



Synonymy of Aleochara (Aleochara) Claviger and A. niponensis (Coleoptera: Staphylinidae: Aleocharinae), and First Record of A. claviger in Korea

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SYNONYMY OF *ALEOCHARA (ALEOCHARA) CLAVIGER*
AND *A. NIPONENSIS* (COLEOPTERA: STAPHYLINIDAE: ALEOCHARINAE),
AND FIRST RECORD OF *A. CLAVIGER* IN KOREA

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While studying Korean *Aleochara* Gravenhorst, we found a species new to the Korean fauna. After detailed comparisons with many types of the East Asian *Aleochara*, the species was identified as *A. claviger* Sharp. In addition, we noticed that the holotype of *A. niponensis* Sharp was very similar to *A. claviger*. Diagnostic characteristics (shape of antennomeres, male tergite VIII, male sternite VIII, median lobe, and paramere) of *A. niponensis* were not sufficient to maintain the separation of *A. niponensis* and *A. claviger*.

Therefore, after studying the holotype of *A. niponensis* and 431 specimens of *A. claviger*, including 2 syntypes, we synonymize *A. niponensis* under *A. claviger*. We also designate the lectotype of *A. claviger* and report the species for the first time in Korea. All Korean specimens studied are deposited in the Chungnam National University Insect Collection (CNUIC) and Hannam University Natural History Museum (HUNHM), Daejeon, Korea.

Aleochara (Aleochara) claviger Sharp
(Figs. 1-2)

Aleochara claviger Sharp, 1874: 7; Fenyés, 1920: 399; Bernhauer & Scheerpeltz, 1926: 776; Smetana, 2004: 353 (cited as *clavigera*).

Aleochara niponensis Sharp, 1888: 281; Fenyés, 1920: 404; Bernhauer & Scheerpeltz, 1926: 783; Smetana, 2004: 354. **New synonym.**

Description. Length 4.5-8.2 mm. Body large and robust; pubescence and microsculpture absent; black or brownish black. Elytra brown to black with inner apical and lateral margins darker. Antennomeres 1-3 and legs brown or brownish black. Carina on each side of midline of ventral side of head incomplete (fading before attaining gular suture) (Fig. 1b). Eyes large and prominent. Antennomeres 1-3 longer than wide, 4-10 transverse. **Mouthparts.** Labrum (Fig. 1c) transverse, about 18 small and dull setae, about 30 long setae; a- and b-setae and pores present apically. Labral b-seta rounded apically (Fig. 1c). Labium (Fig. 1d) with pseudopores in median area, about 3 real pores and several pseudopores in lateral area. Maxillary palpomere 4 at least 1/2 as long as penultimate; palpomere 1 smallest, 3 longest, 4 as long as 2 and pubescent. Mandible

without internal tooth. Ligula with about 3 small setae apically (Fig. 1d). Prementum without distal-seta and basal-pore (Fig. 1d). Labial palpi (Fig. 1e) with 12 setae (a-h, α - δ), a, b, e, f setae large; β -seta short and closer to tp than to a-seta; c- and d-seta at same level. Mentum (Fig. 1f) transverse, with 4 pairs of main setae (b, u, v, w), 2 extra setae, and pores. Mesosternum not carinate (Fig. 1a). Abdominal tergite VIII (Fig. 2a) with many setae and pores; posterior margin weakly rounded. Male sternite VIII (Fig. 2b) with many setae and pores; posterior margin weakly rounded; posterior area with many short setae marginally. Female sternite VIII (Fig. 2c) with many setae and pores; posterior margin weakly rounded and with many small setae. Median lobe as in Figs. 2e and f. Paramere as in Fig. 2d. Spermatheca coiled closely but irregularly, as in Fig. 2g.

