## New lycids from China (Coleoptera, Lycidae)

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New lycids from China (Coleoptera, Lycidae). - Thirteen new lycid species (Coleoptera, Lycidae) are described from China: Pyropterus (Helcophorus) tricolor n. sp., Xylobanellus gansuensis n. sp., Cautires bulenoides n . sp ., C. yengi $\mathrm{n} . \mathrm{sp} ., \mathrm{C}$. mao n . $\mathrm{sp} ., \mathrm{C}$. vigens $\mathrm{n} . \mathrm{sp} ., \mathrm{C}$. sichuanensis $\mathrm{n} . \mathrm{sp} ., \mathrm{C}$. galae n. sp., Xylobanus montiphionus n. sp., Libnetis xilingensis n. sp., L. monachus n. sp., L. latrunculus n. sp. and L. confucius n. sp. This is the first record of Xylobanellus Kleine, 1930, in China. Only basally sclerotized paramerae are for the first time described in Pyropterus Mulsant, 1838.

Key words: Coleoptera, Lycidae, New species, China.
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## Introduction

It is surprising that our knowledge of Lycidae in China is virtually non-existent in spite of the fact that genera with abundant species have been described both from Japan, on one hand, and from Indochina and the Himalayas, on the other. Recent intensive collecting however has started to cast more light on beetle fauna in China. The description of thirteen new species of the family collected during recent trips is given below. The new species belong to five genera: Pyropterus Mulsant, 1838; Xylobanellus Kleine, 1930; Cautires Waterhouse, 1879; Xylobanus Waterhouse, 1879 and Libnetis Waterhouse, 1878, of which only one species from continental China in each of Pyropterus and Xylobanus has been known so far, with no records of Xylobanellus from the area at all.

The following abbreviations are used in the paper: NTU. Coleoptera collection, National Taiwan University, Taipei; USNMNH. United States National Museum of Natural History, Washington, D. C.; ICM. Insect Centre, Moscow.

## Material and methods

Specimens for this study were collected mostly by hand from low strata foliage or when attracted by light at night in the mountainous forests of inland China and Taiwan. They were dissected after being softened for a couple of hours in water, with the male genitalia extracted and affixed with water-soluble glue on cardboard plates.

Another widespread method consists of treating genital parts by 3 to 5 minutes boiling in $10 \% \mathrm{KOH}$ solution. However, the soft-bodied Cantharoidea, to which the Lycidae belong, do not usually possess inner structures of the aedeagus requiring such development. Such structures have not yet been sufficiently studied or used for taxonomic purposes, and as their outer layer after such a procedure desintegrates, the usually much softer internal sac structures lose shape and even the general contours get distorted, more often than not becoming hardly recognisable. In a word, the latter method does not seem to be worth the effort in the study of the Lycidae.

Length of the antennal lamellae, when determined, was measured from its inner basis.

## Results

Pyropterus (He/cophorus) tricolorn. sp. (figs. 1-3)

## Description

Black. Head, $1^{\text {ts }}$ antennal joint, scutellum and legs except tarsi and tibiae apically fulvous; pronotum and elytra cinnabar red.

Male. Head small, not much wider than anterior pronotal margin, dorsally densely covered with reddish pubescence, with conspicuous antennal prominence, antennal sockets separated with minute lamina. Eyes large (interocular distance only 1.6 times as long as the radius). Ultimate joint of maxillary palpi small, relatively short and parallel-sided, narrowing toward apex. Antennae filiform, slightly flattened in 3rd to 6th joints, reaching over three fourths of elytra, with 2 nd and 3 rd joints equal in length and together 2.8:1.8 times shorter than 4th joint in turn 1.15 times shorter than 5th; 6th to 10th joints gradually increasing in length, and 11th joint 5.2:4 times longer than 10th and 1.6 longer than 5th; 1st to 3rd joints decumbent, following joints with short erect dense pubescence.

Pronotum transverse, 1.7 times wider than long, median areola wide, connected with anterior and posterior margins with short ribs, lateral margins conspicuously widened to posterior margin, front margin convex, blunt front angles conspicuous, acute posterior angles prominently produced laterally.

Scutellum almost parallel-sided, slightly elongate, prominently triangularly emarginate at apex where dehiscent elytra disclose portion of mesosternum.

Elytra long, wider than pronotum basally and 3.65 times as long as wide humerally, slightly widening to apex, with four longitudinal primary costae and one row of square cells in each interstice; third costa much stouter than the rest in all length of elytra. Uniform pubescence decumbent, short and dense.

Legs slender and long; ratio of length of tarsomeres in front tarsus 1.3:1.3:1.2:1:1.8.

Aedeagus long and straight, with uns-
clerotized narrow long projections of apices of parameres (figs. 1-3).

Length: 8.0-10.7 mm.
Width (humerally): 2.1-2.5 mm.
Female unknown.

