

**Study of the genus *Anthrenus*, subgenus *Florilinus* from the Eastern
Palearctic Region.
Part 3. Six new species from China (Coleoptera: Dermestidae: Megatominae)**

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Taxonomy, new species, list of species, Coleoptera, Dermestidae, *Anthrenus*, *Florilinus*, China, Palearctic Region

Abstract. The following six new species *Anthrenus* (*Florilinus*): *ciping* sp. nov. (China: Jiangxi), *ryjaceki* sp. nov. (China: Anhui), *henanus* sp. nov. (China: Henan), *rakovici* sp. nov. (China: Henan), *murzini* sp. nov. (China: Yunnan), *bocakorum* sp. nov. (China: Yunnan) are described, illustrated and compared with similar species. The new species differ by the structure of the antennae and male genitalia. Lists of species for continental China and Taiwan are added.

INTRODUCTION

The subgenus *Florilinus* Mulsant et Rey, 1868 of the genus *Anthrenus* Geoffroy, 1762 currently contains 41 species Worldwide (Háva 2023a-e, 2025c). Only five species are known from continental China (Herrmann & Háva 2019) and three species from Taiwan (Kadej, Háva & Kitano 2016, Háva 2023a).

The subgenus is characterized by antennae consisting of eight antennomeres. Males differ from females by the shape of the antennal club. In males, the terminal antennomere is longer than the penultimate one; in females it is as long as the penultimate one. Adults can be found on plants, but also in households, where the larvae are harmful to different commodities of natural origin. They are feared pests in museum collections (Peacock 1993, Háva 2023a-e, 2025a-b).

MATERIAL AND METHODS

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

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

elytral width (EW) - maximum linear transverse distance.

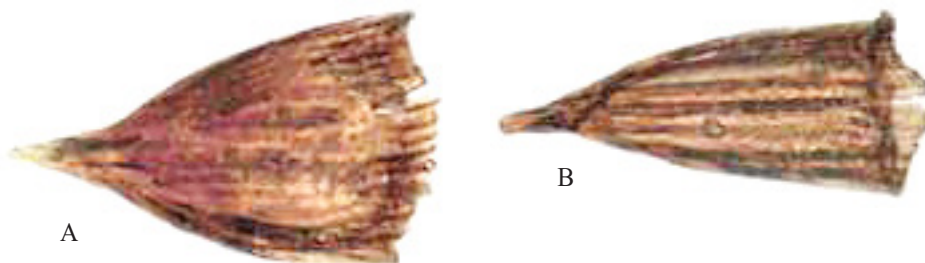
Photographs were made with a Canon EOS 550 D camera, and images were modified with Helicon Focus 7.7.5. software.

The type material and other mentioned material are deposited in following collections:
JHAC Jiří Háva, Private Entomological Laboratory & Collection, Únětice u Prahy, Prague-West, Czech Republic.

NMPC National Museum, Praha, Czech Republic (J. Hájek).

Specimens of the species described here are provided with red printed labels with texts as follows: „HOLOTYPE [or PARATYPE] *species name* sp. nov. Jiří Háva det. 2025”.

Type of elytral scales: A- broad; B- narrow.



DESCRIPTION

Anthrenus (Florilinus) ciping sp. nov.

(Figs. 1-4)

Type material. Holotype (♂): “China, Jiangxi W, Jinggang Shan, Ciping env., 2-14.vi.1994”, (JHAC). Paratype (1 ♀): same data as holotype, (JHAC).

Description. Male. Body measurements (mm): TL 2.2 EW 1.5; body brown, small, oval (Fig. 1). Dorsal surfaces covered by white and black scales, type A. Head with white scales. Palpomeres dark brown. Antennae consisting of 8 antennomeres, antennomeres I-V brown, antennomeres VI-VIII dark brown, terminal antennomere short and oval (Fig. 2). Antennal fossa short and broad, finely punctured. Frons with median ocellus. Eyes with entire median margin. Pronotum covered with white scales on lateral margins, other parts intermixed by white and black scales. Scutellum small, triangular. Elytra with white scales, black scales forming spots (Fig. 1). Epipleuron short, with white scales. Ventral surface covered with white scales, abdominal ventrites covered by white scales; ventrites I-V with small black spots laterally. Prosternum with white scales only. Metasternum with white scales only, without any large patch at lateral margins. Legs brown with white scales and white setae. Aedeagus as in (Fig. 4).

Female. Externally similar to male, but differs in structure of the antennal club (Fig. 3).

Differential diagnosis. The new species is similar to *Florilinus* species known from China, but differs from them by the characters in the following diagnosis.

