

Some Ground Beetles (Coleoptera, Carabidae) from Korea (14)

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ABSTRACT

Herein, 24 species of the carabid beetles are reported from South Korea. Of these, 5 species, *Aephnidius adelioides* (MacLeay, 1825), *Badister (Baudia) nakayamai* Morita, 1992, *Bembidion (Trichoplataphus) eurygonum* (Bates, 1883), *Cillenus (Novicillenus) aestuarii* (Uéno & Habu, 1955), *Cillenus (Desarmatocillenus) yokohamae* (Bates, 1883), are listed for the first time from the Korean Peninsula. A new junior subjective synonym is established: *Oodes integer* Semenov, 1889 = *Oodes helopioides tokyoensis* Habu, 1956. Syn. Nov.

Key words : Coleoptera, Carabidae, fauna, synonym, new record, South Korea

In this paper 24 species of the carabid beetles from Korea are reported with some additional collection data. Of these, 5 species are listed for the first time in southern part of the Korean Peninsula including Jeju-do.

Materials collected by the author were examined and the specimens are deposited in Department of Plant Medicine, Suncheon National University (SCNAE).

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The abbreviations used herein for provincial names of Korea and others are as follows: CB-Chungcheongbuk-do, CN-Chungchongnam-do, GB-Gyeongsangbuk-do, GG-Gyeonggi-do, GN-Gyeongsangnam-do, GW-Gangweon-do, JB-Jeonllabuk-do, JJ-Jeju-do, JN-Jeonllanam-do. CPC (2003)-Catalogue of Palaearctic Coleoptera, Vol. 1. Archostemata-Myxophaga-Adephaga by Löbl & Smetana (eds.).

LIST OF SPECIES

(01) *Aephnidius adelioides* (MacLeay, 1825)

가시밀빠진먼지벌레 (신칭)

Anaulacus (Aephnidius) adelioides MacLeay, 1825, Ann.

Jav., p. 23, pl. 1, fig. 7 (Java).

Masoreus sericeus C. Zimmermann, 1832, Faunus 1, p. 121 (India). Synonymized by Schaum, 1963: 78 and confirmed by Andrewes, 1927: 17.

Masoreus australis Sloane, 1904, Proc. Linn. Soc. N. S. Wales, 29: 535-536 (Australia). Synonymized by Andrewes, 1919: 159.

Masoreus adelioides (MacLeay): Schaum, 1863, Berl. Entomol. Zeitschr., 7: 78; Bates, 1873, Trans. Ent. Soc. London, p. 307 (Japan).

Aephnidius adelioides (MacLeay): Andrewes, 1919, Trans. Ent. Soc. London, p. 159 (syn. suggested); Andrewes, 1923, Trans. Ent. Soc. London, p. 51 (Burma); Andrewes, 1924, Ann. Mag. nat. Hist. (9), 13: 470 (Macao: S China); Andrewes, 1927, Ann. Mag. Nat. Hist. (9), 19: 99 (syn. confirmed); Andrewes, 1930, Trans. Ent. Soc. London, 78: 9 (Sikkim); Csiki, 1932, Coleopt. Cat., 124: 1288; Jedlička, 1963, Ent. Abh., 28: 284, 285-286 (*adeloides* [sic]); Nakane, 1963, Icon. Ins. Jap., Colore natur. edit., 2: 49, pl. 25, fig. 10; Habu, 1967, Truncatipennes, Fauna Japonica, p. 55-57 (redesc.); Darlington, 1968, Bull. Mus. Comp. Zool., 137: 78 (New Guinea); Habu, 1975, Ent. Rev. Japan, 28: 71; Habu, 1982, Ent. Rev. Japan, 36(2): 108-109.

Materials examined. 1 ♀, 17-VII-2005, Sanghyo-dong, Seogwipo-si, JJ (Light Trap) (SCNAE).

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Distribution. Korea (Jejudo), Japan (Honshu, Kyushu, Shikoku, Ryukyus), southern China, Taiwan, Oriental Region, New Guinea, Australia.

Notes. New to Korea. Above specimen agrees well with redescription of Habu (1967). I examined also two specimens collected from Fukuoka, Japan, and they are conspecific with Korean specimen. For more detail, see Habu (1967). Attracted to light.

Aephinidius MacLeay (1825, *Annulosa Javanica*, p. 23) belongs to tribe Masoreini. Ball & Shpeley (2002: 280) treated this genus as a subgenus of *Anaulacus* MacLeay (1825, *Annulosa Javanica*, p. 22). However, some authorities considered as full genus (Jedlička, 1963; Habu, 1967, 1982; CPC, 2003 etc.). Only one genus of Masoreini is known from the Korean Peninsula.

The tribes Masoreini and Cyclosomini (=Tetragonoderini) seem to be closely related, and Jeannel (1949) and Ball (1983) combined the two as a single group. Later, Ball and Bousquet (2001) separated each other. However, Bousquet (2003 in CPC) treated them as the subtribe Masoreina of Cyclosomini. The suprageneric ranks of some *Masoreus* complex are not clear. Recently the historical review and the problems of Masoreitae (with a long hind tibial spur) is detailed by Ball (1979 & 1983).

참고. 우리나라는 처음으로 기록한다. 몸길이는 6-7 mm, 몸은 흑색으로 오글쭙글한 무늬는 광선에 따라 약한 광택이 나며 다리는 짙은 적갈색이다. 종아리마디에 기다란 가시가 있으며, 발톱에는 작은 이빨이 있다. 평지나 야산의 풀밭에서 볼 수 있으며, 불빛에 잘 날아온다. 뒷다리 종아리마디에 긴 가시 (tibial spur)가 있어서 '가시뿔뿔진먼지벌레'로 부른다.

(02) *Amara (Amathitis) microdera* (Chaudoir, 1844)

작은목둥글먼지벌레

Bradylyus [sic] *microderus* Chaudoir, 1844, Bull. Soc. Nat. Mosc., 17(3): 447-8 (Altai).

Bradylyus [sic] *cordicollis* Chaudoir, 1844, Bull. Soc. Nat. Mosc., 17(3): 447 (Altai). Preoccupied by Ménétrés, 1832. Treated as a junior synonym of *A. cordata* by Csiki, 1929: 472.

Bradylyus [sic] *longipennis* Chaudoir, 1844, Bull. Soc. Nat. Mosc., 17(3): 448 (Altai). Synonymized by Hieke, 1975: 314.

Bradytus angusticollis Motschulsky, 1844, Mém. Acad. Sci. St. Pétersb., 5: 180 (Altai). Synonymized by Putzeys, 1866: 228 and confirmed by Hieke, 1975: 315.

Amathitis cordata Putzeys, 1866, Mém. Soc. R. Sci. Liège, (2), 1: 228 (Altai). New name for *Bradytus cordicollis* Chaudoir, 1844. Synonymized by Hieke, 1975: 294.

Amara (Amathitis) [sic] cordata Reitter [sic]: Yano, 1941, Nippon no Kôchû, 4(1): 29 (Korea).

Amara (Amathitis) microdera Chaudoir: Putzeys, 1866, Mém. Soc. R. Sci. Liège, (2), 1: 228 (tax.); Tschitschérine, 1897, L'Abeille, 29: 69 (China: Pékin); Csiki, 1929, Col. Cat., 104: 473; Hieke, 1975, Dtsch. ent. Z., N. F. 22(4/5): 314 (syn.); Lafer, 1989, Key. Ins. Russian Far East, (3), 1: 158 (tax.); Hieke, 1995, Coleoptera, Schwanfeld Col. Mitt., S. 2, p. 44 (Korea); Hieke, 1996, Coleoptera, Schwanfeld Col. Mitt., S. 4, p. 33-42 (N. Korea).

Materials examined. 2♂, 4♀, 25-V-2002, Jinbu, Pyeongchang-gun, GW (SCNAE); 1♂, 28-V-1983, Mt. Palgongsan, GB (SJNAE).

Distribution. Korea (North, Central, South), NW China, Mongolia, Russia (Siberia, Far East).

Notes. Belongs to subgenus *Amathitis* Zimmermann (1832, Faunus, 1: 39). First record for the Korean Peninsula by Yano (1941) as *A. cordata*. The distribution of this species from South Korea confirmed. Thanks to Dr. G. Sh. Lafer, Vladivostok, for comparing with Ussurian species and confirming to my identification of this species. For more detail, see Hieke (1996).

참고. 만주둥글먼지벌레 아속은 가운데다리와 뒷다리 넓적마디에 7-10개의 털이 있어서 다른 아속과 쉽게 구분할 수 있으며, 우리나라는 1종만 기록하고 있다. 한편, 한국곤충명집 (1994)에서 '만주둥글먼지벌레 (*Amara cordata* Putzeys)'는 '작은목둥글먼지벌레'와 같은 종이므로 우리말 이름은 '작은목둥글먼지벌레'를 쓰며, *A. familiaris* (Duftschmid, 1812)의 우리말 이름인 '만주둥글먼지벌레'는 그대로 쓴다. 계곡의 물가나 강가에서 5월부터 성충을 볼 수 있다.

(03) *Amara (Bradytus) pallidula* (Motschulsky, 1844)

담색둥글먼지벌레

Bradytus pallidulus Motschulsky, 1844, Mém. Acad. Sci. St.-Pétersb., 5: 182, t. 8, f. 9 (Russia: Burjatien, Selenga River); Morawitz, 1862, Bull. Acad. Sci. St.-Pétersb., 5: 257.

Amara humilis Baliani, 1934, Mem. Soc. ent. ital., 12 [1933]: 196-7 (Yunnan). Preoccupied, nec Casey, 1918: 302. Synonymized by Hieke, 1997: 217.

Amara (Bradytus) hummeli Jedlička, 1935, Ark. Zool. 27A (4): 20 (China: Kansu). Synonymized by Hieke, 1995: 299.

