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# Description of two new *Carabus* L., 1758 taxa from Central Sichuan Province, China (Coleoptera: Carabidae: Carabinae)

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**Key words:** Carabus, Pagocarabus, Pseudocoptolabrus, taliensis, new species, new subspecies, Shimian, Sichuan, China.

**Abstract:** Two new *Carabus* L., 1758 taxa from Central Sichuan Province, China, are described and figured: *Carabus* (*Pagocarabus*) *huangcaoshanicus* **sp. n.** and *Carabus* (*Pseudocoptolabrus*) *taliensis shimianensis* **ssp. n.** Comparative notes with the closes taxa are provide.

#### INTRODUCTION

Central Sichuan has a very complex orography and consist of numerous mountain ranges forming the easternmost part of the Tibetan Plateau. Deep valley crossed by large rivers separate the mountain systems, a great variety of climate conditions and biodiversity are characteristic of the area. The *Carabus* fauna of the area is of a great interest, a large number of species and subspecies are known (Brezina, 2003; Deuve, 1997; Deuve, 2004). The opportunity to study some *Carabus* specimens collected from the mountain area of Shimian, Central Sichuan, China, permit me to describe two new Taxa: *Carabus* (*Pagocarabus*) huangcaoshanicus sp.n. and *Carabus* (*Pseudocoptolabrus*) taliensis shimianensis ssp.n.

## Carabus (Pagocarabus) huangcaoshanicus sp. n. (Figs 1, 2)

**Description** of Holotype male. Length including mandibles: 25,5 mm, maximum width of elytra: 8 mm. Color black with copper metallic luster on head, dorsum and pronotum; mat. Ticked head; neck of normal shape, strongly punctured and rugulose; big and prominent eyes of hemispheric shape; vertex moderately convex, surface very strongly relevated and rugulose. Mandibles long and

strong, curved uniformly. Retinacular teeth of mandibles bidentate. Labrum bilobate. Long and thin palpi, sub apical segment of labial palpi bi setose. Apical segment of maxillary and labial palpi moderately dilated. Tooth of mentum large and acuminate, shorter than lateral lobes. Antennae very thin, extending with 5 antennomers beyond the prenatal base and extending more or less the apical half of elytra.

Very small pronotum of trapeze shape, sinuate, slightly transverse (1,18 times as broad as long), maximum width on the anterior third; disc of pronotum flat; sides of pronotum very narrow margined, not bent upwards; hind angles not protruding behind its base; surface of pronotum uniformly and very strongly roughly punctured; basal depressions small.

Elytra very elongate, narrow, oval, convex, maximum width behind the middle; shoulders narrow, angolate; sculpture triploid eterodyname, primary segments larger and more elevate, secondary and tertiary intervals of the same size forming chains of small rounded tubercles.

Male aedeagus very characteristic. In frontal view (Fig. 3a) regularly curved with median lobe rather enlarged and developed apical lobe sub-rectilinear with apex in shape of spatula. In lateral view (Fig. 3b) the apical lobe is very elongated and rectilinear.

Variability of the Paratype. Very small variability: the length of the body ranges between 25 mm / 27,5 mm in the males and mm 26/29,5 mm in the females. The pronotum is a little more transverse in the females than in males.

**Materials**. Holotype, 1 male, China, Sichuan Province, Yaan, Shimian, Mt. Huangcao Shan, VII.2012; preserved in the autor's collection; 7 paratypes: 2 males, 5 females, China, Sichuan Province, Yaan, Shimian, Mt. Huangcao Shan, VII.2012; preserved in the autor's collection.

**Discussion.** The new species is very characteristic and differs to all known *Pagocarabus taxa* living in the area. The closest *taxa* seems to be *Carabus* (*Pagocarabus*) *trachynodes* Bates, 1891 and *Carabus* (*Pagocarabus*) *sichuanicola* Deuve, 1989. From *C.* (*P.*) *trachynodes* the new species differs for the bigger size of the body and the shape of the male aedeagus with more developed medium lobe and the spatulate apex. From *C.* (*P.*) *sichuanicola* the new taxon differs for the ticked and strongly punctured and rugulose head; the shape of

pronotum with the hind angles not protruding behind its base, the surface of pronotum roughly punctured; the elytral sculpture more roughly with the primary segment larger and very interrupted secondary and tertiary ones; spatula shape of the apex of male aedeagus.

**Etimology**. The given name is the typical locality of the new species.

### Carabus (Pseudocoptolabrus) taliensis shimianensis ssp. n. (Figs 4, 5)

**Description** of Holotype male. Length including mandibles: 29,5 mm, maximum width of elytra: 8,5 mm. Upper side black with very faint green-blue tint, mat. Legs, antennae and palpi black.

Head moderately ticked but elongate, large as the base of pronotum; long neck; hemispheric eyes, moderately prominent; vertex nearly flat, surface faintly punctured and faintly rugulose. Mandibles very long and narrow, evenly curved. Retinacular teeth of mandibles bidentate, the left a little more developed than the right. Long palpi; apical segment of maxillary and labial palpi moderately dilated; sub apical segment of labial palpi multi setose. Antennae very long and thin, extending over the apical half of elytra.

