



REGIONAL TRAINING COURSE ON FISH LARVAE

PHASE I: LARVAL FISH IDENTIFICATION AND FISH EARLY LIFE HISTORY SCIENCE

Trainees

Department of Fisheries
THAILAND

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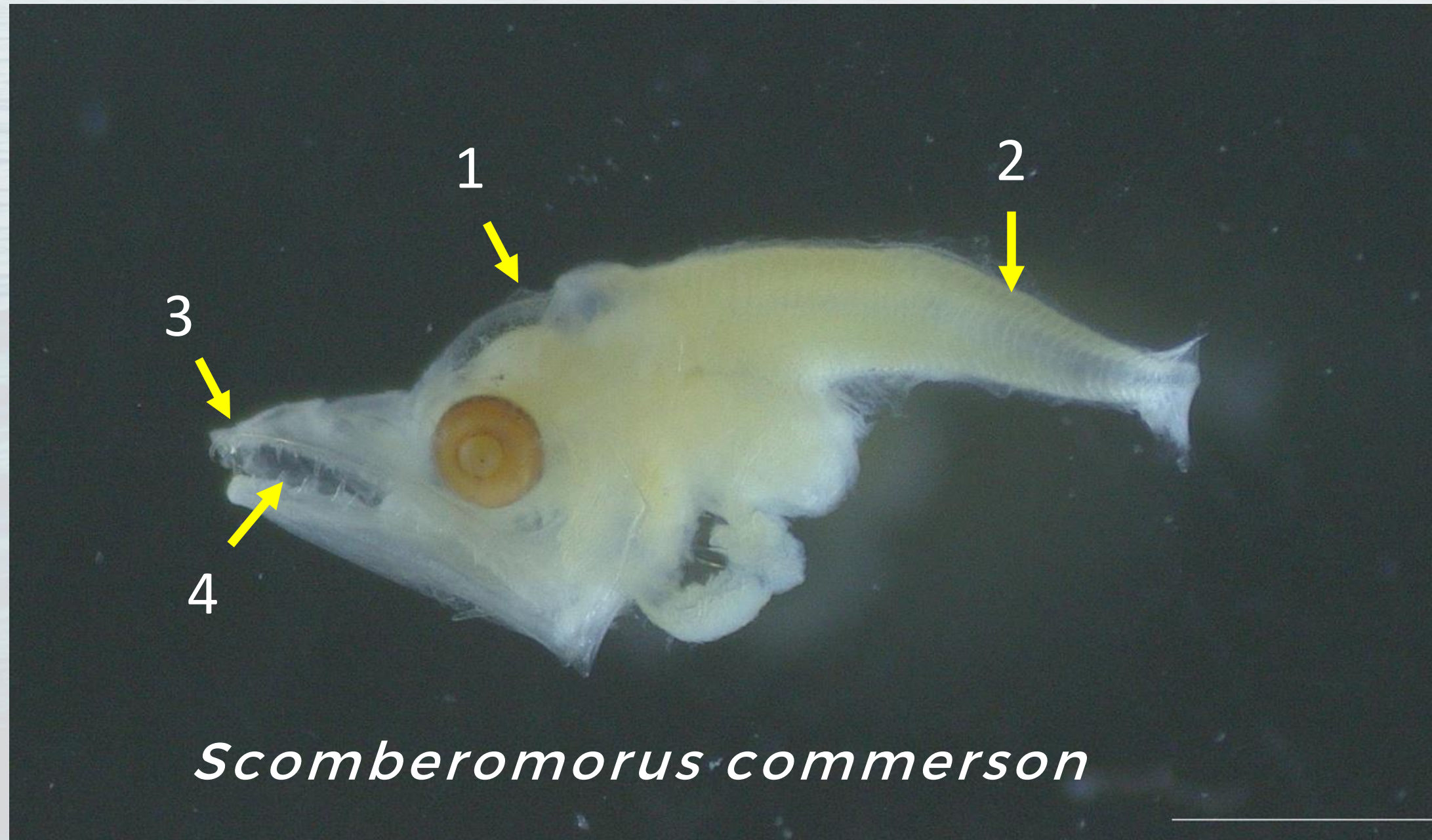