Amara (Bradytus) pallidula (Motschulsky): Csiki, 1929, Coleopt. Cat., 104: 457; Lafer, 1980, Taxonomij Nase. Dal'nego Vostoka, p. 47-49 (Korea); Lafer, 1989, Key. Ins. Russian Far East, (3), 1: 171 (Korea); Hieke, 1995, Dtsch. ent. Z., N.F., 42: 299 (syn.); Hiekie, 1997, Mitt. Zool. Mus. Berl., 73(2): 217 (syn.).

Materials examined. 2 ♀, 13-V-2005, Sangdong-ri, Namilmyeon, Geumsan-gun, CN (SCNAE); 1 ♀, 25-IX-2004, Hadong-eup, Hadong-gun, GN (SCNAE); 1 ♀, 25-IX-2004, Singiri, Sinweon-ri, Daap-myeon, Gwangyang-si, JN (SCNAE); 3 ♂, 1 ♀, 6-X-2002, Aprok, Ogok-myeon, Gokseong-gun, JN (SCNAE); 7 ♂, 11 ♀, 6-X-2002, Sinweol, Gurye-eup, Gurye-gun, JN (SCNAE).

Distribution. Korea (North, South), China (BEI, GAN, HEB, JIL, LIA, SCH, SHA, YUN), Mongolia, Russia (E Siberia, Far East).

Notes. Belongs to the subgenus *Bradytus* Stephens (1828, Illust. British Entomol., 1: 136). First record for the Korean Peninsula by Lafer (1980). This species confirmed to distribution from southern part of the Korean Peninsula for the first time. The beetles were collected from under the small stone on sand of riversides.

I acknowledge Drs. G. Sh. Lafer (Vladivostok), S. Morita (Japan), for gift specimens of the Ussurian specimens of *A. pallidula* and Japanese ones of *A. ampliata* for comparison. I also thank Dr. K. Tanaka (Japan) for the gift specimen of *A. macros*. The Korean specimens are more darker than Ussurian specimens and several specimens are with 3 setae on the meso-femora along ventro-lateral margin.

By Kwon & Lee (1986) and in 'Check list of Insects from Korea (1994)', a related Japanese species, *A. (Bradytus) ampliata* Bates (1873, Trans. R. ent. Soc. Lond., p. 291) is listed in Korea, but the earlier reference could not be traced. This species may be erroneously listed or misidentification of *B. pallidula* or *B. aurichacea*, and/or related species by the Korean reporters, because I could not find in Kwon's collections and other depositories.

This species is very similar to Japanese *A. macros* (Bates, 1873) and *A. ampliata* (Bates, 1873) by the outer apical angle of fore tibiae prolonged and the body shape. The distinguishing characters of these species are as follows.

- 1(2) Outer apical angle of protibiae not prolonged. other *Amara (Bradytus)* spp.
- 2(1) Outer apical angle of protibiae lobe-like prolonged.
- 3(4) Body yellowish brown to dark brown; meso-femora with 4-5 setae along ventro-lateral outer margin; pronotum

- strongly transverse. L. 8.9-9.4 mm. *A. (Bradytus) pallidula* (담색동글먼지벌레)
- 4(3) Body brownish black to black; meso-femora with 2-3 setae along ventro-lateral outer margin.
- 5(6) Upper surface of head and pronotum covered with punctures entirely, but central part of disc very fine; lateral sides of pronotum widely explanate (see Lafer, 1989, fig. 118.2); body brownish black to black. L. 10.7-11.5 mm. *A. (Bradytus) macros* Bates, 1883
- 6(5) Upper surface of head and the most part of pronotum impunctate; pronotum strongly transverse, its lateral sides narrowly explanate; body brownish black to black. L. 9.0-12.0 mm. *A. (Bradytus) ampliata* (Bates, 1873)

참고. 몸길이는 9-11 mm이며, 몸은 갈색에서 짙은 갈색이다. 제주도를 제외한 전국에 분포하며, 강가의 모래밭에서 5월부터 성충을 볼 수 있다. 한국곤충명집 (1994)에 수록한 *A. ampliata* (Bates, 1873)는 이 종을 잘못 동정한 것이다.

(04) *Archipatrobus flavipes* (Motschulsky, 1864)
습지먼지벌레

Patrobus flavipes Motschulsky, 1864, Bull. Soc. Nat. Mosc., 37, 3: 191 (Japan).

Archipatrobus flavipes (Motschulsky): Paik, 2003, Korean J. Soil Zool., 8: 46.

Materials examined. 1 ♀, 6-IX-1997, Chilseon valley, Mt. Jirisan, Hamyang-gun, GN (SCNAE); 1 ♀, 26-V-2001, Eochi, Jinsang-myon, Gwangyang-si, JN (SCNAE); 1 ♀, 1 ♂, 3-X-2002, Sinweol, Gurye-eup, Gurye-gun, JN (SCNAE); 1 ♀, 26-V-2001, Eochi, Jinsang-myon, Gwangyang-si, JN (SCNAE); 1 ♂, 31-VIII-1988, Deokjin-dong, Jeonju-si, JB (SCNAE); 1 ♀, 14-X-1995, Mt. Geonjisan, Jeonju-si, JB (SCNAE).

Distribution. Korea (incl. Jeju), Japan, Northern China, Russian Far East.

Notes. Occurs in water sides of river or valley. Widely distributed including Jeju, but not common.

(05) *Badister (Baudia) nakayamai* Morita, 1992
꼬마이빨먼지벌레 (신칭)

Badister (Baudia) nakayamai Morita, 1992, Elytra, Tokyo, 20(2): 156 (Japan).

Materials examined. 1 ♀, 10-VI-1993, Nonsan-eup, Nonsan-si, CN (SCNAE).

Distribution. Korea (central), Japan (Hokkaido, Honshu).

Notes. New to Korea. Belongs to the subgenus *Baudia* Ragusa (1884, Natur. Sicil., 7: 3). Collected by light trap. Thanks to Dr. S. Morita, Japan, who kindly offered Japanese female specimen of *B. nigriceps* and compared with the Japanese type specimen. He said that the Korean specimen is conspecific with this species.

The genus *Badister* Clairville, 1806, is divided into three subgenera, but the subgenus *Trimorphus* Stephens (1828, Illustr. Brit. Entomol., 1: 180) does not occur in Korea. Four species of this genus are listed in the Korean Peninsula, but *B. pictus* Bates, 1873 has not yet been collected from southern part of the Korean Peninsula, which is reported from North Korea by Jedlička (1960). All records of *B. nigriceps* Morawitz from Korea by the Korean reporters are probably misidentification of this species. The following simple key rather easily distinguishes each other. For more details, see Komarov (1991).

- 1(4) Right mandible on proximal margin with deep emargination, left mandible simple (sg. *Badister* s. str.). Pronotum and scutellum pale orange-red. Elytra with 4 black spots.
 *B. (Badister) pictus* (무늬이빨먼지벌레: 신칭)
- 2(1) Left mandible on proximal margin with emargination, right mandible simple (sg. *Baudia* Ragusa, 1884).
- 3(4) Head and elytra piceous to black; elytra rusty red with bluish lustre. Length of body 4.0-4.3 mm.
 *B. (Baudia) nigriceps* (이빨먼지벌레)
- 4(3) Head black, elytra various.
- 5(6) Pronotum brown, apical angles strongly advanced, hind angles obtuse. Length of body 4.5 mm.
 *B. (Baudia) ussuriensis* (노랑이빨먼지벌레)
- 6(5) Pronotum reddish brown, apical angles moderately advanced, hind angles round. Length of body 4.0 mm.
 *B. (Baudia) nakayamai* (꼬마이빨먼지벌레)
- 참고.** 무늬이빨먼지벌레와 비슷하지만, 크기가 작고 몸의 색깔이 더 진하기 때문에 쉽게 구별할 수 있다. 우리나라는 처음으로 기록한다.

(06) *Bembidion (Plataphus) altaicum* (Gebler, 1833)

알타이강변먼지벌레

- Anchomenus altaicus* Gebler, 1833, Bull. Soc. Nat. Mosc., 6: 272 (Altai).
- Bembidion sutschanense* Jedlička, 1936, Acta Soc. Ent. Praha, 32: 163 (Siberia). Treated as a junior synonym of *B. altaicum* by Jedlička, 1965: 110.
- Bembidion (Plataphus) altaicum* Gebler: Jakobson, 1906, Zhuki Rossii i Zapadnoi Evropy, 4: 282 (syn.); Netolitzky, 1913,

Wiener Ent. Zeit., 32(4-6): 144 (syn.); Csiki, 1928, Coleopt. Cat., 97: 74 (syn.); Netolitzky, 1943, Koleopt. Rdschau, 28: 104; Jedlička, 1965, Ent. Abh., 32(7): 110 (key to spp.); Kwon & Lee, 1986, Ins. Koreana, 6: 23 (Korea); Kryzhanovskij *et al.*, 1995, Checklist of Ground-beetles of Russia, p. 83; Lorenz, 1998, Syst. Carabidarum, p. 210; Löbl & Smetana, 2003, in Cat. Pal. Coleopt., 1: 265 (Korea).

Materials examined. 1 ♀, 31-V-2004, Dopari, Sutong-ri, Buri-myeon, Gamsan-gun, CN (SCNAE); 1 ♂, 1 ♀, 14-VI-2004, Auraji, Yeorany-ri, Buk-myeon, Jeongseon-gun, GW (SCNAE); 2 ♀, 2 ♂, 14-VI-2004, Seokkyo, Deoksong-ri, Jeongseon-eup, GW (SCNAE); 2 ♀, 2 ♂, 13-VI-2004, Mokgol, Sam-ok-ri, Yeongweol-eup, GW (SCNAE); 1 ♂, 3 ♀, 13-VI-2004, Sam-ok, Sam-ok-ri, Yeongweol-eup, GW (SCNAE); 5 ♀, 29-VI-1988, Mt. Bangtaesan, GW (SCNAE).

