# The species of the genus *Gnathodicrus* Fleutiaux, 1934 of China (Insecta: Coleoptera: Elateridae)

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ABSTRACT. The species of the genus *Gnathodicrus* FLEUTIAUX, 1934 of China are revised, described and illustrated, and a key to species, and a overview of their distribution in the Chinese provinces are given. The following species are introduced as new to science: *Gnathodicrus cangshanensis* n. sp., *G. erberi* n. sp., *G. fujianensis* n. sp., *G. jaroslavi* n. sp., *G. kubani* n. sp., *G. kucerai* n. sp., *G. lizipingensis* n. sp., *G. platiai* n. sp., *G. sichuanensis* n. sp., *G. yunnanensis* n. sp., and *G. xingshanensis* n. sp. The occurrence of *Gnathodicrus tonkinensis* (FLEUTIAUX, 1918) in China is recorded for the first time.

Key words: entomology, taxonomy, Coleoptera, Elateridae, *Gnathodicrus*, new species, new records, revision, China.

## INTRODUCTION

The genus *Gnathodicrus* has been established by Fleutiaux (1934), and placed by him (Fleutiaux 1947) as a group of the tribe Ctenicerini, including the Chinese species *G. francki*, and the Indochinese species *Corymbites vitalisi* Fleutiaux, 1918, *C. perpendicularis* Fleutiaux, 1918, and *C. tonkinensis* Fleutiaux, 1918. Fleutiaux (1934) described the genus *Gnathodicrus* based on a female of *G. francki* that was collected at Mt. Omei, in Sichuan province in China. Miwa (1930) described *Athous* (*Alcimathous*) *temperatus* from Taiwan, which had been transferred by Kishii (1991) into the genus *Gnathodicrus*. In the same

paper Kishii (1991) described *Gnathodicrus babai* from Taiwan. Tarnawski (2001) placed under *Gnathodicrus*, besides the type species *G. francki*, also the Philippine species *Agonischius muzzalli* Fleutiaux, 1934, *A. nigerrimus* Fleutiaux, 1934, and *A. praeustus* Fleutiaux, 1934. Up to date, the only known species of *Gnathodicrus* from China was the *G. francki* Fleutiaux (1934).

In this paper we have described eleven new species and recorded *G. tonkinensis* for the first time in China. *G. tonkinensis* has been collected recently on Mt. Dayaoshan, in the Guangxi province in China, close to the locus typicus. FLEUTIAUX (1934) recorded this species from Tonkin and from Cambodia. These species are described and keyed below.

### ABBREVIATIONS AND METHODS

CKB	Coll Kubáň, Brno
CPG	Coll. Platia, Gatteo
CRG	Coll. Riese, Genova
CSV	Coll. Schimmel, Vinningen
CTW	Coll. Tarnawski, Wrocław
NMW	Naturhistorisches Museum, Wien

Body length in all species has been measured from apical margin of frons up to apex of elytra, and body width across base of elytra.

## Genus Gnathodicrus Fleutiaux, 1934

Gnathodicrus Fleutiaux, 1934: 183.

The genus *Gnathodicrus* was described by Fleutiaux (1934) and compared with the genus *Actenicerus* Kiesenwetter, 1858. In the next paper Fleutiaux (1936) included in the genus also *Corymbites tonkinensis*, *C. perpendicularis*, and *C. vitalisi* described by him from Vietnam. In accordance with the constitution of the frons, Fleutiaux (1934) placed the new genus in the tribe Ctenicerini, but the species of *Gnathodicrus* are also distinct by having a conspicuous median carina on scutellum, and this fact was pointed out by Fleutiaux (1934) in his description exceptionally: "Écusson caréné au milieu".

#### Systematic Position

The genus *Gnathodicrus* belongs to the tribe Ctenicerini, characterized by distinct apical edge of frons. It is also significantly characterized by carinate scutellum, and this character easily separates it from other genera of the group. The scutellum is concave at base and wedge-shaped at apex, laterally narrowed, and has a prominent median carina on surface. Also, in all species, the interstices of elytral striae are more or less raised, especially at the elytral base. The proepisternum is excavated at base and visible in dorsal view.

## KEY TO SPECIES OF THE GENUS GNATHODICRUS OF CHINA

(female of *G. sichuanensis* is not possible to identify using this key. See note in the description of the species)

1.	Body uniformly black or blackish-brown (figs. 1, 4, 8, 12, 18, 21, 24, 27) 2.
	Body black with light-brown spot at base of elytra, or on hind angles of
	pronotum (figs. 6, 10, 15, 30, 33)
2.	Pronotum raised at centre (figs. 1, 4, 12, 21, 24)
<u></u>	Pronotum flat at centre and nearly rectangular (fig. 18) <i>G. lizipingensis</i> n. sp.
3.	Legs black or blackish-brown (figs. 4, 12, 21, 24)
	Legs lighter-brown or yellow (figs. 1, 8, 27)
4.	Pronotum campaniform (fig. 12, 21, 24)
	Pronotum cylindrical (fig. 4)
5.	Body slender, length/width ratio = 3.9:1 (figs. 12, 21)
	Body stouter, length/width ratio = 3.6:1 (fig. 24) <i>G. sichuanensis</i> n. sp.
6.	Pronotum convex across the apical third (fig. 12) G. kubani n. sp.
	Pronotum subparallel across the apical third (fig. 21) G. platiai n. sp.
7.	Pronotum nearly rectangular (figs. 8, 27)
	Pronotum campaniform (fig. 1)
8.	Pronotum relatively flat, pubescence thin, and inclined to apex (fig. 8)
	Pronotum prominently raised, pubescence with median parting (fig. 27)
•	
9.	Body black with light-brown spot on basal angles of pronotum or at the base
٦.	of elytra (figs. 15, 30)
	Body more or less reddish-brown (figs. 6, 10, 33)
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10.	Body black with light-brown spot at the base of elytra (fig. 30)
	G. yunnanensis n. sp.
	Body black with light-brown spot on the hind angles of pronotum (fig. 15)
	Pronotum more or less flat (fig. 10, 33)
	Pronotum prominently raised and uneven (fig. 6) G. francki FLEUTIAUX
12.	Pronotum subparallel, its hind angles slightly concave (fig. 33)
	C vival and an
	Pronotum campaniform, its hind angles conspicuously concave (fig. 10)  G. jaroslavi n. sp.

## REVIEW OF SPECIES

# Gnathodicrus cangshanensis n. sp.

(Figs. 1-3)

Locus Typicus Cangshan Mts, Province Yunnan, China. Type material

Holotypus ♂ (CKB): China: Yunnan, Cangshan Mts., 21.VI.1992, 2000-2500 m, leg. V. Kubáň. Paratypes 8 ♂ ♂, 7 ♀♀ (CKB, CSV, CPG, CTW, NMW): Same data as holotypus, 14 spm., leg. V. Kubáň; Same locality but 12.VI.1993, 1 spm., leg. V. Kubáň.

