

## 한국산 길앞잡이 (딱정벌레목, 딱정벌레과)

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## Tiger Beetles (Carabidae, Cicindelinae) of Korea

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## ABSTRACT

Tiger beetles (Carabidae: Cicindelinae) were collected in the Province of Chollabukdo including some nearby islands from April 1997 to October 2002. The specimens of ca. 500 deposited in Suncheon National University, Chonbuk National University, the Jeju Folklore and Natural History Museum, and elsewhere were also examined. As a result, Korean Cicindelinae of 18 species from 10 subgenera is reported herein. Of these, *Cicindela* (*Cylindera*) *obliquefasciata* Adams, 1817 and *Cicindela* (*Cephalota*) *chiloleuca* Fisher, 1820 are recorded newly in the Korean Peninsula. However, the distribution of *C. japana* is very doubtful in South Korea. This study also includes a key to the species, discussions on the habitats, distributions, and some ecological characteristics of Korean Cicindelinae.

**Key words :** Tiger beetles, fauna, key, new record, Korea

## 서 론

우리나라의 길앞잡이는 Kolbe (1886)가 처음으로 4종, *Cicindela chinensis* (길앞잡이), *C. laetescripta* (강변길앞잡이), *C. gemmata* (아이누길앞잡이), *C. transbaicalica* (참길앞잡이)를 보고했다. 그 후 Heyden (1887), Bates (1888), Matsumura (1905, 1931), Kano (1923), Okamoto (1924, 1925), Cho (1932) 등의 한반도산 길앞잡이 단편이 있다. Miwa (1936)는 일본과 대만 그리고 우리나라에 분포하는 길앞잡이를 정리했다.

한편, Okamoto (1925)와 조복성 (1932)도 한반도산 길앞잡이 목록을 발표했지만, 조(1932)가 보고한 *C. sexpunctata*는 동남아시아에 널리 분포하는 종으로 우리나라에는 분포하지 않는 것으로 보인다. 한편, Puchkov & Matalin (2003 in Löbl & Smetana)이 북한에서 기록한 *C. sylvatica sylvatica* Linnaeus도 분포하지 않을 것으로 생각한다.

길앞잡이 성충과 유충은 포식성으로, 유충은 대개 작은 갑각류, 지네류, 거미류, 잠자리, 나비, 파리 등을 포식한다. 성

충은 개미, 파리, 작은 딱정벌레류, 진딧물, 거미 등을 잡아먹는다 (Balduf 1935). 성충은 토양 속에 알을 따로따로 낳으며, 부화한 유충은 그 자리에서 땅에 원통형 구멍을 파고 생활한다. 3령기가 지나면 구멍을 막고, 땅속에서 번데기가 된다 (Balduf 1935). 길앞잡이 천적은 오소리나 새, 그리고 잠자리 등이 있다 (Graves 1962).

길앞잡이는 전 세계에 약 2,500여종이 분포하며, 한반도에는 Cicindelini (길앞잡이 족), *Cicindela* (길앞잡이 속) 1속만 분포한다. *Cicindela*속의 분류체계는 학자에 따라 다르다 (Wiesner 1992, Puchkov & Matalin 2003 in Löbl & Smetana, etc.). Rivalier (1950, 1971)는 *Cicindela*속의 여러 아속을 독립한 속으로 구분했지만, 그의 분류체계는 수컷 생식기 (aedeagus)에서 internal sac의 형태로 속을 나누기 때문에 외부형태로는 구별하기 어렵다. 여기서는 넓은 의미로 *Cicindela*속을 다루며, 한국곤충명집 (1994)의 길앞잡이 목록을 수정했다. 우리말 명칭이 없는 종은 새로운 이름을 붙였다.

그 동안 남한에서 채집한 개체와 더불어 순천대학교 (SCNAE), 제주도민속자연사박물관 (JFNHM), 그리고 전북대학교 (JBNAE)에 소장한 길앞잡이를 정리한 결과 총 18종을 보고한다. 이 중에서 2종, *Cicindela obliquefasciata* (화충

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깔다구길앞잡이: 신칭)와 *C. chiloleuca* (무너길앞잡이: 신칭)는 우리나라에서 처음으로 기록하며, *C. brevopilosa* (개야길앞잡이)와 *C. inspecularis* (흰테길앞잡이) 그리고 *C. yuasai* (백제흰테길앞잡이)는 아직 채집되지 않았다.

한국산 길앞잡이 종 검색표

(A key to the species in Korean Peninsula)

- 1(2) 앞가슴의 등판 앞쪽 가장자리에 센털이 있으며, 위에서 보면 앞가슴의 옆판(prothoracic episternum)이 보인다. .... *C. (Abroscelis) anchoralis* (닷무늬길앞잡이)
- 2(1) 앞가슴의 등판 앞쪽가장자리는 짧은 털이 있으며 막질이고, 위에서 보면 앞가슴의 옆판은 보이지 않는다.
- 3(26) 뺨(gena)에는 센털이 없다.
- 4(5) 뒷다리 넓적마디 밑면에는 낚시바늘모양의 센털이 줄지어 있으며, 윗입술에는 4개의 센털이 있다. .... *C. (Myriochile) speculifera* (쇠길앞잡이)
- 5(4) 뒷다리 넓적마디의 센털은 보통이다.
- 6(7) 윗입술에는 5개의 이빨이 있으며 가운데 것이 매우 크다. .... *C. (Sophiodela) chinensis* (길앞잡이)
- 7(6) 윗입술에는 1-3개의 이빨이 있으며 가운데 것은 약간 돌출한다.
- 8(11) 앞가슴의 옆판에 센털은 없지만, 있을 때는 안쪽에만 약간 있다. 앞날개는 광택이 없고, 날개는 뒤쪽으로 넓어지며 어깨무늬가 없다. 앞가슴의 옆판 앞쪽에는 센털이 없으며, 배의 양쪽 가장자리에도 가는 털이 없다.
- 9(10) 앞날개의 가운데무늬는 똑바르면서 짧으며, 윗입술은 검정색이다. .... *C. (Cylindela) gracilis* (깔다구길앞잡이)
- 10(9) 앞날개의 가운데무늬는 비스듬하면서 길며, 윗입술은 노랑색이다. .... *C. (Cylindela) obliquefasciata* .... (화홍깔다구길앞잡이: 신칭)
- 11(8) 앞가슴의 옆판에는 센털이 매우 많다.
- 12(13) 윗입술은 황색이지만 가장자리는 흑색이며, 가운데 1개의 이빨이 있고 센털은 6개이다. 앞가슴 배판 양쪽에는 센털이 줄을 지어있다. 앞날개에는 황색의 줄무늬가 있으며, 가운데 무늬의 끝은 구름모양이다. .... *C. (Cephalota) chiloleuca* (무너길앞잡이: 신칭)
- 13(12) 아래입술수염(labial palpus)과 다리의 도래마디(trochanter)는 검정색이다.
- 14(15) 아래입술수염의 끝마디는 검정색이지만 나머지 마디와 도래마디는 황색이다. 앞날개에는 3개의 무늬가 있는데, 각 무늬는 가늘며 바깥쪽으로 갈라진다. .... *C. (Eugrapha) elisae* (꼬마길앞잡이)
- 15(14) 앞날개에 3개의 무늬가 있는데, 무늬는 굵으면서 둥글거나 때로는 날개끝무늬(apical lunule)가 초생달모양이다.
- 16(17) 윗입술은 삼각형이며 가운데 뾰족한 이빨이 1개 있다. 앞날개의 좁쌀모양 돌기나 점각은 분명하지만, 표

- 면은 평평하다. .... *C. (Cicindela) sachaliensis* (산길앞잡이)
- 17(16) 윗입술은 짧아서 옆으로 길쭉하며, 중앙의 이빨은 명확하지 않다.
- 18(19) 앞날개 길이는 머리와 가슴을 합한 길이보다 2배 이상이며 앞날개 무늬는 황색으로 매우 굵다. .... *C. (Cicindela) lewisii* (큰무늬길앞잡이)
- 19(18) 앞날개 길이는 머리와 가슴을 합한 길이의 약 2배이며 앞날개 무늬는 변화가 많다.
- 20(21) 앞날개의 끝무늬(apical lunule)는 둥글다. .... *C. (Cicindela) japana* (좁길앞잡이)
- 21(20) 앞날개의 끝무늬는 초생달모양이다.
- 22(23) 몸은 적갈색에서 흑갈색으로 광택은 거의 없으며, 앞날개의 가운데 무늬(middle band)는 날개 가장자리 부근까지 도달한다. .... *C. (Cicindela) gemmata* (아이누길앞잡이)
- 23(22) 몸의 색깔은 다르지만 금속광택이 있으며, 날개의 가운데 무늬는 날개 가장자리에 붙어 있다.
- 24(25) 머리와 가슴은 녹색이고 앞날개는 적색으로 매우 강한 금속광택이 있다. .... *C. (Cicindela) coerulea nitida* (주홍길앞잡이)
- 25(24) 몸에는 구리빛 광택이 있으며, 암컷은 앞날개 위쪽에 검정색의 둥글며 오목하게 들어간 부분이 있다. 앞날개 어깨무늬(humeral lunule)가 끊어져서 무늬는 2개인 것은 아종 ssp. *japanensis* (뜯길앞잡이), 어깨무늬는 서로 연결하여 초생달모양은 아종 ssp. *hamifasciata* (참뜯길앞잡이)로 다르다. .... *C. (Cicindela) transbaicalica* (참길앞잡이)
- 26(3) 뺨(gena)에는 센털이 있다.
- 27(32) 윗입술은 옆으로 길쭉하며 3개의 이빨이 있고, 앞날개에 황색 줄이 있다.
- 28(29) 암컷 앞날개의 거울무늬(mirror)는 작으며 광택이 없는 붉은색이다. 가슴옆판(mesepisterna)의 교미홈(coupling sulci) 위쪽에는 작은 홈이 있다. .... *C. (Callytron) inspecularis* (흰테길앞잡이)
- 29(28) 암컷 앞날개의 거울무늬(mirror)는 금속광택이 있다.
- 30(31) 앞날개의 거울무늬는 등자색(疰)의 금속광택이 있으며, 가슴옆판의 교미홈에는 분명한 홈이 있다. .... *C. (Callytron) nivicineta* (바다흰테길앞잡이: 신칭)
- 31(32) 앞날개의 거울무늬는 푸른색을 띤 검정색으로 광택이 있으며, 가슴옆판의 교미홈에는 홈이나 구멍이 없다. .... *C. (Callytron) yuasai yuasai* (백제흰테길앞잡이)
- 32(27) 윗입술에는 1개의 이빨만 있고, 앞날개에는 3개의 무늬가 있거나 또는 없다.
- 33(34) 앞날개에는 무늬가 없으며, 앞가슴의 밑면에는 센털이 매우 많지만, 머리방패(clypeus)에는 센털이 없다. .... *C. (Calomera) brevopilosa* (개야길앞잡이)