Distribution. Korea (North, Central), Japan (Hokkaido, Honshu), Russia (Siberia, Far East).

Notes. Belongs to the subgenus *Plataphus* Motschulsky (1844, Bull. Soc. Nat. Mosc., 39(3): 184). First record for Korea by Kwon & Lee (1986). Thanks to Dr. G. Sh. Lafer, Vladivostok, who offered Ussurian specimens for comparison. This species occurs under stones on the riversides or mountain streams.

B. latum (Motschulsky, 1844 = *B. planum* R. Sahlberg, 1844) is treated as a distinct species by Netolitzky (1943: 104) and also by Kryzhanovskij *et al.* (1995) and Lorenz (1998). However, Marggi *et al.* (2003 in CPC) treated it as a junior synonym of *B. altaicum* (Gebler) after Jakobson (1906).

참고. 몸길이는 6.5-9 mm로 몸은 검정색이지만 금속 광택이 있으며 평평하다. 앞날개는 긴 달걀모양이고 날개실은 평평하다. 차가운 습지나 물가에 살며 매우 빠르게 움직인다. 5월부터 강가나 계곡의 물가에서 성충을 볼 수 있다. Ussuri 표본은 몸 크기가 6.0-7.0 mm이지만, 한국산은 9.00 mm.

(07) *Bembidion (Trichoplataphus) eurygonum* Bates, 1883

검정큰강변먼지벌레 (신칭)

- Bembidium (Peryphus) eurygonum* Bates, 1883, Trans. R. ent. Soc. Lond., p. 274 (Japan: Kumamoto).
- Bembidion (Trichoplataphus) eurygonum* Bates: Csiki, 1928, Col. Cat., 98: 77; Netolitzky, 1943, Koleopt. Rdschau, 28(4/6): 109; Jedlička, 1965, Ent. Abh., 32(7): 117; Lorenz, 1998, Syst. Carabidarum, p. 211; Löbl & Smetana, 2003, in Cat. Pal. Coleopt., 1: 270.

Materials examined. 2 ex., 31-V-2004, Samiri, Hwangpung-

ri, Namil-myeon, Geumsan-gun, CN (SCNAE); 1 ♂, 1 ♀, 17-VIII-2004; 1 ex, 3-VI-2004, Sutong, Sutong-ri, Buri-myeon, Geumsan-gun, CN (SCNAE); 1 ♂, 1 ♀, Mokgol, Samok-ri, Yeongweol-eup, Yeongweol-gun, GW (SCNAE); 15 ex, 2-VI-2002; 3 ♀, 18-VI-2002, Gurye-eup, JN (SCNAE); Gurye-eup, (SCNAE); 4 ex, 24-VII-2001, Hansunae, Songjeong-ri, Toji-myeon, Gurye-gun, JN (SCNAE).

Distribution. Korea (Central, South), Japan (Honshu, Shikoku, Kyushu).

Notes. New to Korea. Belongs to the subgenus *Trichoplataphus* Netolitzky (1914, Ent. Blätter, 10: 51). According to Marggi *et al.* (2003 in CPC), this 14 species of the subgenus are distributed in Palaearctic region of which 3 species occur in the Korean Peninsula. The species are hygrophilous and riparian, with adults hunting along banks of flowing water. In day time when disturbed, very rapidly escape. Sometimes it is very abundant depending on collecting sites.

The following simple key rather easily distinguishes 3 Korean species, plus one species expected to occur.

- 1(2) Elytral striae 7 absent, 6 very fine or absent; apical striole (1st recurrent first stria) with 2, rarely 3 setae; body black with strong blue luster, 1st antennal segment blackish brown, the followings blackish; Length 5.5-6.5 mm
 *B. (Trichoplataphus) lissonotum* (큰강변먼지벌레)
- 2(1) Elytral striae 6 and 7 well developed; apical striole with at least 5 setae.
- 3(4) Pronotum broad, transverse, hind angles acute and prominent, lateral margins before them sinuate; antennal segment 1 and legs reddish brown. L. 5.3-5.5 mm
 *B. (Trichoplataphus) eurygonum* (검정큰강변먼지벌레: 신칭)
- 4(3) Elytra narrow and parallel-sided; pronotum widest at middle or before it, fairly contracted towards base, microsculpture of disc at middle distinct.
- 5(6) Elytra somewhat flattened, elytral striae impunctate; body black, sometimes with greenish tinge, elytra often reddish brown. L. 5.0-6.5 mm.
 *B. (Trichoplataphus) oxyglymma* (애기강변먼지벌레)
- 6(5) Elytra depressed, elytral striae full with distinct minute punctures; body brownish black to black with greenish or bronze tinge, elytra, antennal segment 1, legs, partly underside of body reddish brown. L. 5.7-6.5 mm.
 *B. (Trichoplataphus) deplanatum* A. Morawitz, 1862

참고. 몸길이는 약 5.5 mm, 몸은 검정 색이고, 앞가슴 앞쪽 폭은 밑쪽 폭보다 넓으며, 뒤쪽 모서리는 직각을 이루지만 바깥쪽으로 약간 돌출한다. 5월부터 강가의 모래밭에서 성충을 볼 수 있다.

(08) *Bembidion (Plataphus) infuscatipenne* Netolitzky, 1938
 개울납작강변먼지벌레 (신칭)

Bembidion (Plataphus) infuscatipenne Netolitzky, 1938, Proc. R. ent. Soc. Lond. (B), 7(2): 38 (Wladiwostok); Netolitzky, 1943, Koleopt. Rundsch., 28(4/6): 105; Jedlička, 1965, Ent. Abh., 32(7): 111; Löbl & Smetana, 2003, Cat. Pal. Coleopt., 1: 265 (N. Korea).

Bembidion infuscatipenne Netolitzky: Kirschenhofer, 1997, Annls hist.-nat. Mus. natn. hung., 89: 104 (N. Korea).

Materials examined. 3 ex, 26-V-1985, Mt. Weolaksan, Jecheon-si, CB (SCNAE); 1 ♀, 1 ♂, 26-V-2002, Mt. Cheongryangsan, Bonhwa-gun, GB (SCNAE); 1 ♂, 1 ♀, 12-X-2001, Eumjeong, Mt. Jirisan, Hamyang-gun, GN (SCNAE); 2 ♀, 2 ♂, 7-VI-2001, Jungsan-ri, Mt. Jirisan, Sancheong-gun, GN (SCNAE); 2 ♀, 2 ♂, 25-V-2002, Sogeu-gan, Mt. Odaesan, GW (SCNAE); 2 ♀, 2 ♂, 14-V-2004, Sangong-ri, Seolcheon-myeon, Muju-gun, JB (SCNAE); 1 ♂, 1 ♀, 2-VI-2002, Jungchon, Gyeweol-ri, Weoldeung-myeon, Suncheon-si, JN (SCNAE); 1 ♀, 1 ♂, 27-IV-2002, Mt. Baek-un-san, Jinsang-myeon, Gwangyang-si, JN (SCNAE); 4 ex, 28-IV-2001, Eochi, Jinsang-myeon, Gwangyang-si, JN (SCNAE); 4 ex, 14-VII-1995, Mt. Baek-un-san, Gwangyang-eup, JN (SCNAE); 18 ex, 13-VII-1995, Mt. Jirisan (SCNAE); 10 ex, 13-VII-1995, Piagol, Mt. Jirisan (SCNAE).

Distribution. Korea (incl. Jeju-do), Japan, NE China, Russia (Siberia, Far East).

Notes. Belongs to the subgenus *Plataphus* Motschulsky (1844, Bull. Soc. Nat. Mosc., 39(3): 184). Record for North Korea by Kirschenhofer (1997). This species is widely distributed in South Korea having previously been recorded from the Siberia, Russian Far East and Japan. These are the first records for the southern part of the Korean Peninsula including Jeju-do. Occurs at pebble banks of rivers or streams in mountainous regions. Body occasionally infested with very many mites and fungi (Laboubeniales).

Thanks to Dr. G. Sh. Lafer (Vladivoskok) and Dr. S. Morita (Japan) who offered Ussurian specimens of *B. coelestinum* Motschulsky, 1844 and Japanese specimens of *B. lucillum* Bates, 1883, respectively, for comparison.

It is very similar to *B. coelestinum*, also similar to *B. lucillum*, but the body color differ each other (in *lucillum* black with slightly bluish luster, legs black; in *coelestinum* legs blackish red). Widely distributed. Rather common. The following simple key rather easily separate *B. infuscatipenne*. This subgenus needs to detail for east Asian species including

Russian Far East.

- 1(2) Abdominal sterna 3-5 each with a row of small setae along hind margin besides two usual; hind angle of pronotum with indistinct lateral basal carinae (sg. *Hirmoplataphus* Netolitzky, 1943).
- 2(1) Abdominal sterna 3-5 each with one seta along hind margin; hind angle of pronotum with distinct lateral basal carinae (sg. *Plataphus* Motschulsky, 1864).
- 3(4) Small species, less than 4 mm; pronotum transverse, with rough isodiametric reticulation at middle area; elytral striae deep, intervals with isodiametric reticulation. Blackish blue to black. Length, 3.0-3.7 mm. Russian Far East. *B. (Plataphus) coelestinum* (Motschulsky, 1844)
- 4(3) Larger, more than 3.7 mm.
- 5(6) Elytra and tibiae reddish brown to brownish black; elytral striae 1-4 shallow, 5th deep; antennal scapus reddish brown, others darkened. Length, 3.7-4.3 mm.
..... *B. (Plataphus) infuscatipenne*
..... (개울납작강변먼지벌레)
- 6(5) Elytra black with strong bluish lustre; elytral striae deep 1-4 very deep; antennae and legs blackish brown. Length, 4.5-4.8 mm. Japan, Russian Far East.
..... *B. (Plataphus) lucillum* Bates, 1883

참고. 몸길이는 3.7-4.5 mm로 몸은 납작하며, 앞날개는 길쭉하다. 머리와 가슴은 검정색, 날개는 검정색으로 보이지만 짙은 갈색이며, 더듬이의 밑마디는 적갈색이며 나머지는 흑갈색이다. 제주도를 비롯하여 전국에 널리 분포하며, 성충은 4월부터 야산의 계곡이나 강가에서 흔히 볼 수 있으며, 불빛에 잘 날아온다. 우리말 이름은 강가나 개울가에서 채집하여 '개울강변먼지벌레'로 붙였다.

