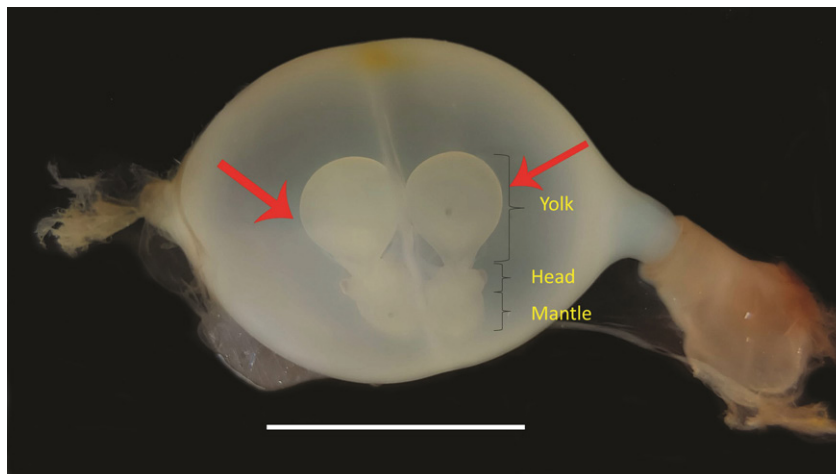


Rare double embryos in the egg capsule of Pharaoh Cuttlefish

The embryonic development of cephalopods is considered unique among molluscs. A recently spawned and deposited egg cluster of Pharaoh Cuttlefish *Sepia pharaonis* (Ehrenberg, 1831) was collected from the Arabian Sea off Kochi (10°01'52" N; 75°55'09" E) (40 m depth) on 25th November 2021. The egg stalks were attached to a moored coconut spadix and the colour of the egg cluster was white. Fertilized eggs were brought to the laboratory and allowed to develop in tanks with oxygenated seawater (28°C; pH 8.1-8.3; salinity 34-35 ppt) at the ICAR-Central Marine Fisheries Research Institute, Kochi, India.

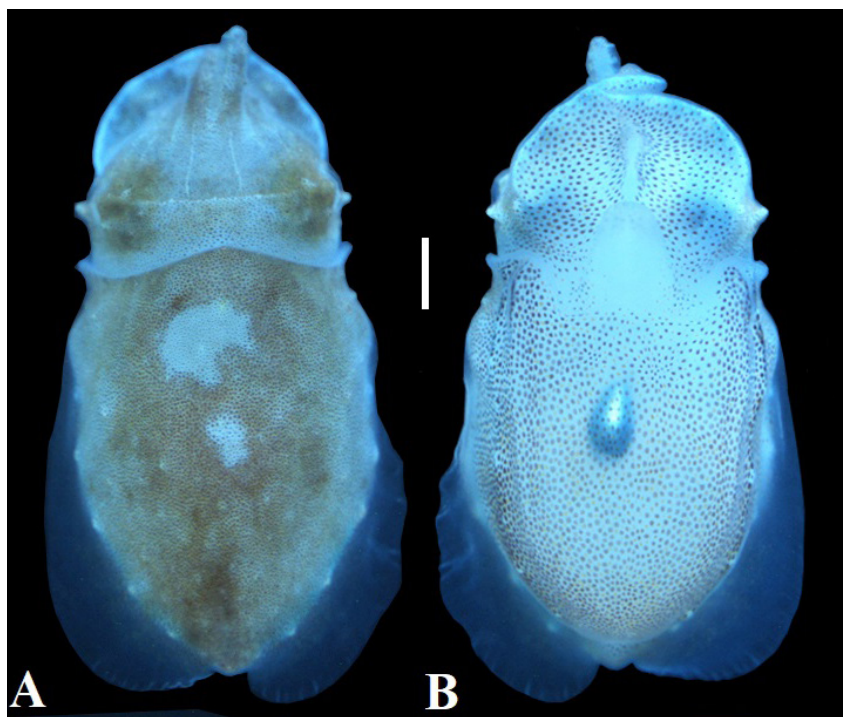
Normally cephalopod egg capsules contain a single embryo in a single egg capsule. On the detailed examination



Two embryos in a single capsule of *Sepia pharaonis* from the Arabian Sea. Arrow mark indicate the embryos (Scale bar= 10 mm).

of the egg cluster (168 eggs) in the laboratory, a single egg capsule with two embryos was observed. The chorion of each embryo had formed

a thin layer inside the egg capsule, transversely dividing the capsule into two chambers. The embryos were observed in the laboratory to determine whether they will grow like normal cuttlefish embryos. The size and shape of the double embryo egg capsule was slightly larger than normal ones and the embryo size is not different than normal ones. Two embryos developed independently and hatched on the same day (8th December 2021). The hatchlings were benthic. The hatchling size (dorsal mantle length) and weight of the individuals were 6.1 and 6.4 mm and 0.12 and 0.14 g wet weight. The mantle width of the hatchlings were 5.2 and 5.0 mm respectively. The incubation period of the eggs and the size of the hatchlings were like the normal ones. Previously, 26 double embryos capsule observed in several egg clusters of *S. pharaonis* collected from the Thailand water (Nabhitabhata, 2003) indicating it does happen occasionally.



Dorsal (A) and ventral (B) view of the rare hatchling of *Sepia pharaonis* from the southwest coast of India (Scale bar=1 mm)

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