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Characteristics

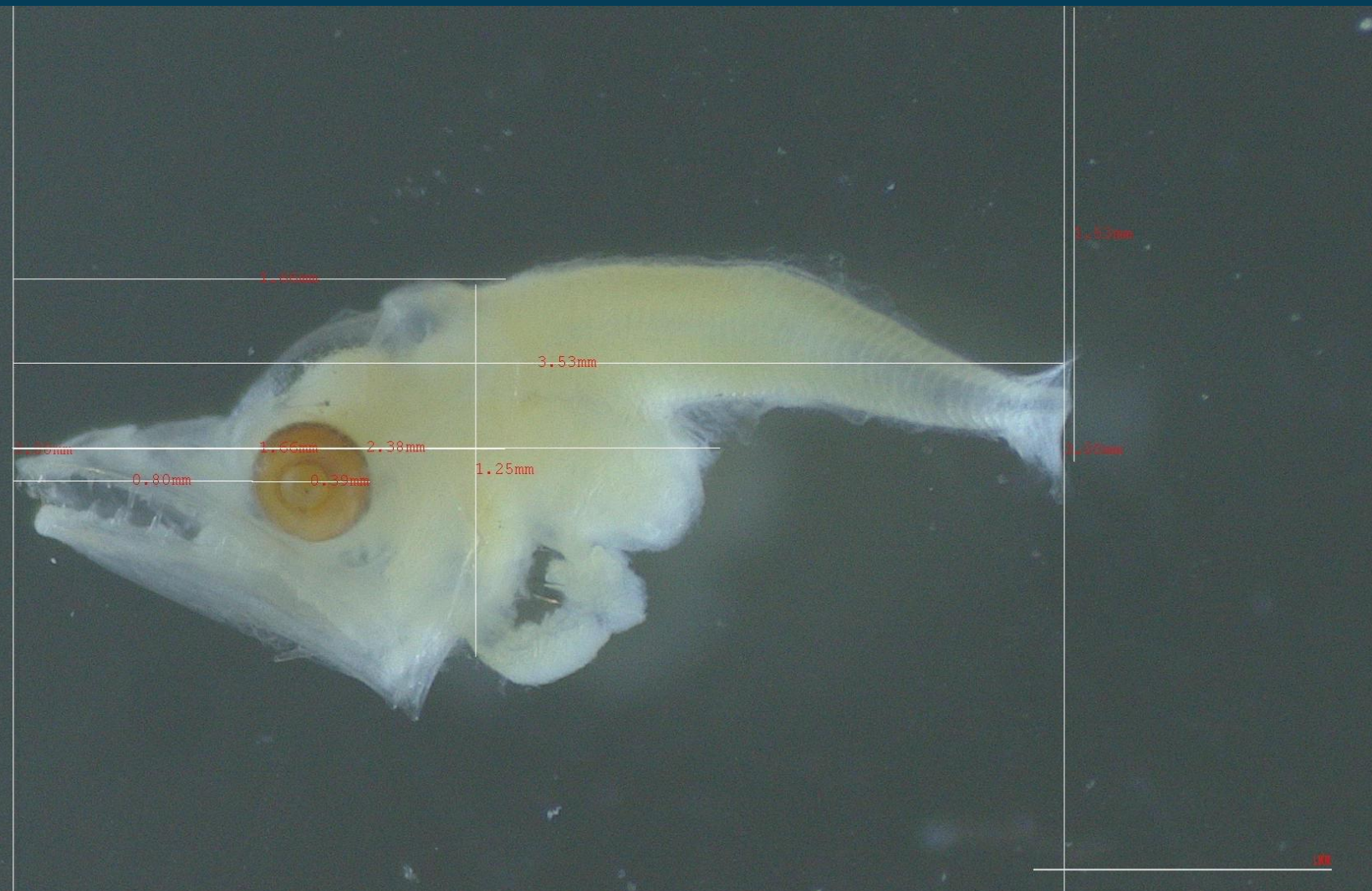
Description

1. Supraoccipital spine
2. 42 myomeres
3. Head pointed, snout large
4. Teeth



Scombridae

Scombridae



Measurement (mm)