(09) *Bembidion (Notaphocampa) niloticum batesi* (Putzeys, 1875) 검은강변먼지벌레

Notaphus batesi Putzeys, 1875, Ann. Soc. Ent. Belg. (Compt.-Rend.), 8: 52 (Japan).

Bembidion (Notaphocampa) niloticum batesi Putzeys: Paik & Jung, 2003, Korean J. Soil. Zool., 8: 47 (Jejudo).

Materials examined. 1 ♀, 10-VI-1982, Suweon, GG; 2 ♂, 2 ♀, 22-VI-2001, 2 ♂, 2 ♀, 22-IX-2001, Mt. Seonunsan, Gochang-gun, JB; 5 ♀, 3 ♂, 9-VII-1995, Eochi, Mt. Baekunsan, Gwangyang-gun, JN.

Distribution. Korea (North, Central, South, Jejudo), Japan (Hokkaido, Honshu, Sihokoku, Kyushu, Okinawa), NE China, Russian Far East, SE Asia (Taiwan, Philippines, Indo-China).

Notes. Widely distributed from the Korean Peninsula includ-

ing Jejudo.

**(10) *Bembidion (Chrysobracteion) stenoderum* Bates, 1873
넉점박이강변먼지벌레**

Bembidium stenoderum Bates, 1873, Trans. R. ent. Soc. Lond., p. 300 (Japan).

Bembidion uenoshiba Jedlička, 1965, Ent. Abh., 32(7): 94 (Japan). Synonymized by Maddison, 1993: 179.

Bembidion stenoderum mukdensis Kirschenhofer, 1984, Koleopt. Rundsch., 57: 59 (China).

Bembidion stenoderum Bates: Yano, 1941, Nippon no Kôchû, 4(1): 24 (Korea); Kurosa, 1949, Bull. Takarazuka Ins., 60: 5 (Korea); Jedlička, 1960, Annls hist.-nat. Mus. natn. Hung., 52: 230 (Korea).

Bembidion (Bracteion) stenoderum Bates: Jedlička, 1965, Ent. Abh., 32(7): 93 (tax.); Maddison, 1993, Bull. Mus. Comp. Zool., 153(3): 179-180 (syn.); Kryzhanovskij *et al.*, 1995, Checklist of the Ground-beetles of Russia, p. 77; Lorenz, 1998, Systematic List, p. 202; Löbl & Smetana, 2003, in Cat. Pal. Coleopt., 1: 247 (N. Korea).

Bembidion (Chrysobracteion) stenoderum Bates: Csiki, 1928, Coleopt. Cat., 97: 36; Lindroth, 1962, Opuscula Entom., 27: 12 (Korea); Lafer, 1975, Entomofagi Soc. Dal. Bostocká, 27 (130): 60 (Korea); Kwon & Lee, 1986, Ins. Koreana, 6: 24 (Korea).

Materials examined. 1 ♀, 27-VI-1998, Mt. Weolaksan, Jecheon-si, CB (SCNAE); 1 ♂, 10-VIII-1982, Mt. Gwangdeoksan, CB (SJNAE); 1 ♀, 1 ♂, Sutong-ri, Buri-myeon, Geumsan-gun, CN (SCNAE); 1 ♂, 1 ♀, 14-VIII-2004, Beom-morae, Hakgok-ri, Pyeonghae-eup, Uljin-gun, GB (SCNAE); 1 ♂, 1 ♀, 14-VIII-2004, Susandong, Susan-ri, Geunnam-myeon, Uljin-gun, GB (SCNAE); 1 ♂, 1 ♀, 12-VI-2004, Byeongsan-ri, Pungcheon-myeon, Andong-si, GB (SCNAE); 1 ♀, 12-VI-2004, Mae-ri, Pungsan-eup, Andong-si, GB (SCNAE); 9 ♂, 2 ♀, 15-VIII-2001, Sangju-si, GB (SJNAE); 1 ♂, 1 ♀, 16-VIII-2004, Umteo, Jeongok-ri, Jeongok-eup, Yeoncheon-gun, GG (SCNAE); 1 ♀, 1 ♂, 16-VIII-2004, Sinjangri, Seongdong-ri, Yeongjung-myeon, Pocheon-gun, GG (SCNAE); 1 ♂, 1 ♀, 15-VIII-2004, Wongtong, Weontong-ri, Buk-myeon, Inje-gun, GW (SCNAE); 1 ♀, 1 ♂, 15-VIII-2004, Daedae-ri, Geojin-eup, Goseong-gun, GW (SCNAE); 1 ♂, 1 ♀, 15-VI-2004, Yongho-ri, Gandong-myeon, Hwacheon-gun, GW (SCNAE); 1 ♂, 1 ♀, 15-VI-2004, Meonnaegol, Yucheon-ri, Gandong-myeon, Hwacheon-gun, GW (SCNAE); 1 ♂, 1 ♀, 15-VI-2004, Yangjimal, Yucheon-ri, Buk-myeon, Jeongseon-

gun, GW (SCNAE); 1 ♂, 1 ♀, 14-VI-2004, Auraji, Yeoryang-ri, Bu-myeon, Jeongseon-gun, GW (SCNAE); 1 ♂, 1 ♀, 14-VI-2004, Seokgyo, Deoksong-ri, Jeongseon-eup, Jeongseong-gun, GW (SCNAE); 1 ♂, 1 ♀, 14-VI-2004, Suhang-ri, Jinbumeon, Pyeongchang-gun, GW (SCNAE); 1 ♂, 1 ♀, 13-VI-2004, Mokgol, Samok-ri, Yeongweol-eup, Yeongweol-gun, GW (SCNAE); 1 ♂, 1 ♀, 13-VI-2004, Samok, Samok-ri, Yeongweol-eup, Yeongweol-gun, GW (SCNAE); 1 ♀, 1 ♂, 23-V-2002, Yongho-ri, Gandong-myeon, Hawacheon-gun, GW (SCNAE); 1 ♂, 1 ♀, 7-VIII-2004, Unpyeong, Bukchang-ri, Seolcheon-myeon, Muju-gun, JB (SCNAE); 1 ♂, 1 ♀, 6-VIII-2004, Teoil, Gigok-ri, Seolcheon-myeon, Muju-gun, JB (SCNAE); 1 ♂, 1 ♀, 2-VIII-2004, Inweol, Inweol-ri, Inweol-myeon, Namweon-si, JB (SCNAE); 1 ♀, 1 ♂, 2-VIII-2004, Baekil, Baekil-ri, Sannae-myeon, Namweon-si, JB (SCNAE); 8 ex., 20-VI-2002, Eochi-ri, Donggae-myeon, Sunchang-gun, JB (SCNAE); 1 ♂, 1 ♀, 25-V-2004, Gajeong, Songjeong-ri, Ogok-myeon, Gokseong-gun, JN (SCNAE); 3 ♂, 3 ♀, 26-X-2004, Chimgok-ri, Ogok-myeon, Gokseong-gun, JN (SCNAE); 1 ♂, 1 ♀, 19-IX-2004, Byeongbang, Jukma-ri, Mucheok-myeon, Gurye-gun, JN (SCNAE); 1 ♀, 2-VIII-2004, Pyeongsan, Ipyeong-ri, Sandong-myeon, Gurye-gun, JN (SCNAE); 1 ♀, 1 ♂, 6-X-2002, Aprojok, Aprojok-ri, Ogok-myeon, Gokseong-gun, JN (SCNAE); 2 ♂, 2 ♀, 20-VI-2002, Sinchon, Sinweol-ri, Gurye-eup, Gurye-gun, JN (SCNAE).

Distribution. Korea (North, Central, South), Japan (Hokkaido, Honshu, Shikoku, Kyushu), China, Russia (East Siberia, Far East, Kurils).

Notes. Belongs to the subgenus *Chrysobracteon* Netolitzky (1914, Ent. Blätt., 10: 166).

This species was recorded from northern part of the Korean Peninsula by Yano (1941). Later reported from North Korea by Jedlička (1960) and Kirschenhofer (1984), and Lindroth (1962) for central Korea (Shuotu). This is a widely distributed species previously recorded from Korea, Japan, Kazakhstan, Siberia, and Russian Far East (Löbl & Smetana, 2003: 247). The beetles were collected on sandy bank of the river and stream. The beetles very active even in the sunny day time. Widely distributed in South Korea. Common species. For more detail, see Maddison (1993).

The other species, *B. conicollis* Motschulsky (1844, Ins. Sibér., p. 273) was listed from Korea by Kwon & Lee (1986) and Marggi *et al.* (2003 in CPC), but the earlier reference could not be traced. Also I could not find the specimens of this species from the collections in Kyungpuk National University. It is probably an error or misidentification of *B. stenoderum* (or other related species) by the Korean reporters.

This subgenus *Chrysobracteon* was treated as a junior synonym of *Bracteon* by Maddison (1993). However, I regarded it as a distinct subgenus in this paper.

