

## A New Species of *Algon* (Coleoptera, Staphylinidae) from China, with Some Notes on the Generic Characteristics

Yasuhiko HAYASHI

Suimeidai 3–1–73, Kawanishi City, Hyôgo, 666–0116 Japan

**Abstract** *Algon uenoi* sp. nov. is described from Sichuan, China. Some notes on the genus *Algon* are given. The new species belongs to the *kaiserianus* species-group.

The genus *Algon* SHARP, 1874 is rather a large genus, including 60 species from South Asia to the Far East (HERMAN, 2001; LÖBL & SMETANA, 2004; SCHILLHAMMER, 2006) and divided into seven species-groups (SCHILLHAMMER, 2006).

In this paper I am going to describe a new species of *Algon* from Sichuan, China, belonging to the *kaiserianus* species-group and to give some taxonomic notes on the genus.

Before going into further details I wish to express my cordial thanks to Dr. Katsura MORIMOTO Emeritus Professor of Kyushu University, for his critically reading the manuscript of this paper.

The holotype of the new species is preserved in the collection of the Osaka Museum of Natural History.

### *Algon uenoi* sp. nov.

(Figs. 1–10)

Body rather flattened dorsally, subparallel-sided, distinctly covered with fine microsculpture; deep black, rather opaque, abdomen with obscure bluish lustre dorsally and weakly iridescent ventrally; palpi pale pitchy brown, antennae reddish in bases of 2nd and 3rd segments, gradually becoming paler in colour from 4th to 11th, 11th yellowish brown. Length: 13.0–14.5 mm.

Head (Fig. 3) rounded subquadrangular, weakly arcuate at sides, feebly emarginate at base and broadly rounded at basal angles, much wider than long (63 : 51), much narrower and shorter than pronotum (63 : 85 and 51 : 72); upper surface weakly and evenly convex, covered with fine reticulate microsculpture (Type I, sensu SCHILLHAMMER, 2006), very sparsely scattered with minute punctures all over; with 3 or 4 large punctures along supra-orbital margin behind supra-orbital macroseta (socket), several (about 5) large punctures in postogenae, and with several rather small punctures near basal angles. Eyes relatively small, not prominent, and a little shorter than postogenae (17 : 20). Fourth segment of maxillary palpi (Fig. 2) elongate-subfusiform and truncate at apex; 3rd segment of labial palpi (Fig. 2) subclavate and subtruncate at the tip. Antennae rather long, reaching pronotal base; all segments longer than wide; 10th segment slightly longer than wide (12 : 11), and each segment with the following relative lengths from base to apex: 32 : 19 : 21 : 14 : 14 : 14 : 14 : 14 : 13 : 12 : 19.

Gular sutures not contiguous to each other, but narrowly and distinctly separated throughout.

Pronotum (Fig. 3) subquadrate, weakly convergent forwards, gently arcuate at sides and

basal margin, anterior margin nearly straight between anterior angles, a little wider than long (85 : 72), much longer and a little narrower than elytra (72 : 55 and 85 : 92); anterior angles rounded and a little protuberant anteriorly, and basal angles very largely rounded; disc moderately convex, covered with dense reticulate microsculpture (Type II, sensu SCHILLHAMMER, 2006), very sparsely and minutely punctulate in antero-lateral corners, with 1 or 2 small punctures latero-medially and several small ones along each margin.

Scutellum triangular, flattened, finely and sparsely punctured with fine setae.

Elytra (Fig. 3) subquadrangular, much wider than long (92 : 55), weakly narrowed anteriorly, nearly straight at sides, distinctly and angularly folded down at lateral margins, widely and gently emarginate at apices and narrowly rounded at post-lateral angles; surface flat but somewhat uneven, bearing several longitudinal creases in each half, covered with rather weak reticulostriate microsculpture (Type III, sensu SCHILLHAMMER, 2006), scattered with only several fine punctures, except for humeral areas very sparsely so, and rather numerous so on epipleura; sutural area flattened and impunctate. Wings completely atrophied.