34(33) 앞날개에는 무늬가 있으며; 앞가슴의 밑면에는 센털이 없지만, 머리방패 양쪽에는 센털이 있다. ....  
.....*C. (Chaetodera) laetescrpta* (강변길앞잡이)

**한국산 길앞잡이 목록**  
**(List of Korean Cicindelinae)**

The genus *Cicindela* (sensu lato) includes more than 1,000 known species of tiger beetles worldwide with 85 subgenera, of which many are ranked by other authors as distinct genera, see Revalier (1950, 1971), Wiesner (1992), Lorenz (1998, 2005), and Puchkov & Matalin (2003 in Löbl & Smetana).

The Korean species are arrayed in 10 subgenera. A key to these subgenera is not included here because such key is non-existent and identifications rely mostly on character states of the internal sac of the male genitalia (see Rivalier 1950, etc).

Here, we adopt a broad definition (sense), assigning all of these species to a single genus, *Cicindela*.

The abbreviations used herein for provincial names of Korea are as follows: CB-Chungcheongbuk-do, CN-Chungchongnam-do, GB-Gyeongsanbuk-do, GG-Gyeonggi-do, GN-Gyeongsangnam-do, GW-Gangweon-do, JB-Jeonllabuk-do, JJ-Jeju-do, JN-Jeonllanam-do.

JFNHM-Jejudo Folklore and Natural History Museum, Jeju.  
SCNAE-Sunchon National University, Department of Applied Biology, Suncheon.

JBNAE-Jeonbuk National University, Department of Agrobiology, Jeonju.

1. *Cicindela (Abroscelis) anchoralis* Chevrolat, 1845  
뚫무늬길앞잡이

*Cicindela anchoralis* Chevrolat, 1845, Revue zool., 3: 97; Cho, 1932, Jour. Chosen Nat. Hist., 14: 59 (Korea); Kim, 1978, Distribution atlas ins. Korea, 2. Coleoptera, p. 1.

*Cicindela anchoralis punctatissima* Horn [sic]: Miwa, 1936, Fauna Nipponica, (10), 8(4): 77.

*Cicindela (Abroscelis) anchoralis punctatissima* Horn [sic]: ESK & KSAE, 1994, Check list of insects from Korea, p. 117.

*Cicindela (Abroscelis) anchoralis* Chevrolat: Nakane, 1976, Check-list of Coleoptera of Japan, 3: 7.

*Abroscelis anchoralis punctatissima* (Schaum): Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 99.

**Materials examined.** 3♂, 2♀, 25-VII-1995; 3♂, 1♀, 12-VII-1998, Gusipo, Gochang-gun, JB (SCNAE); 4♂, 12-VII-1998, Gusipo, Gochang-gun, JB (JBNAE).

**Distribution.** Korea, Japan, Southern China, Taiwan, and Vietnam.

**Notes.** First record for Korea by Cho (1932). This oriental species is very rare and occurs locally in the Korean Peninsula. This subgenus is rather easily distinguished by the prothoracic episternum seen from above. Only one species occurs from the Korean Peninsula.

**참고.** Cho (1932)가 처음으로 보고했으며, 한반도에 분포하는 것은 아종 *ssp. punctatissima* Schaum, 1863으로 기록하고 있다 (한국곤충명집 1994). 일본에 분포하는 아종 *ssp. punctatissima*는 앞날개의 노란 줄무늬가 매우 가늘지만, 원아종 *anchoralis* s. str.는 무늬가 굵고 뚜렷하다. 앞날개의 줄무늬가 가는 종류는 현재까지 채집하지 못했으며, 우리나라에는 분포하지 않을 것으로 생각한다. 바닷가의 흰 모래밭에서 볼 수 있지만, 일부 특정 지역에만 분포한다.

2. *Cicindela (Callytron) inspecularis* W. Horn, 1904  
흰테길앞잡이

*Cicindela nivicineta inspecularis* W. Horn, 1904, Dtsch. ent. Z., p. 87; Okamoto, 1925, Zool. Mag. 37: 410 (Korea); Cho, 1932, Jour. Chosen Nat. Hist., 14: 56.

*Cicindela nivicineta yodo* Nakane, 1955, Sci. Rept. Saikyō Univ., 2(A): 27.

*Callytron inspeculare* (Horn): Hori & Cassola, 1989, Jpn. J. Ent., 57(3): 507; Wiesner, 1992, Checklist of tiger beetles, p. 221; ESK & KSAE, 1994, Check list of insects from Korea, p. 117; Ashida & Kitayama, 1998, Ent. Rev. Japan, 53(1): 15.

*Callytron inspeculare inspeculare* W. Horn: Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 101 (Korea).

**Materials examined.** Not available.

**Distribuiton.** Korea, Japan, China, and Taiwan.

**Notes.** First record for Korea by Okamoto (1925) as *C. nivicineta inspecularis* W. Horn, but has not yet been collected from southern part of the Korean Peninsula. This species is usually found on the muddy sand shore around the reed field from the mouth of river (Ashida & Kitayama 1998). The record of *C. nivicineta inspecularis* from Mokpo, southernmost west of the Korean Peninsula by Okamoto (1925) was probably overlooked *C. nivicineta* Horn.

**참고.** Okamoto (1925)가 보고한 이후 아직까지 채집한 기록은 없다. 대개 하구나 바닷가의 진흙이 있는 물가에서 산다.

3. *Cicindela (Callytron) nivicincta* Chevrolat, 1845

바다흰테길앞잡이 (신칭)

*Cicindela nivicincta* Chevrolat, 1845, Revue zool., 8: 98; Miwa, 1936, Fauna Nipponica, (10), 8(4): 79; Nakane, 1976, Check-list of Coleoptera of Japan, 3: 6 (S. Korea).

*Callytron nivicinctum* (Chevrolat): Hori & Cassola, 1989, Jpn. J. Ent., 57(3): 511; Wiesner, 1992, Checklist of Tiger beetles, p. 221; Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 101.

**Material examined.** 1 ♀, 13-VII-1999, Is. Munyeo-do, JB (JBNAE); 3 ♂, 3 ♀, 17-VII-2002, Hadong, GN (SCNAE).

**Distribuiton.** Korea (South), Japan (Ryukyu), Southern China, and Vietnam.

**Notes.** Listed from the Korean Peninsula by Nakane (1976), but the earlier reference could not be traced. Later this species was also recorded from Korea by Kim (1978: 4 & photo CI3b). The photograph of this species is overlooked *C. yuasai* Nakane (Hori & Cassola 1989: 512). The distribution of this species from the Korean Peninsula is confirmed. This oriental species is rare, locally distributed, and occurs from sand or sandy soil near seashore. In Hadong, *C. nivicincta* is usually found on the mouth of sand shore and partially sympatric with *C. elisae*, *lewisi*, *transbaicalica*, and *laetescripta*.

**참고.** 6월에서 8월 사이에 하구나 바닷가의 모래 또는 모래가 많은 진흙 지대에서 볼 수 있다. 더 자세한 것은 Hori & Cassola (1989)를 참조하기 바란다.

4. *Cicindela (Callytron) yuasai yuasai* Nakane, 1955

백제흰테길앞잡이

*Cicindela yuasai* Nakane, 1955, Scient. Rept. Saikyo Univ., 2 (A): 26.

*Cicindela yuasai miyakejimana* Nakane, 1961, Fragm. Coleopt., 1: 3.

*Cicindela nivicincta* Chevrolat: Kim, 1978, Distribution atlas of insects, p. 4.

*Cicindela (Callytron) yuasai* Nakane: Nakane, 1963, Icon. Ins. Jap., Colore nat. ed., 2 (Col.), p. 2; Nakane, 1976, Check-list of Coleoptera of Japan, 3: 6.

*Callytron yuasai* (Nakane): Wiesner, 1992, Checklist of tiger beetles, p. 221.

*Callytron yuasai yuasai* (Nakane): Hori & Cassola, 1989, Jpn. J. Ent., 57(3): 512 (Korea); ESK & KSAE, 1994, Check list of insects from Korea, p. 117; Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 101.