#### **DIAGNOSIS**

Slender, subparallel, raised species. Length: 8.0 mm, width: 1.9 mm. Black, legs chestnut-brown. Pubescence yellowish brown, short, slightly dense and on pronotum tightly inclined to apex and lateral sides, on elytra inclined to apex.

Head with puncturation coarse, dense and umbilicate, regularly rounded, pubescence inclined to apex. Frons depressed in the middle and slightly raised above the base of antenna. Eyes small, just like circular sector, and little prominent. Antennae long and stout, outreaching basal angles of pronotum for the length of the last antennomere. Second antennomere short, slightly longer than wide, and slightly extended at apex. Third antennomere slightly longer than second antennomere and both combined as long as fourth and each of the following antennomeres; those are extended at apex. Last antennomere oval, bevelled subapically. Puncturation of antennal surface dense and covered with fine, short and protruding pubescence.

Pronotum campaniform, along median area conspicuously longer than wide at the basal angles (length/width ratio 1.25:1), prominently raised at centre, slightly bent laterally, in front of basal angles convex, apical edge of basal angle sharp. Proepisternum excavated at base and visible in dorsal view. Pronotum slightly raised across subbasally and subapically and slightly depressed on both sides of median line, with conspicuous mould. Puncturation of pronotum dense, coarse, regularly rounded, and umbilicate, interstices reduced to small raised and shiny wrinkles. Basal angles of pronotum with prominently raised carina. Pronotum conspicuously raised medially, with a conspicuous fine furrow, reaching from anterior margin to centre of pronotum, and with a relatively prominent dropping.

Scutellum slightly convex at base, laterally narrowed, broad at apex, and wedge-shaped. Surface raised, with a prominent median carina. Puncturation dense and umbilicate, pubescence dense and long, pointed from lateral margin to centre and to apex.

Elytra subparallel, slender and wedge-shaped, just after mid length narrowed to apex. Apex curved, inner tooth small. Base as wide as that of pronotum, in the scutellar area slightly depressed, margin raised, shoulders prominent (winged species). Striae of elytra covered with rugosities and dense, simple puncturation, interstices finely punctate, rugose and shiny, and strip-like raised. Pubescence short, bristly, and inclined to apex.

Pro-, meso- and metathorax with dense and rugose puncturation, interstices raised and shiny. Pubescence short and adherent.

Legs slender, moderately long and thin, tarsal segments up to claws of decreasing length, ventrally with hardly visible, fine pubescence and fine upholstery. Tibia covered with short and sharp thorns.

Aedeagus with penis thickened in the middle, narrowed and thin apically, just extending the parameres. Apical lobe of parameres concave subapically, with prominent, hook-like lateral edge and long apical hairs.

#### DIFFERENTIAL DIAGNOSIS

G. cangshanensis is closely allied to G. kubani, but can be easily distinguished from this species by narrower body, the form of scutellum, less dense puncturation of pronotum and by the form of aedeagus.

Etymology

Named after the locus typicus.

DISTRIBUTION

Province Yunnan in China.

## Gnathodicrus erberi n. sp.

(Figs. 4, 5)

Locus typicus

Zi-Shan, Province Yunnan, China.

Type material

Holotypus ♂ (CSV): China: Yunnan, Kunming, Zi-Shan, 2200-2400 m, 14.VII.1996, leg. D. Erber. Paratypus ♀ (CSV): China: Yunnan, Dali, 1600-2000 m, 5.-8.VII.1990, leg. L. & M. Bocák.

## Diagnosis

Robust, subparallel, raised species. Length: 9.0 mm, width: 2.3 mm. Black coloured species. Pubescence yellowish brown, short, slightly dense and tightly, on pronotum inclined to apex and lateral sides, on elytra inclined to apex.

Head with dense, coarse, regularly rounded and umbilicate puncturation, and pubescence inclined to apex. Frons depressed at middle and slightly raised above the base of antenna. Eyes small, just like circular sector, and little prominent. Antennae long and stout, outreaching basal angles of pronotum for the length of the half of last antennomere. Second antennomere short, slightly longer than wide, and slightly extended at apex. Third antennomere slightly longer than second antennomere, and both combined are slightly longer than fourth and each of the following antennomeres; those are extended at apex. Last antennomere oval, bevelled subapically. Puncturation of antennal surface dense and covered with fine, short and protruding pubescence.

Pronotum cylindrical, along the median line only slightly longer than wide at the basal angles (length/width ratio 1.05:1), prominently raised at centre, slightly bent laterally, in front of basal angles concave, apical edge of basal angles sharp. Proepisternum excavated at base and visible from dorsal view. Pronotum uneven, raised across subbasal and subapical area, and slightly depressed on both sides of median line. Puncturation of pronotum dense, coarse, regularly rounded, umbilicate, interstices reduced to small, matt and raised wrinkles. Basal angles of pronotum without carina. Pronotum conspicuously raised, with a relatively prominent dropping, sub-central area relatively flat.

Scutellum slightly convex at base, laterally narrowed, broad at apex, and wedge-shaped. Surface raised, with a prominent and broad median carina. Puncturation dense and umbilicate, pubescence dense and long, pointed from lateral margin to centre and to apex.

Elytra subparallel, slender and wedge-shaped, just after mid length narrowed to apex. Apex curved, inner tooth small. Base as wide as base of pronotum, in the scutellar area slightly depressed, margin raised, shoulders prominent (winged species). Striae of elytra covered with rugosities and dense, simple puncturation, interstices finely punctate, rugose and shiny, and strip-like raised. Pubescence short, bristly, and inclined to apex.

Pro-, meso- and metathorax with dense rugose puncturation, interstices raised and shiny. Pubescence short and adherent.

Legs slender, moderately long and thin, tarsal segments up to claws of decreasing length, ventrally with hardly visible, fine pubescence and fine upholstery, tibia covered with short and sharp thorns.

Aedeagus with a slender penis, slightly thickened at the middle, apically narrowed and thin, just extending the parameres. Apical lobe of parameres crescent-shaped, with prominent lateral edge and long apical hairs, sub-apically concave.

#### DIFFERENTIAL DIAGNOSIS

*G. erberi* is closely allied to *G. sichuanensis*, but can be easily distinguished from this species by the smaller body, longer antennae, cylindrical form of pronotum, and shape of aedeagus.

ETYMOLOGY

Named in posthumous honour of Dr. D. Erber, the collector of the new species.

DISTRIBUTION

Province Yunnan in China.

Gnathodicrus francki Fleutiaux, 1934

(Figs. 6, 7)

Gnathodicrus francki Fleutiaux, 1934: 183-184.

Locus typicus

Kiating, Mt. Omei, Province Sichuan, China.

