

Additional Notes on Japanese Stag-beetles

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Though the Japanese stag-beetles are well studied, new names are required for insular forms of several species, especially for those from the Ryûkyû Archipelago.

Lucanus maculifemoratus MOTSCHULSKY, 1861

This species has three forms in Japan, viz., *maculifemoratus* MOTSCHULSKY, s. str. from central Honshû, *hopei* PARRY, 1862, from Hokkaidô and mountainous areas of Honshû, and *elegans* PLANET, 1898, from hilly areas of Honshû, Shikoku and Kyûshû. These forms are distinguished from one another by the form of the mandibles in the male, but are indistinguishable in the female.

In 1972, Dr. T. NAKANE examined the type-specimen of *L. maculifemoratus* MOTSCHULSKY preserved in the Zoological Museum, University of Moscow, and found that it is nothing but a medium-sized male of so-called "form *elegans* PLANET, 1898". *Lucanus maculifemoratus* var. *elegans* described by M. PLANET in 1898 from "Yeso" is a mere synonym of *L. hopei* PARRY, 1862, and the name f. *maculifemoratus* MOTSCHULSKY, 1861, must be used for the so-called form "*elegans* PLANET". Therefore, the new name, *nakanei* n. sp. is herewith given for the so-called form "*maculifemoratus* MOTSCHULSKY", because there is no available name for it.

The three forms of this species may be distinguished by the points mentioned in the following key.

1. —Mandibles strongly furcate at apex, with the basal dentation not longer than the others 2
—Mandibles not so strongly furcate at apex, with the basal dentation strongly produced and distinctly longer than the others. .f. *nakanei* nov.
2. —Dentations of mandibles uneven, basal dentation about as long as the medium, and the furcated apical branches robuster
.....f. *maculifemoratus* MOTSCHULSKY, 1861
—Dentations of mandibles almost even, basal dentation shorter than the medium, and the furcated apical branches longer and slenderer
.....f. *hopei* PARRY, 1862

Lucanus balachowskyi LACROIX, 1968, described from Mukoda, South Kyûshû, is nothing but a synonym of f. *maculifemoratus* MOTSCHULSKY s. str. Its type-specimen, which is preserved in the Muséum National d'Histoire Naturelle, Paris,

and was examined by the present author, is the minute form of *maculifemoratus*.

In Hokkaidô, *f. hopei* PARRY is the sole inhabitant, and it is also found in the northern and central hilly areas of Honshû and rarely in the central mountainous part of Kyûshû. On the contrary, the Izu-Hakone district, including Mt. Fuji and the northern Izu Islands, is solely occupied by *f. nakanei* m. The latter is also rarely found in Sado, northern Honshû and Shikoku, which are mainly occupied by *maculifemoratus*, a form that has the widest distributional range of the three. The details of their distribution will be discussed in another paper.

Neolucanus saundersi insulicola subsp. nov.

Differing from typical *saundersi* PARRY, 1864, described from North India, in the form of male mandibles, which are robuster, with the basal erect dentation robuster, larger, and about as long as the apical erect dentation.

Length: 32.5–49.0 mm (without mandibles), 37–60 mm (with mandibles) (male), 40.5–44.0 mm (without mandibles), 45–48 mm (with mandibles) (female); width: 15–24 mm (male), 21–23 mm (female).

Holotype: ♂, Funaura, Iriomote-jima I., 1968; allotype and a paratype: 2 ♀♀, Ôhara, Iriomote-jima I., 20–30. xi. 1973, T. IMAIZUMI lgt.; paratypes: 1 ♂, Kabira, Ishigaki-jima I., 30. iii. 1936, T. KANO lgt.; 1 ♂, Ôhara, Iriomote-jima I., 20–30. xi. 1973, T. IMAIZUMI lgt.; 1 ♂, Hiraé, Ishigaki-jima I., v. 1960, MIYARA lgt.; 1 ♂, Ôhara, Iriomote-jima I., 1. xi. 1963, H. HASEGAWA lgt.

Range. Ryûkyû Islands (Yaéyama group).

Neolucanus saundersi protogenetivus subsp. nov.

Differing from the preceding subspecies in the shape of oculo-frontal ridge, which is longitudinally truncate and not produced lateroanteriorly.

Length: 48.5 mm (with mandibles), 41 (without mandibles) (male); 43–44 mm (without mandibles), 47–48 mm (with mandibles) (female); width: 20 mm (male), 22.0–22.6 mm (female).

