

THE GENUS *HEXARHOPALUS* FAIRMAIRE, 1891 IN CHINA,
WITH DESCRIPTION OF THREE NEW SPECIES
(COLEOPTERA, TENEBRIONIDAE: CNODALONINI)

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Three new species of the genus *Hexarhopalus* FAIRMAIRE, 1891 are described from China. *H. (Hexarhopalus) mangshanicus* sp. n. (Hunan), *H. (Leprocaulus) bisinuatus* sp. n. (Guizhou) and *H. (Leprocaulus) xui* sp. n. (Yunnan). *H. (Hexarhopalus) sculptilis* KASZAB, 1960 is newly recorded from China. A key to the six Chinese species of the genus is given.

Key words: Tenebrionidae, Cnodalonini, *Hexarhopalus*, China, new species, new record

INTRODUCTION

The genus *Hexarhopalus* was erected by FAIRMAIRE (1891) for *H. sculpticollis* FAIRMAIRE, 1891 from Chang-Yang, China. Recently, *Hexarhopalus* was redefined and critically revised, to which genus *Leprocaulus* FAIRMAIRE, 1896 was transferred and demoted to subgenus rank (BEČVÁŘ & PURCHART 2008).

So far this genus is endemic to the Oriental Region and includes 43 species, of which 18 belong to the subgenus *Hexarhopalus* and 25 belong to the subgenus *Leprocaulus* (BEČVÁŘ & PURCHART 2008, PURCHART 2010). Among them, only two species have been described from China, *H. (Hexarhopalus) attenuatus* (PIC, 1922a) from Yunnan and *H. (Hexarhopalus) sculpticollis* FAIRMAIRE, 1891 from Zhejiang. Lately, the latter was redescribed and a neotype was designated for it (PURCHART 2009).

In the present paper, three new species from China are described, a new record of Chinese fauna and a key to the known Chinese species are given.

MATERIAL AND METHODS

All specimens used in this study are in the collection of the Museum of Hebei University (MHBHU). They were examined and illustrated under a Nikon SMZ800 stereomicroscope, and measured with an ocular micrometer. Photographs of the adults were taken with a Nikon D60 Digital Single Lens Reflex Camera.

Lengths and widths are the maximum values of the measured parts, but length of metasternum is measured at the shortest distance between mesocoxa and metacoxa. Total length is the distance from the clypeus to the elytral apex with the head in its natural position. Width of the elytra is the combined maximum width of both elytra.

Genus *Hexarhopalus* FAIRMAIRE, 1891

Hexarhopalus FAIRMAIRE, 1891: XIX. Type species: *Hexarhopalus sculpticollis* FAIRMAIRE, 1891 (by monotypy).

Subgenus *Hexarhopalus* FAIRMAIRE, 1891

Hexarhopalus FAIRMAIRE, 1891: XIX. Type species *Hexarhopalus sculpticollis* FAIRMAIRE, 1891 (by monotypy).

Apteroleprocaulus KASZAB, 1983: 182 (subgenus). Type species: *Leprocaulus montanus* KASZAB, 1982: 73 (by original designation). (synonymized by BEČVÁŘ & PURCHART 2008).

Laosocryptobates PIC, 1928: 25. Type species: *Laosocryptobates tuberculatus* PIC, 1928 (by monotypy). (synonymized by BEČVÁŘ & PURCHART 2008).

Hexarhoptrum FAIRMAIRE, 1894: 38 [unnecessary RN]. Type species *Hexarhopalus sculpticollis* FAIRMAIRE, 1891.

Hexaroptrum [sic] FAIRMAIRE, 1894: 38; KASZAB 1941: 2, 8.

Hexarhopalus (Hexarhopalus) attenuatus (PIC, 1922)

Leprocaulus attenuatus PIC, 1922a: 24; KASZAB 1983: 177; LÖBL *et al.* 2008: 343.

Leprocaulus (Pseudocoelophus) attenuatus PIC, 1922a: KASZAB, 1983: 179 (with photo of habitus).

Hexarhopalus (s. str.) attenuatus (PIC, 1922a): BEČVÁŘ & PURCHART, 2008: 40.

Type locality. CHINA: Yunnan (Pe Yen Tsin).

