



# The InBIO Barcoding Initiative Database: DNA barcodes of Orthoptera from Portugal

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## Abstract

## Background

The InBIO Barcoding Initiative (IBI) Orthoptera dataset contains records of 420 specimens covering all the eleven Orthoptera families occurring in Portugal. Specimens were collected in continental Portugal from 2005 to 2021 and were morphologically identified to species level by taxonomists. A total of 119 species were identified corresponding to about 77% of all the orthopteran species known from continental Portugal.

## New information

DNA barcodes of 54 taxa were made public for the first time at the Barcode of Life Data System (BOLD). Furthermore, the submitted sequences were found to cluster in 129 BINs (Barcode Index Numbers), 35 of which were new additions to the Barcode of Life Data System (BOLD). All specimens have their DNA barcodes publicly accessible through BOLD online database. *Stenobothrus lineatus* is recorded for the first time for continental Portugal. This dataset greatly increases the knowledge on the DNA barcodes and distribution of Orthoptera from Portugal. All DNA extractions and most specimens are deposited in the IBI collection at CIBIO, Research Center in Biodiversity and Genetic Resources.

## Keywords

Orthoptera, species distributions, continental Portugal, DNA barcode, cytochrome c oxidase subunit I (COI)

## Introduction

Insects are very challenging to study due to their astonishing biological diversity, the lack of taxonomic expertise for several groups and traditional morphology-based species identification being often logistically or financially unsustainable. DNA metabarcoding is rapidly emerging to overcome these challenges (van Klink et al. 2022), but its application relies on the existence of comprehensive reference collections of DNA barcodes. This method identifies multiple species from a mixed sample, based on DNA barcoding using high-throughput sequencing (HTS) of a specific DNA marker, usually the mitochondrial cytochrome c oxidase I (COI) gene. DNA barcoding is a molecular biology method for species identification that relies on the comparison of a short mitochondrial DNA sequence of interest to a library of sequences with known species identity (Hebert et al. 2003). Hence, for these comparisons, it is important to guarantee that a good sequence library is being used, i.e. all DNA barcodes come from specimens identified by taxonomists (Chimeno et al. 2023). The Barcode of Life Data Systems (BOLD) is an international barcode reference database made available in 2007 (Ratnasingham and Herbert 2007) and large national barcoding initiatives worldwide have contributed to increasing this library (Janzen and Hallwachs 2011, Geiger et al. 2016, deWaard et al. 2019). In Portugal, the InBIO Barcoding Initiative (IBI) was the first project aimed to develop a reference collection of DNA barcoding sequences, having largely focused on Portuguese invertebrate taxa, particularly insects (Ferreira et al. 2018).

Orthoptera are a diverse group of herbivorous insects and playing an important role in ecosystem functioning as both primary consumers in different habitats and significant food sources for higher trophic levels (e.g. birds, mammals) (Catry et al. 2018, Valdez and Cryan 2013). Due to the strong connection with plants, orthopterans are good indicators of

habitat changes and, therefore, often used in environmental monitoring and assessment (Bieringer et al. 2013, Vasconcelos et al. 2019). However, despite their functional importance, they are still poorly studied in areas with high levels of endemic species, such as the Iberian Peninsula (Hochkirch et al. 2016). Studies on the Portuguese Orthoptera fauna have been published in a very scattered manner over time, generally lacking comprehensive inventories or focusing on certain Orthoptera taxa (Pina et al. 2017). Although some of these more recent studies report new findings for the country (e.g. Lemos et al. (2016), Monteiro et al. (2016)), the prime information, such as which species occur in Portugal and their distributions, remains very incomplete.

In Europe, large DNA barcoding initiatives have been established mainly in the northern and central countries (Gaytán et al. 2020). In the study conducted by Hawliitschek et al. (2017), DNA barcodes of Orthoptera from four barcoding initiatives (Barcoding Fauna Bavarica (Germany), German Barcode of Life, Austrian Barcode of Life and Swiss Barcode of Life) comprising three central European countries (Austria, Germany and Switzerland) were made available. A total of 748 COI sequences were obtained for several central European Orthoptera taxa that also occur in other countries, namely in Portugal. This study also showed that barcoding studies can be successfully applied to Orthoptera revealing an overall congruence of 76.2% of the 127 Orthoptera taxa in the study. However, more work is necessary to create a library of barcodes of the European Orthoptera because the representation of certain groups (e.g. Tetrigidae, Gryllidae and Bradyporinae) (Kasalo et al. 2023) and regional areas, such as the southern European peninsulas, remains insufficient. The Iberian Peninsula is a known hotspot of endemic Orthoptera species, but many of its species remain unrepresented in the DNA barcoding reference collections.

The IBI Orthoptera dataset contains records of 420 specimens of Orthoptera collected in continental Portugal, all morphologically identified to species level, for a total of 119 species. Our results constitute a first step in the construction of a DNA barcode database of a curated reference collection of Iberian Orthoptera species.

## General description

**Purpose:** This dataset aims to provide a contribution to the knowledge on DNA barcodes of Portuguese Orthoptera. Such a library should facilitate DNA-based identification of species for both traditional molecular studies and DNA metabarcoding studies. Furthermore, it constitutes a valuable resource for taxonomic research on Iberian Orthoptera and their distribution.

**Additional information:** A total of 420 specimens of orthopterans were collected and DNA barcoded (Table 1, Suppl. material 2) corresponding to 119 species, about 77% of all the orthopteran species known from continental Portugal (Aires and Menano 1915, Pina et al. 2017, GBIF 2023, IUCN 2023). Figs 1, 2 illustrate examples of the diversity of species that are part of the dataset of distribution data and DNA barcodes of Portuguese Orthoptera. The dataset includes 39 Iberian endemic species, of which six occur only in continental Portugal: *Ephippigerida rosae*, *Luciapomaresius anapaulae*, *Neocallicrania barrosi*,

*Neocallicrania serrata*, *Pterolepis lusitanica* and *Pycnogaster cucullatus* (Table 1). Additionally, the species *Stenobothrus lineatus* is recorded for the first time for Portugal in this dataset. A full-length barcode of 658 bp was obtained for all 420 specimens. This dataset contributes significantly to the representation of both species and genetic diversity of Orthoptera in public libraries. Of the 120 taxa barcoded, DNA barcodes of 54 are made public for the first time (marked with # in Taxa field of Table 1). The submitted sequences were found to cluster in 129 BINs, 35 of which were new to BOLD (unique BINs, marked with " in Taxa field of Table 1).

Table 1.

List of taxa that were collected and DNA barcoded within this project. In column Taxa: <sup>1</sup> - indicates Iberian endemic species; <sup>2</sup> - indicates continental Portugal endemic species; # - indicates taxa without a public DNA barcode prior to this study; " - indicates unique BINs.

Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Acrididae	<i>Acrotylus insubricus</i> (Scopoli, 1786)	INV02543	<a href="#">IBIOR108-17</a>	<a href="#">BOLD:AAP4452</a>	<a href="#">OR974638</a>
Acrididae	<i>Acrotylus insubricus</i> (Scopoli, 1786)	INV02544	<a href="#">IBIOR109-17</a>	<a href="#">BOLD:AAP4452</a>	<a href="#">OR974794</a>
Acrididae	<i>Acrotylus insubricus</i> (Scopoli, 1786)	INV05545	<a href="#">IBIOR196-22</a>	<a href="#">BOLD:AAP4452</a>	<a href="#">OR974607</a>
Acrididae	<i>Acrotylus insubricus</i> (Scopoli, 1786)	INV06642	<a href="#">IBIOR436-22</a>	<a href="#">BOLD:AAP4452</a>	<a href="#">OR974455</a>
Acrididae	<i>Acrotylus patruelis</i> (Herrich-Schäffer, 1838)	INV00063	<a href="#">IBIOR002-17</a>	<a href="#">BOLD:AAJ6293</a>	<a href="#">OR974610</a>
Acrididae	<i>Acrotylus patruelis</i> (Herrich-Schäffer, 1838)	INV03740	<a href="#">IBIOR326-22</a>	<a href="#">BOLD:AAJ6293</a>	<a href="#">OR974601</a>
Acrididae	<i>Acrotylus patruelis</i> (Herrich-Schäffer, 1838)	INV05270	<a href="#">IBIOR392-22</a>	<a href="#">BOLD:AAJ6293</a>	<a href="#">OR974494</a>
Acrididae	<i>Acrotylus patruelis</i> (Herrich-Schäffer, 1838)	INV10594	<a href="#">IBIOR535-22</a>	<a href="#">BOLD:AAJ6293</a>	<a href="#">OR974432</a>
Acrididae	<i>Aiolopus puissantii</i> Defaut, 2005	INV00065	<a href="#">IBIOR004-17</a>	<a href="#">BOLD:AAZ1689</a>	<a href="#">OR974633</a>
Acrididae	<i>Aiolopus puissantii</i> Defaut, 2005	INV02502	<a href="#">IBIOR067-17</a>	<a href="#">BOLD:AAZ1689</a>	<a href="#">OR974542</a>
Acrididae	<i>Aiolopus strepens</i> (Latreille, 1804)	INV00066	<a href="#">IBIOR005-17</a>	<a href="#">BOLD:AAP4386</a>	<a href="#">OR974796</a>
Acrididae	<i>Aiolopus strepens</i> (Latreille, 1804)	INV02503	<a href="#">IBIOR068-17</a>	<a href="#">BOLD:AAP4386</a>	<a href="#">OR974414</a>
Acrididae	<i>Aiolopus strepens</i> (Latreille, 1804)	INV02539	<a href="#">IBIOR104-17</a>	<a href="#">BOLD:AAP4386</a>	<a href="#">OR974707</a>
Acrididae	<i>Aiolopus strepens</i> (Latreille, 1804)	INV02540	<a href="#">IBIOR105-17</a>	<a href="#">BOLD:AAP4386</a>	<a href="#">OR974749</a>
Acrididae	<i>Aiolopus strepens</i> (Latreille, 1804)	INV04053	<a href="#">IBIOR351-22</a>	<a href="#">BOLD:AAP4386</a>	<a href="#">OR974447</a>
Acrididae	<i>Aiolopus strepens</i> (Latreille, 1804)	INV06052	<a href="#">IBIOR406-22</a>	<a href="#">BOLD:AAP4386</a>	<a href="#">OR974623</a>
Acrididae	<i>Anacridium aegyptium</i> (Linnaeus, 1764)	INV02504	<a href="#">IBIOR069-17</a>	<a href="#">BOLD:AAO1248</a>	<a href="#">OR974491</a>

Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Acrididae	<i>Anacridium aegyptium</i> (Linnaeus, 1764)	INV02505	<a href="#">IBIOR070-17</a>	<a href="#">BOLD:AAO1248</a>	<a href="#">OR974554</a>
Acrididae	<i>Anacridium aegyptium</i> (Linnaeus, 1764)	INV04117	<a href="#">IBIOR166-19</a>	<a href="#">BOLD:AAO1248</a>	<a href="#">OR974781</a>
Acrididae	<i>Arcyptera tornosi</i> Bolívar, 18841	INV02598	<a href="#">IBIOR188-22</a>	<a href="#">BOLD:AER6128</a>	<a href="#">OR974776</a>
Acrididae	<i>Arcyptera tornosi</i> Bolívar, 18841	INV02599	<a href="#">IBIOR189-22</a>	<a href="#">BOLD:AER6128</a>	<a href="#">OR974669</a>
Acrididae	<i>Calephorus compressicornis</i> (Latreille, 1804)	INV02562	<a href="#">IBIOR120-17</a>	<a href="#">BOLD:AEA6681</a>	<a href="#">OR974480</a>
Acrididae	<i>Calephorus compressicornis</i> (Latreille, 1804)	INV02563	<a href="#">IBIOR121-17</a>	<a href="#">BOLD:AEA6681</a>	<a href="#">OR974777</a>
Acrididae	<i>Calliptamus barbarus</i> (Costa, 1836)	INV00067	<a href="#">IBIOR006-17</a>	<a href="#">BOLD:ACQ0538</a>	<a href="#">OR974431</a>
Acrididae	<i>Calliptamus barbarus</i> (Costa, 1836)	INV00068	<a href="#">IBIOR007-17</a>	<a href="#">BOLD:ACQ0538</a>	<a href="#">OR974606</a>
Acrididae	<i>Calliptamus barbarus</i> (Costa, 1836)	INV02550	<a href="#">IBIOR113-17</a>	<a href="#">BOLD:ACQ0538</a>	<a href="#">OR974538</a>
Acrididae	<i>Calliptamus barbarus</i> (Costa, 1836)	INV03646	<a href="#">IBIOR314-22</a>	<a href="#">BOLD:ACQ0538</a>	<a href="#">OR974580</a>
Acrididae	<i>Calliptamus barbarus</i> (Costa, 1836)	INV04028	<a href="#">IBIOR346-22</a>	<a href="#">BOLD:ACQ0538</a>	<a href="#">OR974686</a>
Acrididae	<i>Calliptamus wattenwylanus</i> Pantel, 1896	INV00069	<a href="#">IBIOR008-17</a>	<a href="#">BOLD:AEZ7204</a>	<a href="#">OR974823</a>
Acrididae	<i>Calliptamus wattenwylanus</i> Pantel, 1896	INV00070	<a href="#">IBIOR009-17</a>	<a href="#">BOLD:AEZ7204</a>	<a href="#">OR974681</a>
Acrididae	<i>Calliptamus wattenwylanus</i> Pantel, 1896	INV11426	<a href="#">IBIOR550-22</a>	<a href="#">BOLD:AEZ7204</a>	<a href="#">OR974745</a>
Acrididae	<i>Chorthippus apicalis</i> (Herrich-Schäffer, 1840)	INV00071	<a href="#">IBIOR010-17</a>	<a href="#">BOLD:AED8559</a>	<a href="#">OR974762</a>
Acrididae	<i>Chorthippus apicalis</i> (Herrich-Schäffer, 1840)	INV00072	<a href="#">IBIOR011-17</a>	<a href="#">BOLD:AED8559</a>	<a href="#">OR974600</a>
Acrididae	<i>Chorthippus apicalis</i> (Herrich-Schäffer, 1840)	INV02506	<a href="#">IBIOR071-17</a>	<a href="#">BOLD:AED8559</a>	<a href="#">OR974536</a>
Acrididae	<i>Chorthippus apicalis</i> (Herrich-Schäffer, 1840)	INV02507	<a href="#">IBIOR072-17</a>	<a href="#">BOLD:AED8559</a>	<a href="#">OR974696</a>
Acrididae	<i>Chorthippus apicalis</i> (Herrich-Schäffer, 1840)	INV02532	<a href="#">IBIOR097-17</a>	<a href="#">BOLD:AED8559</a>	<a href="#">OR974673</a>
Acrididae	<i>Chorthippus apicalis</i> (Herrich-Schäffer, 1840)	INV02533	<a href="#">IBIOR098-17</a>	<a href="#">BOLD:AED8559</a>	<a href="#">OR974657</a>
Acrididae	<i>Chorthippus binotatus</i> (Charpentier, 1825)	INV03941	<a href="#">IBIOR331-22</a>	<a href="#">BOLD:AAC5779</a>	<a href="#">OR974519</a>

Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Acrididae	<i>Chorthippus binotatus</i> (Charpentier, 1825)	INV05546	<a href="#">IBIOR197-22</a>	<a href="#">BOLD:AAC5779</a>	<a href="#">OR974508</a>
Acrididae	<i>Chorthippus binotatus</i> (Charpentier, 1825)	INV05547	<a href="#">IBIOR198-22</a>	<a href="#">BOLD:AAC5779</a>	<a href="#">OR974733</a>
Acrididae	<i>Chorthippus jacobsi</i> Harz, 19751	INV02535	<a href="#">IBIOR100-17</a>	<a href="#">BOLD:AAC5779</a>	<a href="#">OR974828</a>
Acrididae	<i>Chorthippus jacobsi</i> Harz, 19751	INV02536	<a href="#">IBIOR101-17</a>	<a href="#">BOLD:AAC5779</a>	<a href="#">OR974425</a>
Acrididae	<i>Chorthippus jacobsi</i> Harz, 19751	INV02537	<a href="#">IBIOR102-17</a>	<a href="#">BOLD:AAC5779</a>	<a href="#">OR974577</a>
Acrididae	<i>Chorthippus jucundus</i> (Fischer, 1853)	INV03734	<a href="#">IBIOR323-22</a>	<a href="#">BOLD:AER0035"</a>	<a href="#">OR974582</a>
Acrididae	<i>Chorthippus vagans</i> (Eversmann, 1848)	INV00073	<a href="#">IBIOR012-17</a>	<a href="#">BOLD:AAL3938</a>	<a href="#">OR974714</a>
Acrididae	<i>Chorthippus vagans</i> (Eversmann, 1848)	INV00074	<a href="#">IBIOR013-17</a>	<a href="#">BOLD:AAL3938</a>	<a href="#">OR974540</a>
Acrididae	<i>Chorthippus vagans</i> (Eversmann, 1848)	INV02548	<a href="#">IBIOR111-17</a>	<a href="#">BOLD:AAL3938</a>	<a href="#">OR974820</a>
Acrididae	<i>Chorthippus vagans</i> (Eversmann, 1848)	INV02704	<a href="#">IBIOR571-22</a>	<a href="#">BOLD:AAL3938</a>	<a href="#">OR974618</a>
Acrididae	<i>Chorthippus yersini</i> Harz, 19751	INV05556	<a href="#">IBIOR207-22</a>	<a href="#">BOLD:AAC5779</a>	<a href="#">OR974682</a>
Acrididae	<i>Chorthippus yersini</i> Harz, 19751	INV05557	<a href="#">IBIOR208-22</a>	<a href="#">BOLD:AAC5779</a>	<a href="#">OR974805</a>
Acrididae	<i>Dociostaurus genei</i> (Ocskay, 1832)	INV00075	<a href="#">IBIOR014-17</a>	<a href="#">BOLD:ADU3247</a>	<a href="#">OR974636</a>
Acrididae	<i>Dociostaurus genei</i> (Ocskay, 1832)	INV00076	<a href="#">IBIOR015-17</a>	<a href="#">BOLD:ADU3247</a>	<a href="#">OR974806</a>
Acrididae	<i>Dociostaurus hispanicus</i> Bolivar, 18981	INV00079	<a href="#">IBIOR018-17</a>	<a href="#">BOLD:ADV6985</a>	<a href="#">OR974787</a>
Acrididae	<i>Dociostaurus jagoi</i> Soltani, 1978	INV00077	<a href="#">IBIOR016-17</a>	<a href="#">BOLD:ADT8663</a>	<a href="#">OR974505</a>
Acrididae	<i>Dociostaurus jagoi</i> Soltani, 1978	INV00078	<a href="#">IBIOR017-17</a>	<a href="#">BOLD:ADT8663</a>	<a href="#">OR974567</a>
Acrididae	<i>Dociostaurus jagoi</i> Soltani, 1978	INV02549	<a href="#">IBIOR112-17</a>	<a href="#">BOLD:ADT8663</a>	<a href="#">OR974476</a>
Acrididae	<i>Dociostaurus jagoi</i> Soltani, 1978	INV03536	<a href="#">IBIOR308-22</a>	<a href="#">BOLD:ADT8663</a>	<a href="#">OR974516</a>
Acrididae	<i>Dociostaurus jagoi</i> Soltani, 1978	INV03540	<a href="#">IBIOR191-22</a>	<a href="#">BOLD:ADT8663</a>	<a href="#">OR974736</a>
Acrididae	<i>Dociostaurus jagoi</i> Soltani, 1978	INV03547	<a href="#">IBIOR309-22</a>	<a href="#">BOLD:ADT8663</a>	<a href="#">OR974585</a>
Acrididae	<i>Dociostaurus jagoi</i> Soltani, 1978	INV03556	<a href="#">IBIOR310-22</a>	<a href="#">BOLD:ADT8663</a>	<a href="#">OR974495</a>
Acrididae	<i>Dociostaurus jagoi</i> Soltani, 1978	INV03628	<a href="#">IBIOR313-22</a>	<a href="#">BOLD:ADT8663</a>	<a href="#">OR974808</a>
Acrididae	<i>Dociostaurus jagoi</i> Soltani, 1978	INV06726	<a href="#">IBIOR438-22</a>	<a href="#">BOLD:ADT8663</a>	<a href="#">OR974514</a>
Acrididae	<i>Dociostaurus jagoi</i> Soltani, 1978	INV07282	<a href="#">IBIOR464-22</a>	<a href="#">BOLD:ADT8663</a>	<a href="#">OR974807</a>

Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Acrididae	<i>Dociostaurus jagoi</i> Soltani, 1978	INV07542	<a href="#">IBIOR473-22</a>	<a href="#">BOLD:ADT8663</a>	<a href="#">OR974544</a>
Acrididae	<i>Dociostaurus jagoi</i> Soltani, 1978	INV07619	<a href="#">IBIOR480-22</a>	<a href="#">BOLD:ADT8663</a>	<a href="#">OR974532</a>
Acrididae	<i>Dociostaurus jagoi</i> Soltani, 1978	INV11390	<a href="#">IBIOR546-22</a>	<a href="#">BOLD:ADT8663</a>	<a href="#">OR974482</a>
Acrididae	<i>Dociostaurus jagoi</i> Soltani, 1978	INV11391	<a href="#">IBIOR547-22</a>	<a href="#">BOLD:ADT8663</a>	<a href="#">OR974635</a>
Acrididae	<i>Dociostaurus jagoi</i> Soltani, 1978	INV11393	<a href="#">IBIOR549-22</a>	<a href="#">BOLD:ADT8663</a>	<a href="#">OR974646</a>
Acrididae	<i>Dociostaurus maroccanus</i> (Thunberg, 1815)	INV00080	<a href="#">IBIOR019-17</a>	<a href="#">BOLD:AAX8673</a>	<a href="#">OR974534</a>
Acrididae	<i>Dociostaurus maroccanus</i> (Thunberg, 1815)	INV00081	<a href="#">IBIOR020-17</a>	<a href="#">BOLD:AAX8673</a>	<a href="#">OR974574</a>
Acrididae	<i>Euchorthippus elegantulus</i> Zeuner, 1940#	INV00083	<a href="#">IBIOR021-17</a>	<a href="#">BOLD:ADJ5172</a>	<a href="#">OR974465</a>
Acrididae	<i>Euchorthippus elegantulus</i> Zeuner, 1940#	INV00084	<a href="#">IBIOR022-17</a>	<a href="#">BOLD:ADJ5172</a>	<a href="#">OR974592</a>
Acrididae	<i>Euchorthippus elegantulus</i> Zeuner, 1940#	INV00085	<a href="#">IBIOR023-17</a>	<a href="#">BOLD:ADJ5172</a>	<a href="#">OR974659</a>
Acrididae	<i>Euchorthippus elegantulus</i> Zeuner, 1940#	INV00086	<a href="#">IBIOR024-17</a>	<a href="#">BOLD:ADJ5172</a>	<a href="#">OR974625</a>
Acrididae	<i>Euchorthippus elegantulus</i> Zeuner, 1940#	INV00087	<a href="#">IBIOR025-17</a>	<a href="#">BOLD:ADJ5172</a>	<a href="#">OR974559</a>
Acrididae	<i>Euchorthippus elegantulus</i> Zeuner, 1940#	INV00088	<a href="#">IBIOR026-17</a>	<a href="#">BOLD:ADJ5172</a>	<a href="#">OR974666</a>
Acrididae	<i>Euchorthippus elegantulus</i> Zeuner, 1940#	INV02579	<a href="#">IBIOR135-17</a>	<a href="#">BOLD:ADJ5172</a>	<a href="#">OR974674</a>
Acrididae	<i>Euchorthippus elegantulus</i> Zeuner, 1940#	INV02580	<a href="#">IBIOR136-17</a>	<a href="#">BOLD:ADJ5172</a>	<a href="#">OR974803</a>
Acrididae	<i>Euchorthippus elegantulus</i> Zeuner, 1940#	INV03557	<a href="#">IBIOR311-22</a>	<a href="#">BOLD:ADJ5172</a>	<a href="#">OR974428</a>
Acrididae	<i>Eyrepocnemis plorans</i> (Charpentier, 1825)	INV05585	<a href="#">IBIOR236-22</a>	<a href="#">BOLD:AAV4939</a>	<a href="#">OR974729</a>
Acrididae	<i>Eyrepocnemis plorans</i> (Charpentier, 1825)	INV05586	<a href="#">IBIOR237-22</a>	<a href="#">BOLD:AAV4939</a>	<a href="#">OR974676</a>
Acrididae	<i>Locusta migratoria</i> (Linnaeus, 1758)	INV02510	<a href="#">IBIOR075-17</a>	<a href="#">BOLD:AAD9526</a>	<a href="#">OR974584</a>
Acrididae	<i>Locusta migratoria</i> (Linnaeus, 1758)	INV02511	<a href="#">IBIOR076-17</a>	<a href="#">BOLD:AAD9526</a>	<a href="#">OR974821</a>
Acrididae	<i>Locusta migratoria</i> (Linnaeus, 1758)	INV05513	<a href="#">IBIOR141-19</a>	<a href="#">BOLD:AAD9526</a>	<a href="#">OR974698</a>

Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Acrididae	<i>Mioscirtus wagneri</i> (Eversmann, 1859)	INV05564	<a href="#">IBIOR215-22</a>	<a href="#">BOLD:ABV1949</a>	<a href="#">OR974436</a>
Acrididae	<i>Mioscirtus wagneri</i> (Eversmann, 1859)	INV05565	<a href="#">IBIOR216-22</a>	<a href="#">BOLD:ABV1949</a>	<a href="#">OR974457</a>
Acrididae	<i>Morphacris fasciata</i> (Thunberg, 1815)	INV02560	<a href="#">IBIOR118-17</a>	<a href="#">BOLD:ACR8091</a>	<a href="#">OR974668</a>
Acrididae	<i>Morphacris fasciata</i> (Thunberg, 1815)	INV02569	<a href="#">IBIOR125-17</a>	<a href="#">BOLD:ACR8091</a>	<a href="#">OR974488</a>
Acrididae	<i>Oedaleus decorus</i> (Germar, 1825)	INV00091	<a href="#">IBIOR027-17</a>	<a href="#">BOLD:AAE5868</a>	<a href="#">OR974713</a>
Acrididae	<i>Oedaleus decorus</i> (Germar, 1825)	INV00092	<a href="#">IBIOR142-19</a>	<a href="#">BOLD:AAE5868</a>	<a href="#">OR974497</a>
Acrididae	<i>Oedipoda caeruleascens</i> (Linnaeus, 1758)	INV00093	<a href="#">IBIOR028-17</a>	<a href="#">BOLD:AAC9181</a>	<a href="#">OR974732</a>
Acrididae	<i>Oedipoda caeruleascens</i> (Linnaeus, 1758)	INV00094	<a href="#">IBIOR029-17</a>	<a href="#">BOLD:AAC9181</a>	<a href="#">OR974612</a>
Acrididae	<i>Oedipoda caeruleascens</i> (Linnaeus, 1758)	INV02551	<a href="#">IBIOR114-17</a>	<a href="#">BOLD:AAC9181</a>	<a href="#">OR974535</a>
Acrididae	<i>Oedipoda caeruleascens</i> (Linnaeus, 1758)	INV04033	<a href="#">IBIOR161-19</a>	<a href="#">BOLD:AAC9181</a>	<a href="#">OR974793</a>
Acrididae	<i>Oedipoda charpentieri</i> Fieber, 1853	INV00095	<a href="#">IBIOR030-17</a>	<a href="#">BOLD:AAC9180</a>	<a href="#">OR974452</a>
Acrididae	<i>Oedipoda charpentieri</i> Fieber, 1853	INV00096	<a href="#">IBIOR031-17</a>	<a href="#">BOLD:AAC9180</a>	<a href="#">OR974742</a>
Acrididae	<i>Oedipoda charpentieri</i> Fieber, 1853	INV02512	<a href="#">IBIOR077-17</a>	<a href="#">BOLD:AAC9180</a>	<a href="#">OR974548</a>
Acrididae	<i>Oedipoda charpentieri</i> Fieber, 1853	INV02513	<a href="#">IBIOR078-17</a>	<a href="#">BOLD:AAC9180</a>	<a href="#">OR974571</a>
Acrididae	<i>Oedipoda coerulea</i> Saussure, 1884#	INV07299	<a href="#">IBIOR465-22</a>	<a href="#">BOLD:AEO7756</a>	<a href="#">OR974419</a>
Acrididae	<i>Omocestus panteli</i> (Bolivar, 1887) <sup>1</sup>	INV00097	<a href="#">IBIOR032-17</a>	<a href="#">BOLD:AAX0669</a>	<a href="#">OR974413</a>
Acrididae	<i>Omocestus panteli</i> (Bolivar, 1887) <sup>1</sup>	INV00098	<a href="#">IBIOR033-17</a>	<a href="#">BOLD:AAX0669</a>	<a href="#">OR974740</a>
Acrididae	<i>Omocestus panteli</i> (Bolivar, 1887) <sup>1</sup>	INV00099	<a href="#">IBIOR034-17</a>	<a href="#">BOLD:AAX0669</a>	<a href="#">OR974780</a>
Acrididae	<i>Omocestus panteli</i> (Bolivar, 1887) <sup>1</sup>	INV00100	<a href="#">IBIOR035-17</a>	<a href="#">BOLD:AAX0669</a>	<a href="#">OR974546</a>
Acrididae	<i>Omocestus panteli</i> (Bolivar, 1887) <sup>1</sup>	INV00101	<a href="#">IBIOR036-17</a>	<a href="#">BOLD:AAX0669</a>	<a href="#">OR974726</a>
Acrididae	<i>Omocestus panteli</i> (Bolivar, 1887) <sup>1</sup>	INV02531	<a href="#">IBIOR096-17</a>	<a href="#">BOLD:AAX0669</a>	<a href="#">OR974790</a>
Acrididae	<i>Omocestus panteli</i> (Bolivar, 1887) <sup>1</sup>	INV10730	<a href="#">IBIOR265-22</a>	<a href="#">BOLD:AAX0669</a>	<a href="#">OR974565</a>
Acrididae	<i>Omocestus raymondi</i> (Yersin, 1863)	INV02588	<a href="#">IBIOR178-22</a>	<a href="#">BOLD:AEO7761</a>	<a href="#">OR974430</a>
Acrididae	<i>Omocestus raymondi</i> (Yersin, 1863)	INV02589	<a href="#">IBIOR179-22</a>	<a href="#">BOLD:AEO7761</a>	<a href="#">OR974511</a>
Acrididae	<i>Omocestus rufipes</i> (Zetterstedt, 1821)	INV02575	<a href="#">IBIOR131-17</a>	<a href="#">BOLD:AAE1108</a>	<a href="#">OR974755</a>
Acrididae	<i>Omocestus rufipes</i> (Zetterstedt, 1821)	INV02576	<a href="#">IBIOR132-17</a>	<a href="#">BOLD:AAE1108</a>	<a href="#">OR974773</a>
Acrididae	<i>Omocestus viridulus</i> (Linnaeus, 1758)	INV05555	<a href="#">IBIOR206-22</a>	<a href="#">BOLD:AAE1108</a>	<a href="#">OR974599</a>
Acrididae	<i>Paracinema tricolor</i> (Thunberg, 1815)	INV06628	<a href="#">IBIOR432-22</a>	<a href="#">BOLD:ACU5079</a>	<a href="#">OR974730</a>



Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Acrididae	<i>Pezotettix giornae</i> (Rossi, 1794)	INV00102	<a href="#">IBIOR037-17</a>	<a href="#">BOLD:AE07437"</a>	<a href="#">OR974583</a>
Acrididae	<i>Pezotettix giornae</i> (Rossi, 1794)	INV00103	<a href="#">IBIOR038-17</a>	<a href="#">BOLD:AE07437"</a>	<a href="#">OR974543</a>
Acrididae	<i>Pezotettix giornae</i> (Rossi, 1794)	INV02538	<a href="#">IBIOR103-17</a>	<a href="#">BOLD:AE07437"</a>	<a href="#">OR974709</a>
Acrididae	<i>Pezotettix giornae</i> (Rossi, 1794)	INV03278	<a href="#">IBIOR306-22</a>	<a href="#">BOLD:AE07436</a>	<a href="#">OR974802</a>
Acrididae	<i>Pseudochorthippus parallelus</i> (Zetterstedt, 1821)	INV03712	<a href="#">IBIOR319-22</a>	<a href="#">BOLD:AAC3399</a>	<a href="#">OR974527</a>
Acrididae	<i>Pseudochorthippus parallelus</i> (Zetterstedt, 1821)	INV05554	<a href="#">IBIOR205-22</a>	<a href="#">BOLD:AAC3399</a>	<a href="#">OR974441</a>
Acrididae	<i>Sphingonotus azurescens</i> (Rambur, 1838) <sup>1</sup>	INV02556	<a href="#">IBIOR116-17</a>	<a href="#">BOLD:AAJ3344</a>	<a href="#">OR974768</a>
Acrididae	<i>Sphingonotus azurescens</i> (Rambur, 1838) <sup>1</sup>	INV02557	<a href="#">IBIOR172-22</a>	<a href="#">BOLD:AAJ3344</a>	<a href="#">OR974647</a>
Acrididae	<i>Sphingonotus azurescens</i> (Rambur, 1838) <sup>1</sup>	INV02594	<a href="#">IBIOR184-22</a>	<a href="#">BOLD:AAJ3344</a>	<a href="#">OR974570</a>
Acrididae	<i>Sphingonotus azurescens</i> (Rambur, 1838) <sup>1</sup>	INV06744	<a href="#">IBIOR439-22</a>	<a href="#">BOLD:AAJ3344</a>	<a href="#">OR974738</a>
Acrididae	<i>Sphingonotus imitans</i> Brunner von Wattenwyl, 1882 <sup>1</sup> #	INV02555	<a href="#">IBIOR171-22</a>	<a href="#">BOLD:AER3084"</a>	<a href="#">OR974661</a>
Acrididae	<i>Sphingonotus imitans</i> Brunner von Wattenwyl, 1882 <sup>1</sup> #	INV08093	<a href="#">IBIOR244-22</a>	<a href="#">BOLD:AER3084"</a>	<a href="#">OR974539</a>
Acrididae	<i>Sphingonotus Iluciapomaresi</i> (Default, 2005) <sup>1</sup>	INV00105	<a href="#">IBIOR040-17</a>	<a href="#">BOLD:AEI2886</a>	<a href="#">OR974734</a>
Acrididae	<i>Sphingonotus Iluciapomaresi</i> (Default, 2005) <sup>1</sup>	INV00106	<a href="#">IBIOR041-17</a>	<a href="#">BOLD:AEI2886</a>	<a href="#">OR974489</a>
Acrididae	<i>Sphingonotus Iluciapomaresi</i> (Default, 2005) <sup>1</sup>	INV00107	<a href="#">IBIOR042-17</a>	<a href="#">BOLD:AEI2886</a>	<a href="#">OR974721</a>
Acrididae	<i>Sphingonotus Iluciapomaresi</i> (Default, 2005) <sup>1</sup>	INV03709	<a href="#">IBIOR316-22</a>	<a href="#">BOLD:AEI2886</a>	<a href="#">OR974433</a>
Acrididae	<i>Sphingonotus Iluciapomaresi</i> (Default, 2005) <sup>1</sup>	INV03711	<a href="#">IBIOR318-22</a>	<a href="#">BOLD:AEI2886</a>	<a href="#">OR974624</a>
Acrididae	<i>Sphingonotus Iluciapomaresi</i> (Default, 2005) <sup>1</sup>	INV11392	<a href="#">IBIOR548-22</a>	<a href="#">BOLD:AEI2886</a>	<a href="#">OR974569</a>
Acrididae	<i>Sphingonotus lusitanicus</i> Ebner, 1941 <sup>1</sup> #	INV08094	<a href="#">IBIOR245-22</a>	<a href="#">BOLD:AEI2886</a>	<a href="#">OR974699</a>

Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Acrididae	<i>Sphingonotus nodulosus</i> Lluçia Pomares, 2013 <sup>1</sup> ,#	INV02553	<a href="#">IBIOR147-19</a>	<a href="#">BOLD:AAJ3344</a>	<a href="#">OR974506</a>
Acrididae	<i>Sphingonotus nodulosus</i> Lluçia Pomares, 2013 <sup>1</sup> ,#	INV02596	<a href="#">IBIOR186-22</a>	<a href="#">BOLD:AAJ3344</a>	<a href="#">OR974703</a>
Acrididae	<i>Sphingonotus rubescens</i> (Walker, 1870)	INV02591	<a href="#">IBIOR181-22</a>	<a href="#">BOLD:AFB6849</a>	<a href="#">OR974611</a>
Acrididae	<i>Stenobothrus grammicus</i> Cazorro y Ruiz, 1888	INV08096	<a href="#">IBIOR247-22</a>	<a href="#">BOLD:AER4390</a>	<a href="#">OR974501</a>
Acrididae	<i>Stenobothrus grammicus</i> Cazorro y Ruiz, 1888	INV08097	<a href="#">IBIOR248-22</a>	<a href="#">BOLD:AER4390</a>	<a href="#">OR974737</a>
Acrididae	<i>Stenobothrus lineatus</i> (Panzer, 1796)	INV05566	<a href="#">IBIOR217-22</a>	<a href="#">BOLD:AAC6368</a>	<a href="#">OR974812</a>
Acrididae	<i>Stenobothrus stigmaticus</i> (Rambur, 1838)	INV05552	<a href="#">IBIOR203-22</a>	<a href="#">BOLD:AAD9833</a>	<a href="#">OR974708</a>
Acrididae	<i>Stenobothrus stigmaticus</i> (Rambur, 1838)	INV05558	<a href="#">IBIOR209-22</a>	<a href="#">BOLD:AAD9833</a>	<a href="#">OR974772</a>
Acrididae	<i>Truxalis nasuta</i> (Linnaeus, 1758)#	INV02522	<a href="#">IBIOR087-17</a>	<a href="#">BOLD:AAP6089</a>	<a href="#">OR974692</a>
Acrididae	<i>Truxalis nasuta</i> (Linnaeus, 1758)#	INV02523	<a href="#">IBIOR088-17</a>	<a href="#">BOLD:AAP6089</a>	<a href="#">OR974525</a>
Gryllidae	<i>Acheta domesticus</i> (Linnaeus, 1758)	INV06916	<a href="#">IBIOR443-22</a>	<a href="#">BOLD:AAJ7534</a>	<a href="#">OR974760</a>
Gryllidae	<i>Acheta domesticus</i> (Linnaeus, 1758)	INV06947	<a href="#">IBIOR452-22</a>	<a href="#">BOLD:AAJ7534</a>	<a href="#">OR974811</a>
Gryllidae	<i>Acheta hispanicus</i> Rambur, 1838#	INV06943	<a href="#">IBIOR448-22</a>	<a href="#">BOLD:AAP6118</a>	<a href="#">OR974604</a>
Gryllidae	<i>Acheta hispanicus</i> Rambur, 1838#	INV11450	<a href="#">IBIOR553-22</a>	<a href="#">BOLD:AAP6118</a>	<a href="#">OR974517</a>
Gryllidae	<i>Eugryllodes escalerae</i> (Bolivar, 1894) 1.#	INV04014	<a href="#">IBIOR342-22</a>	<a href="#">BOLD:AEP5287"</a>	<a href="#">OR974785</a>
Gryllidae	<i>Eugryllodes escalerae</i> (Bolivar, 1894) 1.#	INV04015	<a href="#">IBIOR343-22</a>	<a href="#">BOLD:AEP5287"</a>	<a href="#">OR974822</a>
Gryllidae	<i>Eugryllodes escalerae</i> (Bolivar, 1894) 1.#	INV04046	<a href="#">IBIOR350-22</a>	<a href="#">BOLD:AEP5287"</a>	<a href="#">OR974421</a>
Gryllidae	<i>Eumodicogryllus bordigalensis</i> (Latreille, 1804)	INV02554	<a href="#">IBIOR115-17</a>	<a href="#">BOLD:ACU5350</a>	<a href="#">OR974640</a>
Gryllidae	<i>Eumodicogryllus bordigalensis</i> (Latreille, 1804)	INV02916	<a href="#">IBIOR149-19</a>	<a href="#">BOLD:ACU5350</a>	<a href="#">OR974751</a>
Gryllidae	<i>Eumodicogryllus bordigalensis</i> (Latreille, 1804)	INV02918	<a href="#">IBIOR150-19</a>	<a href="#">BOLD:ACU5350</a>	<a href="#">OR974644</a>
Gryllidae	<i>Eumodicogryllus bordigalensis</i> (Latreille, 1804)	INV02932	<a href="#">IBIOR151-19</a>	<a href="#">BOLD:ACU5350</a>	<a href="#">OR974663</a>

Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Gryllidae	<i>Eumodicogryllus bordigalensis</i> (Latreille, 1804)	INV03553	<a href="#">IBIOR155-19</a>	<a href="#">BOLD:ACU5350</a>	<a href="#">OR974788</a>
Gryllidae	<i>Eumodicogryllus bordigalensis</i> (Latreille, 1804)	INV04047	<a href="#">IBIOR162-19</a>	<a href="#">BOLD:ACU5350</a>	<a href="#">OR974683</a>
Gryllidae	<i>Eumodicogryllus bordigalensis</i> (Latreille, 1804)	INV08718	<a href="#">IBIOR505-22</a>	<a href="#">BOLD:ACU5350</a>	<a href="#">OR974470</a>
Gryllidae	<i>Eumodicogryllus bordigalensis</i> (Latreille, 1804)	INV08735	<a href="#">IBIOR506-22</a>	<a href="#">BOLD:ACU5350</a>	<a href="#">OR974662</a>
Gryllidae	<i>Eumodicogryllus bordigalensis</i> (Latreille, 1804)	INV08804	<a href="#">IBIOR511-22</a>	<a href="#">BOLD:ACU5350</a>	<a href="#">OR974594</a>
Gryllidae	<i>Eumodicogryllus bordigalensis</i> (Latreille, 1804)	INV10559	<a href="#">IBIOR530-22</a>	<a href="#">BOLD:ACU5350</a>	<a href="#">OR974603</a>
Gryllidae	<i>Gryllomorpha longicauda</i> (Rambur, 1838)#	INV07535	<a href="#">IBIOR471-22</a>	<a href="#">BOLD:AEP5097"</a>	<a href="#">OR974478</a>
Gryllidae	<i>Gryllomorpha longicauda</i> (Rambur, 1838)#	INV07551	<a href="#">IBIOR477-22</a>	<a href="#">BOLD:AEP5097"</a>	<a href="#">OR974602</a>
Gryllidae	<i>Gryllomorpha longicauda</i> (Rambur, 1838)#	INV07552	<a href="#">IBIOR478-22</a>	<a href="#">BOLD:AEP5097"</a>	<a href="#">OR974744</a>
Gryllidae	<i>Gryllomorpha longicauda</i> (Rambur, 1838)#	INV07767	<a href="#">IBIOR487-22</a>	<a href="#">BOLD:AEP5096"</a>	<a href="#">OR974694</a>
Gryllidae	<i>Gryllomorpha uclensis</i> Pantel, 1890#	INV03607	<a href="#">IBIOR312-22</a>	<a href="#">BOLD:AEP5096"</a>	<a href="#">OR974685</a>
Gryllidae	<i>Gryllomorpha uclensis</i> Pantel, 1890#	INV03710	<a href="#">IBIOR317-22</a>	<a href="#">BOLD:AEP5096"</a>	<a href="#">OR974418</a>
Gryllidae	<i>Gryllomorpha uclensis</i> Pantel, 1890#	INV04121	<a href="#">IBIOR361-22</a>	<a href="#">BOLD:AEP5096"</a>	<a href="#">OR974477</a>
Gryllidae	<i>Gryllomorpha uclensis</i> Pantel, 1890#	INV04122	<a href="#">IBIOR362-22</a>	<a href="#">BOLD:AEP5096"</a>	<a href="#">OR974555</a>
Gryllidae	<i>Gryllomorpha uclensis</i> Pantel, 1890#	INV07146	<a href="#">IBIOR460-22</a>	<a href="#">BOLD:AEP5096"</a>	<a href="#">OR974763</a>
Gryllidae	<i>Gryllus bimaculatus</i> De Geer, 1773	INV02564	<a href="#">IBIOR122-17</a>	<a href="#">BOLD:ABX6319</a>	<a href="#">OR974451</a>
Gryllidae	<i>Gryllus bimaculatus</i> De Geer, 1773	INV03744	<a href="#">IBIOR327-22</a>	<a href="#">BOLD:ABX6319</a>	<a href="#">OR974739</a>
Gryllidae	<i>Gryllus bimaculatus</i> De Geer, 1773	INV06946	<a href="#">IBIOR451-22</a>	<a href="#">BOLD:ABX6319</a>	<a href="#">OR974680</a>
Gryllidae	<i>Gryllus bimaculatus</i> De Geer, 1773	INV06963	<a href="#">IBIOR454-22</a>	<a href="#">BOLD:ABX6319</a>	<a href="#">OR974800</a>
Gryllidae	<i>Gryllus bimaculatus</i> De Geer, 1773	INV10186	<a href="#">IBIOR517-22</a>	<a href="#">BOLD:ABX6319</a>	<a href="#">OR974595</a>
Gryllidae	<i>Gryllus campestris</i> Linnaeus, 1758	INV02587	<a href="#">IBIOR177-22</a>	<a href="#">BOLD:AAD6537</a>	<a href="#">OR974715</a>
Gryllidae	<i>Gryllus campestris</i> Linnaeus, 1758	INV03268	<a href="#">IBIOR152-19</a>	<a href="#">BOLD:AAD6537</a>	<a href="#">OR974660</a>
Gryllidae	<i>Petaloptila fermini</i> Gorochov & Llorente del Moral, 2001 <sup>1</sup> #	INV03261	<a href="#">IBIOR301-22</a>	<a href="#">BOLD:AEO7507</a>	<a href="#">OR974593</a>

Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Gryllidae	<i>Petaloptila fermi</i> Gorochov & Llorente del Moral, 2001 <sup>1</sup> #	INV03262	<a href="#">IBIOR302-22</a>	<a href="#">BOLD:AE07507</a>	<a href="#">OR974460</a>
Gryllidae	<i>Petaloptila fermi</i> Gorochov & Llorente del Moral, 2001 <sup>1</sup> #	INV03263	<a href="#">IBIOR303-22</a>	<a href="#">BOLD:AE07507</a>	<a href="#">OR974498</a>
Gryllidae	<i>Petaloptila fermi</i> Gorochov & Llorente del Moral, 2001 <sup>1</sup> #	INV03264	<a href="#">IBIOR304-22</a>	<a href="#">BOLD:AE07507</a>	<a href="#">OR974557</a>
Gryllidae	<i>Petaloptila fermi</i> Gorochov & Llorente del Moral, 2001 <sup>1</sup> #	INV03265	<a href="#">IBIOR305-22</a>	<a href="#">BOLD:AE07507</a>	<a href="#">OR974537</a>
Gryllidae	<i>Petaloptila galaica</i> Domingo, 2021 <sup>1</sup> #	INV02494	<a href="#">IBIOR286-22</a>	<a href="#">BOLD:AE07506</a>	<a href="#">OR974701</a>
Gryllidae	<i>Petaloptila galaica</i> Domingo, 2021 <sup>1</sup> #	INV02880	<a href="#">IBIOR287-22</a>	<a href="#">BOLD:AE07506</a>	<a href="#">OR974670</a>
Gryllidae	<i>Petaloptila galaica</i> Domingo, 2021 <sup>1</sup> #	INV02881	<a href="#">IBIOR288-22</a>	<a href="#">BOLD:AE07506</a>	<a href="#">OR974825</a>
Gryllidae	<i>Petaloptila galaica</i> Domingo, 2021 <sup>1</sup> #	INV02882	<a href="#">IBIOR289-22</a>	<a href="#">BOLD:AE07506</a>	<a href="#">OR974487</a>
Gryllidae	<i>Petaloptila galaica</i> Domingo, 2021 <sup>1</sup> #	INV02890	<a href="#">IBIOR294-22</a>	<a href="#">BOLD:AE07506</a>	<a href="#">OR974453</a>
Gryllidae	<i>Petaloptila galaica</i> Domingo, 2021 <sup>1</sup> #	INV02975	<a href="#">IBIOR298-22</a>	<a href="#">BOLD:AE07506</a>	<a href="#">OR974652</a>
Gryllidae	<i>Petaloptila galaica</i> Domingo, 2021 <sup>1</sup> #	INV02976	<a href="#">IBIOR299-22</a>	<a href="#">BOLD:AE07506</a>	<a href="#">OR974677</a>
Gryllidae	<i>Petaloptila galaica</i> Domingo, 2021 <sup>1</sup> #	INV02977	<a href="#">IBIOR300-22</a>	<a href="#">BOLD:AE07506</a>	<a href="#">OR974706</a>
Gryllidae	<i>Petaloptila galaica</i> Domingo, 2021 <sup>1</sup> #	INV03671	<a href="#">IBIOR315-22</a>	<a href="#">BOLD:AE07506</a>	<a href="#">OR974503</a>
Gryllidae	<i>Petaloptila galaica</i> Domingo, 2021 <sup>1</sup> #	INV03938	<a href="#">IBIOR330-22</a>	<a href="#">BOLD:AE07506</a>	<a href="#">OR974702</a>
Gryllidae	<i>Petaloptila galaica</i> Domingo, 2021 <sup>1</sup> #	INV07145	<a href="#">IBIOR459-22</a>	<a href="#">BOLD:AE07506</a>	<a href="#">OR974789</a>
Gryllidae	<i>Petaloptila galaica</i> Domingo, 2021 <sup>1</sup> #	INV09746	<a href="#">IBIOR584-22</a>	<a href="#">BOLD:AE07506</a>	<a href="#">OR974629</a>
Gryllidae	<i>Petaloptila galaica</i> Domingo, 2021 <sup>1</sup> #	INV10284	<a href="#">IBIOR523-22</a>	<a href="#">BOLD:AE07506</a>	<a href="#">OR974801</a>
Gryllidae	<i>Sciobia lusitanica</i> (Rambur, 1838)#	INV00645	<a href="#">IBIOR169-19</a>	<a href="#">BOLD:ADV9764"</a>	<a href="#">OR974617</a>
Gryllidae	<i>Sciobia lusitanica</i> (Rambur, 1838)#	INV05578	<a href="#">IBIOR229-22</a>	<a href="#">BOLD:ADV9764"</a>	<a href="#">OR974474</a>
Gryllidae	<i>Sciobia lusitanica</i> (Rambur, 1838)#	INV07347	<a href="#">IBIOR466-22</a>	<a href="#">BOLD:ADV9764"</a>	<a href="#">OR974653</a>
Gryllidae	<i>Sciobia lusitanica</i> (Rambur, 1838)#	INV08092	<a href="#">IBIOR243-22</a>	<a href="#">BOLD:ADV9764"</a>	<a href="#">OR974568</a>
Gryllidae	<i>Sciobia lusitanica</i> (Rambur, 1838)#	INV08476	<a href="#">IBIOR496-22</a>	<a href="#">BOLD:ADV9764"</a>	<a href="#">OR974558</a>
Gryllidae	<i>Sciobia lusitanica</i> (Rambur, 1838)#	INV08769	<a href="#">IBIOR508-22</a>	<a href="#">BOLD:ADV9764"</a>	<a href="#">OR974564</a>
Gryllidae	<i>Svercus palmeterum</i> (Krauss, 1902)#	INV08098	<a href="#">IBIOR249-22</a>	<a href="#">BOLD:AEI3656</a>	<a href="#">OR974553</a>
Gryllidae	<i>Svercus palmeterum</i> (Krauss, 1902)#	INV10188	<a href="#">IBIOR518-22</a>	<a href="#">BOLD:AEI3656</a>	<a href="#">OR974486</a>
Gryllotalpidae	<i>Gryllotalpa africana</i> Palisot de Beauvois, 1805	INV09085	<a href="#">IBIOR514-22</a>	<a href="#">BOLD:AER6009</a>	<a href="#">OR974770</a>

Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Gryllotalpidae	<i>Gryllotalpa vineae</i> Bennet-Clark, 1970#	INV02541	<a href="#">IBIOR106-17</a>	<a href="#">BOLD:AEP5100"</a>	<a href="#">OR974509</a>
Gryllotalpidae	<i>Gryllotalpa vineae</i> Bennet-Clark, 1970#	INV04101	<a href="#">IBIOR355-22</a>	<a href="#">BOLD:AEP5099"</a>	<a href="#">OR974817</a>
Gryllotalpidae	<i>Gryllotalpa vineae</i> Bennet-Clark, 1970#	INV04148	<a href="#">IBIOR364-22</a>	<a href="#">BOLD:AEP5099"</a>	<a href="#">OR974504</a>
Mogoplistidae	<i>Arachnocephalus vestitus</i> Costa, 1855	INV05571	<a href="#">IBIOR222-22</a>	<a href="#">BOLD:AER1092</a>	<a href="#">OR974649</a>
Mogoplistidae	<i>Paramogoplistes dentatus</i> Gorochov & Llorente del Moral, 2001 <sup>1</sup>	INV07634	<a href="#">IBIOR483-22</a>	<a href="#">BOLD:AEO7941"</a>	<a href="#">OR974590</a>
Mogoplistidae	<i>Paramogoplistes ortini</i> Lluçà Pomares, 2015 <sup>1</sup>	INV07633	<a href="#">IBIOR482-22</a>	<a href="#">BOLD:AEO7942"</a>	<a href="#">OR974689</a>
Mogoplistidae	<i>Paramogoplistes ortini</i> Lluçà Pomares, 2015 <sup>1</sup>	INV07690	<a href="#">IBIOR486-22</a>	<a href="#">BOLD:AEO7942"</a>	<a href="#">OR974632</a>
Mogoplistidae	<i>Pseudomogoplistes vicentae</i> Gorochov, 1996#	INV05575	<a href="#">IBIOR226-22</a>	<a href="#">BOLD:AEI3508</a>	<a href="#">OR974710</a>
Mogoplistidae	<i>Pseudomogoplistes vicentae</i> Gorochov, 1996#	INV05576	<a href="#">IBIOR227-22</a>	<a href="#">BOLD:AEI3508</a>	<a href="#">OR974484</a>
Oecanthidae	<i>Oecanthus dulcisonans</i> Gorochov, 1993#	INV05589	<a href="#">IBIOR240-22</a>	<a href="#">BOLD:ACG7286</a>	<a href="#">OR974741</a>
Oecanthidae	<i>Oecanthus pellucens</i> (Scopoli, 1763)	INV00109	<a href="#">IBIOR270-22</a>	<a href="#">BOLD:AAF4350</a>	<a href="#">OR974458</a>
Oecanthidae	<i>Oecanthus pellucens</i> (Scopoli, 1763)	INV00110	<a href="#">IBIOR044-17</a>	<a href="#">BOLD:AAF4350</a>	<a href="#">OR974627</a>
Oecanthidae	<i>Oecanthus pellucens</i> (Scopoli, 1763)	INV01600	<a href="#">IBIOR143-19</a>	<a href="#">BOLD:AAF4350</a>	<a href="#">OR974588</a>
Oecanthidae	<i>Oecanthus pellucens</i> (Scopoli, 1763)	INV03582	<a href="#">IBIOR156-19</a>	<a href="#">BOLD:AAF4350</a>	<a href="#">OR974779</a>
Oecanthidae	<i>Oecanthus pellucens</i> (Scopoli, 1763)	INV03638	<a href="#">IBIOR158-19</a>	<a href="#">BOLD:AAF4350</a>	<a href="#">OR974621</a>
Oecanthidae	<i>Oecanthus pellucens</i> (Scopoli, 1763)	INV07629	<a href="#">IBIOR481-22</a>	<a href="#">BOLD:AAF4350</a>	<a href="#">OR974560</a>
Pamphagidae	<i>Acinipe ignatii</i> Llorente del Moral & Presa, 1983 <sup>1</sup> #	INV05580	<a href="#">IBIOR231-22</a>	<a href="#">BOLD:AER2325"</a>	<a href="#">OR974628</a>
Pamphagidae	<i>Acinipe ignatii</i> Llorente del Moral & Presa, 1983 <sup>1</sup> #	INV05581	<a href="#">IBIOR232-22</a>	<a href="#">BOLD:AER2325"</a>	<a href="#">OR974475</a>
Pamphagidae	<i>Eumigus ayresi</i> Bolívar, 1912 <sup>1</sup> #	INV04381	<a href="#">IBIOR388-22</a>	<a href="#">BOLD:AEP5224</a>	<a href="#">OR974727</a>
Pamphagidae	<i>Eumigus ayresi</i> Bolívar, 1912 <sup>1</sup> #	INV04382	<a href="#">IBIOR389-22</a>	<a href="#">BOLD:AEP5224</a>	<a href="#">OR974687</a>
Pamphagidae	<i>Eumigus ayresi</i> Bolívar, 1912 <sup>1</sup> #	INV04384	<a href="#">IBIOR390-22</a>	<a href="#">BOLD:AEP5224</a>	<a href="#">OR974530</a>
Pamphagidae	<i>Euryparyphes terrulentus</i> (Serville, 1838) <sup>1</sup> #	INV00111	<a href="#">IBIOR045-17</a>	<a href="#">BOLD:AEP5297"</a>	<a href="#">OR974434</a>

Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Pamphagidae	<i>Euryparyphes terrulentus</i> (Serville, 1838) <sup>1</sup> #	INV00112	<a href="#">IBIOR046-17</a>	<a href="#">BOLD:AEP5297"</a>	<a href="#">OR974613</a>
Pamphagidae	<i>Euryparyphes terrulentus</i> (Serville, 1838) <sup>1</sup> #	INV02509	<a href="#">IBIOR074-17</a>	<a href="#">BOLD:AEP5297"</a>	<a href="#">OR974711</a>
Pyrgomorphidae	<i>Pyrgomorpha conica</i> (Olivier, 1791)	INV02528	<a href="#">IBIOR093-17</a>	<a href="#">BOLD:AEO6938</a>	<a href="#">OR974695</a>
Pyrgomorphidae	<i>Pyrgomorpha conica</i> (Olivier, 1791)	INV02586	<a href="#">IBIOR176-22</a>	<a href="#">BOLD:AEO6938</a>	<a href="#">OR974735</a>
Tetrigidae	<i>Paratettix meridionalis</i> (Rambur, 1838)	INV00113	<a href="#">IBIOR047-17</a>	<a href="#">BOLD:AAP5007</a>	<a href="#">OR974448</a>
Tetrigidae	<i>Paratettix meridionalis</i> (Rambur, 1838)	INV00114	<a href="#">IBIOR048-17</a>	<a href="#">BOLD:AAP5007</a>	<a href="#">OR974720</a>
Tetrigidae	<i>Paratettix meridionalis</i> (Rambur, 1838)	INV00169	<a href="#">IBIOR281-22</a>	<a href="#">BOLD:AAP5007</a>	<a href="#">OR974423</a>
Tetrigidae	<i>Paratettix meridionalis</i> (Rambur, 1838)	INV00487	<a href="#">IBIOR282-22</a>	<a href="#">BOLD:AAP5007</a>	<a href="#">OR974454</a>
Tetrigidae	<i>Paratettix meridionalis</i> (Rambur, 1838)	INV02534	<a href="#">IBIOR099-17</a>	<a href="#">BOLD:AAP5007</a>	<a href="#">OR974775</a>
Tetrigidae	<i>Paratettix meridionalis</i> (Rambur, 1838)	INV04327	<a href="#">IBIOR378-22</a>	<a href="#">BOLD:AAP5007</a>	<a href="#">OR974645</a>
Tetrigidae	<i>Paratettix meridionalis</i> (Rambur, 1838)	INV06862	<a href="#">IBIOR442-22</a>	<a href="#">BOLD:AAP5007</a>	<a href="#">OR974717</a>
Tetrigidae	<i>Paratettix meridionalis</i> (Rambur, 1838)	INV08590	<a href="#">IBIOR503-22</a>	<a href="#">BOLD:AAP5007</a>	<a href="#">OR974665</a>
Tetrigidae	<i>Tetrix ceperoi</i> (Bolívar, 1887)	INV03714	<a href="#">IBIOR321-22</a>	<a href="#">BOLD:AAF1605</a>	<a href="#">OR974591</a>
Tetrigidae	<i>Tetrix ceperoi</i> (Bolívar, 1887)	INV04328	<a href="#">IBIOR167-19</a>	<a href="#">BOLD:AAF1605</a>	<a href="#">OR974572</a>
Tetrigidae	<i>Tetrix ceperoi</i> (Bolívar, 1887)	INV04333	<a href="#">IBIOR168-19</a>	<a href="#">BOLD:AAF1605</a>	<a href="#">OR974427</a>
Tetrigidae	<i>Tetrix depressa</i> Brisout de Barneville, 1848	INV04324	<a href="#">IBIOR375-22</a>	<a href="#">BOLD:AER2533</a>	<a href="#">OR974747</a>
Tetrigidae	<i>Tetrix depressa</i> Brisout de Barneville, 1848	INV04335	<a href="#">IBIOR383-22</a>	<a href="#">BOLD:AER2533</a>	<a href="#">OR974463</a>
Tetrigidae	<i>Tetrix nodulosa</i> (Fieber, 1853)#	INV02584	<a href="#">IBIOR139-17</a>	<a href="#">BOLD:AEO6332"</a>	<a href="#">OR974637</a>
Tetrigidae	<i>Tetrix undulata</i> (Sowerby, 1806)	INV02886	<a href="#">IBIOR290-22</a>	<a href="#">BOLD:ACU3727</a>	<a href="#">OR974765</a>
Tetrigidae	<i>Tetrix undulata</i> (Sowerby, 1806)	INV02887	<a href="#">IBIOR291-22</a>	<a href="#">BOLD:ACU3727</a>	<a href="#">OR974722</a>
Tetrigidae	<i>Tetrix undulata</i> (Sowerby, 1806)	INV04322	<a href="#">IBIOR373-22</a>	<a href="#">BOLD:ACU3727</a>	<a href="#">OR974753</a>
Tetrigidae	<i>Tetrix undulata</i> (Sowerby, 1806)	INV06353	<a href="#">IBIOR415-22</a>	<a href="#">BOLD:ACU3727</a>	<a href="#">OR974634</a>
Tetrigidae	<i>Tetrix undulata</i> (Sowerby, 1806)	INV06531	<a href="#">IBIOR421-22</a>	<a href="#">BOLD:ACU3727</a>	<a href="#">OR974705</a>
Tetrigidae	<i>Tetrix undulata</i> (Sowerby, 1806)	INV09776	<a href="#">IBIOR585-22</a>	<a href="#">BOLD:ACU3727</a>	<a href="#">OR974492</a>
Tetrigidae	<i>Tetrix undulata</i> (Sowerby, 1806)	INV09777	<a href="#">IBIOR586-22</a>	<a href="#">BOLD:ACU3727</a>	<a href="#">OR974438</a>
Tetrigidae	<i>Tetrix undulata</i> (Sowerby, 1806)	INV09862	<a href="#">IBIOR587-22</a>	<a href="#">BOLD:ACU3727</a>	<a href="#">OR974464</a>
Tetrigidae	<i>Tetrix undulata</i> (Sowerby, 1806)	INV10036	<a href="#">IBIOR588-22</a>	<a href="#">BOLD:ACU3727</a>	<a href="#">OR974575</a>
Tettigoniidae	<i>Antaxius florezi</i> Bolívar, 1900 <sup>1</sup> #	INV05548	<a href="#">IBIOR199-22</a>	<a href="#">BOLD:AER0570</a>	<a href="#">OR974719</a>

Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Tettigoniidae	<i>Antaxius florezi</i> Bolivar, 1900 <sup>1</sup> #	INV05549	<a href="#">IBIOR200-22</a>	<a href="#">BOLD:AER0570</a>	<a href="#">OR974562</a>
Tettigoniidae	<i>Antaxius spinibrachius</i> (Fischer, 1853)#	INV01297	<a href="#">IBIOR284-22</a>	<a href="#">BOLD:AER0568</a>	<a href="#">OR974748</a>
Tettigoniidae	<i>Antaxius spinibrachius</i> (Fischer, 1853)#	INV03948	<a href="#">IBIOR332-22</a>	<a href="#">BOLD:AER0568</a>	<a href="#">OR974810</a>
Tettigoniidae	<i>Antaxius spinibrachius</i> (Fischer, 1853)#	INV03993	<a href="#">IBIOR336-22</a>	<a href="#">BOLD:AER0568</a>	<a href="#">OR974712</a>
Tettigoniidae	<i>Antaxius spinibrachius</i> (Fischer, 1853)#	INV03994	<a href="#">IBIOR337-22</a>	<a href="#">BOLD:AER0568</a>	<a href="#">OR974693</a>
Tettigoniidae	<i>Antaxius spinibrachius</i> (Fischer, 1853)#	INV04000	<a href="#">IBIOR339-22</a>	<a href="#">BOLD:AER0568</a>	<a href="#">OR974743</a>
Tettigoniidae	<i>Antaxius spinibrachius</i> (Fischer, 1853)#	INV04001	<a href="#">IBIOR340-22</a>	<a href="#">BOLD:AER0568</a>	<a href="#">OR974445</a>
Tettigoniidae	<i>Antaxius spinibrachius</i> (Fischer, 1853)#	INV04034	<a href="#">IBIOR347-22</a>	<a href="#">BOLD:AER0567</a>	<a href="#">OR974576</a>
Tettigoniidae	<i>Antaxius spinibrachius</i> (Fischer, 1853)#	INV04036	<a href="#">IBIOR348-22</a>	<a href="#">BOLD:AER0567</a>	<a href="#">OR974417</a>
Tettigoniidae	<i>Antaxius spinibrachius</i> (Fischer, 1853)#	INV04088	<a href="#">IBIOR352-22</a>	<a href="#">BOLD:AER0567</a>	<a href="#">OR974791</a>
Tettigoniidae	<i>Antaxius spinibrachius</i> (Fischer, 1853)#	INV05550	<a href="#">IBIOR201-22</a>	<a href="#">BOLD:AER0569</a>	<a href="#">OR974641</a>
Tettigoniidae	<i>Antaxius spinibrachius</i> (Fischer, 1853)#	INV05551	<a href="#">IBIOR202-22</a>	<a href="#">BOLD:AER0569</a>	<a href="#">OR974472</a>
Tettigoniidae	<i>Antaxius spinibrachius</i> (Fischer, 1853)#	INV07171	<a href="#">IBIOR567-22</a>	<a href="#">BOLD:AER0569</a>	<a href="#">OR974688</a>
Tettigoniidae	<i>Antaxius spinibrachius</i> (Fischer, 1853)#	INV07172	<a href="#">IBIOR568-22</a>	<a href="#">BOLD:AER0569</a>	<a href="#">OR974426</a>
Tettigoniidae	<i>Antaxius spinibrachius</i> (Fischer, 1853)#	INV07174	<a href="#">IBIOR569-22</a>	<a href="#">BOLD:AER0567</a>	<a href="#">OR974824</a>
Tettigoniidae	<i>Conocephalus conocephalus</i> (Linnaeus, 1767)	INV05569	<a href="#">IBIOR220-22</a>	<a href="#">BOLD:AEQ8460</a>	<a href="#">OR974496</a>
Tettigoniidae	<i>Conocephalus conocephalus</i> (Linnaeus, 1767)	INV05570	<a href="#">IBIOR221-22</a>	<a href="#">BOLD:AEQ8460</a>	<a href="#">OR974443</a>
Tettigoniidae	<i>Conocephalus conocephalus</i> (Linnaeus, 1767)	INV06923	<a href="#">IBIOR445-22</a>	<a href="#">BOLD:AEQ8460</a>	<a href="#">OR974757</a>

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Tettigoniidae	<i>Conocephalus conocephalus</i> (Linnaeus, 1767)	INV06925	<a href="#">IBIOR446-22</a>	<a href="#">BOLD:AEQ8460</a>	<a href="#">OR974573</a>
Tettigoniidae	<i>Conocephalus conocephalus</i> (Linnaeus, 1767)	INV06944	<a href="#">IBIOR449-22</a>	<a href="#">BOLD:AEQ8460</a>	<a href="#">OR974561</a>
Tettigoniidae	<i>Conocephalus conocephalus</i> (Linnaeus, 1767)	INV06948	<a href="#">IBIOR453-22</a>	<a href="#">BOLD:AEQ8460</a>	<a href="#">OR974493</a>
Tettigoniidae	<i>Conocephalus fuscus</i> (Fabricius, 1793)	INV05583	<a href="#">IBIOR234-22</a>	<a href="#">BOLD:AEQ8462</a>	<a href="#">OR974609</a>
Tettigoniidae	<i>Conocephalus fuscus</i> (Fabricius, 1793)	INV06634	<a href="#">IBIOR435-22</a>	<a href="#">BOLD:AEQ8462</a>	<a href="#">OR974829</a>
Tettigoniidae	<i>Conocephalus fuscus</i> (Fabricius, 1793)	INV09078	<a href="#">IBIOR513-22</a>	<a href="#">BOLD:AEQ8462</a>	<a href="#">OR974579</a>
Tettigoniidae	<i>Cyrtaspis scutata</i> (Charpentier, 1825)#	INV07949	<a href="#">IBIOR493-22</a>	<a href="#">BOLD:AEQ8625</a>	<a href="#">OR974541</a>
Tettigoniidae	<i>Cyrtaspis scutata</i> (Charpentier, 1825)#	INV08776	<a href="#">IBIOR510-22</a>	<a href="#">BOLD:AEQ8625</a>	<a href="#">OR974639</a>
Tettigoniidae	<i>Cyrtaspis scutata</i> (Charpentier, 1825)#	INV09030	<a href="#">IBIOR512-22</a>	<a href="#">BOLD:AEQ8625</a>	<a href="#">OR974656</a>
Tettigoniidae	<i>Decticus albifrons</i> (Fabricius, 1775)#	INV00115	<a href="#">IBIOR049-17</a>	<a href="#">BOLD:AEQ8654"</a>	<a href="#">OR974549</a>
Tettigoniidae	<i>Decticus albifrons</i> (Fabricius, 1775)#	INV00116	<a href="#">IBIOR271-22</a>	<a href="#">BOLD:AEQ8654"</a>	<a href="#">OR974550</a>
Tettigoniidae	<i>Decticus albifrons</i> (Fabricius, 1775)#	INV02508	<a href="#">IBIOR073-17</a>	<a href="#">BOLD:AEQ8654"</a>	<a href="#">OR974446</a>
Tettigoniidae	<i>Ephippigerida diluta</i> (Bolivar, 1878) <sup>1</sup> #	INV08107	<a href="#">IBIOR258-22</a>	<a href="#">BOLD:AEP5780"</a>	<a href="#">OR974778</a>
Tettigoniidae	<i>Ephippigerida diluta</i> (Bolivar, 1878) <sup>1</sup> #	INV08108	<a href="#">IBIOR259-22</a>	<a href="#">BOLD:AEP5780"</a>	<a href="#">OR974678</a>
Tettigoniidae	<i>Ephippigerida rosae</i> Barat & Correas, 2015 <sup>1,2</sup> #	INV08109	<a href="#">IBIOR260-22</a>	<a href="#">BOLD:AEP5781"</a>	<a href="#">OR974415</a>
Tettigoniidae	<i>Incertana decorata</i> (Fieber, 1853)#	INV02577	<a href="#">IBIOR133-17</a>	<a href="#">BOLD:AEO9013</a>	<a href="#">OR974700</a>
Tettigoniidae	<i>Incertana decorata</i> (Fieber, 1853)#	INV02578	<a href="#">IBIOR134-17</a>	<a href="#">BOLD:AEO9013</a>	<a href="#">OR974759</a>
Tettigoniidae	<i>Leptophyes punctatissima</i> (Bosc, 1792)	INV05562	<a href="#">IBIOR213-22</a>	<a href="#">BOLD:ADT5783</a>	<a href="#">OR974467</a>
Tettigoniidae	<i>Lluciapomaresius anapaulae</i> (Schmidt, 2009) <sup>1,2</sup> #	INV02573	<a href="#">IBIOR129-17</a>	<a href="#">BOLD:AEO8290</a>	<a href="#">OR974723</a>
Tettigoniidae	<i>Lluciapomaresius asturiensis</i> (Bolívar, 1898) <sup>1</sup> #	INV03388	<a href="#">IBIOR307-22</a>	<a href="#">BOLD:AEO6324"</a>	<a href="#">OR974819</a>
Tettigoniidae	<i>Lluciapomaresius asturiensis</i> (Bolívar, 1898) <sup>1</sup> #	INV03952	<a href="#">IBIOR333-22</a>	<a href="#">BOLD:AEO6324"</a>	<a href="#">OR974672</a>
Tettigoniidae	<i>Lluciapomaresius asturiensis</i> (Bolívar, 1898) <sup>1</sup> #	INV05560	<a href="#">IBIOR211-22</a>	<a href="#">BOLD:AEO8296</a>	<a href="#">OR974648</a>



Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Tettigoniidae	<i>Luciapomaresius asturiensis</i> (Bolívar, 1898) <sup>1</sup> #	INV05561	<a href="#">IBIOR212-22</a>	<a href="#">BOLD:AE08296</a>	<a href="#">OR974697</a>
Tettigoniidae	<i>Luciapomaresius stalii</i> (Bolívar, 1877) <sup>1</sup> #	INV08100	<a href="#">IBIOR251-22</a>	<a href="#">BOLD:AE08295</a>	<a href="#">OR974783</a>
Tettigoniidae	<i>Meconema thalassinum</i> (De Geer, 1773)	INV03732	<a href="#">IBIOR159-19</a>	<a href="#">BOLD:AAK7060</a>	<a href="#">OR974440</a>
Tettigoniidae	<i>Meconema thalassinum</i> (De Geer, 1773)	INV03944	<a href="#">IBIOR160-19</a>	<a href="#">BOLD:AAK7060</a>	<a href="#">OR974750</a>
Tettigoniidae	<i>Meconema thalassinum</i> (De Geer, 1773)	INV04094	<a href="#">IBIOR165-19</a>	<a href="#">BOLD:AAK7060</a>	<a href="#">OR974507</a>
Tettigoniidae	<i>Metrioptera ambigua</i> Pfau, 1986 <sup>1</sup> #	INV02600	<a href="#">IBIOR190-22</a>	<a href="#">BOLD:AE08174</a>	<a href="#">OR974461</a>
Tettigoniidae	<i>Metrioptera ambigua</i> Pfau, 1986 <sup>1</sup> #	INV05542	<a href="#">IBIOR193-22</a>	<a href="#">BOLD:AE08174</a>	<a href="#">OR974767</a>
Tettigoniidae	<i>Neocallicrania barrosi</i> Barat, 2013 <sup>1,2</sup> #	INV08101	<a href="#">IBIOR252-22</a>	<a href="#">BOLD:AE07827"</a>	<a href="#">OR974485</a>
Tettigoniidae	<i>Neocallicrania barrosi</i> Barat, 2013 <sup>1,2</sup> #	INV08102	<a href="#">IBIOR253-22</a>	<a href="#">BOLD:AE07827"</a>	<a href="#">OR974563</a>
Tettigoniidae	<i>Neocallicrania lusitanica</i> (Aires & Menano, 1916) <sup>1</sup> #	INV08110	<a href="#">IBIOR261-22</a>	<a href="#">BOLD:AE07822</a>	<a href="#">OR974578</a>
Tettigoniidae	<i>Neocallicrania lusitanica</i> (Aires & Menano, 1916) <sup>1</sup> #	INV08111	<a href="#">IBIOR262-22</a>	<a href="#">BOLD:AE07822</a>	<a href="#">OR974435</a>
Tettigoniidae	<i>Neocallicrania lusitanica</i> (Aires & Menano, 1916) <sup>1</sup> #	INV08112	<a href="#">IBIOR263-22</a>	<a href="#">BOLD:AE07826"</a>	<a href="#">OR974827</a>
Tettigoniidae	<i>Neocallicrania miegii</i> (Bolívar, 1873) <sup>1</sup> #	INV08103	<a href="#">IBIOR254-22</a>	<a href="#">BOLD:AE07823</a>	<a href="#">OR974490</a>
Tettigoniidae	<i>Neocallicrania miegii</i> (Bolívar, 1873) <sup>1</sup> #	INV08104	<a href="#">IBIOR255-22</a>	<a href="#">BOLD:AE07823</a>	<a href="#">OR974513</a>
Tettigoniidae	<i>Neocallicrania selligera meridionalis</i> (Pfau, 1996) <sup>1</sup> #	INV02574	<a href="#">IBIOR130-17</a>	<a href="#">BOLD:AE07820"</a>	<a href="#">OR974631</a>
Tettigoniidae	<i>Neocallicrania selligera meridionalis</i> (Pfau, 1996) <sup>1</sup> #	INV04091	<a href="#">IBIOR354-22</a>	<a href="#">BOLD:AE07825</a>	<a href="#">OR974528</a>
Tettigoniidae	<i>Neocallicrania selligera meridionalis</i> (Pfau, 1996) <sup>1</sup> #	INV07436	<a href="#">IBIOR470-22</a>	<a href="#">BOLD:AE07825</a>	<a href="#">OR974462</a>
Tettigoniidae	<i>Neocallicrania selligera selligera</i> (Charpentier, 1825) <sup>1</sup> #	INV06585	<a href="#">IBIOR429-22</a>	<a href="#">BOLD:AE07824"</a>	<a href="#">OR974724</a>
Tettigoniidae	<i>Neocallicrania serrata</i> (Bolívar, 1885) <sup>1,2</sup> #	INV08105	<a href="#">IBIOR256-22</a>	<a href="#">BOLD:AE07821"</a>	<a href="#">OR974605</a>
Tettigoniidae	<i>Neocallicrania serrata</i> (Bolívar, 1885) <sup>1,2</sup> #	INV08106	<a href="#">IBIOR257-22</a>	<a href="#">BOLD:AE07821"</a>	<a href="#">OR974589</a>

Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Tettigoniidae	<i>Odontura glabricauda</i> (Charpentier, 1825)#	INV00117	<a href="#">IBIOR050-17</a>	<a href="#">BOLD:AE07751</a>	<a href="#">OR974651</a>
Tettigoniidae	<i>Odontura glabricauda</i> (Charpentier, 1825)#	INV02515	<a href="#">IBIOR080-17</a>	<a href="#">BOLD:AE07751</a>	<a href="#">OR974587</a>
Tettigoniidae	<i>Odontura glabricauda</i> (Charpentier, 1825)#	INV06518	<a href="#">IBIOR419-22</a>	<a href="#">BOLD:AE07751</a>	<a href="#">OR974459</a>
Tettigoniidae	<i>Odontura glabricauda</i> (Charpentier, 1825)#	INV06520	<a href="#">IBIOR420-22</a>	<a href="#">BOLD:AE07751</a>	<a href="#">OR974804</a>
Tettigoniidae	<i>Odontura glabricauda</i> (Charpentier, 1825)#	INV08771	<a href="#">IBIOR509-22</a>	<a href="#">BOLD:AE07751</a>	<a href="#">OR974664</a>
Tettigoniidae	<i>Odontura macphersoni</i> Morales-Agacino, 1943 <sup>1</sup> #	INV05587	<a href="#">IBIOR238-22</a>	<a href="#">BOLD:AE07752</a>	<a href="#">OR974608</a>
Tettigoniidae	<i>Odontura macphersoni</i> Morales-Agacino, 1943 <sup>1</sup> #	INV05588	<a href="#">IBIOR239-22</a>	<a href="#">BOLD:AE07752</a>	<a href="#">OR974456</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV02559	<a href="#">IBIOR117-17</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974643</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV03968	<a href="#">IBIOR334-22</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974614</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV03978	<a href="#">IBIOR335-22</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974650</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV04008	<a href="#">IBIOR341-22</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974667</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV04019	<a href="#">IBIOR344-22</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974798</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV04021	<a href="#">IBIOR345-22</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974799</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV04042	<a href="#">IBIOR349-22</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974444</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV06063	<a href="#">IBIOR408-22</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974764</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV06087	<a href="#">IBIOR412-22</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974416</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV06558	<a href="#">IBIOR424-22</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974510</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV06560	<a href="#">IBIOR425-22</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974758</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV06629	<a href="#">IBIOR433-22</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974655</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV09088	<a href="#">IBIOR515-22</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974469</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV10234	<a href="#">IBIOR520-22</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974481</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV10271	<a href="#">IBIOR522-22</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974586</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV10339	<a href="#">IBIOR528-22</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974813</a>
Tettigoniidae	<i>Phaneroptera nana</i> Fieber, 1853	INV11453	<a href="#">IBIOR555-22</a>	<a href="#">BOLD:AE07449</a>	<a href="#">OR974449</a>
Tettigoniidae	<i>Phaneroptera sparsa</i> Stål, 1857#	INV06918	<a href="#">IBIOR444-22</a>	<a href="#">BOLD:AE07448"</a>	<a href="#">OR974512</a>

Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Tettigoniidae	<i>Phaneroptera sparsa</i> Stål, 1857#	INV06926	<a href="#">IBIOR447-22</a>	<a href="#">BOLD:AE07448"</a>	<a href="#">OR974518</a>
Tettigoniidae	<i>Phaneroptera sparsa</i> Stål, 1857#	INV07540	<a href="#">IBIOR472-22</a>	<a href="#">BOLD:AE07448"</a>	<a href="#">OR974619</a>
Tettigoniidae	<i>Phaneroptera sparsa</i> Stål, 1857#	INV07543	<a href="#">IBIOR474-22</a>	<a href="#">BOLD:AE07448"</a>	<a href="#">OR974771</a>
Tettigoniidae	<i>Platycleis affinis</i> Fieber, 1853	INV00122	<a href="#">IBIOR053-17</a>	<a href="#">BOLD:AAH9443</a>	<a href="#">OR974752</a>
Tettigoniidae	<i>Platycleis affinis</i> Fieber, 1853	INV02516	<a href="#">IBIOR081-17</a>	<a href="#">BOLD:AAH9443</a>	<a href="#">OR974816</a>
Tettigoniidae	<i>Platycleis albopunctata</i> (Goeze, 1778)	INV03998	<a href="#">IBIOR338-22</a>	<a href="#">BOLD:AE06325</a>	<a href="#">OR974784</a>
Tettigoniidae	<i>Platycleis albopunctata</i> (Goeze, 1778)	INV05544	<a href="#">IBIOR195-22</a>	<a href="#">BOLD:AE06325</a>	<a href="#">OR974442</a>
Tettigoniidae	<i>Platycleis albopunctata</i> (Goeze, 1778)	INV06511	<a href="#">IBIOR417-22</a>	<a href="#">BOLD:AE06325</a>	<a href="#">OR974815</a>
Tettigoniidae	<i>Platycleis albopunctata</i> (Goeze, 1778)	INV07110	<a href="#">IBIOR458-22</a>	<a href="#">BOLD:AE06325</a>	<a href="#">OR974626</a>
Tettigoniidae	<i>Platycleis intermedia</i> (Serville, 1838)	INV02518	<a href="#">IBIOR083-17</a>	<a href="#">BOLD:AAE4790</a>	<a href="#">OR974615</a>
Tettigoniidae	<i>Platycleis intermedia</i> (Serville, 1838)	INV10586	<a href="#">IBIOR532-22</a>	<a href="#">BOLD:AAE4790</a>	<a href="#">OR974728</a>
Tettigoniidae	<i>Platycleis sabulosa</i> Azam, 1901#	INV00131	<a href="#">IBIOR058-17</a>	<a href="#">BOLD:AE06325</a>	<a href="#">OR974479</a>
Tettigoniidae	<i>Platycleis sabulosa</i> Azam, 1901#	INV00132	<a href="#">IBIOR059-17</a>	<a href="#">BOLD:AE06325</a>	<a href="#">OR974756</a>
Tettigoniidae	<i>Platycleis sabulosa</i> Azam, 1901#	INV00133	<a href="#">IBIOR060-17</a>	<a href="#">BOLD:AE06325</a>	<a href="#">OR974450</a>
Tettigoniidae	<i>Platycleis sabulosa</i> Azam, 1901#	INV00134	<a href="#">IBIOR061-17</a>	<a href="#">BOLD:AE06325</a>	<a href="#">OR974690</a>
Tettigoniidae	<i>Platycleis sabulosa</i> Azam, 1901#	INV02572	<a href="#">IBIOR128-17</a>	<a href="#">BOLD:AE06325</a>	<a href="#">OR974581</a>
Tettigoniidae	<i>Platycleis sabulosa</i> Azam, 1901#	INV05439	<a href="#">IBIOR399-22</a>	<a href="#">BOLD:AAL4618</a>	<a href="#">OR974658</a>
Tettigoniidae	<i>Platycleis sabulosa</i> Azam, 1901#	INV05515	<a href="#">IBIOR403-22</a>	<a href="#">BOLD:AE06325</a>	<a href="#">OR974429</a>
Tettigoniidae	<i>Platycleis sabulosa</i> Azam, 1901#	INV05516	<a href="#">IBIOR404-22</a>	<a href="#">BOLD:AAL4618</a>	<a href="#">OR974716</a>
Tettigoniidae	<i>Platycleis sabulosa</i> Azam, 1901#	INV07352	<a href="#">IBIOR468-22</a>	<a href="#">BOLD:AE06325</a>	<a href="#">OR974679</a>
Tettigoniidae	<i>Platycleis sabulosa</i> Azam, 1901#	INV07353	<a href="#">IBIOR469-22</a>	<a href="#">BOLD:AAL4618</a>	<a href="#">OR974671</a>
Tettigoniidae	<i>Platycleis sabulosa</i> Azam, 1901#	INV10326	<a href="#">IBIOR527-22</a>	<a href="#">BOLD:AE06325</a>	<a href="#">OR974468</a>
Tettigoniidae	<i>Platycleis sabulosa</i> Azam, 1901#	INV10593	<a href="#">IBIOR534-22</a>	<a href="#">BOLD:AAL4618</a>	<a href="#">OR974814</a>
Tettigoniidae	<i>Platycleis sabulosa</i> Azam, 1901#	INV11434	<a href="#">IBIOR551-22</a>	<a href="#">BOLD:AE06325</a>	<a href="#">OR974630</a>
Tettigoniidae	<i>Platycleis sabulosa</i> Azam, 1901#	INV11452	<a href="#">IBIOR554-22</a>	<a href="#">BOLD:AE06325</a>	<a href="#">OR974596</a>
Tettigoniidae	<i>Platystolus martinezii</i> (Bolívar, 1873) <sup>1</sup> . #	INV02526	<a href="#">IBIOR091-17</a>	<a href="#">BOLD:AE07253</a>	<a href="#">OR974818</a>
Tettigoniidae	<i>Platystolus martinezii</i> (Bolívar, 1873) <sup>1</sup> . #	INV02527	<a href="#">IBIOR092-17</a>	<a href="#">BOLD:AE07253</a>	<a href="#">OR974545</a>
Tettigoniidae	<i>Pterolepis grallata</i> (Pantel, 1886)#	INV06068	<a href="#">IBIOR410-22</a>	<a href="#">BOLD:AE07102"</a>	<a href="#">OR974774</a>
Tettigoniidae	<i>Pterolepis grallata</i> (Pantel, 1886)#	INV06069	<a href="#">IBIOR411-22</a>	<a href="#">BOLD:AE07102"</a>	<a href="#">OR974761</a>

Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Tettigoniidae	<i>Pterolepis grallata</i> (Pantel, 1886)#	INV06609	<a href="#">IBIOR431-22</a>	<a href="#">BOLD:AE07102"</a>	<a href="#">OR974483</a>
Tettigoniidae	<i>Pterolepis grallata</i> (Pantel, 1886)#	INV06631	<a href="#">IBIOR434-22</a>	<a href="#">BOLD:AE07102"</a>	<a href="#">OR974566</a>
Tettigoniidae	<i>Pterolepis grallata</i> (Pantel, 1886)#	INV07175	<a href="#">IBIOR570-22</a>	<a href="#">BOLD:AE07102"</a>	<a href="#">OR974830</a>
Tettigoniidae	<i>Pterolepis grallata</i> (Pantel, 1886)#	INV07351	<a href="#">IBIOR467-22</a>	<a href="#">BOLD:AE07102"</a>	<a href="#">OR974809</a>
Tettigoniidae	<i>Pterolepis lusitanica</i> (Bolivar, 1900) <sup>1,2</sup> .#	INV05574	<a href="#">IBIOR225-22</a>	<a href="#">BOLD:AE07101</a>	<a href="#">OR974551</a>
Tettigoniidae	<i>Pterolepis lusitanica</i> (Bolivar, 1900) <sup>1,2</sup> .#	INV07563	<a href="#">IBIOR479-22</a>	<a href="#">BOLD:AE07101</a>	<a href="#">OR974437</a>
Tettigoniidae	<i>Pterolepis spoliata</i> Rambur, 1838 <sup>1</sup> .#	INV06945	<a href="#">IBIOR450-22</a>	<a href="#">BOLD:AE07101</a>	<a href="#">OR974831</a>
Tettigoniidae	<i>Pterolepis spoliata</i> Rambur, 1838 <sup>1</sup> .#	INV08090	<a href="#">IBIOR241-22</a>	<a href="#">BOLD:AE07101</a>	<a href="#">OR974424</a>
Tettigoniidae	<i>Pycnogaster cucullatus</i> (Charpentier, 1825) <sup>1,2</sup> .#	INV02590	<a href="#">IBIOR180-22</a>	<a href="#">BOLD:AE06978"</a>	<a href="#">OR974521</a>
Tettigoniidae	<i>Pycnogaster cucullatus</i> (Charpentier, 1825) <sup>1,2</sup> .#	INV05577	<a href="#">IBIOR228-22</a>	<a href="#">BOLD:AE06980"</a>	<a href="#">OR974622</a>
Tettigoniidae	<i>Pycnogaster jugicola</i> Graells, 1851 <sup>1</sup> .#	INV05563	<a href="#">IBIOR214-22</a>	<a href="#">BOLD:AE06979"</a>	<a href="#">OR974704</a>
Tettigoniidae	<i>Ruspolia nitidula</i> (Scopoli, 1786)	INV02561	<a href="#">IBIOR119-17</a>	<a href="#">BOLD:AAJ7497</a>	<a href="#">OR974654</a>
Tettigoniidae	<i>Ruspolia nitidula</i> (Scopoli, 1786)	INV04086	<a href="#">IBIOR163-19</a>	<a href="#">BOLD:AAJ7497</a>	<a href="#">OR974782</a>
Tettigoniidae	<i>Ruspolia nitidula</i> (Scopoli, 1786)	INV04089	<a href="#">IBIOR164-19</a>	<a href="#">BOLD:AAJ7497</a>	<a href="#">OR974529</a>
Tettigoniidae	<i>Steropleurus pseudolus</i> (Bolivar, 1878) <sup>1</sup> .#	INV02592	<a href="#">IBIOR182-22</a>	<a href="#">BOLD:AE06528"</a>	<a href="#">OR974515</a>
Tettigoniidae	<i>Steropleurus pseudolus</i> (Bolivar, 1878) <sup>1</sup> .#	INV02593	<a href="#">IBIOR183-22</a>	<a href="#">BOLD:AE06528"</a>	<a href="#">OR974620</a>
Tettigoniidae	<i>Tessellana tessellata</i> (Charpentier, 1825)	INV00136	<a href="#">IBIOR062-17</a>	<a href="#">BOLD:AER1298</a>	<a href="#">OR974473</a>
Tettigoniidae	<i>Tessellana tessellata</i> (Charpentier, 1825)	INV00137	<a href="#">IBIOR063-17</a>	<a href="#">BOLD:AAF2021</a>	<a href="#">OR974526</a>
Tettigoniidae	<i>Tessellana tessellata</i> (Charpentier, 1825)	INV03387	<a href="#">IBIOR154-19</a>	<a href="#">BOLD:AAF2021</a>	<a href="#">OR974616</a>
Tettigoniidae	<i>Tessellana tessellata</i> (Charpentier, 1825)	INV06544	<a href="#">IBIOR422-22</a>	<a href="#">BOLD:AER1298</a>	<a href="#">OR974556</a>
Tettigoniidae	<i>Tessellana tessellata</i> (Charpentier, 1825)	INV06545	<a href="#">IBIOR423-22</a>	<a href="#">BOLD:AAF2021</a>	<a href="#">OR974522</a>
Tettigoniidae	<i>Tessellana tessellata</i> (Charpentier, 1825)	INV09723	<a href="#">IBIOR583-22</a>	<a href="#">BOLD:AER6209"</a>	<a href="#">OR974718</a>

Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Tettigoniidae	<i>Tettigonia viridissima</i> (Linnaeus, 1758)	INV02524	<a href="#">IBIOR089-17</a>	<a href="#">BOLD:AAF1423</a>	<a href="#">OR974547</a>
Tettigoniidae	<i>Tettigonia viridissima</i> (Linnaeus, 1758)	INV02525	<a href="#">IBIOR090-17</a>	<a href="#">BOLD:AAF1423</a>	<a href="#">OR974531</a>
Tettigoniidae	<i>Tettigonia viridissima</i> (Linnaeus, 1758)	INV05451	<a href="#">IBIOR401-22</a>	<a href="#">BOLD:AAF1423</a>	<a href="#">OR974520</a>
Tettigoniidae	<i>Thyreonotus bidens</i> (Bolivar, 1887) <sup>1</sup> #	INV02581	<a href="#">IBIOR137-17</a>	<a href="#">BOLD:AER1533"</a>	<a href="#">OR974766</a>
Tettigoniidae	<i>Thyreonotus bidens</i> (Bolivar, 1887) <sup>1</sup> #	INV04118	<a href="#">IBIOR359-22</a>	<a href="#">BOLD:AER1532</a>	<a href="#">OR974598</a>
Tettigoniidae	<i>Thyreonotus bidens</i> (Bolivar, 1887) <sup>1</sup> #	INV05307	<a href="#">IBIOR396-22</a>	<a href="#">BOLD:AER1532</a>	<a href="#">OR974597</a>
Tettigoniidae	<i>Thyreonotus bidens</i> (Bolivar, 1887) <sup>1</sup> #	INV06570	<a href="#">IBIOR427-22</a>	<a href="#">BOLD:AER1532</a>	<a href="#">OR974439</a>
Tettigoniidae	<i>Thyreonotus bidens</i> (Bolivar, 1887) <sup>1</sup> #	INV07109	<a href="#">IBIOR457-22</a>	<a href="#">BOLD:AER1532</a>	<a href="#">OR974499</a>
Tettigoniidae	<i>Thyreonotus bidens</i> (Bolivar, 1887) <sup>1</sup> #	INV07232	<a href="#">IBIOR462-22</a>	<a href="#">BOLD:AER1532</a>	<a href="#">OR974725</a>
Tettigoniidae	<i>Thyreonotus bidens</i> (Bolivar, 1887) <sup>1</sup> #	INV07796	<a href="#">IBIOR490-22</a>	<a href="#">BOLD:AER1531"</a>	<a href="#">OR974500</a>
Tettigoniidae	<i>Thyreonotus bidens</i> (Bolivar, 1887) <sup>1</sup> #	INV07805	<a href="#">IBIOR491-22</a>	<a href="#">BOLD:AER1533"</a>	<a href="#">OR974471</a>
Tettigoniidae	<i>Tylopsis lilifolia</i> (Fabricius, 1793)#	INV00140	<a href="#">IBIOR064-17</a>	<a href="#">BOLD:AER2541</a>	<a href="#">OR974552</a>
Tettigoniidae	<i>Tylopsis lilifolia</i> (Fabricius, 1793)#	INV00141	<a href="#">IBIOR065-17</a>	<a href="#">BOLD:AER2541</a>	<a href="#">OR974797</a>
Tettigoniidae	<i>Tylopsis lilifolia</i> (Fabricius, 1793)#	INV02520	<a href="#">IBIOR085-17</a>	<a href="#">BOLD:AER2541</a>	<a href="#">OR974792</a>
Tettigoniidae	<i>Tylopsis lilifolia</i> (Fabricius, 1793)#	INV02521	<a href="#">IBIOR086-17</a>	<a href="#">BOLD:AER2541</a>	<a href="#">OR974422</a>
Tettigoniidae	<i>Tylopsis lilifolia</i> (Fabricius, 1793)#	INV10591	<a href="#">IBIOR533-22</a>	<a href="#">BOLD:AER2541</a>	<a href="#">OR974502</a>
Tridactylidae	<i>Xya iberica</i> Günther, 1990 <sup>1</sup> #	INV02567	<a href="#">IBIOR124-17</a>	<a href="#">BOLD:AER2238</a>	<a href="#">OR974754</a>
Trigonidiidae	<i>Natula averni</i> (Costa, 1855)#	INV02565	<a href="#">IBIOR123-17</a>	<a href="#">BOLD:ACP3886</a>	<a href="#">OR974642</a>
Trigonidiidae	<i>Natula averni</i> (Costa, 1855)#	INV02582	<a href="#">IBIOR138-17</a>	<a href="#">BOLD:ACP3886</a>	<a href="#">OR974795</a>
Trigonidiidae	<i>Nemobius sylvestris</i> (Bosc, 1792)	INV02258	<a href="#">IBIOR144-19</a>	<a href="#">BOLD:AAC3438</a>	<a href="#">OR974524</a>
Trigonidiidae	<i>Nemobius sylvestris</i> (Bosc, 1792)	INV02570	<a href="#">IBIOR126-17</a>	<a href="#">BOLD:AER5488"</a>	<a href="#">OR974523</a>
Trigonidiidae	<i>Nemobius sylvestris</i> (Bosc, 1792)	INV02571	<a href="#">IBIOR127-17</a>	<a href="#">BOLD:AER5488"</a>	<a href="#">OR974691</a>
Trigonidiidae	<i>Nemobius sylvestris</i> (Bosc, 1792)	INV03615	<a href="#">IBIOR157-19</a>	<a href="#">BOLD:AAC3438</a>	<a href="#">OR974826</a>
Trigonidiidae	<i>Nemobius sylvestris</i> (Bosc, 1792)	INV03758	<a href="#">IBIOR328-22</a>	<a href="#">BOLD:AAC3438</a>	<a href="#">OR974675</a>
Trigonidiidae	<i>Nemobius sylvestris</i> (Bosc, 1792)	INV03759	<a href="#">IBIOR329-22</a>	<a href="#">BOLD:AAC3438</a>	<a href="#">OR974769</a>
Trigonidiidae	<i>Nemobius sylvestris</i> (Bosc, 1792)	INV07640	<a href="#">IBIOR484-22</a>	<a href="#">BOLD:AEO7832"</a>	<a href="#">OR974684</a>
Trigonidiidae	<i>Nemobius sylvestris</i> (Bosc, 1792)	INV07769	<a href="#">IBIOR489-22</a>	<a href="#">BOLD:AEO7832"</a>	<a href="#">OR974746</a>
Trigonidiidae	<i>Nemobius sylvestris</i> (Bosc, 1792)	INV08603	<a href="#">IBIOR504-22</a>	<a href="#">BOLD:AER5488"</a>	<a href="#">OR974466</a>
Trigonidiidae	<i>Pteronemobius lineolatus</i> (Brullé, 1835)#	INV03739	<a href="#">IBIOR325-22</a>	<a href="#">BOLD:AEO6935</a>	<a href="#">OR974731</a>

Family	Taxa	IBI code	BOLD code	BOLD BIN	GenBank
Trigonidiidae	<i>Trigonidium cicindeloides</i> Rambur, 1838	INV02529	<a href="#">IBIOR094-17</a>	<a href="#">BOLD:ACY3774</a>	<a href="#">OR974533</a>
Trigonidiidae	<i>Trigonidium cicindeloides</i> Rambur, 1838	INV02530	<a href="#">IBIOR095-17</a>	<a href="#">BOLD:ACY3774</a>	<a href="#">OR974420</a>
Trigonidiidae	<i>Trigonidium cicindeloides</i> Rambur, 1838	INV07034	<a href="#">IBIOR456-22</a>	<a href="#">BOLD:ACY3774</a>	<a href="#">OR974412</a>
Trigonidiidae	<i>Trigonidium cicindeloides</i> Rambur, 1838	INV10193	<a href="#">IBIOR519-22</a>	<a href="#">BOLD:ACY3774</a>	<a href="#">OR974786</a>

The results show multiple BINs for a recognised species in several cases. Namely, three BINs were obtained in each of the recognised species given: *Antaxius spinibrachius*, *Nemobius sylvestris*, *Tessellana tessellata* and *Thyreonotus bidens*. Two BINs were obtained in each of the following taxa: *Gryllomorpha longicauda*, *Gryllotalpa vineae*, *Lluciapomaresius asturiensis*, *Neocallicrania lusitanica*, *Pezotettix giornae*, *Pycnogaster cucullatus*, *Platycleis sabulosa* and for the subspecies *Neocallicrania selligera meridionalis*. Our dataset includes three BINs obtained for the species *Antaxius spinibrachius*, including the first sequences of the BIN [BOLD:AER0568](#) from specimens collected in the Castelo Branco and Guarda Districts. In a previous study, aimed at the phylogeography of this species in the Iberian Peninsula, two different lineages of this species were identified, one of which occurs along the Cordillera Oretana and the other includes all other populations (Gutiérrez-Rodríguez et al. 2014). The genetic diversity found in DNA barcodes in this species highlights the necessity of a taxonomic revision. Additionally, in the family Tettigoniidae, the specimen of the *Neocallicrania* genus collected in the Setúbal Peninsula was morphologically identified as *Neocallicrania lusitanica* using the available literature (Barat 2007) and the unique BIN [BOLD:AE06978](#) was obtained. However, the revision conducted by Barat (2013) pointed out uncertainties related to specimens collected in this geographic area. Thus, our results emphasise the need for further work towards a better understanding of the taxonomy of this genus in the Iberian Peninsula.

Of the 119 species, 104 have direct correspondence between morphologic identification and BINs, leaving 15 species involved in BIN sharing. In the subfamily Tettigoniinae, two BINs were found to be shared by more than one species, the BIN [BOLD:AE06325](#) and the BIN [BOLD:AE07101](#) was shared by *Platycleis albopunctata* and *Platycleis sabulosa* and by *Pterolepis lusitanica* and *Pterolepis spoliata*, respectively. In the subfamily Gomphocerinae, the generated sequence of *Pseudochorthippus parallelus* shared BIN [BOLD:AAC3399](#) with sequences of *Pseudochorthippus montanus* from Germany, Ukraine and Norway. Introgression caused by hybridisation is a well-studied phenomenon in areas where both species occur in sympatry in Germany (Hochkirch and Lemke 2011, Rohde et al. 2015). These species are morphologically very similar, but have different ecological requirements and both species occur in Spain, although *Pseudochorthippus montanus* is restricted to the northeast (Llucià-Pomares 2002). Additionally, in this subfamily, there are other Gomphocerinae groups of species that cannot be identified using the DNA barcode

COI fragment. Sequences obtained from our specimens of *Chorthippus binotatus*, *Chorthippus jacobsi* and *Chorthippus yersini* shared the same BIN [BOLD: AAC5779](#). Moreover and in line with the results by Hawlitschek et al. (2017), sequences obtained as *Omocestus rufipes* and *Omocestus viridulus* shared the same BIN. Likewise, in the subfamily Oedipodinae, two BINs were shared by more than one species, namely the BIN [BOLD: AAJ3344](#) was shared by *Sphingonotus azurescens* and *Sphingonotus nodulosus* and the BIN [BOLD: AEI2886](#) was shared by *Sphingonotus lluciapomaresi* and *Sphingonotus lusitanicus*. The success rate of DNA barcoding in the genus *Sphingonotus* was previously studied by Dey et al. (2020). Their results showed intensive sharing of identical or closely-related DNA barcodes indicating that the single analysis of the COI fragment is not sufficient enough to differentiate many of the *Sphingonotus* species.

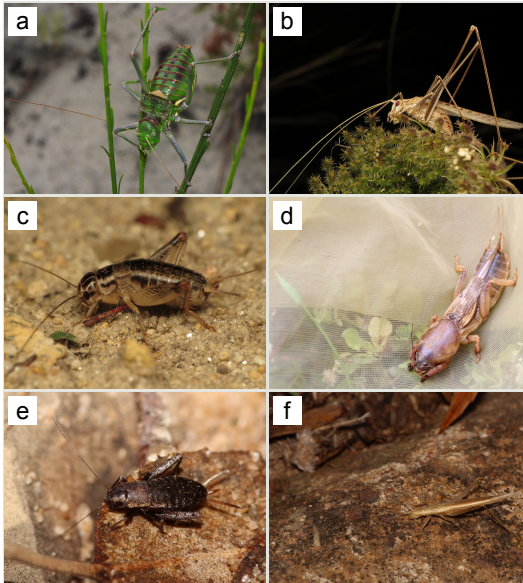


Figure 1.

Examples of the diversity of species that are part of the dataset of distribution data and DNA barcodes of Portuguese Orthoptera 01.

**a:** *Neocallicrania barrosi* Barat, 2013. Tettigoniidae. Photo by Francisco Barros. BIN URI [BOLD: AEO7827](#); [doi](#)

**b:** *Tylopsis lillifolia* (Fabricius, 1793). Tettigoniidae. Photo by Sónia Ferreira. BIN URI [BOLD: AE R2541](#); [doi](#)

**c:** *Eugryllodes escalerae* (Bolívar, 1894). Gryllidae. Photo by Sónia Ferreira. BIN URI [BOLD: A EP5287](#); [doi](#)

**d:** *Gryllotalpa vineae* Bennet-Clark, 1970. Gryllotalpidae. Photo by Sílvia Pina. BIN URI [BOLD: AEP5099](#); [BOLD: AEP5100](#); [doi](#)

**e:** *Paramogoplistes ortini* Llucià Pomares, 2015. Mogoplistidae. Photo by Sílvia Pina. BIN URI [BOLD: AEO7942](#); [doi](#)

**f:** *Oecanthus dulcisonans* Gorochov, 1993. Oecanthidae. Photo by Sílvia Pina. BIN URI [BOLD: ACG7286](#). [doi](#)



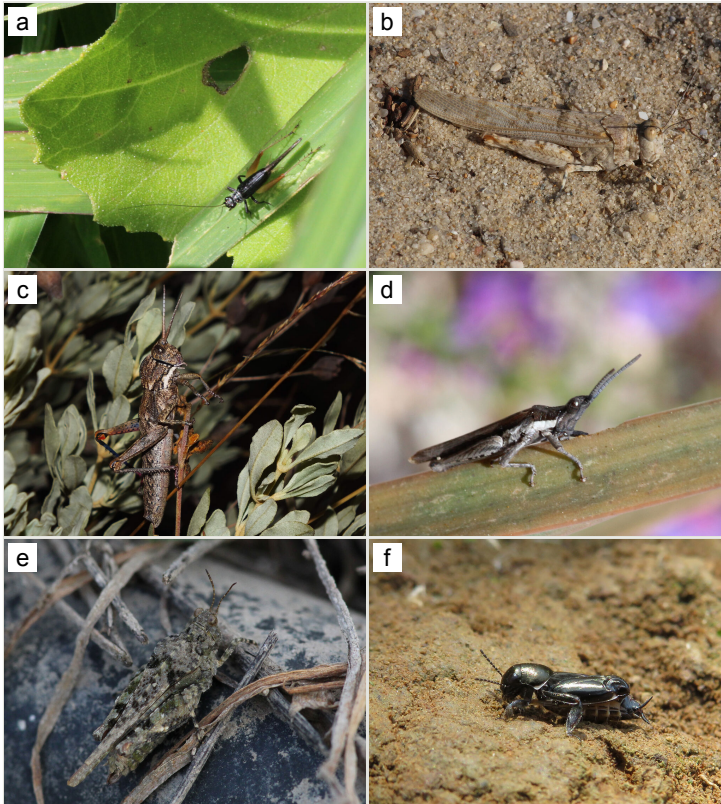


Figure 2.

Examples of the diversity of species that are part of the dataset of distribution data and DNA barcodes of Portuguese Orthoptera.

**a:** *Trigonidium cicindeloides* Rambur, 1838. Trigonidiidae. Photo by Sílvia Pina. BIN URI [BOLD:ACY3774](#); [doi](#)

**b:** *Sphingonotus lusitanicus* Ebner, 1941. Acrididae. Photo by Sílvia Pina. BIN URI [BOLD:AEI2886](#); [doi](#)

**c:** *Acinipe ignatii* Llorente del Moral & Presa, 1983. Pamphagidae. Photo by Francisco Barros. BIN URI [BOLD:AER2325](#); [doi](#)

**d:** *Pyrgomorpha conica* (Olivier, 1791). Pyrgomorphidae. Photo by Sílvia Pina. BIN URI [BOLD:AEO6938](#); [doi](#)

**e:** *Paratettix meridionalis* (Rambur, 1838). Tetrigidae. Photo by Sílvia Pina. BIN URI [BOLD:BO LD:AAP5007](#); [doi](#)

**f:** *Xya iberica* Günther, 1990. Tridactylidae. Photo by Sónia Ferreira. BIN URI [BOLD:AER2238](#) [doi](#)

This study shows that DNA barcode sequences, based on the COI mitochondrial gene fragment, can be useful in identifying Portuguese Orthoptera to species level. To our knowledge, this is the first study to focus on DNA barcoding of the Orthoptera order for the Iberian Peninsula. It also highlights several taxonomic challenges related to the rich fauna of this group and suggests intricated phylogeographic processes in the region that lead to the diversification of several taxa and high endemism levels in line with what previous



studies have found (Barranco 2004, Solé et al. 2018). Our results constitute a first step in the construction of a DNA barcode database of a curated reference collection of Iberian (Portuguese) Orthoptera species that can be used in studies where it is necessary to identify specimens either by DNA barcoding or DNA metabarcoding.

## Project description

**Title:** The InBIO Barcoding Initiative Database: DNA barcodes of Orthoptera from Portugal.

**Personnel:** Pedro Beja (project coordinator), Sónia Ferreira (taxonomist and IBI manager), Sílvia Pina (taxonomist), Joana Paupério (IBI manager), Francisco Barros (taxonomist), Cátia Chaves (project technician), Filipa M.S. Martins (molecular biologist), Joana Pinto, Joana Veríssimo (molecular biologist), Vanessa Mata (molecular biologist).

