



The Korean species of the genus *Thinodromus* Kraatz (Coleoptera: Staphylinidae: Oxytelinae)

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ABSTRACT

A taxonomic study of the genus *Thinodromus* Kraatz in Korea is presented. Four species are recognized, two of which are new to Korea: *Thinodromus* (*T.*) *bernhaueri* (Klima) and *T.* (*T.*) *deceptor* (Sharp). Males of *Thinodromus* (*T.*) *deceptor* (Sharp) are described for the first time. A key, illustrations of the habitus, and line drawings of diagnostic characters are provided.

Key words: Taxonomy, Coleoptera, Staphylinidae, Oxytelinae, *Thinodromus*, Korea

INTRODUCTION

The genus *Thinodromus* Kraatz, 1857 contains 98 species over the world. Thirty nine species of the genus are recorded in the Palaearctic region (Herman 2001, Smetana 2004). Gildenkov (2000, 2000a, 2000b, 2003) reviewed the Palaearctic *Thinodromus* species. Five *Thinodromus* species have been reported from Japan (Gildenkov 2001, 2003, Smetana 2004). In Korea, two *Thinodromus* species have been recorded (Yuh *et al.* 1985, Kim *et al.* 1994, Gildenkov 2000, Cho & Ahn 2001).

Members of *Thinodromus* are usually found under stones near streams, but some species occur in leaf litters. They are characterized by combination of the following features: body flattened dorso-ventrally, epistomal suture present, gular sutures confluent, maxillary palpomere 4 acicular, transverse curved groove present along basal part of pronotum, tarsal formula 5-5-5, basal three tarsomeres closely associated, abdominal sternite II well developed, tergite VII with posterior margin fimbriate, tergites II–VI each with two pairs of paratergites (Herman 1970, Makranczy 2006).

In this paper, we report four *Thinodromus* species, two of which are identified for the first time in Korea: *T.* (*T.*) *bernhaueri* (Klima, 1904) and *T.* (*T.*) *deceptor* (Sharp, 1889). Males of *T.* (*T.*) *deceptor* are described for the first time. A key, illustrations of the habitus, and line drawings of diagnostic characters are provided.

MATERIALS AND METHODS

Specimens for this study have been mainly collected manually with aspirator from under stones near streams. Occasionally specimens were collected by sifting from leaf litters and by Flight Intercept Traps (FIT). All photographs have been made with a Nikon D100 digital SLR camera in combination with 60 mm macro lens and a set of extension tube. Subsequent processing was done in Adobe Photoshop 6.0. Preparation of permanent microscopic slides was performed using the techniques described by Hanley and Ashe (2003) and Makranczy (2006). The subgeneric system follows Smetana (2004), while the terminology follows Herman

(1970) and Makranczy (2006). All examined specimens, except for the three types, are deposited in Chungnam National University Insect Collection (CNUIC, Daejeon), Korea.

SYSTEMATICS

Key to the species of the genus *Thinodromus* in Korea

1. Body color usually black (Figs. 1–3); punctures on pronotum small and shallow (Figs. 17–19); scutellar impression as inverted triangle (Figs. 21–23); male sternite VIII more or less prolonged apically (Figs. 25–27) 2
- Body color usually dark brown (Fig. 4); punctures on pronotum large and deep; scutellar impression semi-circular (Fig. 24); male sternite VIII more or less emarginated apically (Fig. 28) *T. (Amisammus) japonicus*
2. Intervals between punctures on pronotum narrower than diameter, punctures moderately large (Figs. 17, 18); abdomen with long pubescence (Figs. 25, 26, 29, 30); spermatheca curved more than 90 degrees (Figs. 41, 42) 3
- Intervals between punctures on pronotum wider than diameter, punctures small (Fig. 19); abdomen with short and dense pubescence (Figs. 27, 31); spermatheca very slightly curved (Fig. 43) ... *T. (T.) sericatus*
3. Apical region of elytral suture with red mark (Fig. 1); median sclerotized plate of hologlossa oval (Fig. 5); male antennomere 10 about 1.1 times wider than long (Fig. 9); spermatheca curved about 90 degrees (Fig. 41) *T. (T.) deceptor*
- Apical region of elytral suture without red mark (Fig. 2); median sclerotized plate of hologlossa trapezoidal (Fig. 6); male antennomere 10 about 1.1 times longer than wide (Fig. 11); spermatheca curved about 130 degrees (Fig. 42) *T. (T.) bernhaueri*

Genus *Thinodromus* Kraatz, 1857

Thinodromus Kraatz, 1857: 866; Herman, 1970: 385; Gildenkov, 2001: 48; Makranczy, 2006: 65.

Warburtonia Oke, 1933: 104.

Paracarpalimus Scheerpeltz, 1937: 105.

See Herman (2001) for additional references.

Type species: *Trogophloeus dilatatus* Erichson, 1839, by monotypy.

Diagnosis. The genus *Thinodromus* is very similar to the genus *Carpelimus* Leach, 1819. However, *Thinodromus* can be distinguished by having five tarsomeres and subcylindrical aedeagus with broad parameres (three tarsomeres and dorsoventrally flattened aedeagus with slender parameres in *Carpelimus*). *Thinodromus* is also superficially similar to *Ochthephilus* Mulsant & Rey, 1856, but differs in having very small maxillary palpomere 4 (strongly enlarged in *Ochthephilus*).

Thinodromus (Thinodromus) deceptor (Sharp, 1889)

(Figs. 1, 5, 9, 10, 17, 21, 25, 29, 33, 37, 41)

Trogophloeus deceptor Sharp, 1889: 416.