## Type material

Holotype male: "China, NW Yunnan, 20 km E of Weixi, Yunling Mt. Range, 3,100-3,300 m, 10-12.VIII. 1996" (ICM); paratypes, 3 males, "Mt. Omei, Szechuen, China, 4,400 ft, 110.VIII.(19)35, D. C. Graham coll."; male, "Mt. Omei, Szechuen, China, 11,000 ft, 21.VII.(19)35, D. C. Graham coll."; male, " China: Szechuen, Mt. Omei, 4,500 ft, 10-22.VIII.1936, D. C. Graham leg." (USNMNH and ICM).

## Diagnosis

P. (H.) tricolor n. sp. differs from all Pyropterus species by the coloration and the shape of the aedeagus (figs. 1-3), the latter unlike anything similar in Erotini, except in the African genus Flagrax Kazantsev, 1992.

## Etymology

The name alludes to the number of colors of the species, with cinnabar red upperside, fulvous legs and black antennae and underside.

## Xylobanellus gansuensis n. sp.

Description
Black. Pronotum and elytra dark red.
Female. Head dorsally densely covered with reddish pubescence, antennal sockets separated by half their diameter. Eyes relatively small (interocular distance 3.5 times as long as eye radius). Antennae flattened, serrate from 3rd joint, barely reaching half the elytra, with 1st and 2 nd joints cylindrical, 3 rd joint 2.4 times as long as 2 nd, subequal in length to 1st and 1.1 times shorter than 4th; all joints with short reddish decumbent pubescence.

Pronotum transverse, 1.3 times wider than long, densely pubescent, with sides concave in the middle and median areola almost reaching posterior margin, with rounded front and laterally produced acute hind angles.

Scutellum densely pubescent, slightly elongate, conspicuously emarginate at apex.

Elytra wider than pronotum basally, 3.5 times as long as wide humerally, slightly widening after humeri, with four longitudinal costae the last (fourth) of which much stouter than others in all elytra except basally; pubescence uniform, very short and scarce.

Length: 9.0 mm .
Width (humerally): 2.1 mm .
Male unknown.

## Type material

Holotype female: "China: S GANSU, Minshan, 70 km Wudu, 2,000-2,700 m, 25.VII.2000, A. Gorodinsky leg." (ICM).

## Diagnosis

X. gansuensis n . sp. differs from $X$. erythropterus (Baudi) by the red pronotum, reddish pubescence on frons and vertex and the stout fourth elytral costa. Though a female, the examined specimen clearly provides sufficient differential characters to separate it from all the congenerics.

## Etymology

The specific name is derived from Gansu, a province in Central China.

Cautires bulenoides n. sp. (figs. 4-6)
Description
Black; pronotum reddish brown; elytra uniformly red.

Male. Head with inconspicuous antennal prominence, antennal sockets separated with minute lamina. Eyes relatively small (interocular distance 3.75 times as long as the radius). Ultimate joint of maxillary palpi elongate, widest in the middle, flattened at apical margin. Antennae from 3rd joint lamellate, reaching over half of elytra, with 2nd joint transverse, lamella of 3rd joint 1.25 times shorter than joint itself (fig. 4); all joints with decumbent short dense brownish pubescence.

Pronotum transverse, 1.3 times wider than long, conspicuously narrowed anteriorly; with prominent blunt anterior and small acute posterior angles; front margin medially produced forward and slightly emarginate at apex, hind one slightly biarcuate; median longitudinal areola relatively broad, starting in anterior fourth and reaching posterior
margin, all lateral ribs lacking, with only traces of first pair noticeable at anterior margin.

Scutellum elongate, nearly parallel-sided, deeply incised at apex.

Elytra slightly wider than pronotum basally and 3.2 times as long as wide humerally, widened posteriorly, with four longitudinal costae and double rows of rather irregular cells in interstices; 2nd costa much stouter than others. Uniform pubescence decumbent, short and dense.

Legs slender; tarsi slightly longer than half of pertinent tibiae.

Aedeagus slender and almost straight, with pair of inwardly curved teeth in apical opening (figs. 5-6).

Female. Similar to male, but eyes smaller and antennae much less lamellate and shorter.

Length: 8.8-9.8 mm,
Width (humerally): 2.2-2.3 mm.
Type material
Holotype male: "TAIWAN: Taoyuan, Lalashan, 21.VII.1999, leg. M.-L. Jeng" (NTU); paratypes, 2 males and female: same label (NTU and ICM); "Taiwan, Taoyuan Co., Palin-Fushan, 3.VII. 1998, leg. H. Y. Lee" (ICM).

## Diagnosis

C. bulenoides n. sp. somewhat resembles species of the genus Bulenides C. O. Waterhouse, 1879, by the seemingly absent lateral ribs on the pronotum, whereas traces of these are noticeable at the anterior margin. Apart from the structure of the pronotum, the new species readily differs from its congeners by the coloration, the stout second elytral costa and the shape of the aedeagus (figs. 5-6).

