

*Anthrenus nipponensis*, a New Dermestid Beetle (Coleoptera,  
Dermestidae) from Japan, Korea and China

Vladimír KALÍK\* and Nobuo OHBAYASHI\*\*

\* Na Okurouhliku 837, 530 03 Pardubice, CSSR

\*\* Kanagawa Horticultural Experiment Station, 3002,  
Shimomiyada, Hasse-machi, Miura City, 238-03 Japan

**Abstract** Two syntypes of *Anthrenus pimpinellae* var. *latefasciatus* REITTER were studied and one of them was designated as the lectotype. Besides, *Anthrenus* (s. str.) *nipponensis*, a new dermestid species from Japan, Korea and China, is described. Diagnostic characters of both the species are illustrated.

*Anthrenus pimpinellae* FABRICIUS has been considered a cosmopolitan polytypic species comprising a number of infraspecific taxa. MROCZKOWSKI (1968) mentioned altogether 2 subspecies and 11 varieties of that species, including *A. pimpinellae latefasciatus* REITTER, originally described as a variety of *A. pimpinellae*. The same author (1960) pointed out that the taxonomic status of those infraspecific taxa should be re-evaluated. Of special importance is *A. pimpinellae latefasciatus* REITTER from Central Asia and Japan, which has currently been regarded as a subspecies of *pimpinellae*, but whose specific independency was suggested by MROCZKOWSKI (1960, 1962) and SOKOLOV (1972).

Through the kindness of Dr. Z. KASZAB, KALÍK was able to examine 2 syntypes of *A. pimpinellae* var. *latefasciatus* REITTER, one of which, a male, has been designated as the lectotype by KALÍK. After a comparative study of particular diagnostic characters, especially male genitalia, it was proved that the above authors' presumption was correct in regarding *A. latefasciatus* REITTER as a distinct species, quite different from the European *A. pimpinellae* FABRICIUS. Examination of an additional material from Central Asia suggests the existence of further two closely related and sympatric species in that territory, taxonomic evaluation of which will be the topic of another paper by KALÍK.

Examination of a series of Japanese specimens in KALÍK's own collection as well as a very large number in OHBAYASHI's collection also confirmed that the Japanese populations differ from *A. latefasciatus* REITTER but belong to a new species to be described below as *Anthrenus* (s. str.) *nipponensis*.

*Anthrenus* (s. str.) *latefasciatus* REITTER, 1892, stat. nov.

(Figs. 1, 2, 3)

*Anthrenus pimpinellae* var. *latefasciatus* REITTER, 1892: 134.

*Anthrenus pimpinellae latefasciatus*: MROCZKOWSKI, 1961: 192.

Lectotype (male): Margelan, subsequently labelled as "Paratype". The label "Syntype No. 1" and "Lectotype, III, 85" was added by KALÍK (Hungarian Museum of Natural History, Budapest).

Oval, black, elytra reddish brown. Pronotum strongly narrowed anteriorly, anterior angles not visible from above. Elytra almost parallel-sided, wider than the base of pronotum. White scales forming small spots at the sides of pronotum as well as a broad transverse band on elytra reaching the base of elytra at scutellum and projecting to three-fourths the length of elytra laterally. The white elytral band encloses a small black spot situated at its mid-length near suture as well as another similar spot situated laterally at the apical third of each elytron. Three small white spots also occur at the apex of each elytron. Reddish brown scales form some vaguely limited spots on pronotum, some of them also dispersed at the base of elytra. They also border posterior part of suture and form individual spots and bands in the posterior part of elytra between the white transverse band and apical spot. Rest of the upper surface covered with black scales.

Ventral surface covered with white scales, particular abdominal sternites bearing larger or smaller spots of black scales laterally, also hypopygidium in the middle (Fig. 1). Lateral spots of the first sternite broad, reaching lateral margins of the sternite.

Scales oblong, nearly twice as long as wide, dense, completely concealing the surface of body.

Antenna (left one missing in the lectotype) 11-segmented, yellowish red, antennal club 3-segmented, compact, reddish brown, as long as 6 preceding antennal segments together (Fig. 3).

Male genitalia: parameres narrow, moderately curved, of almost equal width throughout their length, only slightly wider at the base and moderately narrowed at the apex. Aedeagus narrow, widest at the base, gradually narrowed towards the apex and moderately dorsoventrally curved (Fig. 2).

Length 2.4 mm, width 1.6 mm.

Differential diagnosis: REITTER (1892) stated in his original description that the black spot on the first abdominal sternite was always present and compared *A. latefasciatus* with *A. goliath* MULSANT, in which the spot is either absent or very small and distinctly separated from the lateral margin of sternite. He probably examined for comparison various specimens of another larger species resembling *latefasciatus* in the form of transverse elytral band but having a different scale-pattern on the surface (the first abdominal sternite only with small black spot or without them), and failed in noticing the actual difference.