Material examined. 9 males, 12 females, CHINA: Yunnan Province, Xiping County, Xinhua Town, 24°06'48.7" N, 101°51'24.8" E, alt. 1870 m, 29–30 July 2009, Jishan Xu & Lixiang Zhang leg.

Distribution. China: Yunnan.

Remark. "Pe Yen Tsin" is now called Shiyang Town of Dayao County (formerly called Baiyanjing of Yanfeng County).

Hexarhopalus (Hexarhopalus) sculpticollis FAIRMAIRE, 1891

Hexarhopalus sculpticollis FAIRMAIRE, 1891: XIX; KASZAB 1960: 290.

Hexaroptrum sculpticolle FAIRMAIRE, 1891 [sic]: KASZAB 1941: 8.

Hexarhopalus (s. str.) sculpticollis FAIRMAIRE, 1891: BEČVÁŘ & PURCHART 2008: 41; PURCHART 2009: 28.

Hexarhopalus sculpticolle FAIRMAIRE, 1891 [sic]: LÖBL *et al.* 2008: 343.

Type locality. Neotype (designated by PURCHART, 2009), CHINA: Zhejiang Province, Lin'an County, Tianmushan National Nature Reserve.

Material examined. 1 female, CHINA: Anhui Province, Guniujiang National Nature Reserve, alt. 950–1050 m, 28 April 2005, Hu & Tang leg.

Distribution. China: Anhui, Zhejiang.

Remark. Fairmaire (1891) mentioned “Chang-Yang” in China as the original type locality.

Hexarhopalus (Hexarhopalus) sculptilis KASZAB, 1960

Hexarhopalus sculptilis KASZAB, 1960: 288 (with photo of habitus).

Leprocaulus (Apteroleprocaulus) sculptilis (KASZAB, 1960): KASZAB, 1983:183.

Hexarhopalus (s. str.) sculptilis KASZAB, 1960: BEČVÁŘ & PURCHART 2008: 41.

Type locality. Myanmar: Ruby Mts.

Material examined. 1 male, 1 female, CHINA: Yunnan Province, Ruili, Huyu, 10 April 1981, Zhenghui Xu leg., 1 male, CHINA: Yunnan Province, Yingjiang County, 20 June 1995, alt. 1750 m, Zhenghui Xu leg.

Distribution. Myanmar: Ruby Mts, China: Yunnan.

Remark. This species is recorded from China for the first time.

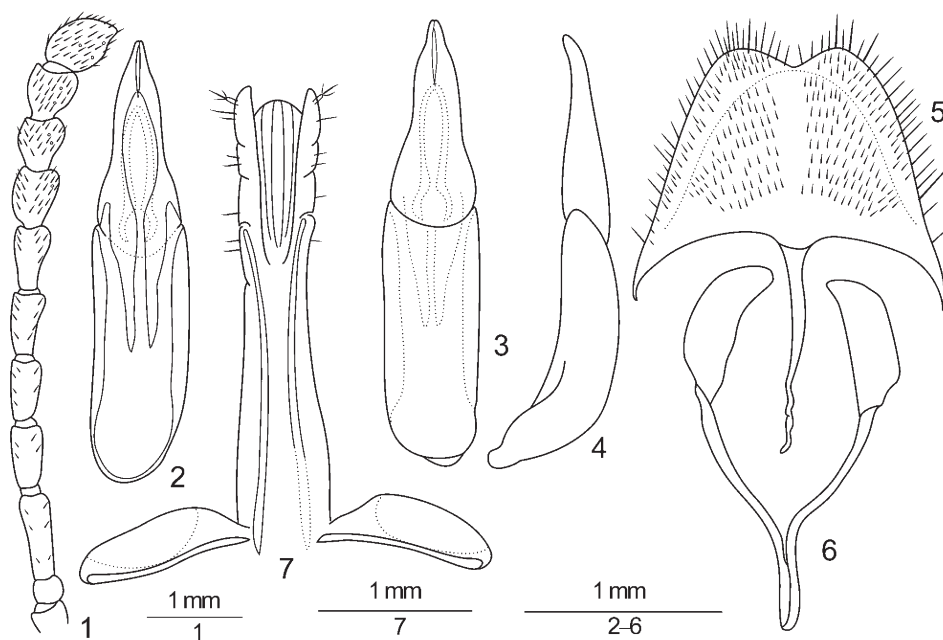
***Hexarhopalus (Hexarhopalus) mangshanicus* sp. n.**
(Figs 1–7, 17)

Material examined. Holotype: male, CHINA: Hunan, Mangshan, 800 m, September 1960, collector unknown. Paratypes: 1 male, 1 female, same data as holotype.