NEW RECORDS

5 ♀ ♀ (CSV, CPG, CTW): China: Hubei, Muyuping, 1300 m, 12.-13.VII.2003, 1 spm., leg. J. Turna. Same place but 8. und 15.-17.VI.2002, 1 spm., leg. J. Turna. At the road from Badong to Yesanguan, Tiechanghuhang, 27.-28.VI.2003, 1300 m, 1 spm., leg. J. Turna; China: Fujian, Shaowu, Tachuland, 2.VI.1942, 1 spm., leg. T. C. Maa; same locality but 5.VI.1942, 1 spm., leg. T. C. Maa.

#### DIAGNOSIS

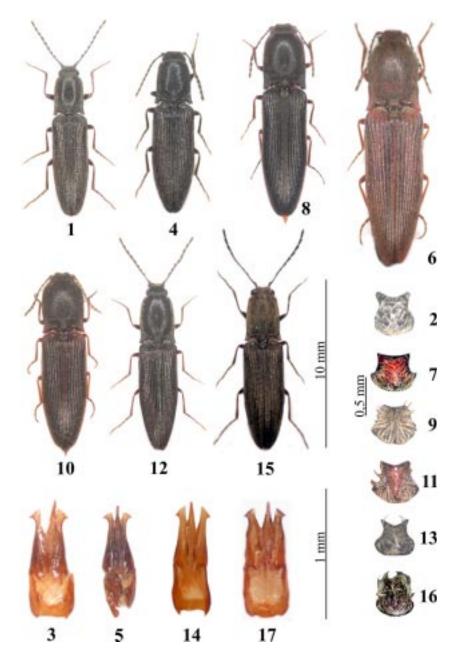
Robust, subparallel, raised species. Length: 15.5 mm, width: 3.8 mm. Reddish-brown to chestnut-brown, antennae black, first antennomere red-brown; legs, prosternal-apophyse, and lateral margins of abdominal segments reddish-brown. Pubescence yellowish brown, short, and dense, on pronotum and elytra inclined to apex.

Head with dense, and umbilicate, regularly rounded, and coarse puncturation, pubescence inclined to apex. Frons depressed at middle, and slightly raised above the base of antenna. Interstices of puncturation raised and surface of frons appears rough. Eyes small, just like circular sector, and little prominent. Antennae short and slender, not reaching basal angles of pronotum for the length of the last two antennomeres. Second antennomere short, slightly longer than wide, and slightly extended at apex. Third antennomere obviously longer than second and both combined as long as fourth and each of the following antennomeres, those are extended at apex, final antennomere oval, bevelled subapically. Puncturation of antennal surface dense and covered with fine, short and protruding pubescence.

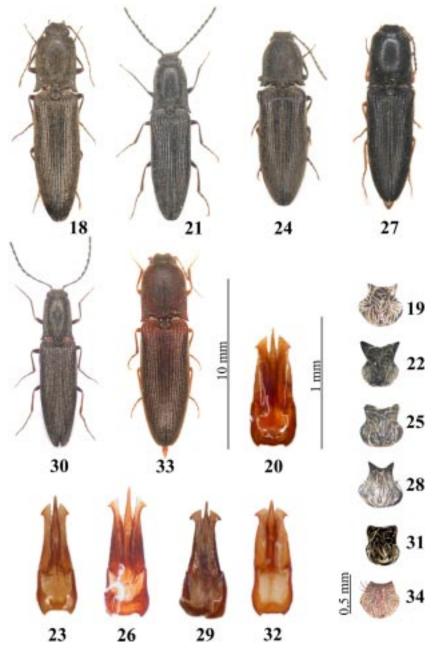
Pronotum cylindrical, along median area conspicuously longer than wide at the basal angles (length/width ratio 1.25:1), prominently raised at centre and uneven, S-forming bent laterally, in front of basal angles obviously convex, basal angles sharp at apex, and pointed outwards. Proepisternum excavated at base and visible from dorsal view. Pronotum uneven, raised across subbasal and subapical area and slightly depressed on both sides of median line, and with a flat base-mould, reaching from base to first third of pronotum. Puncturation of pronotum dense, coarse, regularly rounded and umbilicate, interstices, especially at centre, reduced to small, shiny wrinkles. Basal angles of pronotum without carina, but the wrinkling interstices of puncturation suggesting it. Pronotum base with a relatively prominent dropping.

Scutellum convex at base, laterally narrowed, broad at apex, and wedge-shaped. Surface raised, with a prominent median carina. Puncturation dense and umbilicate, pubescence dense and long, pointed from lateral margin to centre and to apex.

Elytra subparallel, slender and wedge-shaped, just after middle narrowed to apex. Apex curved, inner tooth hardly visible. Base as wide as base of pronotum,



1-3. Gnathodicrus canshanensis n. sp.: 1 - habitus, 2 - scutellum, 3 - aedeagus; 4, 5. G. erberi n. sp.: 4 - habitus, 5 - aedeagus; 6, 7. G. francki Fleutiaux: 6 - habitus, 7 - scutellum; 8, 9. G. fujianensis n. sp.: 8 - habitus, 9 - scutellum; 10, 11. G. jaroslavi n. sp.: 10 - habitus, 11 - scutellum; 12-14. G. kubani n. sp.: 12 - habitus, 13 - scutellum, 14 - aedeagus; 15-17. G. kucerai n. sp.: 15 - habitus, 16 - scutellum, 17 - aedeagus



18-20. *Gnathodicrus lizipingensis* n. sp.: 18 - habitus, 19 - scutellum, 20 - aedeagus; 21-23. *G. platiai* n. sp.: 21- habitus, 22 - scutellum, 23 - aedeagus; 24-26. *G. sichuanensis* n. sp.: 24 - habitus, 25 - scutellum, 26 - aedeagus; 27-29. *G. tonkinensis* (Fleutiaux, 1918): 27 - habitus, 28 - scutellum, 29 - aedeagus; 30-32. *G. yunnanus* n. sp.: 30 - habitus, 31 - scutellum, 32 - aedeagus; 33, 34. *G. xingshanensis* n. sp.: 33 - habitus, 34 - scutellum

in the scutellar area slightly depressed, margin raised, shoulders prominent (winged species). Striae of elytra covered with rugosities and dense, simple puncturation, interstices finely punctate, rugose and shiny, and strip-like raised. Pubescence short, bristly, and inclined to apex.

Pro-, meso and metathorax with dense and rugose puncturation, interstices raised and shiny. Pubescence short and adherent.

Legs slender, moderately long and thin, tarsal segments up to claws of decreasing length, ventrally with hardly visible, fine pubescence and fine upholstery. Tibia covered with short and sharp thorns.

#### DIFFERENTIAL DIAGNOSIS

G. francki is closely allied to G. sichuanensis, but can be easily distinguished from this species by the less wide formed, flatter body, form of scutellum and the less raised interstices of puncturation strips of elytra.

#### DISTRIBUTION

Provinces Hubei, Sichuan and Fujian in China.

## Gnathodicrus fujianensis n. sp.

(Figs. 8, 9)

## Locus typicus

Fenshui Guan, Province Fujian, China.