참고. 몸길이는 5.0 mm 정도이며, 앞가슴의 밑쪽은 앞쪽보다 폭이 넓다. 전국에 널리 분포하며, 강가나 물가에서 자주 볼 수 있으며, 기온이 높은 낮에는 잘 난다. 우리나라에 분포하는 것은 원아종 *ssp. stenoderum* s. str., 중국 요령성 (Liaoning) 지역에는 아종 *ssp. mukdensis* Kirschenhofer (1984, Koleopt. Rundschau, 57: 59 from Mukden=Shenyang, China)로 다루지만 (CPC, 2003), 우리나라도 이러한 개체가 같은 장소에 분포하기 때문에 아종으로 다룰 필요는 없다고 생각한다.

(11) *Bembidion (Notaphus) varium* (Olivier, 1975)

만주강변먼지벌레

Carabus varius Olivier, Olivier, 1795, Ent. (3), 35: 110, t. 14, f. 165 (Europe).

Notaphus (s. str.) *varius* (Olivier): Uéno, 1954, Shin-Kontyu, 7(3): 43 (N. Korea).

Bembidium varium Olivier: Schaum, 1860, Naturg. Ins. Deutschl. Col., 1(1): 686; Ganglbauer, 1892, Käf. Mitteleur., 1: 152, 159.

Bembidion varium Olivier: Andrewes, 1935, Fauna of British India, Carabidae 2, Harpalinae 1, p. 195-197.

Bembidium (Notaphus) varium (Olivier): Bates, 1883, Trans. R. ent. Soc. Lond., p. 269 (Japan). See for other synonymy, Csiki (1928), Andrewes (1935), & other Palaearctic catalogues.

Bembidion (Notaphus) varium (Olivier): Müller, 1918, Koleopt. Rundsch., 7(1/2): 60; Csiki, 1928, Coleopt. Cat., 97: 66; Matsumura, 1931, Illust. Common Ins. Jpn., 3: 3 (Jpn.), 5 (Eng.) (Korea); Netolitzky, 1943, Koleopt. Rundsch., 29(4/6): 73; Jedlička, 1965, Ent. Abh., 32(7): 102; Lindroth, 1985, Fauna Ent. Scand., 15(1): 156 (dia. cha.); Kwon & Lee, 1986, Ins. Koreana, 6: 21 (Korea); Park & Paik, 2001, Ins. Koreana, Suppl., 19: 42 (Korea); Kryzhanovskij *et al.*, 1995, Checklist of Ground-beetles of Russia, p. 79; Lorenz, 1998, Syst. Carabidarum, p. 205; Löbl & Smetana, 2003, Cat. Pal. Coleopt., 1: 254 (Korea).

Materials examined. 4 ex., 1 ♂, 1 ♀, 23-V-2002, Yongho-ri, Hwacheon-gun, GW (SCNAE); 4 ex., 20-VI-2002, Pyeongsan-ri, Jeokseong-myeon, Sunchang-gun, JB (SCNAE); 3 ex., 27-III-2002, Temple Hyanggrimsa, Suncheon-si, JN (SCNAE).

Distribution. Korea (North, Central, South), Japan (Hok-

kaido), China, Northern Asia, Russia (Siberia, Far East), Europe, India (Kashmir).

Notes. Belongs to the subgenus *Notaphus* Dejean (1821, Catalogue des Col., p. 16).

Noted in Korea by Matsumura (1931), but the earlier references could not be traced. The identification of *B. varium* by Matsumura (1931) is very doubtful, because his figure (pl. 1, fig. 15) does not match with this species. Later Uéno (1954, Shin-Kontyu, 7(3): 43) noted that it occurs in the northern part of the Korean Peninsula and Manchuria. The distribution of this species was confirmed from southern part of the Korean Peninsula. Widely distributed, but not common. I have seen one female specimen collected from northern part of Liaoning, China which is conspecific with the Korean specimens.

This subgenus is rather easily distinguishable from other related subgenera by the characteristic 'mosaic' pattern on elytra, the 2nd dorsal punctures on third elytral interval (at least the anterior) are free, not touching adjacent striae, their microsculpture coarse, more or less reticulate and different body colors.

For separating characters of related species, refer to Netolitzky (1943: 72), Jedlička (1965: 102), and Lindroth (1985: 134). The habitat, see Andrewes (1935: 196).

참고. 몸길이는 약 5.0 mm로 앞날개에는 얼룩무늬가 있다. 앞머리에는 금속광택이 없어서 만주지방에 널리 분포하는 *B. (Notaphus) obliquum* Sturm 또는 몸 크기가 작은 *B. (N.) semipunctatum* Sahlberg과 쉽게 구분할 수 있으며, 이 종들도 우리나라에 분포할 것으로 생각한다. 전국에 분포하며, 4월부터 강가나 계곡의 물가에서 성충을 볼 수 있지만, 흔한 종은 아니다. 우리나라는 Matsumura (1931)가 기록했지만, 도판 그림을 보면 다른 종을 잘못 동정한 것으로 생각한다.

(12) *Caelostomus picipes* (Macleay, 1825)

서귀길쭈먼지벌레

Anaulacus picipes Macleay, 1825, Ann. Jav., p. 24 (Java).

Caelostomus picipes Macleay: Paik, 1988, Korean J. Entomol., 18(4): 242 (Korea).

Materials examined. 1♂, 1♀, 2-VI-2002, Jungsan, Ganjeon-myon, Gurye-gun (SCNAE); 1♀, 1-VI-2002, Temple Dorimsa, Gokseong, Gokseong-gun, Light Trap (SCNAE).

Distribution. Korea (incl. Jeju), Japan (Honshu, Shikoku, Kyushu, Ryukyus), Oriental Region, New Guinea, Northern Australia.

Notes. First record for Jeju by Paik (1988). This species

is reported from mainland of the Korean Peninsula for the first time. Occurs in rotting or fermenting vegetation. For the generic diagnosis, see Moore (1965: 6).

(13) *Chlaenius (Chlaenites) spoliatus motschulsky*

Andrewes, 1928 긴줄무늬먼지벌레

Chlaenius motschulsky Andrewes, 1928, Trans. Ent. Soc. Lond., 76: 13 (Japan).

Chlaenius spoliatus Rossi: Fairmaire, 1888, Rev. Ent. [Fr.], 7: 113 (China: Peking); Nakane, 1963, Icon. Ins. Jap. Colore Nat., 2, Col., p. 46, pl. 22, fig. 19 (Korea).

Chlaenius (Chlaenites) spoliatus Rossi: Chaudoir, 1876, Ann. Mus. Civ. Stor. Nat. Genova, 8: 88; Jakobson, 1906, Beetles of Russia, 4: 312; Csiki, 1931, Col. Cat., 115: 944; Kryzhanovskij, 1976, Trudy biol. pochv. Inst., Vladivostok, (n. s.), 43: 10-11.

Chlaenius spoliatus motschulsky Andrewes: Lafer, 1973, Rev. Ent. URSS. 52(4): 849-850 (Korea). Treated as a subspecies by Lafer, 1973: 849.

Chlaenius (Chlaenites) spoliatus motschulsky Andrewes: Lafer, 1989, Keys ident. Ins. Russian Far East. Coleoptera. 1: 202 (Korea).

Materials examined. 2 ex., 1-VII-1992, Anseong GG (NAIST); 1 ex., 7-VI-1925, Suigen [=Suvon], T. Hanaya leg., (NAIST); 1♂, 12-X-2001, Emjeong, Mt. Jirisan, Sancheong-gun, GN (SCNAE).

Distribution. Korea (North, Central, South), Japan (Honshu, Shikoku), NE China, Russian Far East.

Notes. Belongs to the subgenus *Chlaenites* Motschulsky (1860, Bull. Acad. Sci. St.-Pétersb., 2: 515). *Chlaenius* is one of the largest and most taxonomically complex genus of the family Carabidae and divided into numerous subgenera. However, the treatment of subgenera are varied by authors. Representatives of this genus are distributed throughout all zoogeographical regions of the world. They usually live on the ground near water, but not always, some appear to be true forest dwellers. The Korean fauna need to detail.

T. Nakane (1963) notes that this species occurs in Korea as *C. spoliatus*. This species is divided two subspecies, ssp. *spoliatus* (P. Rossi, 1790, Fauna Etrusca, 1: 33). and ssp. *motschulskyi* Andrewes by Lafer (1973). The nominative subspecies, ssp. *spoliatus* s. str. is widely distributed from North Africa to Europe extended Central Asia, Siberia, Mongolia and Far East (CPC, 2003).

This beautiful species, one of this genus, the elytra bright

green to dark green with bronze tinge. Occurs in sedge and grass meadows along the banks of brackish channels and lagoons (Lafer, 1973).

The distinguishing characters are as follows (after Lafer, 1973: 849).

1(2) Yellow lateral flange of elytra occupying outer three intervals, boundary of yellow and green extending along 7th stria or slightly encroaching onto 8th interval; the latter virtually completely yellow. Length of male and female about 18.1-18.3 mm.

..... *Ch. spoliatus motschulsky* Andrewes

2(1) Yellow lateral flange of elytra occupying only 2.5 intervals, boundary of yellow and green extending along middle of 8th interval. Length of male and female about 16.5-17.5 mm.

..... *Ch. spoliatus spoliatus* Rossi

참고. 몸길이는 약 16 mm로 몸은 녹색이나 적동색 광택이 있어서 매우 아름답다. 앞날개는 제7날개홈부터 바깥쪽과 날개 끝까지의 황갈색이다. 불빛에 가끔 날아온다. 우리나라에 분포하는 것은 아종 *ssp. motschulskyi* Andrewes, 중국 북부지역, 몽고, 시베리아와 유럽에는 원아종 *ssp. spoliatus* s. str. (Rossi, 1790, Fauna Etrusca, 1: 33)로 다룬다.

