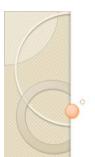
#### **Annex 10/1: Identification Results**

By Mr. Sayan Promjinda and Mr. Nakaret Yasook (SEAFDEC/TD)



### TRAINING/WORKSHOP ON INDENTIFICATION

## Deep-Sea Fishes

18-22 January 2010

SAYAN PROMJINDA NAKARET YASOOK

Vessel M.V.SEAFDEC 2

Type of gear Beam trawl

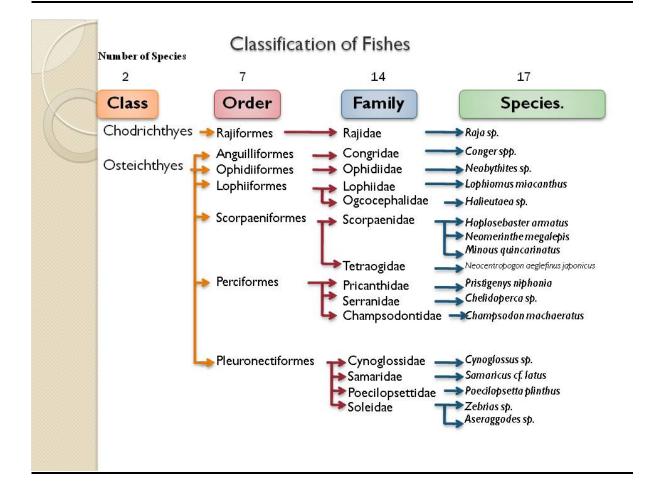
Location Lat 05 00'.60 N - 04 57'.90 N

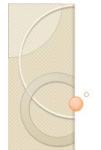
Long 113\_51'.70 E - 113\_49'.20 E

 Depth
 I16 meter

 Date
 28 March
 2009

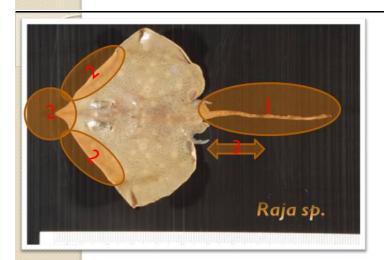
Locality Brunei Darussalam water







Class Elasmobranchii
Order Rajiformes
Suborder Rajoidei
Family Rajidae
Scientific name Raja sp.



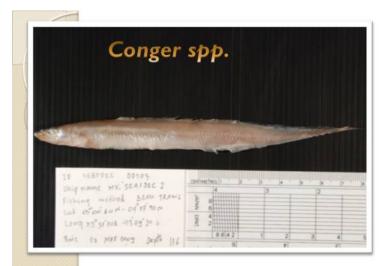
- 1. Tail with caudal fin but without large spines (many small spines)
- 2. Snout pointed, outline between tip of snout and pectoral fin slightly concave
- 3.1st dorsal fin far behind pelvic fin

(key to family; )

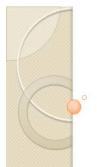




Class Osteichthyes
Order Anguilliformes
Suborder Anguilloidei
Family Congridae
Scientific name Conger sp.

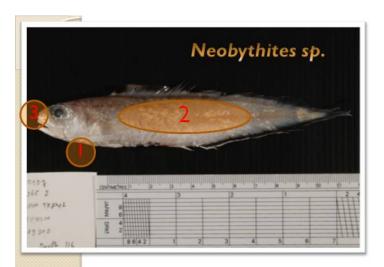


- 1. Body moderate elongate; preanal length less than 40%
- 2. End of branchiostegal rays do not protrude freely through gill opening
- 3. Lip well develop and maxillary and mandibular teeth in 2 rows



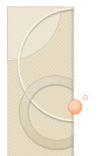


Class Osteichthyes
Order Ophidiiformes
Suborder Ophidioidei
Family Ophiidae
Scientific name Neobythites sp.



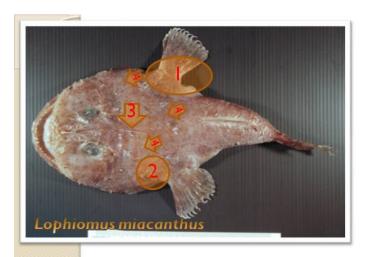
Dorsal fin: 98
Anal fin: 73
Pectoral fin: 25
Pelvic fin: 2

- 1. Pelvic fin with 2 soft rays
- 2. Some markings on body
- 3. Anterior nostril without think rim





Class Osteichthyes
Order Lophiiformes
Suborder Lophioidei
Family Lophiidae
Scientific name Lophiomus miacanthus



- I. I Anterior end of gill-slit extending dorsally over origin of pectoral fin
- 2. Humeral spines bifurcate or more
- 3.3<sup>rd</sup> dorsal fin spine shorter than head length
- 4. Small white spots scattered on head



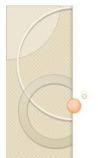


Class Osteichthyes
Order Lophiiformes
Suborder Ogcocephaloidei
Family Ogcocephalidae
Scientific name Halieutaea sp.



