

BOLETIM

MUSEU DE
HISTÓRIA NATURAL DO FUNCHAL

Vol. LXVIII (2018), Art. 350: 21-23



ISSN 2183-279X (online edition) |

Available online at: <http://boletim.cm-funchal.pt>

Paratettix meridionalis (Rambur, 1838) (Orthoptera: Tetrigidae), a grasshopper species and Family new to the Archipelago of Madeira, Portugal

By M. MATOS ANDRADE ^{1*} & A. M. FRANQUINHO AGUIAR ²

With 1 figure

¹ Rua das Virtudes, Barreiros Golden I, Bloco I, R/C B, 9000-645 Funchal, Madeira, Portugal.

* Corresponding author: miguelm.andrade@hotmail.com

² Entomology Lab, Laboratório de Qualidade Agrícola, Secretaria Regional de Agricultura e Pescas, Caminho Municipal dos Caboucos, 61, 9135-372 Camacha, Madeira, Portugal.

ABSTRACT: The first record from the archipelago of Madeira of the pygmy grasshopper *Paratettix meridionalis* (Rambur, 1838) and of Family Tetrigidae is given, as well as some data from local observations.

Keywords: groundhopper, pygmy grasshopper, first record, Madeira Island, Macaronesia.

RESUMO: Publica-se a primeira referência para o arquipélago da Madeira, do gafanhoto pigmeu, *Paratettix meridionalis* (Rambur, 1838) e da respetiva Família Tetrigidae.

Palavras-chave: gafanhoto tetrigídeo, primeira referência, Ilha da Madeira, Macaronésia.

INTRODUCTION

The family Tetrigidae counts with approximately 2026 valid species organized into 8 subfamilies and 272 genera with a worldwide distribution (CIGLIANO *et al.*, 2018). The members of this family are characterized by their small size and elongated pronotum that extends over the length of the abdomen and covers almost the totality of the hind wings as the fore wings are reduced to a scale sclerite. In Europe 4 genera and 12 species can be found, being *Tetrix* Latreille, 1802 the most speciose genus with 8 species (HELLER, 2013). Nine of the aforementioned species can be found in Spain (LLORENTE & PRESA, 1981) and 6 in mainland Portugal: *Paratettix meridionalis* (Rambur, 1838); *Uvarovitettix depressus* (Brisout de Barneville, 1849), *Uvarovitettix nodulosus* (Fieber, 1853), *Tetrix ceperoi* (Bolivar, 1887), *Tetrix undulata* (Sowerby, 1806) and *Tetrix subulata* (Linnaeus, 1758) (FERREIRA *et al.*, 2006).

This groundhopper or pygmy grasshopper, is a common Western Palaearctic species, the distribution of which is limited by the Azores Islands to the west, by France to the north, most of the Mediterranean to the south, reaching North Africa (Morocco and Lybia) and by Turkey plus several Middle Eastern countries to the east (CIGLIANO *et al.*, 2018). In Europe, *P. meridionalis* is quite widespread throughout the Mediterranean area in humid, vegetation-rich sandy, rocky or muddy places, usually not very far from the coast. This species is already known from all the other Macaronesian Archipelagos, the Canary Islands (LÓPEZ & MORALES, 2010), the Azores (SOUSA, 2010) and the Cape Verde Islands (HOCHKIRCH & LLORENTE, 2005). Any previous records of Tetrigidae were unknown from the archipelago of Madeira until April 28, 2018 when during a field trip, the author (MMA) collected a single female specimen (see Fig. 1) of *Paratettix meridionalis* (Rambur, 1838), from an agricultural field with a high abundance of grasses of the genus *Cyperus* (cf. *Cyperus esculentus* L.) located at Covas (on the way from Felpa to Rocha de Baixo), west of São Jorge, north of Madeira Island, 32° 49' 42.725" N, 16° 55' 22.962" W, 415 m *a.s.l.* This specimen of *P. meridionalis* is deposited in the author's private collection. It is the first recorded observation of this taxon as well as of the family Tetrigidae in the archipelago of Madeira. It is possible that this species may have been introduced from the Canary Islands or the Iberian Peninsula, through the same channels used by passengers and cargo between Madeira and those destinations. Further observations should be made to validate *P. meridionalis* establishment and to study any kind of impacts in local ecosystems.