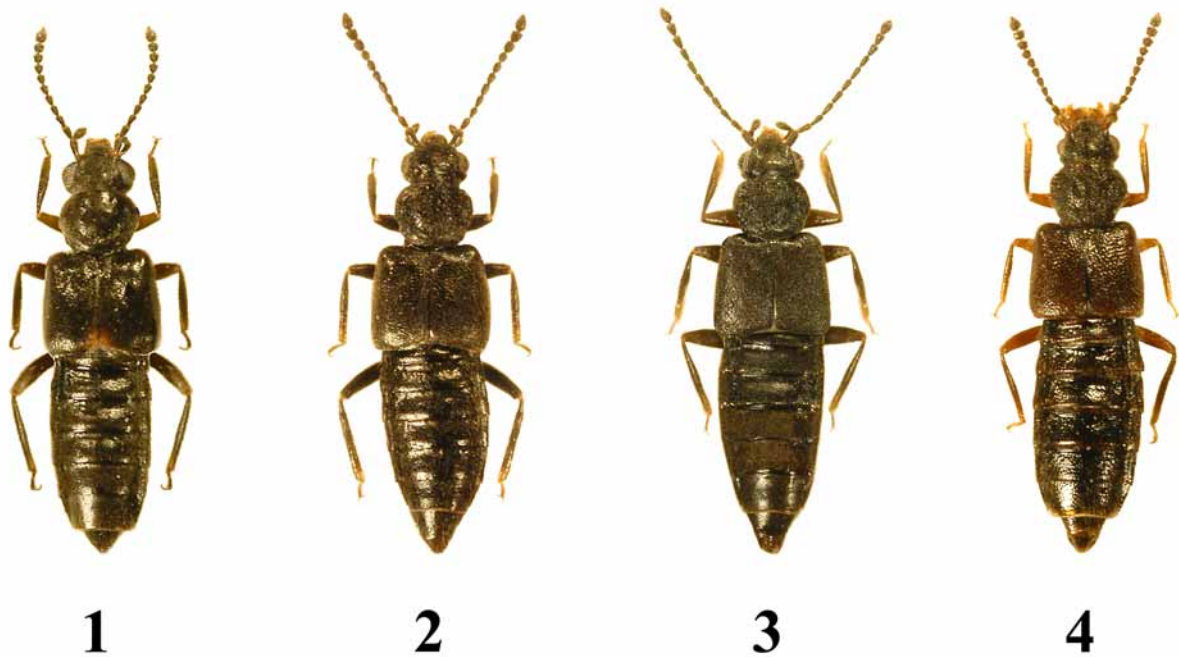
Trogophloeus (Thinodromus) deceptor: Bernhauer & Schubert, 1911: 94.

Carpelimus (Thinodromus) deceptor: Adachi, 1957: 6.

Thinodromus deceptor: Herman, 1970: 387; Shibata, 1976: 144; Watanabe, 1985: 273; Li, 1993: 19.

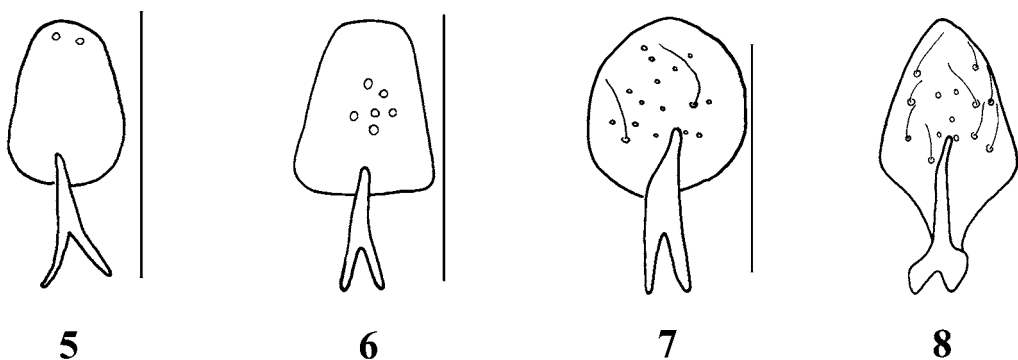
Thinodromus (Thinodromus) deceptor: Gildenkov, 2000: 693; 2001: 80; 2003: 592; Smetana, 2004: 534.

Description. Body length 2.5–3.4 mm. Body glossy. Color usually black, legs dark brown, base of elytral suture red (Fig. 1).



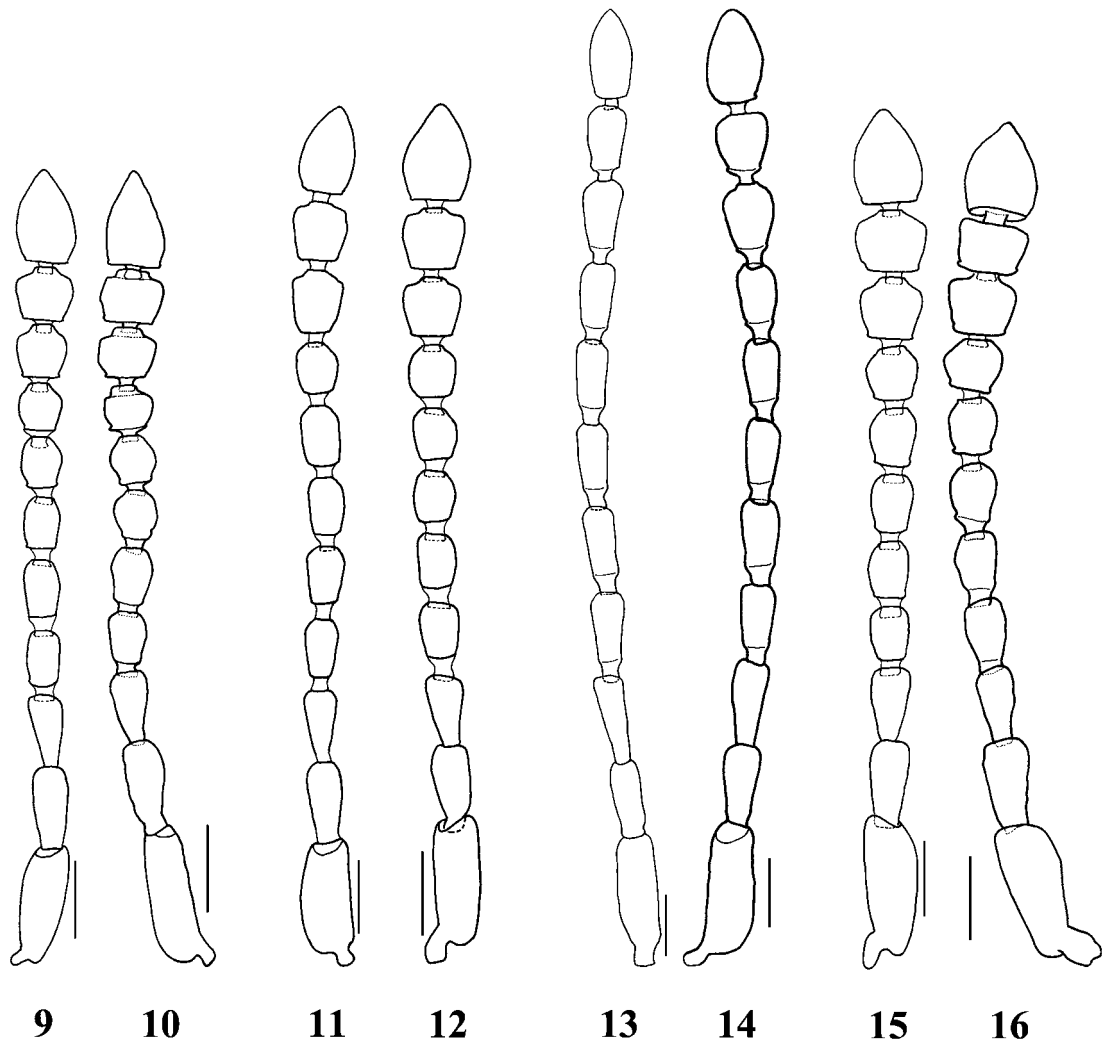
FIGURES 1–4. Habitus of *Thinodromus*. 1: *T. deceptor*, 3.2 mm; 2: *T. bernhaueri*, 3.3 mm; 3: *T. sericatus*, 3.5 mm; 4: *T. japonicus*, 3.8 mm.

