

Some New Subspecies of the *Aegus laevicollis* SAUNDERS
from Japan (Coleoptera, Lucanidae)

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日本産ネプトクワガタの4新亜種

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Aegus 属は1819年に MACLEAY によって創設された属で模式種は *Aegus chelififer* MACLEAY である。同属に含まれる種の多くは東洋区・オーストラリア区に広く分布し、一部は旧北区におよんでいる。クワガタムシ科の属の中では *Aegus* 属はきわめて多くの種を含む大属であり、現在、旧北区に位置する本邦からは *Aegus laevicollis* SAUNDERS が同属唯一の種として知られているが、日本における同種の分布は *Aegus* 属の分布北限となっている。

私たちはここ数年米 *Aegus* 属に興味をもって調査を行ってきたが、ここでは日本に分布する *Aegus* 属 (*A. laevicollis*) について現段階での知見を述べるとともに *Aegus laevicollis* の沖縄本島、沖永良部島、トカラ列島 (悪石島・諏訪瀬島)、伊豆諸島 (八丈島) の産地産のものをそれぞれ新亜種として記載する。本文に先立ち、種々のご指導を頂き、かつ本文のご校閲を賜

った中根猛彦博士、およびご指導・ご助力くださった玉貫光一、阿部 東、高桑正敏、藤田 宏、宮原道則、秋山達也、庄田達巳の諸氏に深く謝意を表する。

Aegus laevicollis SAUNDERS is a unique representative of the genus *Aegus* MACLEAY in Japan. Three subspecies of the *Aegus laevicollis* SAUNDERS have been known to occur in Japan; subsp. *subnitidus* WATERHOUSE, 1873 (Japan main islands; Honshû, Shikoku, Kyûshû), subsp. *taurululus* DIDIER, 1928 (Is. Amami-Ôshima); subsp. *ishigakiensis* NOMURA, 1960 (Is. Ishigaki, Is. Iriomote). In this paper, the author describes following four new subspecies. All holotype specimens may be deposited in the National Museum of Japan (Tokyo) and paratypes are in authors' collections.

Aegus laevicollis nakanei subsp. nov.

Male (minor): Body deep reddish brown and somewhat glossy. Mandible thick, relatively shorter than in other subspecies, strongly incurved with a small triangular tooth near base, sharp at apex and gradually broadened to base, where it is finely and sparsely punctured. Head rather shiny, narrower than prothorax and elytra; covered with deep, large and dense punctures all over. Pronotum slightly rounded at sides and punctured

as head at median and on lateral parts. Elytra as broad as prothorax, covered with delicate and fine punctures: deeply striate as usual, dorsal interstices scarcely convex.

Length: 10-12.5mm Width: 4.1-4.3mm

Distribution: Is. Okinawa

Holotype: ♂, Mt. Yonahadake, Is. Okinawa, July 8, 1973, Tatsumi SHOODA leg.

Paratypes: 1♀, Yona, Is. Okinawa, June 16-17, 1970, Jirô KOMIYA leg; 2♂♂, Yona, Is. Okinawa, May 23, 1972, IMANISHI leg.

Present address

1) 2-1-17, Ôji-honchô, Kita-ku, Tôkyô city (〒114)

2) 16-34, Nakamurachô, Ibaragi city, Osaka Pref. (〒567)

Aegus laevicollis tamanukii subsp. nov.

Male (minor): Body black and opaque. Mandible resembling that of subsp. *A.I. nakanei* subsp. nov., but longer and less strongly incurved, with base bearing a few punctures. Head densely covered with large and deep punctures, the larger ones of which consist of 2 or 3 small punctures. Pronotum densely and finely punctured, except lateral parts and median longitudinal zone, where it is punctured as head.

Length: 13-16mm Width: 4.2-5.5mm

Distribution: Is. Okinoerabu (Nansei Islands)

Holotype: ♂, Mt. Oyama, Is. Okinoerabu, March 22, 1972, IMANISHI leg.