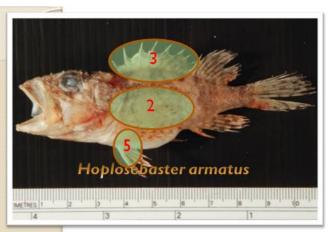
Dorsal fin: 5 Anal fin: 4 Pectoral fin:8

- 1. Disc circular; Body strongly depress
- 2. Gill rakers on upper limb of 1st gill arch
- 3. Ventral side smooth without small spines





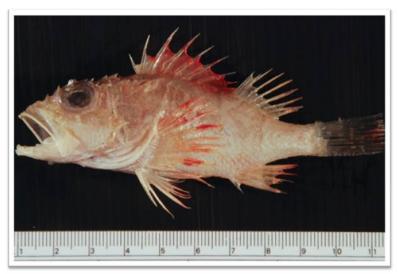
Class Osteichthyes
Order Scorpaeniformes
Suborder Scorpaenoidei
Family Scorpaenidae
Scientific name Hoplosebaster armatus



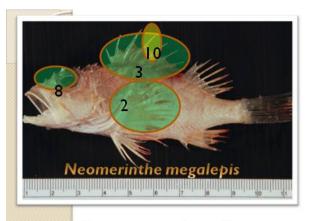
D XIII, 9 A II, 6

- I. Lateral line as internal canall
- 2. Pectoral without lowermost free ray / without notch
- 3. Dorsal-fin with 13 spines
- 4. Dorsal-fin spines moderately long, longest about equal to soft rays
- 5.2 anal spine, first anal spine minute



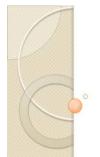


Class Osteichthyes
Order Scorpaeniformes
Suborder Scorpaenoidei
Family Scorpaenidae
Scientific name Neomerinthe megalepis



D XII,8 A III,5 PI 19

- I. Lateral line as internal canall
- 2. Pectoral without lowermost free ray / without notch
- 3. Dorsal-fin with 111/2 spines
- 4. Palatine teeth present on roof of mouth
- 5. Occiput inclined / (depressed; Scorpaena)
- 6.At least some rays branched / (fin-ray simple; Poninus)
- 7. Dorsal-fin rays  $9^{1/2}$  to  $11^{1/2}$  /  $(8^{1/2}$  to  $10^{1/2}$ ; Sebastapistes)
- 8. Posterior lacrimal spines relatively strong
- 9. Pectoral-fin rays 19
- 10. Fourth dorsal-fin spine longest





Class Osteichthyes
Order Scorpaeniformes
Suborder Scorpaenoidei
Family Scorpaenidae
Scientific name Minous quincarinatus



- 1. Skin at gill opening broadly connected to isthmus
- 2. Pectoral fins with lowermost  $\,I\,-\,3\,$  rays free and independently  $\,$  mobile
- 3. Ist dorsal fin spine equal to or longer than  $2^{nd}$  dorsal fin spine; Ist spine widely separated from base of  $2^{nd}$  spine
- 4. Caudal fin without transverse dark bars; medial surface of pectoral fin with dark brown stripes; posterior spine of lacrimal bone about twice length of anterior spine and not bayonet-shaped



Class Osteichthyes
Order Scorpaeniformes
Suborder Scorpaenoidei
Family Tetraogidae
Scientific name Neocentropogon aeglefinus japonicus



D XV,7 A III, 7 PI 15 P2 1,5

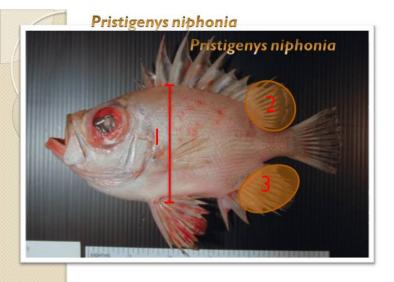
- 1. Pactoral-fin ray simple, elongate filamentously)
- 2. Body covered with many small cycloid scales

(fish of Japan Edt. I, page 599)





Class Osteichthyes
Order Perciformes
Suborder Percoidei
Family Pricanthidae
Scientific name Pristigenys niphonia