SL : 3.53

HL : 1.66

ED : 0.39

SnL : 0.80

BD : 1.25

PAL : 2.38

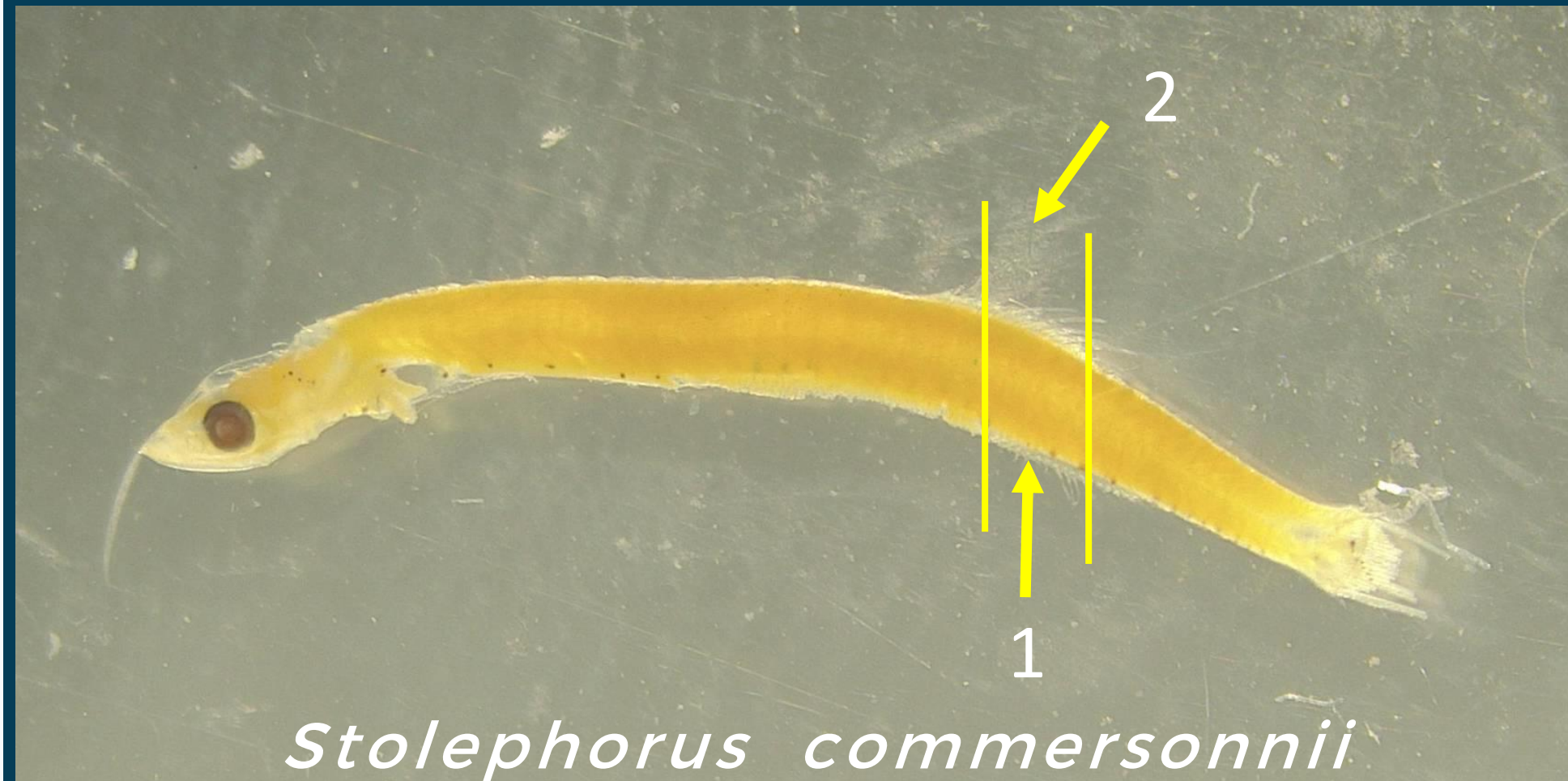
PDL : 1.66

Engraulidae

Characteristics

Description

1. Anal fin rays less than 30, and its base less than 1.5 times of dorsal fin base
2. Origin of anal fin distinctly anterior to end of dorsal fin



Engraulidae



Measurement (mm)

