

PTINID BEETLES (COLEOPTERA, PTINIDAE) FROM THE MALTESE ISLANDS**Xavier Bellés¹ and David Mifsud²****ABSTRACT**

The following ten species of ptinid beetles are recorded from the Maltese Islands: *Dignomus brevipilis* (Desbrochers), *Dignomus reichei* (Boieldieu), *Ptinus (Gynopterus) variegatus* Rossi, *Ptinus (Pseudobruchus) spitzyi* Villa, *Ptinus (Heteroptinus) affinis* Desbrochers, *Ptinus (Ptinus) clavipes* Panzer, *Microptinus melitensis* Pic, *Mezium americanum* (Laporte), *Gibbium aequinoctiale* Boieldieu and *Gibbium psylloides* (Czenpinski). Of these, *Ptinus clavipes* was not previously recorded whereas *Gibbium aequinoctiale* was referred to as *G. boieldieui* (Levrat).

INTRODUCTION

The Ptinidae is a family of small insects commonly known as spider beetles, presently composed of some 70 genera and approximately 700 described species. Their distribution is cosmopolitan although they seem to be more abundant in the drier regions of the world (Philips, 2000). From a systematic point of view, ptinid beetles have been considered as a formal family within the Bostrichoidea (Crowson, 1967, 1981; Paulian, 1988) or as a subfamily of Anobiidae (Lawrence & Newton, 1995; Philips, 2000). In any case, ptinid beetles are a well defined group that seems to be monophyletic according to the recent studies by Philips (2000), which suggests that the consideration of them as a formal family may be not only practical but also reasonable from a biosystematic point of view. Morphological characters which distinguish Ptinidae from Anobiidae have been detailed by Crowson (1967), among others. Ptinids include specialized myrmecophiles, dung feeders and wood-boring species. Several species are often associated with stored products where they are considered as minor pests.

The first endemic Maltese ptinid was described by Pic (1903), under the name of *Microptinus melitensis*. This species was later included by Tonna-Barthet (1931) in a list of rare beetles peculiar to the Maltese Islands, and again cited by Cilia (1989) in the Red Data Book. However, the main contribution to the knowledge of Ptinidae from the Maltese Islands is the checklist of Coleoptera published by Cameron &

Caruana Gatto (1907), in which seven valid species of this family were cited.

Recent collections made by one of us (DM) allow an up to-date study of the ptinid beetles inhabiting the Maltese Islands. The results are presented below. Material has been deposited in the collections of the authors and at the Natural History Museum of Basel, Switzerland.

ANNOTATED LIST OF SPECIES***Dignomus brevipilis* (Desbrochers, 1875)**

Data from Malta. Recorded from Buskett and Attard by Cameron & Caruana Gatto (1907).

Material examined. MALTA, St. Thomas Bay (towards Munxar), 3 exs., under stone near coastal area, 20.v.1990 and 23.v.1994, leg. D. Mifsud.

Comments. The inclusion of this species under the genus *Dignomus* has been recently proposed by Bellés (1996). *D. brevipilis* has a West Mediterranean distribution (Pic, 1912; Bellés, 1996).

***Dignomus reichei* (Boieldieu, 1854)**

Data from Malta. Recorded from Gnejna (Cameron & Caruana Gatto, 1907).

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The inclusion of this species under the genus *Dignomus* has been recently proposed by Bellés (1996). Although no recent records are available, the occurrence of *D. reichei* in Malta is probable, given that it has a distribution comprising Greece, Sicily and North Africa (Pic, 1912; Bellés, 1996).

Ptinus (Gynopterus) variegatus Rossi, 1794

Data from Malta. Recorded from Valletta by Cameron & Caruana Gatto (1907).

Material examined. MALTA, Birzebbuga, 1 ex., 27.iii.1994, leg. D. Mifsud; Marsa (Ghammieri), 7 exs., under bark of *Eucalyptus* trees, 7-28.xii.1993, leg. D. Mifsud; Msida (University gardens), 1 ex., 2.iv.1995, leg. D. Mifsud; Pembroke 2 exs., in private orchard, 27.iii.1990 and 6.v.1990, leg. A. Micallef.

Comments. *Ptinus duvali* Lareynie, 1852, which was also cited from Malta (Coll. Gatto) by Cameron & Caruana Gatto (1907), is a variety of *P. (G.) variegatus* (Pic, 1912) without formal taxonomic value. *Ptinus insularis* Desbrochers, mentioned from Malta in the original description (Desbrochers, 1871), was synonymised with *P. (G.) variegatus* (Pic, 1912). *P. (G.) variegatus* has a Palaearctic distribution (Pic, 1912).