**Material examined.** Not available. Incheon City (after Hori & Cassola 1989).

**Distribuiton.** Korea and Japan.

**Notes.** First record for South Korea by Hori & Cassola (1989), but has not yet been collected from the southern part of the Korean Peninsula. Occurs at saline habitats (sea shore, estuary, and tidal mud flats). For more detail, see Hori & Cassola, 1989.

**참고.** 이 종은 흰테길앞잡이와 매우 비슷하지만, 앞날개 가장자리의 흰 테가 날개 끝 부분에서 끊어져 쉽게 구별할 수 있다. 7월부터 9월 사이에 바닷가의 모래밭 부근의 바위가 많은 곳에서 볼 수 있다. 일본 류큐지방과 대만에 분포하는 것은 아종 *ssp. okinawensis* Hori & Cassola (1989)로 다룬다.

5. *Cicindela (Calomera) brevipilosa* Horn, 1908

개야길앞잡이

*Cicindela brevipilosa* Horn, 1908, Deut. ent. Zts., p. 33; Miwa, 1936, Fauna Nipponica, (10), 8(4): 62; Mandl, 1942, Mitt. münch. Ent. Ges., 32: 87; Rivalier, 1950, Rev. Fr. Entomol., 17(4): 244; Kim, 1978, Distribution atlas ins. Korea, 2. Coleoptera, p. 1; Mandl, 1981, Koleopt. Rdsch., 55: 37.

*Cicindela kaiyaensis* Kano & Cho, 1933, J. Chosen nat. Hist. soc., 15: 11 (Korea).

*Lophyridia brevipilosa kaiyaensis* Kano & Cho: Wiesner, 1992, Checklist of the tiger beetles, p. 152.

*Callytron brevipilosa* (W. Horn): ESK & KSAE, 1994, Check list of insects from Korea, p. 117.

*Calomera brevipilosa kaiyaensis* Kano & Cho: Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 99.

**Materials examined.** Not available. Hongcheon (Kano & Cho 1933); Daegu City (Kim 1978).

**Distribuiton.** Korea and China.

**Notes.** Described from central part of the Korean Peninsula by Kano & Cho (1933) as *C. kaiyaensis*, however, this species was treated as a junior synonym of this species by Miwa (1936). Divided into three subspecies, of which subspecies *kaiyaensis* occurs in South Korea (Mandl 1942, Puchkov & Matalin 2003 in Löbl & Smetana). Very rare in South Korea. Occurs locally near the sand ground in river beds. Adults are often attracted to light. The second author examined one specimen collected by light trap which is deposited in the Department of Biology, Gyeongsang National University.

**참고.** 몸길이는 10-16 mm로 앞날개에 무늬가 없고, 윗입술에는 불규칙하게 10개의 센털이 있다. 매우 드문 종으로

강가의 모래사장이나 평지에서 볼 수 있다. 우리나라에 분포하는 것은 아종 *kaiyaensis* Kano & Cho로 다루며, 날개에 흰 무늬가 없어서 다른 종과 쉽게 구별할 수 있다. 한편, 중국 남부 Fujian (Fukien)지방에는 아종 *ssp. klapperichi* Mandl (1942, Mitt. münch. Ent. Ges., 32: 87), 중국 Shandong지방에 분포하는 것은 원아종 *ssp. brevipilosa*로 다룬다 (Mandl 1942, Puchkov & Matalin 2003 in Löbl & Smetana).

6. *Cicindela (Cephalota) chiloleuca* Fischer, 1820  
무늬길앞잡이 (신칭)

*Cicindela chiloleuca* Fischer, 1820, Entomogr. Imp. Rossici, 1: 5.

*Cicindela chiloleuca* Fischer: Horn, 1891 in Horn & Roeschke, Monogr. pal. Cicind., p. 121; Horn, 1926, Col. Cat., 86: 242; Horn, 1930, Lingnan Sci. Jour. China, 9(4): 406.

*Cephalota (Taenidia) chiloleuca* (Fischer): Wiesner, 1992, Checklist of the tiger beetles, p. 174; Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 102.

**Materials examined.** 20 ex., 22-VI-1995, Is. Munyeo-do, JB (SCNAE); 5 ♂, 8 ♀, 23-VI-1995, Is. Munyeo-do, JB (JBNAE); 1 ♂, 3 ♀, 31-VII-1996, Is. Sinsi-do, JB (JBNAE); 17 ♂, 8 ♀, 6-VI-2002, Mandol-ri, Gochang-gun, JB (JBNAE).

**Distribution.** Korea, China, Mongolia, Russia (European Territory, Siberia), Kazakhstan, Turkestan, Hungary, Bulgaria, Moldavia, Romania, and Ukraine.

**Notes.** New to Korea. General habitus; refer to plate. Body rather large, about 15 mm; Head blackish blue, without hairs; thorax metallic purplish luster, with many white hairs; elytra bluish black with yellowish maculae and bluish punctures, lateral band and lunules yellow; mandible yellow except apical half black; basal 4 segments of antennae metallic; legs metallic luster with many white hairs. Distinguished by the shape of labrum with 6 setae; elytra with yellowish stripe and end of middle band with scattered yellow maculations and bluish punctures, with a subsutural row of contrasting green foveae; mettalic bluish femora. This species occurs in salty soil on plains near sea shore. Rare and local species from South Korea. In Munyeodo, *C. chiloleuca* is usually found on the muddy sand shore and partially sympatric with *C. elisae*, *nivicincta*, and *speculifera*.

**참고.** 우리나라에서 처음 기록한다. 6월에서 10월 사이에 서해안 바닷가의 염전지대나 진흙땅에서 볼 수 있다. 날개 무늬로 쉽게 구분할 수 있으며, 무너도는 같은 장소에서 *C. elisae* (꼬마길앞잡이), *nivicincta* (바다흰테길앞잡이: 신칭)와 *speculifera* (쇠길앞잡이)를 함께 채집했다. 우리말 명칭은 처

음으로 채집한 장소인 무너도에서 따왔다.

7. *Cicindela (Chaetodera) laetescrpta* Motschulsky, 1860  
강변길앞잡이

*Cicindela laetescrpta* Motschulsky, 1860, Coléopt. Sibérie orient. et Amour, 2: 88; Kolbe, 1886, Archiv. f. Naturg., 52: 163 (Korea); Horn & Roeschke, 1891, Monogr. pal. Cicind., p. 163; Jacobson, 1905, Beetles of Russia, p. 193; Okamoto, 1925, Zool. Mag. (Japan), 37: 416; Matsumura, 1931, Illust. Common Ins. Jpn., 3: 2; Cho, 1932, Jour. Chosen Nat. Hist., 14: 59; Miwa, 1936, Fauna Nipponica, (10), 8(4): 63; Kim, 1978, Distribution atlas ins. Korea, 2. Coleoptera, p. 12.

*Cicindela semenovi* Dokhtoureff, 1888, Horae Soc. Ent. Ross., p. 142.

*Cicindela (Chaetostyla) laetescrpta* Motschulsky: Lafer, 1978, Biol. nek. v. v. pol. nasek. Dal. Vostocka, p. 16.

*Cicindela (Chaetodera) laetescrpta* Motschulsky: Nakane, 1976, Check-list of Coleoptera of Japan, 3: 7; ESK & KSAE, 1994, Check list of Insects from Korea, p. 117.

*Cicindela (Tribonophora) laetescrpta* Motschulsky: Nakane, 1963, Icon. Ins. Jap., Colore nat. ed., 2 (Col.), p. 4.

*Cicindela (Laphyra) laetescrpta* Motschulsky: Kryzhanovskij et al., 1995, Checklist of ground-beetles of Russia, p. 26.

*Chaetodera laetescrpta* (Motschulsky): Wiesner, 1992, Checklist of the tiger beetles, p. 167.

*Chaetodera laetescrpta laetescrpta* Motschulsky: Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 103.

**Distribuiton.** Korea, Japan, China, Russian Far East, and Mongolia.

**Notes.** First record for the Korean Peninsula by Kolbe (1886). Widely distributed in mainland and rather common. This species occurs on white sandy areas along small to large rivers. Sometimes, adults are attracted to light. Divided into three subspecies (Wiesner 1992), of which nominotypical subspecies *laetescrpta* s. str. occurs in South Korea.

**참고.** Kolbe (1886)가 처음 기록하였으며, 전국에 분포한다. 바닷가나 커다란 강가의 모래밭에서 볼 수 있으며, 가끔 불빛에 날아온다. 섬진강 하구 모래밭에는 꼬마길앞잡이 (*C. elisae*), 큰무늬길앞잡이 (*C. lewisii*), 참길앞잡이 (*C. transbaicalica*)가 같은 장소에 서식한다. 일본 큐슈지방은 아종 *kiushuensis* Mandl (1981), 류큐지방은 아종 *circumpictula* W. Horn (1938)가 분포하지만, 광택이나 반문의 차이로 아종을 구별할 필요는 없다고 생각한다.

8. *Cicindela (Cicindela) coerulea nitida* Lichtenstein,  
1796 주홍길앞잡이 (극동길앞잡이)

*Cicindela nitida* Lichtenstein, 1796, Catalogus musei Zoologici ditissimi Hamburgi, ed. 1: 32.

*Cicindela tricolor* Adams, 1817, Mem. Soc. Nat. Mosc., 5: 278; Horn, 1891, Monogr. pal. Cicind., p. 47; Kano, 1923, Ins. world, (Konchusekai), 27: 378; Kano, 1924, Ins. world, (Konchusekai), 28: 160; Lafer, 1978, Biol. nek. v. v. pol. nasek. Dal. Vostocka, p. 14.