SL : 12.50

HL : 1.94

ED : 0.50

SnL : 0.66

BD : 1.07

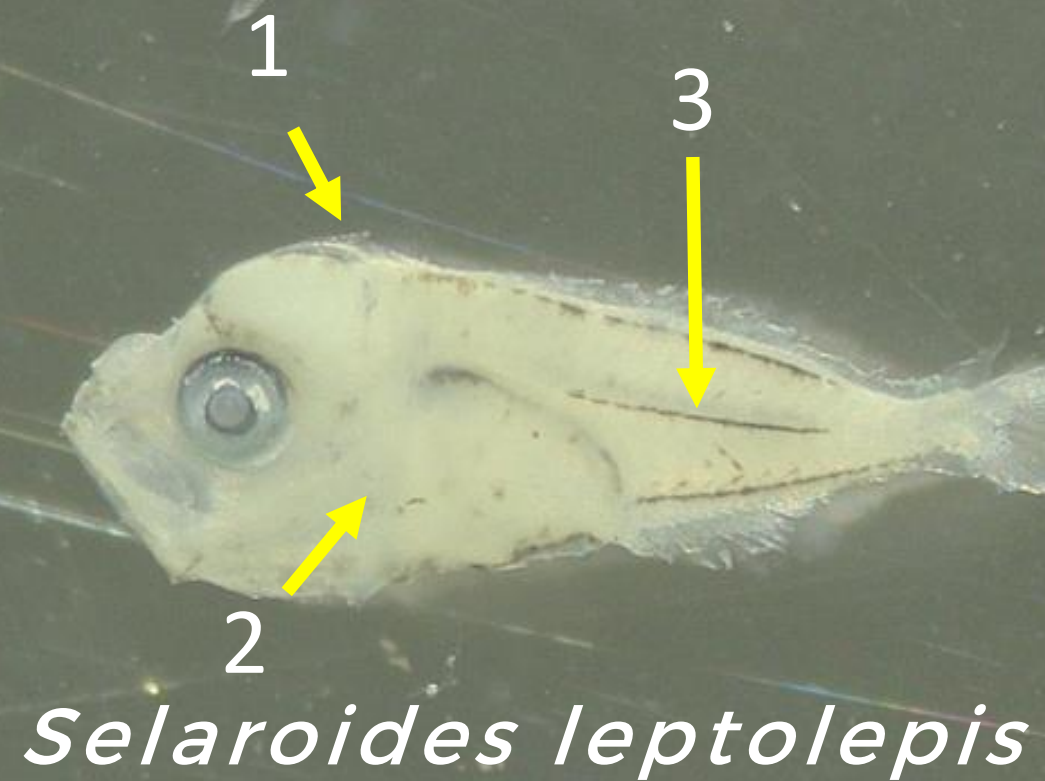
PAL : 8.41

PDL : 7.88

Carangidae

Description (Group 2)

1. SOC present (shape like mountain ; Ref. Chayakul, 2022)
2. Preopercular spine developed
3. Pigment present on lateral midline



Carangidae



Measurement (mm)

