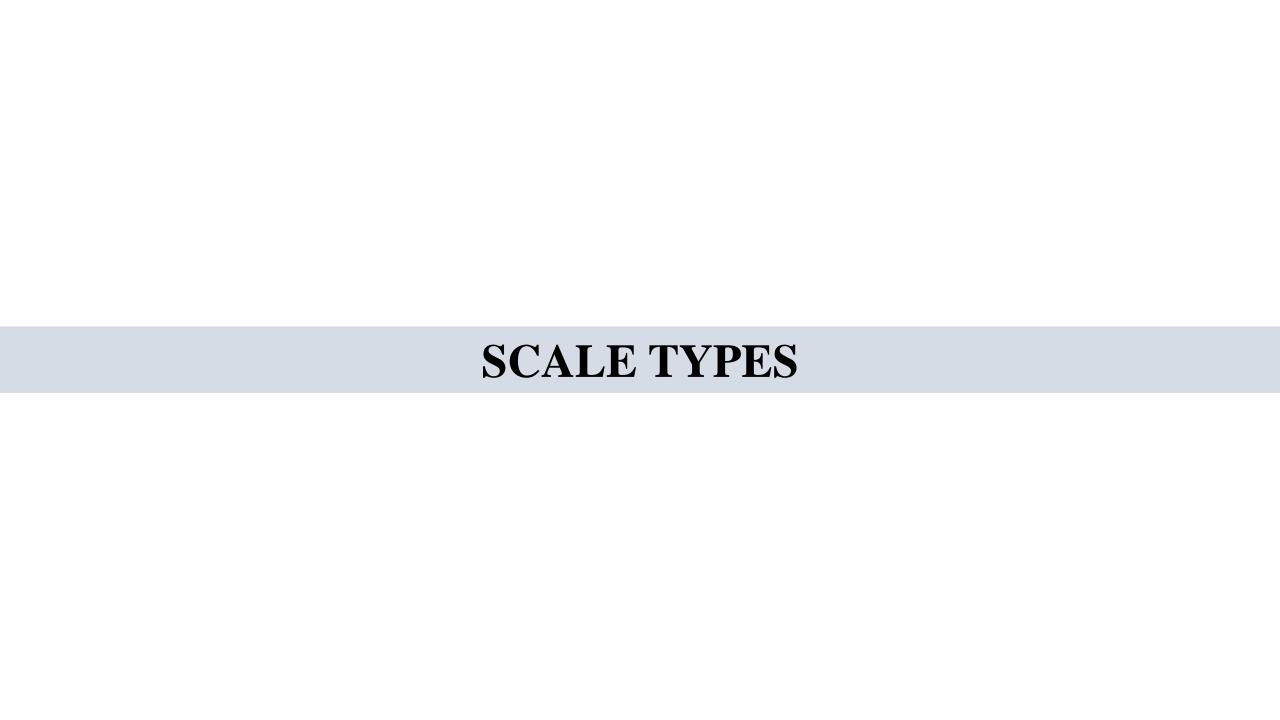
Parupeneus sp. (නගරයා / Goat fish)