*Cicindela hybrica nitida* Lichtenstein: Okamoto, 1925, Zool. Mag. (Japan), 37: 414 (Korea); Cho, 1932, Jour. Chosen Nat. Hist., 14: 57; Miwa, 1936, Fauna Nipponica, (10), 8(4): 43; Wu, 1937, Cat. Insect. Sinensium, 3: 15; Kim, 1978, Distribution atlas ins. Korea, 2. Coleoptera, p. 11.

*Cicindela (Cicindela) coerulea shantungensis* Mandl: Kwon & Lee, 1986, Ins. Koreana, 6: 2; ESK & KSAE, 1994, Check list of Insects from Korea, p. 117.

*Cicindela (Cicindela) nitida nitida* Lichtenstein: Kryzhanovskij *et al.*, 1995, Checklist of ground-beetles of Russia, p. 26.

*Cicindela (Cicindela) coerulea nitida* Lichtenstein: Wiesner, 1992, Checklist of the tiger beetles, p. 117; Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 104.

**Materials examined.** 1 ♂, 1 ♀, 30-VIII-1975, Gyehwado, Gimje-gun (SCNAE).

**Distribution.** Korea, China, Mongolia, and Russia (Transbaicalia, Siberia, Far East).

**Notes.** First record for Korea by Kano (1923) as *C. tricolor* Adams. Very rare in South Korea, but widely distributed in North Korea. Divided into several subspecies, of which subspecies *nitida* occurs in the Korean Peninsula. However, this subspecies was treated as a full species by Kryzhanovskij *et al.* (1995) and divided into two forms.

**참고.** Kano (1923)가 처음 기록했으며, 학자에 따라 *C. coerulea* Pallas 1777의 아종(Lafer 1989, Werner 1991 등) 또는 독립한 종으로 다룬다(Kryzhanovskij *et al.* 1995). 이 종은 북한 지방에 널리 분포하지만, 남한에는 매우 희귀한 종이다. 몸길이 14-18 mm, 머리와 가슴은 청색과 녹색의 금속 광택이 있으며, 앞날개는 적색으로 선명한 황색 줄무늬가 있는 예쁜 종으로 어깨무늬는 2개로 나뉘어 있다. 주홍길앞잡이는 반문에 차이가 많아서 여러 아종으로 구분한다. 원아종 *ssp. coerulea* Pallas는 몸은 짙은 청색으로 무늬가 없지만, 다른 아종들은 노란 무늬가 있다. 우리말 명칭은 '주홍길앞잡이' (한국동물명집 1968)를 쓰며, 한국곤충명집(1994)에서 '극동길앞잡이' (*C. coerulea shantungensis* Mandl)는 폐기한다.

9. *Cicindela (Cicindela) gemmata* Faldermann, 1835  
아이누길앞잡이

*Cicindela gemmata* Faldermann, 1835, Mém. Acad. St.-Petersb., 2: 350.

*Cicindela aino* Lewis, 1891, Ent. mon. Mag., 27: 20.

*Cicindela aino shikokuana* Oike, 1939, Trans. Kansai Ent. Soc., 8: 15.

*Cicindela japana* Motschulsky: Okamoto, 1924, Bull. Agr. Expt. Sta. Gov.-Gen. Chosen, 1(2): 159. Misidentification.

*Cicindela sylvatica* var. *gemma* Faldermann: Kano, 1923, Insect world, 27: 378.

*Cicindela gemmata* Faldermann: Kolbe, 1886, Archiv f. Naturgesch., 52: 164 (Korea); Heyden, 1887, Horae Soc. ent. Rossicae, 29: 245; Bates, 1888, Proc. Zool. Soc. Lond., 1888: 368; Jacobson, 1905, Beetles of Russia, p. 188; Kano, 1924, Insect world, 28: 157; Okamoto, 1925, Zool. Mag., 37: 411; Cho, 1932, Jour. Chosen Nat. Hist., 14: 56; Miwa, 1936, Fauna Nipponica, (10), 8(4): 44; Mori & Cho, 1938, Zool. Mag. (Japan), 50(1): 28; Nakane, 1955, Sci. Rept. Saikyo Univ., 2(A): 25; Cho, 1957, Hum. & Sci., Nat. Sci., Korea Univ., 2: 177; Cho, 1969, Illust. Encyclop. Fau. Flo. Korea, 10, Insecta 2: 108; Nakane, 1976, Check-list Col. Japan, 3: 2; Lafer, 1978, Biol. nek. v. v. pol. nasek. Dal. Vostocka, p. 7; Kim, 1978, Distribution atlas ins. Korea, 2. Coleoptera, p. 5.

*Cicindela gemmata gemmata* Faldermann: Kwon & Lee, 1986, Ins. Koreana, 6: 2; ESK & KSAE, 1994, Check list of insects from Korea, p. 117.

*Cicindela (Cicindela) gemmata* Faldermann: Nakane, 1963, Icon. Ins. Jap., Colore nat. ed., 2 (Col.), p. 3; Nakane, 1976, Check-list of Coleoptera of Japan, 3: 1; Wiesner, 1992, Checklist of the tiger beetles, p. 111; Kryzhanovskij *et al.*, 1995, Checklist of ground-beetles of Russia., p. 27; Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 105.

**Materials examined.** 1 ♀, 24-IV-1997, Pyeongdae-ri, Jejudo (SCNAE); 1 ex, 1-VI-1991, Is. U-do, Bukjeju-gun, JJ (JFNHM); 1 ex, 19-IV-1987, Hamdeok, Bukjeju-gun, JJ (JFNHM); 1 ex, 20-VI-1982, Donnaeko, Seogwipo-si, JJ (JFNHM); 1 ♂, 24-V-1996, Okcheon, CB (SCNAE); 1 ♂, 19-V-2001, Mt. Weolaksan, Jecheon CB (SCNAE); 1 ♂, 2 ♀, 28-IV-1996; 1 ♀, 5-V-1996, Mt. Hwayasan, GG (SCNAE); 1 ♂, 1 ♀, 3-V-1996, Eonyang, GN (SCNAE); 1 ♀, 22-VI-2001, Mt. Seonunsan, Gochang-gun, JB (SCNAE); 1 ♂, 25-V-1996, Jinan, JB (JBNAE); 2 ♀, 19-V-1999, Mt. Daedunsan, JB

(JBNAE); 1♂, 1♀, 22-V-1999, Mt. Jeoksangsan, Muju, JB (JBNAE); 1♀, 11-IV-2002, Mt. Maisan, Jinan, JB (JBNAE); 1♂, 10-IV-1986, Mt. Mohusan, Hwasun-gun, JN (SCNAE); 1♀, 15-V-1988, Hwasun, JN (SCNAE); 1♂, 1-IV-1989, Suncheon, JN (SCNAE); 1♂, 1♀, 30-V-1987, Mt. Baekunsan, Gwangyang-gun, JN (SCNAE).

**Distribution.** Korea, Japan, China, Russian Far East, and Mongolia.

**Notes.** First record for the Korean Peninsula by Kolbe (1886). Widely distributed, including Jeju. Very common species. On the other hand, Heyden (1887) noted *C. japonica* Guérin var. *japonica* De Haan (= *C. japana* Motschulsky 1857, Etud. Ent., 6: 108) from Korea, but it is probably an error of this species.

**참고.** Kolbe (1886)가 처음으로 보고했으며, 제주도를 포함하여 전국에 분포하며 매우 흔한 종으로 강가나 풀밭에서 볼 수 있다. 중국의 남부지역 (Gansu)에 아종 *potanini* Dokhtouroff (1888), 일본에 분포하는 것은 앞날개 가운데 무늬가 가늘고 경사가 심하여 아종 *ainu* Lewis (1891)로 다룬다 (Nakane 1955).

#### 10. *Cicindela (Cicindela) japana* Motschulsky, 1857 좁길앞잡이

*Cicindela japana* Motschulsky, 1857, Etud. Ent., 6: 108 (Japan).

*Cicindela japonica* Guérin var. *japonica* de Haan: Heyden, 1887, Horae Soc. ent. Rossicae 29: 245 (Korea).

*Cicindela japana* Motschulsky: Jacobson 1905, Beetles of Russia, p. 188 (Korea); Okamoto, 1925, Zool. Mag. (Japan), 37: 410-411 (Korea: Suweon); Cho, 1932, Jour. Chosen Nat. Hist., 14: 55 (Korea); Miwa, 1936, Fauna Nipponica, (10), 8 (4): 39 (Korea: Quelpart Is.); Kim, 1978, Distribution atlas ins. Korea, 2. Coleoptera, p. 8 (Korea).

*Cicindela (Cicindela) japana* Motschulsky: Nakane, 1963, Icon. Ins. Jap., Colore nat. ed., 2 (Col.), p. 3 (Korea); Nakane, 1976, Check-list of Coleoptera of Japan, 3: 1 (Korea); Lafer, 1978, Biol. nek. v. v. pol. nasek. Dal. Vostočka, p. 8 (Korea); Kwon & Lee, 1986, Ins. Koreana, 6: 2 (Korea); ESK & KSAE, 1994, Check list of Insects from Korea, p. 117 (Korea); Kryzhanovskij *et al.*, 1995, Checklist Ground-beetles of Russia., p. 27.

*Cicindela (Cicindela) japana japana* Motschulsky: Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 106 (Korea).

**Materials examined.** Not available.

**Distribution.** Korea, Japan, NE China, and Russian Far East.

**Notes.** First record for Korea by Heyden (1887) as *C. japonica* Guérin var. *japonica* De Haan, but has not yet been collected from southern part of the Korean Peninsula. Okamoto (1924) also listed *C. japana* from Quelpart island (=Jeju), but this species was a misidentification of *C. gemmata* (Okamoto 1925: 411). The distribution of this species from Korea is very doubtful. The record of this species from Korea is probably an error of *C. gemmata*.

