

BOCAGIANA

Museu Municipal do Funchal (História Natural)

Madeira

12.IX.1994

No. 169

**TWO NEW RECORDS OF STINGRAYS (PISCES:
DASYATIDAE) FROM THE ARCHIPELAGO OF MADEIRA
(NE ATLANTIC)**

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With 2 figures.

ABSTRACT. In the present paper two species of stingrays, *Dasyatis violacea* (BONAPARTE, 1832) and *Taeniura grabata* (E. GEOFFROY SAINT-HILLAIRE, 1817) are recorded for the first time from the Archipelago of Madeira.

RESUMO. No presente artigo os autores assinalam pela primeira vez para o Arquipélago da Madeira duas espécies de peixes da família DASYATIDAE: *Dasyatis violacea* (BONAPARTE, 1832) e *Taeniura grabata* (E. GEOFFROY SAINT-HILLAIRE, 1817).

INTRODUCTION

The family DASYATIDAE was represented in Madeiran waters until now by only two species, the very common *Dasyatis pastinaca* (LINNAEUS, 1758) and *D. centroura* (MITCHILL, 1815) (KREFFT & STEHMANN, 1973; McEACHRAN & CAPAPE, 1989). The latter species, recorded from Madeira by GÜNTHER (1870) (as *Trygon thalassia* MÜLLER & HENLE, 1841, one specimen sent to The Natural History Museum (London) by J. Y. JOHNSON), has never been seen by the authors and specimens do not exist in the collections of the Museu Municipal do Funchal (História Natural).

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In the years of 1990 and 1991 the Fisheries Laboratory of Madeira (Direcção de Serviços de Estudos e Investigação das Pescas) made a series of experimental fishing trials for swordfish (*Xiphias gladius* LINNAEUS, 1758) for which a long-line was used, with the hooks at about 15 to 20 metres depth. These trials were carried out mainly at the south coast of Madeira with the sea floor in excess of 900 metres depth. Among the species captured, there were several specimens of a stingray, which obviously had to be pelagic and later proved to be *Dasyatis violacea* (BONAPARTE, 1832), a species apparently never before recorded from the island.

On several occasions, one of the authors (P.W.), in a series of dives in several localities along the south coast of Madeira and Porto Santo observed and identified another species of stingray apparently new to the archipelago: *Taeniura grabata* (E. GEOFFROY SAINT-HILLAIRE, 1817).

Both species are discussed below. The following abbreviations were used: DW=Disc width; DL= Disc length; MMF = Museu Municipal do Funchal (História Natural). Measurements were taken according to STEHMANN (1981).

Dasyatis violacea (BONAPARTE, 1832)

Material seen: MMF 25298, ♂, 19.1.90; MMF 25299, ♀, 15.2.90; MMF 25300, ♀, 8.5.90. All specimens caught ca. 2 miles off Cabo Girão, Madeira.

The identification of the specimens was easy as the external characters - snout rounded, not produced and the dark colouration of both upper and lower surfaces of body allied to the fact of having been caught in open waters, well above the sea floor, could not fit any other species of the family DASYATIDAE. The specimens observed measured DW=540-597 mm and DL=387-469 mm.

According to MCEACHRAN & CAPAPE (1989) this species, which can attain as much as 800 mm DW, is probably cosmopolitan in tropical and subtropical seas. It has also been recorded from the south-eastern coasts of the Mediterranean Sea and off Sicily. To our knowledge, this is the first time this species has been recorded from Madeira. BRITO (1991) does not mention it for the Canary Islands and no references were found for the Azores.

Taeniura grabata (E. GEOFFROY SAINT-HILLAIRE, 1817)

This species is frequently seen by SCUBA divers during summer. In winter it appears to move into deeper waters. We were not able to obtain a specimen, but the species is recognizable from underwater photographs (Figs. 1 and 2) by a combination of the following characters: disc broad and round, snout round, not produced, tail short, laterally compressed and not tapering into a whiplike filament (as in *Dasyatis pastinaca*), colour bluish-black on upper side.