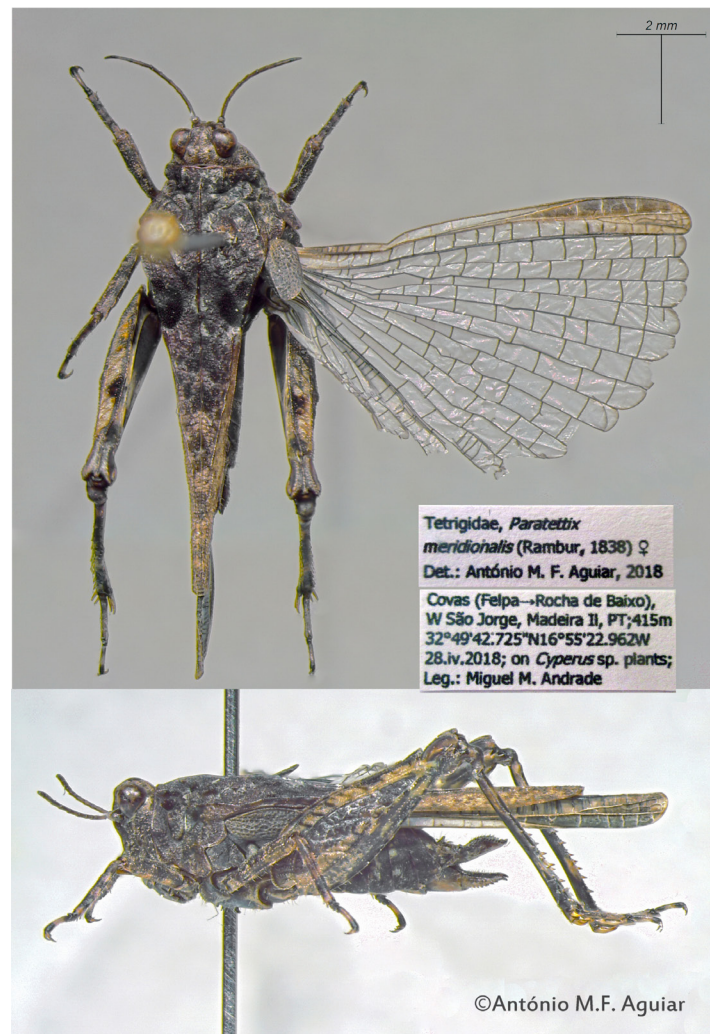


Fig. 1 – Dorsal view and left profile of a *Paratettix meridionalis* female specimen collected in Madeira Island.

REFERENCES

- CIGLIANO, M. M., H. BRAUN, D. C. EADES & D. OTTE:
2018. *Orthoptera Species File*. Version 5.0/5.0. <http://Orthoptera.SpeciesFile.org> [Accessed: 04/10/2018].
- FERREIRA, S., J. M. GROSSO-SILVA, P. SOUSA & P. S. VIEIRA:
2006. Contribution to the knowledge of the Tetrigidae (Orthoptera) in continental Portugal. *Boletín de la Sociedad Entomológica Aragonesa*, **38**: 141-144.
- HELLER, K. G.:
2013. *Fauna Europaea: Tetrigidae*. Fauna Europaea version 2017.06, <https://fauna-eu.org> [Accessed: 19/09/2018].
- HOCHKIRCH, A. & V. LLORENTE:
2005. Orthoptera. En: M. Arechavaleta, N. Zurita, M. C. Marrero & J. L. Martín (eds.). *Lista preliminar de especies silvestres de Cabo Verde (hongos, plantas y animales*

terrestres). 2005. Consejería de Medio Ambiente y Ordenación Territorial, Gobierno de Canarias, p. 69.

LLORENTE, V. & J. J. PRESA:

1981. Los Tetrígidae de la Península Ibérica. *Eos*, **57**: 127-152.

LÓPEZ, H. & E. MORALES:

2010. Orthoptera. En: *Lista de especies silvestres de Canarias. Hongos, plantas y animales terrestres*. 2009. M. Arechavaleta, S. Rodríguez, N. Zurita & A. García (coord.). Gobierno de Canarias, pp. 227-228.

SOUSA, A. B.:

2010. Orthoptera. In: Borges *et al.* (eds.). *A list of the terrestrial and marine biota from the Azores*. p. 213, Princípiã, Cascais, 432 pp.