# A New Species of the Genus *Dianous* Leach (Coleoptera: Staphylinidae: Steninae) from the Nansei Islands, Japan<sup>\*</sup>

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Abstract A new large and distinct *Dianous* species, *D. uedai*, is described from the Amami-Oshima Island, the Nansei Islands, south-western part of Japan. This new species belongs to the *Dianous calceatus* species complex, and is closely related to *D. arachnipes* Puthz, 1971, but it is easily distinguishable from the latter by the characteristics such as the coloration of the dorsum of body, and the structure of the head, pronotum, elytra, female eighth sternite, and aedeagus.

Key words : Staphylinidae, Steninae, *Dianous*, new species, Japan.

Up to the present, the Dianous calceatus (Puthz, 1990) species complex is, according to Puthz (2000), composed of 44 species, and this species complex is clearly diagnosed by the combination of the following characters: relatively small eyes; temples at least half the length of eyes; first segments of the metatarsi longer than the length of two to four segments of the metatarsi combined, fourth segment of the metatarsi simple or asymmetrical; eighth sternite of female entire or emarginate apically; median lobe of aedeagus usually almost conically narrowed, etc. From Japan, nine species of Dianous have been hitherto known. Of those species, D. moritai Naomi, 1997 from Amami-Oshima Island only belongs to the D. calceatus species complex. In this study, a large distinctive new Dianous species of the D. calceatus complex, which is closely allied to D. arachnipes Puthz, 1971 from Taiwan, was discovered also from Amami-Oshima Island, Nansei Islands, south-western part of Japan. In this paper. I describe this new species under the name of Dianous uedai. This study is based on five specimens collected by Mr. K. Takanashi. The holotype of the new species is deposited in the Natural History Museum and Institute, Chiba (CBM).

#### Taxonomy

#### Dianous uedai Naomi, sp. nov. (Figs. 1, 2)

Description. Male and female. Macropterous; body large, 7.6 · 8.0 mm in length, rather slender, moderately to weakly shining. Head black, partially with metallic bluish tinge; labrum black, with reddish anterior margin; antennae black through dark brown to reddish brown; maxillary palpi dark reddish brown to reddish brown; pronotum black, but entirely with metallic bluish tinge; elytra black; legs black to dark brown, with apical tarsal segments yellowish brown to reddish brown; abdomen with 3rd to 6th paratergites black, 3rd to 8th tergites black but entirely with metallic bluish tinge.

Head large, broader than long (1: 0.75), strongly narrowed posteriorly behind eyes; eyes relatively small but well convex, a little longer than postocular areas (1: 0.82); clypeofrontal area broad, moderately convex at middle; interocular area rather broad, very weakly concave, with antennal tubercles short but distinct, paired dorsal tentorial pits distinct, located just behind antennal tubercles; temples (= postocular areas) gently rounded. Surface of head very densely covered with minute, regular, round punctures throughout, but median part of clypeofrontal area very sparsely punctate; interstices between punc-

<sup>\*</sup> Studies on the subfamily Steninae from Japan 43.

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Fig. 1. *Dianous uedai* Naomi, sp. nov., paratypes. A, Eighth sternite of male (ventral view); B, 8th sternite of female (ventral view); C, 9th and 10th tergites of male (dorsal view); D, 9th and 10th tergites of female (dorsal view). Scale 1: 0.25 mm for A and B; scale 2: 0.25 mm for C and D.

tures distinctly microsculptured on the anterior part of head, indistinctly or faintly so on the posterior part of head. Antennae very slender, extending posteriorly beyond half of elytra.

Pronotum robust, well convex above, longer than broad (1: 0.85), broadest at about middle, moderately constricted at base, with a thin line running along each of anterior and posterior margins of pronotum; surface of pronotum with a pair of large foveae at sides of central part, without median longitudinal line; punctures extremely fine, very sparse; interstices between punctures minutely evenly microsculptured. Mesoscutellum almost triangular in shape, covered densely with minute setiferous punctures. Elytra well developed, elongate, distinctly longer than broad (1: 0.71), moderately convex, gently rounded laterally, posterior margins together forming a very shallow arcuate emargination; surface of elytra somewhat uneven, densely covered with very fine punctures; interstices between punctures moderately shining, devoid of microsculpture, or obsoletely microsculptured. Abdomen elongate, tergites each well convex right and left; 3rd to 6th paratergites each well developed, composed of elongate rectangular plate, densely punctate; 3rd tergite with punctures very fine, very sparse, their diameter distinctly shorter than interstices; interstices between punctures with faint reticulate microsculpture; punctures becoming denser posteriad from 3rd to 7th tergites; punctures on 8th tergite, however, distinctly larger than those on 7th tergite, but rather sparse.