Paratypes: 1♂, 1♀, Mt. Oyama, Is. Okinoerabu, March 22, 1972, IMANISHI leg.

This new subspecies is easily distinguished from the nominate subspecies by the strong and dense puncturation on head and pronotum.

Aegus laevicollis abei subsp. nov.

Male: Body black and shiny. Mandible relatively long and curved inwards, one or two small teeth jutted out from inner margin near base. In large males each mandible with two small teeth at base, but only one in small males, and the development of teeth in medium-sized males less marked than that of males of same sized in other subspecies. Head narrower than prothorax and elytra, sparsely with shallow and large punctures. In large males, a pair of fine projections present on upperside of head near base of mandibles. Pronotum wholly covered with fine punctures, and with large punctures on lateral

parts and at middle.

Length: 11-26mm Width: 4-9.5mm

Distribution: Islands. Tokara (Is. Akuseki and Is. Suwanose)

Holotype: ♂, Is. Akuseki, Aug. 4, 1973, IMANISHI leg.

Paratypes: 55♂♂, 21♀♀, Is. Akuseki, Aug. 4, 1973, IMANISHI leg.; 65♂♂, 20♀♀, Is. Akuseki, Aug. 5, 1973, IMANISHI leg.; 40♂♂, 25♀♀, Is. Akuseki, Aug. 4, 1974, MICHINORI MIYAHARA leg.; 1♂, 1♀, Is. Suwanose, Aug. 1, 1973, IMANISHI leg.

Aegus laevicollis fujitai subsp. nov.

Male (minor): Body black and shiny. Mandible long and slender, acuminate at apex, becoming broader towards base where it bears a small tooth and shallow punctures sparsely scattered. Head and pronotum lustrous and the edges slightly punctured.

Length: 15.4-20.5mm Width: 4.6-6.5mm

Distribution: Is. Hachijō (Islands. Izu)

Holotype: ♂, Sueyoshi, Is. Hachijō, July 10, 1975, Hiroshi FUJITA leg.

Paratypes: 2♂♂, Kashidate, Is. Hachijō, June 26, 1972, IMANISHI leg.; 1♀, Kashidate, Is. Hachijō, June 23, 1973, ICHIKAWA leg.; 1♂,

2♀♀, Nakanogō, Is. Hachijō, June 21, 1973, Tatsuya AKIYAMA leg.; 1♀, Miharayamarindō, Kashidate, Is. Hachijō, July 9, 1975, ICHIKAWA leg.; 1♀, Sueyoshi, Is. Hachijō, July 10, 1975, Masatoshi TAKAKUWA leg.

This new subspecies is closely related to subspecies *abei* subsp. nov., but distinguished from the latter by having a squarish projection at the outside of base of mandible. Also this new subspecies is characterized by having fewer punctures on the head and pronotum as compared with other subspecies.

Some New Subspecies of the *Aegus laevicollis* SAUNDERS from Japan

	Mandible	Body, head and pronotum	Distribution
<i>A.l. nakanei</i>	Thick, relatively shorter than body, strongly incurved. Base thick, with finely and sparsely punctured.	Body: somewhat glossy. Head: covered with deep, large and dense punctures all over. Pronotum: punctured as head at median and lateral parts.	Is. Okinawa.
<i>A.l. tamanukii</i>	Slender, relatively long and less strongly incurved. Base thick, with finely and sparsely punctured.	Body: opaque. Head: covered with deep, large and dense punctures all over, the larger ones of which consist of 2 or 3 small punctures. Pronotum: punctured as head at median and lateral parts.	Is. Okinoerabu.
<i>A.l. abei</i>	Long and slender, mildly curved inwards at apical half.	Body: shiny. Head: covered sparsely with shallow and large punctures. Pronotum: covered wholly with fine punctures, and with large ones at lateral and posterior middle parts.	Islands Tokara (Is. Akuseki and Is. Suwanose)
<i>A.l. fujitai</i>	Long and slender, mildly curved inwards at apical half. A squarish projection being at the outsides of base.	Body: shiny. Head and pronotum: lustrous and edges slightly punctured.	Islands Izu. (Is. Hachijō)