Abdomen subfusiform, widest at apex of 4th segment, gently convergent posteriorly, very sparsely asperate-punctate on tergites, somewhat hollowed behind the punctures, microsculptured as on elytra in the hollows, with faint and transversely striate microsculpture on the interstices, and sparsely clothed with recumbent pubescence; 7th tergite without apical pallisade seam; 8th tergite (Fig. 4) bisinuate and protuberant in middle of apical margin; 10th tergite (Fig. 5) nearly equilateral-triangular; sternites with punctures much smaller and denser than those on tergites, and the hollows behind the punctures also smaller; 6th and 7th sternites (Fig. 6) feebly emarginate at each apical margin; 8th sternite (Fig. 6) rather narrowly and deeply incised at apical margin in male but gently arcuate and straight there in female (Fig. 8); male 9th (Fig. 7) sternite narrow, sharply and deeply incised at apex.

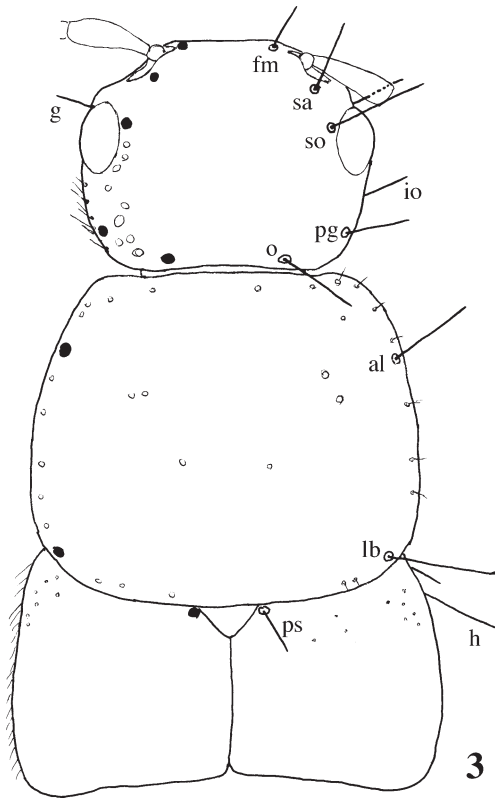
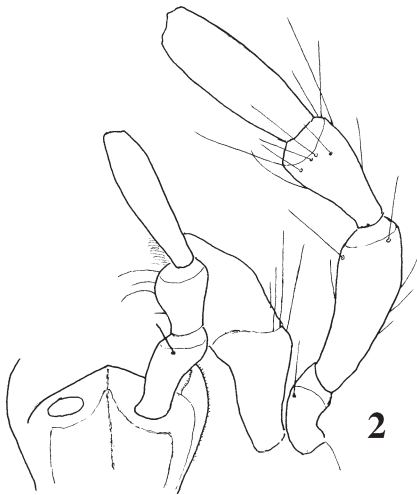
Male genitalia (Figs. 9, 10) moderate in thickness and size, symmetrical; penis in ventral view straight, nearly parallel-sided in basal three-fourths, thence gently and arcuately convergent towards long and sharp apical piece; in lateral view, it bears a remarkable subapical tooth on side facing parameres; phallobase large, about half length of penis; parameres unilobed, slender, gradually convergent from base to the middle, thence almost parallel-sided in apical half, rounded at the tip, reaching the apical tooth, bearing about 3 pairs of setae of various length at the apex, without peg-setae, and somewhat edged at sides.

Holotype: ♂, Chin Tsen San vill. (700 m), 70 km NW of Chendu, Sichuan Prov., China, 19–VI–2009, A. GORODINSKI leg. Paratypes: 2 ♂♂, 1 ♀, same data as the holotype.

*Remarks.* The present new species belongs to the *kaiserianus* group (SCHILLHAMMER, 2006) in the structure of the head, the mouth organs, and the microsculptures of the fore body. The new species is very closely allied to *A. hubeiensis* SCHILLHAMMER in general appearance and shape of male genitalia, but it is easily distinguished by the characters in the following key.

