New deep-sea shark: type specimens kept at ZSI Chennai

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News

Scientists of the Zoological Survey of India (ZSI) and ICAR-CMFRI have described a new deep-sea shark, Echinorhinus roinee (common name Indian Bramble Shark). For decades it had been mistaken for the Atlantic bramble shark. Its type specimens are kept in the National Zoological Collections at ZSI's Marine Biology Regional Centre (MBRC), Chennai (announced 11 Nov 2026).

Key facts for the exam

Point	Details
Species	Echinorhinus roinee – Indian Bramble Shark
Named after	Roinee, daughter of ZSI Director Dr Dhriti Banerjee
Specimens landed	Sakthikulangara fishing harbour, Kollam (Keralam), as trawl bycatch
Habitat	Continental slope, about 350–450 m deep; grows to about 3 m
Journal	Records of the Zoological Survey of India, Vol. 126 (2026)
Funding	Deep Ocean Mission, Ministry of Earth Sciences

Background

- Type specimens: the holotype is the single specimen that bears the species name; paratypes are the other specimens studied with it. They are kept in a national collection so that future scientists can check the identity.
- DNA barcoding (mitochondrial DNA) showed it is a separate Indian Ocean lineage, distinct from E. brucus (Atlantic) and E. cookei (Pacific). Similar records from Oman, Sri Lanka and Thailand suggest a wider range.
- Sharks belong to class Chondrichthyes (cartilaginous fishes, no swim bladder). Deep-sea sharks grow slowly and breed slowly, so wrong identification hides their true status.
- ZSI was founded on 1 July 1916 in Kolkata under the Environment Ministry. Other 2026 MBRC finds include the catshark Apristurus drona.

Tamil Nadu link: ZSI's Marine Biology Regional Centre in Chennai studies marine animals of India's seas and keeps national type collections. Chennai also hosts NIOT, which is building the Matsya 6000 submersible for Samudrayaan under the same Deep Ocean Mission.

Frequently asked questions

What is this news about?

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What are the key facts to remember for the exam?

Species: Echinorhinus roinee – Indian Bramble Shark; Named after: Roinee, daughter of ZSI Director Dr Dhriti Banerjee; Specimens landed: Sakthikulangara fishing harbour, Kollam (Keralam), as trawl bycatch; Habitat: Continental slope, about 350–450 m deep; grows to about 3 m.

What is the background to this news?

Type specimens: the holotype is the single specimen that bears the species name; paratypes are the other specimens studied with it. They are kept in a national collection so that future scientists can check the identity.

Practice questions (with answers)

1. What is the scientific name of the new species "Indian Bramble Shark" described in 2026?

A) Apristurus drona

B) Squalus hima

C) Echinorhinus roinee

D) Iago gopalakrishnani

Answer: C – Explanation: Echinorhinus roinee was mistaken for decades for the Atlantic bramble shark (E. brucus). It is named after Roinee, daughter of ZSI Director Dr Dhriti Banerjee.

2. Where is the headquarters of the Zoological Survey of India (ZSI), founded in 1916?

A) Kolkata

B) Chennai

C) Dehradun

D) New Delhi

Answer: A – Explanation: ZSI was set up on 1 July 1916 in Kolkata under the Environment Ministry; its Marine Biology Regional Centre is in Chennai.

3. When a new species is described, the single specimen designated as the name-bearer is called the:

A) Paratype

B) Holotype

C) Neotype

D) Syntype

Answer: B – Explanation: Holotype = the single name-bearing specimen; other specimens studied with it are paratypes. Together they are "type specimens", kept in the National Zoological Collections.

4. Which ministry funded the Indian Bramble Shark study under the Deep Ocean Mission?

A) Environment Ministry

B) Dept of Fisheries

C) Dept of Science & Tech

D) Ministry of Earth Sciences

Answer: D – Explanation: The Deep Ocean Mission (2021) belongs to the Ministry of Earth Sciences; under it, Samudrayaan's manned submersible Matsya 6000 is being built by NIOT, Chennai.

5. Sharks belong to which animal class?

A) Osteichthyes (bony fishes)

B) Chondrichthyes (cartilaginous fishes)

C) Cyclostomata

D) Amphibia

Answer: B – Explanation: Sharks and rays have a skeleton of cartilage and no swim bladder.

Sources: Records of the Zoological Survey of India, Vol. 126(1S): 41–58 (2026); Zoological Survey of India, Kolkata (11 Nov 2026). © Shanmugam IAS Academy.