SL : 4.61

HL : 1.72

ED : 0.54

SnL : 0.56

BD : 1.56

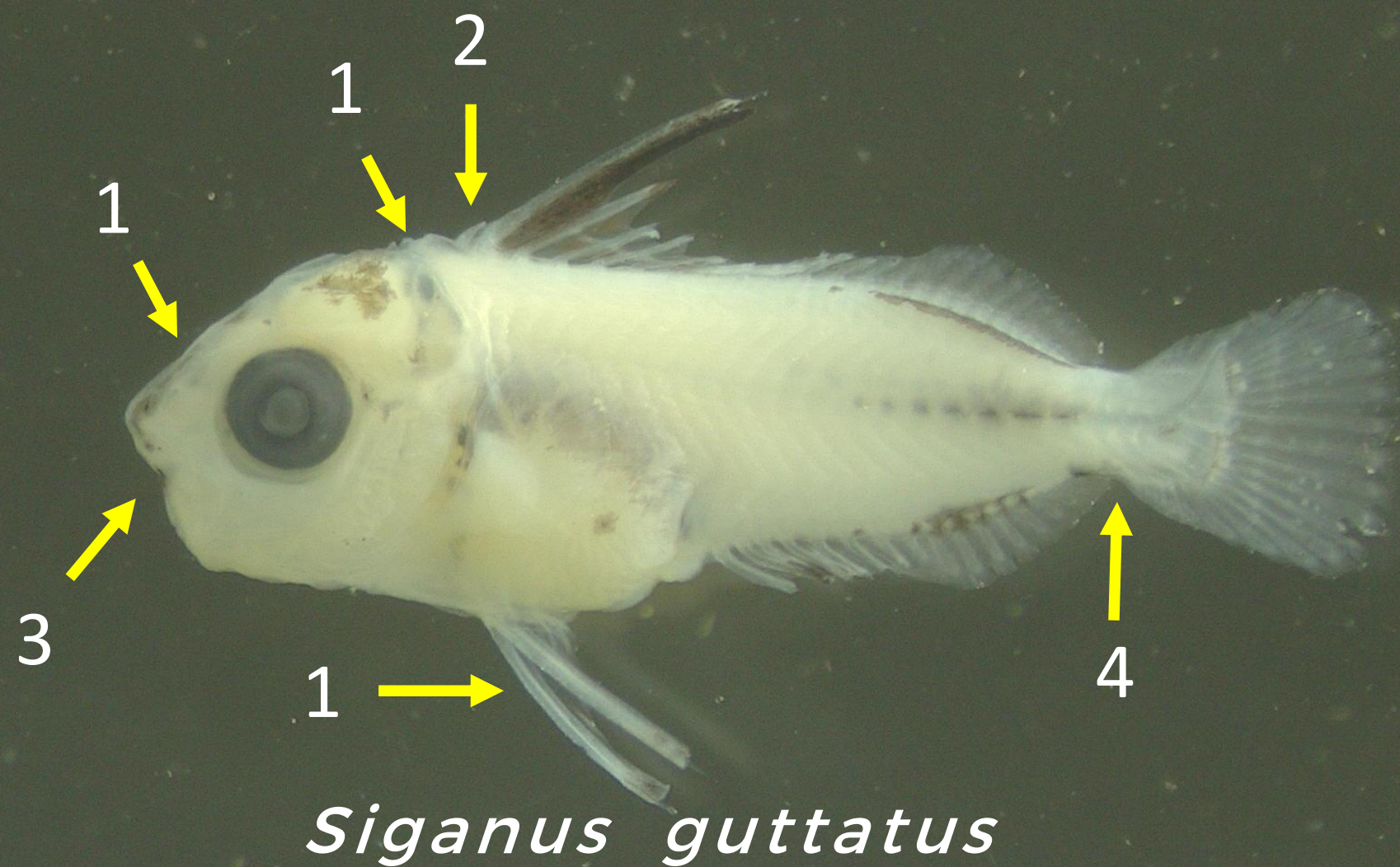
PAL : 2.74

PDL : 2.00

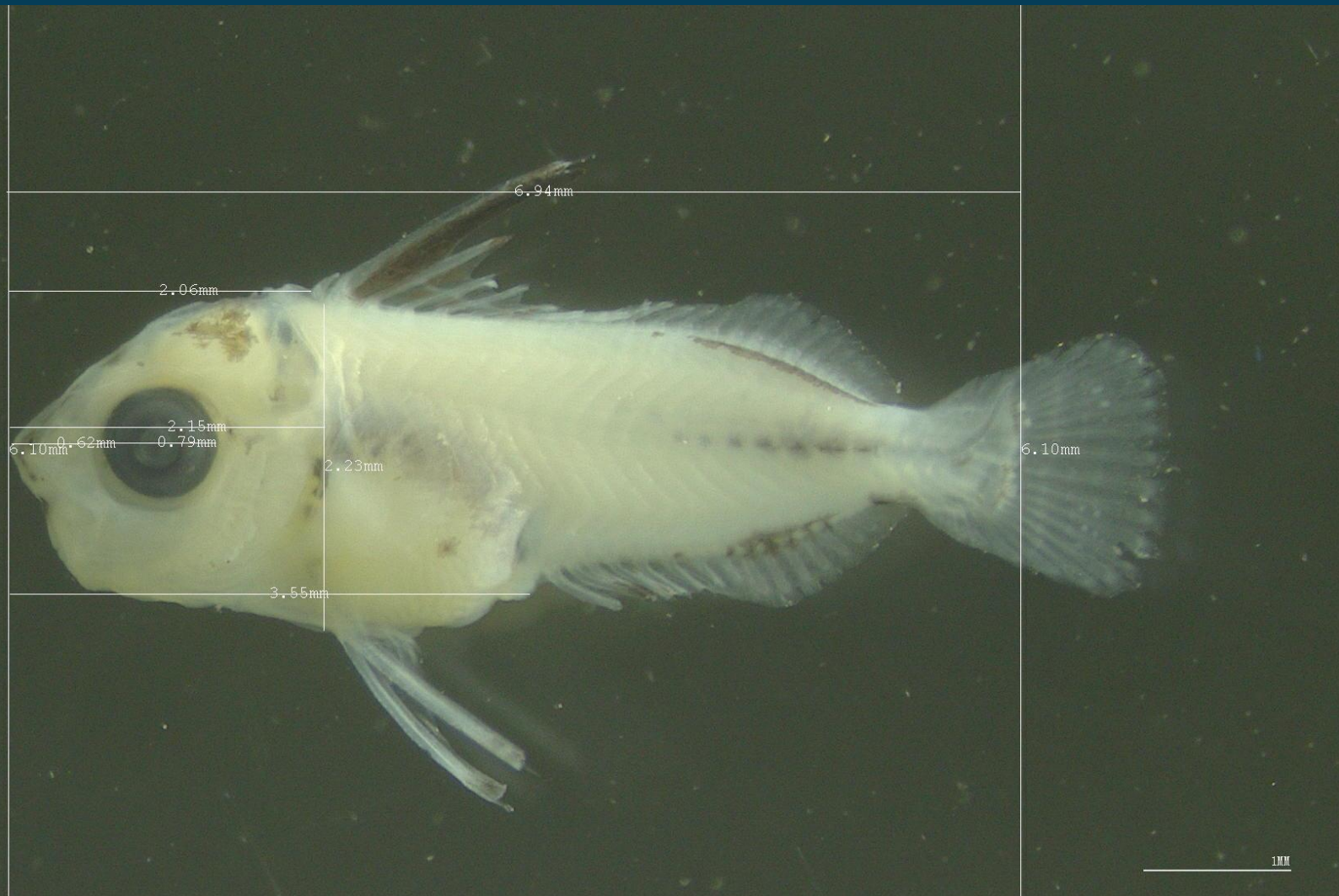
Siganidae

Description

1. Serrations formed
2. Small spine extended forward
3. Small mouth
4. Caudle peduncle narrow



Siganidae



Measurement (mm)

