

# The genus *Laena* Latreille (Coleoptera: Tenebrionidae) in China (part 2), with descriptions of 30 new species and a new identification key<sup>1</sup>

WOLFGANG SCHAWALLER

## Abstract

New species of the genus *Laena* Latreille, 1829 (Coleoptera: Tenebrionidae) from China are described and newly collected specimens of previously known species are recorded. The distribution range of newly treated specimens also includes those Chinese provinces (Fujian, Guangxi, Guizhou, Henan, Jiangxi) from where previously no species of *Laena* were known. Five species are transferred from the genus *Laena* to the genus *Hypolaenopsis* Masumoto, 2001. New identification keys for all known species of *Laena* (96) and *Hypolaenopsis* (5) from China including Tibet are compiled. – New species: *Laena alesi* **n. sp.** (Yunnan), *L. baiorum* **n. sp.** (Yunnan), *L. baoshanica* **n. sp.** (Yunnan), *L. barkamica* **n. sp.** (Sichuan), *L. basumtsoica* **n. sp.** (Tibet), *L. bohrni* **n. sp.** (Sichuan), *L. cooteri* **n. sp.** (Jiangxi, Fujian), *L. dabashanica* **n. sp.** (Hubei), *L. davidi* **n. sp.** (Sichuan), *L. farkaci* **n. sp.** (Yunnan), *L. fouquei* **n. sp.** (Yunnan), *L. gaoligongica* **n. sp.** (Yunnan), *L. guangxica* **n. sp.** (Guangxi), *L. guizhouica* **n. sp.** (Guizhou), *L. gyalthagica* **n. sp.** (Yunnan), *L. hlavaci* **n. sp.** (Jiangxi), *L. janatai* **n. sp.** (Sichuan), *L. jiangxica* **n. sp.** (Jiangxi), *L. jinpingsica* **n. sp.** (Sichuan), *L. kalabi* **n. sp.** (Sichuan), *L. lisuorum* **n. sp.** (Yunnan), *L. maowenica* **n. sp.** (Sichuan), *L. michaeli* **n. sp.** (Yunnan), *L. moxica* **n. sp.** (Sichuan), *L. naxiorum* **n. sp.** (Yunnan), *L. nujiangica* **n. sp.** (Yunnan), *L. quinquagesima* **n. sp.** (Yunnan), *L. sehnali* **n. sp.** (Sichuan), *L. septuagesima* **n. sp.** (Yunnan), *L. xueshanica* **n. sp.** (Yunnan). – New combinations: *Hypolaenopsis benesi* (Schawaller, 2001) **n. comb.**, *H. hongyuanica* (Schawaller, 2001) **n. comb.**, *H. hualongica* (Schawaller, 2001) **n. comb.**, *H. nanpingica* (Schawaller, 2001) **n. comb.**, *H. nomurai* (Schawaller, 2001) **n. comb.**, all from *Laena*. – New synonym by priority: *Hypolaenopsis nanpingica* (Schawaller, 2001) = *H. uenoi* Masumoto, 2001 **n. syn.**

**Key words:** Coleoptera, Tenebrionidae, *Laena*, *Hypolaenopsis*, China, new species, taxonomy, distribution, identification key.

## Zusammenfassung

Neue Arten der Gattung *Laena* Latreille, 1829 (Coleoptera: Tenebrionidae) aus China werden beschrieben und neu gesammelte Exemplare bekannter Arten werden aufgeführt. Die neu behandelten Exemplare stammen auch aus solchen chinesischen Provinzen (Fujian, Guangxi, Guizhou, Henan, Jiangxi), aus denen bislang keine *Laena*-Arten bekannt waren. Fünf Arten werden von der Gattung *Laena* zur Gattung *Hypolaenopsis* Masumoto, 2001 verschoben. Neue Bestimmungsschlüssel für alle bekannten Arten von *Laena* (96) und *Hypolaenopsis* (5) aus China einschließlich Tibet werden erstellt. – Neue Arten: *Laena alesi* **n. sp.** (Yunnan), *L. baiorum* **n. sp.** (Yunnan), *L. baoshanica* **n. sp.** (Yunnan), *L. barkamica* **n. sp.** (Sichuan), *L. basumtsoica* **n. sp.** (Tibet), *L. bohrni* **n. sp.** (Sichuan), *L. cooteri* **n. sp.** (Jiangxi, Fujian), *L. dabashanica* **n. sp.** (Hubei), *L. davidi* **n. sp.** (Sichuan), *L. farkaci* **n. sp.** (Yunnan), *L. fouquei* **n. sp.** (Yunnan), *L. gaoligongica* **n. sp.** (Yunnan), *L. guangxica* **n. sp.** (Guangxi), *L. guizhouica* **n. sp.** (Guizhou), *L. gyalthagica* **n. sp.** (Yunnan), *L. hlavaci* **n. sp.** (Jiangxi), *L. janatai* **n. sp.** (Sichuan), *L. jiangxica* **n. sp.** (Jiangxi), *L. jinpingsica* **n. sp.** (Sichuan), *L. kalabi* **n. sp.** (Sichuan), *L. lisuorum* **n. sp.** (Yunnan), *L. maowenica* **n. sp.** (Sichuan), *L. michaeli* **n. sp.** (Yunnan), *L. moxica* **n. sp.** (Sichuan), *L. naxiorum* **n. sp.** (Yunnan), *L. nujiangica* **n. sp.** (Yunnan), *L. quinquagesima* **n. sp.** (Yunnan), *L. sehnali* **n. sp.** (Sichuan), *L. septuagesima* **n. sp.** (Yunnan), *L. xueshanica* **n. sp.** (Yunnan). – Neue Kombinationen: *Hypolaenopsis benesi* (Schawaller, 2001) **n. comb.**, *H. hongyuanica* (Schawaller, 2001) **n. comb.**, *H. hualongica* (Schawaller, 2001) **n. comb.**, *H. nanpingica* (Schawaller, 2001) **n. comb.**, *H. nomurai* (Schawaller, 2001) **n. comb.**, alle von *Laena*. – Neues Synonym wegen Priorität: *Hypolaenopsis nanpingica* (Schawaller, 2001) = *H. uenoi* Masumoto, 2001 **n. syn.**

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<sup>1</sup> Contributions to Tenebrionidae, no. 69. – For no. 68 see Stuttgarter Beiträge zur Naturkunde A, N. S. 1: 381–385 (2008).

## 1 Introduction

After publishing the recent revision of the Chinese *Laena* (SCHAWALLER 2001), I was immediately provided with a considerable number of newly collected specimens of this genus from different Chinese localities. These specimens turned out to be either new faunistic records, or again numerous new taxa, listed and described herein. The distribution range of newly treated specimens also includes those Chinese provinces (Fujian, Guangxi, Guizhou, Henan, Jiangxi) from where previously no species of *Laena* were known; nearly all those taxa are new to science. China houses an incredibly high number of species (96 at present) of the tenebrionid genus *Laena*. All species are wingless and nearly all species have restricted distribution areas. It can be predicted, that every subsequent finding in an as yet "unsifted" mature mountainous forest will yield further new taxa. The older references concerning the Chinese fauna are listed in my first contribution and are not repeated here. In additional recent papers our knowledge upon the genus *Laena* in the Nepal Himalayas (SCHAWALLER 2002) and in adjacent continental southeastern Asia except China (SCHAWALLER 2006) is summarized.

Through the courtesy of I. LÖBL (in litt.) I recently became aware of a hidden paper of JINGKE & PENG (1993), in which a new species of *Laena* from the Anhui Province is described. This description consists only of a few lines in Chinese, without any figures or a diagnosis, thus the taxonomic status of this taxon remains unclear. Moreover, the species name *chinensis* is a homonym of *Laena chinensis* Kaszab, 1965. A replacement name for *chinensis* Jingke & Peng will be chosen in a forthcoming paper together with I. LÖBL.

Concerning the species characters within the genus *Laena* I refer to the cited papers. As stated earlier, some taxa in this species-rich genus form natural groups (e. g. those species transferred herein to the genus *Hypolaenopsis* Masumoto, 2001, see chapter 2 below), but the bulk of the species still represents an unsatisfactory assemblage without resolved phylogenetic structure.