Description. Male (Fig. 17). Body elongate oval (length 14.5–16.8 mm, width 5.5–6.0 mm), more or less convex, dull-shiny; brown, head black, elytra, pronotum and apical half of femora brown-black, labrum, basal half of femora, tibiae and tarsi brown-red. Hind wing absent.

Head finely and simply punctate, 0.71–0.73 (0.72 on average, $n = 2$) times as wide as pronotum. Punctures on genae and anterior half of clypeus denser than those on frons. Frontoclypeal suture well developed, reaching anterior margin of clypeus. Ocular sulcus only moderately developed at inner side of eyes. Distance between eyes 2.33–2.67 (2.50 on average, $n = 2$) times as wide as the transverse diameter of an eye (in dorsal view). Labrum transverse, covered with long yellow setae anteriorly and laterally. Ventral side of head shiny, shagreened, wrinkled and microscopically pubescent. Antennae (Fig. 1) 1.40–1.43 (1.42 on average, $n = 2$) times as long as pronotum, slightly filiform, gently pubescent; four distal segments with shallow sensory pores, more densely pubescent than basal ones; 8th to 10th slightly dilated; terminal segment drop-shaped; ratio of the length (width) of 2nd–11th segments 6 (8):22 (8):16 (8):16 (8):16 (8):15 (11):13 (12):12 (12):17 (13). Mentum obtrapezoidal, irregularly and coarsely punctate, with a tubercle-like elevation in middle which is directed forwards, each lateral side of the elevation with a deep groove.

Pronotum globular, 1.02–1.04 (1.03 on average, $n = 2$) times as long as wide, broadest at anterior third, weakly shiny, microscopically pubescent, densely and moderately punctate, with a large longitudinal swelling on each side from anterior angle to near base, each swelling with a deep oblique depression extending posterolaterally from the middle part to near lateral margin; lateral carina not developed; oblique indentation in posterior angles large and deep, becoming deep lateral groove and reaching anterior angles, then the groove bent in rounded obtuse angle towards the middle and connecting to each other at the middle of anterior margin; in this way, anterior margin completely rimmed; posterior margin with deep groove connected with the beginning of oblique indentation and provided posterior rim of pronotum; longitudinal groove present, gradually broadened and deepened from the anterior margin to the base; prothoracic hypomeron slightly shagreened, only finely wrin-



Figs 1–7. *Hexarhopalus* (s. str.) *mangshanicus* sp. n., male: 1 = left antenna, dorsal view, 2–4 = aedeagus, ventral (2), dorsal (3) and lateral (4) view, 5 = abdominal sternite VIII, ventral view, 6 = spiculum gastrale, dorsal view; female: 7 = ovipositor, dorsal view. Scales: 1 mm

kled in posteriorlateral parts; prosternum finely wrinkled, weakly shiny; prosternal process shiny, finely punctate, with medio-longitudinal groove between coxae. Scutellum linguiform.

Elytra ovoid, slightly dilated posteriad, broadest at apical third, weakly shiny, 1.64–1.71 (1.68 on average, $n = 2$) times as long as its width, 2.20–2.25 (2.23 on average, $n = 2$) times longer and 1.32–1.43 (1.38 on average, $n = 2$) times wider than pronotum; sides gradually broadened from base to apical third, thence arcuately narrowed to the apex; apical declivity moderately steep; base nearly as wide as that of pronotum, carinate, without developed shoulders; disc with regular rows of more or less foveolate punctures; interstices clearly carinate, shiny and undulate, without transverse wrinkle connecting interstices; scutellary striole short.

Mesosternum finely punctate, weakly shiny, wrinkled. Metasternum 0.90–0.91 times (0.91 on average, $n = 2$) as long as mesocoxa, strongly punctate and shagreened.

Legs shiny, finely punctate and microscopically pubescent; apical parts of tibiae and tarsi with yellow-brown setae ventrally; femora pedunculate, all tibiae slightly thickened apically, protibiae gently curved, mesotibiae nearly straight, metatibiae slightly sinuous.