Ptinus (Pseudobruchus) spitzyi Villa, 1838

Data from Malta. Recorded from Gnejna by Cameron & Caruana Gatto (1907).

Comments. Although no recent records are available, the occurrence of *P. (P.) spitzyi* in Malta is probable, given that it has a West Mediterranean distribution, comprising Corsica (Pic, 1912).

Ptinus (Heteroptinus) affinis Desbrochers, 1871 (figure 1)

Data from Malta. Recorded from Valletta by Cameron & Caruana Gatto (1907).

Material examined. MALTA, St. Thomas Bay (towards Munxar), 1 ex., 25.v.1994, leg. D. Mifsud; Hagar Qim, 1 ex., 22.x.1989, leg. D. Mifsud; Marsa (Ghammieri), 43 exs., under bark of *Eucalyptus* trees, 2-28.xii.1993 and 19.ii.2000, leg. D. Mifsud; Msida (University gardens), 1 ex., 13.xii.1994, leg. C. Farrugia; Bahrija, 2 exs., 12.v.1996, leg. D. Mifsud.

GOZO, Ramla, 1 ex., under stone near sand dune vegetation, 16.x.1997, leg. D. Mifsud.

Comments. *P. (H.) affinis* was described from Sicily by Desbrochers (1871) and later reported only from Malta (sic) by Reitter (1884). Pic (1912) mentions both localities, Malta and Sicily.

Ptinus (Ptinus) clavipes Panzer, 1792

Material examined. MALTA, St. Thomas Bay, 1 ex., 29.iii.1991, leg. D. Mifsud; Marsa (Ghammieri), 2 exs., in human habitation, 20.iv.1994 and 13.ii.1995, leg. D. Mifsud; Mdina, 2 exs., in old demolished building under pigeon dung, 17.ii.2000, leg. D. Mifsud.

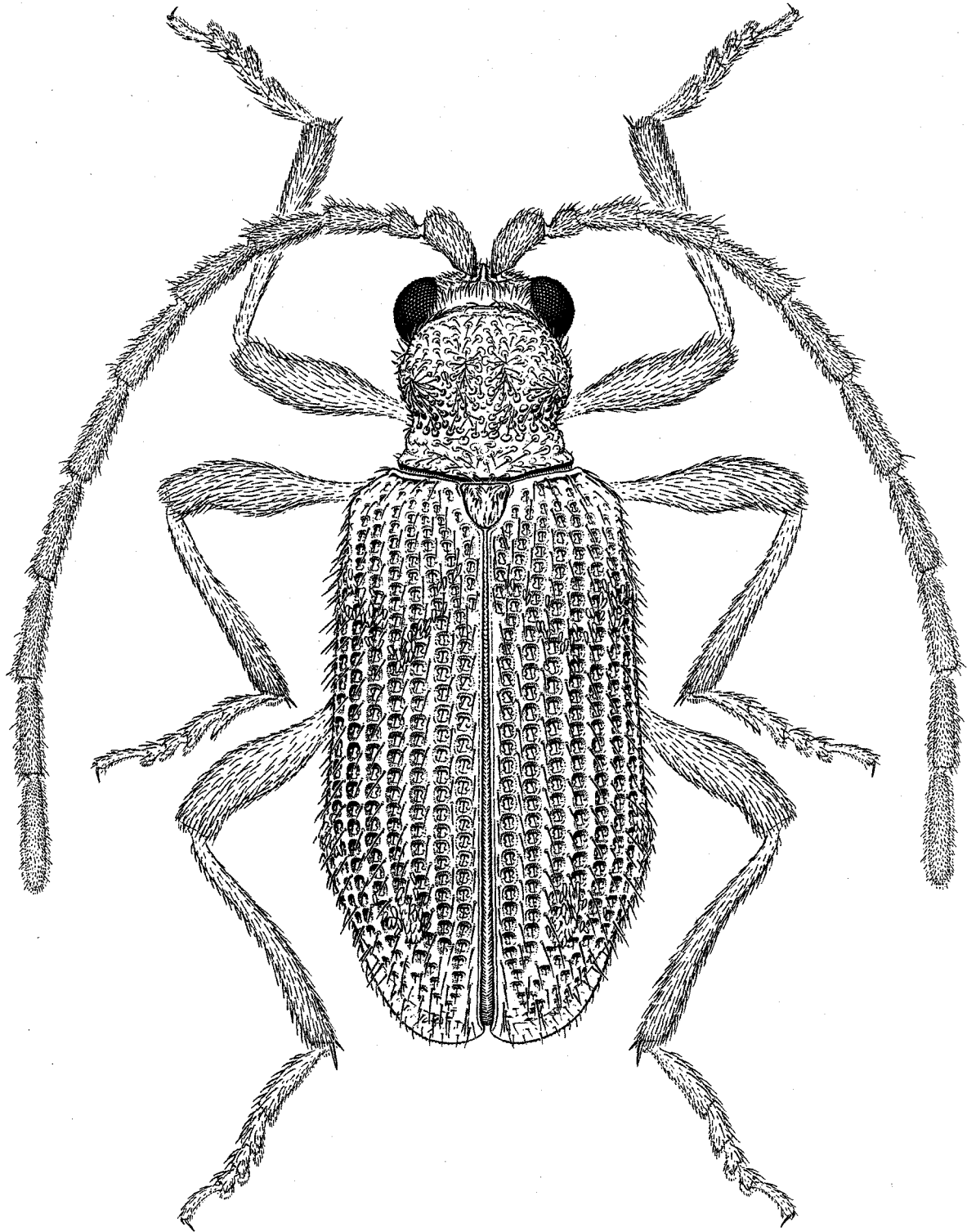
Comments. The status of this species was revised by Moore (1957). *P. (P.) clavipes* frequently shows synanthropic habits, and its distribution is practically cosmopolitan (Hinton, 1941). There were no previous records of *P. clavipes* from the Maltese Islands.