### Acronyms of depositories

BMNH	The Natural History Museum, London (MAX BARCLAY)
CAPE	Collection ANDREAS PÜTZ, Eisenhüttenstadt
CASO	Collection DR. ALEŠ SMETANA, Ottawa
CHHR	Collection HANS HEBAUER, Rain
CJTK	Collection JAROSLAV TURNA, Kostelec na Hané
CKBB	Collection KAROL BOHRN, Bratislava
CLSM	Collection LAURENT SOLDATI, Montferrier
CMLS	Collection MARTIN LILLIG, Saarbrücken
CRFL	Collection RENÉ FOUQUÉ, Liberec
CRSW	Collection RUDOLF SCHUH, Wien
CSBC	Collection STANISLAV BEČVÁŘ, České Budějovice
DEI	Deutsches Entomologisches Institut, Münchefeld (Dr. LOTHAR ZERCHE)

HNHM	Hungarian Natural History Museum, Budapest (Dr. OTTÓ MERKL)
NHMB	Naturhistorisches Museum, Basel (Dr. MICHEL BRANCUCCI)
NHMW	Naturhistorisches Museum, Wien (Dr. HARALD SCHILLHAMMER)
OUMNH	HOPE Entomological Collections, Oxford University Museum of Natural History (JON COOTER)
SMNS	Staatliches Museum für Naturkunde, Stuttgart

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## 2 Species of *Hypolaenopsis*

MASUMOTO (December 30, 2001) described the genus *Hypolaenopsis* erroneously within the tribe Adeliini (and not in Laenini), based on the single species *H. uenoi*. Nearly simultaneously, SCHAWALLER (November 30, 2001) published the first contribution on the Chinese species of *Laena*, describing five new species from that group. In that paper, I gave arguments that these five species form a natural group, but that this group is still included in *Laena* as long as a complete phylogenetic classification of this species-rich genus is not available. Due to MASUMOTO'S description, these five species are here formally transferred to *Hypolaenopsis*, although its phylogenetic position within the *Laena*-complex is still unsolved.

### *Hypolaenopsis benesi* (Schawaller, 2001) **n. comb.**

New material: Sichuan, Ganzi Tibetan Autonomous Prefecture, 55 km NE Batang, Shaluli Shan, 4200 m, 3.VII.1999, leg. A. PÜTZ, 2 ex. CAPE.

New combination: See remarks on genus *Hypolaenopsis*.

### *Hypolaenopsis hongyuanica* (Schawaller, 2001) **n. comb.**

New material: NW Sichuan, between Luhuo and Sanggarmai, pass W Luhuo, 4200–4300 m, 8.–28.VI.2004, leg. R. FABBRI, 4 ex. SMNS. – W Sichuan, pass SE Barkam, pass between Zhuokeji and Lianghekou, 4100 m, 10.–30.VI.2004, leg. R. FABBRI, 1 ex. SMNS. – W Sichuan, road Luhuo to Sertar, pass 40 km N Luhuo, 4200 m, 22.VII.1997, leg. M. TRÝZNA & O. ŠAFRANEK, 2 ex. CJTK.

New combination: See remarks on genus *Hypolaenopsis*.

*Hypolaenopsis hualongica* (Schawaller, 2001) **n. comb.**

New material: NW Sichuan, 20 km S Maeirma, 3800 m, 9.–29.VI.2004, leg. R. FABBRI, 2 ex. SMNS. – Central Sichuan, N pass Zhangla, Nanping, 4000 m, 22.VI.1996, leg. M. JANATA, 13 ex. CKBB, 2 ex. SMNS. – N Sichuan, 60 km S Hongyan, 2400 m, 27.–29.VI.1991, leg. J. KALÁB, 2 ex. CKBB, 2 ex. SMNS.

New combination: See remarks on genus *Hypolaenopsis*.

*Hypolaenopsis nanpingica* (Schawaller, 2001) **n. comb.**

*Hypolaenopsis uenoi* Masumoto, 2001 **n. syn.**

New combination: See remarks on genus *Hypolaenopsis*.

New synonymy: Both described taxa are conspecific, the species synonymy is caused by priority: MASUMOTO (December 30, 2001), SCHAWALLER (November 30, 2001).

*Hypolaenopsis nomurai* (Schawaller, 2001) **n. comb.**

New material: NW Sichuan, Min Shan, 2500–4500 m, 14.–16.VII.1990, leg. J. KOLIBÁČ, 1 ♂ SMNS.

New combination: See remarks on genus *Hypolaenopsis*.

Remarks: The identification of the newly listed specimen is uncertain, because the pronotum is somewhat longer as in the type series. However, the aedeagus shows no distinct differences.

**3 Key to the species of *Hypolaenopsis* in China**

Also compare figures of the specific characters in SCHAWALLER (2001), cited in the present new key as “Sch: figs.”.

- 1 Pronotum with crenulated lateral margins. – Sch: figs. 2–5. . . . . **nomurai**
- Pronotum with smooth lateral margins. . . . . **2**
- 2 Pronotum wider than medially long, maximum width near base. – Sch: figs. 6–9. . . . . **hualongica**
- Pronotum subquadrate or longer than wide, maximum width at or anterior to the middle. . . . . **3**
- 3 Pronotum with the maximum width near the middle, apicale very short, triangular. – Sch: figs. 10–13. . . . **hongyuanica**
- Pronotum with the maximum width in the anterior part, apicale very long, finger-like or shape unknown. . . . . **4**
- 4 Eyes completely reduced, only with some lighter cuticular spots; pronotum trapezoid, with straight lateral margins; aedeagus unknown. – Sch: figs. 14–16. . . . . **nanpingica**
- Eyes not completely reduced, kidney-shaped in lateral view; pronotum cordiform, with rounded lateral margins; aedeagus with long, finger-like apicale. – Sch: figs. 17–20. **benesi**

**4 New species of *Laena****Laena alesi* **n. sp.**

(Figs. 97–100)

Holotype (♂): China, N Yunnan, Nujiang Lisu Autono-

mous Prefecture, Gongshan County, Gaoligong Shan, 3000–3050 m, 21.VI.2005, leg. A. SMETANA, SMNS.

Paratypes: China, N Yunnan, Nujiang Lisu Autonomous Prefecture, Gongshan County, Gaoligong Shan, 3000–3050 m, 21.VI.2005, leg. M. SCHÜLKE, 3 ex. SMNS.

Etymology: Named in honour of Dr. ALEŠ SMETANA (Ottawa), who collected several species of *Laena* in China and generously deposited most of them in the Natural History Museum Stuttgart.

Description: Body length 6.2–6.5 mm. Eyes (Fig. 97) not reduced, not prominent. Shape of pronotum see Fig. 97, disc with scattered punctures slightly varying in size, distance between 0.5–5 diameters, all punctures bearing short adpressed setae, surface with a pair of feeble impressions and slightly shagreened, lateral margins bordered and before the middle with a distinct irregular emargination, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation than on disc and without setation. Elytra (Fig. 97) with rows of punctures without striae, punctures of rows of similar size as pronotal punctures, each puncture bearing a microseta, intervals with very few nearly indistinct punctures bearing a short and adpressed seta, all intervals flat and shining, interval 9 with 4 indistinct setiferous pores. All femora in both sexes without teeth. All tibiae of males without modifications (Figs. 98–99). Aedeagus see Fig. 100.

Diagnosis: With *Laena xueshanica* n. sp. from Yunnan *L. alesi* n. sp. shares the general body size and shape, the general dorsal punctation and setation, and the laterally bordered pronotum. *L. alesi* n. sp. can be recognized by a distinct irregular emargination before the middle of the pronotal lateral margins, by larger punctures in the elytral rows, by unmodified male tibiae, and by a different aedeagus with acute apicale (blunt tip in *L. xueshanica* n. sp.). *L. naxiorum* n. sp., also from Yunnan, belongs to the same group of species, but has a different shape of the pronotum without lateral emargination, modified male tibiae, and also a different aedeagus.

*Laena baiorum* **n. sp.**

(Figs. 101–104)

Holotype (♂): China, N Yunnan, Diancang Shan 5 km SSW Dali, 2800 m, 26.VIII.2003, leg. M. SCHÜLKE, SMNS.

Paratypes: Same data as holotype, 4 ex. SMNS. – China, N Yunnan, Diancang Shan 5 km SSW Dali, 2800 m, 26.VIII.2003, leg. D. WRASE, 1 ex. CJTK. – China, N Yunnan, Diancang Shan 3 km W Dali, 2700 m, 28.VIII.2003, leg. D. WRASE, 1 ex. CJTK.

Etymology: Named in honour of the Chinese minority Bai mainly settling in the village Dali, in whose adjacent Diancang Shan the type series was collected.

Description: Body length 8.0–9.0 mm. Eyes (Fig. 101) not reduced, prominent. Shape of pronotum see Fig. 101, disc with coarse but not confluent punctures, distance between 0.5–1 diameters, most punctures bear-

ing short adpressed setae; surface uneven, with a pair of impressions on the disc and with an indistinct mediobasal impression, surface somewhat shagreened but shining, lateral margins bordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation and shorter setation than on disc. Elytra (Fig. 101) with rows of punctures without striae, these rows disappearing in the posterior part, punctures of rows slightly smaller than pronotal punctures, each puncture bearing a microseta, intervals with very few indistinct punctures bearing a similar small adpressed seta, intervals 1–6 flat, external intervals convex, interval 9 with 2 distinct setiferous pores. All femora in both sexes without teeth. Posterior tibiae of males basomedially somewhat swollen (Figs. 102–103). Aedeagus see Fig. 104.