**Study area description:** Continental Portugal (Fig. 3).

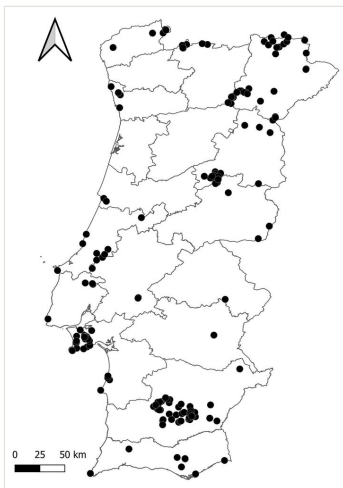


Figure 3. [doi](#)

Map of the localities where Orthoptera samples were collected in continental Portugal. Portuguese districts are also represented.

**Design description:** Orthoptera specimens were collected in the field, morphologically identified and DNA barcoded.

**Funding:** The present work was funded by National Funds through FCT-Fundação para a Ciência e a Tecnologia in the scope of the project LA/P/0048/2020. InBIO Barcoding Initiative was funded by the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 668981 and the project PORBIOTA—Portuguese E-Infrastructure for Information and Research on Biodiversity (POCI-01-0145-FEDER-022127), supported by Operational Thematic Program for Competitiveness and

Internationalization (POCI), under the PORTUGAL 2020 Partnership Agreement, through the European Regional Development Fund (FEDER). Fieldwork benefitted from the project PTDC/ BIA-BIC/2203/2012-FCOMP-01-0124-FEDER-028289 by FEDER Funds through the Operational Programme for Competitiveness Factors—COMPETE and by National Funds, EDP Biodiversity Chair, the project “Promoção dos serviços de ecossistemas no Parque Natural Regional do Vale do Tua: Controlo de Pragas Agrícolas e Florestais por Morcegos” funded by the Agência de Desenvolvimento Regional do Vale doTua and includes research conducted at the Long Term Research Site of Baixo Sabor (LTER\_EU\_PT\_002). The work was partially Funded by Horizon Europe under the Biodiversity, Circular Economy and Environment call (REA.B.3); co-funded by the Swiss State Secretariat for Education, Research and Innovation (SERI) under contract number 22.00173; and by the UK Research and Innovation under the Department for Business, Energy and Industrial Strategy’s Horizon Europe Guarantee Scheme. SF and VM were funded by the FCT through the programme ‘Stimulus of Scientific Employment, Individual Support—3rd Edition’ 2020.03526.CEECIND; 2020.02547.CEECIND). JV and FMSM by PhD grants (SFRH/BD/133159/2017; SFRH/BD/104703/2014) funded by FCT.

## Sampling methods

**Description:** Continental Portugal (Fig. 3).

**Sampling description:** Specimens were collected during field expeditions throughout continental Portugal, from 2005 to 2021. Nearly all districts of continental Portugal are represented in the dataset, with the exception of Braga and Viseu. Setúbal, Beja and Bragança were the districts with the highest number of species collected (Table 2). Specimens were collected by direct search and stored in 96% ethanol. Specimens were kept as tissue samples and stored at the InBIO Barcoding Initiative reference collection (Vairão, Portugal).

Table 2.

Number of specimens and species collected per Portuguese district.

District	Number of specimens	Number of species
Beja	108	44
Bragança	95	40
Castelo Branco	14	9
Coimbra	4	4
Évora	1	1
Faro	21	13
Guarda	36	23
Leiria	11	6

Lisboa	6	4
Portalegre	1	1
Porto	7	7
Santarém	9	6
Setúbal	68	45
Viana do Castelo	17	9
Vila Real	22	14
Total	420	119

DNA extraction and sequencing followed the general pipeline used in the InBIO Barcoding Initiative (Ferreira et al. 2018). Briefly, genomic DNA was extracted from leg tissue using the EasySpin Genomic DNA Tissue Kit (Citomed) following the manufacturer's protocol. The cytochrome c oxidase I (COI) barcoding fragment (Folmer region) was amplified as two overlapping fragments (LC and BH), using two sets of primers: LCO1490 (Folmer et al. 1994) + III\_C\_R (Shokralla et al. 2015) and III\_B\_F (Shokralla et al. 2015) + HCO2198 (Folmer et al. 1994), respectively. The partial COI mitochondrial gene (Folmer region) was then sequenced in a MiSeq benchtop system. OBITools (<https://git.metabarcoding.org/obitools/obitools>) was used to process the initial sequences which were then assembled into a single 658 bp fragment using Geneious 9.1.8. (<https://www.geneious.com>).

**Quality control:** All DNA barcode sequences were compared against the BOLD database and the top hits were inspected to detect possible issues due to contamination or misidentifications due to errors in codification during samples processing.

**Step description:** Specimens were collected in 118 different Portuguese localities between 2005 and 2021. Sampling consisted of direct search of specimens in different types of habitats during the day and the night-time. Additionally, some orthopterans were detected by listening to the calling songs. All specimens were morphologically identified using the available literature, DNA barcoded and deposited in the IBI reference collection at CIBIO (Research Center in Biodiversity and Genetic Resources). To sequence the 658 bp COI DNA barcode fragment, one leg was removed from each individual, DNA was extracted and then amplified. All DNA extracts were deposited in the IBI collection. All sequences in the dataset were submitted to BOLD and GenBank databases and, to each sequenced specimen, the morphological identification was compared with the results of the BLAST of the newly-generated DNA barcodes in the BOLD Identification Engine.

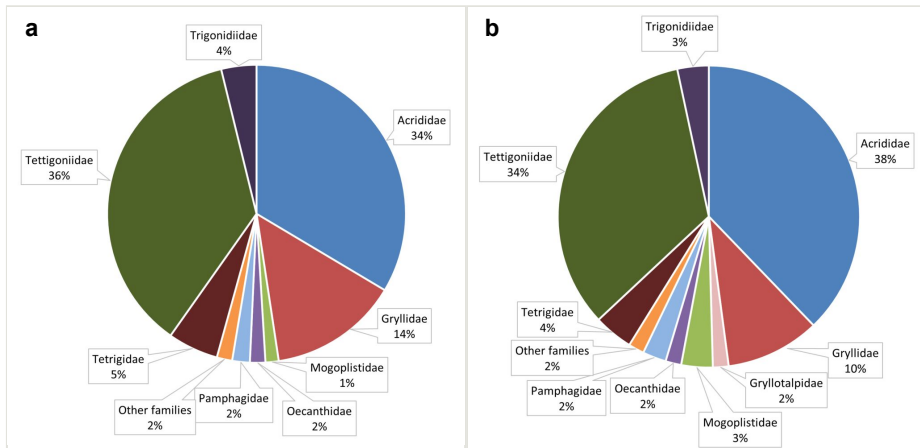
## Geographic coverage

**Description:** Continental Portugal.

**Coordinates:** -9.4651 and -6.5573 Latitude; 42.0416 and 37.019 Longitude.

### Taxonomic coverage

**Description:** This dataset is composed of data relating to 420 Orthoptera specimens. All specimens were determined to species level, with four specimens further identified to subspecies level. Overall, 119 species are represented in the dataset. These species belong to all the eleven Orthoptera families occurring in Portugal. The Tettigoniidae and Acrididae families accounts for 36% and 34% of the total collected specimens, respectively, followed by Gryllidae family with 14%. A similar pattern was observed for the proportion of species, Acrididae, Tettigoniidae and Gryllidae are represented by the highest number of recorded species (38%, 34% and 10%, respectively) (Fig. 4).



**Figure 4.** Distribution of specimens (A) and species (B), in percentage, per Orthoptera family present in the dataset. “Other families” represent less than 1% of the total specimens or species (Pyrgomorphidae, Tridactylidae, Gryllotalpidae).

**a:** Distribution of specimens, in percentage, per Orthoptera family present in the dataset.

[doi](#)

**b:** Distribution of species, in percentage, per Orthoptera family present in the dataset. [doi](#)

**Taxa included:**

Rank	Scientific Name
kingdom	Animalia
phylum	Arthropoda
class	Insecta
order	Orthoptera
family	Acrididae
family	Gryllidae

family	Gryllotalpidae
family	Mogoplistidae
family	Oecanthidae
family	Pamphagidae
family	Pyrgomorphidae
family	Tetrigidae
family	Tettigoniidae
family	Tridactylidae
family	Trigonidiidae
subfamily	Acridinae
subfamily	Bradyporinae
subfamily	Calliptaminae
subfamily	Conocephalinae
subfamily	Cyrtacanthacridinae
subfamily	Eypreocnemidinae
subfamily	Gomphocerinae
subfamily	Gryllinae
subfamily	Gryllomorphae
subfamily	Gryllotalpinae
subfamily	Meconematinae
subfamily	Mogoplistinae
subfamily	Nemobiinae
subfamily	Oecanthinae
subfamily	Oedipodinae
subfamily	Pamphaginae
subfamily	Pezotettiginae
subfamily	Phaneropterinae
subfamily	Pyrgomorphinae
subfamily	Tetriginae
subfamily	Tettigoniinae
subfamily	Tridactylinae

subfamily	Trigonidiinae
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## Temporal coverage

**Data range:** 2005-3-13 - 2021-7-09.

**Notes:** The sampled material was collected in the period from 13 March 2005 to 9 July 2021.

## Collection data

**Collection name:** InBIO Barcoding Initiative

**Specimen preservation method:** "Alcohol"

**Curatorial unit:** Voucher tube - 1 to 420; DNA extractions - 1 to 420

## Usage licence

**Usage licence:** Other

**IP rights notes:** Creative Commons Attribution 4.0 International (CC BY 4.0)

## Data resources

**Data package title:** The InBIO Barcoding Initiative Database: DNA barcodes of Orthoptera from Portugal

**Resource link:** <http://dx.doi.org/10.5883/DS-IBIOR01>

**Number of data sets:** 1

**Data set name:** Orthoptera

**Data format:** dwc, xml, tsv, fasta

**Description:** The InBIO Barcoding Initiative Database: DNA barcodes of Orthoptera from Portugal dataset can be downloaded from the Public Data Portal of BOLD (<https://doi.org/10.5883/DS-IBIOR01>) in different formats (data as dwc, xml or tsv and sequences as fasta files). BOLD users can also log-in and access the dataset through the Workbench platform of BOLD. All records are also discoverable within BOLD, using the platform search function. The version of the dataset, at the time of writing the manuscript, is included as Suppl. materials 1, 2, 3 in the form of two text files with specimen data and one fasta file containing all sequences as downloaded from BOLD. Column labels below follow the labels downloaded in the tsv file downloaded from BOLD. Columns with no content in our dataset are left out in the list below.

Column label	Column description
processid	Unique identifier for the sample.
sampleid	Identifier for the sample being sequenced, i.e. IBI catalogue number at Cibio-InBIO, Porto University. Often identical to the "Field ID" or "Museum ID".
recordID	Identifier for specimen assigned in the field.
catalogNumber	Catalogue number.
fieldnum	Field number.
institution_storing	The full name of the institution that has physical possession of the voucher specimen.
bin_uri	Barcode Index Number system identifier.
phylum_taxID	Phylum taxonomic numeric code.
phylum_name	Phylum name.
class_taxID	Class taxonomic numeric code.
class_name	Class name.
order_taxID	Order taxonomic numeric code.
order_name	Order name.
family_taxID	Family taxonomic numeric code.
family_name	Family name.
subfamily_taxID	Subfamily taxonomic numeric code.
subfamily_name	Subfamily name.
genus_taxID	Genus taxonomic numeric code.
genus_name	Genus name.
species_taxID	Species taxonomic numeric code.
species_name	Species name.
identification_provided_by	Full name of primary individual who assigned the specimen to a taxonomic group.
identification_method	The method used to identify the specimen.
voucher_status	Status of the specimen in an accessioning process (BOLD controlled vocabulary).
tissue_type	A brief description of the type of tissue or material analysed.
collectors	The full or abbreviated names of the individuals or team responsible for collecting the sample in the field.
lifestage	The age class or life stage of the specimen at the time of sampling.
sex	The sex of the specimen.
lat	The geographical latitude (in decimal degrees) of the geographic centre of a location.

lon	The geographical longitude (in decimal degrees) of the geographic centre of a location.
elev	Elevation of sampling site (in metres above sea level).
country	The full, unabbreviated name of the country where the organism was collected.
province_state	The full, unabbreviated name of the province ("Distrito" in Portugal) where the organism was collected.
region	The full, unabbreviated name of the municipality ("Concelho" in Portugal) where the organism was collected.
exactsite	Additional name/text description regarding the exact location of the collection site relative to a geographic relevant landmark.
subspecies_taxID	Subspecies taxonomic numeric code.
subspecies_name	Subspecies name.

## Acknowledgements

The present work was funded by National Funds through FCT-Fundação para a Ciência e a Tecnologia in the scope of the project LA/P/0048/2020. The authors are grateful to Ana Rita Gonçalves, José M. Grosso-Silva, Martin Corley, Pedro Brito Lopes, Pedro Sousa and Rui Andrade for collecting specimens. InBIO Barcoding Initiative was funded by the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No. 668981 and the project PORBIOTA—Portuguese E-Infrastructure for Information and Research on Biodiversity (POCI-01-0145- FEDER-022127), supported by Operational Thematic Program for Competitiveness and Internationalization (POCI), under the PORTUGAL 2020 Partnership Agreement, through the European Regional Development Fund (FEDER). Fieldwork benefitted from the project PTDC/ BIA-BIC/ 2203/2012-FCOMP-01-0124-FEDER-028289 by FEDER Funds through the Operational Programme for Competitiveness Factors—COMPETE and by National Funds, EDP Biodiversity Chair, the project "Promoção dos serviços de ecossistemas no Parque Natural Regional do Vale do Tua: Controlo de Pragas Agrícolas e Florestais por Morcegos" funded by the Agência de Desenvolvimento Regional do Vale doTua and includes research conducted at the Long Term Research Site of Baixo Sabor (LTER\_EU\_PT\_002). The work was partially Funded by Horizon Europe under the Biodiversity, Circular Economy and Environment call (REA.B.3); co-funded by the Swiss State Secretariat for Education, Research and Innovation (SERI) under contract number 22.00173; and by the UK Research and Innovation under the Department for Business, Energy and Industrial Strategy's Horizon Europe Guarantee Scheme. SF and VM were funded by the FCT through the programme 'Stimulus of Scientific Employment, Individual Support—3rd Edition' 2020.03526.CEECIND; 2020.02547.CEECIND). JV and FMSM by PhD grants (SFRH/BD/133159/2017; SFRH/BD/104703/2014) funded by FCT.



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## Supplementary materials

### Suppl. material 1: DS-IBIOR01 InBIO Barcoding Initiative - Orthoptera 01 -

#### Specimen details [doi](#)

**Authors:** Sílvia Pina, Joana Paupério, Francisco Barros, Cátia Chaves, Filipa M.S. Martins, Joana Pinto, Joana Veríssimo, Vanessa Mata, Pedro Beja, Sónia Ferreira

**Data type:** Record information - specimen data

**Brief description:** The file includes information about all records in BOLD for the DS-IBIOR01 InBIO Barcoding Initiative - Orthoptera 01 library. It contains collection and identification data.

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### Suppl. material 2: IBI – Orthoptera 01 library - Specimen details - Darwin Core

#### Standard [doi](#)

**Authors:** Sílvia Pina, Joana Paupério, Francisco Barros, Cátia Chaves, Filipa M.S. Martins, Joana Pinto, Joana Veríssimo, Vanessa Mata, Pedro Beja, Sónia Ferreira

**Data type:** Specimen data records in the Darwin Core Standard format.

**Brief description:** The file includes information about all records in BOLD for the DS-IBIOR01 InBIO Barcoding Initiative - Orthoptera 01. It contains collection and identification data.

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### Suppl. material 3: IBI - Orthoptera 01 library - DNA sequences [doi](#)

**Authors:** Sílvia Pina, Joana Paupério, Francisco Barros, Cátia Chaves, Filipa M.S. Martins, Joana Pinto, Joana Veríssimo, Vanessa Mata, Pedro Beja, Sónia Ferreira

**Data type:** Specimen genomic data, DNA sequences.

**Brief description:** COI sequences in fasta format. Each sequence is identified by the BOLD ProcessID, species name, genetic marker name and GenBank accession number, all separated by a vertical bar. The data are as downloaded from BOLD.

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