Microptinus melitensis Pic, 1903 (figure 2)

Material examined. MALTA, Delimara, 1 ex., under stone near large accumulations of rabbit dung, 26.ii.1990, leg. D. Mifsud; Buskett, 1 ex., 17.xi.1995, leg. D. Mifsud; Mtahleb, 1 ex., in leaf litter under *Cistus monspeliensis*, 5.iv.1998, leg. D. Mifsud; Mellieha, 1 ex., in leaf litter under *Tetraclinis articulata*, 30.ix.1997, leg. D. Mifsud. GOZO, San Blas, 1 ex., in leaf litter under *Ceratonia siliqua*, 7.i.1995, leg. D. Mifsud.

Comments. *M. melitensis* is endemic to Malta (Pic, 1903). Cameron & Caruana Gatto (1907) reported *Microptinus reitteri* Pic (1895) from Imtahleb, as identified by Maurice Pic. However, Pic himself later stated that *M. reitteri* is known only from Sicily (Pic, 1912), whereas the *Microptinus* found in Malta is *M. melitensis*.

From these data we have inferred that Pic provisionally identified the material from Malta for Cameron and Caruana Gatto as *M. reitteri*, before discovering that the Maltese *Microptinus* belonged to a new species. Pic then described *M. melitensis* in 1903, but Cameron and Caruana Gatto still used the identification of *M. reitteri* determined by the French specialist before 1903.



1mm

Fig. 1. Habitus of the male of *Ptinus (Heteroptinus) affinis* Desbrochers.

***Mezium americanum* (Laporte, 1840)**

Data from Malta: Recorded from "Malta" by Bellés (1985a)

Comments. It is a frequently synanthropic species with a practically cosmopolitan distribution (Bellés, 1985a)

***Gibbium aequinoctiale* Boieldieu, 1854**

Material examined. MALTA, Zejtun, 15 exs., in human habitation, 12.vii.1997, 20.ix.1997, 3.iii.1998, 6 and 20.iv.1998, 1.v.1998, 22.i.1999 and 18.ii.2000, leg. D. Mifsud; Marsa (Ghammieri), 8 exs., in human habitation, 8.x.1993, 15.vi.1994, 4 and 6.v.1995, 3.v.1996 and 8.vii.1997, leg. D. Mifsud.

Comments. There were no previous records of this species from Malta. However, the mention of *Gibbium boieldieui* Levrat, by Cameron & Caruana Gatto (1907) from Valletta, could be attributed to *Gibbium aequinoctiale*, given the relative similarity between both species. *G. boieldieui* is known from West Asia, including Turkey, although there are some old unconfirmed records from Greece and Malay archipelago (Bellés, 1985a).

The main characters to separate the two species, including the description of the respective male

genitalia, have been reported by Bellés (1985a).

