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Taxonomic Notes on the Stag-Beetles Known from Chejudo Island, Korea ^{1), 2)}

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Abstract.

The lucanid fauna from Chejudo Island is revised, in which six species are listed and *Serrognathus consentaneus* is newly recorded.

Introduction

The stag-beetles, namely the family Lucanidae are very popular insects and ten species of which are known from southern Korea after Kim (1978). Lee, Kim & Kim (1985) recorded *Prosopowihs blanchardi* from Mt. Hallasan, Chejudo. Bomans (1989) and Imura & Choe (1989) described *Figulus venustus* and *Platycerus hongwonpyoi* (probably same as *P. sp.* of Watanabe, 1989) respectively, both of which are distributed in Korean peninsula. The lucanid fauna of southern Korea therefore comprises thirteen species up to now.

As to the lucanid fauna of Cheju Island, *Eurytrachelus platymelus* (*Serroganatus platymelus castanicolor* in this paper) was recorded by Okamoto (1924) for the first time. From this island, five lucanid species are known and four of which are common with the Japanese fauna.

Present paper gives a check& of Lucanidae of Chejudo Is. from the Korean literature including a first record of *Serrognathus consentaneus* with notes on its diagnostic characters.

Family LUCANIDAE

1) Results from the Korea-Japan Co-operative Science Program on "The Evolution and Biogeography of the Insects in the East Asia". No. 8.

2) Contribution from the Entomological Laboratory, Faculty of Agriculture, Kyushu University, Fukuoka (Ser. 4, No. 42)

Subfamily Lucaninae

***Prismognathus dauricus* (Motschulsky)**

(Fig. 1A)

Cladognathus dauricus Motschulsky, 1860, Shrenks Reise: 137.

Cladognathus subaeneus Motschulsky, 1860, l. c.: 138; Heiden, 1884, Deutsch. ent Zeitschr., 28: 276 (synonymized).

Prismognathus subaeneus : Cho, 1957, Hum. Sci. Korea Univ., 2: 115; 1963, *ibid.*, 6: 58.

Prismognathus damicus : Kurosawa, 1976, Pam. Lucanidae, In Check-Lit of Coleoptera of Japan, Col. Assoc. Japan, Tokyo, (1): 4; Kim. 1978, Dist Atlas Ins. Korea, 2: 311; Lee, Kim & Kim. 1985, Rep. acad. Surv. Hallasan (Mt.) Nat. Pres.: 417.

Specimens ~~examined~~: 1 male, Yongshil, Mt. Hallasan, 24. vii. 1990, M. T. Chûjô leg.

Distribution. Korea, China, Siberia, Japan (Tsushima Is.).

***Prosopocoilus blanchardi* (Parry)**

(Fig. 2A)

Metopodontus blanchardi Parry, 1873, Trans. ent. Soc. Lond., 1873: 337; Lee, Kim & Kim. 1985, Rep. acad. Surv. Hallasan (Mt.) Nat. Pres.: 417.

Prosopocoirus blanchardi : Nomura, 1965, Spec. Bull. lep. Soc. Jap., (1): 141.

Specimens **examined**: 1 male, Kaewol Bridge, Mt. Hallasan, 27. vii. 1990, S. Kamitani leg.

Distribution. Korea, China, Mongolia, Formosa.

Fig. 1. Dorsal aspects. A, *Prismognathus dauricus* (Motschulsky); B, *Macrodercus rectus rectus* (Motschulsky).

***Prosopocoilus inclinatus inclinatus* (Motschulsky)**

Lucanus inclinatus Motschulsky, 1857, **Etud. Entomol.**, 6: 29.

Psalidognathus inclinatus : Motschulsky, 1861, *ibid.*, 10: 13.

Psalidoremus inclinatus : Parry, 1870, **Trans ent. Soc. Lond.**, 1870: 76; Cho, 1931, **J. Chosen nat. Hist. Soc.**, (12): 57; 1957, **Hum. Sci. Korea Univ.**, 2: 115; Lee, Kim & Kim. 1985, **Rep. acad. Surv. Hallasan** (Mt.) **Nat. Pres.**: 418.

Psalidoremus inclinatus, *var. inflexus* : Cho, 1931, **J. Chosen nat. Hist. Soc.**, (12): 58.

Metopodontus inclinatus : Kurosawa, 1970, **Mem. nat. Sci. Mus, Tokyo**, (3): 290; Kim. 1978, **Dist. Atlas Ins. Korea**, 2: 314.

Prosopowilus inclinatus inclinatus : Nomura, 1960, **Toho-Gakuho**, (10): 40; Kurosawa, 1976, **Fam. Lucanidae**, In **Check-List of Coleoptera of Japan**, **Col., Assoc. Japan, Tokyo**, (1): 5.
Distribution Korea, Japan.

***Macrodercus rectus rectus* (Motschulsky)**

(Fig. 1B)

Psafidostomus rectus Motschulsky, 1857, **Etud. Entomol.**, 6: 29.