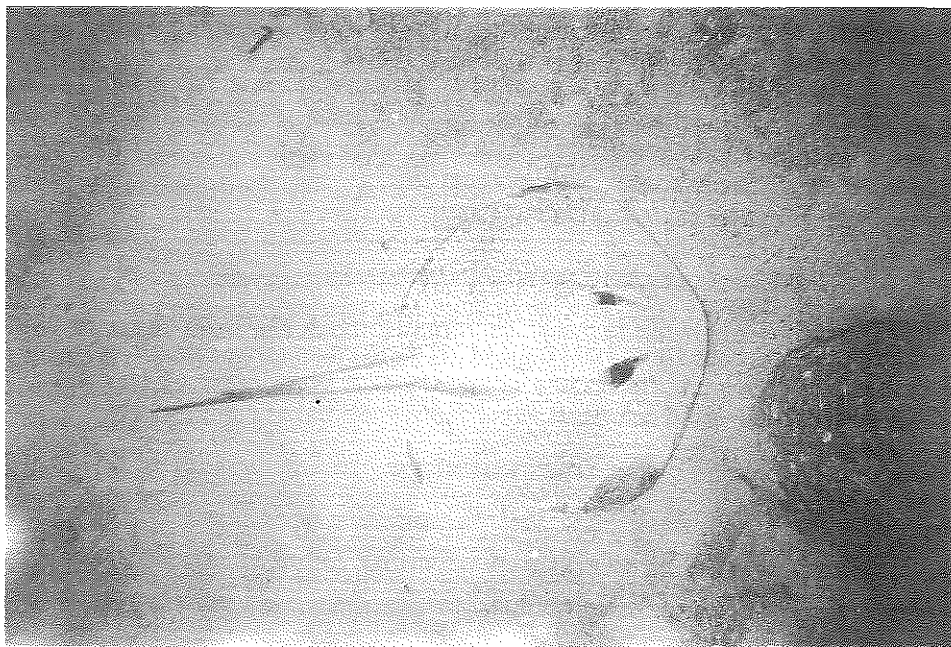


Fig. 1. - *Taeniura grabata* photographed at Porto Santo, 30 m depth. (P. WIRTZ).

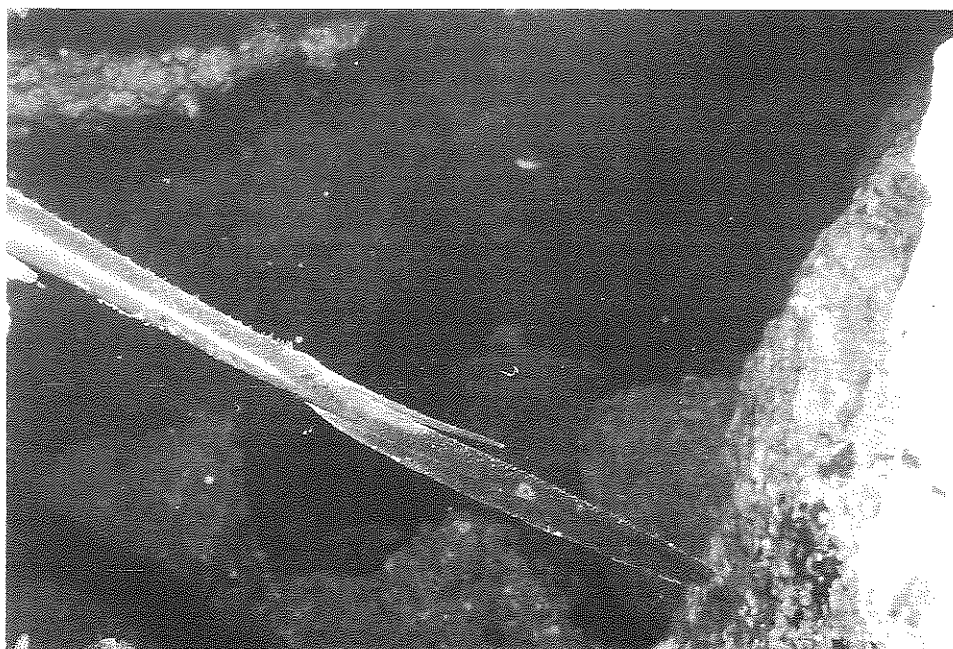


Fig. 2. - Detail of tail of *Taeniura grabata*, Madeira, 15 m depth. (P. WIRTZ).

Most of the animals seen by P.W. were on rocky substrate at depths of 10 to 40m. Disc width of the specimens seen was estimated at up to 180cm.

According to MCEACHRAN & CAPAPE (1989) and CAPAPE & DESOUTTER (1990), the species occurs at the African coasts of the eastern and central Mediterranean Sea and in the eastern Atlantic southward from Mauritania to the south of Angola. In a recent catalogue of the fishes of the Canary Islands, BRITO (1991) gives a colour photograph of the species. Apparently it has not yet been recorded from Madeira.

ACKNOWLEDGEMENTS

The authors would like to thank Drs. LÍDIA GOUVEIA and JOÃO DELGADO of the Direcção de Serviços de Estudos e Investigação das Pescas for their cooperation in obtaining the specimens of *D. violacea*. Thanks are also due to Dr. G. E. MAUL of M.M.F. for the revision of the manuscript and useful comments.

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