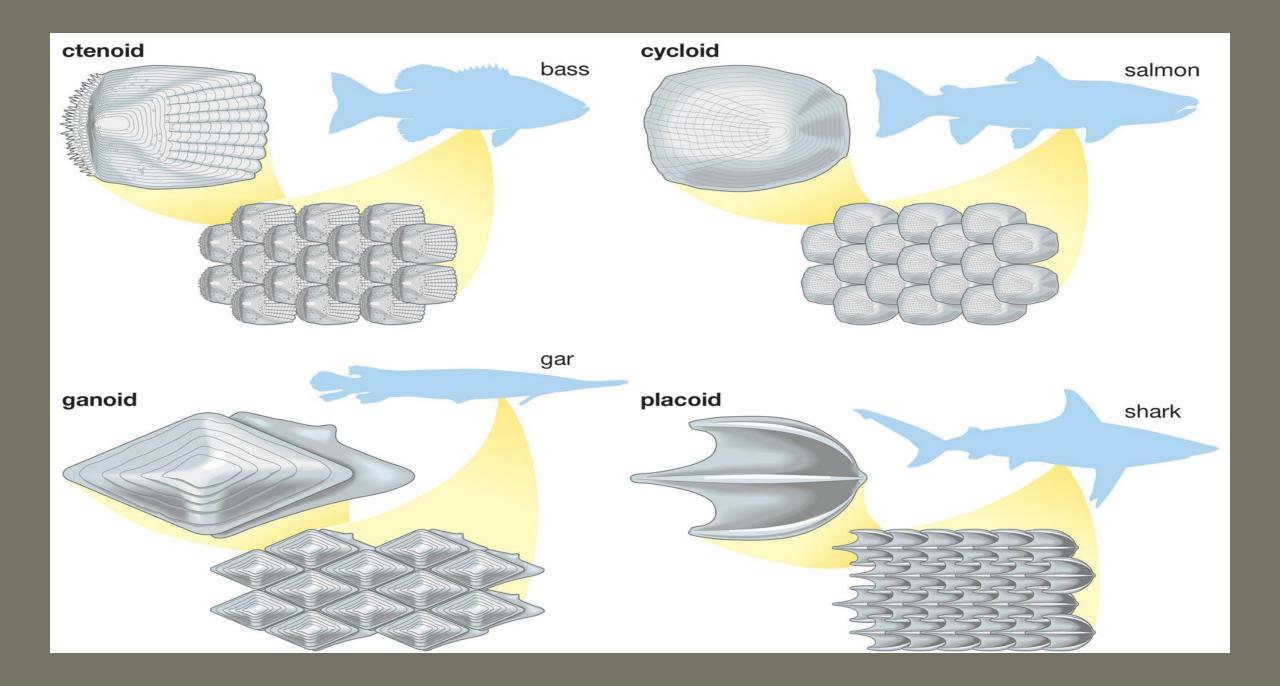
- **Body shape :** Moderately elongate, slightly compressed
- body; ventral side of head and body nearly flat
- **Mouth type:** Small triangular mouth, ventral on head, and protrusible, the upper jaw slightly protruding
- **Teeth type**: Teeth conical
- Feeding habit: benthic carnivore
- **Habitat**: Native to the Indian and Pacific oceans
- **Scale type** : Cycloid
- Specification :
 - ✓ Two separated dorsal fins
 - ✓ Lateral line organs are absent

Kingdom:	<u>Animalia</u>
Phylum:	<u>Chordata</u>
Class:	<u>Actinopterygii</u>
Order:	<u>Perciformes</u>



Parupeneus sp. (නගරයා / Goat fish)





Ganoid scale type

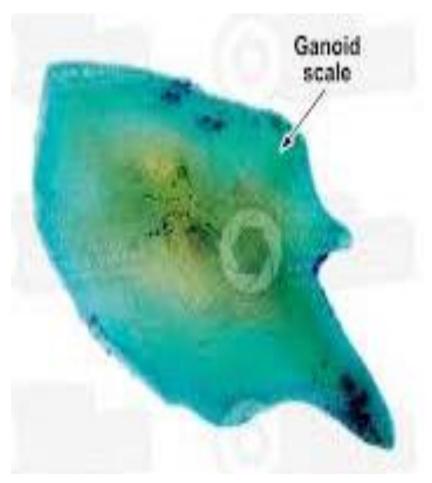


Figure 04: Ganoid scale

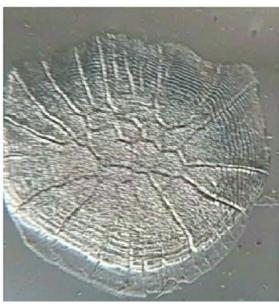
- Ganoid scales are evolutionary older style.
- Usually rhomboid in shape and have articulating peg and socket joints between them
- They are found on Bichirs, Gar-fish, Sturgeons and Reed fish.