The status of this species was revised by Bellés (1985a) and Bellés & Halstead (1985). Its distribution is practically cosmopolitan, although most of the records are concentrated in tropical or subtropical areas (Bellés, 1985a; Bellés & Halstead, 1985). It shows synanthropic habits (Bellés, 1985b).

***Gibbium psylloides* (Czenpinski, 1778)**

Data from Malta: Recorded from "Malta" by Bellés (1985a).

Comments: It is a typically synanthropic species distributed in the Mediterranean area (Bellés, 1985a; Bellés & Halstead, 1985).

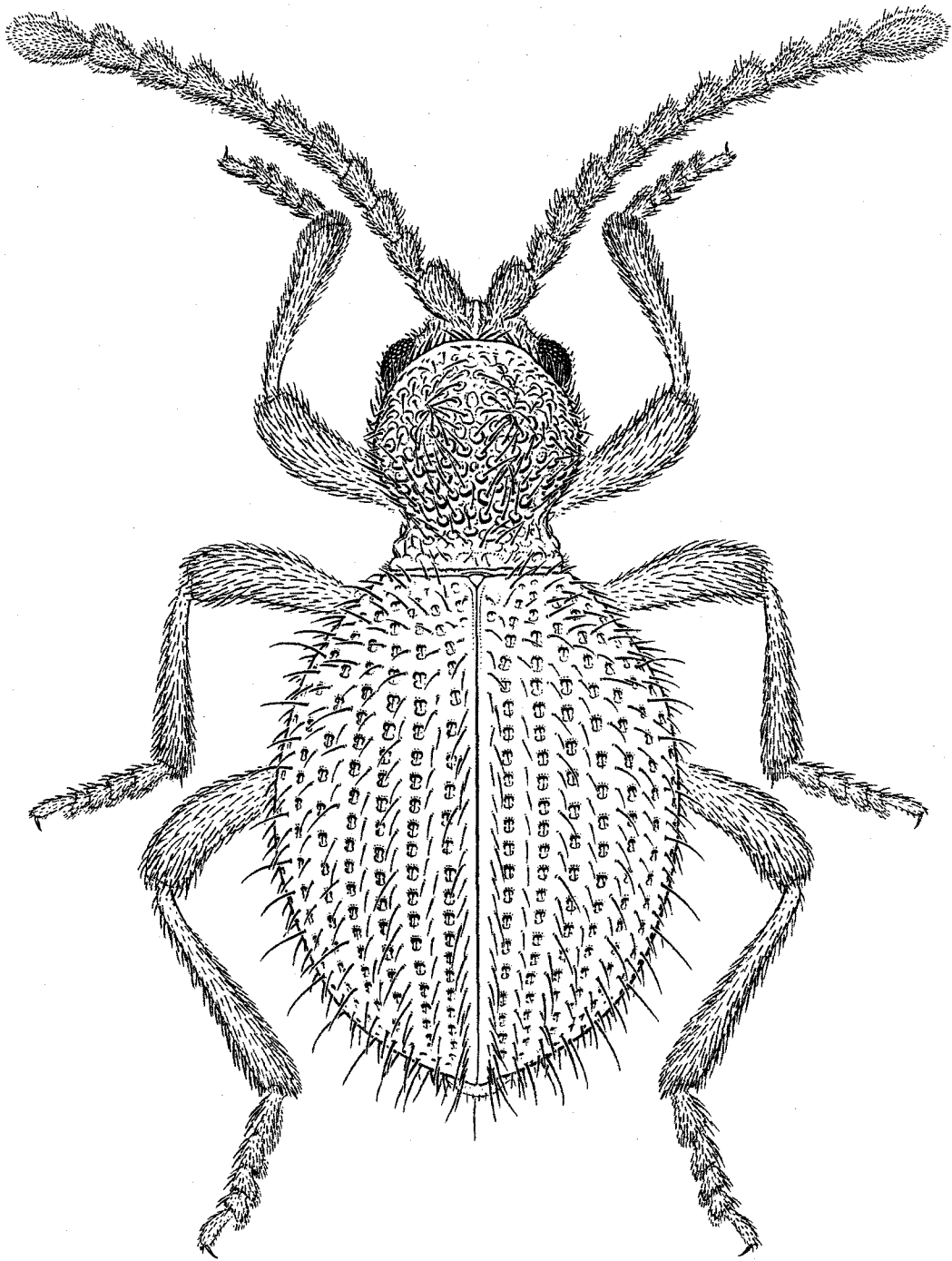
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1mm

Fig. 2. Habitus of *Microptinus melitensis* Pic.

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