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# Discovery of the rare genus *Awas* in mainland China with description of a new species (Coleoptera: Staphylinidae: Pselaphinae: Goniaceritae)

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**Abstract.** The rare genus *Awas* Löbl, 1994 is reported from mainland China for the first time, based on a new species, *A. sinicus* Yin & Li sp. nov., from Yunnan Province. The new species is described and illustrated. It appears closely related to *A. shunichii* Nomura, 1995 from Taiwan. A revised key to all species is provided.

**Key words.** Coleoptera, Staphylindiae, Pselaphinae, *Awas*, taxonomy, new species, revised key, China

### Introduction

The genus *Awas* was erected by Löbl (1994) for *A. giraffa* Löbl, 1994, based on a single male with striking appearance from West Malaysia. The new genus was placed in Arnylliini based on a phylogenetic analysis (Löbl 1994). *Awas* is so distinct that it may be readily distinguished from most pselaphine genera by an unusually elongate head and small abdomen in contrast to large elytra. One year later, the second species, *A. shunichii* Nomura, 1995, based on a single male with large body size (4.2 mm), was discovered in Taiwan (Nomura 1995). The third species, *A. rajah* Nomura & Idris, 2004 (two males), was described from the southern Malay Peninsula almost ten years later (Nomura & Idris 2004). Thus, at present *Awas* includes three species.

Through recent collecting efforts of Dr. Tang (SHNU), we received an additional specimen of *Awas* collected in Gaoligonshan Mountain, Yunnan, China. This is the first record of the genus in mainland China. In the present paper, we describe it as a new species, *A. sinicus* Yin

& Li sp. nov. We provide some illustrations and photographs, discuss its systematic position and give a revised key for the identification of the species of the genus *Awas*.

### Material and methods

The specimen was collected from a bush using a beating tray. It was killed with ethylacetate and then dried. Dissections were done in 75% ethanol; the material was macerated in hot NaOH solution for 10–30 minutes when necessary. The genitalia and other dissected parts were mounted in Euparal (Chroma Geselschaft Schmidt, Koengen, Germany) on plastic slides that were placed on the same pin as the specimen. Photos were taken by a Canon EOS 40D Camera mounted with an MP-E 65 mm Macro Photo Lens; line drawings were made using Adobe Illustrator CS2. The holotype is deposited in the Insect Collection of Shanghai Normal University (SNUC).

### Taxonomy

### Awas sinicus Yin & Li sp. nov.

(Figs. 1-9)

Type locality. South China, Yunnan Province, Gaoligongshan Mountains.

Type material. Holotype: ♂, 'CHINA: Yunnan Province, Gongshan County, Mt. Gaoligongshan, near Qiqi Station, alt. 2,000 m, 02.vii.2010, Liang TANG leg.' (SNUC).

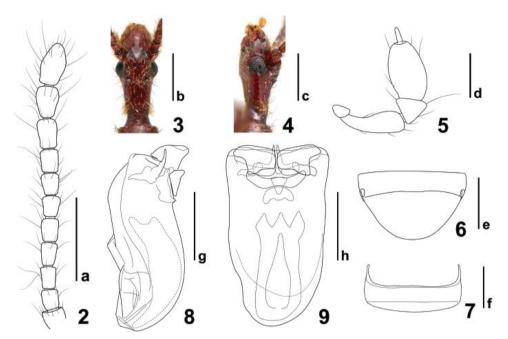
**Description.** Male (Fig. 1). Length 3.63 mm, maximum width (across elytra) 1.15 mm. Body reddish brown, maxillary palpi and tarsi lighter; it seems to be without obvious sexual modifications.

Head (Figs. 3, 4) strongly elongate, 1.01 mm long (without occiput), across eyes 0.45 mm wide, slightly broadened and thickened anteriorly; clypeus arcuately projected; frons elevated on lateral sides and concave in median part, with short longitudinal depression; vertex flattened; postgenae on sides densely covered with bold pubescence. Gular area depressed in middle with gular foveae merging into large median longitudinal depression. Eyes prominent, situated anterior head mid-length, each composed of about 85 facets. Maxillary palpi (Fig. 5) short, palpomere I small, palpomere II elongate, thickened distally; palpomere III short, nearly triangular; IV largest, nearly oval, with large apical psedosegment. Antennae (Fig. 2) long, scape thick, pedicel much smaller than scape; antennomeres III–VII successively shorter and slightly narrower, VIII similar to VII; antennomeres IX–XI each large, longer than wide, XI almost oval.

