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RESEARCH PAPER

# New species and records of Coryphiini from China (Coleoptera: Staphylinidae: Omaliinae)

Alexey V. SHAVRIN 1,\*) & Aleš SMETANA2)

- 1) Institute of Life Sciences and Technologies, Daugavpils University, Vienibas 13, Daugavpils, LV-5401, Latvia; e-mail: ashavrin@hotmail.com
- <sup>2)</sup> Agriculture and Agri-Food Canada, Biodiversity, Central Experimental Farm, K. W. Neatby Bldg., Ottawa, ON K1A 0C6, Canada; e-mail: ales.smetana@canada.ca

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Published online: 9th November 2020 **Abstract.** Two new species of the tribe Coryphiini Jakobson, 1908 (Omaliinae) from Sichuan are described and illustrated: *Archaeoboreaphilus paradoxus* sp. nov. and *Caloboreaphilus concisus* sp. nov. New records of *Boreaphilus japonicus* Sharp, 1874 and *Coryphium taibaiense* Li, Li & Zhao, 2007 are given, and some morphological details of these species are illustrated. *Boreaphilus japonicus* is recorded from Shaanxi for the first time. A distributional map and key to species of Coryphiini of China are provided.

**Key words.** Coleoptera, Staphylinidae, Omaliinae, Coryphiini, taxonomy, description, new species, new records, China, Palaearctic Region

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# Introduction

The rove beetle tribe Coryphiini Jakobson, 1908 (Omaliinae) contains 172 species in two subtribes (Boreaphilina Zerche, 1990 and Coryphiina Jakobson, 1908) and 25 genera (Newton 2019), distributed in the Holarctic Region. The first record of the tribe from China was provided by LI (1993), who recorded *Boreaphilus japonicus* Sharp, 1874 from Jilin. The Palaearctic species of the tribe were revised by L. Zerche (e.g., Zerche 1990, 1993), including *Caloboreaphilus hammondi* Zerche 1990, which was described from Shaanxi. Smetana (2003) described two species of the genus *Haida* Keen, 1897 from Shaanxi. Previously, species of this genus were known from the Nearctic Region (Campbell 1978). Li et al. (2007) described two species of *Coryphium* Stephens, 1834 from Zhejiang and Shaanxi. Thus, only six species in four genera were known from China.

This study presents descriptions of two new species of *Archaoboreaphilus* Zerche, 1990 and *Caloboreaphilus* Zerche, 1990 from Sichuan, and records of two species of *Boreaphilus* C. R. Sahlberg, 1832 and *Coryphium*, based on material collected by Vasily Grebennikov (Ottawa) and our Czech colleagues. An additional record of *B. japonicus* from the Maritime Province of Russia is given. A distribu-

tional map and key to all species of the tribe known from China are provided.

# Material and methods

Specimens were studied using Nikon SMZ 745T and Nikon Eclipse E200 stereomicroscopes. All measurements are given in millimeters and were made with an ocular micrometer mounted on a stereoscopic microscope. Data on labels are given verbatim in single quotations; different lines are separated by a single vertical bar, labels are separated by double vertical bar, additional notes are given in square brackets. In the specimen listings, '[...] dissected' means that a plastic plate with aedeagus or female genital segment, as well as abdominal tergite VIII, sternite VIII and apical segments in Canada balsam was pinned under the card with the beetle. The distributional map was created using MapCreator 2.0 software.

The following measurements are used in this paper and abbreviated as follows:

AL length of antenna;

AW maximum width of abdomen;

AedL length of aedeagus (from base of the median lobe to apex of parameres);



<sup>\*)</sup>corresponding author

ESL sutural length of elytra (length of elytra from the apex of scutellum to the posterior margin of sutural angle);

EW maximum width of both elytra together;

HW maximum width of head including eyes;

HL length of head (from base of labrum to neck constriction along head midline);

LT length of temple; MTbL length of metatibia;

MTrL length of metatarsus; OL ocular length (longitudinal);

PL length of pronotum;

PW maximum width of pronotum;

TL total length (from anterior margin of clypeus to apex of abdomen).