#### 11. *Cicindela (Cicindela) lewisii* Bates, 1873 큰무늬길앞잡이

*Cicindela lewisii* Bates, 1873, Trans. R. ent. Soc. Lond., p. 226-227 (Japan).

*Cicindela lewisi* [sic] Bates: Okamoto, 1924, Bull. Agr. Expt. Sta. Gov.-Gen. Chosen, 1(2): 160 (Korea); Okamoto, 1925, Zool. Mag. (Japan), 37: 414; Matsumura, 1931, Illust. Common Ins. Jpn., 3: 2; Cho, 1932, Jour. Chosen Nat. Hist., 14: 58; Miwa, 1936, Fauna Nipponica, (10), 8(4): 45; Wu, 1937, Cat. Insect. Sinensium, 3: 15; Mori & Cho, 1938, Zool. Mag. (Japan), 50(1): 28; Kim, 1978, Distribution atlas ins. Korea, 2. Coleoptera, p. 13.

*Cicindela (Cicindela) lewisi* [sic] Bates: Nakane, 1963, Icon. Ins. Jap., Colore nat. ed., 2 (Col.), p. 3; Nakane, 1976, Check-list of Coleoptera of Japan, 3: 3; Kwon & Lee, 1986, Ins. Koreana, 6: 2; ESK & KSAE, 1994, Check list of Insects from Korea, p. 117.

*Cicindela (Cicindela) lewisii* Bates: Wiesner, 1992, Checklist of the tiger beetles, p. 118; Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 106.

**Materials examined.** 15 ex., 17-VII-2002, Daesan-ri, Bukmyeon, Changweon-si, GN (SCNAE); 1♂, 25-VIII-2001; 3♂, 3♀, 11-IV-2002, Hadong, GN (SCNAE); 1♂, 1♀, 10-IV-2002; 6♂, 6♀, 25-VIII-2001, Jinweol, Jinsang-myon, Gwangyang-gun (SCNAE).

**Distribution.** Korea, Japan, and Northern China.

**Notes.** First record for Quelpart Island (=Jeju, Cheju), Korea by Okamoto (1924), but has not yet been collected from this island. Widely distributed in mainland, but seldom. Occurs in sand or mud flats at estuary or riversides. Often abundant locally.

**참고.** 제주도에서 Okamoto (1924)가 처음으로 기록했으나, 그 후 제주도는 지금까지 채집한 기록은 없다. 4월부터 9월까지 하구나 바닷가의 모래밭에서 볼 수 있으며 흔하지

는 않지만 곳에 따라 많이 발생하기도 한다.

12. *Cicindela (Cicindela) sachalinensis* Morawitz, 1862  
산길앞잡이

*Cicindela sachalinensis* Morawitz, 1862, Bull. Acad. Sci. St.-Petersb., 5: 188; Jacobson, 1905, Beetles of Russia, p. 188; Okamoto, 1925, Zool. Mag. (Japan), 37: 412; Cho, 1932, Jour. Chosen Nat. Hist., 14: 56; Miwa, 1936, Fauna Nipponica, (10), 8(4): 38; Kim, 1978, Distribution atlas ins. Korea, 2. Coleoptera, p. 14.

*Cicindela raddei* Morawitz, 1862, Bull. Acad. imp. Sci. St.-Petersb., 5: 188; Bates, 1888, Proc. Zool. Soc. Lond., p. 368; Horn, 1891, Monogr. pal. Cicind., p. 28; Kano, 1923, Ins. world, 27: 378; Kano, 1924, Insect world, 28: 159.

*Cicindela (Cicindela) sachalinensis raddei* Morawitz: Lafer, 1978, Biol. nek. v. v. pol. nasek. Dal. Vostočka, p. 10; Kwon & Lee, 1986, Ins. Koreana, 6: 2; ESK & KSAE, 1994, Check list of insects from Korea, p. 117.

*Cicindela (Cicindela) sachalinensis* Morawitz: Nakane, 1976, Check-list of Coleoptera of Japan, 3: 3; Wiesner, 1992, Checklist of the tiger beetles, p. 113; Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 107.

**Materials examined.** 1 ♂, 21-IX-1997, Mt. Gwangdeoksan, GG (SCNAE); 1 ♂, 1 ♀, 11-XI-1972, Mt. Odaesan, GW (SCNAE); 1 ♂, 16-V-1994, Geojin, GW (SCNAE); 2 ♂, 4 ♀, 31-VIII-1997, Manbokdae, Mt. Jirisan, JB (SCNAE); 1 ♂, 3 ♀, 22-VI-1997; 1 ♂, 27-VII-1997; 4 ♂, 2 ♀, 31-VIII-1997, Manbokdae, Mt. Jirisan, JB (JBNAE).

**Distribution.** Korea, Japan, Northern China, Mongolia, and Russian Far East.

**Notes.** First record for Korea by Bates (1888) as *C. raddei* Morawitz. Widely distributed in mainland, but (very) seldom. Occurs in mountain forest. Divided into several subspecies, of which subspecies *raddei* A. Morawitz occurs in the Korean Peninsula.

On the other hand, Puchkov & Matalin (2003 in Löbl & Smetana, p. 107) noted that *C. sylvatica sylvatica* Linnaeus (1758, Systema Naturae, ed. 10: 407) occurred in North Korea and Japan, but the earlier reference could not be traced. This record is probably an error. This species also occurs in northern part of Primorskij Kraj, Russian Far East, but not in southern part of Primorskij Kraj (Lafer 2004 *in litteris*).

**참고.** Bates (1888)가 처음으로 보고했다. 우리나라와 러시아 극동아시아에 분포하는 것은 아종 *raddei* Morawitz (1862), 일본에 분포하는 것은 앞날개의 반문이 가늘어서 아

종 *niohozana* Bates (1883, Trans. R. ent. Soc. Lond., p. 213)로 다루지만, 몸의 색깔이나 반문의 변화가 매우 많기 때문에 원아종 *sachalinensis*와 구별할 필요는 없다고 생각한다. 중국남부지역에는 아종 *kansuensis* Schilder (1953, Wiss. Zeitschr. der Martin-Luther-Univ., Halle-Wittenberg, math.-naturw. Reihe 3(2): 563)가 분포한다. 제주도를 제외하고 전국에 분포하며 6월부터 11월까지 산악지대의 모래가 많은 지대에서 볼 수 있지만 흔한 종은 아니다.

한편, Puchkov & Matalin (2003 in Löbl & Smetana, p. 107)은 *C. sylvatica sylvatica* Linnaeus (1758 Systema Naturae, ed. 10: 407)가 북한과 일본에 분포한다고 기록하고 있으며, 그 이전 기록을 확인하지 못했지만, 이것은 아마도 날개무늬가 비슷하기 때문에 이 종을 오인한 것으로 생각한다. *C. sylvatica sylvatica*는 중국 북부지역과 유럽에도 분포한다.

13. *Cicindela (Cicindela) transbaicalica* Motschulsky,  
1844 참길앞잡이 (=참뜰길앞잡이, 뜰길앞잡이)

*Cicindela transbaicalica* Motschulsky, 1844, Ins. Sib., p. 28; Horn, 1891, Monogr. pal. Cicind., p. 46.

*Cicindela japonensis* Chaudoir, 1863, Bull. Soc. Imp. Nat., 36: 202; Heyden, 1887, Horae Soc. ent. Rossicae, 29: 245; Bates, 1888, Proc. Zool. Soc. Lond., 1888: 368; Kano, 1923, Ins. world, 27: 378; Kano, 1924, Insect world, 28: 159; Okamoto, 1924, Bull. Agr. Expt. Sta. Gov.-Gen. Chosen, 1 (2): 159.

*Cicindela japonensis* var. *hamifasciata* Kolbe, 1886, Arch. f. Naturg., 52(1): p. 170 (Korea).

*Cicindela hybrida* Linnaeus: Cho, 1932, Jour. Chosen Nat. Hist., 14: 56.

*Cicindela hybrida japonensis* Chaudoir: Okamoto, 1925, Zool. Mag. (Japan), 37: 413; Cho, 1932, Jour. Chosen Nat. Hist., 14: 57; Miwa, 1936, Fauna Nipponica, (10), 8(4): 41.

*Cicindela (Cicindela) transbaicalica japonensis* Chaudoir: Kim, 1978, Distribution atlas ins. Korea, 2. Coleoptera, p. 10; ESK & KSAE, 1994, Check list of insects from Korea, p. 117.

*Cicindela hybrida transbaicalica* Motschulsky: Jacobson, 1905, Beetles of Russia, p. 190.

*Cicindela hybrida hamifasciata* Kolbe: Okamoto, 1925, Zool. Mag. (Japan), 37: 413; Cho, 1932, Jour. Chosen Nat. Hist., 14: 57; Miwa, 1936, Fauna Nipponica, (10), 8(4): 41.

*Cicindela (Cicindela) transbaicalica hamifasciata* Kolbe: ESK & KSAE, 1994, Check list of insects from Korea, p. 117.

*Cicindela (Cicindela) transbaicalica* Motschulsky: Nakane, 1963, Icon. Ins. Jap., Colore nat. ed., 2 (Col.), p. 3; Nakane,



1976, Check-list of Coleoptera of Japan, 3: 3; Lafer, 1978, Biol. nek. v. v. pol. nasek. Dal. Vostočka, p. 12-14; Wiesner, 1992, Checklist of the tiger beetles, p. 118; Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 107.