Abdominal sternites finely punctate, shiny, covered with extremely microscopical pubescence, 1st to 3rd visible sternites wrinkled, each lateral side of the first and second visible sternites with a rounded shallow depression. Abdominal sternite VIII (Fig. 5) entirely densely covered with fine setae, forming deep angulate emargination at apical margin. Apical margin of epiproct straight.

Aedeagus (Figs 2–4) curved at base in lateral view, length 2.3 mm, width 0.5 mm; parameres short (length 1.1 mm, width 0.4 mm), regularly curved in apical part in lateral view. Spiculum gastrale (Fig. 6) relatively short, with large apical lobes.

Female. Body length 16.6 mm, width 6.0 mm. Frons with a shallow impression at the middle. Ovipositor (Fig. 7) consists of paraprocts and coxites; paraprocts partly enclose the base of coxites, baculi of the paraprocts nearly transverse; coxites 4-lobed, the fold between lobes 3 and 4 fine; basal lobe with a pair of longitudinal baculi, elongate (length 1.66 mm), 2.37 times as long as three apical lobes combined; gonostyles with apices bearing a few cerci, attached dorsolaterally to coxites; spiculum ventrale with well-developed median shaft.

Etymology. The specific name is derived from the type locality Mangshan National Forest Park, Yizhang County, Hunan Province.

Remark. This new species is similar to *H. sculpticollis* FAIRMAIRE, 1891 and *H. problematicus* BEČVÁŘ et PURCHART, 2008, but differs from the both species by elytral interstices clearly carinate and undulate, from *H. sculpticollis* by the anterior margin of pronotum completely rimmed, from *H. problematicus* by the pronotal oblique indentation in posterior angles smoothly continuing as lateral groove.

Distribution. China: Hunan.

Subgenus *Leprocaulus* FAIRMAIRE, 1896

Leprocaulus FAIRMAIRE, 1896: 95. Type species: *Leprocaulus clavipes* FAIRMAIRE, 1896 (by monotypy).

Lyprocaulus [sic] PIC, 1934: 84.

Pseudocaelophus PIC, 1922a: 28 (subgenus), Type species: *Strongylium (Pseudocaelophus) difforme* PIC, 1922a: 28 (by monotypy). (synonymized by BEČVÁŘ & PURCHART, 2008).

Pseudocoelophus [sic] PIC, 1922b: 504; KASZAB, 1983: 177.

Pseudoderosphaerus PIC, 1922a: 24 (subgenus). Type species: *Leprocaulus* (*Pseudoderosphaerus*) *rotundicollis* PIC, 1922a (by monotypy). (synonymized by KASZAB, 1983).

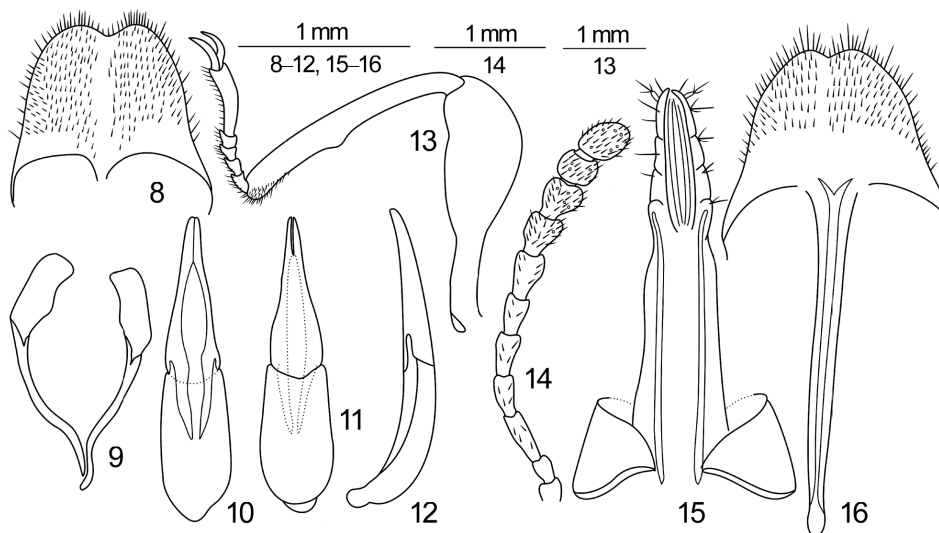
Hexarhopalus (*Leprocaulus*) bisinuatus sp. n.
(Figs 8–16, 18)