#### The material examined is deposited in:

ASCD Alexey Shavrin collection, Daugavpils, Latvia;

CNC Canadian National Collection of Insects, Ottawa, Canada (A.E.

Davies, P. Bouchard);

NSMT Aleš Smetana collection, deposited at The National Museum

of Nature and Science, Toshiba, Japan (S. Nomura).

#### Results

#### Subtribe Boreaphilina

#### Archaeoboreaphilus paradoxus sp. nov.

(Figs 1–10, 14)

**Type locality.** China, Sichuan, 23 km E of Songpan, 32°37′47″N, 103°49′25″E, 3826 m a.s.l.

Type material. HOLOTYPE: ♂ (dissected), 'CHINA: Sichuan, 23 km | E Songpan, N32°37'47" | E103°49'25", 28.V.2012 | 3826m, sifting 14, | V. Grebennikov || HOLOTYPE | Archaeoboreaphilus | paradoxus Shavrin & Smetana, 2020 [red rectangular label, printed]' (CNC).

**Description.** Measurements of the holotype (in mm): HW: 0.52; HL: 0.32; AL: 0.92; OL: 0.17; LT: 0.05; PL: 0.40; PW: 0.62; ESL: 0.72; EW: 0.86; AW: 1.00; MTbL: 0.37; MTrL: 0.32 (MTrL 1–4: 0.17; MTrL 5: 0.15); AedL: 0.72; TL: 2.26.

Body and antennomeres VI–XI brown; legs, antennomeres I and III–V yellow-brown; mouthparts and antennomere II yellow. Forebody glossy, without microsculpture on pronotum, scutellum and elytra; head with fine transverse meshes on middle portion; abdominal tergites with fine isodiametric microreticulation. Pubescence of forebody semierect, moderately dense and long; abdominal tergites with dense, fine, decumbent pubescence. Habitus as in Fig. 1.

Head 1.6 times as broad as long, with evenly convex middle portion, deep suboval postantennal depressions and slightly elevated supra-antennal prominences; mediobasal margin of head straight. Punctation on middle portion dense and moderately deep, finer on basal portion. Temples short, gradually narrowing toward neck. Postocular ridge indistinct, obtuse. Ocelli moderately large, located slightly behind level of postocular ridges; distance between ocelli about twice as long as distance between ocellus and posterior margin of eye. Eyes large, convex. Neck with very sparse fine punctures, without visible microreticulation. Labrum transverse, with widely rounded latero-apical portions and deep medioapical emargination, with several long apical setae (Fig. 2). Mandible as in Fig. 3. Mentum narrow, elongate; labium moderately wide (Fig. 4). Preapical palpomere of maxillary palpus very wide, club-like, 1.7 times as long as broad, slightly shorter than preceding palpomere; galea narrow, short; lacinia moderately wide and long, with unarticulated spine-like apex, five long preapical spines and numerous long setae along medial margin (Fig. 5). Antenna reaching basal third of elytra when reclined, with moderately elongate antennomeres VI–X; basal antennomere about twice as long as broad, antennomere II suboval, III about as long as and distinctly narrower than II, IV–V distinctly smaller than III, slightly longer than wide, VI shorter than V, about as long as broad, VII–VIII slightly broader than VI, as long as broad, IX–X indistinctly broader than VIII, apical antennomere more than twice as long as X, from apical third gradually narrowing toward apex.

Pronotum with markedly convex middle portion, without median impressions, 1.5 times as broad as long, slightly broader than head, with widely rounded anterior angles, from widest anterior third gradually narrowing posteriad toward widely rounded hind angles; anterior margin rounded, slightly shorter than somewhat straight posterior margin; lateral margins distinctly bordered, somewhat wider in latero-apical portions; lateral edges with irregular, small, rounded crenulation; lateral portions with moderately deep and wide impressions. Punctation dense, slightly larger and deeper than that on middle portion of head, distinctly sparser on middle and mediobasal portions.

Scutellum moderately large, with rounded apex and with several very small punctures.