Etymology
The specific name is given in connection with its resemblance to the genus Bulenides.

Cautires yengi n. sp. (figs. 7-9)

## Description

Black; pronotum, scutellum and elytra orange red.
Male. Head with conspicuous antennal prominence, antennal sockets separated with minute lamina. Eyes relatively small (interocular distance twice as long as the
radius). Ultimate joint of maxillary palpi elongate, parallel-sided, obliquely cut apically. Antennae from 3rd joint lamellate, hardly reaching half of elytra, with 2 nd joint transverse, lamella of 3rd joint 1.25 times shorter than joint itself (fig. 7); all joints with decumbent short dense brownish pubescence.

Pronotum transverse, 1.5 times wider than long, with almost straight sides widened in posterior half, prominent blunt anterior and acute posterior angles; front margin medially slightly produced forward, hind one feebly biarcuate; median longitudinal areola relatively broad, starting in anterior third and reaching posterior margin, all lateral ribs well developed.

Scutellum elongate, almost parallel-sided, deeply incised at apex.

Elytra long, slightly wider than pronotum basally and 3.8 times as long as wide humerally, widened posteriorly, with four longitudinal costae and double rows of regular square cells in interstices. Uniform pubescence decumbent, short and dense.

Legs slender; tarsi slightly longer than half of pertinent tibiae.

Aedeagus slender and almost straight, with pair of outwardly curved narrow teeth in apical opening (figs. 8-9).

Female unknown.
Length: 11.1 mm .
Width (humerally): 2.5 mm .

## Type material

Holotype male: "Taiwan: Taitung Co., Wulu forest track (2,230 m), 2.VI. 1998 (light), M. L. Jeng leg." (NTU); paratypes, 2 males: same label (ICM).

## Diagnosis

C. jengin. sp. may be distinguished from its congeners of the same coloration by the shape of the aedeagus (figs. 8-9).

## Comments

In one of the paratypes, the antennal lamellae are definitely longer and the median portion of its pronotal anterior margin is conspicuously produced forward.

## Etymology

The species is named after its collector Mr. M. L. Jeng.


Figs. 1-10. Aedeagi and antennae, o': Pyropterus (Helcophorus) tricolorn. sp., aedegus: 1. Dorsally; 2 Laterally; 3. Ventrally: Cautires bulenoides n. Sp. 4. First to 4th antennal joints, 5. Aedeagus, ventrally; 6. Aedeagus, laterally C jengi n. sp: 7. First to 5th antennal joints; 8. Aedeagus, ventrally; 9. Aedeagus, laterally; 10 . C. mao n. sp., aedeagus, laterally. (Scale 0.5 mm )

Edeagos y antenas, $0^{2}$. Pyropterus (Helcophorus) tricolor sp. n., edeago: 1 . Vista dorsal; 2. Vista lateral; 3. Vista ventral. Cautires bulenoides sp. n. 4. Artejos antenales 1० a 4; 5. Edeago, vista ventral; 6. Edeago, vista lateral. C. jengi sp. n.: 7. Artejos antenales $1^{\circ}$ a $5^{\circ}$; 8. Edeago, vista ventral; 9. Edeago, vista lateral; 10. C. mao sp. n. edeago, vista lateral. (Escala $0,5 \mathrm{~mm}$.)

Cautires mao n. sp. (fig. 10)

## Description

Dark brown; elytra brownish red, with reddish pubescence.

Male. Head with inconspicuous antennal prominence, antennal sockets separated with minute lamina. Eyes relatively small (interocular distance 3.1 times as long as the radius). Ultimate joint of maxillary palpi only slightly longer than wide, parallel-sided, flattened at apical margin. Antennae from 3rd joint lamellate, slightly reaching over half of elytra, with 2nd joint transverse, lamella of 3rd joint as long as joint itself; all joints with short semi-erect dense brownish pubescence.

Pronotum slightly transverse, 1.1 times wider than long, slightly narrowed anteriorly; with rounded blunt anterior and acute posterior angles; front margin medially conspicuously produced forward and slightly emarginate at apex, hind one biarcuate; median longitudinal areola relatively narrow, starting in anterior third and reaching posterior margin, second pair of lateral ribs (connecting median areola with lateral margins) lacking.

Scutellum elongate, parallel-sided, incised at apex.

Elytra long, slightly wider than pronotum basally and 3.9 times as long as wide humerally, widened posteriorly, with four longitudinal costae and double rows of irregular cells in interstices, irregularity more expressed medially. Uniform pubescence decumbent, short and dense.

Legs slender; tarsi slightly longer than half of pertinent tibiae.