Head. As long as wide. Eyes large, convex, occupying almost entire lateral side of head. Mandible more or less blunt, three subapical teeth present. Median sclerotized plate of hologlossa (Fig. 5) oval, about 1.4 times longer than wide. In male antenna slightly longer than female. Male antenna (Fig. 9): scape robust, about 3.1 times longer than wide; pedicel about 2.1 times longer than wide, shorter and narrower than scape; antennomere 3 slender, slightly dilated apically, about 1.6 times longer than wide; 4–7 longer than wide; 8–9 about 1.1 times longer than wide; 10 about 1.1 times wider than long. Female antenna (Fig. 10): antennomeres 8–9 about 1.1 times wider than long; 10 about 1.2 times wider than long.

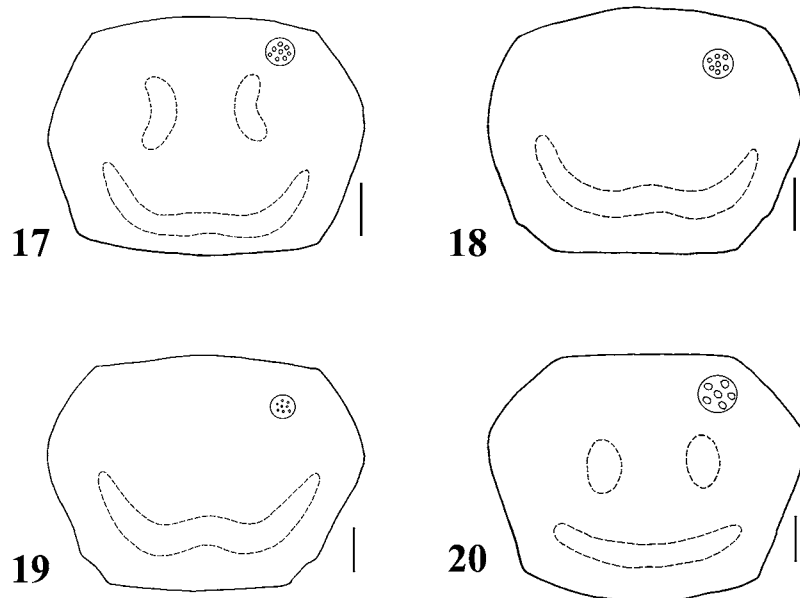


FIGURES 5–8. Median sclerotized plate of hologlossa of *Thinodromus*, ventral aspect. 5: *T. deceptor*; 6: *T. bernhaueri*; 7: *T. sericatus*; 8: *T. japonicus*. Scale bars: 0.1 mm.

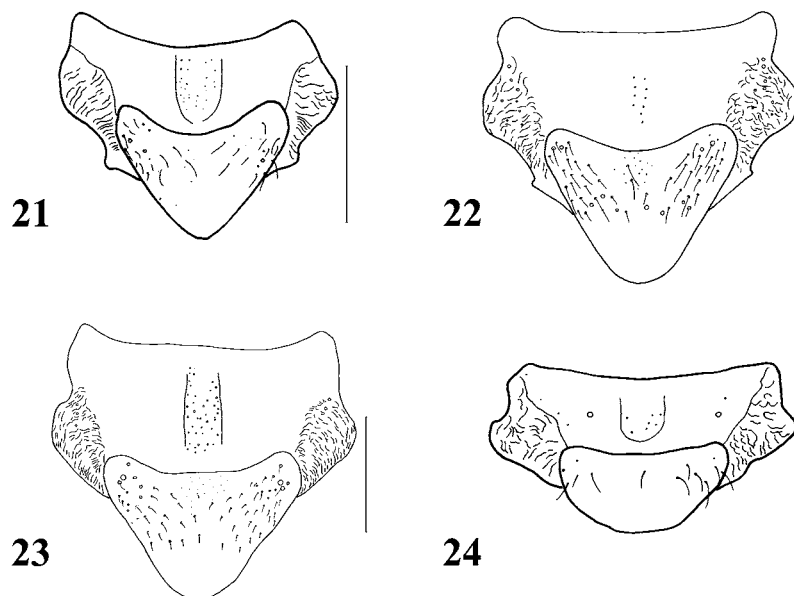
Thorax: Pronotum (Fig. 17) wider than long, widest at anterior third, narrowest at base. Intervals between punctures slightly narrower than puncture diameter. Scutellar impression (Fig. 21) 1.3 times longer than wide, shaped as broadly emarginated inverted triangle, with moderate pubescence. Elytra slightly wider than pronotum, each elytron with deep diagonal groove in apical third.