**Materials examined.** 1 ♂, 26-VI-2000, Dongsuak, alt. 600 m, Mt. Hallasan, JJ (SCNAE); 1 ♀, 24-V-1996, Okcheon, Okcheon-gun, CB (SCNAE); 1 ♀, 26-V-1993, Dandongcheon, Daejeon City (SCNAE); 1 ♀, 10-IV-1924, Suigen (=Suweon), T. Kurisue Igt. GG (NAIST); 1 ♂, 1-X-1925, Suigen (=Suweon), Hasegawa Igt. GG (NAIST); 1 ♂, 1 ♀, 25-VIII-2001, Hadong, GN (SCNAE); 2 ex, 4-VI-1998; 4 ex, 16-V-1999, Gusipo, Okgu-gun, JB (SCNAE); 2 ♂, 2 ♀, 17-VI-1998, Gusipo, Okgu-gun, JB (JBNAE); 1 ♀, 26-V-1996, Mt. Jeoksangsang, Muju-gun, JB (JBNAE).

**Distribution.** Korea, Japan, China, Mongolia, and Russia (Siberia, Far East).

**Notes.** First record for Korea by Kolbe (1886) as *C. japonensis* var. *hamifasciata* Kolbe. Divided into several subspecies, of which two subspecies *hamifasciata* and *japanensis* Chaudoir are listed in the Korean Peninsula. The former subspecies occurs in South Korea, and the latter species in North Korea (Puchkov & Matalin 2003 in Löbl & Smetana). The records of subspecies *japanensis* from the Korean Peninsula by Okamoto (1924) and other Korean reporters are probably erroneous, and most probably referred to this subspecies. Widely distributed including Jeju. Occurs at seashore and also in mountain forest. Rather common species.

**참고.** 제주도를 비롯하여 전국에 널리 분포하며, 혼한 종으로 5월부터 10월까지 성충을 볼 수 있다. 대개 바닷가나 강가의 모래밭과 같은 습기가 많은 곳에서부터 산악지대까지 널리 서식한다. 우리나라에 분포하는 아종 ssp. *hamifasciata* (참길앞잡이, 참뜰길앞잡이)는 어깨무늬가 완전하며, 일본에 분포하는 아종 ssp. *japanensis* Chaudoir (뜰길앞잡이)는 앞날개 어깨무늬가 2개로 나뉘어 있다. 원아종 ssp. *transbaicalica*는 시베리아 바이칼호수 동쪽지역에 분포한다. 아직까지 아종 ssp. *japanensis*는 채집하지 못했다.

#### 14. *Cicindela (Cylindera) gracilis* Pallas, 1777 깔다구길앞잡이

*Cicindela gracilis* Pallas, 1777, Reise durch verschiedene Provinzen des Russischen Reiches, 2, Anhang, p. 28.  
*Cicindela gracilis* var. *angustata* Fischer, 1824, Entomographia imperii rossici, p. 5.

*Cicindela tenuis* Fischer, 1828, Ent. Ross., 3: 49 (Korea: Jeju).

*Cicindela gracilis angustata* Fischer: Cho, 1932, Jour. Chosen Nat. Hist., 14: 58; Horn & Roeschke, 1891, Monogr. pal. Cicind., p. 85; Wu, 1937, Cat. Insect. Sinensium, 3: 19.

*Cicindela gracilis* Pallas: Okamoto, 1924, Bull. Agr. Expt. Sta. Gov.-Gen. Chosen, 1(2): 160; Okamoto, 1925, Zool. Mag. (Japan), 37: 414; Cho, 1932, Jour. Chosen Nat. Hist., 14: 58; Miwa, 1936, Fauna Nipponica, (10), 8(4): 57; Wu, 1937, Cat. Insect. Sinensium, 3: 19; Kim, 1978, Distribution atlas ins. Korea, 2. Coleoptera, p. 7.

*Cicindela (Eumecus) gracilis* Pallas: Kryzhanovskij *et al.*, 1995, Checklist of ground-beetles, p. 24.

*Cicindela (Cylindera) gracilis* Pallas: Nakane, 1963, Icon. Ins. Jap., Colore nat. ed., 2 (Col.), p. 2; Nakane, 1976, Checklist of Coleoptera of Japan, 3: 5; Lafer, 1978, Biol. nek. v. v. pol. nasek. Dal. Vostočka, p. 7; ESK & KSAE, 1994, Check list of insects from Korea, p. 117.

*Cylindera (Cylindera) gracilis* (Fischer): Wiesner, 1992, Checklist of the tiger beetles, p. 182; Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 109.

**Materials examined.** 1 ♀, 6-VI-1986, Songchon, near Daejeon City (SCNAE); 1 ♀, 29-VI-1927, Suigen (=Suweon), Yukato Igt. (SCNAE); 1 ♀, 17-VI-1993, Suncheon, JN (SCNAE); 6 ex, 28-VI-2001, Changchun, China, (SCNAE).

**Distribution.** Korea, Japan, Northern China, Mongolia, and Russia (Caucasus, Siberia, Far East).

**Notes.** First record for Quelpart Island, Korea by Fischer (1828) as *C. tenuis*. Later listed by Okamoto (1924) as *C. gracilis* from Jeju (=Quelpart Island), but has not yet been collected from this island. Widely distributed in main land, very rare species. Occurs at sandy or stony soil in mountain forest.

**참고.** Okamoto (1924)가 제주도에서 처음으로 기록했지만, 아직까지 제주도에서 채집한 기록은 없다. 혼한 종은 아니며, 6월부터 8월까지 산림이나 강가의 풀밭에서 볼 수 있고 매우 빠르게 기어 다닌다. 불빛에도 가끔 날라든다 (Okamoto 1925). 대개 모래땅이나 자갈이 많은 토양에 살지만, 중국 길림성 장춘의 진흙땅인 풀밭에서 채집한 표본은 앞날개 끝에 붉은 반점이 없는 것이 더 많았다. 한편, 순천과 송촌(대전 근교)에서 채집한 것은 날개 끝에 적갈색무늬가 없지만, 수원에서 채집한 것은 적갈색 무늬가 있다. 앞날개 끝에 적갈색의 무늬가 없는 것을 아종 ssp. *angustata* Fischer (1824, Ent. imp. rossici, p. 5)로 다루지만, 이것은 개체변이로 생각한다.

15. *Cicindela (Cylindera) obliquefasciata* Adams, 1817  
화홍갈다구길앞잡이 (신칭)

*Cicindela obliquefasciata* Adams, 1817, Mém. Soc. Nat. Moscou, 5: 280; Motschulsky, 1945, Ins. Sib., p. 32; Horn, in W. Horn & Roeschke, 1891, Monogr. pal. Cicind., p. 80, 86-90; Mori & Cho, 1938, Zool. Mag., Japan, 50(1): 32.

*Cicindela germanica obliquefasciata* Adams: Horn, W., 1926, Col. Cat., 82: 236; Horn, 1930, Lingnan Sci. Jour. China, 9 (4): 403.

*Cicindela (Eumecus) obliquefasciata* Adams: Kryzhanovskij *et al.*, 1995, Checklist of ground-beetles, p. 24.

*Cylindera (Cylindera) obliquefasciata* (Adams): Wiesner, 1992, Checklist of tiger beetles, p. 180; Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 109.

**Materials examined.** 1 ♂, 19-V-1919, Saishuto (=Jejudo), C. Inoue lgt. (SCNAE); 1 ♀, 29-VI-1927, Suigen (=Suweon), Yukato lgt. (SCNAE).

**Distribution.** Korea, China, Mongolia, East Siberia, and Iran.

**Notes.** New to Korea. Very rare. The fresh specimens have not yet been collected. Distinguished by the oblique middle band and comma-shaped apical lunula on elytra; from the 3rd to 5th abdominal sternites with scattered small hairs; eight submarginal labral setae. General habitus; ref. to plate. Body small, app. 11 mm. Dorsum bluish black; head and pronotum blackish with slightly coppery reflections; humeral lunula, oblique median band and apical lunula yellow; body metallic bluish black ventrally. Divided into two subspecies of which the Korean specimens are near to nominal subspecies. The other subspecies *descendens* Fischer von Waldheim (1828, Entomographie de la Russie, 3: 35) occurs in central Asia. Habitat unknown from Korea but this flightless species probably has habitat similar to the former species.

**참고.** 몸길이 약 11 mm, 몸 색깔은 흑갈색으로 머리에 광택은 없지만 등과 날개에 희미한 금속 광택이 있다. 매우 희귀한 종으로 우리나라는 처음 기록한다. 우리말 이름은 채집 장소인 수원외 화홍문에서 따왔다.

16. *Cicindela (Eugrapha) elisae* Motschulsky, 1859  
꼬마길앞잡이

*Cicindela elisae* Motschulsky, 1859, Bull. Soc. Nat. Moscou, 32: 487 (Amur); Horn & Roeschke, 1891, Monogr. pal. Cicind., p. 136; Horn, 1915, Genera Ins., 82b: 292, 353 (Korea); Okamoto, 1925, Zool. Mag. (Japan), 37: 415; Matsumura, 1931, Illust. Common Ins. Jpn., 3: 2; Cho, 1932,

Jour. Chosen Nat. Hist., 14: 59; Miwa, 1936, Fauna Nipponica, (10), 8(4): 53; Wu, 1937, Cat. Insect. Sinensium, 3: 21; Kim, 1978, Distribution atlas ins. Korea, 2. Coleoptera, p. 4.

*Cicindela elisae koreanica* Mandl, 1981, Koleopt. Rdschau, 55: 35 (Korea: Kongosan).