Aedeagus both ventrally and laterally similar to that of $C$. bulenoides $n$. sp., differing by unsclerotised structures of apical opening (fig. 10).

Female. Similar to male, but antennae much less lamellate and slightly shorter.

Length: 7.4-8.1 mm.
Width (humerally): $1.6-1.9 \mathrm{~mm}$.

## Type material

Holotype male: "CHINA: JIANGXI, Jinggang Shan, 700-1,000 m, 25-31.V.1998, S. Kazantsev leg." (ICM); paratypes (4 males and 4 females): same label (ICM).

## Diagnosis

In the shape of the aedeagus C. mao n. sp.
resembles $C$. bulenoides n. sp. differing only by the unsclerotised structures disclosed in the apical opening, at the same time readily distinguishable by the coloration, structure of the antennae, equally developed elytral costae and other characters.

## Etymology

This species is named after Mao Zedong who spent considerable time in 1927 and 1928 in these forested mountains just before starting the Long March.

Cautires vigens n. sp. (figs. 11-13)

## Description

Dark brown; only elytral pubescence reddish.
Male. Head with conspicuous antennal prominence, flat and glabrous behind eyes; antennal sockets separated with minute lamina. Eyes large (interocular distance as long as the radius). Ultimate joint of maxillary palpi elongate, parallel-sided, flattened and glabrous at apical margin. Antennae from 3rd joint lamellate, reaching half of elytra, with 2nd joint transverse, lamella of 3rd joint as long as joint itself (fig. 11); all joints with short semi-erect dense brownish pubescence.

Pronotum transverse, 1.3 times wider than long, slightly narrowed anteriorly; with prominent blunt anterior and acute posterior angles; front margin medially produced forward and slightly emarginate at apex, hind margin biarcuate; median longitudinal areola rather wide anteriorly, starting in anterior third and reaching posterior margin, all lateral ribs well developed.

Scutellum elongate, parallel-sided, conspicuously incised at apex.

Elytra long, slightly wider than pronotum basally and 3.9 times as long as wide humerally, widened posteriorly, with four longitudinal costae and double rows of rather regular cells in interstices. Short decumbent pubescence on ribs only, leaving bottom of cells hairless.

Legs slender; tarsi definitely longer than half of pertinent tibiae.

Aedeagus long and slender, with small dents produced outwardly from ventroapical cavity (figs. 12-13).

Female. Similar to male, but eyes much


Figs 11-19. Aedeagi and antennae, $0^{7}$. Cautires vigens n. sp: 11. First to 5 th antennal joints; 12. Aedeagus, ventrally; 13. Aedeagus, laterally. C. sichuanensis n. sp. 14. First to 4th antennal joint; 15 . Aedeagus, ventrally; 16. Aedeagus, laterally, C. galae n. sp.: 17. First to 5th antennal joints; 18. Aedeagus, ventrally; 19. Aedeagus, laterally. Xylobanus montiphionus n. sp: 20. First to 5 th antennal joints; 21. Aedeagus, ventrally; 22. Aedeagus, laterally. (Scale 0.5 mm .)

Edeagos y antenas, © Cautires vigens sp. n.: 11. Artejos antenales 1\% a 5; 12. Edeago, vista ventral, 13. Edeago, vista lateral. C. sichuanensis sp. n. 14. Artejos antenales $1^{\circ}$ a 40; 15. Edeago, vista ventral; 16. Edeago, vista lateral C galae sp. n. 17. Artejos antenales $1^{\circ}$ a 5 ; 18. Edeago, vista ventral; 19. Edeago, vista lateral. Xylobanus montiphionus sp. n.: 20. Artejos antenales $1^{\circ}$ a $5^{\circ}$ : 21. Edeago, vista ventral; 22. Edeago, vista lateral. (Escala $0,5 \mathrm{~mm}$.)
smaller and antennae much less lamellate.
Length: $7.4-8.5 \mathrm{~mm}$.
Width (humerally): $1.6-2.0 \mathrm{~mm}$.
Holotype male: "CHINA: JIANGXI, Jinggang Shan, 700-1,000 m, 25-31.V.1998, S. Kazantsev leg." (ICM); paratypes ( 1 male and 3 females): same label; 1 male: "CHINA: FUJIAN, Wuyi Shan, 22 May 1998, S. Kazantsev leg" (ICM).

## Diagnosis

C. vigens n . sp . is easily distinguishable from other Cautires species by the coloration, structure of the antennae, peculiarities of the elytral pubescence, the shape of the aedeagus (figs. 12-13) and other characters.

## Comments

The paratype from Fujian differs by the narrower and shorter median pronotal areola and less developed lateral pronotal ribs.

## Etymology

The specific name is derived from the Latin for flourishing, alluding to the number of specimens collected.

