



<http://dx.doi.org/10.11646/zootaxa.3911.2.5>

<http://zoobank.org/urn:lsid:zoobank.org:pub:22BEC736-D607-4997-8B76-90C03149E751>

Nematocera flies recorded in Serra do Courel, northwest Spain, May 2012 (Diptera: Anisopodidae, Blepharoceridae, Cylindrotomidae, Limoniidae, Pediidae, Tipulidae and Trichoceridae) including descriptions of two new species of Limoniidae

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Abstract

During May 2012 Diptera were sampled in the Serra do Courel area of Lugo Province, Galicia, northwest Spain. The authors of this paper, members of the Malloch Society (see website) are active in attempting to understand the detailed ecology of flies. Much of this work is through targeting larval stages often with an emphasis on saproxylic situations. By rearing adults from larvae direct relationships between them and their detailed habitat requirements are established. The list of nematoceros Diptera that were sampled includes 36 species two of them new to science and records of six others new to the Iberian peninsula are provided. We describe *Lipsothrix galiciensis* Hancock & Hewitt **sp. nov.**, and *Prionolabis pjotri* Hancock **sp. nov.** of the family Limoniidae and provide a key to adults of European *Lipsothrix* species. Such results from this brief opportunity indicate the potential of the area for further field work in these and other families of Diptera.

Key words: fauna, aquatic, plastron, larvae, eggs, saproxylic, *Lipsothrix galiciensis* **sp. nov.**, *Prionolabis pjotri* **sp. nov.**

Introduction

Serra do Courel is a very rugged and steep area at the western end of the Cordillera Cantábrica mountain range. Altitude ranges from 400 to 1639m above sea level (a.s.l.) at Formigueiros peak. Courel has a mountain-oceanic climate with an average rainfall of 1500mm and annual temperature average of 8–10°C (Gutián *et al.* 2009). Courel has a long history of human use which has influenced its landscape but only a few, small, urban areas exist. Flat or slightly sloped areas have traditionally been used to for food crops. Timber from the forests has been used as fuel including production of charcoal for iron smelting. Extensive open or scrubland areas are maintained by controlled burning or grazing by domestic animals. Unadulterated native Galician forests can only be found in the most inaccessible and steep valleys. This landscape mosaic of vegetation types, influenced by these different land uses, makes Courel one of the most interesting and important areas of the Cordillera Cantábrica in terms of ecological value. Due to the abandonment of some traditional agriculture and livestock management, woodland areas are now expanding in Courel (Gutián *et al.* 2009).

About 40% of the Galician flora can be found in Courel, even though it represents only 6% of the surface area of the region. The dominant bio-geographic component of the Courel flora is Euro-Asiatic and to a lesser extent cosmopolitan and Mediterranean. The number of endemic plants is low. Many plant species have used the Cordillera Cantábrica (e.g. *Fagus sylvatica* and *Quercus petraea*) and the Lor-Sil-Miño river system (e.g. *Quercus*

Santiago de Compostela, was made available through the kind assistance of the director, Dr Javier Guitián and Professor Carlos Otero. Margaret Mullin and David Russell helped with the preparation of specimens for examination by scanning electron microscope. Pjotr Oosterbroek and Jaroslav Starý generously shared their great knowledge of crane flies and details of specimens in their care. Dr Clovis Quindroit, University of Lille, drew attention to the excellent photographs of live *Prionolabis* at www.diptera.info/forum [accessed, 26 November 2103].

Authors' roles

All the authors visited the area at the same time as a group. Nematoceros dipteran specimens, immature or adult, were given to E. Geoffrey Hancock for identification. From these samples the text and illustrations were prepared. Specific input from Stephen Hewitt regarded the rearing and subsequent help with description of samples of *Lipsothrix*. David Horsfield collected the larva from which he reared the adult female of *Tipula obscuriventris*.

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