Type material

**Holotypus** ♀ (CSV): China: Fujian, Fenshui Guan, 26.-27.V.2005, leg. J. Turna.

#### DIAGNOSIS

Slender, subparallel, raised species. Length: 11.4 mm, width: 2.7 mm. Black, first three antennomeres of antenna, legs, and epipleura of elytra chestnut-brown. Pubescence yellowish brown, short and dense, on pronotum and elytra inclined to apex.

Head with dense, coarse and umbilicate, regularly rounded puncturation, pubescence inclined to apex. Frons depressed at middle and slightly raised above the base of antenna. Interstices of puncturation raised and surface of frons appears rough. Eyes small, just like circular sector, and little prominent. Antennae short and slender, not reaching basal angles of pronotum for the length of the last antennomere. Second antennomere short, slightly longer than wide, and slightly extended at apex. Third antennomere obviously longer than second, and both combined as long as fourth and each of the following antennomeres; those are extended at apex. Last antennomere oval. Puncturation of antennal surface dense and covered with fine, short and protruding pubescence.

Pronotum cylindrical, along median area conspicuously longer than wide at the basal angles (length/width ratio 1.22:1), little raised at centre, and nearly flat, little bent laterally, in front of basal angles obviously convex, basal angles truncate at apex. Proepisternum excavated at base and visible from dorsal view. Pronotum even, a little raised across subbasal and subapical area, and slightly depressed on both sides of median line, but without any kind of mould or furrow. Puncturation of pronotum dense, coarse, regularly rounded and umbilicate, interstices reduced to small, shiny wrinkles. Basal angles of pronotum without a carina, but the wrinkling interstices of puncturation suggesting it. Pronotum conspicuously raised medially, and with a short and fine median furrow, and a relatively prominent dropping.

Scutellum convex at base, laterally narrowed, broad at apex, and wedge-shaped. Surface raised, with a prominent median carina. Puncturation dense and umbilicate, pubescence dense and long, pointed from lateral margin to centre and to apex.

Elytra subparallel, slender and wedge-shaped, extended at centre and narrowed to apex. Apex curved, inner tooth hardly visible. Base as wide as that of pronotum, in the scutellar area slightly depressed, margin raised, shoulders prominent (winged species). Striae of elytra covered with rugosities and dense, simple puncturation, interstices finely punctate, rugose and shiny, and strip-like raised. Pubescence short, bristly, and inclined to apex.

Pro-, meso and metathorax with dense, and rugose puncturation, interstices raised and shiny. Pubescence short and adherent.

Legs slender, moderately long and thin, tarsal segments up to claws of decreasing length, ventrally with hardly visible, fine pubescence and fine upholstery. Tibia covered with short and sharp thorns.

## DIFFERENTIAL DIAGNOSIS

G. fujianensis is closely allied to G. xingshanensis, but can be easily distinguished from this species by the slender and smaller body, black colour, longer antenna, and by the form and structure of pronotum and scutellum.

ETYMOLOGY Named after the locus typicus.

DISTRIBUTION Province Fujian in China.

Gnathodicrus jaroslavi n. sp. (Figs. 10, 11)

Locus TYPICUS Muyuping, Province Hubei, China.

Type material

**Holotypus**  $\ \$  (CSV): China: Hubei, Muyuping, 1300 m, 12.-13.VII.2003, leg. J. Turna. **Paratypus**  $\ \$  (CSV): Same data as holotypus.

#### DIAGNOSIS

Robust, subparallel, raised species. Length: 10.8 mm, width: 2.7 mm. Blackish-brown, base of pronotum and lateral margins of elytra, as well as inner strip of elytra, epipleura, antenna, legs, and margin of abdominal segments reddish. Pubescence yellowish brown, short and dense, on pronotum and elytra, inclined to apex.

Head with dense, coarse and umbilicate, regularly rounded puncturation, pubescence inclined to apex. Frons depressed at middle and slightly raised above the base of antenna. Interstices of puncturation raised and surface of frons appears rough. Eyes small, just like circular sector and little prominent. Antennae short and slender, not reaching basal angles of pronotum for the length of the last three antennomeres. Second and third antennomere short and equal in length, slightly longer than wide, and slightly extended at apex, and both combined are conspicuously shorter than fourth and each of the following antennomeres. Those are extended at apex, final antennomere oval, bevelled subapically. Puncturation of surface dense and covered with fine, short and protruding pubescence.

Pronotum campaniform, along median area conspicuously longer than wide at the basal angles (length/width ratio 1.25:1), slightly raised at centre, slightly bent laterally, in front of basal angles little convex, apical edge of basal angle sharp. Proepisternum excavated at base and visible from dorsal view. Pronotum slightly raised across subbasal and subapical area, and slightly depressed on both sides of median line, with small, hardly visible mould. Puncturation of pronotum dense, coarse, regularly rounded and umbilicate, interstices reduced to small raised and shiny wrinkles. Basal angles of pronotum without a carina, but the wrinkling interstices of puncturation suggesting it. Pronotum conspicuously raised medially, with a relatively prominent dropping.

Scutellum convex at base, laterally narrowed, broad at apex, and wedge-shaped. Surface raised, with a prominent median carina. Puncturation dense and umbilicate, pubescence dense and long, pointed from lateral margin to centre and to apex.

Elytra subparallel, slender and wedge-shaped, just after middle narrowed to apex. Apex curved, inner tooth hardly visible. Base as wide as base of pronotum, in the scutellar area slightly depressed, margin raised, shoulders prominent (winged species). Striae of elytra covered with rugosities and dense, simple puncturation, interstices finely punctate, rugose and shiny, and strip-like raised. Pubescence short, bristly, and inclined to apex.

Pro-, meso and metathorax with dense, and rugose puncturation, interstices raised and shiny. Pubescence short and adherent.

Legs slender, moderately long and thin, tarsal segments up to claws of decreasing length, ventrally with hardly visible, fine pubescence and fine upholstery. Tibia covered with short, and sharp thorns.

#### DIFFERENTIAL DIAGNOSIS

G. jaroslavi is closely allied to G. sichuanensis, but can be easily distinguished from this species by the smaller, slender, less raised body, less convex edges of basal part of pronotum, and the less raised interstices of elytra. The similar G. xiangshanensis can be distinguished by smaller body, the form of pronotum and the structure of elytra.

ETYMOLOGY

Named after the collector of the species, Mr. Jaroslav Turna, Praha.

DISTRIBUTION

Province Hubei in China.

## Gnathodicrus kubani n. sp.

(Figs. 12-14)

Locus typicus

Yipinglang, Province Yunnan, China.

Type material

Holotypus ♂ (CSV): China: Yunnan, Dali, 4.-6.VI.1998, leg. E. Kučera. Paratypes 32 ♂ ♂, 7 ♀♀ (CKB, CSV, CPG, NMW): Same data as holotypus, 1 spm.; China: Yunnan, Yipinglang, 8.-10.VI.1993, 2000 m, 18 spm., leg. V. Kubáň; Yunnan, Cangshan-Mts, 12.VI.1993, 4 spm., leg. V. Kubáň; Yunnan, Weibaoshan-Berge, 25.-28.VI.1992, 2000-2800 m, 14 spm., leg. V. Kubáň; Shaanxi, Daxue-Shan, Gongga-Shan, Moxi, VII.1999, 1700 m, 2 spm. (CPG), leg. Plutenko.