## Cautires sichuanensis n. sp. (figs. 14-16)

## Description

Black; pronotum and elytra orange.
Male. Head with inconspicuous antennal prominence, antennal sockets separated with minute lamina. Eyes relatively small (interocular distance twice as long as the radius). Ultimate joint of maxillary palpi only slightly longer than wide, parallel-sided, flattened at apical margin. Antennae from 3rd joint lamellate, slightly reaching over two thirds of elytra, with 2nd joint transverse, lamella of 3rd joint slightly shorter than joint itself (fig. 14); all joints with scarce short decumbent whitish pubescence.

Pronotum trapezoidal, anteriorly 1.3 times narrower than posteriorly; with pronounced blunt anterior and acute posterior angles; front margin concave, hind one conspicuously biarcuate; median longitudinal areola narrow, starting in anterior forth and open at posterior margin, second pair of lateral ribs (connecting median areola with lateral margins) lacking.

Scutellum elongate, parallel-sided, deeply and broadiy semi-circularly incised at apex.

Elytra slightly wider than pronotum basally and 3.75 times as long as wide humerally, slightly widened posteriorly, with four longitudinal costae and double rows of regular elongate cells in interstices. Uniform pubescence decumbent, short and dense.

Legs slender; tarsi slightly longer than half of pertinent tibiae.

Aedeagus robust, its ventral opening in apical third (figs. 15-16).

Female. Unknown.
Length: 10.7 mm .
Width (humerally): 2.4 mm .
Type material
Holotype male: "CHINA: C SICHUAN, Xiling Snow Mts., 1,300-2,100 m, 29-31.VII.1996, leg. S. Kazantsev" (ICM).

## Diagnosis

C. sichuanensis $\mathbf{n}$. $\mathbf{s p}$. is readily distinguished from its congeners with similar coloration by the shape of the pronotum, the structure of the elytra and the shape of the aedeagus (figs. 15-16).

Etymology
The specific name is derived from Sichuan, a province in Central China.

Cautires galae n. sp. (figs. 17-19)

## Description

Dark brown; pronotal and elytral margins light brown, pubescence on pronotal and elytral margins and ribs reddish brown.

Male. Head with inconspicuous antennal prominence, antennal sockets separated with minute lamina. Eyes relatively large (interocular distance 1.5 times as long as the radius). Ultimate joint of maxillary palpi elongate, parallel-sided, flattened and glabrous at apical margin. Antennae from 3rd joint lamellate, slightly reaching over half of elytra, with 2 nd joint transverse, lamella of 3rd joint over 1.5 times as long as joint itself (fig. 17); all joints with short decumbent whitish pubescence.

Pronotum slightly transverse, 1.1 times wider than long, slightly narrowed anteriorly; with prominent blunt anterior and acute posterior angles; front margin medially conspicuously protruded forward, hind one biarcuate; median longitudinal areola
relatively narrow, starting almost in the middle and reaching posterior margin, all lateral ribs well developed.

Scutellum elongate, parallel-sided, triangularly emarginate at apex.

Elytra slightly wider than pronotum basally and 3.5 times as long as wide humerally, slightly widened posteriorly, with four longitudinal costae and double rows of rather regular square cells in interstices. Short decumbent pubescence on ribs only, leaving bottom of cells hairless.

Legs slender; tarsi slightly longer than half of pertinent tibiae.

Aedeagus slender, bent laterally, with lowered ventral cavity (figs. 18-19).

Female. Similar to male, but eyes smaller and antennae much less lamellate.

Length: $8.2-8.5 \mathrm{~mm}$.
Width (humerally): $2.0-2.2 \mathrm{~mm}$.
Type material
Holotype male: "CHINA: E GUIZHOU, Fanjingshan Nat. Res., 700-1,200 m, 2426.VI.1999, S. \& I. Kazantsev leg." (ICM); paratypes ( 1 male and 1 female): same label (ICM).

## Diagnosis

C. galae $\mathrm{n} . \mathrm{sp}$. is distinguishable from its congeners with similar coloration by the antennal structure (fig. 17), the shape of the pronotum, the structure of the elytra and the shape of the aedeagus (figs. 18-19).

## Etymology

The species is named after my wife, Gala.

Xylobanus montiphionus n. sp. (figs. 20-22)

## Description

Dark brown; second antennal joint brown; pubescence on pronotal and elytral margins, costae and ribs dark red.

Male. Head with inconspicuous antennal prominence, slightly depressed and glabrous behind eyes, antennal sockets separated with minute lamina. Eyes relatively large (interocular distance 1.3 times as long as the radius). Ultimate joint of maxillary palpi only slightly longer than wide, oval, widest near base. Ultimate joint of labial palpi small, pointed at apex. Antennae from 3rd joint
lamellate, reaching half of elytra, with 2nd joint transverse, lamella of 3rd joint as long as joint itself (fig. 20); all joints with short semi-erect dense brownish pubescence.