Cycloid and Ctenoid scale types





- Cycloid scales have smooth surfaces and edges
- Herrings, minnows and trout all have cycloid scales





- Ctenoid scales have sharp and rough surfaces and edges that stick out
- Perch have ctenoid scales

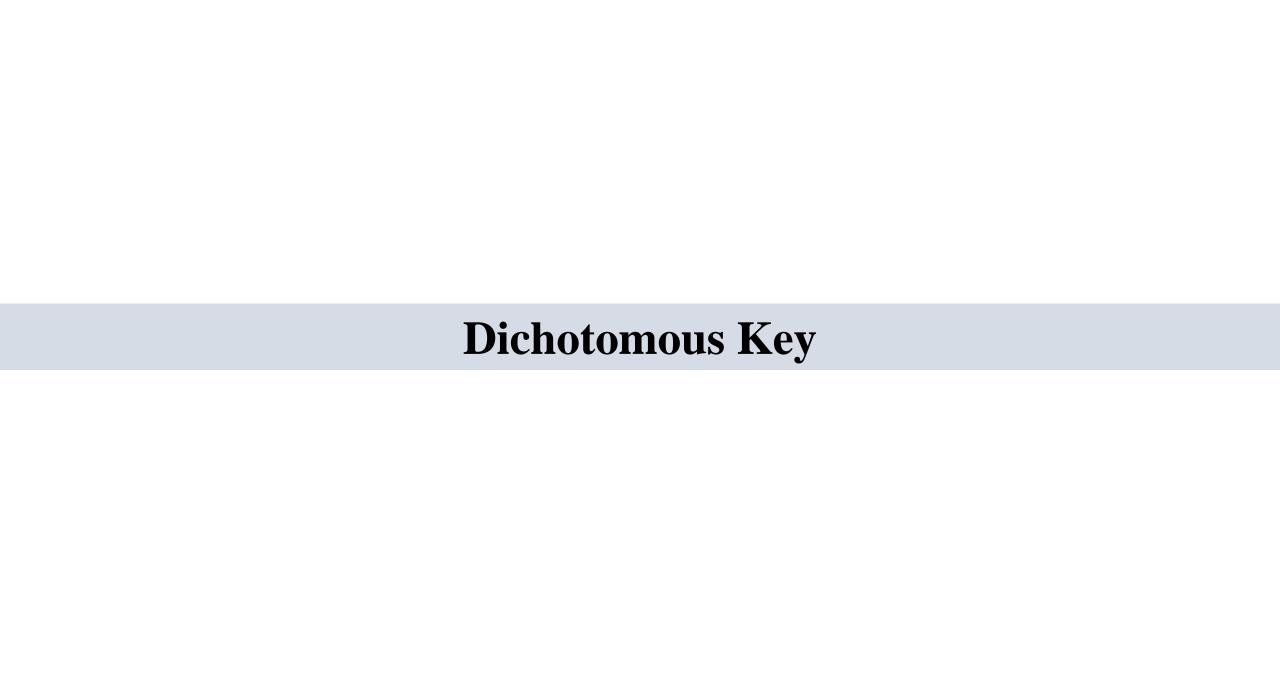
Figure 05: Cycloid and ctenoid scale types

Placoid scale type



Figure 06: Placoid scale type

- Scales evolved separately in the cartilaginous fish and in bony fish.
- The scales of sharks and rays are made of bone and resemble teeth in that they have a soft central area called the pulp, a middle layer of dentine and a hard outer layer of enamel.
- These scales are called denticles and are described as 'Placoid Scales', they protrude through the epidermis and are not wholly covered by it.
- Such scales have a definite size and do not grow along with the animal.
- Instead, when the animal's growth opens up a large enough space between two or more denticles, a new one grows to fill the space.
- The scales/denticles of cartilaginous fish are discrete they do not overlap as do the scales of bony fishes.



Thank you!