

**Reinstatement of *Anthrenus (Nathrenus) funebris* Reitter, 1889  
from Greece as a valid species  
(Coleoptera: Dermestidae: Megatominae)**

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**Taxonomy, synonymy, reinstatement, Coleoptera, Dermestidae, *Anthrenus*, *Nathrenus*, Greece**

**Abstract.** *Anthrenus (Nathrenus) funebris* Reitter, 1889 from Greece is reinstated from its synonymy with *Anthrenus (Nathrenus) verbasci* (Linnaeus, 1767). The lectotype of this taxon is firstly illustrated and compared with *Anthrenus verbasci*.

## INTRODUCTION

*Anthrenus funebris* Reitter, 1889 seems to be quite a rare species since all the many archived examples labelled with this name - as far as examined by the authors - turned out to belong actually to the very variable species *Anthrenus verbasci* (Linnaeus, 1767). Because of this the taxon *Anthrenus funebris* Rtt. has been synonymised with *Anthrenus verbasci* according to an examination of specimens which were collected in the surrounding of the type locality (Háva 2004). Recently the first author has loaned and examined the regarding lectotypus being deposited in the collection of the Museum für Naturkunde, Berlin, Germany in order to confirm the synonymy.

## METHODS

The specimen has been stored for 5 days in a solution of 1% pepsin in hydrochloric acid to free it roughly from protein tissues and making the extremities of the body moveable. The abdomen was disconnected from the body and glued upside-down onto the same cardboard plate, just behind the beetle. Before this the genitalia was excluded and then cleaned with a fine needle in a drop of 99% glycerol. Afterwards it was also glued onto the plate behind the beetle, firmly embedded in a drop of a solution consisting of polyvinylpyrrolidone, aqua demineralisata and diglycerin (the liquid solution becomes permanently solid after a few minutes). Photos of body and abdomen were taken with a digital SLR camera Sony alpha 35, connected with an objective Nikon CF N Plan Achromat 4x 160/- and extension rings; for the photos of the genitalia and antenna a Bresser Junior USB-Handmikroskop at 200x magnification was used. Because of the low depth of field all photos were taken as layered images, afterwards combined on a PC by using the stacking program Combine ZP. Nomenclature and systematic in this paper follow Háva (2015).

Acronyms:

JHAC Private Entomological Laboratory & Collection, Jiří Háva, Únětice u Prahy, Prague-west, Czech Republic;

ZMUB Museum für Naturkunde, Berlin, Germany.

## RESULTS

***Anthrenus (Nathrenus) funebris* Reitter, 1889**

(Figs. 1-4)

*Anthrenus funebris* Reitter, 1889: 256.*Anthrenus funebris*: Háva, 2004: 88; 2015: 140.

**Type material.** Lectotype ♂ labelled: "Ins. Karpathos, Berg Lastros, v. Oertzen." [printed] / *Anthrenus funebris* m. n. sp." [hand written] / Lektotypus Nr. [red printed label] / "84278", (ZMUB).

**Other studied material.** "Greece, Karpathos Is., Menetés env., 18.6.2008, (kleinSteinbruch bei der Strasse nach Arkasa), Ing. K. Schön lgt.", 1 ♂, 2 ♀♀, (JHAC).

**Original description.** "*Anthrenus funebris* n. sp. Subovalis, fere parallelus, antennis 11-articulatis, clava triarticulata, bene arupta, subtus albo, supra nigro-squamulatus, squamulis piliformibus haud densissime tectus, prothoracis basi utrinque lato, fasciis tribus transtensis undulatis, frequens maculatim interruptis, punctoque apicali albo-squamulatis; abdominis segmentis ventralibus ad latera fusco-maculatis. - Long. 1.8 mill.

Eine kleine echte *Anthrenus*-Art, mit 11 gliederigen Fühlern, welche einigermassen dem *Florilinus caucasicus* ähnlich sieht. Körper viel länger als breit, fast viereckig, unten weiss, oben schwarz beschuppt. Die Schuppen nicht den ganzen Untergrund vollkommen bedeckend, lang, haarförmig. Auf schwarzem Grunde der Flügeldecken befinden sich drei gebuchtete weisse Querbinden, die sich fleckenartig auflösen können, sowie ein Punkt an der Spitze hell beschuppt. Die vorderste Binde biegt sich innen gegen das Schildchen zu. Die Seiten der Basis des Halsschildes ist mit Ausnahme ihrer Mitte breit weiß beschuppt. Die weisse Unterseite zeigt auf den Seiten der einzelnen Bauchsegmente braune Schuppenflecken. Die Schienen und Tarsen sind dunkelbraun. Kommt hinter *A. versicolor* m. zu stellen. Insel Karpathos: Berg Lastros."