Materials Examined. Lectotype, labeled as follows: Japan, G. Lewis, Sharp Coll. 1905-313.; Lectotype, *Aleochara claviger* Sharp, Desig. Park & Ahn, 2007. Deposited in the Natural History Museum (NHM, London); Paralectotype, 1, labeled as follow: Japan. G. Lewis. 1910-320.; Paralectotype, *Aleochara claviger* Sharp, Desig. Park & Ahn, 2007. Deposited in the Natural History Museum (NHM, London); KOREA: *Gyeonggi Prov.*: Namyangju-city, Sudong-myeon, Oibang-ri, Mt. Chunkryongsan, 12 IX – 14 IX 1999, US Hwang, HJ Kim, *ex* Bait trap (1, CNUIC); Seoul, Dongseon-dong, Mt. Gaewonsan, 22 VI 1985, YS Kim (13, CNUIC); Mt. Gaewonsan, 9 V 1988, YS Kim (3, CNUIC); Paju-city, Mt. Gamaksan, 8 IX 1984, YS Kim (24♂ ♀, CNUIC); *Gangwon Prov.*: Jeongsun-gun, Mt. Gariwangsan, 12 VIII – 14 VIII 1998, HJ Lim, KL You, *ex* bait trap (11♂ ♀, 1♂ 1♀ on slide, CNUIC); Wonju-city, Mt. Chiaksan, Kuryong Area, 10 VII 1999, US Hwang, HJ Kim, *ex* FIT (1, CNUIC); Pyeongchang-gun, Bangrim-myeon, Unkyo2-ri, Mt. Baekdeoksan, 12 VII – 16 VIII 2001, KJ Ahn, SJ Park, CW Shin, *ex* FIT (2, CNUIC); Injae-gun, Mt. Jumbongsan, Gombaeyong, 23 VIII – 30 VIII 1999, US Hwang, *ex* bait trap (1, CNUIC); Pyeongchang-gun, Cheongdong-ri, Mt. Sambangsan, 13 VII – 15 VIII 2001, KJ Ahn, SJ Park, CW Shin, *ex* FIT in *Pinus* forest (1, CNUIC); Noron-ri, Mt. Sambangsan, 13 VII – 15 VIII 2001, KJ Ahn, SJ Park, CW Shin, *ex* FIT (1, CNUIC); *Chungnam Prov.*: Gongju-city, Banpo-myeon, Mt. Gyeoryongsan, Temple Donghaksa, 26 V 1983, YB Cho (4♂ ♀, CNUIC); Dae-