**Diagnosis:** *Laena baiorum* n.sp. and *L. fouquei* n.sp. share the medium-sized body length, the prominent eyes, the laterally bordered pronotum with a pair of discal impressions, the dorsal punctation and very short dorsal setation, and also the shape of the aedeagus. In *L. fouquei* n.sp., however, the shape of the pronotum is different, widest in the middle (widest in the anterior part in *L. baiorum* n.sp.), the pronotal punctation is somewhat finer and the posterior male tibiae are unmodified. *L. yufengsi* Masumoto, 1996, also from Yunnan, belongs to the same group, but in this species the pronotum shape is also different and its lateral margins are indistinctly bordered, the aedeagus is different and the male posterior tibiae are without modification.

***Laena baoshanica* n.sp.**  
(Figs. 113–116)

**Holotype** (♂): China, Yunnan, Gaoligong Shan, pass SW Baoshan, 4.–8.VI.2005, leg. I. JENIS, CJTK.

**Paratypes:** Same data as holotype, 4 ex. CJTK, 3 ex. SMNS.

**Etymology:** Named after the village Baoshan, where the types were collected.

**Description:** Body length 4.8–6.0 mm. Eyes (Fig. 113) not reduced, prominent. Shape of pronotum see Fig. 113, disc scattered with large punctures, distance between 0.5–2 diameters, all punctures bearing long erect setae, surface without impressions and shining, lateral margins bordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation than but similar long setation as on disc. Elytra (Fig. 113) with rows of punctures without striae, punctures of rows equal in size to pronotal punctures, each puncture bearing a long and erect seta, intervals with a row of fine punctures bearing a similar long seta, all intervals flat and shining, interval 9 with 4 distinct setiferous pores. All femora in both sexes without teeth. Posterior tibiae of males medially swollen and inte-

riorly with hooked apex (Figs. 114–115). Aedeagus see Fig. 116.

**Diagnosis:** *Laena baoshanica* n.sp. can be recognized by the prominent eyes, the bordered lateral margins of the pronotum, the long and erect dorsal setation, the unarmed femora and the medially swollen posterior tibiae in males, and the shape of the aedeagus. The prominent eyes are quite unusual among the nearly 100 Chinese species; only *L. angulifemoralis* Masumoto, 1996, also from Yunnan, has similar eyes (also a similar shape of the pronotum with lateral border, and a long dorsal setation), but in that species all femora are armed by distinct angles, and the shape of the aedeagus is different.

***Laena barkamica* n.sp.**  
(Figs. 69–72)

**Holotype** (♂): China, W Sichuan, Qionglai Shan, Mou Pi Shan, Barkam, 15 km S Zhuokeji, 3100–3750 m, 10.–30. VI.2004, leg. R. FABBRI, SMNS.

**Paratypes:** Same data as holotype, 10 ex. SMNS, 2 ex. HNHM.

**Etymology:** Named after the village Barkam, where the types were collected.

**Description:** Body length 3.8–5.0 mm. Eyes (Fig. 69) not reduced, not prominent. Shape of pronotum see Fig. 69, disc scattered with large punctures, distance between 2–3 diameters, all punctures bearing small adpressed setae, surface without impressions and shining, lateral margins unbordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation than and similar setation as on disc. Elytra (Fig. 69) with rows of punctures without striae, punctures of rows smaller than punctures on pronotum, each puncture bearing a short and adpressed seta, intervals with very few nearly indistinct punctures bearing a similar short seta, all intervals flat and shining, interval 9 with 3 setiferous pores. All femora in both sexes with teeth. All tibiae of males without modifications (Figs. 70–71). Aedeagus see Fig. 72.

**Diagnosis:** *Laena barkamica* n.sp. and *L. fengileana* Masumoto, 1996 from Shaanxi and Sichuan share the general body size and shape, the unbordered lateral margins of the pronotum and the armed femora, but *L. barkamica* n.sp. can be separated by larger and denser setation on the pronotum, short and adpressed dorsal setation on pronotum and elytra, smaller elytral punctures, and different shape of the aedeagus.

***Laena basumtsaica* n.sp.**  
(Figs. 25–28)

**Holotype** (♂): China, E Tibet, 90 km W Gyamda, Basum Tso, 3700 m, 17.VI.2001, leg. A. WRZECIONKO, CJTK.

**Paratypes:** Same data as holotype, 2 ex. CJTK, 1 ex. SMNS.

**Etymology:** Named after the region and lake Basum Tso, where the type series was collected.

**Description:** Body length 7.5–8.5 mm. Eyes (Fig. 25) not reduced, not prominent. Shape of pronotum see Fig. 25, disc with dense but not confluent punctures, distance between 1–3 diameters, all punctures bearing longer adpressed setae, surface with a pair of feeble impressions on the disc and a feeble mediobasal impression, and shagreened, lateral margins finely bordered, basal margin unbordered and not bent downwards, posterior angles completely rounded and indistinct, propleura with sparser punctation and shorter setation than on disc. Elytra (Fig. 25) with rows of punctures without striae; these rows partly disappearing in posterior part, punctures of rows as large as pronotal punctures, most punctures bearing a microseta, intervals with a few scattered fine punctures which are smaller than the punctures of the rows bearing a similar microseta; internal intervals flat and feebly shagreened, interval 9 with 3 indistinct setiferous pores. All femora in both sexes without teeth. All tibiae of males interiorly with a few granules (Figs. 26–27). Aedeagus see Fig. 28.

**Diagnosis:** With *Laena janatai* n. sp. from Sichuan *L. basumtsoica* n. sp. shares the general body size and shape, as well as the pronotum with protruding anterior corners and bordered lateral margins; however, in *L. janatai* n. sp. the pronotal punctation is distinctly coarser, the elytral intervals are distinctly punctate, the elytral interval 7 is somewhat convex, the male tibiae show no distinct modifications, and the parameres of the aedeagus are somewhat broader. *L. michaeli* n. sp. and *L. quinquagesima* n. sp., both from Yunnan, have a similarly shaped pronotum, but both have a different dorsal punctation, a laterally unbordered or incompletely bordered pronotum, and a different shape of the aedeagus, besides other characters.

***Laena bohrni* n. sp.**  
(Figs. 53–56)

**Holotype** (♂): China, W Sichuan, S Barkam, between Lianghekou and Fubian, 3450–3650 m, 10.–30.VI.2004, leg. R. FABBRI, SMNS.

**Paratypes:** China, N Sichuan, valley SW Barkam, 3000–3800 m, 22.VII.1995, leg. M. JANATA, 4 ex. CKBB, 1 ex. SMNS.

**Etymology:** Named in honour of KAROL BOHRN (Bratislava), who entrusted me with the study of specimens from his collection and who allowed me to keep some duplicates.

**Description:** Body length 7.5–8.5 mm. Eyes (Fig. 53) not reduced, not prominent. Shape of pronotum see Fig. 53, disc with coarse and partly confluent punctures, distance between 0.5–2 diameters, most punctures bearing short adpressed setae; surface uneven, with a pair of indistinct impressions on the disc and with an indistinct longitudinal medial impression, surface shining, lateral

margins unbordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with larger but sparser punctation than and similar setation as on disc. Elytra (Fig. 53) with rows of punctures without striae, punctures of rows equal in size to pronotal punctures, each puncture bearing a small and adpressed seta, intervals with a few very fine punctures bearing a similar seta, intervals flat, intervals 5 and 7 slightly convex but not keel-like, intervals 3, 5 and 7 somewhat broader and even darker than other intervals, interval 9 with 4 distinct setiferous pores. All femora in both sexes with strong teeth, teeth of anterior femur with blunt tip. All tibiae of males without modifications (Figs. 54–55). Aedeagus see Fig. 56.

**Diagnosis:** *Laena bohrni* n. sp. can be recognized by its large body size, by its distinctly armed femora, by its round and convex pronotum with coarse punctation without lateral border, and by the shape of its aedeagus. *L. ganzica* Schawaller, 2001 from Sichuan is similar and has even a similar shape of the aedeagus, but that species is smaller (6.0–7.2 mm), the pronotum is longer and the elytral intervals 3, 5 and 7 are distinctly convex. *L. smetanai* Schawaller, 2001, also from Sichuan, belongs to the same group, has a similarly round and convex pronotum, but its pronotal punctation is much finer and sparser and its aedeagus is different. See also under *L. dabashanica* n. sp. from Hubei.

