



An interesting case of a single ocellus in a brown ray from the Adriatic Sea

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Fig. 1 Brown ray (*Raja miraletus*) with single unilateral ocellus recorded in January 2022 in Vlorë, Albania. Photo: A. Gajić



A variety of morphological abnormalities have been reported in skates and rays, which are primarily associated with the lack of fusion of the pectoral fins to the head region (Ehemann et al. 2022), anophthalmia (Ehemann et al. 2022), and missing/additional fins (e.g., Moore 2015). However, records of skates with aberrant coloration patterns are reported infrequently (Capapé et al. 2018).

The brown ray (*Raja miraletus* Linnaeus, 1758) is distributed across the continental shelf and uppermost slopes of the

Mediterranean Sea, eastern Atlantic (from Iberian waters to South Africa), and the south-western Indian Ocean (Last et al. 2016). This species is differentiated from other skates within this area by two symmetrical ocelli with light blue center, narrow black (or dark blue) ring in the middle and an outer yellow-orange ring, one on each anterior dorsal surface of the pectoral fins (Barone et al. 2022). Here we present the unique finding of a brown ray with a single unilateral ocellus on the dorsal surface of the left pectoral fin (wing).

Throughout 2022, 730 brown rays were observed as by-catch of bottom trawlers, bottom longlines, and driftnets fishing on sandy and muddy bottoms (80–400 m deep) off Vlorë County, in the southern Adriatic Sea. Upon examination of the catch, one female individual measuring 31.7 mm total length (TL), 21.1 mm disk width (DW), and 147 g total weight (TW) was identified with only one ocellus, located on its left dorsal pectoral fin (Fig. 1). Detailed morphometric measurements of the individual are summarized in Table 1. Condition factor (CF), hepatosomatic index (HSI), and gonadosomatic index (GSI) were calculated (following

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