Male. Seventh sternite with a shallow, arcuate emargination at posteromedian part; 8th sternite (Fig. 1A) with a shallow but relatively broad emargination at posteromedian part; 9th tergite (Fig. 1C) elongate, with paired anterior struts; 9th sternite (Fig. 2A) with apicolateral projections each robust, large but pointed, with a tuft of very long setae; 10th tergite (Fig. 1C) with a very shallow arcuate emargination at posteromedian part, posterior margin densely furnished with a line of yellowish, short thick sensory setae. Aedeagus (Fig. 2C) with median lobe almost elongate-elliptical, weakly sinuate around apicolateral corners, its apicalmost part minutely but distinctly tuberculate, with several very minute setae; median longitudinal bands rather short, thin; endophallic basal tube well developed, very large, robust, rather simply structured, composed of paired Yshaped rods, without basal constriction; parameres long, slender, extending posteriad much beyond apex of median lobe; each paramere (Fig. 2C) furnished with setae (16 to 17 in number), short to moderate

in length, not only on apical part, but also on medial side behind middle of paramere.

Female. Eighth sternite (Fig. 1B) entire at posterior margin; 9th tergite (Fig. 1D) almost truncate at posterior margin, without apical struts; 9th sternite (Fig. 2B) composed of paired hemisternites and coxites; coxites each elongate, narrowed apically, bluntly pointed, furnished with a tufts of very long setae; 10th tergite (Fig. 1D) with posterior margin almost straight or very weakly bisinuate, densely furnished with a line of yellowish, short thick sensory setae.

*Type series.* Holotype: (CBM-ZI 122353), Sumiyomura, Amami-Oshima Island, Kagoshima Prefecture, 28.v.2004, K. Takanashi leg. Paratypes, 2 , 2 , same data as holotype.

*Distribution.* Amami-Oshima Island, the Nansei Islands, southwestern Japan.

Remarks. Out of the known Japanese species, Dianous uedai sp. nov. is the very conspicuous and largest one. This new species is closely allied to D. arachnipes Puthz, 1971, but, the former is separable from the latter by the body black but the pronotum and abdomen each entirely tinged with bluish metallic colors (entirely black or pitchy black in D. arachnipes), the head with the interocular area less strongly convex (interocular area more strongly convex in D. arachnipes), the eyes less strongly convex (more strongly convex in D. arachnipes), the pronotum smoothly convex dorsally (convex dorsally but with the surface weakly uneven in D. arachnipes), the surface of elytra weakly uneven (moderately uneven in D. arachnipes), the eighth sternite of the female straight at the posteromedian margin (with a very shallow V-shaped emargination at the posteromedian part in D. arachnipes), the aedeagus (Fig. 2C) more slender, with the posterior half of median lobe less strongly narrowed posteriorly (less slender, with posterior half of median lobe more strongly narrowed posteriorly in D. arachnipes), the endophallus with the basal tube very large, composed of a pair of Y-shaped rods, and the median longitudinal bands longer and broader (with basal tube composed of a pair of short, small straight rods, and the median longitudinal bands shorter and narrower in D. arachnipes).

*Etymology.* Patronymic. The species is named in honour of Dr. Kyoichiro Ueda (Kitakyushu Museum and Institute of Natural History), who is an eminent systematic lepidopterologist and palaeontological entomologist in Japan. During his career as a curator at Kitakyushu Museum, he has very much contributed



Fig. 2. *Dianous uedai* Naomi, sp. nov., paratypes. A, Ninth sternite of male (ventral view); B, 9th sternite of female (ventral view); C, aedeagus (ventral view). Scale 1: 0.25 mm for A and B; scale 2: 0.3 mm for C.

to the development of systematic entomology in Japan in various ways.

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## 南西諸島奄美大島から発見された ヒョウタンメダカハネカクシ属 (甲虫目:ハネカクシ科:メダカハネカクシ亜科) の1新種の記載

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日本産ヒョウタンメダカハネカクシ属9種のうち, Dianous calceatus 種群に属する種は, これまで D. moritai Naomi, 1997 (分布: 奄美大島) だけであった. 今回のメダカハネカクシ亜科に関する研究において, Dianous calceatus 種群に属する大型のヒョウタンメダカ ハネカクシ属の新種をやはり奄美大島から発見すること ができたので,本論文において D. uedai (新名称:ウエ ダヒョウタンメダカハネカクシ)という名称のもとで記載 した.頭部,胸部,腹部末端節などの外部形態,雄交尾 器の構造,体の色彩などから考えて,本種は,同島に分 布する D. moritai ではなく, 台湾に分布する D. arachipes Puthz, 1971 (オオクロヒョウタンメダカハネカ クシ)に明らかに近縁な種である.しかし,D.uedaiは, 前胸背と腹部は黒色だが,全体的に青みがかった金属光 沢を帯びる,頭部の複眼間域はより弱く凹窪する,複眼 はより弱く膨隆する,前胸背は概ね滑らかに膨隆する, 上翅の表面はごく弱くでこぼこする,雌の第8腹節腹板 後縁の中央部は切れ込みを欠く,雄交尾器中央片はより 細長く,後方半分においてより弱く後方に向かって細く なるなどの点で, D. arachnipes から明瞭に区別できる.