## Diagnosis

Robust, subparallel, raised species. Length: 10.3 mm, width: 2.5 mm. Black, legs chestnut-brown, pubescence yellowish brown, short and dense, on pronotum and elytra inclined to apex, at median line of pronotum forming bilateral crowns.

Head with dense and coarse, umbilicate, regularly rounded puncturation. Pubescence inclined to apex. Frons depressed at middle and slightly raised above the base of antenna. Interstices of puncturation raised and surface of frons appears rough. Eyes small, just like circular sector, and little prominent. Antennae short and stout, not reaching basal angles of pronotum for the length of the half of last antennomere. Second antennomere short, slightly longer than wide and slightly extended at apex. Third antennomere slightly longer than second antennomere and both combined are conspicuously shorter than fourth and each of the following antennomeres; those are extended at apex. Last antennomere oval. Puncturation of antennal surface dense and covered with fine, short and protruding pubescence.

Pronotum campaniform, along median area conspicuously longer than wide at the basal angles (length/width ratio 1.25:1), and convex across apical third,

prominently raised at centre, slightly bent laterally, in front of basal angles convex, apical edge of basal angles sharp. Proepisternum excavated at base and visible from dorsal view. Pronotum slightly raised across subbasal and subapical area, and slightly depressed on both sides of median line, with conspicuous mould. Puncturation of pronotum dense, coarse, regularly rounded, and umbilicate, interstices reduced to small raised and shiny wrinkles. Basal angles of pronotum without a carina, but the wrinkling interstices of puncturation suggesting it. Pronotum conspicuously raised medially, with a relatively prominent dropping.

Scutellum convex at base, with a small hump on each side, laterally narrowed, broad at apex and wedge-shaped. Surface raised with a prominent median carina. Puncturation dense and umbilicate, pubescence dense and long, pointed from lateral margin to centre and to apex.

Elytra subparallel, slender and wedge-shaped, just after middle narrowed to apex. Apex curved, inner tooth small. Base as wide as base of pronotum, in the scutellar area slightly depressed, margin raised, shoulders prominent (winged species). Striae of elytra covered with rugosities and dense, simple puncturation, interstices finely punctate, rugose and shiny, and strip-like raised. Pubescence short, bristly, and inclined to apex.

Pro-, meso and metathorax with dense and rugose puncturation, interstices raised and shiny. Pubescence short and adherent.

Legs slender, moderately long and thin, tarsal segments up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery. Tibia covered with short and sharp thorns.

Aedeagus with penis thickened at the middle, apex narrowed and thin, just extending the parameres. Apical lobe of parameres almost straight subapically with prominent, hook-like lateral edge, and long apical hairs.

## DIFFERENTIAL DIAGNOSIS

*G. kubani* is closely allied to *G. sichuanensis*, but can be easily distinguished from this species by narrower, more raised body, shorter antenna, form of scutellum and hairs on pronotum, and shape of aedeagus.

ETYMOLOGY

Named after our dear friend and colleague, Mr. V. Kubáň, Brno.

DISTRIBUTION

Province Yunnan in China.

Gnathodicrus kucerai n. sp.

(Figs. 15-17)

Locus typicus

Yanmen, Province Yunnan, China.

Type material

**Holotypus** ♂ (CSV): China: Yunnan, Yanmen, 13.-23.VI.2005, leg. E. Kučera. **Paratypus** ♂ (CSV): Same data as holotypus.

DIAGNOSIS

Slender, subparallel, raised species. Length: 9.9 mm, width: 2.4 mm. Black, basal edges of pronotum, tibiae and claws yellowish. Pubescence yellowish brown, short and dense, on pronotum and elytra inclined to apex.

Head with dense and coarse, umbilicate, regularly rounded puncturation. Pubescence inclined to apex. Frons depressed at middle and slightly raised above the base of antenna. Eyes small, just like circular sector, and little prominent. Antennae long and stout, outreaching basal angles of pronotum for the length of the last two antennomeres. Second antennomere short, slightly longer than wide, and slightly extended at apex. Third antennomere slightly longer than second antennomere and both combined conspicuously shorter than fourth and each of the following antennomeres; those are extended at apex. Last antennomere oval, bevelled subapically. Puncturation of antennal surface dense and covered with fine, short and protruding pubescence.

Pronotum cylindrical, along median area conspicuously longer than wide at the basal angles (length/width ratio 1.25:1), prominently raised at centre, slightly bent laterally, in front of basal angles convex, apical edge of base-angle sharp. Proepisternum excavated at base and visible from dorsal view. Pronotum slightly raised across subbasal and subapical areas and slightly depressed, on both sides of median line with conspicuous mould. Puncturation of pronotum dense, coarse, regularly rounded and umbilicate; interstices reduced to small, raised and shiny wrinkles. Basal angles of pronotum with carina. Pronotum conspicuously raised medially, with a conspicuous fine furrow, reaching to centre of pronotum, and with a relatively prominent dropping.

Scutellum slightly convex at base, laterally narrowed, broad at apex, and wedge-shaped. Surface raised, with a prominent median carina. Puncturation dense and umbilicate, pubescence dense and long, pointed from lateral margin to centre and to apex.

Elytra subparallel, slender and wedge-shaped, just after middle narrowed to apex. Apex curved, inner tooth small. Base as wide as that of pronotum, in the scutellar area slightly depressed, margin raised, shoulders prominent (winged species). Striae of elytra covered with rugosities and dense, simple puncturation, interstices finely punctate, rugose and shiny, and strip-like raised. Pubescence short, bristly, and inclined to apex.

Pro-, meso and metathorax with dense and rugose puncturation, interstices raised and shiny. Pubescence short and adherent.

Legs slender, moderately long and thin, tarsal segments up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery. Tibia covered with short and sharp thorns.

Aedeagus with penis thickened at the middle, apex narrowed and thin, just extending the parameres. Apical lobe of parameres concave subapically with prominent, hook-like lateral edge, and long apical hairs.

#### DIFFERENTIAL DIAGNOSIS

*G. kucerai* is closely allied to *G. yunnanensis*, but can be easily distinguished from this species by wider body, more dense pubescence, less convex basal edges of pronotum and form of aedeagus.

ETYMOLOGY

Named after the collector of the new species, Mr. E. Kučera, Praha.

DISTRIBUTION

Province Yunnan in China.

## Gnathodicrus lizipingensis n. sp.

(Figs. 18-20)

Locus typicus

Liziping, Province Sichuan, China.

Type material

**Holotypus** ♂ (CSV): China: Yunnan, Liziping, near Shimien, 200 km southwest of Yáan, 27.VI.-3.VII.1991, leg. Z. Kejval. **Paratypus** ♂ (CSV): Same data as holotypus.