FIGURES 9–16. Antenna of *Thinodromus*, male (9, 11, 13, 15) and female (10, 12, 14, 16), ventral aspect. 9, 10: *T. deceptor*; 11, 12: *T. bernhaueri*; 13, 14: *T. sericatus*; 15, 16: *T. japonicus*. Scale bars: 0.1 mm.



FIGURES 17–20. Pronotum of *Thinodromus*, dorsal aspect, circle indicates punctures. 17: *T. deceptor*; 18: *T. bernhaueri*; 19: *T. sericatus*; 20: *T. japonicus*. Scale bars: 0.1 mm.



FIGURES 21–24. Scutellum of *Thinodromus*, dorsal aspect. 21: *T. deceptor*; 22: *T. bernhaueri*; 23: *T. sericatus*; 24: *T. japonicus*. Scale bars: 0.1 mm.

Abdomen: Male sternite VIII (Fig. 25) wider than long and slightly prolonged apically. Posterior margin of female sternite VIII (Fig. 29) broadly round.

Aedeagus (Figs. 33, 37) oval, parameres broad, wrapping around the middle of median lobe.

Spermatheca (Fig. 41) in the middle curved about 90 degrees.

Type material. Lectotype (designated by Gildenkov 2001), female, labeled as follows: ‘*Trogophloeus deceptor*. Type D. S. 28. 5. 1881. Lewis, Type, Japan. G. Lewis, Sharp Coll. 1905–313., Lectotypus *Trogophloeus deceptor* Sharp, *Thinodromus deceptor* (Sharp) 2000 det. M. Gildenkov’ (Deposited in The Natural History Museum, London).

Additional materials (total 167 specimens). **KOREA: Gyeonggi Prov.:** 156 ex., Jinwae stream, Hwasung-gun, 2–3 VIII 1999, C.-W. Shin, *ex* near stream (5 males and 6 females, on slide); **Chungnam Prov.:** 2 ex., Geum river, Geumnam-myeon, Yeongi-gun, 19 IX 1999, K.-J. Ahn & H.-J. Kim, *ex* near stream (1 female, on slide); 1 ex., Gapcheon, Wolpyeong-dong, Yuseong-gu, Daejeon City, 3 XI 2005, D.-H. Lee, *ex* near stream; **Jeonbuk Prov.:** 7 ex., Mangyeong river, Ha-ri, Wanju-gun, 6 IX 2005, D.-H. Lee, *ex* under stones near stream; **Jeonnam Prov.:** 1 ex., Wolpyeong-ri, Jinan-gun, 24 IX 2005, S.-J. Park & D.-H. Lee, *ex* under stones near stream.

Distribution. Korea, Japan, and China

Remarks. This species can be easily distinguished from other Korean *Thinodromus* by the red mark at the base of elytral suture, more shining body, and proportion of each antennomere. The lectotype is female and brown without red mark at the apical region of elytral suture. However, all Korean specimens we studied are with red mark. First description of males is presented and this species is new to Korea.

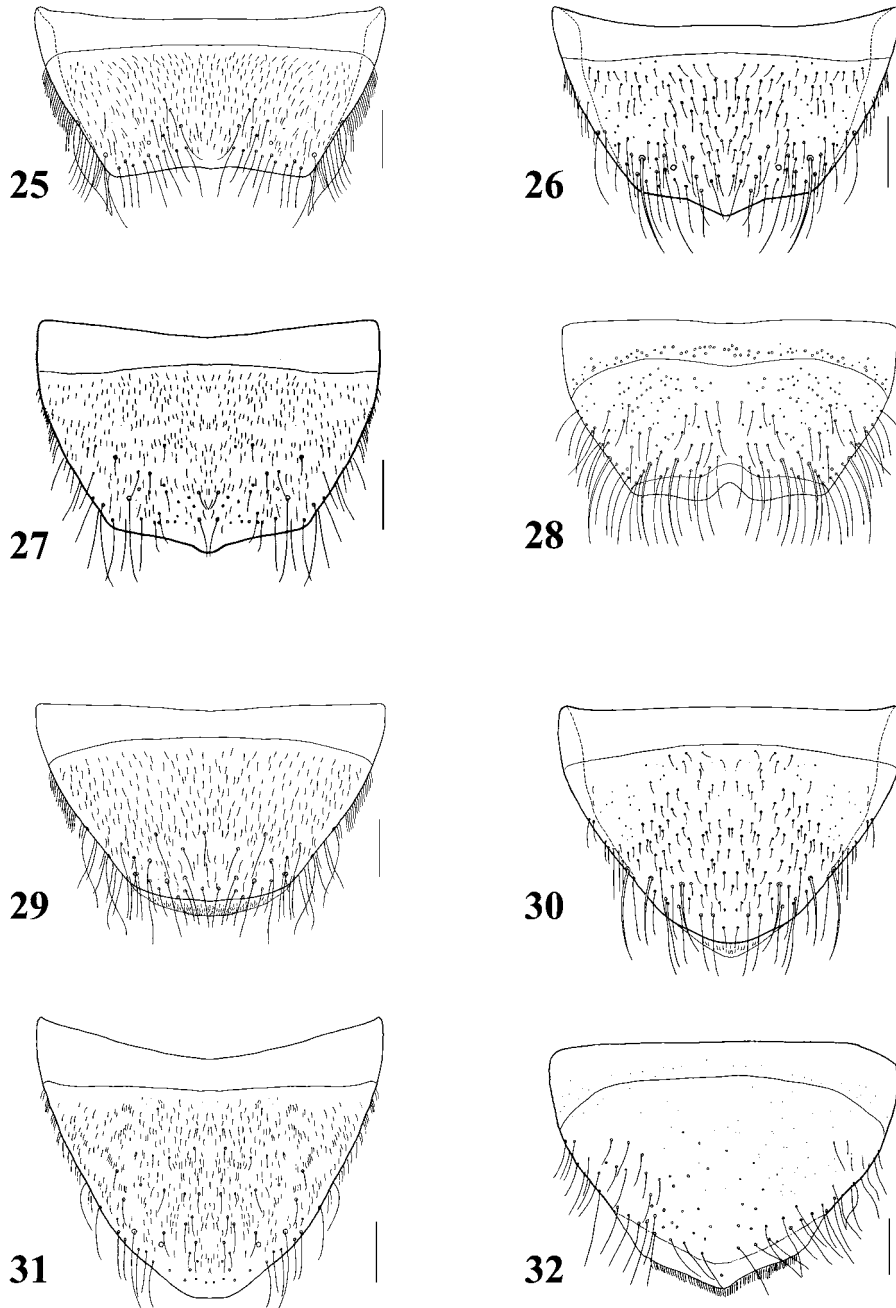
Thinodromus (Thinodromus) bernhaueri (Klima, 1904)