Holotype: Nishikata-son (Setouchi-chô at present), Amami-Oshima I., 25. ix. 1937, Y. MAKI lgt.; allotype and a paratype: 2 ♀♀, Mt. Yuwan-dake, Amami-Ôshima I., 29. ix. 1937, Y. MAKI lgt.

Range. Ryûkyû Islands (Amami group).

Prosopocoilus motschulskyi pseudodissimilis subsp. nov.

Differing from typical *motschulskyi* WATERHOUSE, 1869, known from Formosa in the following points: 1) mandibles slenderer, similar to those of *dissimilis okinawanus* NOMURA, 1962, described from Okinawa; 2) body above brighter. From *dissimilis* BOILEAU, 1898, known from the Amami and Okinawa groups of the Ryûkyû Archipelago, it is distinguishable by the shape of clypeus, which is almost identical with

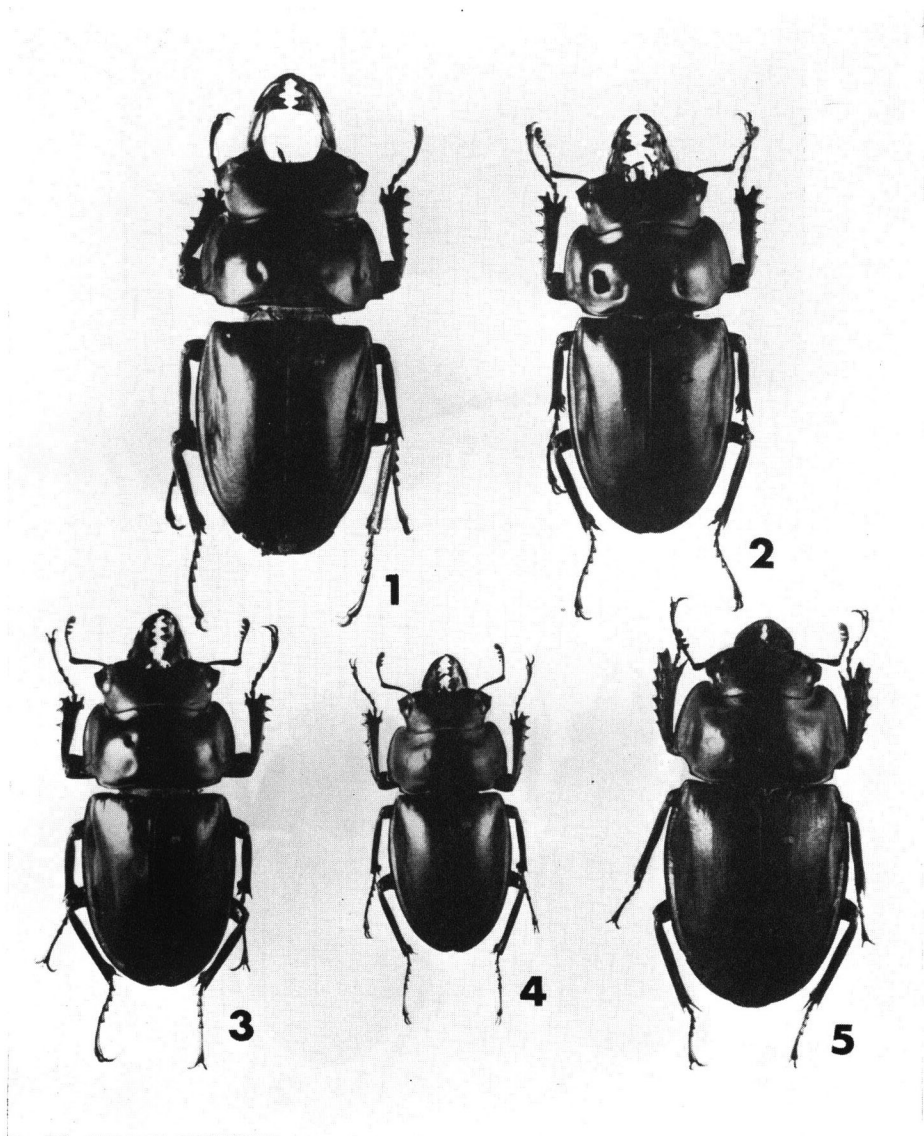


Fig. 1. Variations of *Neolucanus saundersi insulicola* Y. KUROSAWA, nov. — 1-4, Male; 5, female. 1, Holotype; 5, allotype.

that of Formosan *motschulskyi* WATERHOUSE.