DIAGNOSIS

Robust, subparallel, raised species. Length: 13.5 mm, width: 3.2 mm. Black, legs chestnut-brown. Pubescence yellowish brown, short and dense, on pronotum and elytra inclined to apex.

Head with dense, coarse and umbilicate, regularly rounded puncturation; pubescence inclined to apex. Frons depressed at middle and slightly raised above the base of antenna. Eyes small, just like circular sector, and little prominent. Antennae long and stout, outreaching basal angles of pronotum for the length of the half of the last antennomere. Second antennomere short, slightly longer than wide, and slightly extended at apex. Third antennomere conspicuously longer than second, and both combined are slightly shorter than fourth and each of the following antennomeres; those are extended at apex. Last antennomere oval, bevelled subapically. Puncturation of antennal surface dense and covered with fine, short and protruding pubescence.

Pronotum almost rectangular, along median area conspicuously longer than wide at the basal angles (length/width ratio 1.17:1), prominently raised at centre, slightly bent laterally, in front of basal angles convex, apical edge of basal angle

sharp. Proepisternum excavated at base and visible from dorsal view. Pronotum uneven and raised across subbasal and subapical area, and slightly depressed on both sides of median line, with conspicuous mould. Puncturation of pronotum dense, coarse, regularly rounded and umbilicate, interstices reduced to small raised and shiny wrinkles. Basal angles of pronotum without carina. Pronotum conspicuously raised medially, with a conspicuous fine furrow, reaching to centre of pronotum, and with a relatively prominent dropping.

Scutellum slightly convex at base, laterally narrowed, broad at apex, and wedge-shaped. Surface raised, with a prominent median carina. Puncturation dense and umbilicate, pubescence dense and long, pointed from lateral margin to centre and to apex.

Elytra subparallel, slender and wedge-shaped, just after middle narrowed to apex. Apex curved, inner tooth small. Base as wide as base of pronotum, in the scutellar area slightly depressed, margin raised, shoulders prominent (winged species). Striae of elytra covered with rugosities and dense, simple puncturation, interstices finely punctate, rugose and shiny, and strip-like raised. Pubescence short, bristly, and inclined to apex.

Pro-, meso and metathorax with dense and rugose puncturation, interstices raised and shiny. Pubescence short and adherent.

Legs slender, moderately long and thin, tarsal segments up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery. Tibia covered with short and sharp thorns.

Aedeagus with penis stout and short, thickened at the middle, apex narrowed and thin, just extending the parameres. Apical lobe of parameres almost straight subapically with prominent, hook-like lateral edge, and long apical hairs, apex truncate.

### DIFFERENTIAL DIAGNOSIS

*G. lizipingensis* is closely allied to *G. kucerai*, but can be easily distinguished from this species by larger size and flatter body, and by the form and structure of pronotum, antennae, scutellum and aedeagus.

Etymology

Named after the locus typicus.

DISTRIBUTION

Province Sichuan in China.

Gnathodicrus platiai n. sp.

(Figs. 21-23)

Locus typicus

Jintang, Tcho-nin, Province Sichuan, China.

Type material

Holotypus ♂ (CSV): China: Sichuan, Jintang, Tcho-nin, 10.-15.VI.2004, leg. E. Kučera. Paratypes 3 ♂♂, 1 ♀ (CSV, CPG): Same data as holotypus.

DIAGNOSIS

Slender, subparallel, raised species. Length: 9.5 mm, width: 2.3 mm. Black, knee and claws, as well as prosternal-apophyse brown. Pubescence yellowish brown, short and dense, on pronotum and elytra inclined to apex.

Head with dense, coarse, umbilicate and regularly rounded puncturation, pubescence inclined to apex. Frons depressed at middle, and slightly raised above the base of antenna. Eyes small, just like circular sector, and little prominent. Antennae short and stout, not reaching basal angles of pronotum for the length of the last three antennomeres. Second antennomere short, slightly longer than wide, and slightly extended at apex, third antennomere as long as second, and both combined are slightly shorter than fourth and each of the following antennomeres; those are extended at apex. Last antennomere oval, bevelled subapically. Puncturation of antennal surface dense and covered with fine, short and protruding pubescence.

Pronotum campaniform, along median area conspicuously longer than wide at the basal angles (length/width ratio 1.15:1), and subparallel across apical third, prominently raised at centre, slightly bent laterally, in front of basal angles convex, apical edge of base-angle sharp. Proepisternum excavated at base and visible from dorsal view. Pronotum uneven and raised across subbasal and subapical area, and slightly depressed on both sides of median line, with conspicuous mould. Puncturation of pronotum dense, coarse, regularly rounded and umbilicate, interstices reduced to small raised and shiny wrinkles. Basal angles of pronotum without carina. Pronotum slightly raised, just central area depressed, with a relatively prominent dropping.

Scutellum slightly convex at base, laterally narrowed, broad at apex, and wedge-shaped. Surface raised with a prominent median carina. Puncturation dense and umbilicate, pubescence dense and long, pointed from lateral margin to centre and to apex.

Elytra subparallel, slender and wedge-shaped, just after middle narrowed to apex. Apex curved, inner tooth small. Base as wide as base of pronotum, in the scutellar area slightly depressed, margin raised, shoulders prominent (winged species). Striae of elytra covered with rugosities and dense, simple puncturation, interstices finely punctate, rugose and shiny, and strip-like raised. Pubescence short, bristly, and inclined to apex.

Pro-, meso and metathorax with dense, and rugose puncturation, interstices raised and shiny. Pubescence short and adherent.

Legs slender, moderately long and thin, tarsal segments up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery, Tibia covered with short and sharp thorns.

Aedeagus with penis stout and thickened at the middle, apex narrowed and thin, just extending the parameres. Apical lobe of parameres triangular, straight subapicallty with prominent, hook-like lateral edge, and long apical hairs.

#### DIFFERENTIAL DIAGNOSIS

G. platiai is closely allied to G. kucerai, but can be easily distinguished from this species by the prominently raised pronotum, shorter antenna, sparser hairs of pronotum and by the form of aedeagus.

## ETYMOLOGY

Named after our friend and colleague, Prof. Dr. G. PLATIA, Gatteo, honouring his excellent work on the Elateridae.

## DISTRIBUTION

Province Sichuan in China.

## Gnathodicrus sichuanensis n. sp.

(Figs. 24-26)

#### Locus typicus

Pingchuan, Province Sichuan, China.

## Type material

**Holotypus** ♂ (CSV): China: Sichuan, 30 km northern of Muli (Bowa), 1.-2.VII.1998, 3500 m, leg. J. Turna. **Paratypus** ♀ (CSV): China: Sichuan, on the road from Xichang to Yanyuan, Pass 15 km south-west of Pingchuan, 3200 m, 26.-27.VI.1998, leg. J. Turna.

