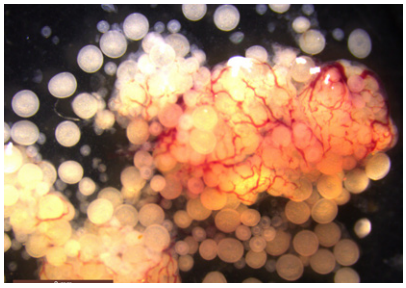
Remarkable landings of Unicorn leatherjacket

A. monoceros with regressing ovarian stage

Ripe ovary of *A. monoceros*



Vitellogenic oocytes of *A. monoceros*

The Unicorn leatherjacket (*Aluterus monoceros*), belonging to the family Monacanthidae, is found worldwide in subtropical oceans between latitudes 43° N and 35° S, often at depths as low as 50 meters. This fish is identified by its extremely compressed body and the positioning of its eyes towards the back of the head, resulting in both dorsal and ventral head profiles being convex. Notably, there were unusual, heavy landings of *A. monoceros*, locally known as "Uduppori", by boat seine recorded at the Vizhinjam landing center in Trivandrum, Kerala, on 28th June, 2023. Despite the presence of the South-west monsoon along the Kerala coast during June 2023, its impact was comparatively milder in the Trivandrum region, particularly the Vizhinjam coast. A significant catch of *A. monoceros* was observed following a drizzling day. The gear used for operation was boat seine (locally known as Thattumadi) having a length of 1.5-2.5 km, a weight of 140-210 kg and a mesh size of 18 to 200 mm. This gear is operated on an Out Board FRP or Plywood Out Board Boat having an overall length (OAL) of 9-9.3 m and a horsepower of 9.9+9.9 or 9.9+25. The crew size for this operation ranges from 8 to 14 members. The area of operation is approximately 15-18 nautical miles (nmi) from the Vizhinjam coast (Poovar and Pozhiyoor) at a depth of 30 meters. On that day, *A. monoceros* within the length range of 35 to 60 cm and weight range of 0.8 to 2.5 kg were landed, resulting in a remarkable haul. More than 30 tonnes of leatherjackets were brought to the center. Boat seines landed approximately 100 to 400 numbers of *A. monoceros* each. The major highlight of these landings was that over 85% of the fishes fell into the length range of more than 50 cm, and each fish was successfully auctioned at a rate ranging from ₹300 to ₹350. The auctioning process was conducted by numbers, not by quantity, allowing fishers to earn higher incomes from their catches. In fact, some lots of 180-200 fish were auctioned at rates between ₹55,000 and ₹70,000. Importantly, there were no bycatch issues with these landings.Fishers from various fishing villages in Trivandrum embarked from the Vizhinjam harbour to fish during this active monsoon season. The word quickly spread about the abundance of *A. monoceros* in the area, attracting more fishers who brought in substantial catches of leatherjackets. There was no preference for these fish in the local market, and all of them were exported to seafood exporting companies in Cochin and Thoothukudi. The boat seine fishers departed for fishing at 4.00 am and returned between 9.00 am and 1.00 pm Biological examinations were conducted on the landed fishes, revealing that all fishes with a Total Length (TL) greater than 48 cm were either ripe or in the regressing stage of gonadal development. The majority of the fish that were landed had already spawned in the sea before being caught. Similar heavy landings of *A. monoceros* by trawlers were reported at Tuticorin Fishing Harbour in July 2009. According to the fishermen at Trivandrum, the shoal of *A. monoceros* was moving in a south-easterly direction, and they had been making efforts to collect fish as far as Inayam in the Kanyakumari district. Fishermen noted that it was uncommon to witness such a large number of *A. monoceros* being landed near the Trivandrum shore. The increased landings could offer economic opportunities to the fishers align with the balanced exploitation with conservation efforts to ensure the long-term viability of the fish population and the overall health of the marine ecosystem. Over time, the recorded data on rare fish landings becomes a crucial component of baseline information, enabling the assessment of long-term trends and the effectiveness of conservation measures.

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