Eurytrachelus rectus : Cho, 1931, **J. Chosen nat. Hist. Soc.**, (12): 58.

Macrodercus rectus : Motschulsky, 1861, *ibid.*, 10: 16; Cho, 1957, **Hum. Sci. Korea Univ.**, 2: 115; Kurosawa, 1970, **Mem. nat. Sci. Mus, Tokyo**, (3): 289; 1976, **Fam. Lucanidae**, In **Check-List of Coleoptera of Japan**, **Col. Assoc. Japan, Tokyo**, (1): 7; Kim. 1978, **Dist. Atlas Ins. Korea**, 2: 313.

Specimens examined: 1 female, Kaewol Bridge., Mt. Hallasan, 27. vii. 1990, S. Nomura leg.

Fig. 2 Dorsal aspects. A, *Prosopowirus branchardi* (Parry); B, *Serrognathus platymelus castanicolor* Motschulsky; C, *S. consentaneus* (Albers).

Distribution. Korea, China, Japan.

***Serrogathus platymelus castanicolor* Motschulsky**

(Fig. 2B, 3A, C)

Serrogathus castanicolor Motschulsky, 1861, Etud. Entomol., 10: 12.

Eurytrachelus platymelus: Cho, 1931 (nec. Saunders, 1854), J. Chosen nat. Hist. Soc., (12): 58.

Eurytrachelus platymerus: Okamoto, 1924, Bull. Agric. Expt. Stat. Gov.- Gen. Chosen: 169 (misspelling);

Cho, 1957, Hum. Sci. Korea Univ., 2: 116.

Eurytrachellelus platymerus: Cho, 1963, Hum. Sci. Korea Univ., 6: 58 (misspelling).

Fig. 3. A-B, male genitalia; C-D, 9th abdominal sternites of females. A, C *Serrogathus platymelus castanicolor* Motschulsky; B, D, *S. consentaneus* (Albers).

Eurytrachelus platymelus : Lee, Kim & Kim. 1985, Rep. acad. Surv. Hallasan (Mt.) Nat. Pres.: 417 (misspelling).

Dorcus (Serrognathus) titanus castanicolor : Nomura, 1960, Toho-Gakuho, 10: 42.

Serrognathus platymerus castanicolor : Kurosawa, 1970, Mem. nat. Sci. Mus, Tokyo, (3): 289; 1976, Fam. Lucanidae, In Check-Lit of Coleoptera of Japan, Col. Assoc. Japan, Tokyo, (1):1985, Luc., Col. Jap. Color, 2: 343; Satô & Saitô, 1989, Col. Luc., Ch. L. Jap. Ins, Fukuoka, 1: 300.

Serrognathus titanus castanicolor : Kim, 1978, Dist. Atlas Ins. Korea, 2: 309.

Specimens **examined**: 5 males 8 females, Kaewol Bridge, Mt. Hallasan, 27. vii. 1990, S. Kamitani & S. Nomura leg.

Distribution. Korea, China, Japan (Tsushima Is., Goto Isls.).

Serrognathus consentaneus (Albcrs)

(Figs. 2C, 3B, D)

Eurytrachelus consentaneus Albers, 1886, Deutsch. ent. Zeitschr., 30 (1): 28.

Dorcus (Serrognathus) fasolt : S.-Z. Nomura, 1962 (**nec.** Kriesche, 1921), Toho-Gakuho, (12): 35; Kurosawa, 1970, Mem. nat. Sci. Mus., Tokyo, (3): 291 (synonymized).

Serrognathus consentaneus : Kurosawa, 1970, Mem. nat. Sci. Mus., Tokyo (3): 289; 1976, Fam. Lucanidae, In Check-List of Coleoptera of Japan, Col. Assoc. Japan, Tokyo, (1):8.

Serrognathus consetaneus : Kim, 1978, Dist. Atlas Ins. Korea, 2: 310 (misspelling).

Remarks. Maes (1982) redescribed the genitalia of this species and reported it from Korea as a new record. But it has been already known from Korea by S.-Z. Nomura (1962) under the name *Dorcus fasolt*, and by Kim (1978). This species is very similar in its appearance to *S. platymelus castanicolor*, but in the male, it is easily separated by the slenderer parameres each with a large inner process and a line of serra (two large processes in *platymelus*) as shown in S.-Z. Nomura (1962) and Maes (1982). As for the female, this species is distinguishable from *S. p. castanicolor* after Sugita (1987) by the ninth sternite, namely it consists of a pair of hemisternites distant from each other, each with an elongate and distally rounded apical sclerite and a strongly narrowed basal sclerite; on the other hand, it is composed of a short and truncate apical sclerite being close to each other and short and broadly sclerotized basal part in *S. p. castanicolor*.

Specimens **examined**: 4 males 3 females, Kaewol Bridge, Mt. Hallasan, 27. vii. 1990, S. Kamitani & S. Nomura leg.

Distribution. Korea, China, Japan (Tsushima Is.)

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