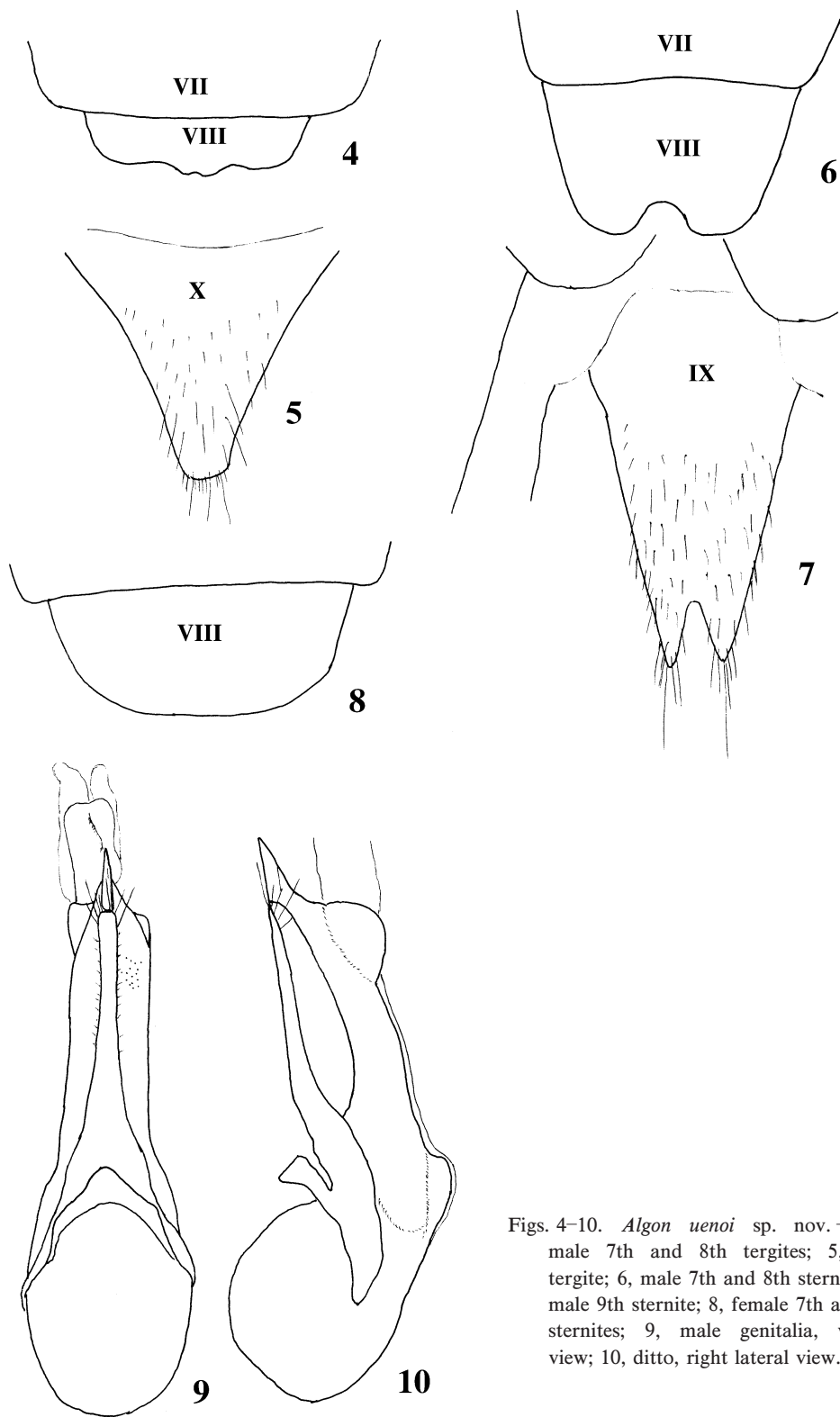
Elytra almost impunctate except for marginal areas and epipleura; labial palpi with 3rd segment blunt at apex; penis with a long apical piece and a well developed subapical tooth.....  
 .....*A. uenoi* sp. nov.  
 Elytra wholly punctate; labial palpi with 3rd segment truncate at apex; penis with a short apical piece, without subapical tooth .....*A. hubeiensis* SCHILLHAMMER

*Etymology.* The specific name is dedicated to Dr. Shun-Ichi UÉNO, Emeritus Curator of the National Museum of Nature and Science, Tokyo, who is the most excellent leader of



Figs. 1-3. *Algon uenoi* sp. nov. — 1, habitus; 2, labium and maxilla; 3, forebody, with macrosetae (Head - fm: front marginal; g: genal; io: infraorbital; o: occipital; pg: postgenal; sa: supraantennal; so: supraorbital. Pronotum - al: anterolateral; lb: laterobasal. Elytra - h: humeral; ps: parascutellar).

Coleopterology in Japan, and has been publishing many papers on Japanese and Chinese trechine beetles.



Figs. 4-10. *Algon uenoi* sp. nov. — 4, male 7th and 8th tergites; 5, 10th tergite; 6, male 7th and 8th sternites; 7, male 9th sternite; 8, female 7th and 8th sternites; 9, male genitalia, ventral view; 10, ditto, right lateral view.