Etymology. Toponymic, named according to Ciping city.



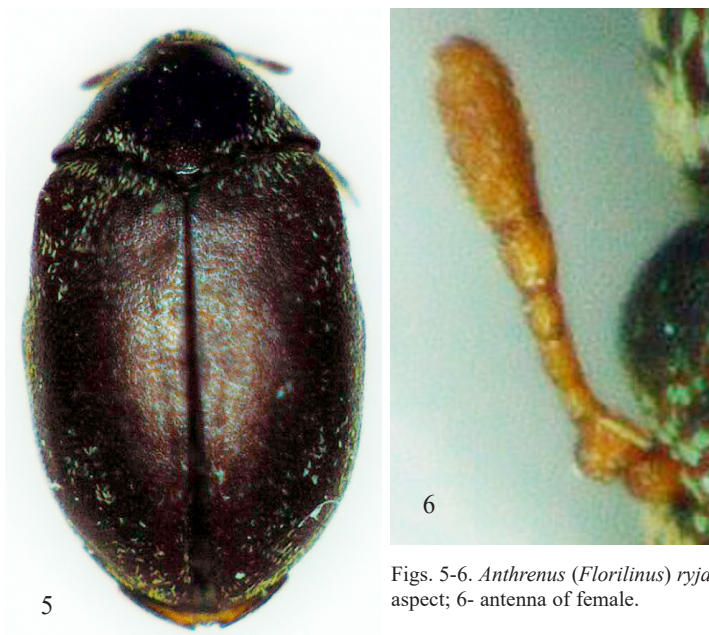
Figs. 1-4. *Anthrenus (Florilinus) ciping* sp. nov.: 1- habitus, dorsal aspect; 2- antenna of male; 3- antenna of female; 4- male genitalia.

***Anthrenus (Florilinus) ryjaceki* sp. nov.**
(Figs. 5-6)

Type material. Holotype (♀): “China, SW Anhui, Tianzhuang env., 30.75N 116.45E, 11-14.v.2004, Vít Ryjáček lgt.”, (JHAC).

Description. Female. Body measurements (mm): TL 2.7 EW 1.7; body brown, small, oval (Fig. 5). Dorsal surfaces covered by intermixed yellow and white scales, type B (abraded, only remnants of scales present). Head with intermixed yellow and white scales. Palpomeres brown. Antennae consisting of 8 antennomeres, antennomeres brown, terminal antennomere oval (Fig. 6). Antennal fossa long and broad, finely punctured. Frons with median ocellus. Eyes with entire median margin. Pronotum covered with intermixed white and yellow scales on lateral margins other parts abraded. Scutellum small, triangular. Elytra with intermixed brown and white scales, abraded. Epipleuron short, with white scales. Ventral surface covered with white scales, abdominal ventrites covered by white scales only. Ventrites I-V without spots in the middle, covered by white scales. Prosternum with white scales only. Metasternum with white scales only, without any large patch at lateral margins. Pygidium brown with brown setation. Legs brown with white scales and white setae.

Male. Unknown.



Figs. 5-6. *Anthrenus (Florilinus) ryjaceki* sp. nov.: 5- habitus, dorsal aspect; 6- antenna of female.

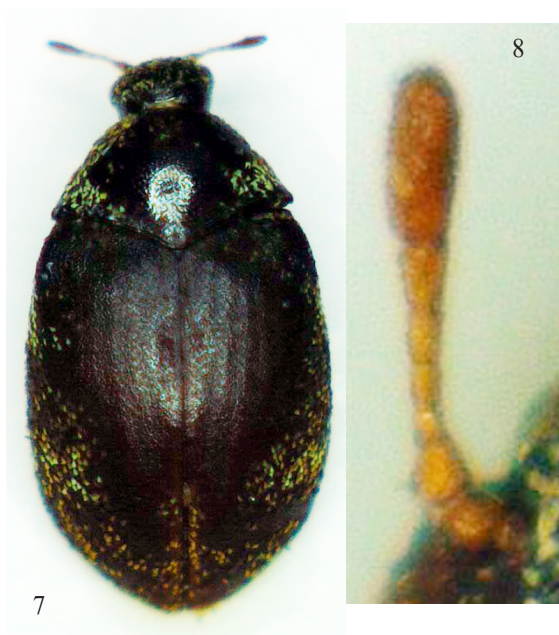
Differential diagnosis. The new species similar to *Florilinus* species known from China, but differs from them by the characters in the following diagnosis.

Etymology. Patronymic, dedicated to Vít Ryjáček (Czech Republic), collector of the new species.

