

Ptinus bertranpetiti, a new species of spider beetle
from Socotra Island (Coleoptera: Ptinidae)

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Abstract. *Ptinus bertranpetiti* sp. nov. (Coleoptera: Ptinidae) is described from Socotra Island. The practical absence of secondary sexual dimorphism and the structure of the aedeagus, slender and subsymmetrical, suggest that the new species must be placed in the subgenus *Gynopterus* Mulsant & Rey, 1868. The most peculiar characteristics of *P. bertranpetiti* sp. nov. refer to the aedeagus and the elytral pubescence, both with features that are unparalleled in other species of the subgenus *Gynopterus*.

Keywords. Coleoptera, Ptinidae, *Ptinus*, *Gynopterus*, new species, Yemen, Socotra.

Introduction

Little is known about the spider beetles from the Socotra Archipelago. In 2005, I described the species *Silisoptinus inermicollis* Bellés, 2005, from *Calanthia*, in the Socotra Island (BELLÉS 2005). Four years later, I published an overview of the Ptinidae family in the archipelago (BELLÉS 2009), reporting the description of two new species of *Mezium* Curtis, 1828 and *Sphaericus* Wollaston, 1854, respectively, and a catalogue of the five species placed in five respective genera known at that time. The catalogue included a *Ptinus* sp. collected at Deksam Plateau, in the island of Socotra, at some 1000 m of altitude. Unfortunately, this *Ptinus* Linnaeus, 1767 was not identified at species level because the only material available was a single female, although I noticed that it could belong to a new species (BELLÉS 2009).

Recently, my colleague Jiří Hájek sent to me two additional specimens of this species, a male and a female collected at the Zemhon area, in Socotra Island, that were deposited in the collections of the National Museum of Prague. The new material allows a proper study of this species that, as expected, resulted to be new to science, and which is described herein.

Materials and methods

Two specimens of the new species were obtained from The National Museum, Prague (NMPC), and the third specimen was from the Hessisches Landesmuseum, Darmstadt (HLMD). Abundant reference material of *Ptinus palliatus* Perris, 1847 and other *Ptinus* species were mainly from the Ptinidae collection of the author (XBCB), and from the Maurice Pic collection, preserved at the Muséum national d'Histoire naturelle, Paris (MNHN).

Habitus in dorsal view of type specimens were photographed with a Leica DFC 420 camera attached to a Leica M 80 binocular microscope, using the Combine ZP Image Stacking Software, by Alan Hadley (<http://www.hadleyweb.pwp.blueyonder.co.uk/CZP/News.htm>). The aedeagus of the holotype was mounted in DMHF (dimethyl hydantoin formaldehyde resin) on a clear celluloid label pinned under the specimen. The aedeagus was drawn by hand with the help of a microscope Nikon Optiphot.

Results

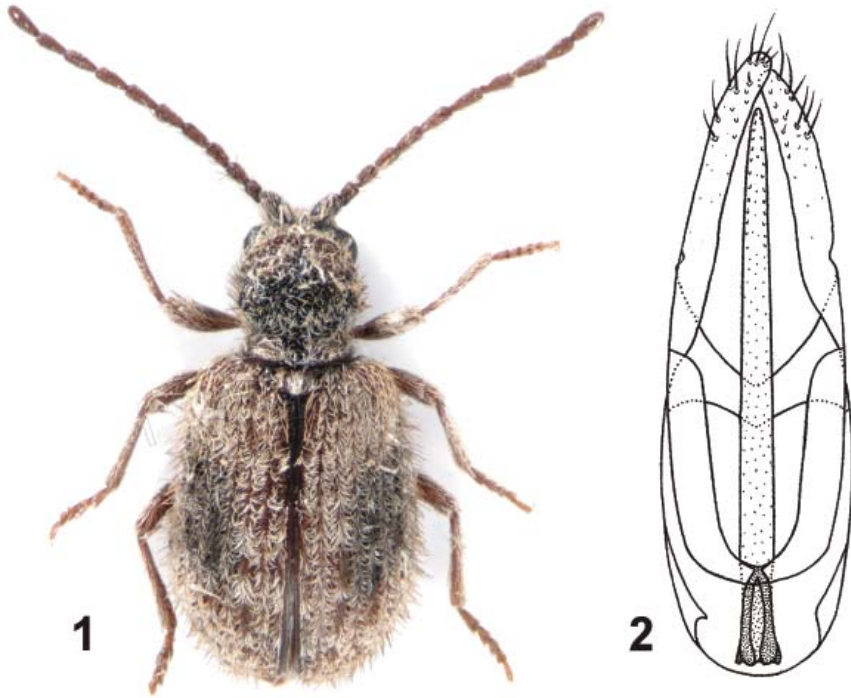
Ptinus (Gynopterus) bertranpetiti sp. nov.