Elytra convex, slightly broader than long, 1.8 times as long as pronotum, gradually widened posteriad, reaching apical margin of abdominal tergite IV; lateral sides bordered, slightly and narrowly explanate in middle. Punctation dense, very coarse and deep, distance between punctures in middle about diameter of nearest puncture, punctures near basal margin and scutellum finer. Wings fully developed.

Metatarsi long, slightly shorter than metatibiae; apical tarsomere slightly shorter than preceding four tarsomeres.

Abdomen convex, distinctly broader than elytra, without visible punctures, with two small, round tomentose wing folding spots on middle of tergite IV, with moderately wide palisade fringe on apical margin of tergite VII.

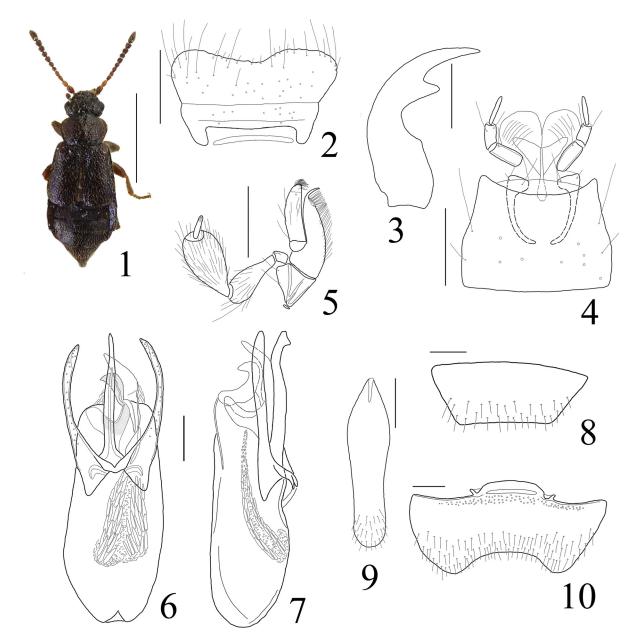
Male. Apical margin of abdominal tergite VIII straight (Fig. 8). Abdominal sternite IX as in Fig. 9. Apical margin of abdominal sternite VIII widely emarginate (Fig. 10). Aedeagus (Fig. 6) with very narrow and long median lobe with acute apex, and with two sclerotized, wide, curved, dorsoapical structures, narrowing apicad; parameres cylindrical, narrow, with apices not quite reaching apex of median lobe; internal sac short and wide, with two basal fields of elongated spicules. Aedeagus laterally as in Fig. 7.

Female unknown.

**Differential diagnosis.** Archaeoboreaphilus paradoxus sp. nov. differs from the remaining species of the genus by the smaller body and the presence of unusual dorsoapical structures of the aedeagus.

**Etymology.** The specific epithet (Greek adjective:  $\pi$ αράδοξος, strange) refers to unusual dorsal armature of the aedeagus.

**Habitat.** The specimen was taken by sifting forest litter at elevation 3826 m a.s.l. together with *C. concisus* sp. nov. (see below).



Figs 1–10. Archaeoboreaphilus paradoxus sp. nov. 1 – habitus (holotype); 2 – labrum, dorsal view; 3 – left mandible, dorsal view; 4 – labium and mentum, ventral view; 5 – left maxilla, ventral view; 6 – aedeagus, parameral view; 7 – aedeagus, lateral view; 8 – abdominal tergite VIII, dorsal view; 9 – abdominal sternite IX, ventral view; 10 – abdominal sternite VIII, ventral view. Scale bars: 1.0 mm (Fig. 1); 0.1 mm (Figs 2–10).

