

Differences between Indo-pacific
king mackerel (*Scomberomorus
guttatus*) - GUT
and Narrow-barred Spanish
mackerel (*Scomberomorus
commerson*) - COM



IOTC Species identification and
sampling workshop

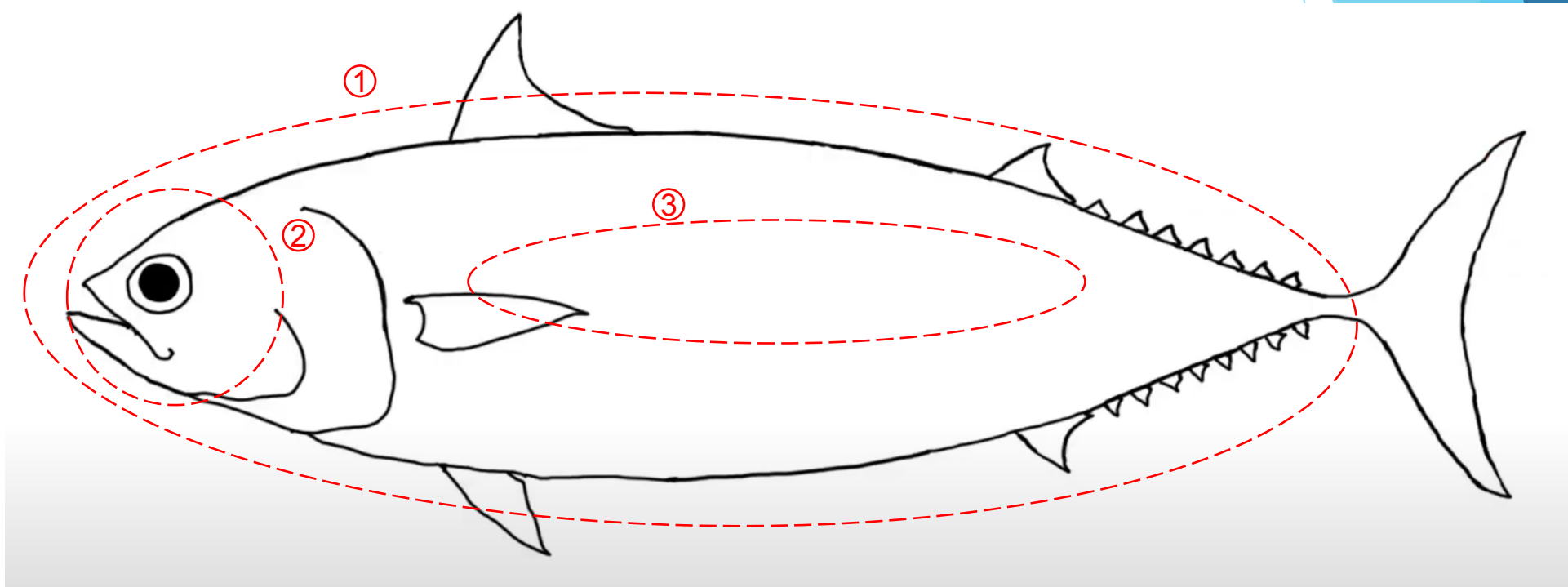
Kochi, India, September 29th to October 3rd, 2025



DEPARTMENT OF FISHERIES
Government of India



What and where to look?



① Body shape



More elongated
↓
S. commerson



Less elongated
↓
S. guttatus

② Head profile



Pointed, elongated



S. commerson

Less pointed



S. guttatus

③ Marks and colours



Vertical bars



S. commerson

Horizontal, oval spots



S. guttatus

General characteristics (relative)

Feature	<i>Scomberomorus commerson</i> (Narrow-barred Spanish mackerel)	<i>Scomberomorus guttatus</i> (Indo-Pacific king mackerel)
Size	Very large, up to 2 m	Smaller, < 1 m
Body	Slender, fusiform	Stockier
Markings	Long vertical dark bars	Large oval spots (black/brown)
Snout	Pointed, elongated	Less pointed
Coloration	Bluish-green back, silvery belly without spots	Bluish-green back, silvery belly without spots Bluish back, silvery belly with spots

Narrow-barred Spanish mackerel (*Scomberomorus commerson*) - COM

- Marks: long, vertical dark bars along the flanks, extending from the dorsal line down toward the midline (tiger-like stripes).
- Body shape: more elongated, fusiform.
- Head: pointed snout, longer.
- Size: generally, much larger (up to 2 m).
- Coloration: bluish-green back, silvery belly without spots.

Indo-pacific king mackerel (*Scomberomorus guttatus*) - GUT

- Marks: large, oval black/brown spots on the flanks, arranged in irregular rows (not continuous bars).
- Body shape: slightly deeper, less elongated.
- Head: snout a bit less pointed.
- Size: smaller species (rarely > 76 cm).
- Coloration: bluish back with sometimes a golden sheen, silvery belly with visible spots.

Field ID summary

- If the fish has vertical bars → *S. commerson*
- If the fish has large round spots → *S. guttatus*
- *S. commerson* is bigger and slimmer, *S. guttatus* is smaller and stouter.

Quizz

- *S. guttatus*

Quizz

S. commerson



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Quizz



• *S. guttatus*

Quizz



S. commerson

Quizz



S. guttatus

Quizz






S. commerson

Sources

- FAO Species Identification Guides (par zones de pêche, ex. FAO Species Catalogue for Fishery Purposes), qui donnent des clés morphologiques détaillées.
- FishBase (www.fishbase.se), une base de données mondiale sur les espèces de poissons avec descriptions, photos et cartes de distribution.
- FAO Fisheries and Aquaculture Fact Sheets pour les espèces d'importance commerciale.
- Scientific field guides & ichthyology references, par ex. Collette & Nauen (1983) — FAO species catalogue, vol. 2. Scombrids of the world.

Sources

Scomberomorus (Spanish mackerels)

- Collette, B.B. & C.E. Nauen (1983). FAO Species Catalogue. Vol. 2. Scombrids of the World. FAO Fisheries Synopsis No. 125, Vol. 2. Rome: FAO. 137 p.
-  FAO PDF en ligne
- FishBase – Scomberomorus commerson
-  FishBase species summary
- FishBase – Scomberomorus guttatus
-  FishBase species summary

Field guides

- Fischer, W. & Bianchi, G. (eds) (1984–1996). FAO Species Identification Sheets for Fishery Purposes – Western Indian Ocean & other regions. FAO, Rome.
- FAO (2001). Field Identification Guide to the Living Marine Resources of the Western Indian Ocean. Rome: FAO.



Thank you for your attention

Any question?