

## Checklist of the Family Erotylidae (Coleoptera) of DPR Korea

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**Abstract** A total of twelve species of Erotylidae occurring in DPR Korea (= North Korea) are listed, including eight species new for the country. Two of these, *Leucohimatium arundinaceum* (FORSKÅL, 1775) and *Microsternus perforatus* (LEWIS, 1883) are recorded for the first time from the Korean Peninsula.

### Introduction

Our knowledge of the Erotylidae fauna (Coleoptera) of DPR Korea (= North Korea) is still limited due to the lack of sufficient surveys. To date, 35 species have been recorded from the Korean Peninsula (WĘGRZYNOWICZ, 2007; SONG & AHN, 2010; JUNG & PARK, 2014). However, most of them are known only from Republic of Korea (= South Korea) because faunistic studies of this family in the peninsula have been conducted mainly in Republic of Korea (e.g., M-T. CHÛJÔ & LEE, 1992; M-T. CHÛJÔ *et al.*, 1993; JUNG & PARK, 2014), whereas much fewer reports are available so far on the Erotylidae fauna of DPR Korea (e.g., CHO, 1969).

In the course of ongoing surveys of entomofauna of DPR Korea by the junior author, he has collected a large number of insects mainly in Pyongyang City and on Mt. Myohyang-san located about 200 km north of the city. Based on his collections, some coleopteran families of DPR Korea have already been studied and reported until now (NITTA *et al.*, 2009: Dytiscidae, Hydrophilidae, and Scirtidae; KITANO & HAN, 2009: Coccinellidae; KADEJ & KITANO, 2010: Dermestidae; KITANO & HAN, 2011: Dermestidae; KITANO & HAN, 2014: Byrrhidae, Dermestidae, and Coccinellidae). In an attempt to clarify the coleopteran fauna of DPR Korea, here we provide a checklist of all species of the family Erotylidae, updating our present knowledge on the family based on data of the recently collected specimens.

### Materials and Methods

This study was based on specimens collected by the junior author, Chang-do HAN, in DPR Korea in summers of 2008, 2009, 2010, and 2016. All the examined specimens are deposited in Wildlife Research Center in Korea University, Tokyo. The distributional range of each species follow WĘGRZYNOWICZ (2007) and SASAJI (1989), unless otherwise stated.



1.0 mm

**A**



1.0 mm

**B**



1.0 mm

**C**



1.0 mm

**D**



1.0 mm

**E**



1.0 mm

**F**



1.0 mm

**G**



1.0 mm

**H**



1.0 mm

**I**

## Checklist of the Family Erotylidae of DPR Korea

### Subfamily **Cryptophilinae**

#### Tribe **Cryptophilini**

#### 1. *Cryptophilus integer* (HEER, 1841)

*Distribution.* DPR Korea; Japan; Taiwan; China: Fujian, Henan, Hubei, Nei Mongol; Russia: Russian Far East; India; Kyrgyzstan; Tajikistan; Uzbekistan; Afghanistan; Turkmenistan; Iran; Syria; Lebanon; Israel; Cyprus. This species is distributed not only in Asia but also in Europe, Africa, North America (HINTON, 1945), Australia (HAGSTRUM & SUBRAMANYAM, 2009), New Zealand (LESCHEN, 2003), and Hawaii Isls. (BLACKBURN & SHARP, 1885).

*Note.* No specimens from DPR Korea were examined for this study.

### Subfamily **Languriinae**

#### Tribe **Languriini**

#### 2. *Tetraphala collaris* (CROTCH, 1876)

(Fig. 1A)

*Specimen examined.* 1 ex., from entrance of Manpokton to Habiro (roadside), Mt. Myohyang-san, 26.VII.2008.

*Distribution.* DPR Korea (new record); Republic of Korea: peninsular part; Japan: Yaeyama Isls. (Ishigaki-jima Is.); Taiwan; China: “Mandjuria”, Zhejiang, Jiangxi, Fujian, Guizhou, Sichuan, Yunnan, Xizang, Hainan; Vietnam; Laos; India; Bhutan (VILLIERS, 1945).

### Subfamily **Xenoscelinae**

#### Tribe **Xenoscelini**

#### 3. *Leucohimatium arundinaceum* (FORSKÅL, 1775)

(Fig. 1B)

*Specimen examined.* 1 ex., around Hyangsan Hotel, near Chongchon River, Hyangsan-gun, 26.VII.2010.

*Distribution.* DPR Korea (new record); “Zakaspia”; Turkey; Syria; Cyprus. This species is distributed not only in Asia but also in Europe, Africa, and Australia.

*Note.* This is the first record from the Korean Peninsula.

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Fig. 1. Habitus of erotylid beetles collected from DPR Korea. — A, *Tetraphala collaris*; B, *Leucohimatium arundinaceum*; C, *Dacne (Dacne) picta*; D, *Dacne (Xenodacne) zonaria zonaria*; E, *Microsternus perforates*; F, *Aulacochilus luniferus decorates*; G, *Episcapha (Episcapha) flavofasciata flavofasciata*; H, *Episcapha (Episcapha) fortunii fortunii*; I, *Episcapha (Psiloscapa) morawitzi morawitzi*.

Subfamily **Erotylinae**Tribe **Dacnini**4. *Dacne (Dacne) picta* CROTCH, 1873

(Fig. 1C)

*Specimens examined.* 4 exs., around Hyangsan Hotel, near Chongchon River, Hyangsan-gun, 3.VII.2008; 1 ex., Central Plant Park, near Mt. Daesong-san, Pyongyang City, 14.VII.2008; 14 exs., near Suna River, around Mt. Ryongak-san, Pyongyang City, 3.VII.2009; 2 exs., around Habiro, Mt. Myohyang-san, 200–550 m alt., 29.VI.2009.

