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## Morphologic deformation in a ray: a case report

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**Abstract:** This study presents the data from a morphologic deformation diagnosis of a speckled ray (*Raja polystigma* Regan, 1923) individual which was sampled from İzmir Bay. Deformation was located on the head part of the specimen and no deformation was observed in other body regions.

Key Words: *Raja polystigma*, deformation, morphology

### Bir vatoz'da morfolojik deformasyon olgusu

**Özet:** Bu çalışmada, İzmir Körfezi'nde örneklenen bir vatoz (*Raja polystigma* Regan, 1923) bireyinde gözlenen morfolojik deformasyona ait bulgular sunulmuştur. Deformasyon, bireyin baş bölgesinde olup vücudun diğer kısımlarında herhangi bir anormallik gözlenmemiştir.

Anahtar Sözcükler: *Raja polystigma*, deformasyon, morfoloji

### Introduction

There are 238 ray species existing in world marine waters, of which 13 species are found in Turkish waters (1). Seven species belonging to family Rajide are found in İzmir Bay (2). The most evident characteristic of the family is flattened and disc shaped body. Head, body, and pectoral fins are combined and the body looks like an equal edged quadrilateral and the snout is sharp or stubby.

The aim of this study was to report morphologic deformation in a ray. To the best of our knowledge, this is the first reported case of morphologic deformation in Speckled Ray (*Raja polystigma* Regan, 1923).

### Case History

A Speckled Ray (*Raja polystigma*) was sampled in İzmir Bay from Northwest of Uzunada (38°33'N-26°42'E, 38°34'N-26°43'E, 38°32'N-26°45'E, 38°31'N-26°44'E, Aegean Sea) in October 2005 by bottom trawl. Sampling area had a sandy-gravel bottom and the depth was between 40 and 60 m. Identification of the individual was performed according to Stehmann and Bürkel (3) and Froese and Pauly (1). The specimen was fixed with 4% formaldehyde and stored in Ege University Fisheries Faculty Museum with ESFM-PIS/2005-1 registration number (Figure).

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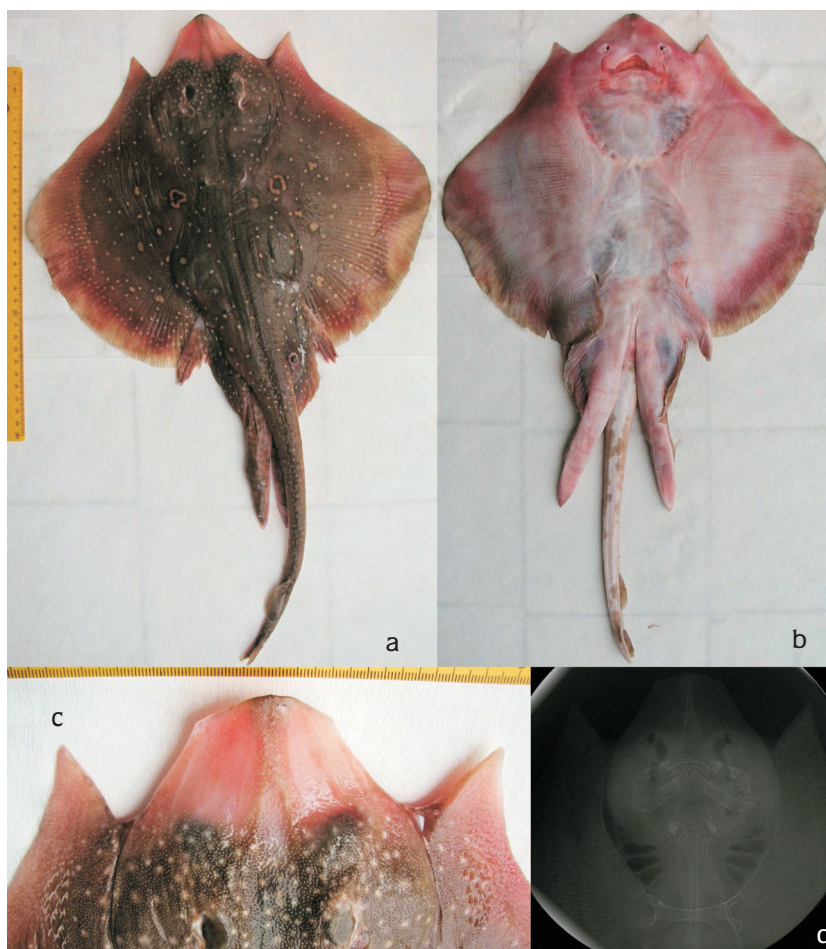


Figure. The picture of the specimen. (a-above, b-below, c-the head part of the specimen, d- the head part with x-ray).

Specimen had 53.6 cm total length and 33.1 cm disc width, and was a male. Deformation specifics of the individual were that there were no combinations between the snout part and pectoral fins and in the head region. Two extensions were symmetrically located on both sides of the snout (snout tip to extension tips: 68.12/71.96, extension tips to eyes: 63.43/63.86, extension tips to 1<sup>st</sup> gill slits: 83.41/82.47 (left/right; mm)).

### Results and Discussion

In the last 20 years many new records have been reported, most of them belonged to family Rajidae and there might be more new records (4). Furthermore, many genera and families of batoids are

poorly known and require further taxonomic study (5). Although many Speckled Ray individuals were sampled from the same region, no similar specimen has been coincided. No coincidence of a paratype sample was found with this morphologic deformation and thus it was concluded that this specimen did not belong to a new species.

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