***Anthrenus (Florilinus) henanus* sp. nov.**
(Figs. 7-8)

Type material. Holotype (♀): “China, N Henan, Wangwushan, 1175 m, 35°11′ N 112°16′E, 13.vi.2007, Jaroslav Turna lgt.”, (JHAC).

Description. Female. Body measurements (mm): TL 2.6 EW 1.5; body brown, small, oval (Fig. 7). Dorsal surfaces covered by intermixed brown, yellow and white scales, type A (abraded, only remnants of scales present). Head with intermixed yellow and white scales. Palpomeres brown. Antennae consisting of 8 antennomeres, antennomeres brown, terminal antennomere long (Fig. 8). Antennal fossa long and narrow, finely punctured. Frons with median ocellus. Eyes with entire median margin. Pronotum covered with intermixed white and yellow scales on lateral margins other parts abraded. Scutellum small, triangular. Elytra with intermixed brown and white scales, abraded. Epipleuron short, with white scales. Ventral surface covered with white scales, abdominal ventrites covered by white scales only. Ventrites I-V without spots in the middle, covered by white scales. Prosternum with white scales only. Metasternum with white scales only, without any large patch at lateral margins. Pygidium brown with brown setation. Legs brown with white scales and white setae.



Figs. 7-8. *Anthrenus (Florilinus) henanus* sp. nov.: 7- habitus, dorsal aspect; 8- antenna of female.

Male. Unknown.

Differential diagnosis. The new species is similar to *Florilinus* species known from China, but differs from them by the characters in the following diagnosis.

Etymology. Toponymic, named according to Henan Province.

***Anthrenus (Florilinus) rakovici* sp. nov.**

(Figs. 9-10)

Type material. Holotype (♀): "China, N Henan, Wangwushan, 1175 m, 35°11' N 112°16'E, 13.vi.2007, Jaroslav Turna lgt.", (JHAC).

Description. Female. Body measurements (mm): TL 2.9 EW 1.8; body brown, small, oval (Fig. 9). Dorsal surfaces covered by milky-white scales, type A. Head with milky-white scales. Palpomeres dark brown. Antennae consisting of 8 antennomeres, antennomeres I-V brown, antennomeres VI-VIII dark brown, terminal antennomere short and oval (Fig. 10). Antennal fossa short and broad, finely punctured. Frons with median ocellus. Eyes with entire median margin. Pronotum covered with milky-white scales on lateral margins other parts slightly abraded. Scutellum small, triangular. Elytra with milk scales, abraded. Epipleuron short, with milk scales. Ventral surface covered with white scales, abdominal ventrites covered by white scales only. Ventrites I-V without spots in the middle, covered by white scales. Prosternum with white scales only. Metasternum with white scales only, without any large patch at lateral margins. Legs brown with white scales and white setae.



Figs. 9-10. *Anthrenus (Florilinus) rakovici* sp. nov.: 9- habitus, dorsal aspect; 10- antenna of female.

Male. Unknown.

Differential diagnosis. The new species is similar to *Florilinus* species known from China, but differs from them by the characters in the following diagnosis.

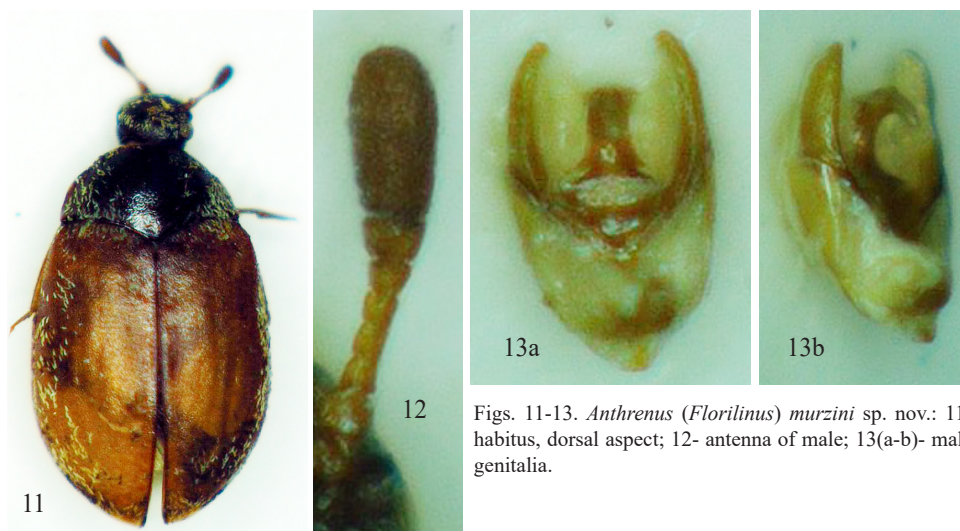
Etymology. Patronymy, dedicated in memoriam to my very good friend Prof. Miloslav Rakovič (*28.9.1935 - †26.12.2024).