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摘 要

1) *Aegus laevicollis nakanei* subsp. nov. は、小型個体を3匹検したのみであるが大腿が太く、体長のわりに短く、強く円形状に湾曲していることで、容易に他産地の個体と区別できる。個体の示す特徴からあるいは新種とも考えられるが、沖永良部島産の subsp. *tamanukii* の大腿と比較すると共に円形状に湾曲する特徴を示すので、現段階では亜種が妥当であろうと考えた。主に沖縄本島北部地域に産するが個体数はきわめて少ないようである。

2) *Aegus laevicollis tamanukii* subsp. nov. は、頭部および前胸部の点刻が顕著に他産地のものと異なる。♂の大腿の形態は沖縄本島産の subsp. *nakanei* に似るが細長いことと湾曲がゆるやかなことで区別できる。本亜種と沖縄本島産 subsp. *nakanei* は、個々に検すると新種とも思われる顕著な特徴を有するが、両島産

を比較すると大腿の湾曲に類似特徴が認められるので、亜種とすることが妥当と考えた。本亜種は、沖永良部島に産するが同島に渡島する採集者が少ないためか、多くは得られていないようであり、今後、多くの個体が得られることを期待するものである。

3) *Aegus laevicollis abei* subsp. nov. は、在来亜種と同じ体長の中型個体でも大腿の小歯の発育が悪く、大腿の湾曲は先端に向かってなだらかに曲がり、角度は強くない。大腿は細長いので全体を見ると刀のような感じを受ける。大型個体♂は大腿の基部よりやや後の頭部に突起を有するが、この特徴は他産地の個体では、台湾産 subsp. *formosae*、奄美大島産 subsp. *taurus*、屋久島産 subsp. *subnitidus* のものに見られる。なお、同列島の両島以外の標本は中之島の1匹を検しただけであるが、その大腿の形態は本亜種と区別しうる特徴を有

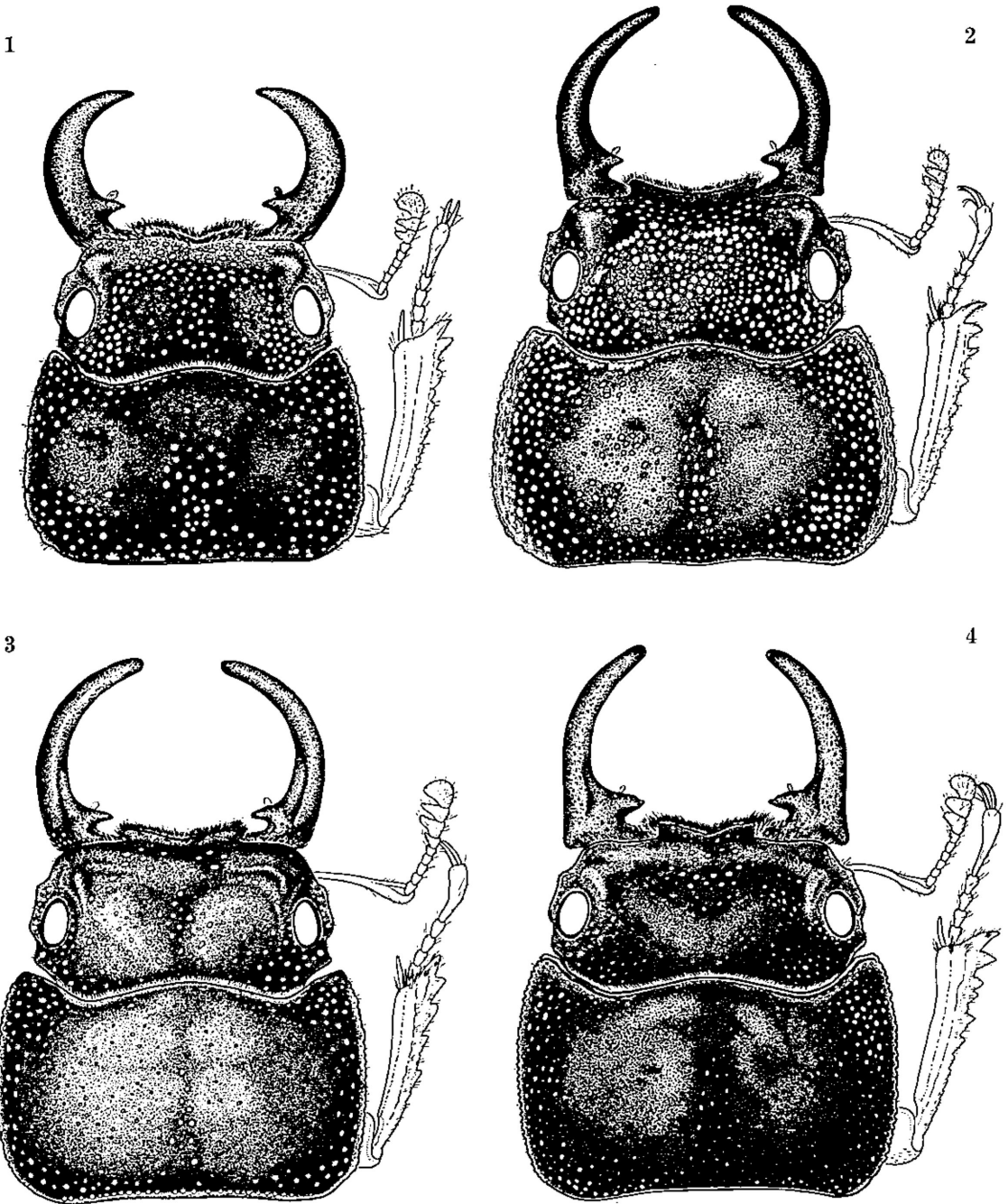
しており、今後より多くの個体を比較研究したい。悪石島では個体数はかなり多いようで路上を歩行中の個体が多く得られている。