*Cicindela litterifera* Chaudoir: Okamoto, 1924, Bull. Agr. Expt. Sta. Gov.-Gen. Chosen, 1(2): 160.

*Cylindera (Cicindina) elisae* Motschulsky: Wiesner, 1992, Checklist of the tiger beetles, p. 196.

*Cicindela (Cicindina) elisae* Motschulsky: Kryzhanovskij *et al.*, 1995, Checklist of ground beetles of Russia, p. 25.

*Cicindela (Eugrapha) elisae* Motschulsky: Nakane, 1963, Icon. Ins. Jap., Colore nat. ed., 2 (Col.), 2; Nakane, 1976, Check-list of Coleoptera of Japan, 3: 4; Lafer, 1978, Biol. nek. v. v. pol. nasek. Dal. Vostocka, 16; ESK & KSAE, 1994, Check list of insects from Korea, p. 117.

*Cylindera (Eugrapha) elisae* (Motschulsky): Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 110.

**Materials examined.** 1 ♂, 16-VII-1992, Jecheon-si, CB, Light trap (SCNAE); 1 ♂, 29-VI-1993; 2 ♀, 10-V-1986, Suweon, GG (SCNAE); 27 ex., 17-VII-2002, Changweon-si, GN (SCNAE); 1 ♀, 2-IX-2000, Temple Haeinsa, Hapcheon, GN (SCNAE); 1 ♂, 11-IX-1992, Muju, Light trap, JB (SCNAE); 1 ♂, 4 ♀, 23-VI-1995, Is. Munyeodo, Okgu-gun, JB (SCNAE); 3 ♂, 22-VI-2001, Mt. Seonunsan, Gochang-gun, JB (SCNAE); 2 ♀, 31-VII-1996, Is. Sinsido, Okgu-gun, JB (JBNAE); 1 ♀, 22-VI-1995, Is. Seonyudo, Okgu-gun, JB (JBNAE); 2 ♂, 2 ♀, 23-VI-1995; 13 ex., 13-VII-1999, Is. Munyeodo, Okgu-gun, JB (JBNAE); 1 ♂, 10-VII-1989, Suncheon, JN (SCNAE).

**Distribution.** Korea, Japan, China, Taiwan, Thibet, Russian Far East, & Mongolia.

**Notes.** First record for Korea by Horn (1915). Later Okamoto (1924) reported as *C. litterifera* Chaudoir. Divided into several subspecies, of which two subspecies *koreanica* Mandl and *elisae* s. str. are distributed in the Korean Peninsula (Puchkov & Matalin 2003 in Löbl, L. & A. Smetana). This species is widely distributed in South Korea including Jejudo. Rather common. Occurs from sandy estuary or seashore to open mountain grassland. Sometimes attracted to light.

**참고.** Horn (1915)이 처음으로 기록했다. 남한에 분포하는 것은 아종 ssp. *koreanica*로 다루며 지역에 따라 여러 아종으로 구분한다. 더 자세한 것은 Mandl (1981)을 참조하기 바란다. 제주도를 비롯하여 전국에 분포하며, 6월부터 10월

까지 바닷가나 강가 모래밭에서 많이 보인다. 야산이나 평지에서 가끔 볼 수 있다. 불빛에도 가끔 날아온다.

17. *Cicindela (Myriochila) speculifera* Chevrolat, 1845  
쇠길앞잡이

*Cicindela speculifera* Chevrolat, 1845, Rév. Zool., p. 96 (China: Macao).

*Cicindela specularis* Chaudoir, 1865, Catalogue de la collection des cicindélètes, p. 24; Cho, 1932, Jour. Chosen Nat. Hist., 14: 59 (Korea); Miwa, 1936, Fauna Nipponica, (10), 8 (4): 56; Kim, 1978, Distribution atlas ins. Korea, 2. Coleoptera, p. 15.

*Myriochile (Myriochile) speculifera* (Chevrolat): Wiesner, 1992, Checklist of tiger beetles, p. 212.

*Myriochila (Myriochila) specularis* Chaudoir: Puchkov & Matalin, 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 114.

*Cicindela (Myriochile) specularis* Chaudoir: Nakane, 1976, Check-list of Coleoptera of Japan, 3: 5; ESK & KSAE, 1994, Check list of insects from Korea, p. 117.

**Materials examined.** 2 ♀, 17-VII-2000, Seongsan, JJ (JFNHM); 2 ex, 30-VII-1994, Seonheul, Bukjeju-gun, JJ (JFNHM); 39 ex, 9-VII-1994, Is. Mara-do, JJ (JFNHM); 1 ex, 1-VII-1983, 2 ex, 6-VII-1983, 1 ex, 24-VIII-1984, Ara, Jeju-si, JJ (JFNHM); 2 ♂, 2 ♀, 9-VII-1994, Is. Marado, JJ (SCNAE); 1 ♂, 20-VI-1975; 1 ♀, 6-VIII-1975, Seogwipo, JJ (SCNAE); 1 ♀, 1 ♂, 22-VI-2001, Mt. Seonunsan, Gochang-gun, JB (SCNAE); 2 ♂, 2 ♀, 13-VII-1999, Is. Munyeodo, Okgu-gun, JB (JBNAE).

**Distribution.** Korea, Japan, China, and Taiwan.

**Notes.** First record for Korea by Cho (1932). Divided into several forms, of which nominotypical subspecies *speculifera* occurs in South Korea. Another subspecies *suensoni* Mandl (1981, Koleopt. Rdsch., 55: 36) occurs in Shanghai District, China. Rather easily separated from other Korean species by the femora with a series of hooked setae along entire posterior margin. Widely distributed from South Korea including Jeju-do. Adults are found along the bare edges of muddy pond in Jeju-do (=Quelpart Island) and valleys in Mt. Seonunsan. They also are often attracted to light. Rather common in Jeju-do, but seldom in mainland.

**참고.** Cho (1932)가 처음으로 기록했으며, 뒷다리 넓적마디 아래쪽에 낚시바늘 모양의 털이 줄지어 있어서 다른 종과 쉽게 구분할 수 있다. 제주도를 비롯하여 전국에 분포하며, 6월부터 8월까지 바닷가나 평지의 모래가 많은 풀가나 연못 근처 또는 야산의 계곡에서 볼 수 있다. 가끔 불빛에

날아온다.

18. *Cicindela (Sophiodela) chinensis* De Geer, 1774  
길앞잡이

*Cicindela chinensis* De Geer, 1774, Mém. Ins., 4: 119 (China).

*Cicindela chinensis flammifera* W. Horn, 1920, Arkiv f. Zoologi, 13(11): 19 (Korea).

*Cicindela chinensis* De Geer: Bates, 1888, Proc. Zool. Soc., p. 368; Heyden, 1887, Horae Soc. ent. Rossicae, 29: 246; Bates, 1888, Proc. Zool. Soc. Lond., p. 368; Horn, 1915, Gen. Ins., 82c: 301; Kano, 1923, Ins. world, (Konchusekai), 27: 378; Kano, 1924, Konchu Sekai, 28: 57; Okamoto, 1924, Bull. Agr. Exp. Sta. gov.-Gen. Chosen, 1(2): 159; Okamoto, 1925, Zool. Mag., Japan, 26: 409; Matsumura, 1931, Illust. Common Ins. Jpn., 3: 3; Tosawa, 1932, Jour. Chosen Nat. Hist. Soc., 14: 55; Cho, 1932, Jour. Chosen Nat. Hist., 14: 55; Miwa, 1936, Fauna Nipponica, (10), 8(4): 71; Wu, 1937, Cat. Insect. Sinensium, 3: 28; Mori & Cho, 1938, Zool. Mag. (Japan), 50(1): 27; Goto, 1946, Trans. Kinki Coleopt. Soc., 1(2): 4; Nakane, 1955, Sci. Rept. Saikyo Univ., 2(A): 25; Cho, 1957, Hum. & Sci., Nat. Sci., Korea Univ., 2: 176; Cho, 1969, Ill. Encyclop. Fau. Flo. Korea, 10. Insecta 2: 104; Kim, 1978, Distribution atlas ins. Korea, 2. Coleoptera, p. 2; Paik, 1993, Educa. Sci., Sunchon Natl. Univ., 1: 82.

*Cicindela chinensis japonica* Thunberg: Kolbe, 1886, Archiv. f. Naturg., 52: p. 163 (Korea).

*Cicindela (Sophiodela) chinensis* De Geer: Nakane, 1976, Check-list of Coleoptera of Japan, 3: 3.

*Cicindela (Sophiodela) chinensis flammifera* Horn: Nakane, 1963, Icon. Ins. Jap., Colore nat. ed., 2 (Col.), p. 3; Kwon & Lee, 1986, Ins. Koreana, 6: 3; Wiesner, 1992, Checklist of tiger beetles, p. 134; ESK & KSAE, 1994, Check list of insects from Korea, p. 117; Puchkov & Matalin 2003 in Löbl & Smetana, Cat. Pal. Coleopt., 1: 108.

**Materials examined.** 1 ♂, 19-V-2001, Mt. Weolaksan, Jecheon, CB (SCNAE); 1 ♂, 23-VI-1995, Is. Biando, Okgu-gun, JB (SCNAE); 1 ♀, 8-VI-1997, Mt. Seonunsan, Gochang-gun, JB (JBNAE); 2 ♂, 1 ♀, 23-VI-1995, Is. Biando, Okgu-gun, JB (JBNAE); 1 ♂, 10-IV-1987; 2 ♂, 30-IV-1988; 8 ♂, 7 ♀, 15-V-1988; 1 ♂, 15-V-1988; 2 ♂, 1 ♀, 24-VI-1988, Suncheon, JN (SCNAE); 1 ♂, 15-V-1988; 4 ♂, 3 ♀, 26-V-1989, Hakgu, Suncheon-si, JN (SCNAE); 1 ♀, 1 ♂, 19-V-1988, Goheung, Goheung-gun JN (SCNAE); 1 ♂, 7-VI-1987, Gwangyang, JN (SCNAE); 2 ♀, 12-VII-1988, Mt. Baekunsan,

Gwangyang-gun (SCNAE). More than 200 specimens from various sites of Suncheon areas (SCNAE).