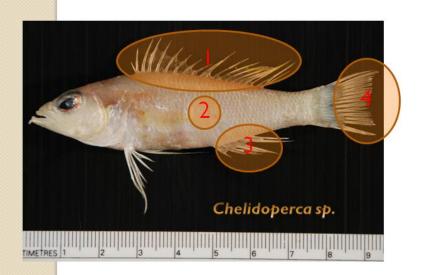
D X,11 A III,10 LLp 36

- 1. Body very deep / (less deep; Heteropriacanthus, Priacanthus and Cookeolus)
- 2. Dorsal-fin rays 11 / (12 P.meyeri)
- 3. Anal-fin rays 10 / (10 P.meyeri)



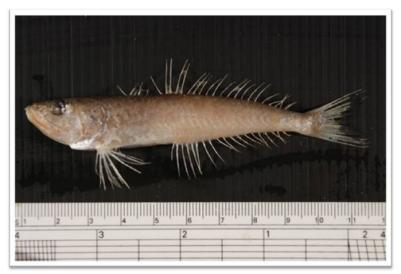


Class Osteichthyes
Order Perciformes
Suborder Percoidei
Family Serranidae
Scientific name Chelidoperca sp.

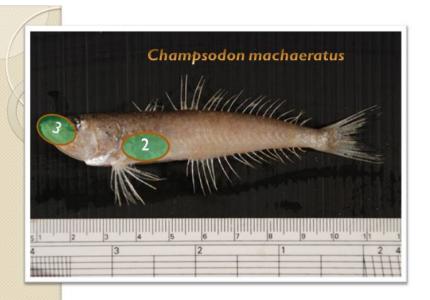


- 1. Dorsal fin with 10 spines and 9 10 soft rays
- 2. Body without black spots
- 3. Anal fin with 6 9 soft rays
- 4. Caudal fin emarginated

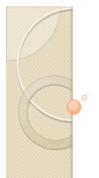




Class Osteichthyes
Order Perciformes
Suborder Trachinoidei
Family Champsodontidae
Scientific name Champsodon machaeratus



- 1.1st arch wit 1 gill raker on upper limb
- 2. Breast naked
- 3. Chin scaly





Class Osteichthyes
Order Pleuronectiformes
Family Cynoglossidae
Scientific name Cynoglossus sp.



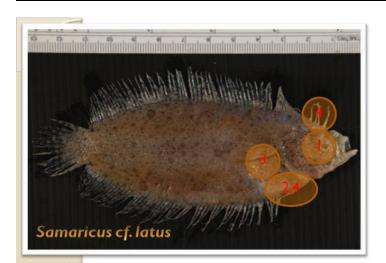
D 114

- I.Pelvic fin without spines / Pectoral fin absent / Eyes on left side of body (key to Fam. Cynoglossidae)
- 2. Mouth strongly curved / (nearly straight; Symphurus)
- 3. Lips on ocular side not fringed with tentacle / (with tentacle; Paraplagusia sp.)
- 4. Dorsal-fin 114 118, snout round and short





Class Osteichthyes
Order Pleuronectiformes
Family Samaridae
Scientific name Samaricus cf. latus

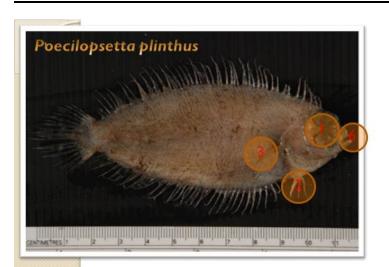


- Pelvic fin without spines / Pectoral fin distinct / Eyes on right side of body / Pectoral fin absent on bline side (key to Fam. Samaridae)
- 2. Eye on right side of body
- 3. Pelvic fin without spines
- 4. Pectoral fin distinct but absent on blind side
- 5. Soft ray of anterior part of dorsal fin and pelvic fin not elongated in to filament





Class Osteichthyes
Order Pleuronectiformes
Family Poecilopsettidae
Scientific name Poecilopsetta plinthus



I. Pelvic fin without spines / Pectoral fin distinct / Eyes on right side of body / Pectoral fin present on bline side / Lateral line rudimentary indistinct on blind side (key to Fam. Poecilopsettidae)

Eye on right side of body

- 2. Pelvic fin without spines
- 3. Pectoral fin distinct and present on blind side
- 4. Lateral line rudimentary indistinct on blind side
- 5. Lateral line scales less than 70
- 6. Upper-jaw length 3.4 3.9 times in head length (this fish = 3.69)



### Reffernce key book

• Fish of Japan with pictorial keys to the species, English edition I, II

 FAO Species Identification Guide for Fishery Purposes, The Living Marine Resources of The WESTERN CENTRAL PACIFIC Vol. 3,4 and 6

# THANKYOU FORYOUR ATTENTION