**Distribution.** The species is known only from the type locality in northern Sichuan, China (Fig. 14).

#### Boreaphilus japonicus Sharp, 1874 (Figs 11-14)

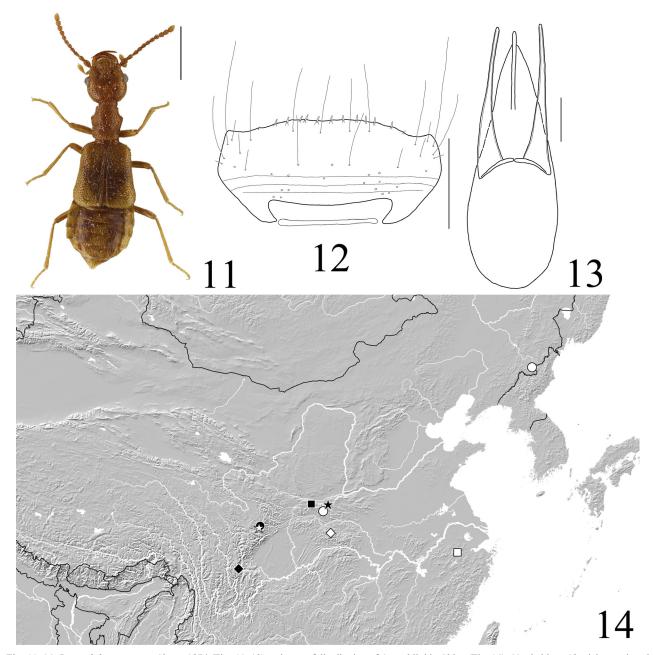
Boreaphilus japonicus Sharp, 1874: 96 (original description). Bernhauer & Schubert (1910): 84 (catalog); Nakane (1963): 83 (characters); Watanabe (1990): 373 (characters); Zerche (1990): 185 (lectotype designation, characters); Li (1993): 19 (record for China); Shin & Ahn (2003): 351 (characters); Smetana (2004): 253 (catalog); Schülke & Smetana (2015): 328 (catalog).

Boreaphilus kurentzovi Tichomirova, 1973: 157 (original description). Zerche (1990): 185 (synonymy).

Type localities. *Boreaphilus japonicus*: Japan, Nagasaki; *B. kurentzovi*: Russia, Maritime Province, Suputinsky (= Ussurisky) Nature Reserve. **Material examined.** 7 ♂♂, 'P.R. CHINA, Shaanxi, S slope Qin Ling Shan, N 33°51'40" E 108°59'27", 15.v.2011, 2000-2600m, sift01, V. Grebennikov' (2 ♂♂ in ASCD; 5 ♂♂ in CNC).

Additional material. 1 &, 'RUSSIA, Maritime Province, Sikhote-Alin Nature Reserve, Yasnaya River, floodplain terrace. 18.07.1984' (ASCD).

Remarks. Boreaphilus japonicus was originally described from Japan, based on '...four specimens, found under dead leaves in different localities near Nagasaki'. Later it was redescribed by WATANABE (1990) and ZERCHE (1990). ZERCHE (1990) recorded B. japonicus from the Maritime Province of Russia, and synonymized B. kurentzovi Tichomirova, 1973 with it. SHIN & AHN (2003) mentioned it from South Korea, but this record needs clarification due to the different shape of the aedeagus, provided by the authors in figure 5 and 6. LI (1993) recorded it from Changbai Mountain, Jilin, China. SMETANA (2004) recorded it from Zhejiang. The species is here recorded from Shaanxi for the first time. Habitus as in Fig. 11. Labrum as in Fig. 12.



Figs 11–14. Boreaphilus japonicus Sharp, 1874 (Figs 11–13) and map of distribution of Coryphiini in China (Fig. 14). 11 – habitus; 12 – labrum, dorsal view. 13 – aedeagus, parameral view (internal sac is not shown); 14 – map: Archaeoboreaphilus paradoxus sp. nov. (black circle), Boreaphilus japonicus (white circles), Caloboreaphilus hammondi Zerche, 1990 (black star), C. concisus sp. nov. (white star), Coryphium taibaiense Li, Li & Zhao, 2007 (black square), C. tangi Li, Li & Zhao, 2007 (white square), Haida argonautarum Smetana, 2003 (black diamond), H. satoi Smetana, 2003 (white diamond). Scale bars: 1.0 mm (Fig. 11); 0.1 mm (Figs 12–13).