Pronotum transverse, 1.4 times wider than long, with almost straight sides; with inconspicuous blunt anterior and acute produced laterally posterior angles; front margin medially produced forward, hind one biarcuate; median longitudinal areola narrow, starting in anterior third and open at posterior margin, second pair of lateral ribs (connecting median areola with lateral margins) lacking.

Scutellum elongate, parallel-sided, broadly emarginate at apex.

Elytra slightly wider than pronotum basally and 3.5 times as long as wide humerally, slightly widening posteriorly, with four longitudinal costae and single row of regular transverse cells in interstices. Uniform pubescence decumbent and short, definitely denser on costae.

Legs slender; tarsi slightly longer than half of pertinent tibiae.

Aedeagus long and straight (figs. 21-22).
Female. Simitar to male, but eyes smaller and antennae less lame lamellate.

Length: $9.0-11.0 \mathrm{~mm}$.
Width (humerally): $2.0-2.7 \mathrm{~mm}$.

## Type material

Holotype male: "CHINA: C SICHUAN, Xiling Snow Mts., 1,300-2,100 m, 7-10.VII.1999, S. \& I. Kazantsev leg." (ICM); paratypes: 1 female, "CHINA: C SICHUAN, Xiling Snow Mts., 1,300-2,100 m, 13-20.VII.1999, S. \& I. Kazantsev leg."; 1 female "CHINA: C SICHUAN, Xiling Snow Mts., 1,300-2,100 m, 29-31.VII.1996, leg. S. Kazantsev" (ICM).

Diagnosis
$X$. montiphionus n . sp . may be placed near $X$. noacki Kleine, 1949, the only Xylobanus species reported from continental China, distinguished by the structure of the pronotum, the elytral pubescence and the shape of the aedeagus (figs. 21-22). I have seen a few further species of this genus from the country, represented only by female specimens.

## Etymology

The specific name is derived from Latin for mountain and Greek for snow, alluding to
the Xiling Snow Mountains, the Sichuan locality where this species was collected.

Libnetis xilingensis n. sp. (figs. 23-24)

## Description

Uniformly black.
Niale. Head small, narrower than anterior pronotal margin, with deep transversal imression between eyes and conspicuous antennal prominence, antennal sockets separated with minute lamina. Eyes moderately large (interocular distance 1.4 times as long as the radius). Ultimate joint of maxillary palpi elongate, widening toward apex and provided with five blunt glabrous teeth at apical margin. Apical joint of labial palpi pointed. Antennae filiform, reaching over three fourths of elytra, with 2nd joint transverse, 5 times shorter than 3 rd which in its turn 1.15 times shorter than 4th and consequent joints; 1st and 2nd joints with decumbent, following joints with erect brownish pubescence.

Pronotum transverse, 1.7 times wider than long, with almost straight lateral margins only slightly narrowed before anterior margin and acutely produced laterally at hind angles; front margin slightly convex, hind one slightly biarcuate; one fifth anteriorly and same width laterally with coarse punctuation; disk with conspicuous narrow longitudinal furrow reaching posterior margin.

Scutellum nearly parallel-sided, square, triangularly emarginate at apex.

Elytra slightly wider than pronotum basally and 3.5 times as long as wide humerally, slightly widening to apex and dehiscent before it, with four longitudinal costae irregularly granolose in interstices; first and third costae almost obsolete near apex. Dark uniform pubescence erect, short and dense.

Legs slender; ratio of length of tarsomeres in front tarsus 1:1.5:1.2:1.1:1.8.

Aedeagus relatively robust and straight (figs. 23-24).

Length: 6.5 mm .
Width (humerally): 1.5 mm .
Female unknown.
Type material
Holotype male: "CHINA: C SICHUAN, Xiling Snow Mts., 1,300-2,100 m, 12-20.VII.1999, s. Kazantsev leg." (ICM).

Diagnosis
L. xilingensis n. sp. seems to be very close to L. birmanensis Kleine (Bocakova, 2000), but may be distinguished by the narrower apex of the phallus and the presence of a triangilar "window" on the dorsal surface of the parameres (figs. 23-24).

## Comments

So far 6 species of this genus have been reported from continental China (Bocakova, 2000). This study adds four more, bringing the total number of described Chinese Libnetis to ten.

## Etymology

The specific name is derived from Xiling, the mountains west of Chengdu, the capital of Sichuan.

## Libnetis monachus n. sp. (figs. 25-26)

## Description

Dark brown; 2nd antennal joint and basis of front femora yellowish.

Male. Head only slightly wider than anterior pronotal margin, with conspicuous antennal prominence, antennal sockets separated with minute lamina. Eyes large (interocular distance about as long as the radius). Ultimate joint of maxillary paipi elongate, sharply pointed and glabrous at apex. Antennae filiform, slightly flattened from 3rd joint, reaching over two thirds of elytra, with 2nd joint transverse, 4.5 times shorter than 3rd which in its turn 1.3 times shorter than 4th and consequent joints; 1st and 2nd joints with decumbent, following joints with erect dense silver pubescence.