(Figs. 1–2)

Ptinus sp.: BELLÉS 2009: 147.

Type material. HOLOTYPE: ♂ (NMPC), 'YEMEN Socotra Island Zemhon area, 270-350 m N12°30'58" E54°06'39" 3-4. ii.2010. L. Purchart & L. Vybíral lgt.' PARATYPES: 1 ♀, same data as the holotype (XBCB); 1 ♀, 'Soqotra, Deksam Plateau, Schwarzlicht, 1020 m. 12°32'N 53°59'E, 22-24.2.1999, leg.: H. Pohl, SOQ 37 (HMLD-Col-1285)' (HLMD).

Description (Fig. 1). Body length: 2.5–3.3 mm; robust, parallel-sided; both sexes winged; cuticle in general brownish-piceous, head and pronotum piceous, antennae and legs brownish, and elytra brownish in basal, sutural and apical parts, and piceous in remaining, lateral parts. Head clothed with short, yellowish, soft and recumbent pubescence covering most of surface, and with short, golden, hard and erect setae scattered over surface; eyes convex, semispherical, with short, erect setae inserted between ommatidia, antennae relatively slender and moderately long, longer than half length of body. Pronotum somewhat longer than wide, with transverse constriction behind disc; sculpture of the anterior third formed by irregular excavations, and that of disc and posterior third formed by round, well delimited granulations; pubescence composed by long, golden setae, erect and scattered over all surface, and short, soft, recumbent pubescence covering most of surface. Scutellum subtriangular, covered by whitish soft and recumbent pubescence. Elytra long, 1.3 times longer than wide; sides subparallel, only slightly rounded; humeri obtuse; elytral punctures as broad as intervals, pubescence of three types: 1st) golden setae, semierect and inserted in intervals, longer than the length of three punctures; 2nd) yellowish setae, semierect and inserted in punctures, shorter than the length of three punctures; and 3rd) short and soft, recumbent pubescence practically covering entire elytra, densely aligned in rows. All five abdominal sternites perfectly delimited, with suture lines well apparent. Aedeagus (Fig. 2) with median lobe somewhat shorter than parameres, which are subsymmetrical and slender, with apex blunt and showing scattered setae, especially at external sides.



Figs. 1-2. *Ptinus bertranpetiti* sp. nov. 1 – habitus of the female; 2 – aedeagus.

Sexual dimorphism. The female, compared to male, is somewhat more robust, with eyes less convex, antennae a bit shorter and elytral disc slightly more convex.

Etymology. The new species is dedicated to my friend Jaume Bertranpetit, to commemorate (on 29 February 2012) his 60th birthday.

Discussion

The practical absence of secondary sexual dimorphism and the slender and subsymmetrical structure of the aedeagus, suggest that the new species must be placed in the subgenus *Gynopterus* Mulsant & Rey, 1868, which has a cosmopolitan distribution, although it predominates in the Palearctic Region (PIC 1912). The most peculiar characteristics of *P. bertranpetiti* sp. nov. are the aedeagus and the elytral pubescence, both with features that are unparalleled in other species of the subgenus *Gynopterus*. The elytral pubescence is similar to that showed by *Ptinus palliatus*, a species spread over the West Palearctic area (PIC 1912, IABLOKOFF-KHYZORIAN & KARAPETIAN 1991, BOROWSKI 2007), including the Iberian Peninsula (BELLÉS 1978). However, the pronotum of *P. palliatus* has a very different morphology, with a conspicuous double protuberance on the disc, as well as a very different structure of the

adeagus, with the basal region much simpler than that of *P. bertranpetiti* sp. nov., as shown by IABLOKOFF-KHNZORIAN & KARAPETIAN (1991). Of note, these authors transferred *P. palliatus* from the subgenus *Gynopterus* to *Bruchoptinus* Reitter, 1884 (IABLOKOFF-KHNZORIAN & KARAPETIAN 1991), although the slight sexual dimorphism exhibited by *P. palliatus*, with the elytra subparallel and with the humeri distinctly protruding outwards in both sexes, suggests that it is more adequately placed in the subgenus *Gynopterus*, which possess these characteristics (MULSANT & REY 1968). Conversely, one of the most typical features of *Bruchoptinus* species is the dramatic sexual dimorphism, with males showing the elytra subparallel, with the humeri protruding outwards, whereas females have the elytra broadly oval, with effaced humeri (REITTER 1884).

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