*Anthrenus latefasciatus* REITTER differs from *A. pimpinellae* by the small size, the shape of white transverse elytral band and a dense arrangement of scales, which are longer and narrower in *A. latefasciatus* and shorter in *A. pimpinellae*. Yellowish red to reddish brown scales exist only in smaller restricted spots, and the antennal club is compact, almost quadrangular or ovate in *A. pimpinellae*. In the last species all

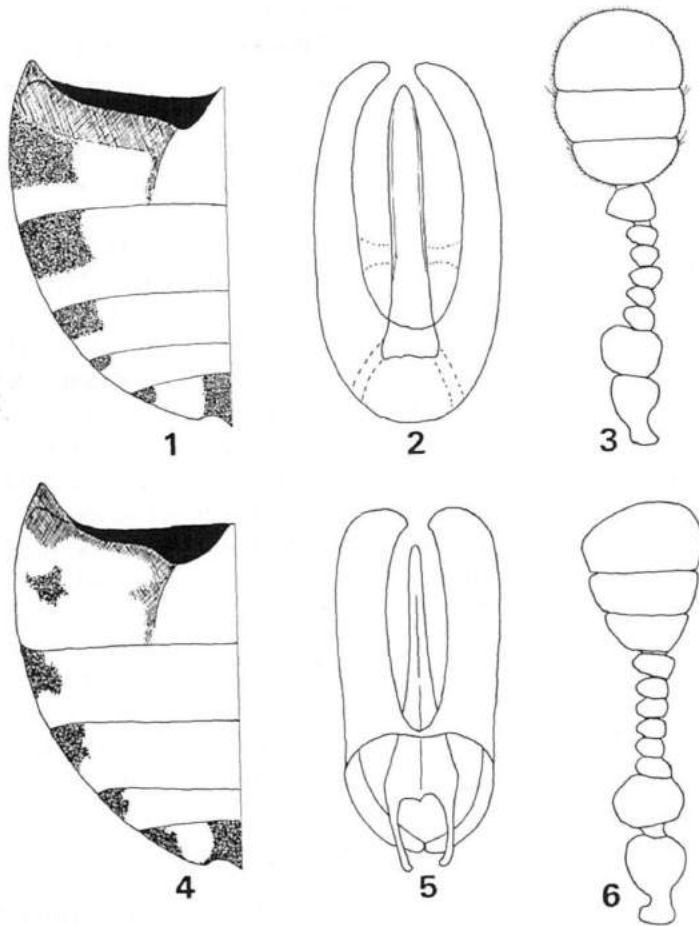
abdominal sternites bear broad black spots, and the scales are more sparsely arranged, leaving cuticle visible in narrow spaces between them. Parameres are wider, flat, narrowed and curved inwards at apex; aedeagus only very slightly curved dorsoventrally.

*Anthrenus* (s. str.) *nipponensis* KALÍK et N. OHBAYASHI, sp. nov.

(Figs. 4, 5, 6)

Color pattern and arrangement of scales very similar to those in *Anthrenus latefasciatus*, from which the new species differs in the following characters:

Length 2.3–4.1 mm, width 1.5–2.8 mm, body more robust in form, anterior angles of pronotum including borders of antennal cavities visible from above, sides of pronotum



Figs. 1-6. 1-3. *Anthrenus latefasciatus* REITTER, lectotype. — 1, pattern of abdomen; 2, male genitalia; 3, antenna. — 4-6. *Anthrenus nipponensis* KALIK et N. OHBAYASHI, sp. nov. — 4, pattern of abdomen; 5, male genitalia; 6, antenna.

almost straight and converging anteriorly, only in their anterior portion distinctly arcuate, moderately flattened. Elytra considerably wider than the base of pronotum, 1.15 times (1.11 times in *A. latefasciatus*) longer than their combined width. Antennal club 3-segmented, compact, terminal segment irregularly rounded at the apex and obtusely angulate at one side.

White irregular spots on pronotum consisting of a limited number of scales, broad transverse band on elytra formed by many densely arranged scales in longitudinal direction. Three to four additional small spots occur in the apical portion of each elytron. Brown scales occurring in the most part of pronotum as well as at the base of elytra and in their apical portion. These brown scales apart from bordering suture, forming three longitudinal stripes and a large irregular spot between the white transverse band and the white apical spot on each elytron.

The first abdominal sternite with a small black-scales spot separated from lateral margin of the sternite. Second to fifth sternites with large black spots reaching lateral margins of sternite (Fig. 4).

Male genitalia: parameres broader, flat, moderately curved inwards (as in *A. pimpinellae*), aedeagus gradually narrowed from the base towards the apical point, very slightly curved in dorsoventral direction (Fig. 5).