Aedeagus as in Fig. 13. The distribution in China as in Fig. 14; the record by SMETANA (2004) from Zhejiang is not shown on the map because of lack of exact locality.

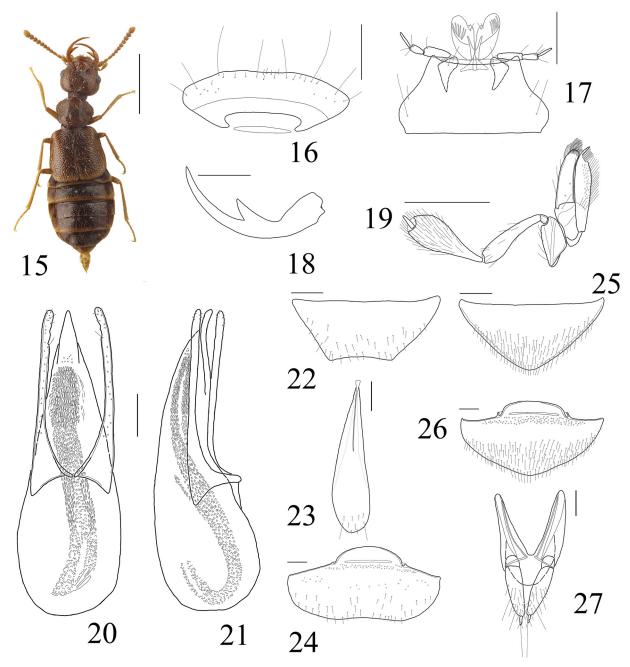
# Caloboreaphilus concisus sp. nov. (Figs 14–27)

**Type locality.** China, Sichuan, 23 km E of Songpan, 32°37′47″N, 103°49′25″E, 3826 m a.s.l.

Type material. Holotype:  $\circlearrowleft$ , 'CHINA: Sichuan, 23 km | E Songpan, N32°37′51" | E103°49′25", 27.V.2012 | 3839m, sifting 11, | V. Grebennikov || HOLOTYPE | Caloboreaphilus | concisus sp.n. | Shavrin A. & Smetana A. des. 2020 [red rectangular label, printed]' (CNC). Paratypes: 2  $\circlearrowleft$  (one specimen dissected), same data as the holotype (1  $\circlearrowleft$ : ASCD, 1  $\circlearrowleft$ : CNC); 1  $\hookrightarrow$ , 'CHINA, Sichuan, 23km | E Songpan, N32°37′42" |

E103°50'08", 26.v.2012, | 3860m, sifting 10, | V. Grebennikov' (CNC); 1  $\circlearrowleft$ , 'CHINA: Sichuan, 23 km | E Songpan, N32°37'47" | E 103°49'25", 28.V.2012 | 3826m, sifting 14. | V. Grebennikov' (CNC); 1  $\circlearrowleft$  (dissected), 5  $\circlearrowleft$ , 'CHINA, Sichuan, 23km | E Songpan, N32°37'57" | E103°49'20", 27.v.2012, | 3761m, sifting 12, | V. Grebennikov' (1  $\circlearrowleft$ : ASCD, 1  $\circlearrowleft$  4  $\circlearrowleft$  CNC). All paratypes with additional red rectangular printed label: 'PARATYPE | Caloboreaphilus | concisus sp.n. | Shavrin A. & Smetana A. des. 2020'.