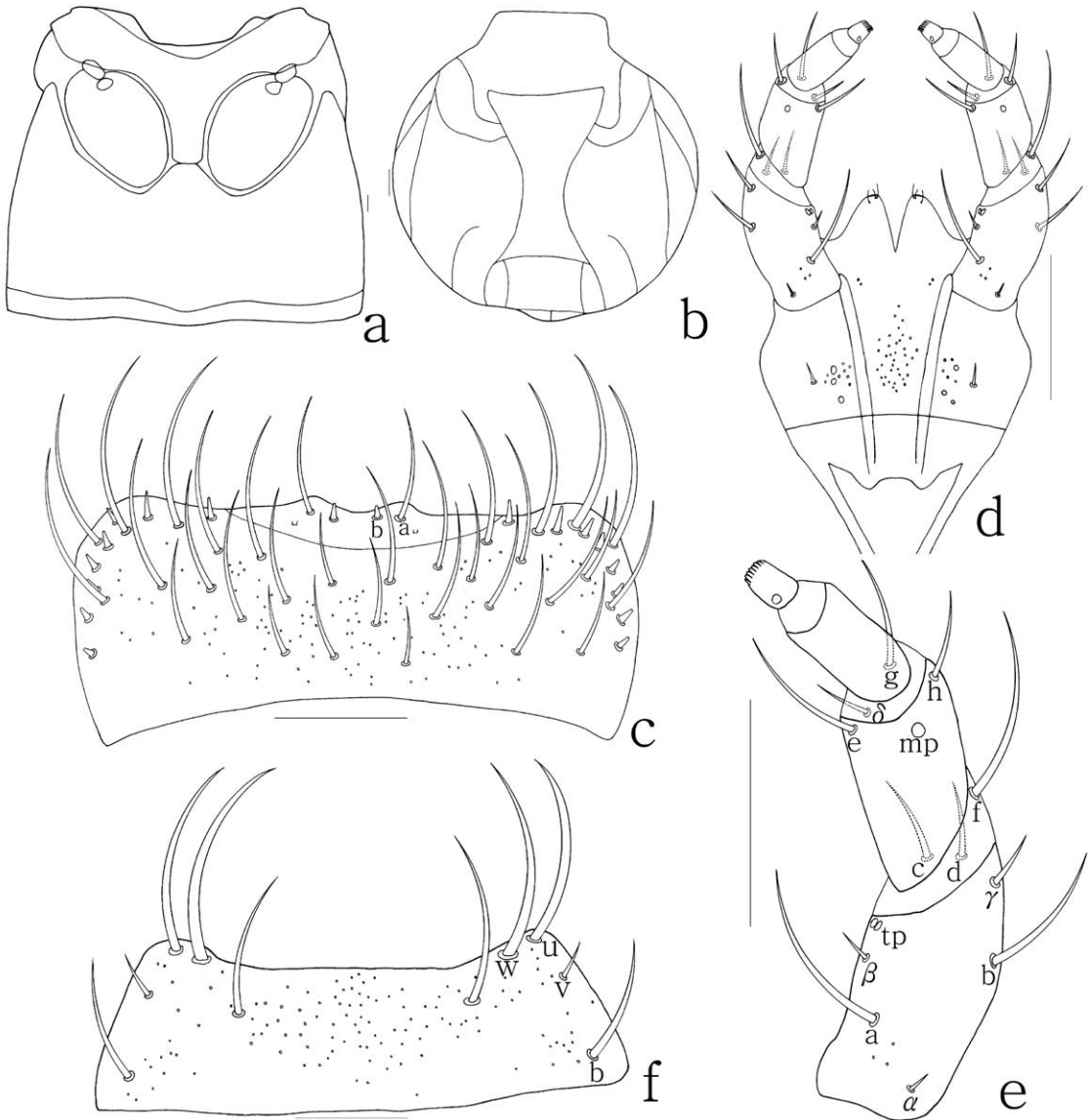


Fig. 1. *Aleochara (Aleochara) claviger*, a: meso- and metasternum, ventral aspect; b: head, ventral aspect; c: labrum, dorsal aspect; d: labium, ventral aspect; e: labial palpus, ventral aspect; f: mentum, ventral aspect. Scale bars = 0.1 mm.

jeon-city, Sutonggol, 21 IV 1998, KJ Ahn, HJ Kim, HJ Lim, KL Yu *ex* bait trap (4♂♀, CNUIC); Yu-seong-gu, Gung-dong, Chungnam National Univ., 20 VI 2000, SJ Park (1, CNUIC); Taean-gun, Taean-eup, Mt. Baehwasan, 6 VII – 25 VIII 2001, SJ Park, CW Shin, *ex* FIT (1, CNUIC); *Gyeongbuk Prov.*: Uleung-do, Uleung-gun, Uleung-eup, Tonggumi, 31 VII – 31 VIII 2001, YB Cho, *ex* bait trap (290♂♀, 2♂♂ on slide, CNUIC); Buk-myeon; Naribunji (39♂♀, HUNHM); Uljin-gun, Onjong-myeon, Mt. Paekamsan, 11 VII – 13 VII 1999, US Hwang, HJ Kim, *ex* bait trap (9♂♀, CNUIC);

Gyeongnam Prov.: Sacheon-eup, Guam-ri, 5 V 1986, KS Lee (17♂♀, CNUIC); CHINA: Szechuan, Tatsienlu, Nitou, Em. Reitter (2, NHM); Tempelberg 900m, Ginyun b. Bébé, C. China, Rtrr. (3, NHM); JAPAN: G. Lewis. 1905-313 (1, holotype of *A. niponensis*), Deposited in the Natural History Museum (NHM, London).

Distribution. Korea, China, and Japan.

Remarks. *Aleochara (Aleochara) claviger* Sharp can be distinguished from *A. brevipennis*, *A. coreana*, *A. curtula*, *A. kochi*, and *A. parens* by having a straight posterior margin of male