(14) *Cillenus (Novicillenus) aestuarii* (Uéno & Habu, 1955)

긴엄니물가먼지벌레 (신칭)

Armatocillenus (Novicillenus) aestuarii Uéno et Habu in Uéno, 1955, Publ. Seto Mar. Biol., 4(2/3): 347-350 (Japan: Osaka).

Armatocillenus aestuarii (Uéno et Habu): Morita, 1985, Col. Japan in color, 2: 92.

Bembidion (Desarmatocillenus) aestuarii (Ueno & Habu): Lindroth, 1980, Ent. scand., 11: 200.

Materials examined. 12♂, 12♀, 11-IV-2002, Hadong-eup, Hadong-gun, GN (SCNAE).

Distribution. Korea (South), Japan (Honshu, Shikoku, Kyushu).

Notes. New to Korea. By the courtesy of Dr. S. Morita, I have had the opportunity to examine the female and male of the species from Japan.

Lindroth (1980) united the subgenus *Novicillenus* Uéno with the subgenus *Desarmatocillenus* Netolitzky, because the length of hind trochanter a little value for main characters or for distinguishing them. For the subgeneric diagnosis, as well as a key to species, see Andrewes (1938) and Lindroth (1980). Occurs in inter-tidal zone.

참고. 우리나라는 처음으로 기록한다. 이 속은 학자에 따라 *Bembidion*의 아속으로 다루기도 한다. 긴엄니물가먼지벌레는 몸길이는 4.5 mm 정도이며, 몸은 검정 색으로 둔한 청동색의 광택이 있다. 앞날개는 갈색이지만 앞가슴 쪽과 날개 중앙은 짙은 무늬가 있고, 다리는 옅은 갈색이다. 뒷다리 도래마디는 매우 길어서 넓적마디의 2/3 정도이고 그 끝은 뾰족하다. 4월부터 성충을 볼 수 있으며, 바닷가나 하구의 모래밭에서 산다. 우리말 명칭은 뒷다리 도래마디 (trochanter)가 매우 길어서 '긴엄니물가먼지벌레'로 부른다.

(15) *Cillenus (Desarmatocillenus) yokohamae* Bates, 1883

엄니물가먼지벌레 (신칭)

Cillenus yokohamae Bates, 1883, Trans. R. ent. Soc. London, p. 268 (Japan: Yokohama); Andrewes, 1938, Proc. R. Ent. Soc. Lond. (B), 7(9): 193.

Armatocillenus (Desarmatocillenus) yokohamae (H.W. Bates): Uéno, 1955, Publ. Seto Mar. Biol., 4(2/3): 350.

Armatocillenus yokohamae (Bates): Louwerens, 1967, Ent. Meddel., 35(3): 196 (Philippine: Palawan); Morita, 1985, Col. Japan in color, 2: 92.

Bembidion (Desarmatocillenus) yokohamae (Bates): Lindroth, 1980, Ent. scand., 11: 202.

Materials examined. 15♂, 13♀, 28-III-2001, Hadong-eup, Hadong-gun, GN (SCNAE); 12♂, 12♀, 11-IV-2002, Hadong-eup, Hadong-gun, GN (SCNAE).

Distribution. Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Yakushima).

Notes. New to Korea. Thanks to Dr. S. Morita, Japan, who offered Japanese specimens of this species for comparison. The Korean specimens are conspecific with Japanese ones. Lives in intertidal zone of sand or under stones. Often attracted to light. Besides these, *Sakagutia* Uéno (1955, Publ. Seto Mar. Biol. Lab., 4(4): 185-6) might be expected to occur from the Korean Peninsula but have not yet been found there. For the subgeneric diagnosis, as well as a key to subgenera and species, see Lindroth (1980).

참고. 이 종은 큰턱 (mandible)이 매우 크고 길어서 우리 말을 '엄니물가먼지벌레'로 붙였다. 몸길이는 약 4.5 mm이며, 몸 빛깔은 검은 청색이지만 다리와 날개옆구리는 갈색이다. 뒷다리 도래마디 (meta-trochanter)는 정상이며 넓적마디 길이의 1/2를 넘지 않는다. 3월부터 바닷가나 하구의 모래밭에서 성충을 볼 수 있으며, 뒷날개가 잘 발달하여 등불에 날아온다.

(16) *Clivina nipponensis* Bates, 1873 줌조롱박먼지벌레

Clivina nipponensis Bates, 1873, Trans. R. ent. Soc. Lond., p. 239 (Japan); Yano, 1941, Nippon no Kôchû, 4(1): 22 (Korea); Nakane, 1952, Ent. Rev. Japan, 6(1): 1; Kwon & Lee, 1986, Ins. Koreana, 6: 17 (Korea).

Materials examined. 1 ♀, 14-VI-1983, Suweon, GG (Light trap) (NIAST); 2 ♀, 9-X-1979, Temple Tongdosa, GN (KPNAE).

Distribution. Korea (Central), Japan (Honshu, Shikoku, Kyushu), China.

Notes. First record for Korea by Yano (1941). Under the tribe Clivini only one genus *Clivina* Laterille with 3 species are represented from Korea. Several authorities regarded it as a subtribe of Clivini (Ball & Bousquet, 2002, etc.).

Clivina is wide-ranging geographically, includes 378 species, in eleven subgenera (Lorenz, 1998: 131-135). The genus has been a subject for at most, broad regional treatments only, such as Andrewes (1929; Oriental Region); Kult (1959; Afro-tropical Region); Basilewsky (1973; Madagascar); and Darlington (1962; New Guinea) (Ball, 2001).

참고. 몸길이는 4.5-5.4 mm로 앞가슴의 가장자리는 둥글며, 앞날개의 제3날개실 중앙에는 3개의 센털구멍이 나란히 줄지어 있다. 머리방패 (clypeus)와 앞머리사이에 가로 홈이 뚜렷하다. 가운데다리 종아리마디 바깥쪽에는 가시가 없다. 강가나 연못과 같은 습기가 많은 진흙땅에서 볼 수 있다.

(17) *Drypta ussuriensis* Jedlička, 1963 호리먼지벌레

Drypta dentata ussuriensis Jedlička, 1963, Ent. Abh., 28: 484 (E. Siberia).

Drypta dentata Rossi: Bates, 1888, Proc. Zool. Soc. Lond., 1888: 371 (Korea); Matsumura, 1905, Thousand Ins. Japan, 2: 157; Kano, 1923, Ins. world, (Konchusekai), 27(315): 383 (Korea); Kano, 1924, Ins. world, (Konchusekai), 28 (326): 352 (Korea); Matsumura, 1931, Illustr. Common Ins. Japan-Empire, 3: 13(Jap.), 19(Eng.); Yano, 1941, Nippon no Kôchû, 4(1): 36 (Korea).

Drypta ussuriensis Jedlička: Habu, 1967, Fauna Japonica, Truncatipennes, p. 269 (Korea); Habu, 1984, Ent. Rev. Japan, 39(2): 113 (Korea); Lafer, 1989, Keys ident. Russian Far East., 3(1): 210 (Korea).

Materials examined. 1 ♂, 1 ♀, 24-V-2002, Suin-ri, Yanggu-eup, Yanggu-gun, GW (SCNAE).

Distribution. Korea (North, Central), Japan (Hokkaido, Northern Honshu), Russian Far East.

Notes. First record for Gensan (=Weonsan, now in North Korea), central part of the Korean Peninsula by Bates (1888) as *D. dentata* Rossi. Thanks to Dr. G. Sh. Lafer, Vladivostock, who offered a Ussurian specimen of this species for comparing.

In Korea two species of this genus occur. These two species are easily distinguished from each other by having the elytral brownish part. *D. japonica* with brownish part, whereas *D. ussuriensis* without patch. The latter species is confirmed to distribute from South Korea.

참고. 몸길이는 약 8.5 mm, 몸은 녹색이어서 다른 종과 쉽게 구분할 수 있다. 앞날개의 날개홈에는 커다란 점각이 있으며, 날개실에는 작은 점각이 많이 있다. 매우 드문 종으로 야산이나 계곡에서 볼 수 있다.

(18) *Elaphrus (Elaphrus) comatus* Goulet, 1983

털꼬마길앞잡이붙이 (가칭)

Elaphrus comatus Goulet, 1983, Quaest. Ent., 19(3/4): 311 (China: Harbin); Kryzhanovskij *et al.*, 1995, Checklist of ground beetles, p. 61.

Elaphrus riparius (Linnaeus): Nakane, 1963, Icon. Ins. Jap. Colore Nat., 2, Col., p. 20 (Korea). Misidentification.

Elaphrus (Elaphrus) riparius (Linnaeus): Lafer, 1989, Key Ident. Ins. Russian Far East, (3), 1: 124 (partim) (Korea).

Materials examined. 1 ♀, 4-IV-1989, Suweon, GG (SCNAE); 1 ex, 15-VI-2004, Meonnaegol, Yucheon-ri, Gandong-myeon, Hwacheon-gun, GW (SCNAE); 10 ex., 22-V-2002, Yongho-ri, Gandong-myeon, Hwacheon-gun, GW (SCNAE); 8 ex., 20-VI-2002, Eoeunjeong, Jeokseong-myeon, Sunchang-gun, JB (SCNAE); 1 ♀, 3-IV-2004, Weoljeon, Weoljeon-ri, Muncheok-myeon, Gurye-gun, JN (SCNAE); 1 ♀, 3-IV-2001, Temple Hyanggrimsa, Suncheon-si, JN (SCNAE).

Distribution. Korea (North, Central, South), Japan (Hokkaido), NE China, Russian Far East.