***Laena cooteri* n. sp.**  
(Figs. 5–8)

**Holotype** (♂): China, Jiangxi, Wuyi Shan Nature Reserve, Huanggan Shan, 1800–2050 m, 5.VI.2001, leg. J. COOTER & P. HLAVÁČ, SMNS.

**Paratypes:** Same data as holotype, 3 ex. HNHM. – China, W Fujian, Emei Feng, 1555 m, 24.IV.2006, leg. J. TURNA, 1 ex. CJTK.

**Etymology:** Named in honour of JON COOTER (Hereford, England), one of the collectors of the type series.

**Description:** Body length 4.0–5.2 mm. Eyes (Fig. 5) not reduced, not prominent. Shape of pronotum see Fig. 5, disc scattered with large punctures, distance between 2–5 diameters, all punctures bearing long erect setae, surface without impressions and shining, lateral margins bordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation than and similar setation as on disc. Elytra (Fig. 5) with rows of punctures without striae, punctures of rows equal in size to pronotal punctures, each puncture bearing a long and erect seta, intervals with very few nearly indistinct punctures bearing a similar long seta, all intervals slightly convex and shining, interval 9 with 4 indistinct setiferous pores. All femora in both sexes with a pair of unequal teeth, in the anterior and middle femora the pair consists of a prominent and a tubercle-like tooth, on the posterior femora the pair con-

sists of a longer and a shorter tooth. All tibiae of males without modifications (Figs. 6–7). Aedeagus see Fig. 8.

**Diagnosis:** The three species newly described herein from Province Jiangxi (*Laena cooteri* n. sp., *L. hlavaci* n. sp., *L. jiangxica* n. sp.) share the general body size and shape and the dorsal punctation and setation, but can be separated by the unarmed (*L. jiangxica* n. sp.) or armed femora (*L. cooteri* n. sp., *L. hlavaci* n. sp.), by unbordered (*L. hlavaci* n. sp.) or bordered lateral margins of the pronotum (*L. cooteri* n. sp., *L. jiangxica* n. sp.), by shagreened (*L. hlavaci* n. sp.) or shining pronotal surface (*L. cooteri* n. sp., *L. jiangxica* n. sp.), by flat (*L. hlavaci* n. sp.) or slightly convex elytral intervals (*L. cooteri* n. sp., *L. jiangxica* n. sp.), and by a different shape of the aedeagus. See also under *L. jiangxica* n. sp. concerning the separation of *L. guizhouica* n. sp. from Province Guizhou.

**Distribution:** The type locality in the Province Jiangxi is situated close to the adjacent locality in Fujian, which is in the same mountain range.

*Laena dabashanica* n. sp.  
(Figs. 37–40)

**Holotype** (♂): China, W Hubei, Daba Shan, pass E Mt. Da Shennongjia, 12 km NW Muyuping, 1950 m, 16.–22.VII.2001, leg. D. WRASE, SMNS.

**Paratypes:** Hubei, Daba Shan, 13 km NW Muyuping, 1900 m, 16.VII.2002, leg. STARY, 1 ex. CRSW, 1 ex. SMNS. – W Hubei, Daba Shan, pass E Mt. Da Shennongjia, 12 km NW Muyuping, 1950 m, 16.–22.VII.2001, leg. A. SMETANA, 1 ex. CASO, 1 ex. SMNS. – W Hubei, Daba Shan, 11 km NW Muyuping, 1960 m, 18.VII.2001, leg. A. SMETANA, 1 ex. SMNS.

**Etymology:** Named after the Daba Shan [Shan = Mountain], where the types were collected.

**Description:** Body length 7.5–8.5 mm. Eyes (Fig. 37) not reduced, not prominent. Shape of pronotum see Fig. 37, disc with coarse and partly confluent punctures, distance between 0.5–3 diameters, most punctures bearing short adpressed setae; surface uneven, with a pair of distinct impressions on the disc and with an indistinct mediobasal impression, surface shining, lateral margins indistinctly bordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with slightly wider punctation than and similar setation as on disc. Elytra (Fig. 37) with rows of punctures without striae, punctures of rows equal in size to pronotal punctures, each puncture bearing a small and adpressed seta, intervals with a few very fine punctures bearing a somewhat longer seta, internal intervals flat, interval 7 distinctly convex and nearly keel-like except at the elytral tip, interval 9 with indistinct setiferous pores. All femora in both sexes with strong teeth, teeth of anterior femur with blunt tip. All tibiae of males without modifications (Figs. 38–39). Aedeagus see Fig. 40.

**Diagnosis:** *Laena dabashanica* n. sp. and *L. chinensis* Kaszab, 1965 share the general body size and sha-

pe, the shining dorsal surface and elytral punctation, and the strong femoral teeth, but the new species can be distinguished by a denser pronotal punctation, indistinct pronotal lateral margins, a strongly convex elytral interval 7, and a different shape of the aedeagus.

*Laena davidi* n. sp.  
(Figs. 77–80)

**Holotype** (♂): China, W Sichuan, Daxue Shan, E Tsheto La pass, W Kangding, 3500 m, 25.V.1997, leg. D. WRASE, SMNS.

**Paratype:** China, NW Sichuan, Maierma, 40 km SE Aba, 3250 m, 9.–29.VI.2004, leg. R. FABBRI, 1 ex. SMNS.

**Etymology:** Named in honour of DAVID WRASE (Berlin), who collected the holotype and several other species of *Laena* in China and generously deposited most of them in the Natural History Museum Stuttgart.

**Description:** Body length 4.2–4.7 mm. Eyes (Fig. 77) not reduced, not prominent. Shape of pronotum see Fig. 77, disc with coarse and confluent punctures, distance between 0.5–1 diameters, most punctures bearing short adpressed setae; surface uneven, with a pair of deep impressions and a medial longitudinal impression on the disc and with a laterobasal impression besides the posterior angles, surface dull, lateral margins distinctly marked and crenulate but unbordered, basal margin unbordered and not bent downwards, posterior angles slightly marked, propleura with wider punctation and shorter setation than on disc. Elytra (Fig. 77) with rows of punctures without striae, punctures of rows equal in size to pronotal punctures, each puncture bearing a small and adpressed seta, intervals with similar small adpressed seta, intervals 3, 5 and 7 distinctly convex but not keel-like, the other intervals flat, interval 9 without distinct setiferous pores. All femora in males (female unknown) without teeth. Posterior tibiae of males with finely hooked inner apex (Figs. 78–79). Aedeagus see Fig. 80.

**Diagnosis:** With *Laena luhuoica* Schawaller, 2001 from Sichuan *L. davidi* n. sp. shares the small body size and shape, the dull surface, the coarse punctation and the impressions on the pronotum, the unarmed femora and the male posterior tibiae with finely hooked inner apex, and even the shape of the aedeagus. However, in *L. davidi* n. sp. the elytra bear distinct and equally convex intervals 3, 5 and 7, and the joint elytral disc between the intervals 7 is nearly flat, whereas in *L. luhuoica* only the interval 7 is marked and the disc between the intervals 7 is convex. Additionally, the pronotum is flatter in *L. davidi* n. sp.

*Laena farkaci* n. sp.  
(Figs. 61–64)

**Holotype** (♂): China, N Yunnan, Xue Shan near Zhongdian, 3800 m, 26.VI.1996, leg. A. SMETANA, J. FARKAČ & P. KABÁTEK, NHMB.

**Paratypes:** Same data as holotype, 8 ex. NHMB, 5 ex. SMNS. – N Yunnan, 51 km SSE Zhongdian, 2970 m,

16.VIII.2003, leg. A. SMETANA, 3 ex. CASO. – N Yunnan, 46 km SSE Zhongdian, 3050–3100 m, 17.VIII.2003, leg. A. SMETANA, 6 ex. SMNS. – N Yunnan, 46 km SSE Zhongdian, 3050–3100 m, 17.VIII.2003, leg. D. WRASE, 5 ex. CJTK. – N Yunnan, 48 km N Zhongdian, 3220 m, 21.VIII.2003, leg. A. SMETANA, 3 ex. SMNS. – N Yunnan, pass 28 km ESE Zhongdian, 3700–3750 m, 22.VIII.2003, leg. A. SMETANA, 4 ex. SMNS, 3 ex. HNHM.

**Etymology:** Named in honour of Dr. JAN FARKAČ (Prague), one of the collectors of the type series.

**Description:** Body length 3.5–4.3 mm. Eyes (Fig. 61) not reduced, not prominent. Shape of pronotum see Fig. 61, disc with scattered punctures, distance between 1–4 diameters, all punctures bearing short adpressed setae, surface without impressions and shining, lateral margins bordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation and shorter setation than on disc. Elytra (Fig. 61) with rows of punctures without striae, punctures of rows equal in size to pronotal punctures, each puncture bearing a short and adpressed seta, intervals with a row of fine punctures bearing a similar short seta, all intervals flat and shining, interval 9 with 2 setiferous pores. All femora in both sexes with teeth. All tibiae of males without modifications (Figs. 62–63). Aedeagus see Fig. 64.