***Anthrenus (Florilinus) murzini* sp. nov.**
(Figs. 11-13)

Type material. Holotype (♂): "China, N. Yunnan, Haba Mts., HUTIAOXIA, 2400 m, 21-26.6.1996, S. Murzin lgt.", (JHAC).

Description. Male. Body measurements (mm): TL 2.5 EW 1.6; body brown, small, oval (Fig. 11). Dorsal surfaces covered by white and black scales, type B. Head with white scales. Palpomeres dark brown. Antennae consisting of 8 antennomeres, antennomeres brown, terminal antennomere oval (Fig. 12). Antennal fossa long and broad, finely punctured. Frons with median ocellus. Eyes with entire median margin. Pronotum covered with white and intermixed individual black scales on lateral margins other parts abraded. Scutellum small, triangular. Elytra with white scales, intermixed individual black scales abraded. Epipleuron short, with white scales. Ventral surface covered with white scales, abdominal ventrites covered by white scales only. Ventrites I-V without spots in the middle, covered by white scales. Prosternum with white scales only. Metasternum with white scales only, without any large patch at lateral margins. Legs brown with white scales and white setae. Aedeagus as in (Fig. 13).

Female. Unknown.



Figs. 11-13. *Anthrenus (Florilinus) murzini* sp. nov.: 11- habitus, dorsal aspect; 12- antenna of male; 13(a-b)- male genitalia.

Differential diagnosis. The new species is similar to *Florilinus* species known from China, but differs from them by the characters in the following diagnosis.

Etymology. Patronymic, dedicated to Sergei Murzin (Russia), collector of the new species.

***Anthrenus (Florilinus) bocakorum* sp. nov.**
(Figs. 14-15)

Type material. Holotype (♂): "China, N. Yunnan, Lijiang, 2600 m, 30.6-2.7.1990, L. & M. Bocák lgt.", (JHAC).

Description. Male. Body measurements (mm): TL 1.6 EW 1.0; body brown, small, oval (Fig. 14). Dorsal surfaces covered by white and yellow scales, type B. Head with white scales. Palpomeres dark brown. Antennae with only I-II antennomeres, other segments missing. Antennal fossa short and very broad, finely punctured. Frons with median ocellus. Eyes with entire median margin. Pronotum covered with white and intermixed individual yellow scales on lateral margins other parts abraded. Scutellum small, triangular. Elytra with white scales, intermixed individual yellow scales, abraded. Epipleuron short, with white scales. Ventral surface covered with white scales, abdominal ventrites covered by white scales only. Ventrites I-V without spots in the middle, covered by white scales. Prosternum with white scales only. Metasternum with white scales only, without any large patch at lateral margins. Legs brown with white scales and white setae. Aedeagus as in (Fig. 15).

Female. Unknown.

Differential diagnosis. The new species is similar to *Florilinus* species known from China, but differs from them by the characters in the following diagnosis.



Figs. 14-15. *Anthrenus (Florilinus) bocakorum* sp. nov.: 14- habitus, dorsal aspect; 15- male genitalia.

Etymology. Patronymic, dedicated to Ladislav and Milada Bocák (Czech Republic), collectors of the new species.

Anthrenus (Florilinus) emili Herrmann & Háva, 2019

Material examined: “China, Sichuan Prov., Moxi env., Hailuoguo valley, Gonghe vill., 1715 m, 29°37'27''N 102°06'26''E, 17-21.vi.2014, at light, in front of hotel, ruderals and gardens close to mixed forest, J. Hájek, J. Růžička & M. Tkoč lgt.”, 1 ♀, J. Háva det., (NMPC).

Distribution. A species known from Sichuan, Yunnan, additional data from Sichuan.