Notes on the Genus *Algon* SHARP

*Algon* SHARP, 1874, 22.

Type species: *Algon grandicollis* SHARP, 1874.

*Algon* is a peculiar genus in showing remarkable variation in the shape of the third segment of labial palpus which is generally regarded as a key character for classifying genera in the same tribe or subtribe.

The genus *Algon* was carefully revised by SCHILLHAMMER (2006), who recognized seven species-groups in the genus. He discussed on the systematic position of this genus, but did not give any conclusions after all. CHATZIMANOLIS *et al.* (2010) attempted to analyze the phylogeny of the tribe Staphylinini by nuclear DNA, but they did not conclude confidently the position of *Algon*.

Therefore, I am going to describe some important morphological characteristics of *Algon* remaining undescribed till now.

Tongue is simple, not notched or emarginate at apex. Chaetotaxy on head (Fig. 3) in dorsal view consists of 7 pairs of fully developed macrosetae (sensu HAYASHI, 1993): supraorbital macroseta lies a little before the middle level of eye, infraorbital one a little behind posterior angle of eye, post genal one almost at the posterior angle of head, and occipital one behind the imaginary line traced between post-genal ones. Chaetotaxy on pronotum (Fig 3) consists of 2 pairs of fully developed macrosetae: antero-lateral macrosetae lie at anterior third of lateral margin and are contiguous to the margins. Chaetotaxy on elytra (Fig. 3) basically consists of 2 pairs of well-developed macrosetae: parascutellar macroseta is very close to lateral margin of scutellum at the middle, and humeral one lie at upper margin of elytral epipleuron.

The combination of these characteristics suggests its close relationship to *Philonthina* or *Anisolinina*, but the empodial setae, that are not observed in *Philonthina*, clearly present in this genus.

## 要 約

林 靖彦：ムナビロハネカクシ属の1新種の記載および属に対する若干の覚え書き。——中国・四川省からムナビロハネカクシ属の1新種を *Algon uenoi* と命名し記載した。本種は *A. hubeiensis* SCHILLHAMMER に非常によく似ているが、上翅の点刻や雄交尾器の形態の差などにより区別できる。

ムナビロハネカクシ属は、アバタツヤムネハネカクシ属 *Rientis* とともに、当初ツヤムネハネカクシ亜族 *Quediina* に所属させられていたが、その後 SMETANA, 1977 によりオオハネカクシ亜族 *Xanthopygi* に移された。しかし外部形態の詳細な観察 (SCHILLHAMMER, 2006) や DNA 解析 (CHATZIMANOLIS *et al.*, 2010) などから、この処理は否定的とされ、本属の上位タクソンの位置付けは未だに確定していない。筆者は SCHILLHAMMER, 2006 の記述に見られないが重要と思われる若干の特徴に付いて記載し、その上位分類群の位置に付いて考察した。

## References

- CHATZIMANOLIS, S., I. M. COHEN, A. SCHOMAN & A. SOLODOVNIKOV, 2010. Molecular phylogeny of the mega-diverse rove beetle tribe Staphylinini (Insecta, Coleoptera, Staphylinida). *Zool. Scripta*, **39**: 436–449.
- HAYASHI, Y., 1993. Studies on the Asian Staphylininae, I. (Coleoptera, Staphylinidae). *Elytra, Tokyo*, **21**: 281–301.
- 1994. Studies on the Asian Staphylininae, II. (Coleoptera, Staphylinidae). On the characteristics of the genus *Philonthus* CURTIS, sensu stricto, with a redescription of *Philonthus splendens* (FABRICIUS). *Elytra, Tokyo*, **22**: 115–

131.

- HERMAN, L. H., 2001. The Catalogue of Staphylinidae, VI, Staphylinine group. *Bull. Am. Mus. nat. Hist.*, **265**: 3021–3840.
- LÖBL, I., & A. SMETANA, 2004. Hydrophiloidea–Histeroidea–Staphylinoidea. *In* Catalogue of Palaearctic Coleoptera, II, 1–942. Apollo Books, Stenstrup.
- SCHILLHAMMER, H., 2006. Revision of the genus *Algon* Sharp (Coleoptera: Staphylinidae: Staphylininae). *Koleopt. Rdsch.*, **76**: 135–218.
- SHARP, D., 1874. The Staphylinidae of Japan. *Trans. r. ent. Soc. London*, **1974**: 1–103.

Manuscript received 24 March 2011;  
revised and accepted 1 May 2011.