## Diagnosis

Robust, subparallel, raised species. Length: 10.8 mm, width: 2.8 mm. Black coloured species. Pubescence yellowish brown, short and dense, on pronotum and elytra inclined to apex.

Head with dense, coarse, umbilicate, and regularly rounded puncturation, pubescence inclined to apex. Frons depressed at middle, and slightly raised above the base of antenna. Eyes small, just like circular sector, and little prominent. Antennae short and stout, not reaching basal angles of pronotum for the length of the last three antennomeres. Second antennomere short, slightly longer than wide, and slightly extended at apex. Third antennomere as long as second, and both combined are slightly shorter than fourth and each of the following antennomeres; those are extended at apex. Last antennomere oval, bevelled subapically. Puncturation of antennal surface dense and covered with fine, short and protruding pubescence.

Pronotum campaniform, along median area conspicuously longer than wide at the basal angles (length/width ratio 1.11:1), prominently raised at centre, slightly

bent laterally, in front of basal angles convex, apical edge of basal angle sharp. Proepisternum excavated at base and visible from dorsal view. Pronotum uneven and raised across subbasal and subapical area and slightly depressed on both sides of median line, with conspicuous mould. Puncturation of pronotum dense, coarse, regularly rounded, and umbilicate, interstices reduced to small raised and shiny wrinkles. Basal angles of pronotum without carina. Pronotum conspicuously raised, with a relatively prominent dropping, sub-central area relatively flat.

Scutellum slightly convex at base, laterally narrowed, broad at apex, and wedge-shaped. Surface raised, with a prominent median carina. Puncturation dense and umbilicate; pubescence dense and long, pointed from lateral margin to centre and to apex.

Elytra subparallel, slender and wedge-shaped, just after middle narrowed to apex. Apex curved, inner tooth small. Base as wide as base of pronotum, in the scutellar area slightly depressed, margin raised, shoulders prominent (winged species). Striae of elytra covered with rugosities and dense, simple puncturation, interstices finely punctate, rugose and shiny, and strip-like raised. Pubescence short, bristly, and inclined to apex.

Pro-, meso and metathorax with dense and rugose puncturation, interstices raised and shiny. Pubescence short and adherent.

Legs slender, moderately long and thin, tarsal segments up to claws of decreasing length, ventrally with hardly visible fine pubescence, and fine upholstery. Tibia covered with short and sharp thorns.

Aedeagus with a slender penis, slightly thickened at the middle, apex narrowed and thin, just extending the parameres. Apical lobe of parameres triangular, concave subapically, with prominent, hook-like lateral edge and long apical hairs.

## DIFFERENTIAL DIAGNOSIS

G. sichuanensis is closely allied to G. kubani, but can be easily distinguished from this species by the wider, prominently raised body, sparser hairs, concave basal-edges of pronotum, form of scutellum, and the raised interstices of elytral strips at base. The female paratype have conspicuously larger size (length: 15.4 mm, width: 3.7 mm) and is distinctly stouter than the male, with interstices of elytral strips more raised than in the male holotype. Furthermore, beside black colour, the female has reddish legs, antennae, elytral and pronotal base, as well as reddish median strip on elytra.

The female of *G. sichuanensis* is not possible to identify using the proposed key to species. However, it is easy to recognize by its large size and by the reddish legs and antennae.

ETYMOLOGY Named after the locus typicus.

DISTRIBUTION
Province Sichuan in China.

# Gnathodicrus tonkinensis (Fleutiaux, 1918)

(Figs. 27-29)

Corymites tonkinensis Fleutiaux, 1918: 249.
Gnathodicrus tonkinensis: Fleutiaux 1936: 281.

Locus typicus Tonkin.

NEW RECORD

China: Guangxi, Gongcheng, Mt. Dayaoshan, 4.-5.VI.2001, 12 spm., leg. L. Jincke.

#### DIAGNOSIS

Robust, subparallel, raised species. Length: 11.0 mm, width: 3.3 mm. Black, antenna blackish-brown, legs reddish-brown. Pubescence light yellowish, short and dense, on pronotum tightly inclined to apex with a median parting, on elytra inclined to apex.

Head with dense, coarse, regularly rounded and umbilicate puncturation; pubescence inclined to apex. Frons depressed at middle and slightly raised above the base of antenna. Eyes small, just like circular sector, and little prominent. Antennae short and stout, not reaching basal angles of pronotum for the length of the last antennomere. Second antennomere short, slightly longer than wide, and slightly extended at apex. Third antennomere longer than second, and both combined are slightly longer than fourth and each of the following antennomeres; those are extended at apex. Last antennomere oval, bevelled subapically. Puncturation of antennal surface dense and covered with fine, short and protruding pubescence.

Pronotum nearly rectangular, along median area just slightly longer than wide at the basal angles (length/width ratio 1.10:1), prominently raised at centre, subparallel laterally, in front of basal angles concave, apical edge of basal angle sharp. Proepisternum excavated at base and visible from dorsal view. Pronotum even and raised across subbasal and subapical area and slightly depressed on both sides of median line. Puncturation of pronotum dense, coarse, regularly rounded and umbilicate. Interstices reduced to small, raised, and matt wrinkles. Basal angles of pronotum with prominent carina. Pronotum conspicuously raised, with a relatively prominent dropping, subcentral area relatively flat.

Scutellum slightly convex at base, laterally narrowed, broad at apex, and wedge-shaped. Surface raised, with a prominent and broad median carina. Puncturation dense and umbilicate; pubescence dense and long, pointed from lateral margin to centre and to apex.

Elytra subparallel, slender and wedge-shaped, just after middle narrowed to apex. Apex curved, inner tooth small. Base as wide as base of pronotum, in the scutellar area slightly depressed, margin raised, shoulders prominent (winged

species). Striae of elytra covered with rugosities and dense, simple puncturation, interstices finely punctate, rugose and shiny, and strip-like raised. Pubescence short, bristly, and inclined to apex.

Pro-, meso and metathorax with dense and rugose puncturation. Interstices raised and shiny. Pubescence short and adherent.

Legs slender, moderately long and thin, tarsal segments up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery. Tibia covered with short and sharp thorns.

Aedeagus with a slender penis, slightly thickened at the middle, apex narrowed and thin, and extending the parameres. Apical lobe of parameres crescent-shaped, concave subapically, with prominent lateral edge and long apical hairs.

## DIFFERENTIAL DIAGNOSIS

G. tonkinensis is closely allied to G. vitalisi, but can be easily distinguished from this species by the smaller and shorter body, form of second antennomere of antenna, nearly rectangular pronotum, and form of aedeagus.

DISTRIBUTION

Tonkin, Cambodia, Province Guangxi in China.

# Gnathodicrus yunnanensis n. sp.

(Figs. 30-32)

Locus typicus

Yanmen, Provnce Yunnan, China.

Type material

**Holotypus**  $\circlearrowleft$  (CSV): China: Yunnan, Yanmen, 13.-23.VI.2005, leg. E. Kučera. **Paratypes** 2  $\circlearrowleft$   $\circlearrowleft$  , 5  $\circlearrowleft$  (CSV, CPG, NMW): Same data as holotypus.

