

**Description of *Anthrenus (Florilinus) emili* sp. nov.
from China province Sichuan
(Coleoptera: Dermestidae: Megatominae)**

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Taxonomy, new species, Coleoptera, Dermestidae, *Anthrenus*, *Florilinus*, Sichuan, China

Abstract. *Anthrenus (Florilinus) emili* sp. nov. from China: Sichuan is described, illustrated and compared with related Chinese species. A list of the species so far known from China is provided.

INTRODUCTION

When identifying some dermestids collected by the Czech coleopterist Emil Kučera in Sichuan, China, an undescribed species of the genus *Anthrenus* Geoffroy, 1762 belonging to the subgenus *Florilinus* Mulsant & Rey, 1868 was found. The genus *Anthrenus* currently includes somewhat more than 250 valid species or subspecies worldwide, and 34 of them are members of the subgenus *Florilinus* (Háva 2015). Up to now, 25 different species of the genus *Anthrenus* are known from China (Háva 2001, 2004, 2005, 2015, Háva & Kadej 2006, Kadej & Háva 2015), and only four of those are members of the subgenus *Florilinus*. Therefore *Anthrenus emili* sp. nov. now becomes the fifth species of this subgenus belonging to the Chinese fauna.

MATERIAL AND METHODS

The specimens were stored for 5 days in a solution of 1% pepsin in hydrochloric acid to free them roughly from protein tissues and make 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 were removed 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 CombineZP.

Nomenclature and systematic in this paper follow Háva (2015).

The size of the beetles and their body parts can be useful in species recognition, so following measurements were made:

total length (TL) - linear distance from anterior margin of pronotum to apex of elytra.

pronotal length (PL) - maximal length measured from anterior margin to posterior margin.

pronotal width (PW) - maximal linear transverse distance.

elytral length (EL) - linear distance from shoulder to apex of elytron.

elytral width (EW) - maximal linear transverse distance.

The type specimens of the described species are provided with a red, printed label showing the following text: „HOLOTYPUS [respectively PARATYPUS], *Anthrenus (Florilinus) emili* n. sp., Herrmann & Háva det. 2018”.

Following abbreviations refer to the collections, in which the examined type materials are deposited:

AHEC Andreas Herrmann, private collection, Stade, Germany;

JHAC Jiří Háva, Private Entomological Laboratory & Collection, Prague-west, Czech Republic.

DESCRIPTION

Anthrenus (Florilinus) emili sp. nov.

(Figs. 1-6)

Type material. Holotype (♂) labelled: “CHINA-N. E., Sichuan, Nanjiang, 1.6.-5.6.2014, leg. E. Kucera”, (AHEC). Paratypes: (2 ♂♂, 1 ♀): labelled with the same data as holotype (1 ♂, 1 ♀ AHEC, 1 ♂ JHAC).

Description. Body measurements (in mm): TL 2.0, PL 0.3, PW 1.1, EL 1.7, EW 1.3. Body longish oval, cuticle of the dorsal surface entirely black to darkish brown, covered by brown and whitish scales (in the three males most of the scales are rubbed off on the elytral disc) (Fig. 1). Head black too, also covered by brown and whitish scales, roughly as broad as long, with sparse, but coarse and deep punctuation. Eyes large with some hardly visible microsetae. Palpi dark brown, ocellus present on front. Antenna with 8 antennomeres; the antennal club entirely darkish brown, the extremely large last segment longer than the whole shaft, covered with dense suberect setation. The antennomeres of the shaft are yellow-brown, naked, and additionally provided with a few strong erect setae (Fig. 2). Pronotum shiny, sparsely but distinct punctuated, covered also with brown and whitish scales, the whitish scales are especially concentrated at the hind edges and margin, furthermore they build an indistinct spot near the scutellum, strongly narrowed from the base to anterior edges, its lateral margins not visible from above. Elytra with distinct dense and coarse punctuation, covered with scales as those on pronotum, The whitish scales build three blurred, interrupted and indistinct transverse fasciae, one before the middle, one behind the middle and the third one just before the apex, furthermore they are somewhat concentrated also at the

