



**The Dasytidae (Coleoptera) of Sardinia\***

GIANFRANCO LIBERTI

Via Cascina Girola 81, I-21040 Uboldo (VA), Italy. E-mail: gianfranco.liberti@login.it

\*In: Cerretti, P., Mason, F., Minelli, A., Nardi, G. & Whitmore, D. (Eds), *Research on the Terrestrial Arthropods of Sardinia (Italy)*. Zootaxa, 2318, 1–602.

**Table of contents**

Abstract .....339  
 Introduction .....340  
 Material and methods .....341  
 Collecting and handling .....341  
 Acronyms of specimen depositories .....341  
 Terminology .....342  
 Chorotypes .....342  
 Bibliographic references of the species .....342  
 Remarks on the “Annotated catalogue” .....342  
 Checklist .....343  
 Species of doubtful occurrence .....344  
 Dasytidae: family description and identification keys .....346  
 Key to the Sardinian genera and species of Dasytidae .....346  
 Key to genera .....347  
 Genus *Danacea* Laporte de Castelnau .....347  
 Key to species of subgenus *Danacea* .....348  
 Key to species of subgenus *Allodanacaea* Liberti .....348  
 Key to species of genus *Dasytes* Paykull .....349  
 Key to species of genus *Dolichosoma* Stephens .....349  
 Key to species of genus *Psilothrix* Redtenbacher .....350  
 Key to species of genus *Aplocnemus* Stephens .....350  
 Annotated catalogue .....350  
 Discussion .....372  
 Zoogeographical analysis .....372  
 The endemics .....375  
 Collecting with traps at Marganai and Montimannu .....377  
 Acknowledgements .....380  
 References .....380

**Abstract**

The study of over 10,000 specimens of Dasytidae from about 35 collections has led to the conclusion that 8 genera and 32 species and subspecies of this family, all actually observed by the author, occur in Sardinia. This number is believed to be rather close to completion. A further 30 species, reported in the past as occurring on the island, are discussed and have been removed from the list. Identification keys based on external characters only are proposed for genera and species. However, for difficult groups and where confusion may arise, drawings of aedeagi are supplied. An annotated catalogue

follows with, for each species, synonymies, bibliography, a list of sampling localities with last year of collection, notes, and chorotype. A zoogeographical analysis shows that the Sardinian Dasytidae conform to a Central Mediterranean type, with rather strong North African influences and with a high presence of strict endemics (11 species), higher than in Corsica (7 species). *Danacea* (*Allodanacaea*) is no doubt the most interesting group with 7 taxa, none of which are spread all over Sardinia and 2 of which—*D. (A.) gorditana* Liberti and *D. (A.) nymphe* Liberti—only occur in a tiny area in the Nurra region. Two species, *Dasytes doderoi* Pic and *Aplocnemus (Diplambe) januaventi* Liberti, both strict Sardinian endemics, are very rare and poorly known: the first is only known on two female specimens, both collected in the Gennargentu area many years ago; the second seems in a “safer” situation because several specimens have been collected recently.

Trap samples (mainly Malaise) from the Marganai and Montimannu region-owned forests (SW Sardinia, respectively Carbonia-Iglesias and Medio Campidano provinces), are also discussed.

**Key words:** Melyridae, Prionoceridae, Acanthocnemidae, *Dasytes*, *Danacea*, *Aplocnemus*, *Psilothrix*, *Dolichosoma*, *Divales*, Italy, Corsica, Tyrrhenian, identification keys

## Introduction

Several generations of entomologists have collected beetles in Sardinia and, all in all, the island's Coleoptera are rather well known. Nevertheless, collecting in Sardinia is still an exciting experience, often supplying little known or even unknown species.

The Dasytidae are small, often black and hairy (sometimes green) beetles, living on flowers and feeding on pollen. Their biology is little known apart from a few species, especially *Psilothrix viridicoerulea* (Geoffroy, 1785) the larval life of which was thoroughly studied by Fiori (1971) in Sardinia. The Dasytidae are not among the most popular beetles in collections, but they are often collected and mounted because rather common and easily found. The main problem seems to be their identification, which is usually considered difficult and frustrating. In reality, most Sardinian species are easy to recognize at a glance except for those of *Danacea* Laporte de Castelnau subgenus *Allodanacaea* Liberti. The main aim of this paper is to supply sufficient information to allow coleopterists to identify specimens of Sardinian Dasytidae.

An interesting feature of the Sardinian dasytid fauna is the high number of endemics, which witnesses its long geographical isolation. Several species are rare and still poorly known like *Dasytes doderoi* Pic, 1924 from the Gennargentu massif, of which only two females are known.

The Dasytidae were recently given full family rank by Majer (1995) and placed within the superfamily Cleroidea in the so called “Melyrid lineage”, close to the Malachiidae, Melyridae, Prionoceridae and Acanthocnemidae, only to mention the families present in Europe. Before Majer's revision these families were considered as subfamilies of the Melyridae in a broader sense (Crowson 1964), a view maintained by Lawrence and Newton (1995). Before Crowson (1964), both the Malachiidae and the Dasytidae were included, as families, in the somewhat heterogeneous group called “Malacodermata”, together with the Cantharidae, Lampyridae, Lycidae and other families.

Specimens of these 5 families of Cleroidea can be recognized using Majer (1995).

The Malachiidae are a large family spread all over the world and well represented in Sardinia by more than 30 species (Audisio *et al.* 1995).

Four species of Melyridae have been reported from Sardinia: *Falsomelyris granulata* (Fabricius) (Baudi di Selve 1873b: 252, as *Melyris granulata*; Schilsky 1897b: nr. 97, as *Zygia nigra* Fabricius; Porta 1929: 130, as *Melyris nigra*), *Melyris bicolor* Fabricius (Baudi di Selve 1873b: 252), *Melyris oblonga* (Fabricius) (Baudi di Selve 1873b: 252; Costa 1882: 19; Luigioni 1929: 635; Porta 1929: 130) and *Melyris (Zygia) versicolor* Chevrolat (Schilsky 1897b: nr. 90; Luigioni 1929: 635; Porta 1929: 130). Their presence on the island could not be confirmed by the author; the most reliable records are those of *Melyris oblonga* by Costa (1882: 19, 1884: 28) with two findings (September 1881 near Cagliari and August 1883 near Sassari), suggesting that this species may have an end of summer appearance.