**Diagnosis:** *Laena farkaci* n.sp. and *L. luguica* Schawaller, 2001 from Sichuan and Yunnan share the small body size, the laterally bordered subquadrate pronotum, the similar dorsal punctation and the distinctly armed femora, but *L. farkaci* n.sp. is distinguished by its shorter dorsal setation and by its completely different shape of the aedeagus. See also *L. septuagesima* n.sp. with unbordered pronotal lateral margins, and with longer and erect dorsal setation.

***Laena fouquei* n.sp.**  
(Figs. 93–96)

**Holotype** (♂): China, Yunnan, Haba Shan, 3500–4000 m, 7–10.VI.2002, leg. S. BEČVÁŘ, R. & H. FOUQUÉ, CSBC.

**Paratypes:** China, Yunnan, Haba Shan, 3150–3500 m, 6–11.VI.2002, leg. S. BEČVÁŘ, R. & H. FOUQUÉ, 4 ex. CSBC, 4 ex. CRFL, 4 ex. SMNS. – China, Yunnan, Haba Shan, 3150–3500 m, 16–18.VI.2004, leg. R. & H. FOUQUÉ, 2 ex. CRFL, 1 ex. SMNS. – China, NW Yunnan, Haba Shan, Haba, 3200 m, 2.VII.2005, leg. M. JANATA, 2 ex. BMNH. – China, NW Yunnan, Haba Shan, Haba, 4000 m, 3.VII.2005, leg. M. JANATA, 1 ex. BMNH. – China, NW Yunnan, Haba Shan, Haba, 4000 m, 15.VII.2006, leg. M. JANATA, 1 ex. BMNH.

**Etymology:** Named in honour of RENÉ FOUQUÉ (Liberec, Czech Republic), collector of the type series.

**Description:** Body length 6.0–8.5 mm. Eyes (Fig. 93) not reduced, prominent. Shape of pronotum see Fig. 93, disc with large punctures, distance between 1–3 diameters, most punctures bearing short adpressed setae; surface uneven, with a pair of impressions on the disc and with an indistinct mediobasal impression, surface shining, lateral margins bordered, basal margin unbordered and

not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation and shorter setation than on disc. Elytra (Fig. 93) with rows of punctures without striae, punctures of rows equal in size to pronotal punctures, each puncture bearing a small and adpressed seta, intervals with an irregular row of distinct punctures bearing a similar small adpressed seta, intervals 1–6 flat, interval 7 convex but not keel-like, interval 9 with 2 distinct setiferous pores. All femora in both sexes without teeth. All tibiae of males without modifications (Figs. 94–95). Aedeagus see Fig. 96.

**Diagnosis:** *Laena fouquei* n.sp., *L. chinensis* Kaszab, 1965 and *L. kubani* Schawaller, 2001, all from Yunnan and even from the same locality, share their general body size and shape, and to a certain extent their dorsal punctation and setation as well as their pronotal impressions. In *L. kubani*, however, the pronotal lateral margins are unbordered, the pronotal disc and the elytral intervals have a denser punctation, the femora are distinctly angled, and the aedeagus is different. In *L. chinensis*, the pronotum and elytral structure is similar to *L. fouquei* n.sp., but the femora bear distinct teeth, and the aedeagus is also different. See also *L. baiorum* n.sp. from Yunnan.

***Laena gaoligongica* n.sp.**  
(Figs. 81–84)

**Holotype** (♂): China, N Yunnan, Nujiang Lisu Autonomous Prefecture, Gongshan County, Gaoligong Shan, 3000–3050 m, 21.VI.2005, leg. M. SCHÜLKE, SMNS.

**Paratypes:** Same data as holotype, 17 ex. SMNS, 3 ex. HNHM. – China, N Yunnan, Nujiang Lisu Autonomous Prefecture, Gongshan County, Gaoligong Shan, 3000–3050 m, 21.VI.2005, leg. A. SMETANA, 3 ex. CASO, 2 ex. SMNS.

**Etymology:** Named after the Gaoligong Shan, where the types were collected.

**Description:** Body length 4.5–6.0 mm. Eyes (Fig. 81) not reduced, not prominent. Shape of pronotum see Fig. 81, disc with coarse and confluent punctures, distance between 0.5–1 diameters, most punctures bearing short adpressed setae; surface uneven, with a pair of deep impressions on the disc and with an indistinct mediobasal impression, surface dull, lateral margins unbordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation and shorter setation than on disc. Elytra (Fig. 81) with rows of punctures without striae, size of punctures of rows equal to pronotal punctures, each puncture bearing a small and adpressed seta, intervals with a row of distinct granules bearing a similar small adpressed seta, intervals 3 and 5 slightly, interval 7 distinctly convex but not keel-like, the other intervals flat, interval 9 with 2 distinct setiferous pores. All femora in both sexes without teeth. All tibiae of males without modifications (Figs. 82–83). Aedeagus see Fig. 84.

**Diagnosis:** This new species is characterized by the coarse confluent punctation of the pronotum, the pronotum with a pair of deep impressions and the unbordered lateral margins, the elytra with the intervals more convex than the others, unarmed femora and the shape of the aedeagus. *Laena ganzica* Schawaller, 2001 from Sichuan possesses a similar pronotum with impressions and similar elytra with elevated odd-numbered intervals, but in that species all femora bear distinct teeth and the aedeagus is shaped differently.

***Laena guangxica* n. sp.**  
(Figs. 9–12)

**Holotype** (♂): China, Guangxi, Miao'er Shan, 1800–2000 m, 15.–16.VIII.1994, leg. M. TRONQUET, SMNS.

**Paratypes:** Same data as holotype, 1 ex. SMNS, 1 ex. CLSM.

**Etymology:** Named after the Province Guangxi, where the types were collected.

**Description:** Body length 3.5–4.3 mm. Eyes (Fig. 9) not reduced, not prominent. Shape of pronotum see Fig. 9, disc scattered with large punctures, distance between 1–3 diameters, all punctures bearing long erect setae, surface without impressions and shining, lateral margins bordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation and shorter setation than on disc. Elytra (Fig. 9) with rows of punctures without striae, punctures of rows equal in size to pronotal punctures, each puncture bearing a long and erect seta, intervals with very few nearly indistinct punctures bearing a similar long seta, all intervals slightly convex and shining, interval 9 with 4 setiferous pores. All femora in both sexes without teeth. All tibiae of males without modifications (Figs. 10–11). Aedeagus see Fig. 12.

**Diagnosis:** *Laena guangxica* n. sp., *L. daliensis* Masumoto & Yin, 1994 and *L. watanabei* Masumoto & Yin, 1993, all from Yunnan, share the general body size and shape, the subquadrate pronotum, the unarmed legs, the large dorsal punctation and the long and erect dorsal setation, but *L. guangxica* n. sp. is mainly separated by a different aedeagus and by a narrower pronotum. See also *L. guizhouica* n. sp. from Province Guizhou with a similar aedeagus but with a distinctly cordiform pronotum.

***Laena guizhouica* n. sp.**  
(Figs. 17–20)

**Holotype** (♂): China, Guizhou, Leishan County, SE Kaili, NE Leishan, eastern slope of Leigong Shan, 2.5 km E pass, 1600 m, 23.–24.VI.2001, leg. H. SCHILLHAMMER, NHMW.

**Paratypes:** Same data as holotype, 1 ex. NHMW, 1 ex. SMNS.

**Etymology:** Named after the Province Guizhou, where the types were collected.

**Description:** Body length 4.5–5.3 mm. Eyes

(Fig. 17) not reduced, not prominent. Shape of pronotum see Fig. 17, disc scattered with large punctures, distance between 2–3 diameters, all punctures bearing long erect setae, surface without impressions and shining, lateral margins bordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation and shorter setation than on disc. Elytra (Fig. 17) with rows of punctures without striae, punctures of rows equal in size to pronotal punctures, each puncture bearing a long and erect seta, intervals with very few nearly indistinct punctures bearing a similar long seta, all intervals slightly convex and shining, interval 9 with 4 setiferous pores. All femora in both sexes without teeth. All tibiae of males without modifications (Figs. 18–19). Aedeagus see Fig. 20.