Notes. Recorded from Korea by Nakane (1963) as *E. riparius*, but the earlier reference could not be traced. Widely distributed. Occurs riparian sites in mainland.

Goulet (1983) described *E. comatus* from Northeastern China and distinguished from *riparius* by the hind femur with long setae on dorso-subapical surface, but this character is subject to a geographical variation. So, *E. comatus* may be treated as a subspecific level of *E. riparius* (L.).

On the other hand, *E. riparius* is also distributed in Hokkaido, Japan, southern part of Russian Far East, and NE China. This

species does not overlap with the range of *E. riparius* extending to the Russian Far East. *E. comatus* is distributed only in Khasan districts (Korea-Russian border), but *E. riparius* s. str. is distributed in northern part of Khasan of the Korea-Russian border (Lafer: personal communication, 2002).

According to Goulet (2003, in Löbl & Smetana) *E. riparius* is distributed in North Korea, but has not yet been collected from southern part of the Korean Peninsula. This record is probably an error of this species.

All known Korean *Elaphrus* species occur at riparian sites or in close proximity to such areas. *E. comatus* is adopted to open riparian areas with little or no vegetation, species of sand, silt, or clay banks.

참고. 몸길이는 6.5-7.5 mm로 몸에는 구리 빛 광택이 있지만 때로는 녹색을 띠기도 하지만 점각이 많기 때문에 광택은 약하다. 제주도를 제외하고 전국에 분포하며, 4월부터 물가나 습지에서 성충을 볼 수 있다. 우리나라는 Nakane (1963: 19)가 *E. riparius*로 보고했지만, 이것은 *E. comatus*를 잘못 동정한 것이기 때문에 *E. comatus*의 우리말 명칭은 ‘털꼬마길앞잡이붙이 (가칭)’로 부른다. 한국곤충명집 (1994)에서 *E. riparius*의 명칭은 ‘꼬마길앞잡이붙이’이지만, 그 분포는 확실하지 않다. 더 자세한 것은 Gouret (1983)을 참조하기 바란다.

(19) *Oodes integer* Semenov, 1889 고운호리병먼지벌레

Oodes integer Semenov-Tyan-Shanskij, 1889, Horae Soc. Ent. Rossicae, 23: 293 (Wladiwostok);

Oodes (Oodes) helopioides tokyoensis Habu, 1956, Bull. Nat. Inst. Agr. Sci., C, 6: 79, 82-85 (Japan: Tokyo). Syn. nov.

Oodes (Oodes) integer Semenov: Lafer, 1989, Keys Ident. Ins. Far East Russia, (3), 1: 205 (Korea); Kryzhanovskij *et al.*, 1995, Checklist of Ground-beetles from Russia, p. 158.

Materials examined. 1♂, 1♀, 25-V-2002, Jinbu, Pyeongchang-gun, GW (SCNAE).

Distribution. Korea (Central), Japan (Hokkaido, Honshu), Russian Far East.

Notes. First record for Korea by Lafer (1989). This species was discovered from central part of the Korean Peninsula for the first time. Thanks to Dr. G. Sh. Lafer, Vladivostok who offered Ussurian specimens of this species for comparison and confirming for my identification.

This species erroneously treated as a junior subjective synonym of *L. prolixus* Bates by Jakobson (1906), Csiki (1931), and Habu (1956), etc. Later, Lafer (1973) clarified *O. integer* and *prolixus*.

This species is similar to *O. vicarius* Bates, but easily distinguished by the completely bordered prosternal process (in *O. vicarius* usually unbordered). Occurs in water sides of river. For more information of this genus, see Habu (1956).

Judging from the original description and figures, *O. helopioides tokyoensis* Habu, 1956 agrees well with *O. integer* Semenov. I am much inclined to the opinion that the former subspecies (= *O. h. tokyoensis* Habu) should be suppressed as a junior subjective synonym of the latter (= *O. integer*). This species also is distributed from Hokkaido, Japan (Lafer, 2002, *in litteris*).

So far, 7 genera of the tribe Oodini are recorded from Palaearctic region (CPC, 2003), of which 2 genera namely *Lachnocrepis* Leconte and *Oodes* Bonelli are in the Korean Peninsula. Each genus is represented by two species. Key to the Korean genera and species of Oodini are as follow (based Habu, 1956 and Lafer, 1973).

- 1(4) Tarsomere 1-4 of middle and hind legs with dense yellowish setae on ventral surface.
..... *Lachnocrepis* LeConte (호리병먼지벌레 속)
 - 2(3) Antennae, palps, tibiae and tarsi brownish yellow, femora black-brown (legs bicolorous).
..... *Lachnocrepis japonica* Bates (호리병먼지벌레)
 - 3(2) Antennae, palpus and legs blackish brown to black; impression of anterior margin of pronotum arcuate; 4th segment of fore tarsus of male 1.5 times as long as broad, slightly impressed on inner margin.
..... *Lachnocrepis prolixus* Bates (넓은호리병먼지벌레)
 - (1) Tarsomere 1-4 of middle and hind legs without setae on ventral surface.
..... *Oodes* Bonelli (고운호리병먼지벌레 속)
 - 5(6) Smaller, narrower, length less than 11.0 mm., width 4.5 mm.; prosternal process completely bordered; on prothorax marginal setae absent.
..... *Oodes integer* Semenov [= *tokyoensis* Habu, 1956]
..... (고운호리병먼지벌레)
 - 6(5) Larger, wider, length more than 12.0 mm., width more than 5.0 mm; prosternal process usually unbordered; on prothorax a pair of fine marginal setae inserted near angles.
..... *Oodes vicarius* Bates, 1873 (허벅호리병먼지벌레)
- 참고.** 몸길이는 9.5-10.5 mm로 앞날개의 미세무늬에 작은 점각이 있다. 강가나 계곡의 물가에서 성충을 볼 수 있다.

(20) *Panagaeus robustus* Morawitz, 1862

작은네눈박이먼지벌레

Panagaeus robustus Morawitz, Morawitz, 1862, Bull. Acad.

Sci. St.-Péters., 5: 323 (Japan); 1862, Mém. Biol. Acad. Sci. St.-Petersb., 4(4): 240.

Panagaeus robustus v. *niponensis* Bates, 1883, Trans. R. ent. Soc. Lond., p. 234 (Japan).

Panagaeus robustus Morawitz: Lutshnik, 1914, Rev. Russe d'Ent., 13 [1913]: 446; Cho, 1957, Hum. & Sci., Nat. Sci., Korea Univ., 2: 187 (Korea); Jedlička, 1965, Ann. Zool. Bot., 12: 14; Kwon & Lee, 1985, Ins. Koreana, 6: 48 (Korea); Lafer, 1989, Keys Id. Ins. Russian Far East, 3(1): 209 (Korea); Park & Paik, 2001, Ins. Koreana, Suppl., 19: 124 (Korea).

Materials examined. 1 ex., 31-V-1983, Daegu-si, DG (SJNAE); 1 ♀, 16-VII-1921, Suigen (=Suweon), GG (H. Okamoto leg.) (NAIST); 1 ♀, 14-VI-2004, Paro-ho, Yoho-ri, Gandong-myeon, Hwacheon-gun, GW (SCNAE).

Distribution. Korea (North, Central, South), Japan (Hokkaido, Honshu, Kyushu), NE China, Russian Far East.

Notes. Listed in Korea by Cho (1957), but is without any collection data. The distribution of this species from South Korea confirmed. The Japanese species is regarded as a subspecies, ssp. *niponensis* Bates (1883: 234) of this species. Very seldom. Occurs on riversides.

(21) *Perigona (Perigona) acupalpoides* Bates, 1883

열대먼지벌레

Perigona acupalpoides Bates, 1883, Trans. R. ent. Soc. Lond., p. 264 (Japan); Yano, 1941, Nippon no Kôchû, 4(1): 26 (Korea: Quelpart Is.); Jedlička, 1964, Reichenbachia, 2(61): 272.

Perigona (Perigona) acupalpoides Bates: Kwon & Lee, 1986, Ins. Koreana, 6: 25.

Materials examined. 1 ex., 19-IX-2004, Dongweol, Mt. Gyeryongsan, Gongju-si, CN (SCNAE); 1 ex., 31-V-2002, Yeongoksa, Mt. Jirisan, Gurye-gun, JN (SCNAE).

Distribution. Korea (Central, South, Jeju), Japan (Hokkaido, Honshu, Shikoku, Kyushu), Taiwan, Oriental region.

Notes. Belongs to the subgenus *Perigona* s. str. First record for Jeju, Korea by Yano (1941), but has not yet been collected in this island. The distribution of this species from main land is confirmed at present. Occurs under bark. I examined also several specimens collected from Mt. Hikosan, Japan when I visited in 2003, and it is conspecific with Korean specimens.

The genus *Perigona* Laporte de Castelnau (1833, Étude

Ent., p. 151) is represented in all of the zoogeographical region. More than 100 species of this genus are arranged in 11 subgenera (Lorenz, 1998), two of which *Perigona* s. str. and *Trechicus* LeConte (1853, Trans. Amer. Philos. Soc., 10: 386) are distributed to the Korean Peninsula. Rather easily separates these two subgenera by the arrangement of 3 submarginal elytral punctures (in *Perigona* s. str. forming straight line, but *Trechicus* forming a triangle) and they differ also in habits. Species of this subgenus usually occur under bark or in rotting wood. However, subgenus *Trechicus* occurs in leaf litter on the ground. The Korean species need further study.

참고. 몸길이는 3.5-4 mm, 머리에는 미세한 무늬가 있으며 작은 점각이 퍼져있다. 앞가슴에 희미한 가로줄과 매우 작은 점각이 있으며, 날개홈의 점각은 뚜렷하다. 대개 나무 껍질 밑에서 생활한다.