Length: 24.8–38.5 mm (without mandibles), 34.5–55.5 mm (with mandibles) (male), 23.2–26.5 mm (without mandibles), 25.0–28.5 mm (with mandibles) (female); width: 10.0–15.8 mm (male), 11.0–12.3 mm (female).

Holotype and a paratopotype: 2 ♂♂, Ishigaki-jima I., 19. vi. 1974, H. MAKI-

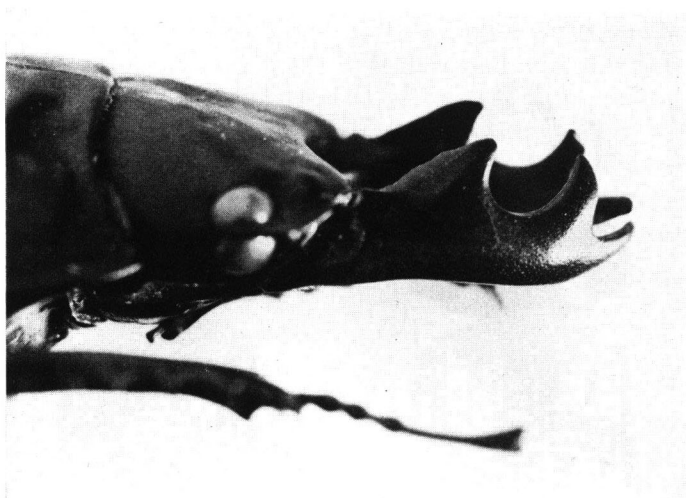


Fig. 2. Head of the maximum male of *Neolucanus saundersi insulicola* Y. KUROSAWA, nov., in lateral aspect (holotype).

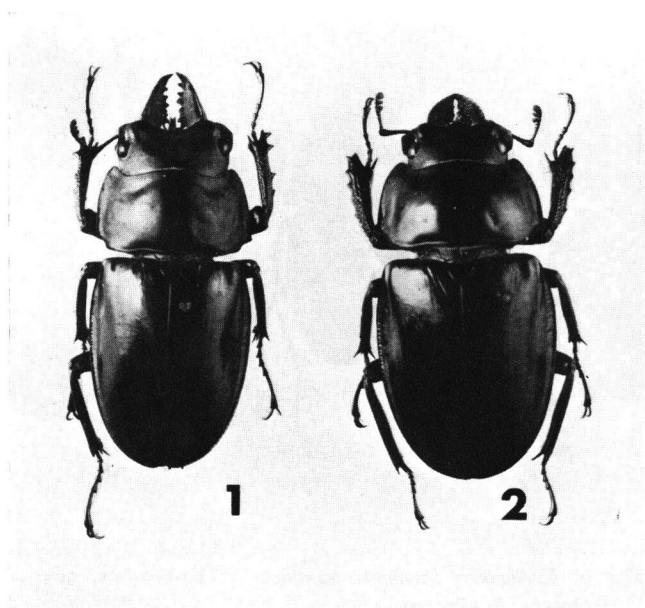


Fig. 3. *Neolucanus saundersi protogenetivus* Y. KUROSAWA, nov. — 1, Male; 2, female.

HARA lgt.; allotype (♀) and a paratype (♂): 1 ♂ 1 ♀, Ishigaki-jima I., 30. vi. 1969, Y. KUSUI lgt.; paratypes: 1 ♂, Shirahama, Iriomote-jima I., 30. v. 1973, Y. KUROSAWA lgt.; 1 ♂, Inda, Iriomote-jima I., 6. viii. 1968, H. ÔHIRA lgt.: 2 ♀♀, Mt. Banna-dake, Ishigaki-jima I., 16 & 25. vi. 1974, H. MAKIHARA lgt.; 1 ♀, Ôhara, Iriomote-jima I.,