Material examined. Holotype: male, CHINA: Guizhou Province, Leigongshan, 13 September 2005, Haoyu Liu leg. Paratypes: 1 male, CHINA: Guizhou Province, Leigongshan, Lianhuaping, Alt. 1450–1500 m, 15 September 2005, Lihong Zhu leg., 1 female; CHINA: Guizhou Province, Leigongshan, 15 September 2005, Fuming Shi leg.; 1 female, CHINA: Guizhou Province, Jiangkou County, Fanjingshan, 29 July 2001, Guodong Ren leg.

Condition of holotype. Right protarsus and metatarsus are missing.

Description. Male (Fig. 18). Body elongate (length 13.4–14.3 mm, width 4.5–5.0 mm), subcylindrical, winged, dull shiny; labrum, claws, tibiae, 1st–7th antennal segments blackish brown, 8th–11th segments pale brown, the rest uniformly black.

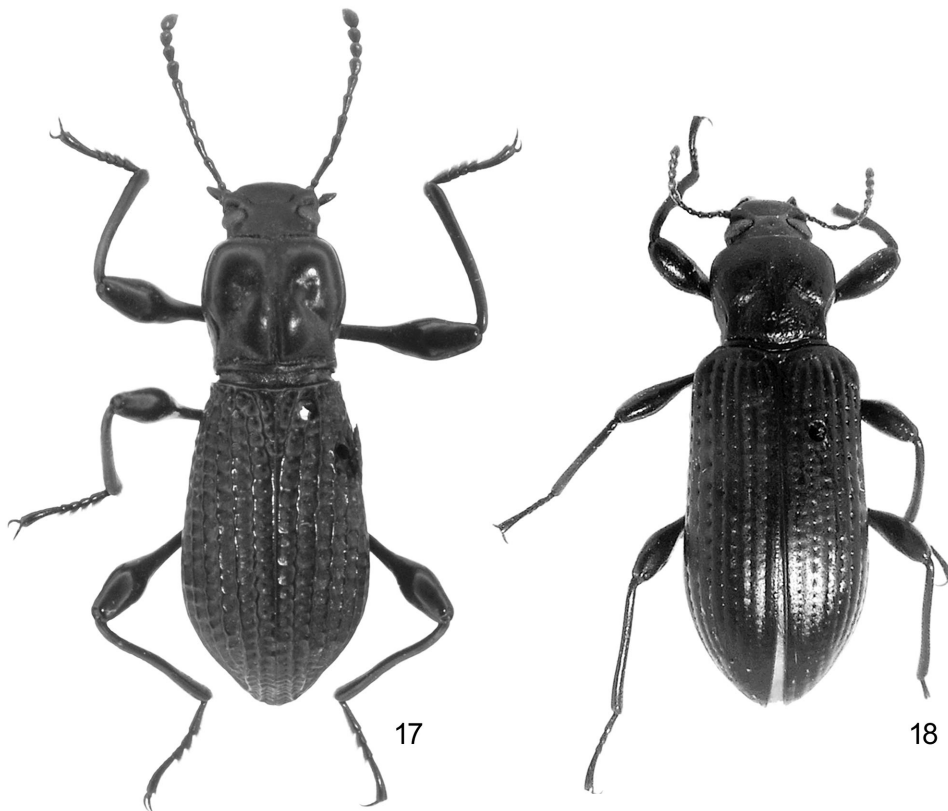
Head widest across eyes, 0.69–0.70 (0.70 on average, $n = 2$) times as wide as pronotum, finely punctate, punctures on genae and anterior half of clypeus denser than those on frons. Frontoclypeal suture well developed, deep, reaching clypeal anterior margins. Distance between eyes 1.33–1.35 (1.34 on average, $n = 2$) times as wide as the transverse diameter of an eye (in dorsal view). Ocular sulcus deep, reaching posterior margin of eyes. Anterior edge of clypeus nearly straight. Labrum