**DIAGNOSIS** 

Slender, subparallel, raised species. Length: 9.1 mm, width: 2.0 mm. Black, legs lighter brown, base of elytra and prosternal-apophysis light-brown. Pubescence yellowish brown, short and dense, on pronotum and elytra, inclined to apex.

Head with dense, coarse, regularly rounded and umbilicate puncturation. Pubescence inclined to apex. Frons depressed at middle and slightly raised above the base of antenna. Eyes small, just like circular sector, and little prominent. Antennae long and stout, outreaching basal angles of pronotum for the length of the last two antennomeres. Second antennomere short, slightly longer than wide, and slightly extended at apex. Third antennomere slightly longer than second, and both combined are as long as fourth and each of the following antennomeres; those are extended at apex. Last antennomere oval, bevelled subapically. Puncturation of antennal surface dense and covered with fine, short and protruding pubescence.

Pronotum cylindrical, along median area conspicuously longer than wide at the basal angles (length/width ratio 1.25:1), slightly raised at centre, slightly bent laterally, in front of basal angles convex, apical edge of basal angle sharp. Proepisternum excavated at base and visible from dorsal view. Pronotum slightly raised across subbasal and subapical area, and slightly depressed on both sides of median line with conspicuous mould. Puncturation of pronotum dense, coarse, regularly rounded, and umbilicate; interstices reduced to small raised, and shiny wrinkles. Basal angles of pronotum with carina, reaching basal fourth. Pronotum conspicuously raised medially, with a short base-mould, and relatively prominent dropping.

Scutellum slightly convex at base, laterally narrowed, broad at apex, and wedge-shaped. Surface raised, with a prominent median carina. Puncturation dense and umbilicate, pubescence dense and long, pointed from lateral margin to centre and to apex.

Elytra subparallel, slender and wedge-shaped, just after middle narrowed to apex. Apex curved, inner tooth small. Base as wide as that of pronotum, in the scutellar area slightly depressed, margin raised, shoulders prominent (winged species). Striae of elytra covered with rugosities and dense, simple puncturation, interstices finely punctate, rugose and shiny, and strip-like raised. Pubescence short, bristly, and inclined to apex.

Pro-, meso and metathorax with dense and rugose puncturation, interstices raised and shiny. Pubescence short and adherent.

Legs slender, moderately long and thin, tarsal segments up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery. Tibia covered with short, and sharp thorns.

Aedeagus with penis thickened at the middle, apex narrowed, bevelled and thin, just extending the parameres. Apical lobe of parameres concave subapically, with prominent, hook-like lateral edge and long apical hairs.

#### DIFFERENTIAL DIAGNOSIS

G. yunnanensis is closely allied to G. kucerai, but can be easily distinguished from this species by the light-brown spots on the base of elytra, slender body, more dense pubescence, convex basal part of edges of pronotum and form of aedeagus.

ETYMOLOGY Named after the locus typicus.

DISTRIBUTION
Province Yunnan in China.

## Gnathodicrus xingshanensis n. sp.

(Figs. 33-34)

Locus Typicus Gaucho, Province Hubei, China.

Type material

**Holotypus** ♀ (CSV): China: Hubei, 5 km north of Gauch, on the road from Xingshan to Badong, 1500 m, 17.VII.2003, leg. J. Turna. **Paratypus** ♀ (CSV): Hubei, Muyuping, southern environment, 8. and 15.-17.VI.2002, 1100 m, leg. J. Turna.

DIAGNOSIS

Robust, subparallel, raised species. Length: 12.2 mm, width: 3.0 mm. Reddish-brown, head, except apex, and fourth to eleventh antennomeres, as well as apical half of elytra blackish-brown. Pubescence yellowish brown, short and dense, on pronotum and elytra inclined to apex.

Head with dense, coarse, regularly rounded and umbilicate puncturation, pubescence inclined to apex. Frons depressed at middle, and slightly raised above the base of antenna. Eyes small, just like circular sector, and little prominent. Antennae short and stout, not reaching basal angles of pronotum for the length of the last four antennomeres. Second and third antennomere short and of the same length, slightly longer than wide, and slightly extended at apex and both combined conspicuously shorter than fourth and each of the following antennomeres; those are extended at apex. Last antennomere oval, bevelled subapically. Puncturation of antennal surface dense and covered with fine, short and protruding pubescence.

Pronotum cylindrical and subparallel, along median area conspicuously longer than wide at the basal angles (length/width ratio 1.18:1), slightly raised at centre, slightly bent laterally, in front of basal angles convex, apical edge of basal angle sharp. Proepisternum excavated at base and visible from dorsal view. Pronotum slightly raised across subbasal and subapical area, and slightly depressed on both sides of median line with conspicuous mould. Puncturation of pronotum dense, coarse, regularly rounded and umbilicate, interstices reduced to small raised and shiny wrinkles. Basal angles of pronotum without carina. Pronotum conspicuously raised medially, with a conspicuous fine furrow, reaching to centre of pronotum, and with a relatively prominent dropping.

Scutellum slightly convex at base, laterally narrowed, broad at apex, and wedge-shaped. Surface raised, with a prominent median carina. Puncturation dense and umbilicate, pubescence dense and long, pointed from lateral margin to centre and to apex.

Elytra subparallel, slender and wedge-shaped, just after middle narrowed to apex. Apex curved, inner tooth small. Base as wide as that of pronotum, in the scutellar area slightly depressed, margin raised, shoulders prominent (winged

species). Striae of elytra covered with rugosities and dense, simple puncturation, interstices finely punctate, rugose and shiny, and slightly strip-like raised. Pubescence short, bristly, and inclined to apex.

Pro-, meso and metathorax with dense, and rugose puncturation, interstices raised and shiny. Pubescence short and adherent.

Legs slender, moderately long and thin, tarsal segments up to claws of decreasing length, ventrally with hardly visible, fine pubescence, and fine upholstery. Tibia covered with short, and sharp thorns.

## DIFFERENTIAL DIAGNOSIS

*G. xingshanensis* is closely allied to *G. jaroslavi*, but can be easily distinguished from this species by larger size of body, cylindrical pronotum, form of scutellum, and relatively flat interstices of elytral strips.

**ETYMOLOGY** 

Named after the locus typicus.

DISTRIBUTION

Province Hubei in China.

Table Overview on the distribution of the species of *Gnathodicrus* in China (sorted after provinces)

Species	Chinese Provinces						
Gnathodicrus	Yunnan	Hubei	Sichuan	Fujian	Guangxi		
cangshanensis	X						
erberi	X						
francki		X	X	X			
fujianensis				X			
jaroslavi		X					
kubani	X						
kucerai	X						
lizipingensis			X				
platiai			X				
sichuanensis			X				
tonkinensis					X		
yunnanensis	X						
xingshanensis		X					

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