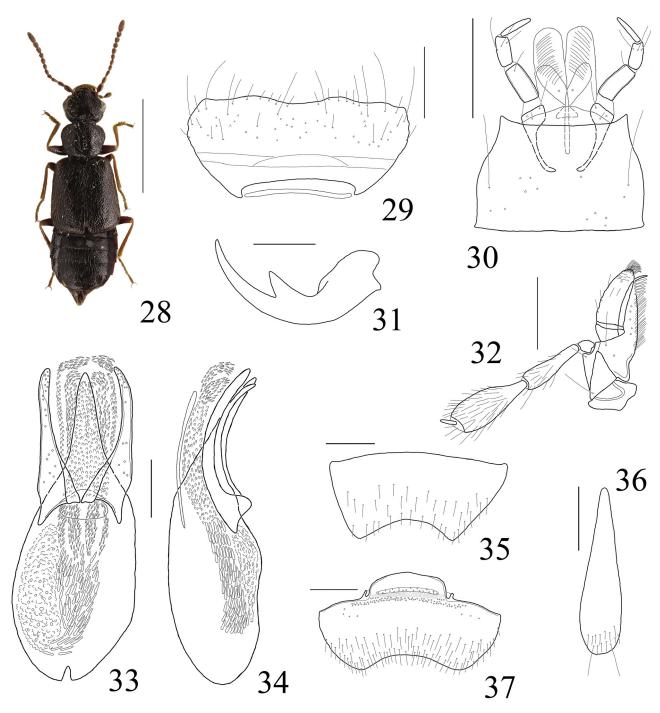
**Description.** Measurements (n = 11, in mm): HW: 0.75–0.97; HL: 0.57–0.75; AL (holotype): 1.25; OL: 0.17–0.20; LT: 0.25–0.30; PL: 0.52–0.62; PW: 0.68–0.92; ESL: 0.93–1.15; EW: 1.06–1.40; AW: 1.17–1.60; MTbL (holotype): 0.82; MTrL (holotype): 0.49 (MTrL 1–4: 0.32; MTrL 5: 0.17); AedL: 0.80–0.82; TL: 3.50–4.40 (holotype: 4.10).



Figs 15–27. *Caloboreaphilus concisus* sp. nov. 15 – habitus (paratype); 16 – labrum, dorsal view; 17 – labium and mentum, ventral view; 18 – left mandible, dorsal view; 19 – left maxilla, ventral view; 20 – aedeagus, parameral view; 21 – aedeagus, lateral view; 22 – male abdominal tergite VIII, dorsal view; 23 – male abdominal sternite IX, ventral view; 24 – male abdominal sternite VIII, ventral view; 25 – female abdominal tergite VIII, dorsal view; 26 – female abdominal sternite IX; 27 – female genital segment, dorsal view. Scale bars: 1.0 mm (Fig. 15); 0.1 mm (Figs 16–27).

Forebody reddish-brown, sometimes with darker indistinct spot in middle of head, paler basal margin of pronotum, lateral and basal margins of elytra; middle portion of head (ventrally), thoracic sclerites (ventrally) and abdomen brown, with yellow-brown paratergites and intersegmental membranes between tergites III–VI; mouthparts, legs and antennomeres yellow to yellow-brown. Body shiny, without microsculpture, except of scutellum with fine transverse meshes in middle and abdomen with dense, indistinct or distinct, transverse meshes between punctures. Body covered by dense semierect setae, sparser and longer on anterior portion of head and somewhat finer on abdomen. Habitus as in Fig. 15.

Head large and convex, 1.2–1.3 times as broad as long, slightly broader than pronotum, with evenly elevated middle portion and distinctly elevated supra-antennal prominences; basal portions of clypeus with very deep narrow impressions; mediobasal margin of head deeply, subtriangularly or semicircularly concave. Punctation very dense and moderately deep, sparser in medioanterior portion, denser in middle and around eyes. Temples distinctly longer than length of eyes, convex. Ocelli large, convex, situated significantly behind level of posterior margins of eyes, distance between ocelli about twice as long as distance between ocellus and posterior margin of eye. Eyes small, strongly convex. Neck with dense and fine microreticulati-



Figs 28–37. *Coryphium taibaiense* Li, Li & Zhao, 2007. 28 – habitus (paratype); 29 – labrum, dorsal view; 30 – labitum and mentum, ventral view; 31 – left mandible, dorsal view; 32 – left maxilla, ventral view; 33 – aedeagus, parameral view; 34 – aedeagus, lateral view; 35 – male abdominal tergite VIII, dorsal view; 36 – male abdominal sternite IX, ventral view; 37 – male abdominal sternite VIII, ventral view. Scale bars: 1.0 mm (Fig. 28); 0.1 mm (Figs 29–37).