Holotype: ♂, Miura, Kanagawa, Japan, 3. VI, 1973, N. OHBAYASHI leg. (in the collection of Ehime University, Matsuyama, Japan). Paratypes: "Japan": 3 exs., Kurokawa, N. Echigo, 21. V, 1965, K. BABA leg.; 1 ex., Niitsu, N Echigo, 8. V, 1962, R. SATÔ leg.; 3 exs., Senami, N Echigo, 17. V, 1973, K. BABA leg.; 1 ex., Mt. Myôkô, S Echigo, 18. V, 1976, K. BABA leg.; 1 ex., Ookura, Sado, 31. V, 1963, K. BABA leg.; 2 exs., Mt. Takao, Tokyo, 11. V, 1954, S. NOMURA leg.; 1 ex., Tokyo, 31. V, 1946, S. HISAMATSU leg.; 46 exs., Miura, Kanagawa, 15. V-8. VI, 1973, N. OHBAYASHI leg.; 2 exs., Wadamachi, Kanagawa, 2. V, 1972, N. NAKAMOTO leg.; 2 exs., Gumyôji, Kanagawa, 25. V, 1972, N. NAKAMOTO leg.; 1 ex., Hon-Atsugi, Kanagawa, 31. V, 1972, N. NAKAMOTO leg.; 1 ex., Sagamihara, Kanagawa, 31. V, 1972, N. NAKAMOTO leg.; 1 ex., Suhara, Gifu, 30. IV, 1967, N. OHBAYASHI leg.; 1 ex., Nagoya, Aichi, emerged on 20. II, 1971, Y. ARITA leg.; 2 exs., Akui-sawa, Tokushima, 17. V, 1965, M. SAKAI leg.; 1 ex., Tarumi, Matsuyama, 11. V, 1953, S. UEDA leg.; 2 exs., Matsuyama, Ehime, 2. V, 1974, Y. NOTSU leg.; 1 ex., Tashiro, Chikugo, 26. VI, 1951, Y. MIYAKE leg.; 53 exs., Hakata, Fukuoka, V, 1952, K. YASUMATSU leg. "Korea": 2 exs., Bukkokuji, 2. VI, 1940, K. SATÔ leg. "China": 3 exs., Dairen, 22. V, 1935, M. HANANO leg. (Paratypes are preserved in the collections of V. KALÍK, N. OHBAYASHI and Ehime University.)

#### Acknowledgement

It is the pleasure to express our thanks to Dr. Z. KASZAB (Hungarian Museum of Natural History, Budapest), Dr. J. JELÍNEK (National Museum, Praha) and many Japanese people for permanent help and loan or offer of materials.

## 摘 要

わが国で、スズメの巢や花上からよく採集されている、シロオビマルカツオブシムシの学名には、従来ヨーロッパに産する *Anthrenus pimpinellae* FABRICIUS が用いられてきた。また、MROCKOWSKI (1960, 1968) は、中近東から東アジアに分布するものについて、*A. pimpinellae latefasciatus* REITTER の亜種名を用いている。筆者らは、この REITTER が記載に用いた総基準標本を調査して後基準標本を指定するとともに、これが *A. pimpinellae* とは異なる独立した種であることを認めて再記載した。また、日本、朝鮮および中国に産するものは、*A. pimpinellae* および *A. latefasciatus* のいずれとも異なる未記載の新種であるとし、*A. nipponensis* KALIK et N. OHBAYASHI とし記載した。

## Literature

- MROCKOWSKI, M., 1960. Kozheedy (Coleoptera, Dermestidae) Turkenii. *Trudy Zool. Inst. Akad. Nauk, Moskwa-Leningrad*, **27**: 208-219.
- 1961. Vierter Beitrag zur Kenntnis der Dermestiden von Afganistan, nebst Beschreibung von zwei neuen Arten der Gattung *Ctesias* STEPH. (Coleoptera) *Ent. Tidskr., Stockholm*, **82**: 191-196.
- 1962. Dermestidae (Coleoptera) from the Kazakh SSR. *Ann. Zool. Warszawa*, **20**: 229-259.
- 1968. Distribution of the Dermestidae (Coleoptera) of the World with a catalogue of all known species. *Ann. Zool., Warszawa*, **26**: 15-191.
- REITTER, E., 1892. Sechster Beitrag zur Coleopteren-Fauna des Russischen Reiches. *Wien. ent. Ztg., Wien*, **11**: 133-136.
- SOKOLOV, E. A., 1972. Materialy k faune i ekologii kozheedov (Coleoptera, Dermestidae), Kazachstana. *Trudy kaz. n.-iss. Inst. Zash. Rast., Alma-Ata*, **11**: 115-137.