Small and elongate pronotum (as broad as long), cordate, widened in the anterior third, very narrowed to the base, sides sinuous; basal angles acute, very few prominent; disc flat with a carachtristic relieved plate; upper surface of pronotum densely punctured, wrinkled near its base; basal depressions deep.

Elytra very narrow and very elongate, slender; shoulders narrow and rounded; elytral disc very convex; sculpture strong, triploid eterodyname type: primary tubercles aligned and separated by rounded and very deep foveae, secondary and tertiary granules irregularly disposed between the primary intervals.

Legs very long and thin. Adhesive sole of 4th male protarsal segment reduced.

Male aedeagus (Fig. 6a, 6b).

Variability of the Paratype. In general very few variability: only the length of the body ranges from 29 mm to 32 mm.

**Materials**. Holotype, 1 male, China, Sichuan Province, Yaan, Shimian, Mt. Huangcao Shan, VII.2012; preserved in the autor's collection; 4

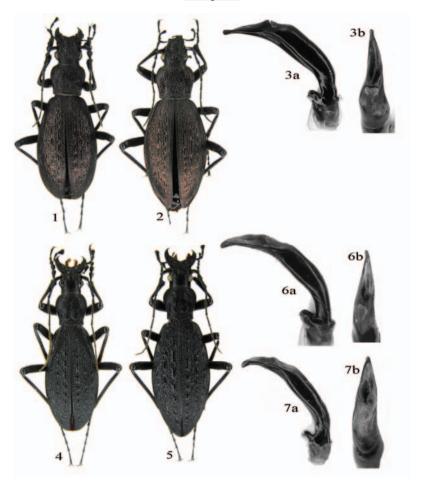
paratypes: 2 males, 2 females, China, Sichuan Province, Yaan, Shimian, Mt. Huangcao Shan, VII.2012; preserved in the autor's collection.

**Discussion.** The discovery of *C.* (*P.*) *t. shimianesis* new subspecies is of a great interest: the collecting locality is close to the typical locality of *C.* (*Pseudocoptolabrus*) armiger Imura, 1997. Despite the geographical vicinity of the new taxon with *C. armiger*, it belongs to *C. taliensis* species and the closes form is the subspecies *liquiensis* Imura, 1999. From *C. t. liquensis* the new taxon differs for the ticked head; the smaller pronotum much more densely punctured; the more slender body; elytral sculpture strongly relieved; and the smaller aedeagus, more regularly curved with more rounded and less curved apex (compare Figs. 6a, 6b with figs. 7a, 7b).

**Etimology.** The given name of the new taxa is the name of the village near by the typical locality.

#### REFERENCES

- Bates H.W. 1891. Coleoptera collected by Mr. Pratt on the Upper Yang-tsze, and on the borders of Tibet. Second notice. Journey of 1890.- The Entomologist. Dorking. Supplement. 24: 69.
- Breuning S. 1932-1936. Monographie der Gattung Marabus L.- Bestimmungs-Tabellen der europäischen Coleopteren. 1610 pp. Troppau: E. Reiter ed.
- Brezina B. 2003. World Catalogue of the Genus Carabus L.- *Pensoft*, Sofia-Moscow, 1999: 170pp.
- Deuve Th. 1989. Nouvequx Carabidae des collections de l'Institut Zoologique de l'Académie Sinica de Pékin (1).- Nouvelle Revue d'Entomologie (NS). Toulouse, 6: 170-171.
- Deuve Th. 1997. Catalogue des Carabini et Cychrini de Chine.- Mémoires de la Societé entomologique de France, n 1: 1-236.
- Deuve Th. 2004. Illustrated Catalogue of the Genus Carabus of the World (Coleoptera, Carabidae).- Pensoft. Sofia-Moscow, 4:61 pp.
- Imura Y. 1999. Ten new taxa of the genera *Carabus* and *Cychrus* from China.- The Japanese Journal of Systematic Entomology, 5(1): 141.



**Figs. 1-2, 3 (a, b).** Carabus (Pagocarabus) huangcaoshanicus **sp. n.:** 1 - Holotype, male, 2 - Paratype, female, 3a - male aedeagus frontal view, 3b - male aedeagus lateral view.

**Figs 4-5, 6(a-b).** Carabus (Pseudocoptolabrus) taliensis shimianensis **ssp. n.**: 4 -Holotype, male, 5 - Paratype, female, 6a - male aedeagus frontal view, 6b - male aedeagus lateral view.

Figs 7 (a, b). Carabus (Pseudocoptolabrus) taliensis liquiensis Imura, 1999 (ex China, Sichuan Province, Kangding Xian, Sabde env., 3400m, 25.VI.2001, M. Janata leg.): 7a - male aedeagus frontal view, 7b - male aedeagus lateral view.

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