(Figs. 2, 6, 11, 12, 18, 22, 26, 30, 34, 38, 42)

Trogophloeus (Thinodromus) bernhaueri Klima, 1904: 50; Bernhauer & Schubert, 1911: 94; Kashcheev, 1989: 283.

Thinodromus bernhaueri: Herman, 1970: 387; Smetana, 1975: 163.

Thinodromus (Thinodromus) bernhaueri: Gildenkov, 2000: 692, 2001: 73; Smetana, 2004: 534.



FIGURES 25–32. Abdominal sternite VIII of *Thinodromus*, (25–28) and female (29–32), ventral aspect. 25, 29: *T. deceptor*; 26, 30: *T. bernhaueri*; 27, 31: *T. sericatus*; 28, 32: *T. japonicus*. Scale bars: 0.1 mm.

Description. Body length 2.6–3.5 mm. Body glossy. Color usually black, tip of tibia and tarsus brown (Fig. 2).

Head: As long as wide. Eyes large, convex, occupying almost entire lateral side of head. Mandible bidentate, slightly pointed, one subapical tooth present. Median sclerotized plate of hologlossa (Fig. 6) trapezoidal, about 1.3 times longer than wide. In male antenna slightly longer than female. Male antenna (Fig. 10): scape robust, about 2.2 times longer than wide; pedicel about 1.9 times longer than wide, shorter and narrower than scape; antennomere 3 slender, slightly dilated apically, about 2.0 times longer than wide, slightly longer and narrower than pedicel; 4–7 about 1.6 times longer than wide; 8 about 1.2 times longer than wide, shorter than

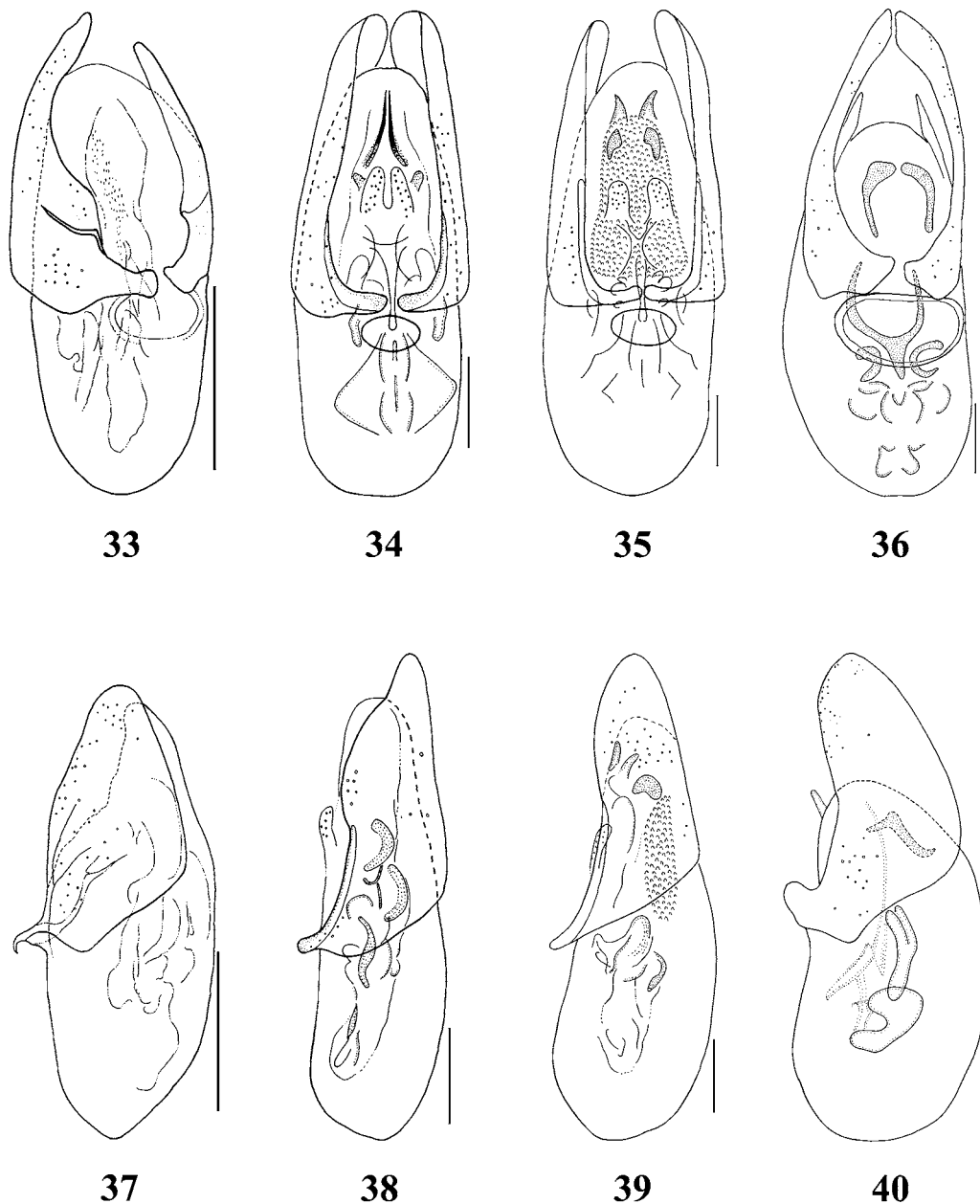
7; 9 about 1.2 times longer than wide, longer than 8; 10 about 1.1 times longer than wide. Female antenna (Fig. 11): antennomeres 4–5 about 1.4 times longer than wide; 6–7 about 1.2 times longer than wide, 8 about 1.1 times longer than wide, 9–10 as long as wide.