Pronotum transverse, 1.7 times wider than long, anteriorly conspicuously narrowed so posterior margin 1.6 times wider than anterior one; front margin prominently convex, hind one biarcuate; one fifth anteriorly and same width laterally with coarse punctuation; disk with narrow longitudinal rib forking in posterior half into three.

Scutellum nearly parallel-sided, square, triangularly emarginate at apex.

Elytra slightly wider than pronotum basally and 3.25 times as long as wide humerally, almost parallel-sided and slightly dehiscent before apex, with four longi-


Figs. 23-30. Aedeagi of Libnetis. L. xilingensis $n$. sp.: 23 . Dorsally; 24. Laterally, L. monachus n. sp. 25. Ventrally; 26. Laterally. L. latrunculus n. sp. 27. Ventrally; 28. Laterally. L. confucius n. sp. 29. Ventrally; 30 . Laterally. (Scale: 0.5 mm )

Edeagos de Libnetis. L. xilingensis sp. n. 23. Vista dorsal; 24. Vista lateral. L. monachus sp. n. 25. Vista ventral; 26. Vista lateral. L. latrunculus sp. n. 27. Vista ventral; 28 . Vista lateral. L. confucius sp. $n$. 29 . Vista ventral; 30 . Vista lateral. (Escala $0,5 \mathrm{~mm}$.)
tudinal costae irregularly reticulate in interstices; first costa almost obsolete in posterior half. Dark uniform pubescence erect, short and dense.

Legs slender; ratio of length of tarsomeres in front tarsus 1:0.9:0.7:0.6:1.3.

Aedeagus with long and straight median piece (figs. 25-26).

Female. Similar to male, but eyes smaller and antennae shorter.

Length: 4.6-4.7 mm.
Width (humerally): $1.2-1.25 \mathrm{~mm}$.
Type material
Holotype male: "CHINA: JIANGXI, Jinggang Shan, 700-1,000 m, 25-31.V.1998, S. Kazantsev leg." (ICM); paratype female: same label (ICM).

## Diagnosis

L. monachus $n$. sp . differs from L. xilingensis n. sp. by the yellowish second antennal joint, the structure of the apical joint of maxillary palpi, the size of the eyes and other external characters and by the shape of the aedeagus (figs. 25-26).

## Etymology

The specific name is derived from the Latin for monk, alluding to its black coloration.

Libnetis latrunculus n. sp. (figs. 27-28)

## Description

Black; narrow sides of pronotum and lateral margins of elytra, one interstice wide, at humeri two interstices wide, fulvous.

Male. Head small, as wide as anterior pronotal margin, with conspicuous antennal prominence, antennal sockets separated with minute lamina. Eyes small (interocular distance 2.4 times as long as the radius). Ultimate joint of maxillary palpi elongate, parallel-sided, flattened and glabrous at apex. Apical joint of labial palpi oval, pointed. Antennae filiform, slightly compressed from 3rd joint, reaching two thirds of elytra, with 2nd joint 2 times shorter than 3rd which in its turn 1.3 times shorter than 4th and consequent joints; 1st and 2nd joints with decumbent, following joints with erect brownish pubescence.

Pronotum transverse, 1.2 times wider than
long, with slightly narrowed anteriorly lateral margins and acutely laterally produced hind angles; front margin slightly convex, hind one biarcuate; one third anteriorly and bent lateral margins roughly rugulose; anterior half with conspicuous narrow longitudinal carina transformed posteriorly into shallow elongate impression.

Scutellum transverse, widely rounded at apex.

Elytra slightly wider than pronotum basally and 3.6 times as long as wide humerally, slightly widening to apex, with four longitudinal costae irregularly granolose in interstices; first and third costae almost obsolete near apex. Dark (on fulvous surface yellowish) uniform pubescence erect, short and dense.

Legs slender; ratio of length of tarsomeres in front tarsus 1.3:1.1:1:1.1:1.7.

Aedeagus with widened apically median piece (figs. 27-28).

Length: 6.1-6.5 mm.
Width (humerally): 1.4 mm .
Female unknown.
Type material
Holotype male: "CHINA: S SICHUAN, Luojishan, 2,200-2,800 m, 16-25.VII.1996, S. Kazantsev leg." (ICM); paratype male: same label (ICM).

## Diagnosis

L. latrunculus n. sp. may be placed near L. leei Kazantsev, 1999 from Taiwan due to the same type of the aedeagus distinguishing both species from their congenerics (Kazantsev \& Yang, 1999). Apart from the details of the aedeagus $L$. latrunculus $n$. sp. differs from $L$. leei by the coloration, eye size and other characters. The suture in the paratype is fulvous in the apical portion as well.