Figs 8–16. *H. (Leprocaulus) bisinuatus* sp. n., male: 8 = abdominal sternite VIII, 9 = spiculum gastrale, 10–12 = Aedeagus, ventral (10), dorsal (11) and lateral (12) view, 13 = right fore leg, inner lateral view, 14 = left antenna, dorsal view; female: 15 = ovipositor, ventral view, 16 = spiculum ventrale, ventral view. Scales: 1 mm

transverse, covered with long yellow setae anteriorly and laterally. Antennae (Fig. 14) slightly filiform, 1.15–1.21 (1.18 on average, $n = 2$) times as long as pronotum, entirely pubescent; five distal segments slightly dilated, with shallow sensory pores and dense sensory setae; ratio of the length (width) of 2nd–11th segments 6 (8):22 (8):16 (8):16 (8):16 (8):16 (8):15 (11):13 (12):12 (12):17 (13). Mentum obtrapezoidal, with a tubercle-like elevation in middle, which is directed forwards; each lateral side of elevation with a broad groove, respectively.

Pronotum semicordiform, broadest at anterior third, 1.03–1.04 (1.04 on average, $n = 2$) times as wide as long; medio-longitudinal groove distinct only in the middle, not reaching anterior and posterior margins of pronotum; disc strongly convex laterally, completely punctate, with a diagonal depression at the rear of swellings; some larger punctures situated between basal groove and diagonal depressions; lateral carina visible only in the anterior half, rudimental posteriorly; oblique indentation in posterior angles deep, somewhat long, running anteriorly to the middle point just above lateral carina, then the indentation obliterated, indentation also running posteriorly and sharply connected with basal groove; prothoracic hypomeron dull shiny, shagreened and finely wrinkled. Prosternum finely wrinkled, prosternal process weakly depressed between coxae and wrinkled apically. Scutellum punctate, small, triangular.



Figs 17–18. *Hexarhopalus* spp. 17 = *H. (s. str.) mangshanicus* sp. n. 18 = *H. (Leuprocaulus) bisinuatus* sp. n.

Elytra subparallel-sided, with developed shoulders, 1.90–2.01 (1.96 on average, $n = 2$) times as long as its width, 2.83–2.87 (2.85 on average, $n = 2$) times longer and 1.38–1.43 (1.41 on average, $n = 2$) times wider than pronotum, broadest at posterior third, slightly raised posteriad, and curved downward close in apical fourth; scutellary striole long; striae consist of row of well separated punctures, but the punctures variable in size; punctures in rows finer in the middle and the rear than those at the base and sides; interstices shagreened, flattened to convex, clearly convex at basal and lateral portions, 4th interstice highest; basal rim slightly carinate in first to fourth interstices; epipleuron narrow, smooth, developed throughout length of elytra, slightly depressed and arched at the level of fourth abdominal ventrite, then bent to apex, decorated with fine rim in apical half.

Metasternum 1.75–1.82 (1.79 on average, $n = 2$) times as long as mesocoxa, finely punctate and pubescent.

Legs densely punctate and completely pubescent, tibiae weakly wrinkled, with yellow-brown setae in apical half; femora pedunculate; ventral side of male protibiae (Fig. 13) slightly bisinuate in inner lateral view due to inner margin of ventral surface with a weak blunt projection near middle; pro-, mesotibiae gently arcuate; metatibiae near straight, thickened at apex.

Abdominal sternites with punctures dense, punctures larger than those on metasternum; each lateral side of the first and second visible sternites with a round shallow depression; sternite VIII (Fig. 8) entirely densely covered with fine setae, emarginated at apical margin.

Aedeagus (Figs 10–12) faintly curved at base in lateral view, length 1.7 mm, width 0.4 mm; parameres short (length 0.9 mm, width 0.3 mm), regularly curved in apical part in lateral view. Spiculum gastrale (Fig. 9) relatively short, with large apical lobes.

Female. Ovipositor (Fig. 15) consists of paraprocts and coxites; paraprocts reduced, and partly enclose the base of the coxites, the baculi of the paraprocts nearly transverse; coxites 4-lobed; basal lobe elongate (length 1.6 mm), with a pair of longitudinal baculi, 2.50 times as long as three apical lobes combined; gonostyles with apices bearing a few cerci, attached dorsolaterally to coxites; spiculum ventrale (Fig. 16) with well-developed median shaft.