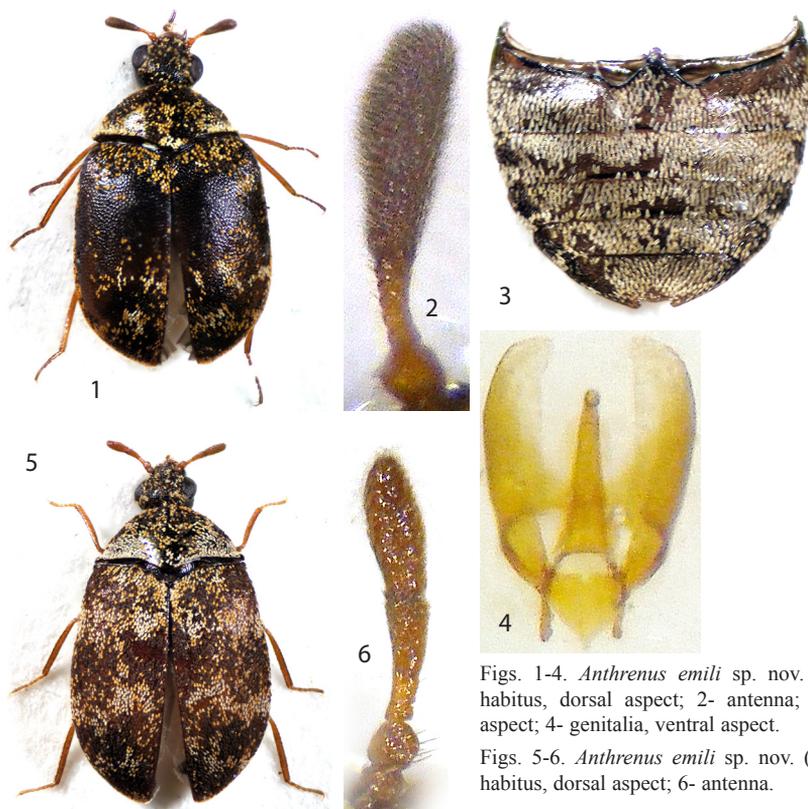
anterior elytral margin. Scutellum very small, triangular, shiny. Colour and punctation of the underside similar to that of the elytra, but covered entirely by greyish brown scales. The five visible abdominal sternites are also covered quite densely by greyish brown scales (Fig. 3). Legs and tarsi entirely light brown, tibiae each with a row of short and erected brown setae on their edges. All tibiae distinctly longer than the tarsi. Genitalia as shown in (Fig. 4).

Variability. Body TL: 2.0-2.4 mm.

Female. Habitus and antenna as in Figs. 5-6.

Differential diagnosis. Within the genus *Anthrenus* the subgenus *Florilinus* is distinctly characterised by the 8- segmented antenna. From other *Florilinus* species occurring in China, *Anthrenus cimrmani* Háva, 2005, *Anthrenus flavidus* Solsky, 1876, *Anthrenus museorum* (Linnaeus, 1761) and *Anthrenus qinlingensis* Háva, 2004, the new species differs by the form and strong erect setae of antennae as well as shape of the genitalia.

Name derivation. The species name honours the collector of the four type specimen, the coleopterist Emil Kučera (Czech Republic), and refers to his first name.



Figs. 1-4. *Anthrenus emili* sp. nov. (holotype, male): 1- habitus, dorsal aspect; 2- antenna; 3- abdomen, ventral aspect; 4- genitalia, ventral aspect.

Figs. 5-6. *Anthrenus emili* sp. nov. (paratype, female): 5- habitus, dorsal aspect; 6- antenna.

LIST OF CHINESE *ANTHRENUS* SPECIES

Genus *Anthrenus* Geoffroy, 1762

Subgenus *Anthrenodes* Chobaut, 1898

Anthrenus debilis Háva, 2005

Anthrenus maculifer Reitter, 1881

Subgenus *Anthrenus* Geoffroy, 1762

Anthrenus flavipes LeConte, 1854

Anthrenus latefasciatus Reitter, 1892

Anthrenus nipponensis Kalík & Ohbayashi, 1985

Anthrenus oceanicus Fauvel, 1903

Anthrenus pimpinellae (Fabricius, 1775)

Anthrenus scrophulariae scrophulariae (Linnaeus, 1758)

Subgenus *Florilinus* Mulsant & Rey, 1868

Anthrenus cimrmani Háva, 2005

Anthrenus emili sp. nov.

Anthrenus flavidus Solsky, 1876

Anthrenus museorum (Linnaeus, 1761)

Anthrenus qinlingensis Háva, 2004

Subgenus *Nathrenus* Casey, 1900

Anthrenus bomiensis Háva, 2004

Anthrenus knizeki Háva, 2004

Anthrenus kucerai Háva, 2005

Anthrenus longisetosus Kadej & Háva, 2015

Anthrenus pilosus Pic, 1923

Anthrenus propinquus Háva, 2005

Anthrenus schawalleri Háva & Kadej, 2006

Anthrenus sichuanicus Háva, 2004

Anthrenus tryznai Háva, 2001

Anthrenus turnai Háva, 2004

Anthrenus verbasci (Linnaeus, 1767)

Subgenus *Solskinus* Mroczkowski, 1962

Anthrenus becvari Háva, 2004

Anthrenus sinensis Arrow, 1915

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Received: 8.11.2018
Accepted: 20.12.2018
Printed: 31.3.2019

