***Copris hispanus cavolinii* (Coleoptera: Scarabaeidae) in the Collection of “Grigore Antipa” National Museum of Natural History (Bucharest)**

Andreea-Cătălina DRĂGHICI*

“Grigore Antipa” National Museum of Natural History, Bucharest, Romania.

*corresponding author, e-mail: andreea.draghici@antipa.ro

Received: December 13, 2016; Accepted: May 6, 2017; Available online: May 24, 2017; Printed: June 30, 2017

Abstract. *Copris hispanus cavolinii* (Petagna, 1792) is mentioned for the first time in the Coleoptera Collection of “Grigore Antipa” National Museum of Natural History (Bucharest). Three new records are added in the present short note for *C. hispanus cavolinii* based on the studied material.

Key words: Coleoptera, *Copris hispanus cavolinii*, Romania, records

Up to now three species of *Copris* are recorded in Romanian fauna: *Copris lunaris* (Linnaeus), *C. hispanus* (Linnaeus) and *C. umbilicatus* Abeille de Perrin. First of them is a very common species, the second one was known only from Breșnița-Ocol, Mehedinți County (Ruicănescu, 1993), and the third was recorded only from Băile Herculane. The specimen of *C. umbilicatus* is preserved in the Collection of the Museum of Natural History of Wien, Austria (Ziani et al., 2015). *Copris hispanus* includes two subspecies, *Copris hispanus hispanus* (Linnaeus, 1764) and *Copris hispanus cavolinii* (Petagna, 1792). *Copris cavolinii* was initially described as species by Petagna from Italy; other authors (Král & Bezděk, 2016) have considered it a subspecies of *C. hispanus*. Later, Falahee & Angus (2010) expressed the opinion that it should be considered as a distinct species, on the basis of karyological studies.

362 specimens of *Copris* from the Scarabaeidae Collection (study collection) have been studied. The identification was made using the external morphological characteristics (Paulian, 1941). 358 specimens belong to *Copris lunaris* (Linnaeus), and four specimens belong to *C. hispanus cavolinii* (Petagna). Three specimens of *C. h. cavolinii* were collected from Romania: the first male from Cheile Dobrogei, Cheia Jurassic Reef, Constanța County, 13.04.2015, leg. Gabriel Chișamera, the second male was collected from Ivrinezu Mare, Constanța County, 03.04.2017, leg. Viorel Gavril, and a female from Urziceni, Ialomița County, 28.07.1966, leg. Nicolae Săvulecu (Fig. 1). The fourth specimen, a male, was collected from Tolfa Mountains (Italy), on 06.04.1974.

The three species of *Copris* genus can be differentiated by:

- *Copris hispanus*: the anterior margin of the pronotum is bisinuate; the anterior angle of the pronotum is almost rectangular; unitary, shield-like anterior face of the pronotum; the male has a large curved horn on the head, the female, a smaller one;
- *Copris lunaris*: the anterior margin of the pronotum is not sinuate; the anterior angle of the pronotum is broadly rounded; the anterior face of the pronotum has two clear-cut lateral indentations instead of a shield-like pronotum; a pointed horn in the male, a very short, bifide horn in the female (Fig. 2).

Fig. 1 – Collecting sites of *Copris hispanus cavolinii* in Romania: new records (red dots) and former record (yellow dot)

Fig. 2 – *Copris hispanus cavolinii*: A, male, lateral view; B, male, dorsal view; *Copris lunaris*: C, male, lateral view; D, male, dorsal view. Scale: 1 mm (Photos: I. Ș. Iorgu)

- *Copris umbilicatus*: three teeth at outer margin of fore tibia, relatively small hornlike appendage of pronotum, metasternal plate with median longitudinal groove ending with a deep fovea, and (in males) without denticles at base of epistomal horn.

The two subspecies of *Copris hispanus* are differentiated by the carina of the pronotum: deeply sinuated in *C. h. hispanus* and not sinuated in *Copris h. cavolinii* and by the presence of the antero-lateral dentations found in *C. h. hispanus*, absent in *Copris h. cavolinii*.

ACKNOWLEDGEMENTS

I am grateful to Dr. Melanya Stan (“Grigore Antipa” National Museum of Natural History) and Dr. Adrian Ruicănescu (Institut of Biological Research, Cluj-Napoca) for their scientific support, to Dr. Ionuț Iorgu and Dr. Tiberiu Sahlean for the photographs of the specimens and for the map of collecting sites.

REFERENCES

- FALAHEE, S. L., R. B. ANGUS (2010) Chromosomal separation of difficult species of *Copris* Geoffroy, 1762 and *Onthophagus* Latreille, 1802 (Coleoptera, Scarabaeidae), with discussion of *O. massai* Baraud as a British Pleistocene fossil. In: E. B. Ratcliff, F.T. Krell (eds) Current advances in Scarabaeoidea research. ZooKeys 34: 17–32.
- KRÁL, D., A. BEZDĚK (2016) Tribe Coprini Leach, 1815. In: I. Löbl, D. Löbl (eds.) Catalogue of Palearctic Coleoptera. Volume 3, Scarabaeoidea, Scirtoidea, Dascilloidea, Buprestoidea, Byrrhoidea Description: Revised and updated edition. Leiden ; Boston : Brill, pp. 168–171.
- PAULIAN, R. (1941) Faune de France. Coléoptères Scarabéidés. 38, 240 pp. (in French)
- RUICĂNESCU, A. (1993) *Copris hispanus* (L.) (Coleoptera: Scarabaeidae), new species in fauna of Romania. Studii și cercetări de biologie, seria Biologie animală, 44(1): 3–6.
- ZIANI, S., A. BEZDĚK, T. BRANCO, O. HILLERT, S. JÁKL (2015) New country records of Scarabaeoidea (Coleoptera) from the Palearctic Region. Insecta Mundi 0409: 1–36.