SL : 6.94

HL : 2.15

ED : 0.79

SnL : 2.22

BD : 1.56

PAL : 3.55

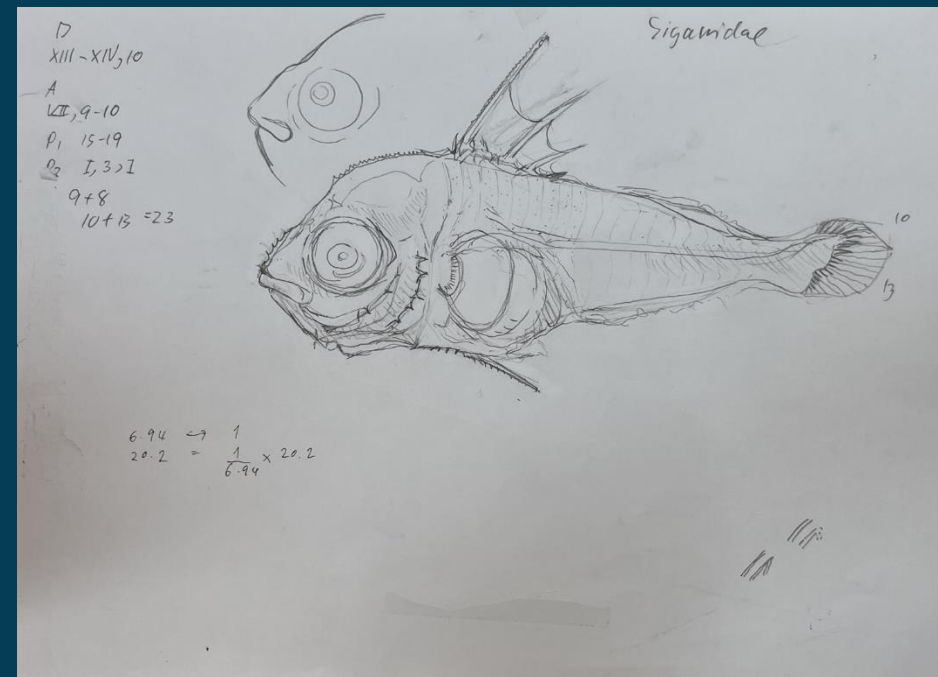
PDL : 2.06

ILLUSTRATION



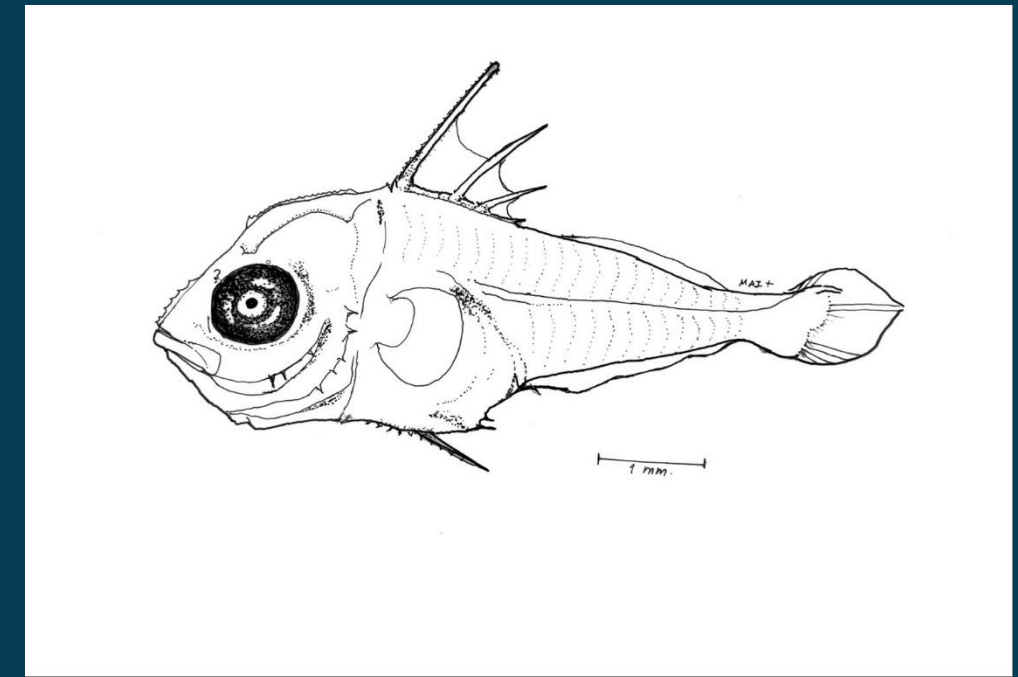
STEP 1: Choosing specimen

If possible, 3 specimens of 3 stages of a species



STEP 2: Making a first sketch by pencil

Observing, measuring and counting. Zoom-up in full size of A4



STEP 3: Tracing paper with rotring pens

Enlarge or reduce in an A4 size by photocopy machine

ILLUSTRATION



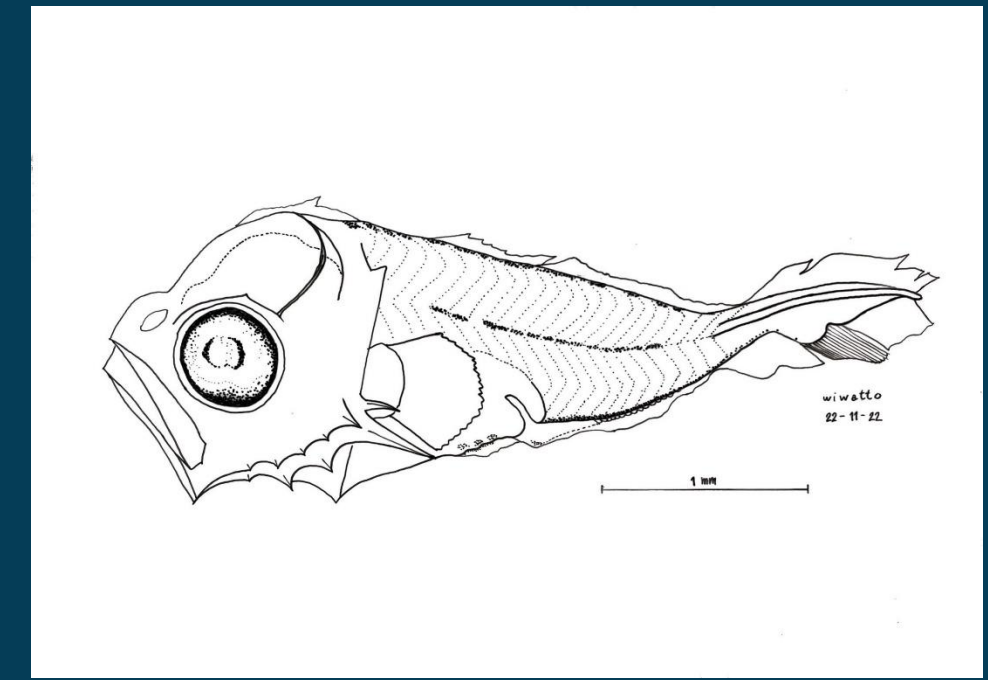
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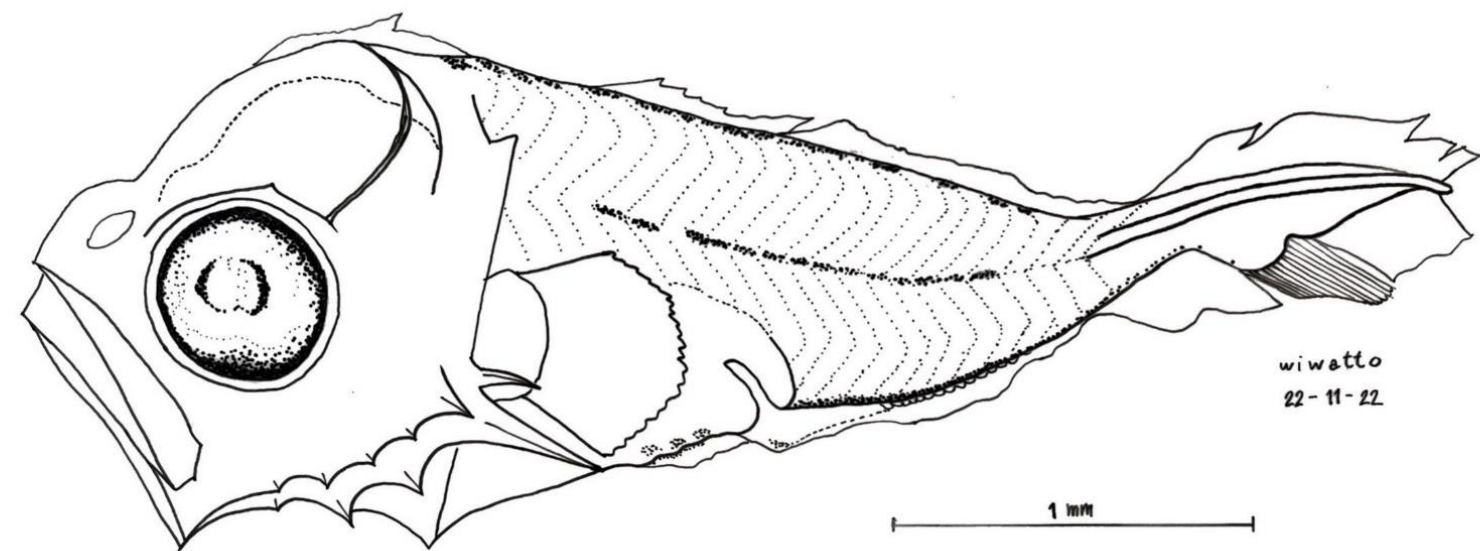
