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## Two new records of gobies (Pisces, Perciformes, Gobiidae) from Madeira Island

With 2 figures

RICARDO ARAÚJO <sup>1\*</sup> & PETER WIRTZ <sup>2</sup>

<sup>1</sup> Museu de História Natural do Funchal, Rua da Mouraria, 31, 9004-546 Funchal, Madeira, Portugal

\* Corresponding author: ricardo.araujo@cm-funchal.pt

<sup>2</sup> Centro de Ciências do Mar, Universidade do Algarve, Campus de Gambelas, 8005-139 Faro, Portugal

**ABSTRACT:** *Gobius niger* and *Lebetus guilleti* are recorded from the coasts of Madeira Island.

**Keywords:** Perciformes, Gobiidae, new records, Madeira Island.

**RESUMO:** *Gobius niger* e *Lebetus guilleti* são registados, pela primeira vez, na ilha da Madeira.

**Palavras-chave:** Perciformes, Gobiidae, novos assinalamentos, ilha da Madeira.

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## INTRODUCTION

Until now, eleven species of gobies (Family Gobiidae) have been recorded from Madeira Island (Wirtz et al., 2008). We here note the presence of two additional species.

## MATERIAL AND METHODS

All records were made while SCUBA diving in a depth range of 1-60 m. Animals were photographed in the field, collected, and preserved in alcohol.

## RESULTS

### *Gobius niger* Linnaeus, 1758

Snorkelling in Machico harbour (32° 43' N, 16° 45' W), in an area closed off for swimmers, the first author, on 27 July 2010, photographed a fish that from the photo could easily be identified as *Gobius niger* Linnaeus, 1758 (Fig. 1). One photo of this unmistakable species has been deposited at Fishbase ([www.fishbase.org](http://www.fishbase.org)). Several other individuals of the same species were observed on the same occasion. The species is known from the Mediterranean and Black Sea, and in the eastern Atlantic from Norway to Mauritania, including the Canary Islands and the Selvagens Islands (CAMPREDON & SCHRIEKEN, 1986; BRITO *et al.*, 2002; ALMADA *et al.*, 2014), but has not previously been recorded from Madeira Island. On 17 October 2014, the second author captured a *Gobius niger* male of 12.5 cm total length in Machico harbour. The specimen was deposited in the collection of the Funchal Natural History Museum with the number MMF 44260. The right pectoral fin of this individual was deposited in the tissue collection of the Zoologische Staatssammlung at Munich (ZSM) with the number P-GO-1046.



Fig. 1 – *Gobius niger* Linnaeus, 1758.

### *Lebetus guilleti* (Le Danois, 1913)

On 4 May 2009, the second author collected a specimen of *Lebetus guilleti* (Fig. 2) by spraying quinaldine while SCUBA diving over sandy bottom at 23 m depth near Caniçal (32° 44' N, 16° 41' W). The specimen was deposited in Funchal Natural History Museum with the number MMF 40063. The species differs from the similar *Lebetus scorpioides* (Collett, 1874) in live colour and in fin ray count (anal soft rays 7-8 in *scorpioides*, versus 5-6 in *guilleti*). Photos of the freshly caught specimen have been deposited at Fishbase ([www.fishbase.org](http://www.fishbase.org)). It then became apparent that the Funchal

museum already contained an unidentified specimen of *Lebetus* (MMF 40054) that on closer examination turned out to be *L. guilleti*. It was collected with a bottom dredge off Cabo Girão on July 2nd 1992.

*Lebetus guilleti* has previously been recorded from sandy bottoms in the Northeastern Atlantic, from northern Scotland southwards to the Strait of Gibraltar, and from the Northwestern Mediterranean Sea and the Adriatic (HERLER & KOVACICZ, 2002; HOPE & SHUCKSMITH, 2010).



Fig. 2 – *Lebetus guilleti* (Le Danois, 1913).

## DISCUSSION

Thirteen species of gobies have now been recorded from Madeira Island. The discovery of *Lebetus guilleti* at Madeira slightly extends the known range of the species to the south. As *Gobius niger* has never been observed outside the harbour of Machico, it has probably been introduced by man. Compared with Mediterranean animals (RASOTTO & MAZZOLDI, 2002; FILIZ & TOĞULGA, 2009), a *Gobius niger* individual of 12 cm length would have an age of three to four years. This and the observation of several individuals of *Gobius niger* in Machico harbour since the year 2010 indicates the probable presence of a viable, reproducing population, likely to spread over a larger area at the south coast of Madeira in the future.

## ACKNOWLEDGEMENTS

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