(22) *Platynus (Platynus) adonis* (Tschitschérine, 1895)

출납작먼지벌레

Colpodes adonis Tschitschérine, 1895, Horae Soc. Ent. Ross., 29: 184-187 (Korea); Kano, 1924, Ins. world, (Konchusekai), 28(326): 351 (Korea); Yano, 1941, Nippon no Kôchû, 4(1): 33 (Korea).

Platynus perelegans Jedlička, 1960, Anns hist.-nat. Mus. natn. Hung., 52: 229 (Korea). Synonymized by Jedlička, 1963: 307.

Colpodes (Colpodes) adonis (Tschitschérine): Kwon & Lee, 1986, Ins. Koreana, 6: 32 (N. Korea); Park & Paik, 2001, Ins. Koreana, Suppl., 19: 70 (Korea).

Platynus adonis Tschitschérine: Jedlička, 1963, Reichenbachia, 1: 307 (syn.).

Materials examined. 1 ♂, 1 ♀, 3-VI-2004, Sutong, Sutong-ri, Buri-myeon, Geumsan-gun, CN (SCNAE); 1 ♂, 1 ♀, 31-V-2004, Dopari, Sutong-ri, Buri-myeon, Geumsan-gun, CN (SCNAE); 1 ♂, 1 ♀, 14-VI-2004, Auraji, Yeorang-ri, Bukmyeon, Jeongseong-gun, GW (SCNAE); 1 ♂, 1 ♀, 14-VI-2004, Seokkyo, Deoksong-ri, Jeongseon-eup, GW (SCNAE); 1 ♂, 1 ♀, 14-VI-2004, Daegi, Sukam-ri, Bukpyeong-myeon, Jeongseon-gun, GW (SCNAE); 1 ♂, 1 ♀, 14-VI-2004, Suhang-ri, Jinbu-myeon, Pyeongchang-gun, GW (SCNAE); 1 ♂, 1 ♀, 13-VI-2004, Mokgol, Samok-ri, Yeongweol-eup, GW (SCNAE); 1 ♂, 1 ♀, 13-VI-2004, Samok, Samok-ri, Yeongweol-eup, GW (SCNAE); 1 ♂, 1 ♀, 25-V-2002, Jinbu, Pyeongchang-gun, GW (SCNAE); 1 ♂, 25-V-2002, Hajang, Samcheok-si, GW (SCNAE); 3 ♂, 2 ♀, 22-V-2004, Hacheonri, Uncheon-ri, Ganjeon-myeon, Gurye-gun, JN (SCNAE).

Distribution. Korea (North, Central, South).

Notes. Belongs to the subgenus *Platynus* s. str. by the tarsomere 4 with subapical seta. Described from unknown place from the Korean Peninsula by Tschitschérine (1895). After then Jedlička (1960) described *Platynus perelegans* from Tshon-Bon-San, North Korea. Later this species was synonymized with *Colpodes adonis* Tschitschérine by himself in 1963.

This species is very easily distinguished from other species by the reddish coppery metallic on pronotum and the bright blue luster on elytra. The distribution of this species in southern part of the Korean Peninsula is confirmed. Widely distributed in mainland, but not common. Occurs in water sides of river or mountain valley. The Korean species of this group need to be defined.

참고. 이 종은 맑은 강이나 계곡의 자갈 밑에서 볼 수 있으며, 가슴은 붉은 황금색 금속광택이 있고 앞날개는 청색이거나 남색으로 쉽게 다른 종과 구별할 수 있다. 강가나 계곡의 물가에 살며, 5월에 성충으로 우화하여 교미를 한다.

(23) *Synuchus (Crepidactyla) melantho* (Bates, 1883)

검정칠납작먼지벌레

Crepidactyla melantho Bates, 1883, Trans. R. ent. Soc. Lond., p. 254 (Japan); Jacobson, 1907, Coleopt. Russ., pars 5: 324.

Calathus (Crepidactyla) silvester Bates: Habu, 1955, Bull. Nat. Inst. Agr. Sci., (C), 5: 162, 208-211 (Japan). Synonymized by Habu, 1976: 328.

Calathus (Crepidactyla) melantho Bates: Habu, 1955, Bull. Nat. Inst. Agr. Sci., (C), 5: 162, 206-208.

Synuchus melantho (Bates): Lindroth, 1956, Trans. R. Ent. Soc. London, 108: 495; Kirschenhofer, 1997, Annls hist.-nat. Mus. natn. hung., 89: 111 (N. Korea).

Synuchus (Synuchus) melantho (Bates): Habu, 1978, Platynini, Fauna Japonica, p. 328; Kwon et Lee, 1986, Ins. Korean, 6: 35 (Korea).

Synuchus (Crepidactyla) melantho (Bates): Nakane, 1963, Icon. Ins. Jap., Colore natur. edit., 2 (Col.), p. 36, pl. 18, fig. 18; Lafer, 1976, Nasekomye Dal'engo Vostoka, 43(146): 26 (Korea); Lafer, 1989, Key. Ident. Ins. Russian Far East, 3(1): 152.

Materials examined. 3♂, 4♀, 7-X-2001, Mt. Cheongrangsang, Bonghwa-gun, GB (SCNAE); 3 ex., 23-VII-1971, Mt. Seolaksan, GW (S.-M. Lee leg.) (SCNAE); 20 ex., 22-VII-1983, Sogumgan, Mt. Odaesan, GW (S.-M. Lee leg.)

(SCNAE); 11 ex., 13-VIII-2001, Unduryeong (1,000 m), Hongcheon-gun, GW (SCNAE).

Distribution. Korea (North, Central, South), Japan, China, Russian Far East.

Notes. Belongs to the subgenus *Crepidactyla* Motschulsky (1861, Etud. Ent., 10: 5), but some researchers treated as the subgenus *Synuchus* s. str. (Habu, 1976, etc.). First record for the Korean Peninsula by Lafer (1976). Later Kwon et Lee (1986) and Kirschenhofer (1997) reported it from South and North Korea. Widely distributed, but rather common.

This genus with Holarctic and Oriental distribution, containing more than 70 species, abundantly represented in eastern Asia. The treatment of supraspecific ranks of this genus is varied (cf. Lafer, 1978 & Habu, 1978). Several authors united the supraspecific ranks within a single genus *Synuchus* (Lindroth, 1956; Lorenz, 1998 etc.). However, *Crepidactyla* is treated as a full genus by Habu (1978) and Lorenz (1998), but some authors treated it as the subgenus of *Synuchus* (Lafer, 1976 etc.).

The following simple key rather easily distinguishes Korean species (based on Lafer, 1989). The Korean species need to detail.

1(2) Pronotum and elytra shiny and iridescent throughout; antennal segment 2 with 3 setae at apex; metacoxae without latero-basal seta; apical segments of labial palpi strongly dilated in male, noticeably thickened in female. Length 15.0-17.0 mm.*Sy. (Cr.) nitidus* Motschulsky(윤남작먼지벌레)

2(1) Pronotum mat in marginal gutters and basal foveae; antennal segment 2 with 1-2 setae at apex or without setae.

3(4) Metacoxae without inner seta; apical segment of labial palpi very slightly dilated towards apex in male; upper surface black, elytra iridescent, lateral margins of pronotum brownish; femora blackish. Length 13.0-15.0 mm.*Sy. (Cr.) cycloderus* Bates (붉은칠납작먼지벌레)

4(5) Metacoxae with inner seta; apical segments of labial palpi triangular dilated in male; antennal segment 2 without setae near apex. Colour as in previous species. Length 10.5-13.0 mm.*Sy. (Cr.) melantho* Bates(검정칠납작먼지벌레)

(24) *Tinoderus singularis* (Bates, 1873) 송이먼지벌레

Panagaesus singularis Bates, 1873, Trans. R. ent. Soc. Lond., p. (Japan); Chaudoir, 1878, Ann. Soc. ent. Belg., 31: 156 (Japan).

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Tinoderus singularis (Bates): Csiki, 1929, Col. Cat., 104: 363; Jedlička, 1965, Ann. Zool. Bot., 12: 7; Kwon & Lee, 1986, Ins. Koreana, 6: 49 (Korea); Lafer, 1989, Keys Id. Ins. Russian Far East, 3(1): 209; Park & Paik, 2001, Ins. Koreana, Suppl., 19: 124 (Korea).

Materials examined. 1 ♂, 10-VIII-1998, Mt. Gapjongsan, Sangju-si, GB (SCNAE);

1 ♂, 3-X-1981, Is. Ulleungdo, GB (SJNAE); 1 ♀, 28-VII-1999; 1 ♀, 29-VIII-1999, Sangju-si, GB (SJNAE); 1 ♀, 23-VII-1927, Suigen (=Suweon), GG (Yugato leg.) (NAIST); 1 ♀, 27-VI-1934, Suigen (=Suweon), GG (H. Okamoto leg.) (NAIST).

Distribution. Korea (Central, South), Japan (Honshu, Shikoku, Kyushu), NE & E China, Russian Far East.

Notes. First record for Is. Ulleungdo (=Dargelet Is.), Korea by Kwon & Lee (1986). Widely distributed, but seldom. Often attracted at light.

참고. 몸길이는 약 11 mm이며, 몸은 검정 색으로 광택이 있으며 더듬이와 입틀의 수염과 다리는 갈색이지만 넓적마디 끝은 대개 검다. 머리의 겹눈 앞쪽에 많은 점각이 있고, 짧은 길다. 앞가슴은 폭이 길며, 양쪽 가장자리는 매우 둥글면서 돌출하며 커다란 점각이 많다. 뒤쪽 모서리에는 작은 이빨이 있다. 날개홈의 점각은 매우 뚜렷하며, 날개실에는 작은 돌기와 점각이 있다. 불빛에 자주 날아온다.

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