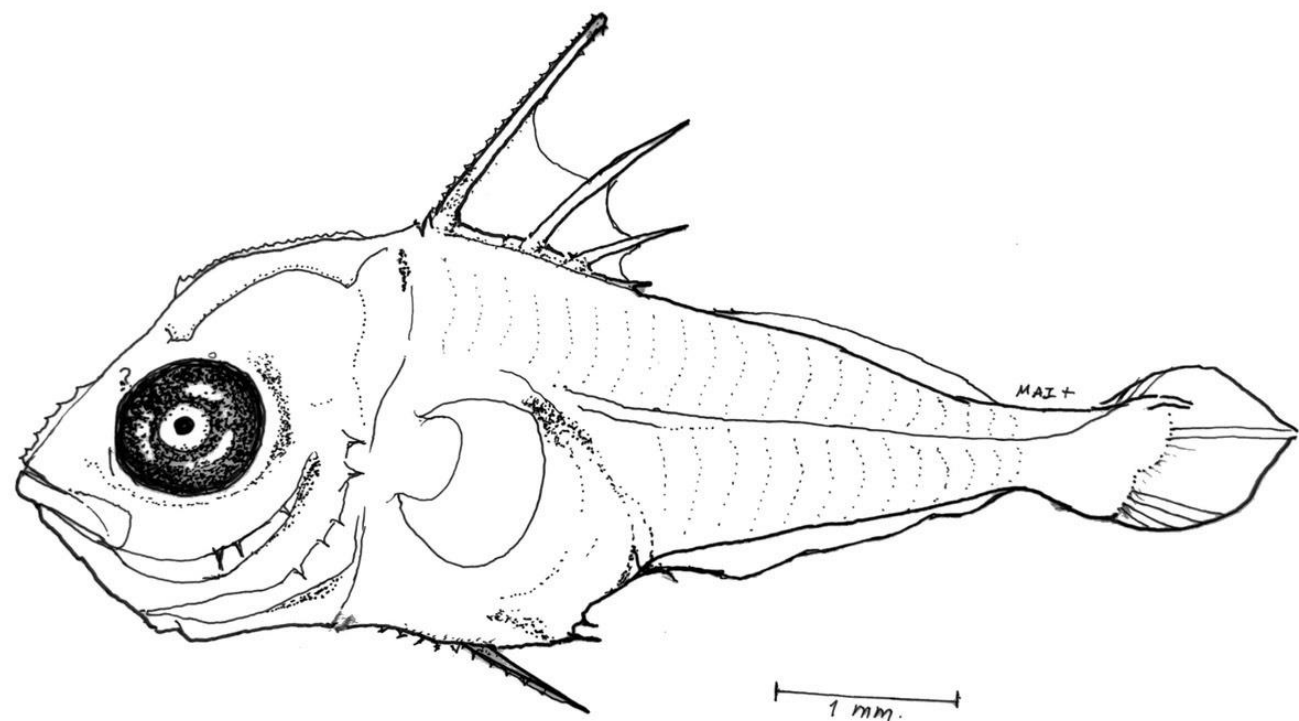
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Lutjanidae
(*Lutjanus ophuysenii*)
7.7 mm SL
(Okiyama, 2014)

Similar larvae to Lutjanidae

Serranid Epinephelini
(*Epinephelus* sp.)
5.5 mm SL
(Baldwin et al., 2000)

Serranid Anthiadae
(*Pronotogrammus multifasciatus*)
6.0 mm SL
(Watson, 1996)

Caesionidae
(*Caesio ophuysenii*)
7.6 mm SL
(Reader & Leis, 1996)

Serranid Nipponini
(*Nippon spinosus*)
7.7 mm SL
(Okiyama, 2014)

V (24)
A 7-10 (mostly 8)
P₁ 15-19 (mostly 16-17)

2nd D spine elongate and spines smooth or serrate

2nd D spine very elongate and the spines serrate

3rd or 4th D spine longest and the spines smooth or serrate

1st P₂ soft ray longer than the spine and spine smooth or serrate

Interopercular spine as long as preopercular spine at angle

P₂ spine serrate and very elongate

2nd D spine elongate and spines serrate

1st P₂ soft ray longer than the spine and the spines smooth or serrate

3rd D spine elongate and the spines smooth

V (25-27)

V (30)

Spines dorsal to preopercular spine at angle: Caesionidae 1; Lutjanidae 1+.

1st P₂ soft ray longer than the spine and the spine serrate



Thank you very much