Pronotum shorter than head, maximum length 0.75 mm, maximum width 0.58 mm, widest in middle, slightly narrowed anteriorly, covered with bold pubescence, with two pairs of fringed basolateral constrictions and T-shaped antebasal sulcus joined to anterior pair of basolateral constriction. Elytra along suture 1.23 mm long, together 1.15 mm wide (maximum width), each with one distinct basal fovea and sutural stria; sides round, convex on dorsolateral surface; with dense and long pubescence in humeral area, with short and sparse setae on discal



Fig. 1. Dorsal habitus of Awas sinicus Yin & Li sp. nov.



Figs. 2–9. Details of *Awas sinicus* Yin & Li sp. nov. 2 – antenna; 3 – head, dorsal view; 4 – same, lateral view; 5 – maxillary palpus; 6 – tergite VIII; 7 – sternite VIII; 8 – aedeagus, lateral view; 9 – same, ventral view. Scale bars: 0.1 mm (d); 0.2 mm (e, f, g, h); 0.5 mm (a, b, c).

area and short, dense setae on posterolateral margins. Legs slender, apex of tibiae densely covered with short pubescence.

Abdomen short, maximum length 0.65 mm, maximum width 0.95 mm; strongly constricted and sulcate at base, with long, dense hairs around basal constriction. First visible tergite (morphologically tergite IV) largest, broadened posteriorly; tergites V–VII very short, successively narrower, tergite VII about 1.3 times as long as VI; tergite VIII (Fig. 6) nearly semicircular, sternite VIII (Fig. 7) short. Aedeagus (Figs. 8–9) 0.43 mm long, almost symmetrical and slightly sclerotized; parameres paired and flattened, each narrow at base, median lobe broad, with pair of spine-shaped sclerites and one transverse arched sclerite; endophallus large and elongate, flame-like, located at basal half of median lobe, densely covered with long bristles.

Female. Unknown.

**Relationships.** The new species is a sister species of *A. shunichii* to which it resembles in many external characters, in particular by: i) pronotum with two pairs of fringed constrictions near base; ii) elytra each with one distinct basal fovea; and iii) basolateral margins of

elytra and basal constriction of abdomen with dense short hairs. *Awas sinicus* sp. nov. may be distinguished from *A. shunichii* by smaller size, more elongate antennomeres III–XI, relatively less prolonged postocular region, more convex sides of elytra and relatively larger parameres of aedeagus.

**Etymology.** The name 'sinicus' refers to China where the species was discovered. **Distribution.** South China (Yunnan Province).

### Revised key to the species of the genus Awas Löbl, 1994

This key is a revised version of that published by Nomura & Idris (2004) which included previously three known species. To add the new species, the key is modified as follows:

previously time known species. To add the new species, the key is modified as follows.	
1	Pronotum with two pairs of basal fringed constrictions; elytra each with one distinct basal fovea
-	Pronotum without basal fringed constrictions; elytra with basal fovea indistinct or absent
2	Antenna thick, antennomeres VIII–X each about as long as wide; eyes large and strongly convex, composed of about 100 facets; elytra nearly hexagonal. China: Taiwan
_	Antenna slender, antennomeres VIII–X each longer than wide; eyes relatively small and weakly convex, composed of about 85 facets; elytra with round sides. China: Yunnan.
3	Scutellum scarcely exposed; elytron lacking basal fovea; abdominal segment IV with semicircular process on ventromedian nodule. West Malaysia.  A. giraffa Löbl, 1994
-	Scutellum exposed in small part between elytral bases; elytron with an indistinct basal fovea; abdominal segment IV without semicircular process on ventromedian nodule.  West Malaysia

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