on, without visible punctures. Labrum transverse, with three latero-apical and two apical long setae (Fig. 16). Mandible as in Fig. 18. Mentum large, trapezoidal, with rounded laterobasal margins, strongly narrowed apicad; labium narrow, with elongate labial palpomeres, apical palpomere narrow, about as long as preapical palpomere, glossa narrow, strongly protruded apicad (Fig. 17). Preapical palpomere of maxillary palp wide, club-like, slightly longer than preceding palpomere; galea moderately narrow; lacinia moderately narrow, slightly longer than galea, with elongate spine-

like apex, five long preapical spines and long setae along medial margin (Fig. 19). Antenna exceeding basal third of elytra when reclined, with shortened antennomeres IV–IX; antennomeres IV–X covered by dense pubescence; basal antennomere wide, 1.6 times as long as II, antennomere II ovoid, III about as long as and indistinctly narrower than II, IV short, about as long as broad, V–VI slightly broader than IV, VII–VIII slightly transverse, IX–X indistinctly longer than VIII, apical antennomere about twice as long as X, with conical apex.

Pronotum 1.3–1.4 times as broad as long, significantly convex in middle, with deep and wide medial impression, stretching from about apical margin toward middle, and with moderately deep transverse or semicircular impression in mediobasal third, mediolateral portions with very wide and deep depressions; pronotum widest at anterior third, significantly narrowed posteriad toward widely rounded hind angles; latero-apical portions widely rounded; apical margin rounded, distinctly narower than widely rounded posterior margin; lateral edges with regular rounded crenulation, distinctly larger on latero-apical and finer on latero-basal margins. Punctation denser and coarser than that on middle of head, sometimes more irregular and sparser on bottom of medioapical and mediobasal impressions, distance between punctures in middle usually about length of nearest puncture.

Scutellum large, with rounded apex and indistinct semicircular impression in middle, with several small punctures.

Elytra convex, short, 1.7–1.8 times as long as pronotum, about as long as wide or slightly wider, gradually widened apicad, reaching apical margin of abdominal tergite IV or basal margin of abdominal tergite V; apical margin straight; lateral portions narrowly flattened, with bordered margins; laterobasal margins with fine acute crenulation. Punctation slightly sparser and larger than that on pronotum, denser and coarser in basal portions near scutellum. Wings fully developed.

Metatarsus about 1.6 times as long as metatibia; apical metatarsomere about as long three preceding tarsomeres.

Abdomen distinctly wider than elytra, with fine and dense punctation, with wide transverse wing-folding spots in middle of tergite IV and small, rounded, sometimes indistinct spots in middle of tergite V; apical margin of tergite VII with very fine palisade fringe.

*Male*. First four protarsomeres slightly widened. Apical margins of abdominal tergite VIII (Fig. 22) and sternite VIII (Fig. 24) sinuate. Abdominal sternite IX as in Fig. 23. Aedeagus (Fig. 20) long, with median lobe gradually narrowing toward acute apex; parameres narrow, cylindrical, reaching apex of median lobe, with two minute apical and three fine lateral setae along inner edge; internal sac long, moderately wide, with apical field of moderately large and two basal fields of finer spiculae. Aedeagus laterally as in Fig. 21.

Female. First four protarsomeres narrow. Apical margins of abdominal tergite VIII (Fig. 25) and sternite VIII (Fig. 26) obtusely triangular. Genital segment (Fig. 27) with long gonocoxites and elongate styli, each with long apical seta. **Differential diagnosis.** Caloboreaphilus concisus sp. nov. can be easily distinguished from C. hammondi by the larger body, wider head, larger crenulation of lateral sides of the pronotum, shorter elytra, wider abdomen, the shape of the narrower median lobe (asymmetrical in C. hammondi) and different structure of the internal sac.