DIAGNOSIS OF CHINESE *FLORILINUS* SPECIES

Scales type A

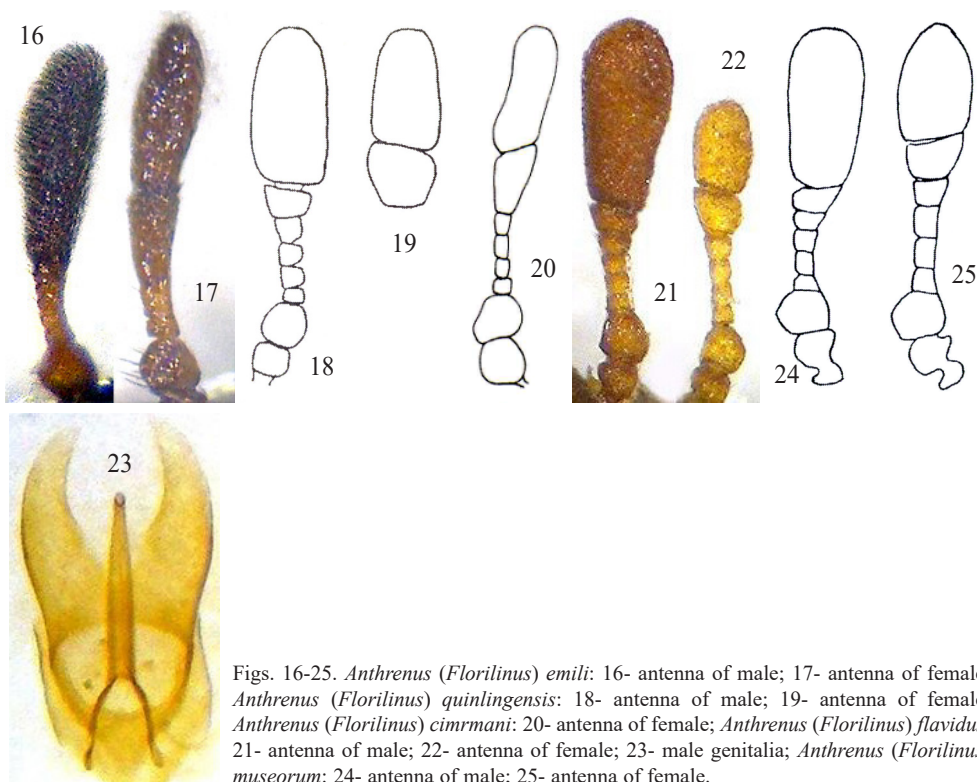
- dorsal scales milky-white
- dorsal scales white and yellow
- dorsal scales white and black
- dorsal scales black, yellow and white; antennae with short recumbent setae
- dorsal scales black, yellow and white; antennae with strong erect setae

A. rakovici
A. henanus
A. ciping
A. quinlingensis
A. emili

Scales type B

- dorsal scales yellow and white; antennal fossa narrow and long
- dorsal scales yellow and white; antennal fossa short and broad; aedeagus Fig. 15
- dorsal scales yellow and white; antennal fossa long and broad; aedeagus Fig. 23
- dorsal scales white and black; terminal antennomere shortly oval
- dorsal scales white and black; terminal antennomere longly oval
- dorsal scales white, black and yellow

A. ryjaceki
A. bocakorum
A. flavidus
A. murzini
A. cimrmani
A. museorum



Figs. 16-25. *Anthrenus (Florilinus) emili*: 16- antenna of male; 17- antenna of female; *Anthrenus (Florilinus) quinlingensis*: 18- antenna of male; 19- antenna of female; *Anthrenus (Florilinus) cimrmani*: 20- antenna of female; *Anthrenus (Florilinus) flavidus*: 21- antenna of male; 22- antenna of female; 23- male genitalia; *Anthrenus (Florilinus) museorum*: 24- antenna of male; 25- antenna of female.

LIST OF *FLORILINUS* SPECIES FROM CONTINENTAL CHINA

<i>A. bocakorum</i> sp. nov.	Yunnan
<i>A. cimrmani</i> Háva, 2005	Hebei
<i>A. ciping</i> sp. nov.	Jiangxi
<i>A. emili</i> Herrmann & Háva, 2019	Sichuan, Yunnan
<i>A. flavidus</i> Solsky, 1876	Gansu, Shaanxi, Sichuan, Xinjiang
<i>A. henanus</i> sp. nov.	Henan
<i>A. murzini</i> sp. nov.	Yunnan
<i>A. museorum</i> (Linnaeus, 1761)	China
<i>A. qinlingensis</i> Háva, 2004	Shaanxi
<i>A. rakovici</i> sp. nov.	Henan
<i>A. ryjaceki</i> sp. nov.	Anhui

LIST OF *FLORILINUS* SPECIES FROM TAIWAN

<i>A. declamator</i> Háva, 2023
<i>A. ohbayashii</i> Kadej, Háva & Kitano, 2016
<i>A. taiwanicus</i> Kadej, Háva & Kitano, 2016

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