**Remarks.** The description published by Reitter in 1889 is detailed and extended, therefore it is not necessary to provide here an additional description of the lectotypus. Since in those days it was not usual to examine the genitalia this important difference has not been reported by the author, and furthermore he obviously had overlooked the different shape of the pronotum, which is laterally bulged like e.g. in *Anthrenus signatus* Erichson (in *Anthrenus verbasci* (Linn.) the lateral sides of the pronotum are more or less evenly rounded from the apical to the anterior edges). Here comes a concerning excerpt from his paper (Reitter, 1889).

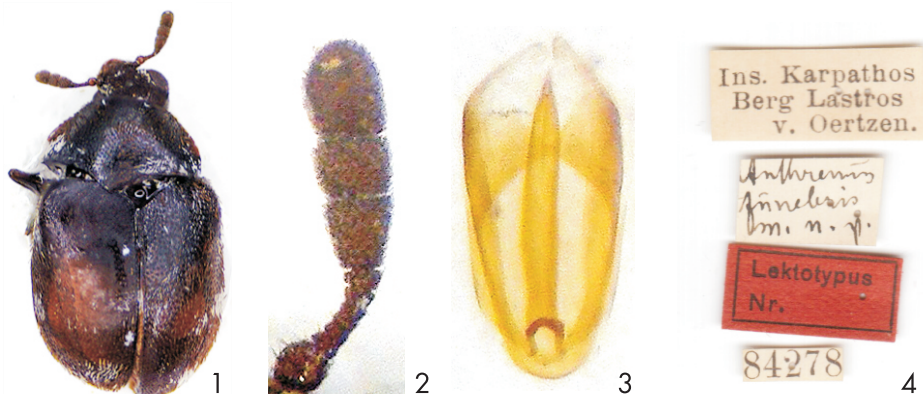
According to Reitter's description *Anthrenus funebris* looks quite similar to *Anthrenus (Florilinus) caucasicus* Rtt., 1881. However, that species belongs to another subgenus and therefore could be distinguished very easily by the number of antennal segments. Furthermore he wrote that his new species has to be placed behind *Anthrenus (Nathrenus) versicolor* Reitter, 1887, what obviously suggests a close relationship to that species. Besides, it is remarkable that any possible similarity to *Anthrenus verbasci* wasn't mentioned at all.

Usually Reitter did not label his type specimens in a dedicated way, therefore someone else had to label the holotype respectively a lectotype later on. If Reitter wrote in his description that only one single example was available to him then that specimen has been labelled as holotype. Otherwise, that means if the type series consisted of several specimens, a lectotype has been designated. In case of *Anthrenus funebris* the number of specimens was not mentioned by Reitter at all, so the concerning example was designated as lectotype. No additional specimens are deposited in the MZUB, and the same is with the other collections which are known to have

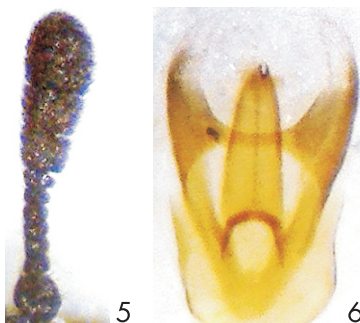
relevant material of Reitter, e.g. the museum Budapest and the museum Paris. Unfortunately it is not known who designated the lectotype, but Bernd Jaeger (ZMUB) suggested that most likely this was done by Kalík, who didn't published his designation.

Unfortunately the lectotypus is not in good condition, many scales were rubbed off and the body parts are not connected firmly with each other. Nevertheless the morphological appearance is absolutely sufficient to detect distinct differences to *Anthrenus verbasci* in general (Fig. 1), furthermore all characters meet the original description in each detail exactly (Reitter 1889). However, beneath this the most relevant and reliable characters to distinguish the two taxa from each other are given by the form of the antenna and genitalia (Figs. 2, 3, 5 and 6).

Concluding there is no doubt left that *Anthrenus* (*Nathrenus*) *funebria* Reitter, 1889 is a valid species indeed.



Figs. 1-4. *Anthrenus funebris* Rtt. (lectotypus, male): 1- habitus, dorsal aspect; 2- antenna; 3- genitalia, ventral aspect; 4- labels.



Figs. 5-6. *Anthrenus verbasci* (Linn.): 5- male antenna; 6- male genitalia, ventral aspect.

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## REFERENCES

- HÁVA J. 2004: Notes on Dermestidae (Coleoptera) with new synonyms and description of three new species. *Annales Historico-Naturales Musei Nationalis Hungarici* 96: 81-95.  
 HÁVA J. 2015: *World Catalogue of Insects. Volume 13. Dermestidae (Coleoptera)*. Leiden/Boston: Brill, xxvi + 419 pp.  
 REITTER E. 1889: Berichte über die von E. v. Oertzen im Jahre 1887 in Griechenland u. Klein-Asien gesammelten Coleopteren. IX. Neue Arten aus verschiedenen Familien. *Deutsche Entomologische Zeitschrift* 1889: 251-259.