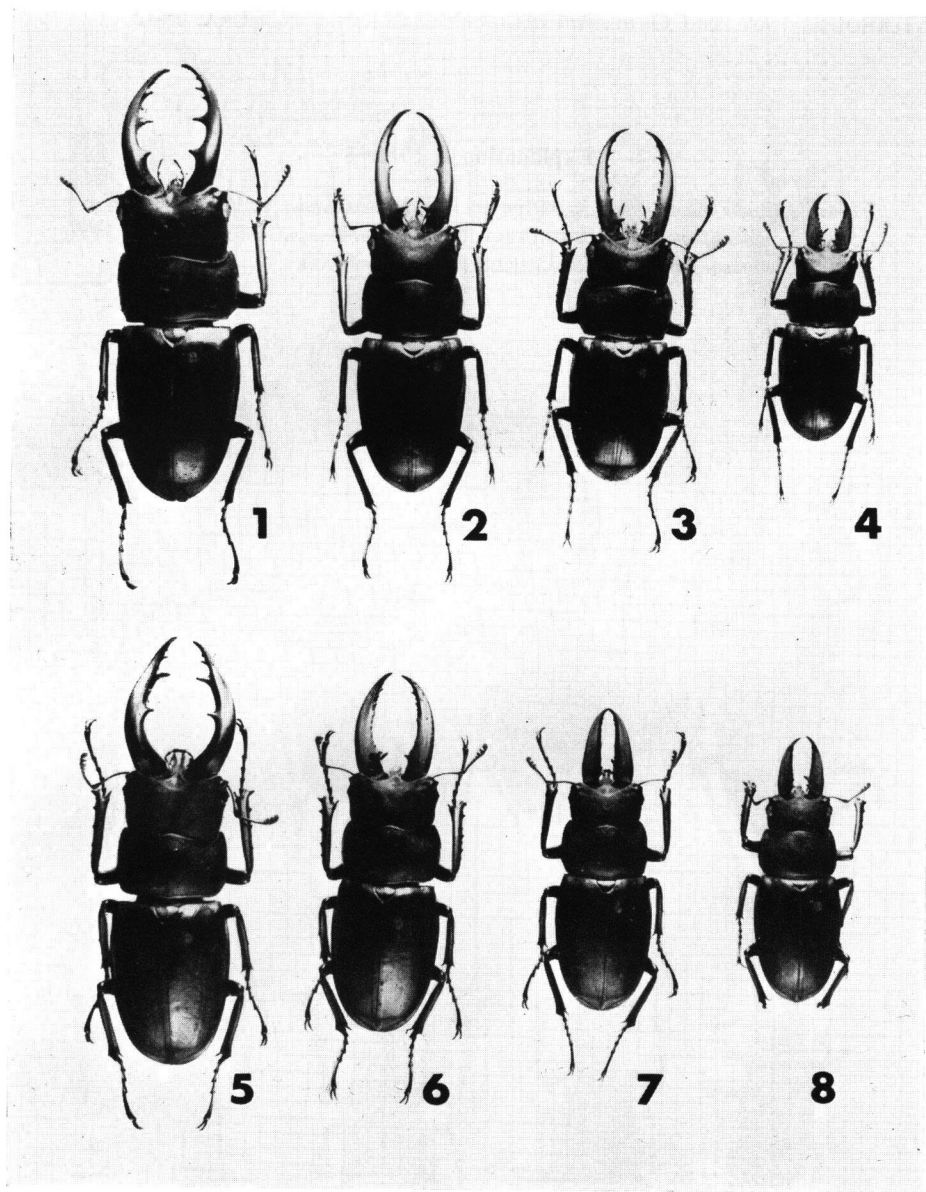


Fig. 4. *Prosopocoilus motschulskyi pseudodissimilis* Y. KUROSAWA, nov., from the Yaéyama group of the Ryûkyû Archipelago (1-4) and *Prosopocoilus motschulskyi motschulskyi* WATERHOUSE, s. str., from Formosa (5-8).

23. vi. 1974, H. MAKIHARA lgt.

Range. Ryûkyû Islands (Yaéyama group).

This subspecies may be placed between Formosan *motschulskyi motschulskyi*

WATERHOUSE, 1869, and Okinawan *dissimilis okinawanus* NOMURA, 1962.

Explanation of Plate 1

- 1-4. *Lucanus maculifemoralis* MOTSCHULSKY, form *nakanei* Y. KUROSAWA, nov.
- 5-8. *L. maculifemoralis* MOTSCHULSKY, form *maculifemoralis* MOTSCHULSKY, s. str.
- 9-12. *L. maculifemoralis* MOTSCHULSKY, form *hopei* PARRY.