Thorax: Pronotum (Fig. 18) wider than long, widest at middle, narrowest at base. Intervals between punctures narrower than puncture diameter. Scutellar impression (Fig. 22) 1.2 times wider than long, shaped as moderately emarginated inverted triangle, with many long pubescence. Elytra wider than pronotum, each elytron with shallow diagonal groove in apical third.

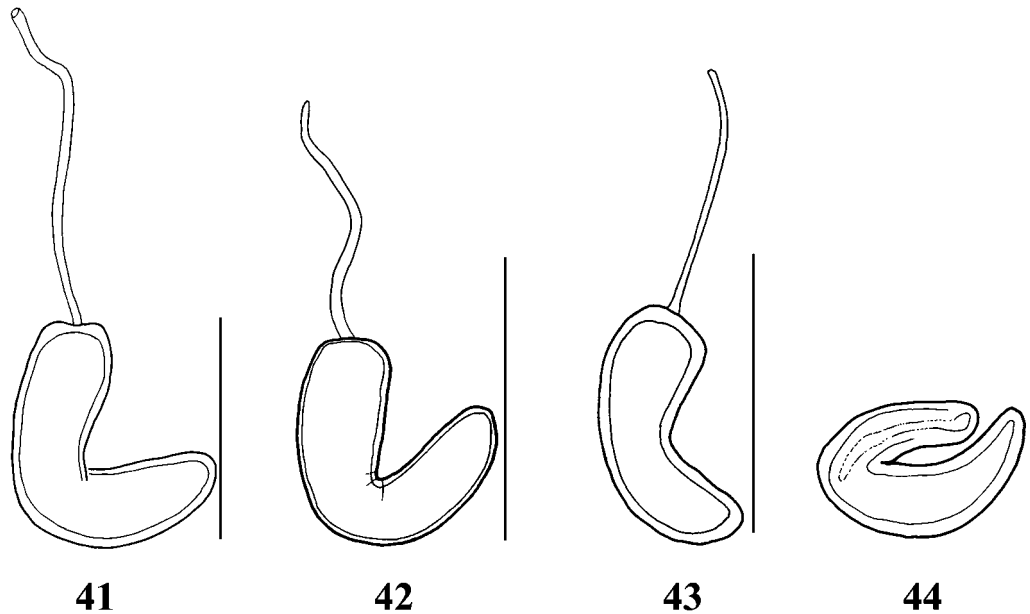
Abdomen: Male sternite VIII (Fig. 26) wider than long and more or less prolonged apically. Posterior margin of female sternite VIII (Fig. 30) broadly round.

Aedeagus (Figs. 34, 38) oval, parameres broad, around the middle of median lobe.

Spermatheca (Fig. 42) in the middle curved about 130 degrees.



FIGURES 33–40. Aedeagus of *Thinodromus*, dorsal (33–36) and lateral (37–40) aspect. 33, 37: *T. deceptor*; 34, 38: *T. bernhaueri*; 35, 39: *T. sericatus*; 36, 40: *T. japonicus*. Scale bars: 0.1 mm.



FIGURES 41–44. Spermatheca of *Thinodromus*. 41: *T. deceptor*; 42: *T. bernhaueri*; 43: *T. sericatus*; 44: *T. japonicus*. Scale bars: 0.1 mm.

Materials examined (total 253 specimens). **RUSSIA:** 5 ex., river Birapchana, Krasnoyarsk region, 29 VI 1993, leg. Semenov V. B., *Thinodromus bernhaueri* (Klima, 1904), det. Gildenkov, 2000; **KOREA: Gangwon Prov.:** 2 ex., Mt. Balgyosan, Chungil-myeon, 9–10 IX 1998, K.-L. You, H.-J. Lim and K.-J. Ahn, *ex* light; 3 ex., Namdaechun, Namdae-dong, 21 IV 2002, S.-J. Park, M.-J. Jeon and J.-S. Park, *ex* under stones near river; 5 ex., Dappung-gyo, Naechon, Hongcheon-gun, 24 V 2002, C.-W. Shin & J.-S. Park, *ex* sifting; **Chungbuk Prov.:** 3 ex., Mt. Sobaeksan, Namcheon-ri, Danyang-gun, 21 VII 2005, S I Lee, *ex* under stone near stream; **Chungnam Prov.:** 35 ex., Kum river, Woosung-myon, Kongju City, 19 IX 1999, K.-J. Ahn & H.-J. Kim, *ex* near stream; 24 ex., same data as former except for Kumnam-myon; 4 ex., Kumnam-myon, Gongju-gun, 7 VI 1999, H.-J. Kim, *ex* near stream; 1 ex., Kum river, Kongju-gun, 6 VII 1999, H.-J. Kim; 14 ex., Sungdang-ri, Chubu-myeon, Kumsan-gun, 27 IV 2006, T.-K. Kim & Y.-H. Kim, *ex* near stream; 3 ex., same data as former except for Y.-H. Kim; 4 ex., same data as former except for K.-J. Ahn; 12 ex., Sutonggol, Daejeon City, 18 IV 1998, K.-J. Ahn, H.-J. Kim, H.-J. Lim and K.-L. Yu, *ex* near stream (1 male, on slide); 21 ex., same data as former except for 26 VI 1999, H.-J. Kim (2 males and 2 females, on slide); 3 ex., same data as former except for 9 V 1998, K.-L. Yu & H.-J. Kim; 1 ex., same data as former except for Gyesan-dong, Yuseong-gu, 6 IV 2003, S.-M. Choi & J.-S. Park; 1 ex., Sinwonsa, Mt. Gyeryongsan, Gongju, 17 VII 2002, Churu Shin, *ex* near stream; 2 ex., Kongam-ri, Banpo-myeon, Kongju City, 6 IX 2003, S.-M. Yu, E.-S. Go, Y.-S. Park, S.-M. Yun and J.-S. Park; 26 ex., Kumsu-bong, Mt. Gyeryongsan, Gyesan-dong, Yuseong-gu, Daejeon City, 21 V 2000, S.-J. Park, *ex* near stream; 2 ex., same data as former except for 23 VI 2000, H.-J. Kim; **Jeonbuk Prov.:** 1 ex., Mankyong river, Ha-ri, Wanju-gun, 6 IX 2005, D H Lee, *ex* under stone near stream; 11 ex., Mt. Deokyusan, Muju-gun, N35°50'35", E127°41'32", 353 m, 27 V 2005, J.-S. Park, S.-I. Lee, T.-K. Kim and D.-M. Lee, *ex* under stone; **Jeonnam Prov.:** 34 ex., Oidong-ri, Changpyeong-myeon, Damyang-gun, N35°10'48.1", E127°2'45.6", 21 IV 2006, K.-J. Ahn, T.-K. Kim, H.-W. Kim and Y.-H. Kim, *ex* under stones near stream (2 males and 2 females, on slide); 1 ex., Mt. Duryunsan, Gurim-ri, Samsan-myeon, Haenam-gun, 46 m, 20 V 2005, S.-I. Lee & J.-S. Park; **Gyeongbuk Prov.:** 2 ex., Gikjisa, Kimcheon, 13 V 1989, K.-J. Ahn, *ex* near stream; 27 ex., Jeokdeok-ri, Bonghwa-gun, N36°86'73.5", E128°68'46.5", 3 V 2003, S.-J. Park & J.-S. Park, *ex* near stream; 5 ex., same data as former except for Kaji-gol, Gangdong-ri, Y.B. Cho, S.-J. Park and J.-S. Park; **Jeju Prov.:** 1 ex., Seogwipo City, 14 VII 1985, K.S. Lee.