Etymology. The specific name is derived from the Latin word “bi” (two) + “sinuatus” (sinuate), to indicate to bisinuate protibiae.

Remark. This new species is similar to *H. (Leprocaulus) punctithorax* KASZAB, 1982, but differs from the latter by male profemora which is normal, without any projections, male protibiae which is slightly bisinuate due to inner margin of ventral surface with a weak blunt projection near the middle.

Distribution. China: Guizhou.

Hexarhopalus (Leprocaulus) xui sp. n.
(Figs 19–22)

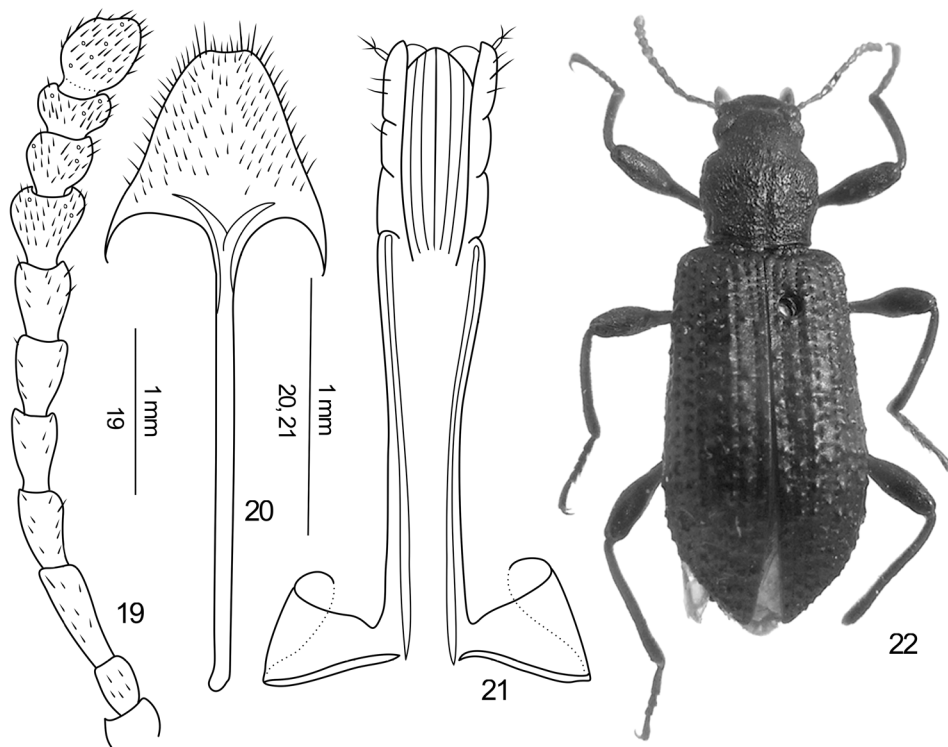
Material examined. Holotype: female, CHINA: Yunnan Province, Yingjiang County, 1750 m, 20 June 1995, Zhenghui Xu leg.

Condition of holotype. Right metatarsus is missing.

Description. Female (Fig. 22). Body elongate (length 10.5 mm, width 3.9 mm), subcylindrical, winged, coarsely sculptured dorsally, sparsely and microscopically pubescent. Elytra blackish brown, pronotum and head black, labrum and claws brown-red.

Head narrower than pronotum (ratio 1:1.26), densely punctate, interspaces among punctures shiny and wrinkled. Labrum densely covered with rufescent setae. Frontoclypeal suture well marked. Ocular sulcus fine, nearly invisible, distance between eyes 2.0 times as wide as the transverse diameter of an eye (in dorsal view). Genae arcuate, weakly swollen. Clypeus with a shallow depression in the middle, straight at anterior edge, slightly bent downwards in lateral sides. Antennae (Fig. 19) slightly filiform, pubescent, 1.41 times as long as pronotum, 8th to 10th segments slightly dilated, terminal segment drop-shaped, four distal segments with shallow sensory pores and dense sensory setae, ratio of the length (width) of 2nd–11th segments 10 (7):22 (7):15 (9):14 (9):15 (10):13 (10):14 (14):12 (13):11 (14):17 (14). Mentum obtrapezoidal, with a median elevation prominent anteriorly.