4) *Aegus laevicollis fujitai* subsp. nov. は、トカラ列島悪石島・諏訪瀬島産の subsp. *abei* に類似する形態を有するが、大腿の基部の外側の部分が角ばって外側に突き出していることにより区別できる。本亜種は伊豆諸島の八丈島に分布する個体にもとずいて記載したが、同諸島の新島、神津島、三宅島、御蔵島の個体と比較し

て、頭部および胸部の点刻が少ないことにより区別できる。新島産の個体の中には、台湾産の subsp. *formosae*、奄美大島産の subsp. *taurulus* のように胸部の点刻が深く、大きく密である個体が含まれており、三宅島・御蔵島産の個体は、大腿がトカラ列島の悪石島・諏訪瀬島産の subsp. *abei* に似るものがあるが、頭部および胸部の点刻が多い点で異なる。現在のところ八丈島以外の伊豆諸島の個体に考察を加え区別するまでにはいたっていない。八丈島では個体数はやや少ないようである。

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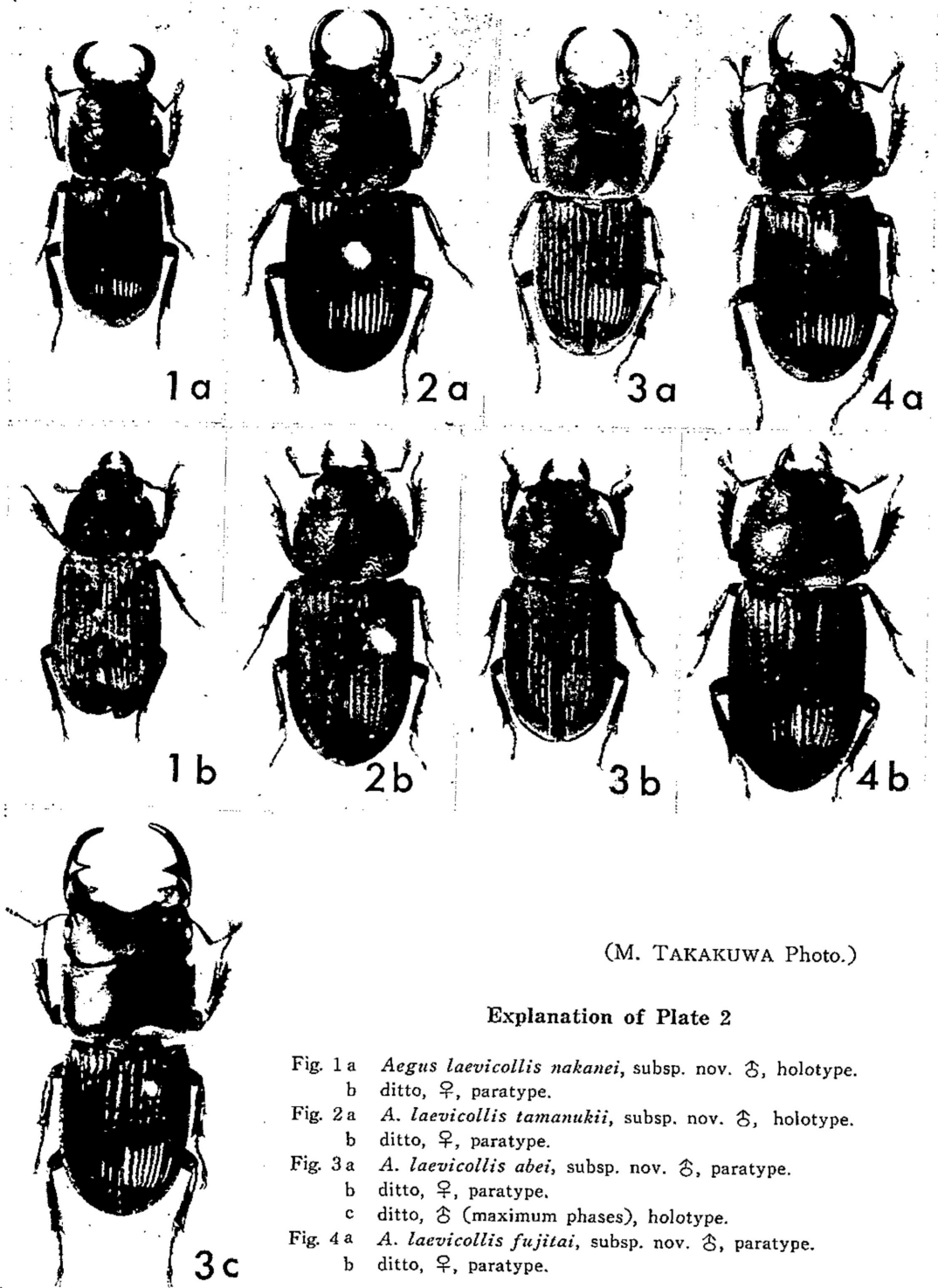


(H. FUJITA del.)

Explanation of Plate 1

- Fig. 1 *Aegus laevicollis nakanei*, subsp. nov.
- Fig. 2 *A. laevicollis tamanukii*, subsp. nov.
- Fig. 3 *A. laevicollis abei*, subsp. nov.
- Fig. 4 *A. laevicollis fujitai*, subsp. nov.

Plate 2



(M. TAKAKUWA Photo.)

Explanation of Plate 2

- Fig. 1 a *Aegus laevicollis nakanei*, subsp. nov. ♂, holotype.
 b ditto, ♀, paratype.
 Fig. 2 a *A. laevicollis tamanukii*, subsp. nov. ♂, holotype.
 b ditto, ♀, paratype.
 Fig. 3 a *A. laevicollis abei*, subsp. nov. ♂, paratype.
 b ditto, ♀, paratype.
 c ditto, ♂ (maximum phases), holotype.
 Fig. 4 a *A. laevicollis fujitai*, subsp. nov. ♂, paratype.
 b ditto, ♀, paratype.