**Etymology.** The specific epithet is the Latin adjective *concisus*, -a, -um (short). It refers to the short elytra of the species

**Habitat.** Specimens were collected by sifting forest litter at elevations from 3761 to 3860 m a.s.l.

**Distribution.** The species is known from several locations close to each other in northern Sichuan, China (Fig. 14).

# Subtribe Coryphiina

# Coryphium taibaiense Li, Li & Zhao, 2007

(Figs 14, 28-37)

Material examined. 1 ♂, 'CHINA: Shaanxi, Qing Ling Shan, Hou Zen Zi vill. To Taibai Shan 3500 m 2.-4.VII.1997', 'alpine meadows Z. Jindra, O. Šafránek and M. Trýzna' (NSMT).

Remarks. Coryphium taibaiense was originally described from the Taibai mountain, Qin Ling Shan range, Shaanxi, China (Li et al. 2007). The present record is located near the type locality (Fig. 14). Habitus as in Fig. 28. Labrum as in Fig. 29. Mentum and labium as in Fig. 30. Mandible as in Fig. 31. Maxillary palpus as in Fig. 32. Male abdominal tergite VIII as in Fig. 35; male sternite IX as in Fig. 36; male sternite VIII as in Fig. 37. Aedeagus as in Figs. 33–34.

# Key to species of Coryphiini of China

1	Gular sutures parallel or diverging anteriad 2
_	Gular sutures converging anteriad
2	Pronotum longer than wide. Body yellow-brown to
	reddish-brown. Aedeagus as in Fig. 13. Body length:
	2.80–3.25 mm. Habitus as in Fig. 11. Far Eastern Russia
	(Maritime Province), South Korea, China (Jilin, Zhe-
	jiang, Shaanxi), Japan (Honshu, Kyushu)
_	Pronotum transverse
3	Lateral margins of pronotum finely crenulated, roun-
	ded at widest point. Antennomeres VI–X elongate.
	Aedeagus with narrow, rod-like median lobe (Fig. 6).
	Body brown. Body smaller: 2.26 mm. Habitus as in Fig.
	1. China (Sichuan).
	Archaeoboreaphilus paradoxus sp. nov.
_	Lateral margins of pronotum coarsely crenulated, so-
	metimes angulate at widest part. Antennomeres VI–X
	short. Aedeagus with median lobe different, not rod-
	like. Body reddish-brown, with darker abdomen. Body
	larger
4	Head about as broad as pronotum. Lateral margins of
4	pronotum at widest point angulate; crenulation of la-
	teral margins moderately fine. Apical portion of medi-
	an lobe wide, asymmetrical; apical portion of internal
	sac with several very long spines (Fig. 534 in Zerche
	1990). Body length: 3.15 mm. Habitus as in Fig. 536 in
	ZERCHE (1990). China (Shaanxi).
_	Head slightly broader than pronotum. Lateral margins
	of pronotum at widest point not angulate; crenulation
	of lateral margins coarse. Apical portion of median
	lobe narrow, symmetrical; apical portion of internal
	sac with wide field of numerous moderately small spi-
	nes (Fig. 20). Habitus as in Fig. 15. Body length: 3.50-
	4.40 mm. China (Sichuan).
	Caloboreaphilus concisus sp. nov.
5	Pronotum large, subangulately widened laterally
	around middle, lateral portions widely explanate. Ely-
	tra almost quadrate, with lateral portions explanate
	and longitudinally impressed in anterior two-thirds.

...... *Haida* Keen, 1897 (see Smetana 2003)

- Pronotum small, evenly rounded laterally, lateral portions not explanate. Elytra elongate, with lateral portions not explanate and not longitudinally impressed in anterior two-thirds.
- 6. Antennomeres IV–X transverse. Aedeagus as in Fig. 4 in L1 et al. (2007). Body smaller: 2.30–2.47 mm. Habitus as in Fig. 1 in L1 et al. (2007). China (Zhejiang). ....

  Coryphium tangi Li, Li & Zhao, 2007
- Antennomeres IV–X elongate. Aedeagus as in Fig. 37.
   Body larger: 2.57–2.67. Habitus as in Fig. 28. China (Shaanxi). Coryphium taibaiense Li, Li & Zhao, 2007

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