**Diagnosis:** *Laena guizhouica* n. sp., *L. daliensis* Masumoto & Yin, 1994 and *L. watanabei* Masumoto & Yin, 1993, all from Yunnan, share the general body size and shape, the unarmed legs, the large dorsal punctation and the long and erect dorsal setation; *L. guizhouica* n. sp. is mainly distinguished by a completely different, cordiform pronotum (subquadrate in the compared species). In *L. guizhouica* n. sp. the aedeagus is similar to *L. watanabei*, but differs in *L. daliensis*. See also *L. jiangxica* n. sp. and *L. moxica* n. sp.

***Laena gyalthagica* n. sp.**  
(Figs. 121–124)

**Holotype** (♂): China, N Yunnan, Zhongdian County, pass 28 km ESE Zhongdian, 3700 m, 22.VIII.2003, leg. M. SCHÜLKE, SMNS.

**Paratypes:** Same data as holotype, 8 ex. SMNS, 1 ex. CRSW. – China, N Yunnan, Zhongdian County, pass 28 km ESE Zhongdian, 3700–3750 m, 22.VIII.2003, leg. A. SMETANA, 2 ex. CASO, 2 ex. CJTK. – China, N Yunnan, Zhongdian County, 48 km N Zhongdian, 3220 m, 21.VIII.2003, leg. M. SCHÜLKE, 2 ex. SMNS. – China, N Yunnan, Zhongdian County, 48 km N Zhongdian, 3220 m, 21.VIII.2003, leg. A. SMETANA, 3 ex. SMNS.

**Etymology:** Named after the Tibetan name Gyalthag for the village Zhongdian (Chinese name), in whose vicinity the types were collected.

**Description:** Body length 3.0–4.5 mm. Eyes (Fig. 121) not reduced, not prominent. Shape of pronotum see Fig. 121, disc with scattered punctures, distance between 1–2 diameters, all punctures bearing distinct adpressed setae, surface without impressions and shining, lateral margins bordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation and shorter setation than on disc. Elytra (Fig. 121) with rows of punctures without striae, punctures of rows somewhat larger than pronotal punctures, each puncture bearing a distinct adpressed seta, intervals with several fine punctures bearing a similar distinct and adpressed seta, all intervals flat and shining, interval 9 with 2 distinct setiferous pores. All



femora in both sexes without teeth. All tibiae of males without modifications (Figs. 122–123). Aedeagus see Fig. 124.

**Diagnosis:** *Laena gyalthagica* n. sp. belongs to a group of small species with a subquadrate flat pronotum with distinct lateral border, and without any teeth on the femora (e. g. *L. alticola* Blair, 1923, *L. daliensis* Masumoto & Yin, 1994, *L. paomaica* Schawaller, 2001 und *L. parallelocollis* Schuster, 1926), but is distinguished by the distinct dense and adpressed setation on pronotum and elytra, and by the shape of the aedeagus. Among the mentioned species only *L. daliensis* possesses also a distinct and dense dorsal setation, but in this species the bristles are long and erect, besides the different shape of the aedeagus.

***Laena hlavaci* n. sp.**

(Figs. 1–4)

**Holotype** (♂): China, Jiangxi, Wuyi Shan Nature Reserve, Huanggan Shan, 1800–2050 m, leg. J. COOTER & P. HLAVÁČ, SMNS.

**Paratypes:** Same data as holotype, 2 ex. HNHM.

**Etymology:** Named in honour of Ing. PETER HLAVÁČ (Košice, Slovakia), one of the collectors of the type series.

**Description:** Body length 5.0–6.0 mm. Eyes (Fig. 1) not reduced, not prominent. Shape of pronotum see Fig. 1, disc scattered with large punctures, distance between 2–5 diameters, all punctures bearing long erect setae, surface without impressions and shagreened, lateral margins unbordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation and shorter setation than on disc. Elytra (Fig. 1) with rows of punctures without striae, punctures of rows equal in size to pronotal punctures, each puncture bearing a long and erect seta, intervals with very few nearly indistinct punctures bearing a similar long seta, all intervals flat and shining, interval 9 with 4 indistinct setiferous pores. All femora in both sexes with a pair of unequal teeth, in the anterior and middle femora the pair consists of a prominent and a tubercle-like tooth, in the posterior femora the pair consists of a longer and a shorter tooth. All tibiae of males without modifications (Figs. 2–3). Aedeagus see Fig. 4.

**Diagnosis:** See *Laena cooteri* n. sp. to distinguish the three species known from Province Jiangxi.

***Laena janatai* n. sp.**

(Figs. 29–32)

**Holotype** (♂): China, SW Sichuan, pass Riwa to Lamuge, 4200 m, 28.VI.2006, leg. M. JANATA, BMNH.

**Paratype:** Same data as holotype, 1 ex. SMNS.

**Etymology:** Named in honour of MIROSLAV JANATA (Prague), the collector of the type series and of other *Laena* species in China.

**Description:** Body length 7.0 mm. Eyes (Fig. 29)

not reduced, not prominent. Shape of pronotum see Fig. 29, disc with dense but not confluent punctures, distance between 0.5–2 diameters, all punctures bearing longer adpressed setae, surface with a pair of feeble impressions on the disc and shining, lateral margins finely bordered, basal margin unbordered and not bent downwards, posterior angles completely rounded and indistinct, propleura with sparser and finer punctation and shorter setation than on disc. Elytra (Fig. 29) with rows of punctures in feeble striae separated from the densely punctate intervals, punctures of rows slightly larger in size than pronotal punctures, most punctures bearing a short and adpressed seta, intervals with dense punctures smaller than punctures of the rows bearing a similar short adpressed seta, internal intervals flat and shining, interval 7 somewhat convex but not keel-like, interval 9 with 4 indistinct setiferous pores. All femora in both sexes without teeth. All tibiae of males without modifications (Figs. 30–31). Aedeagus see Fig. 32.

**Diagnosis:** *Laena janatai* n. sp. shares with *L. michaeli* n. sp. and *L. quinquagesima* n. sp., both from Yunnan, the extraordinary shape of the wide pronotum with a completely rounded posterior part and protruding anterior corners, but is distinguished by completely bordered lateral margins of the pronotum, unmodified male posterior tibiae, and the shape of the aedeagus. In *L. janatai* n. sp. the pronotum is widest in the middle, while it is widest in the anterior part in *L. michaeli* n. sp. and *L. quinquagesima* n. sp. See also *L. basumtsoica* n. sp.

***Laena jiangxica* n. sp.**

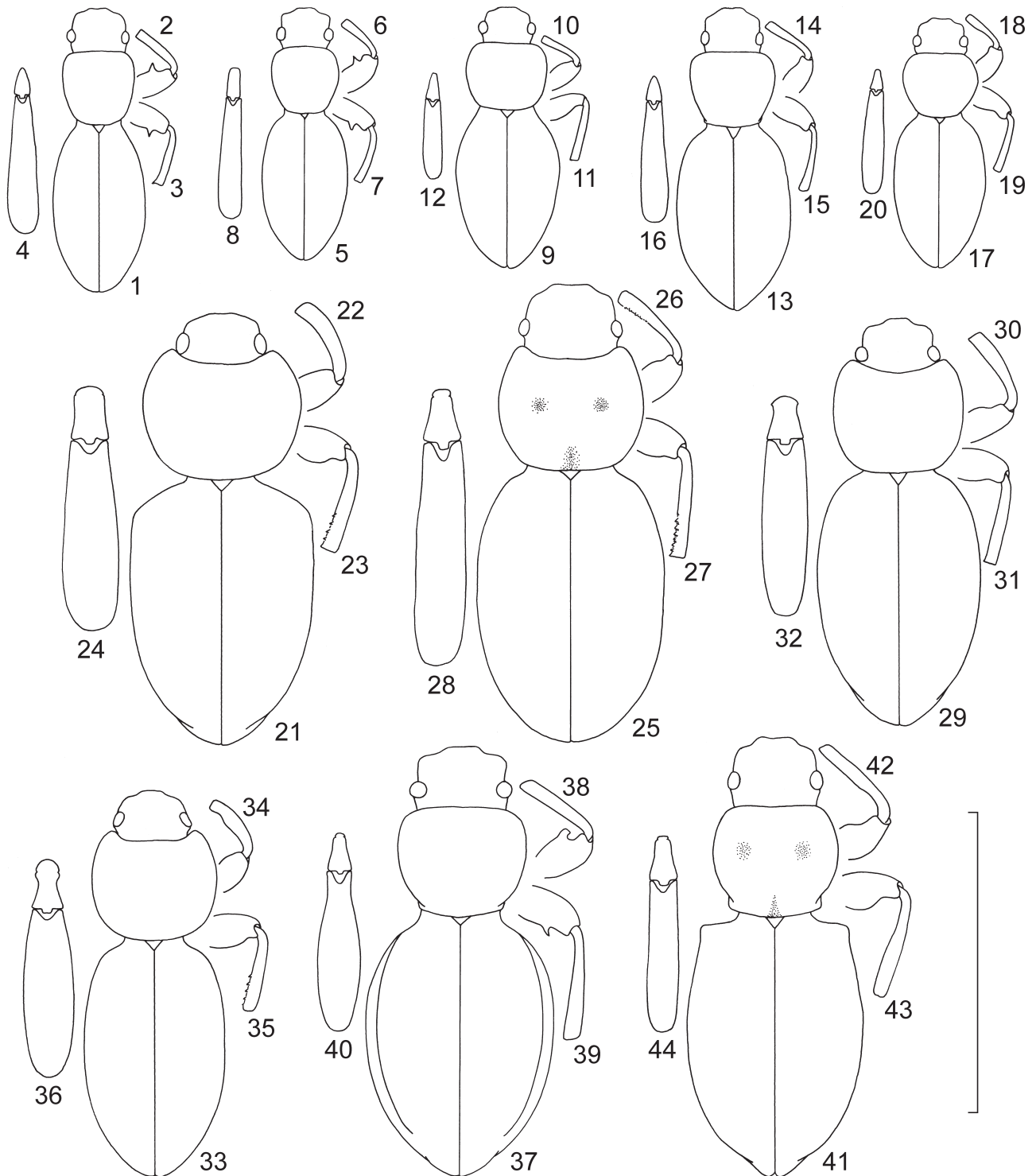
(Figs. 13–16)