Distribution. Korea, Russia, and Mongolia.

Remarks. This species is very similar in appearance to *T. sericatus*, but can be distinguished by the trapezoidal median sclerotized plate of hologlossa (circular in *T. sericatus*), a longer pubescence on the abdomen, and shorter antennomeres as well as a distinct structure of the aedeagus and spermatheca. *Thinodromus bernhaueri* is also different from *T. deceptor* and *T. japonicus* in having black coloration and all antennomeres longer than wide.

Thinodromus (Thinodromus) sericatus (Sharp, 1889)

(Figs. 3, 7, 13, 14, 19, 23, 27, 31, 35, 39, 43)

Trogophloeus sericatus Sharp, 1889: 415.

Trogophloeus eminens Sharp, 1889: 416 (synonymized by Gildenkov, 2001).

Trogophloeus (Thinodromus) eminens: Bernhauer & Schubert, 1911: 94.

Trogophloeus (Thinodromus) sericatus: Bernhauer & Schubert, 1911: 95.

Carpelimus (Thinodromus) sericatus: Adachi, 1957: 6.

Carpelimus sericatus: Nakane, 1963: 83.

Thinodromus eminens: Herman, 1970: 387.

Thinodromus sericatus: Herman, 1970: 387; Shibata, 1976: 145; Frank, 1982: 16; Watanabe, 1985: 273; Yuh *et al.*, 1985: 227; Kim *et al.*, 1994: 140; Cho & Ahn, 2001: 43.

Thinodromus (Thinodromus) eminens: Gildenkov, 2000: 693.

Thinodromus (Thinodromus) sericatus: Gildenkov, 2000: 693; 2001: 70; Smetana, 2004: 535.

Description. Body length 2.7–3.6 mm. Body weakly glossy. Color usually black, tip of tibia and tarsus brown (Fig. 3).

Head: Slightly wider than long. Eyes large, convex, occupying almost entire lateral side of head. Median sclerotized plate of hologlossa (Fig. 7) circular, about 1.1 times longer than wide. In male antenna slightly longer than female. Male antenna (Fig. 13): scape robust, about 2.7 times longer than wide; pedicel about 2.1 times longer than wide, shorter and narrower than scape; antennomere 3 slender, slightly dilated apically, 2.3 times longer than wide, slightly longer and narrower than pedicel; 4–7 about 2.2 times longer than wide; 8 about 2.0 times longer than wide; 9–10 about 1.7 times longer than wide. Female antenna (Fig. 14): antennomeres 4–7 about 1.8 times longer than wide; 8 about 1.5 times longer than wide; 9 about 1.3 times longer than wide; 10 about 1.1 times longer than wide.

Thorax: Pronotum (Fig. 19) wider than long, widest at middle, narrowest at base. Intervals between punctures wider than puncture diameter, punctures very small. Scutellar impression (Fig. 23) 1.4 times wider than long, shaped as broadly emarginated inverted triangle, with many short pubescence. Elytra wider than pronotum, each elytron with shallow diagonal groove in apical third.

Abdomen: Male sternite VIII (Fig. 27) wider than long and more or less prolonged apically. Posterior margin of female sternite VIII (Fig. 31) broadly round.

Aedeagus (Figs. 35, 39) oval and more or less flattened, median lobe long, parameres slightly broad, wrapping around two-thirds of median lobe.

Spermatheca (Fig. 43) in the middle very slightly curved.

Type material. Lectotype (designated by Gildenkov 2001), male, labeled as follows: '*Trogophloeus sericatus*. Type D. S. Konose. Japan. 29.4.1881. Lewis, Type, Lectotypus *Trogophloeus sericatus* Sharp, Sharp Coll 1905–313, Japan. G. Lewis., *Thinodromus sericatus* 2000 det. M. Gildenkov' (Deposited in The Natural History Museum, London).

Additional materials (total 30 specimens). **KOREA: Gangwon Prov.:** 2 ex., Chugokcheon, Balsan-ri, Nam-myeon, Chuncheon City, 80 m, 24 VIII 2005, S.-I. Lee, S.-M. Choi and J.-S. Park, *ex* under stones near stream; 9 ex., Mt. Chiaksan, Wonju City, 231 m, 8 VII 2005, K.-J. Ahn, S.-J. Park and S.-I. Lee, *ex* under

stones near stream; 5 ex., Yonsei University, Heungeop-myeon, Wonju City, 7 VII 2005, S.-J. Park & S.-I. Lee, *ex* under stones near stream (3 males and 2 females, on slide); **Jeonnam Prov.:** 6 ex., Wolpyeong-ri, Jinan-gun, 24 IX 2005, S.-J. Park & D.-H. Lee, *ex* under stones near stream; 4 ex., Mt. Duryunsan, Gurim-ri, Samsan-myeon, Haenam-gun, 46 m, 20 V 2005, S.-I. Lee & J.-S. Park; **Gyeongbuk Prov.:** 1 ex., Dongmyeong reservoir, Chilgok-gun, 23 VII 1986, Y.B. Cho; **Gyeongnam Prov.:** 3 ex., Jeongdong-myeon, Sacheon City, 10 VI 1986, K.S. Lee, *ex* light near stream.