Etymology
The specific name is derived from the Latin for soldier of fortune, alluding to its fulvous stripes on sides of the black elytra.

Libnetis confucius n. sp. (figs. 29-30)
Description
Dark brown; 2nd antennal joint and basis of front femora yellowish.

Male. Head only slightly wider than anterior pronotal margin, with conspicuous antennal prominence, antennal sockets separated with minute lamina. Eyes relatively small (interocular distance twice as long as the radius). Ultimate joint of maxillary palpi elongate, widening toward apex and provided with five blunt glabrous teeth at apical margin. Ultimate joint of labial palpi also widening toward apex and provided with blunt glabrous teeth at apical margin. Antennae paraliel-sided, slightly compressed from 3rd joint, reaching over half of elytra, with 2nd joint transverse, 4 times shorter than 3rd and consequent joints; 1 st and 2 nd joints with decumbent, following joints with erect dense brownish pubescence.

Pronotum transverse, 1.8 times wider than long, slightly narrowed anteriorly; front margin almost straight, hind one slightly biarcuate; one third anteriorly and bent lateral margins with coarse punctuation; medially with short longitudinal carina transformed posteriorly into deep narrow impression.

Scutellum elongate, nearly parallel-sided, slightly emarginate at apex.

Elytra slightly wider than pronotum basally and 2.75 times as long as wide humerally, almost parallelsided, with four longitudinal costae irregularly reticulate in interstices; first and third costae almost obsolete near apex. Dark uniform pubescence erect, short and dense.

Legs slender; ratio of length of tarsomeres in front tarsus 0.8:0.7:0.7:0.8:1.

Aedeagus, figs. 29-30.
Female. Similar to male, but eyes smaller and antennae shorter.

Length: 4.3-5.4 mm.
Width (humerally): $1.2-1.5 \mathrm{~mm}$.
Type material
Holotype male: "CHINA: JIANGXI, Jinggang Shan, 700-1,000 m, 25-31.V.1998, S. Kazantsev leg." (ICM); paratypes, 2 males and 2 females: same label (ICM).

## Diagnosis

L. confucius n . sp. seems to be allied to $L$. fodingshanicus Bocakova, differing by the structure of the phalus of the aedeagus (figs. 29-30).

## Comments

In some of the paratypes the shoulders are fulvous.

Etymology
This species is named after Confucius, the founder of Confucianism.

## Resumen

Nuevos licidos de China (Coleoptera, Lycidae)

Se describen trece nuevas especies de licidos (Coleoptera, Lycidae) de China: Pyropterus (He/cophorus) tricolor sp. n. (figs. 1-3), Xylobanellus gansuensis sp. n., Cautires bulenoides sp. n. (figs. 4-6), C. yengi sp. n. (figs. 7-9), C. mao sp. n. (fig. 10), C. vigens sp. n. (figs. 11-13), C. sichuanensis sp. n. (figs. 14-16), C. galae sp. n. (figs. 17-19), Xylobanus montiphionus sp. n. (figs. 20-22), Libnetis xilingensis sp. n. (figs. 23, 24), L. monachus sp.n. (figs. 25, 26), L. latrunculus sp.n. (figs. 27, 28) y L. confucius sp. n. (figs. 29, 30). Es la primera cita de Xylobanellus Kleine, 1930, de China. Se describen por primera vez los parámero esclerotizados basalmente de Pyropterus Mulsant, 1838.

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## References

Bocákova, M., 1997. Revision of the genus Melaneros from China with a note on Ditoneces (Coleoptera, Lycidae). Acta SoC. Zool. Bohem., 61: 175-190.

- 2000. Review of the genus Libnetis from China with descriptions of several species from Thailand (Coleoptera: Lycidae). Acta Soc. Zool. Bohem., 64: 223-234.
Kazantsev, S., 1992. Revision of the genus Stadenus (Coleoptera, Lycidae) of Africa. Russ. Entom. J., 1(1), 1992: 37-50.

Kazantsev, S. \& Yang, P. S., 1999. Taxonomic and Synonymic Notes on Lycidae (Coleoptera) with the Description of New Species from Taiwan. Chin. J. Entom., 19: 239-247.
Kleine, R., 1930. Neue Lycidae der Malaiischen subregion. J. Fed. Malay States Mus., 16: 169-174.
Mulsant, E., 1838. Tableau synoptique des Lycides, ou des espèces du genre Lycus,
qui se rencontrent dans les environs de Lyon. Ann. Soc. Agr. Lyon, 1: 77-82.
Watermouse, C. O., 1878. On the different forms occuring in the Coleopterous family Lycidae, with descriptions of new genera and species. Trans. Entom. Soc. London, 1: 95-118.

- 1879. Illustrations of Typical Specimens in the collection of the British Museum. Part 1. Lycidae. London: 1-93.