**Distribution.** Korea, Japan, China, and Indochina.

**Notes.** First record for the Korean Peninsula by Kolbe (1886) as *C. chinensis japonica* Thunberg. Later Heyden (1887) as *C. chinensis* De Geer. Divided into several subspecies, of which subspecies *flamifera* occurs in South Korea. Widely distributed including Jeju-do. Subspecies *chinensis* rarely occurs in North Korea. According to Okamoto (1925), the records of Kolbe (1886) and Bates (1888) are thought to be *C. japonica* while Heyden's (1887) is *C. chinensis*. However, the subspecies *flamifera* from Korea is erroneously recorded as *japonica*. Adults occur on open areas of short grass and have been collected along muddy roads through open forest from April to September. The 3rd instars also have been collected in late October.

**참고.** 길앞잡이는 4월부터 9월까지 평지에서 야산에 걸쳐 볼 수 있지만, 최성기는 5월이며, 8월 하순에는 3령 유충을 볼 수 있다. 제주도를 비롯하여 전국에 널리 분포하며, 앞가슴과 앞날개의 색채나 반문이 지역에 따라 변이가 많아서 여러 아종으로 구별한다.

원아종 ssp. *chinensis* s. str.은 앞가슴과 날개는 약한 초록색 띠면서 날개 어깨에 황색반점이 있고 가운데무늬는 이어져 있다. 중국대륙에 널리 분포하지만, 한반도는 북부 지역에만 매우 드물게 분포한다. 아종 ssp. *flamifera* Horn 1920은 몸이 크고 날개의 색깔이 붉은 구리빛갈로 매우 혼하며, 날개 어깨에 황색반문이 없으며 가운데무늬는 이어졌다. 아종 *japonica*는 가운데무늬는 끊어졌으며, 날개 어깨에 작은 황색 반점이 있다. 한편, 일본에 널리 분포하는 아종 ssp. *japonica* Thunberg, 1781 (비단길앞잡이)은 학자에 따라 독립한 종으로 다룬다 (Nakane 1955 etc.). 그러나, 한반도에 이 아종의 분포는 의심스럽다.

## 적 요

그 동안 한국산 길앞잡이 종류를 분류하고 등정한 결과 총 1속 10아속 18종을 보고하며, 이 중에서 *Cicindela* (*Cylindera*) *obliquefasciata* Adams, 1817 (화홍갈다구길앞잡이: 신칭)과 *Cicindela* (*Cephalota*) *chiloleuca* Fisher, 1820 (무너길앞잡이: 신칭)은 한반도에서 처음으로 기록하며, 그 목록은 다음과 같다. Heyden (1887)이 보고한 좀길앞잡이 (*C. japona* Motschulsky)의 분포는 의심스럽다.

1. *Cicindela* (*Abroschelis*) *anchoralis* Chevrolat, 1845  
달무늬길앞잡이
2. *C. (Callytron)* *inspecularis* Horn, 1904 흰테길앞잡이

3. *C. (Callytron)* *nivicincta* Chevrolat, 1866  
바다흰테길앞잡이 (신칭)
4. *C. (Callytron)* *yusai yusai* Nakane, 1955  
백제 흰테길앞잡이
5. *C. (Calomera)* *brevipilosa* Horn, 1908 개야길앞잡이
6. *C. (Cephalota)* *chiloleuca* Fisher, 1820  
무너길앞잡이 (신칭)
7. *C. (Chaetodera)* *laetescripta* Motschulsky, 1860  
강변길앞잡이
8. *C. (Cicindela)* *coerulea nitida* Lichtenstein, 1797  
주홍길앞잡이 (=극동길앞잡이)  
[=*Cicindela* (*Cicindela*) *coerulea shantungensis* Mandl: 한국곤충명집 (1994)]
9. *C. (Cicindela)* *gemmata* Falderman, 1835 아이누길앞잡이
10. *C. (Cicindela)* *japana* Motschulsky, 1857 좀길앞잡이
11. *C. (Cicindela)* *lewisii* Bates, 1873 큰무너길앞잡이  
[=*Cicindela* (*Cicindela*) *lewisi* [sic] Bates:  
한국곤충명집 (1994)]
12. *C. (Cicindela)* *sachalinensis* Morawitz, 1862 산길앞잡이
13. *C. (Cicindela)* *transbaicalica* Motschulsky, 1845  
참길앞잡이 (=참뜰길앞잡이, 뜰길앞잡이, 왜길앞잡이)
14. *C. (Cylindera)* *gracilis* Pallas, 1777 갈다구길앞잡이
15. *C. (Cylindera)* *obliquefasciata* Adams, 1817  
화홍갈다구길앞잡이 (신칭)
16. *C. (Eugrapha)* *elisae* Motschulsky, 1859 꼬마길앞잡이
17. *C. (Myriochila)* *speculifera* Chevrolat, 1845 쇠길앞잡이  
[=*Cicindela* (*Myriochile*) *specularis* Chaudoir:  
한국곤충명집 (1994)]
18. *C. (Sophiodela)* *chinensis* De Geer, 1774 길앞잡이

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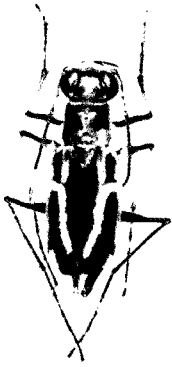
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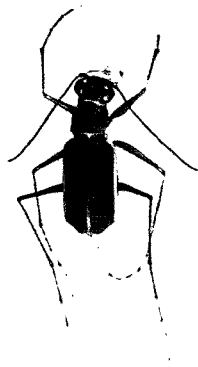
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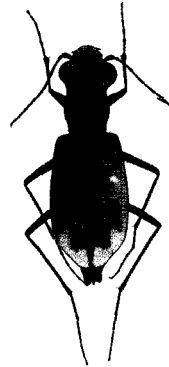
Plates : Some tiger beetles from Korea



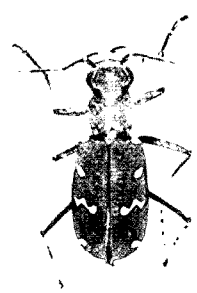
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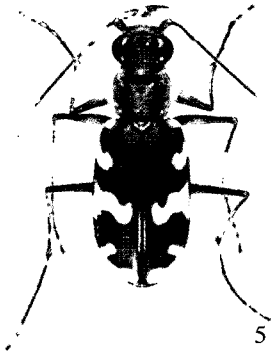
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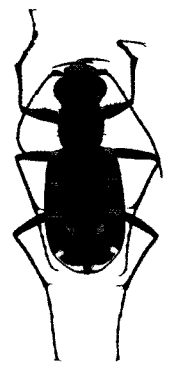
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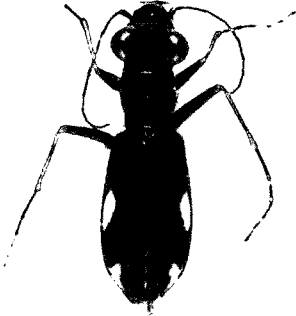
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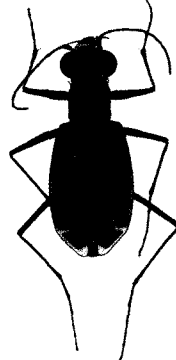
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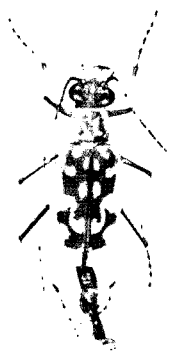
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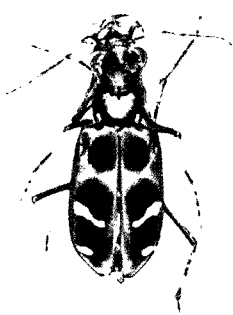
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| 1. <i>C. anchoralis</i> Chevrolat<br>땃무늬길앞잡이     | 2. <i>C. nivincta</i> Chevrolat<br>바다흰테길앞잡이      |
| 3. <i>C. chilo-leuca</i> Fisher<br>무늬길앞잡이        | 4. <i>C. gemmata</i> Falderman<br>아이누길앞잡이        |
| 5. <i>C. lewisii</i> Bates<br>큰무늬길앞잡이            | 6. <i>C. nitida</i> Lichtenstein<br>주홍길앞잡이       |
| 7. <i>C. sachalinensis</i> Morawitz<br>산길앞잡이     | 8. <i>C. transbaicalica</i> Motschulsky<br>참길앞잡이 |
| 9. <i>C. gracilis</i> Pallas<br>갈다구길앞잡이          | 10. <i>C. obliquefasciata</i> Adams<br>화홍갈다구길앞잡이 |
| 11. <i>C. elisae</i> Motschulsky<br>꼬마길앞잡이       | 12. <i>C. speculifera</i> Chevrolat<br>쇠길앞잡이     |
| 13. <i>C. laetescripta</i> Motschulsky<br>강변길앞잡이 | 14. <i>C. chinensis</i> De. Geer<br>길앞잡이         |