Distribution. Korea and Japan.

Remarks. The species is very similar in appearance to *T. bernhaueri*, but can be distinguished by the circular median sclerotized plate of hloglossa (trapezoidal in *T. bernhaueri*), shorter pubescence on abdomen, and longer antennomeres as well as a distinct structure of the aedeagus and spermatheca. *Thinodromus sericatus* is also different from *T. deceptor* and *T. japonicus* by the all antennomeres longer than wide, black coloration, and very short pubescence along the entire body.

Thinodromus (Amisammus) japonicus (Cameron, 1930)

(Figs. 4, 8, 15, 16, 20, 24, 28, 32, 36, 40, 44)

Trogophloeus (Carpelimus) japonicus Cameron, 1930: 183; Scheerpeltz, 1933: 1082.

Carpelimus (Carpelimus) japonicus: Adachi, 1957: 6; Shibata, 1976: 148; Watanabe, 1998: 313.

Carpelimus japonicus: Herman, 1970: 392.

Thinodromus japonicus: Watanabe, 1985: 273.

Thinodromus (Amisammus) japonicus: Gildenkov, 2000b: 1075; 2001: 123; Smetana, 2004: 534.

Description. Body length 3.3–4.0 mm. Body glossy. Color usually dark brown, legs pale brown (Fig. 4).

Head: Slightly longer than wide. Eyes moderately large and convex, occupying two-thirds of lateral side of head. Temples moderately developed. Mandible blunt, three subapical teeth present. Median sclerotized plate of hloglossa (Fig. 8) diamond, 1.7 times longer than wide. In male antenna slightly longer than female. Male antenna (Fig. 15): scape robust, about 2.6 times longer than wide; pedicel about 2.3 times longer than wide, shorter and narrower than scape; antennomere 3 slender, slightly dilated apically, about 1.8 times longer than wide; 4–6 about 1.4 times longer than wide; 7 about 1.3 times longer than wide; 8–9 as long as wide; 10 about 1.1 times wider than long. Female antenna (Fig. 26): scape about 2.4 times longer than wide; pedicel about 1.6 times longer than wide; antennomere 3 about 1.6 times longer than wide; 6–7 about 1.2 times longer than wide; 8–9 about 1.1 times wider than long; 10 about 1.3 times wider than long.

Thorax: Pronotum (Fig. 20) wider than long, widest at anterior third, narrowest at base, pubescence arrange toward head. Intervals between punctures as long as puncture diameter, punctures large and deep. Upper side of procoxal cavity pointed. Scutellar impression (Fig. 24) 1.9 times wider than long, shaped as semicircular, with several long pubescence. Elytra wider than pronotum.

Abdomen: Male sternite VIII (Fig. 28) wider than long and more or less emarginated apically. Posterior margin of female sternite VIII (Fig. 32) broadly round.

Aedeagus (Figs. 36 & 40) oval, parameres broad, wrapping one third of median lobe.

Spermatheca (Fig. 44) in the middle curved about 180 degrees.

Type material. Holotype, male, labeled as follows: ‘Holotypus *Trogophloeus japonicus* Cameron, Type, JAPAN Kobe 10. IV. 30. Stream retire, M. Cameron. Bequest. B. M. 1955–147., *T. Japonicus* Cam. TYPE, *Thinodromus japonicus* (Cam.) 2000 det. M. Gildenkov’ (Deposited in The Natural History Museum, London).

Additional materials (total 141 specimens). **KOREA: Jeju Prov.:** 26 ex., Seongpanak, Jocheon-eup, Bukjeju-gun, 27 VI 2003, M.-J. Jeon, *ex* under leaf litters (2 males, on slide); 27 ex., Goipyongioreum, Namjeju-gun, 28 V 2003, S.-J. Park, C.-W. Shin and M.-J. Jeon, sifting; 4 ex., same data as former except for

28 V – 27 VI 2003, Y.B. Cho, S.-J. Park and C.-W. Shin, FIT; 3 ex., Goipyongioreum, Gyora-ri, Jocheon-eup, Bukjeju-gun, 13 VI 2005, S.-J. Park & S.-I. Lee, sifting; 1 ex., same data as former except for 30 V – 17 VI 2003, Y.B. Cho, FIT; 4 ex., same data as former except for 28 V 2003, Y.B. Cho; 4 ex., Yeongsil, Mt. Hallasan, Seogwipo City, 17 VI 2003, S.-J. Park, sifting; 17 ex., same data as former except for Y.B. Cho; 7 ex., same data as former except for 24 VII 2003; 18 ex., same data as former except for 23 V 2006, T.-K. Kim & H.-W. Kim, *ex* leaf litters near stream (2 males and 1 female, on slide); 3 ex., same data as former except for 27 X 1985, K.S. Lee, *ex* leaf litters; 2 ex., Bomok-ri, Seogwipo City, 20 III 1986, *ex* under seaweeds; 15 ex., near 1100m Rest Area, 28 V 2003, Y.B. Cho, sifting (1 female, on slide); 1 ex., Muljangoreum, 23 V 1998, Y.B. Cho; 2 ex., Girinsaseum, 28 IX 1984, K.S. Lee; 6 ex., Dongsuak, Namwon-eup, Namjeju-gun, 30 VIII 1997, Y.B. Cho.

Distribution. Korea (Jeju Island) and Japan.

Remarks. This species can be easily distinguished from other Korean *Thinodromus* by the dark brown coloration, long pubescence along the entire body, and semicircular scutellar impression. They are collected only in Jeju Island in Korea.

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