**Holotype** (♂): China, Jiangxi, Wuyi Shan Nature Reserve, Huanggan Shan, 1800–2050 m, leg. J. COOTER & P. HLAVÁČ, SMNS.

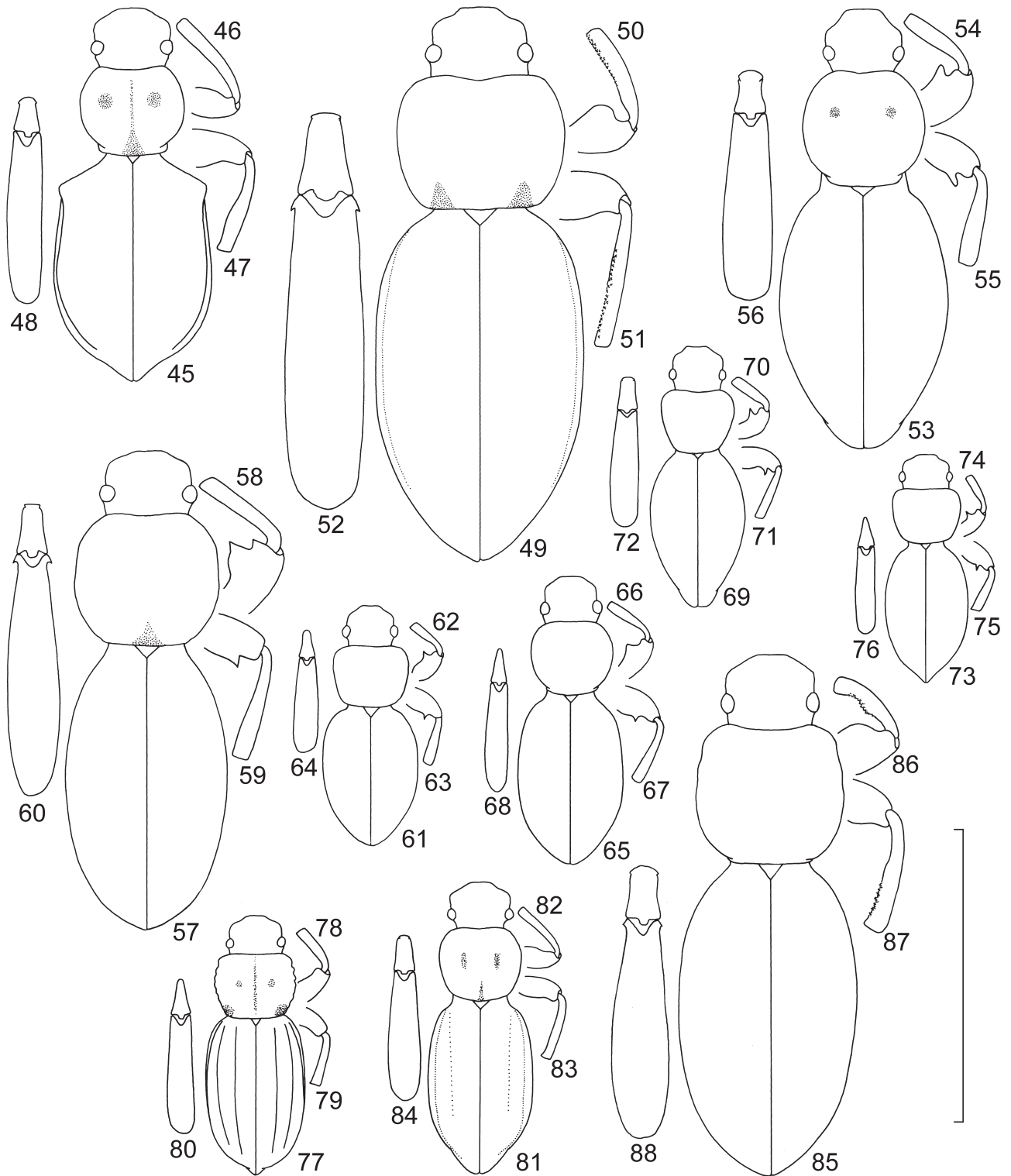
**Paratypes:** Same data as holotype, 2 ex. SMNS (1 ex. in bad condition without mid and hind legs).

**Etymology:** Named after the Province Jiangxi, were the type series was collected.

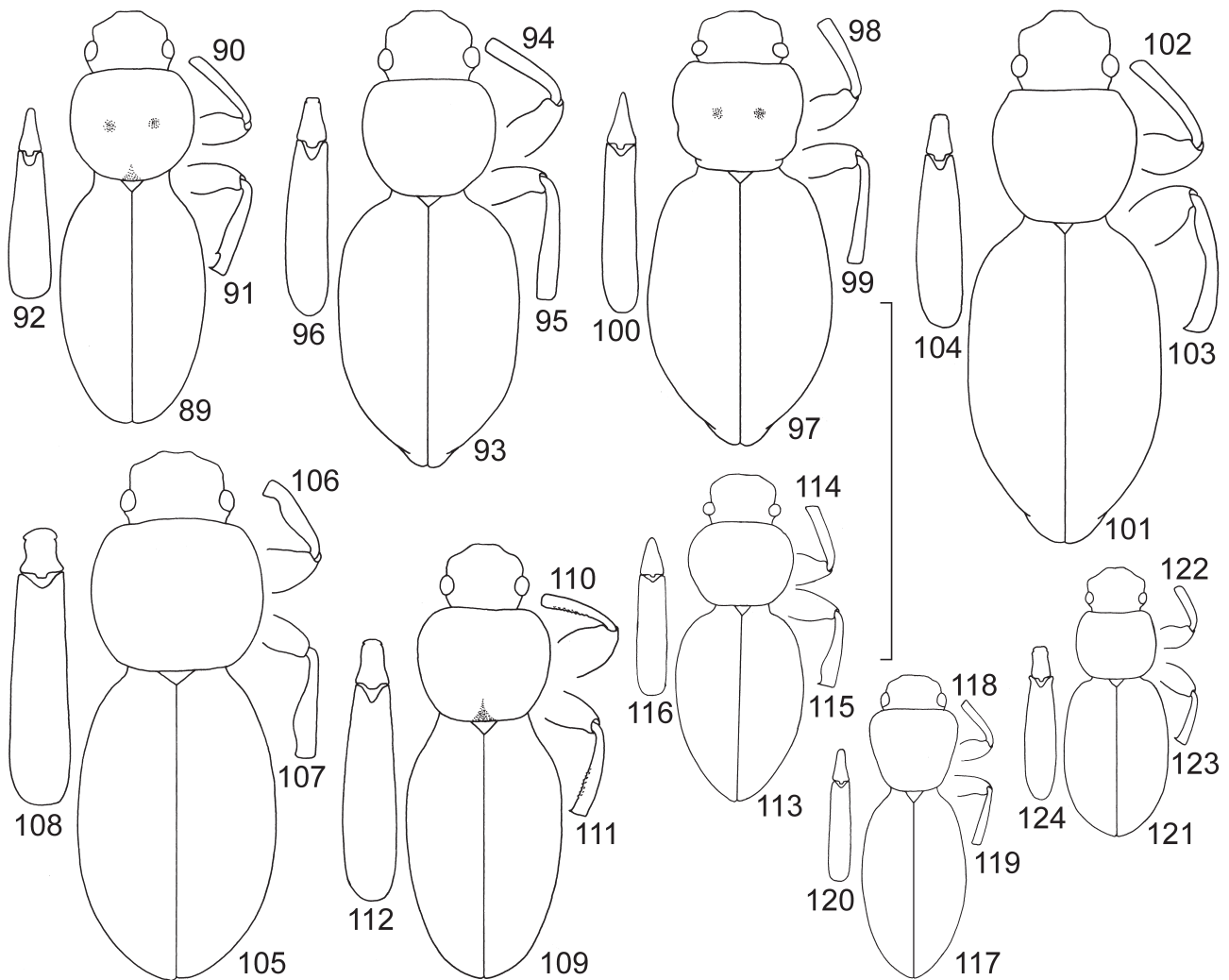
**Description:** Body length 5.5–6.0 mm. Eyes (Fig. 13) not reduced, not prominent. Shape of pronotum see Fig. 13, disc scattered with large punctures, distance between 2–5 diameters, all punctures bearing long erect setae, surface without impressions and shining, lateral margins bordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation and shorter setation than on disc. Elytra (Fig. 13) with rows of punctures without striae, punctures of rows equal in size to pronotal punctures, each puncture bearing a long and erect seta, intervals with very few nearly indistinct punctures bearing a similar long seta, all intervals flat and shining, interval 9 with 4 setiferous pores. All femora in both sexes without teeth. All tibiae of males without modifications (Figs. 14–15). Aedeagus see Fig. 16.