*Distribution.* DPR Korea (new record); Republic of Korea: peninsular part; Japan: Hokkaido, Honshu, Shikoku, Kyushu, Izu Isls. (Niijima Is.) (M. CHŪJŌ, 1969), Tsushima Is., Tokara Isls. (Naka-no-shima Is.) (M. CHŪJŌ, 1969); China: Hubei, Guandong, Zhejiang; Russia: Russian Far East. This species is distributed not only in Asia but also in Europe.

5. *Dacne (Xenodacne) zonaria zonaria* LEWIS, 1887

(Fig. 1D)

*Specimen examined.* 1 ex., from Sangwonam to Nunginam, Mt. Myohyang-san, 900–1200 m alt., 30.VII.2016.

*Distribution.* DPR Korea (new record); Republic of Korea: peninsular part; Japan: Hokkaido, Honshu, Shikoku, Kyushu, Tsushima Is.; Russia: Russian Far East.

6. *Microsternus perforatus* (LEWIS, 1883)

(Fig. 1E)

*Specimens examined.* 2 exs., around Backyon Waterfall, near Gaesong City, 22.VII.2016.

*Distribution.* DPR Korea (new record); Japan: Honshu, Shikoku, Kyushu, Tsushima Is., Tanegashima Is., Yakushima Is.; Taiwan; China: Zhejiang, Hainai; Russia: Russian Far East.

*Note.* This is the first record from the Korean Peninsula.

7. *Microsternus tokioensis* (NAKANE, 1961)

*Distribution.* DPR Korea; Republic of Korea: peninsular part, Chejudo Is.; Japan: Honshu, Kyushu (KIDO, 2011), Tsushima Is. (AKITA, 1989), Kuchinoerabu-jima Is. (TANAKA, 2013).

*Note.* No specimens from DPR Korea were examined for this study.

Tribe **Encaustini**Subtribe **Encaustina**8. *Aulacochilus luniferus decoratus* REITTER, 1879

(Fig. 1F)

*Specimens examined.* 3 exs., from entrance of Manpokton to Habiro (roadside), Mt. Myo-

hyang-san, 26.VII.2008; 6 exs., near Suna River, around Mt. Ryongak-san, Pyongyang City, 3.VII.2009; 2 exs., Mt. Jongbang-san, Sariwon City, 30.VII.2010.

*Distribution.* DPR Korea (new record); Republic of Korea: peninsular part, Chejudo Is.; Japan: northern part of Kyushu (M. CHÛJÔ, 1969), Tsushima Is.; China: Fujian; Russia: Russian Far East.

**9. *Episcapha (Episcapha) flavofasciata flavofasciata* (REITTER, 1879)**

(Fig. 1G)

*Specimens examined.* 1 ex., around Hyangsan Hotel, near Chongchon River, Hyangsan-gun, 6.VII.2008; 1 ex., ditto, 29.VI.2009.

*Distribution.* DPR Korea (new record); Republic of Korea: peninsular part, Chejudo Is.; China: Northern Territory, Henan, Fujian, Guizhou, Sichuan; Japan: Hokkaido; Russia: Russian Far East.

**10. *Episcapha (Episcapha) fortunii fortunii* CROTCH, 1873**

(Fig. 1H)

*Specimens examined.* 2 exs., Central Plant Park, near Mt. Daesong-san, Pyongyang City, 14.VII.2008; 2 exs., ditto, 27.VI.2009; 2 exs., near Pyongyang Hotel, around Dedong River, Pyongyang City, 17.VII.2008; 3 exs., near Suna River, around Mt. Ryongak-san, Pyongyang City, 3.VII.2009.

*Distribution.* DPR Korea (new record); “Korea”; Japan: Honshu, Mikura-jima Is. (M. CHÛJÔ, 1969), Shikoku, Kyushu, Tsushima Is. (IDE, 1999), Iki-no-shima Is. (IMASAKA, 2012), Gotô Isls. (Nakadôri-jima Is. (IMASAKA *et al.*, 1994)); China; “Himalaya”.

*Note.* This species has been recorded from “Korea” without any more locality data by CHÛJÔ, M. & M-T. CHÛJÔ (1988). Therefore, this record is thought of as the first authentic record from DPR Korea.

**11. *Episcapha (Psiloscapa) morawitzi morawitzi* (SOLSKY, 1871)**

(Fig. 1I)

*Specimens examined.* 1 ex., around Chongchon Hotel, near Chongchon River, Hyangsan-gun, 26.VII.2008; 1 ex., at light of entrance, Hyangsan Hotel, Hyangsan-gun, 27.VII.2008.

*Distribution.* DPR Korea; Republic of Korea: peninsular part, Chejudo Is.; Japan: Hokkaido, Honshu, Oki-no-shima Is., Shikoku, Kyushu, Tsushima Is., Yakushima Is.; China: Northeast Territory, Northern Territory, Hubei; Russia: Russian Far East.

**Tribe Tritomini**

**12. *Pselaphandra cinnabarina* (REITTER, 1879)**

*Distribution.* DPR Korea; Republic of Korea; Japan.

*Note.* No specimens from DPR Korea were examined for this study.

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## 要 約

松尾 進・韓 昌道：朝鮮民主主義人民共和国のオオキノコムシ科(鞘翅目)の目録。——朝鮮民主主義人民共和国(北朝鮮)から8新記録種を含むオオキノコムシ科12種を記録した。なお、その内 *Leucohimatium arundinaceum* (FORSKÅL, 1775) とベニモンムネビロオオキノコ *Microsternus perforatus* (LEWIS, 1883) の2種は朝鮮半島初記録種である。

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