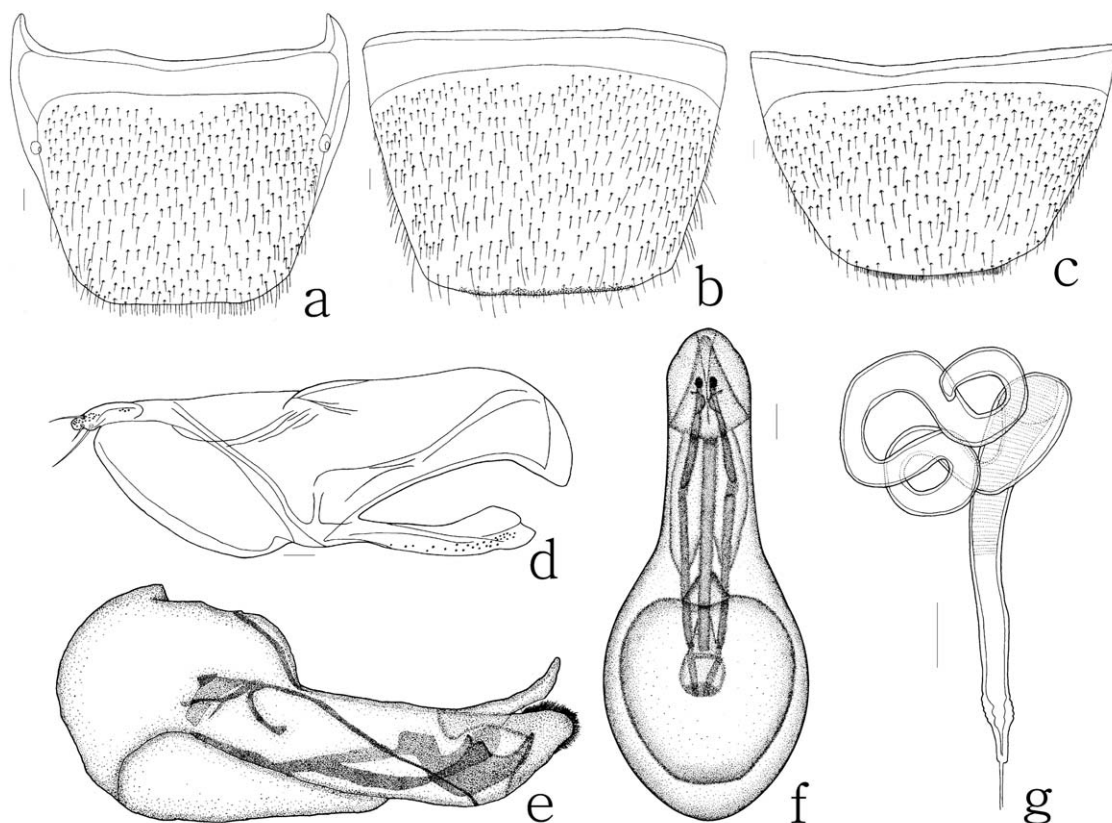


Fig. 2. *Aleochara (Aleochara) claviger*, a: tergite VIII, dorsal aspect; b: male sternite VIII, ventral aspect; c: female sternite VIII, ventral aspect; d: paramere, lateral aspect; e: median lobe, lateral aspect; f: median lobe, dorsal aspect; g: spermatheca, dorsal aspect. Scale bars = 0.1 mm.

tergite VIII (Fig. 2a). This species differs from *A. lata* in having brown or brownish black antennomere 1~3. Additionally, *A. claviger* differs from all other East Asian species of the subgenus *Aleochara* in having many short setae on the posterior area of male sternite VIII (Fig. 2b) and a coiled spermatheca (Fig. 2g).

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SUMMARY

A taxonomic study of *Aleochara (Aleochara) claviger* Sharp, identified for the first time in Korea, is presented. The lectotype of *A. claviger* is designated and *A. niponensis* Sharp is synonym-

mized under *A. claviger*. Illustrations of the diagnostic characters and redescription are provided.

REFERENCES CITED

- BERNHAEUER, M., AND SCHEERPELTZ, O. 1926. Staphylinidae VI, pars 82, pp. 499-988 *In* S. Schenkling [ed.], *Coleopterorum Catalogus*. W. Junk Berlin.
- FENYES, A. 1920. Coleoptera: Fam. Staphylinidae, subfam. Aleocharinae, pp. 111-414 *In* P. Wytzman [ed.], *Genera Insectorum*. Fascicle 173b. Louis Desmet-Verteneuil Bruxelles.
- SHARP, D. S. 1874. The Staphylinidae of Japan. *Trans. Entomol. Soc., London*, pp. 1-101.
- SHARP, D. S. 1888. The Staphylinidae of Japan. *Ann. Mag. Nat. Hist.* 6(2): 277-295.
- SMETANA, A. 2004. Aleocharinae, pp. 353-295 *In* I. Löbl and A. Smetana [eds.], *Catalogue of Palaearctic Coleoptera Volume 2, Hydrophiloidea, Histeroidea, Staphylinidea*. Apollo Books Stenstrup. 942 pp.