Pronotum subcylindrical, a little wider than long (ratio 1:0.90), widest closely before middle, with two moderate dorsolateral swellings ranging over anterior angles and basal third of pronotum; lateral carina visible only in the anterior fourth, slightly denticulate, and obliterated posteriorly; oblique indentation in posterior angles somewhat short, not very deep, curved upward anteriorly, obtusely connected posteriorly with basal groove; disc wrinkled, with irregular, coarse punctures and a shallow median line, wrinkles obvious but small, different in size and partly tuberculated; base with a swelling on each side of median line. Prothoracic hypomeron densely and coarsely wrinkled, but the



Figs 19–22. *H. (Leprocaulus) xui* sp. n., female: 19 = left antenna, dorsal view; 20 = spiculum ventrale, ventral view, 21 = ovipositor, ventral view. 22 = habitus Scales: 1 mm

wrinkles more feeble than those in pronotal median portion. Prosternum pubescent, wrinkled and punctate, prosternal process between coxae enlarged and medio-longitudinally depressed, with margined apex. Scutellum small, triangular.

Elytra 1.75 times as long as its width, 3.25 times longer and 1.67 times wider than pronotum, side subparallel, arcuate in posterior third; dorsum slightly convex posteriad and curved downwards in posterior third; basal rim carinate; striae consist of dense row of deeply and sharply impressed longitudinal punctures; interstices flattened to weakly convex, with irregular row of more or less shiny tubercles; third, fifth and seventh interstices more carinate than the rest due to denser row of tubercles. Epipleuron narrow, smooth, developed throughout length of elytra, slightly depressed and arched at level of fourth abdominal ventrite, then bent to apex, apical half with fine rim.

Metasternum 1.93 times as long as mesocoxa, pubescent and strongly punctate.

Legs densely and regularly punctate and completely pubescent, ventral side of tibiae especially apical half with long yellow hairs.

Abdomenal sternites pubescent, wrinkled and densely punctate.

Ovipositor (Fig. 21) consists of paraprocts and coxites; paraprocts reduced, and partly enclose the base of the coxites, with a pair of rod-like baculi diagonal; coxites 4-lobed, the fold between lobes 3 and 4 fine; basal lobe with a pair of longitudinal baculi, elongate (length 1.68 mm), 2.21 times as long as three apical lobes combined (length 0.76 mm); gonostyles with apices bearing a few cerci, attached dorsolaterally to coxites; spiculum ventrale (Fig. 20) with well-developed median shaft.

Male: unknown.

Etymology. The specific name is named in honour of Prof. Zhenghui Xu of Southwest Forestry University, collector of the holotype.

Remark. This new species resembles *H. eva* BEČVÁŘ et PURCHART, 2008 and *H. jendeki* BEČVÁŘ et PURCHART, 2008, from which it differs in the following characters: lateral carina of pronotum visible only in the anterior fourth, median line of pronotum present, pronotal width to elytral width ratio 1:1.67 (1:1.45 and 1:1.42 in the latter two species, respectively).

Distribution. China: Yunnan.

KEY TO SPECIES OF THE GENUS *HEXARHOPALUS* FROM CHINA

- | | | |
|---|--|-----------------------------------|
| 1 | Elytra ovoid or elongate ovoid, shoulderless; metathoracic wings reduced (subgenus <i>Hexarhopalus</i> FAIRMAIRE, 1891). | 2 |
| – | Elytral margins subparallel-sided, shoulders and metathoracic wings fully developed (subgenus <i>Leprocaulus</i> FAIRMAIRE, 1896). | 5 |
| 2 | Elytral interstices with row of shiny tubercles. | <i>H. attenuatus</i> (PIC, 1922a) |
| – | Elytral interstices devoid of tubercles. | 3 |

- 3 Pronotum coarsely punctate and wrinkled. *H. sculptilis* KASZAB, 1960
 – Pronotum finely punctate, not wrinkled. 4
- 4 Elytral interstices clearly carinate and undulate, anterior margin of pronotum completely rimmed. **H. mangshanicus** sp. n.
 – Elytral interstices convex, but not carinate, anterior margin of pronotum rimmed only in anterior angles. *H. sculpticollis* FAIRMAIRE, 1891
- 5 Elytral interstices without tubercles. **H. bisinuatus** sp. n.
 – Elytral interstices with row of tubercles. **H. xui** sp. n.

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