**Figs. 1–44.** Male body shape, anterior femur and tibia, posterior femur and tibia and aedeagus of *Laena* spp. – 1–4. *L. hlavaci* n. sp. (Jiangxi), holotype. 5–8. *L. cooteri* n. sp. (Jiangxi, Fujian), holotype. 9–12. *L. guangxica* n. sp. (Guangxi), holotype. 13–16. *L. jiangxica* n. sp. (Jiangxi), holotype. 17–20. *L. guizhouica* n. sp. (Guizhou), holotype. 21–24. *L. quinquagesima* n. sp. (Yunnan), holotype. 25–28. *L. basumtsuica* n. sp. (Tibet), holotype. 29–32. *L. janatai* n. sp. (Sichuan), holotype. 33–36. *L. michaeli* n. sp. (Yunnan), holotype. 37–40. *L. dabashanica* n. sp. (Hubei), holotype. 41–44. *L. mirabilis* (Sichuan), non-type. – Scale line: 5.0 mm (body, legs), 2.5 mm (aedeagus).



**Figs. 45–88.** Male body shape, anterior femur and tibia, posterior femur and tibia and aedeagus of *Laena* spp. – 45–48. *L. maowenica* n. sp. (Sichuan), holotype. 49–52. *L. jinpingica* n. sp. (Sichuan), holotype. 53–56. *L. bohrni* n. sp. (Sichuan), holotype. 57–60. *L. sehnali* n. sp. (Sichuan), holotype. 61–64. *L. farkaci* n. sp. (Yunnan), holotype. 65–68. *L. lisuorum* n. sp. (Yunnan), holotype. 69–72. *L. barkamica* n. sp. (Sichuan), holotype. 73–76. *L. septuagesima* n. sp. (Yunnan), holotype. 77–80. *L. davidi* n. sp. (Sichuan), holotype. 81–84. *L. gaoligongica* n. sp. (Yunnan), holotype. 85–88. *L. kalabi* n. sp. (Sichuan), holotype. – Scale line: 5.0 mm (body, legs), 2.5 mm (aedeagus).



**Figs. 89–124.** Male body shape, anterior femur and tibia, posterior femur and tibia and aedeagus of *Laena* spp. – **89–92.** *L. naxiorum* n. sp. (Yunnan), holotype. **93–96.** *L. fouquei* n. sp. (Yunnan), holotype. **97–100.** *L. alesi* n. sp. (Yunnan), holotype. **101–104.** *L. baiorum* n. sp. (Yunnan), holotype. **105–108.** *L. nujiangica* n. sp. (Yunnan), holotype. **109–112.** *L. xueshanica* n. sp. (Yunnan), holotype. **113–116.** *L. baoshanica* n. sp. (Yunnan), holotype. **117–120.** *L. moxica* n. sp. (Sichuan), holotype. **121–124.** *L. gyalthagica* n. sp. (Yunnan), holotype. – Scale line: 5.0 mm (body, legs), 2.5 mm (aedeagus).

**Diagnosis:** *Laena jiangxica* n. sp. is extremely similar to *L. guizhouica* n. sp. from Province Guizhou in body shape and size, the bordered lateral margins of pronotum, the dorsal punctation and setation, and the unarmed femora, but is distinguished by a slightly different pronotum (lateral sides rounder in *L. guizhouica* n. sp.), flat elytral intervals (slightly convex in *L. guizhouica* n. sp.) and a different aedeagus. See also *L. cooteri* n. sp. for separating the three species known from Province Jiangxi.

***Laena jingpingica* n. sp.**  
(Figs. 49–52)

Holotype (♂): China, Sichuan, Jinping Shan, W Mo-

fanggou (Mo Fang Gou), 3850 m, 28.V.–4.VI.2005, leg. R. SEHNAL & M. TRÝZNA, CJTK.

**Paratypes:** Same data as holotype, 13 ex. CJTK, 6 ex. SMNS.

**Etymology:** Named after the Jinping Shan, where the types were collected.

**Description:** Body length 9.5–10.5 mm. Eyes (Fig. 49) not reduced, not prominent. Shape of pronotum see Fig. 49, disc with scattered punctures, distance as 2–4 diameters, all punctures with small adpressed setae, surface flat and shagreened, with a pair of feeble impressions on the disc and 2 distinct basal impressions besides the corners, lateral margins unbordered, basal margin unbordered and not bent downwards, posterior angles rounded,

propleura with finer and sparser punctation than on disc and without setation. Elytra (Fig. 49) with rows of punctures arranged in indistinct striae, punctures of rows somewhat smaller than punctures on pronotum and extinguished in the posterior third of the elytra, most punctures with a microseta, intervals with a few scattered smaller punctures bearing each a microseta, internal intervals flat and distinctly shagreened, interval 7 distinctly convex but not keel-like, interval 9 with 4 setiferous pores. All femora in both sexes without teeth, but anterior femora with prominent angles. All tibiae of males interiorly with granules (Figs. 50–51). Aedeagus see Fig. 52.

**D i a g n o s i s:** *Laena jinpingica* n. sp. is very similar to *L. turnai* Schawaller, 2001 from the same region in Sichuan (Muli). In *L. turnai*, however, the pronotum has a mediobasal impression (two lateral impressions in *L. jinpingica* n. sp.), all elytral intervals around the shoulders are slightly convex (completely flat in *L. jinpingica* n. sp. except interval 6), all femora bear teeth or at least distinct angles (only anterior femora with distinct angles in *L. jinpingica* n. sp.), the male posterior tibiae have a broadly hooked interior apex, and the aedeagus has slightly longer parameres and the basal piece without dentated apical corners.

**R e m a r k s:** I hesitated for a while to distinguish the two populations as different species, but though numerous specimens of both “groups” were collected, no intermediate forms were found, therefore I now consider them as different species.

***Laena kalabi* n. sp.**  
(Figs. 85–88)

**H o l o t y p e** (♂): China, SW Sichuan, road Xiangcheng to Dérong, pass 10 km NW Xiangcheng, 3500 m, 14.VII.1994, leg. J. KALÁB, CJTK.

**P a r a t y p e s:** Same data as holotype, 20 ex. CJTK, 10 ex. SMNS.

**E t y m o l o g y:** Named in honour of JAROSLAV KALÁB (Kuřim, Czech Republic), collector of the type series.

**D e s c r i p t i o n:** Body length 8.3–10.3 mm. Eyes (Fig. 85) not reduced, not prominent. Shape of pronotum see Fig. 85, disc with scattered punctures, distance as 2–5 diameters, most punctures with small adpressed setae, surface flat and shining, lateral margins bordered and somewhat irregular rounded, basal margin unbordered and not bent downwards, posterior angles rounded, propleura with similar punctation and setation as on disc. Elytra (Fig. 85) with rows of punctures without striae, punctures of rows as large as those on pronotum, most punctures bearing a microseta, intervals with a row of scattered smaller punctures bearing each a microseta, all intervals flat and shining, interval 9 with 3 indistinct setiferous pores. All femora in both sexes without teeth. Anterior and middle tibiae of males medially distinctly sinu-

ated and with granules, posterior tibiae of males with dilated apex and medially with granules (Figs. 86–87). Aedeagus see Fig. 88.

**D i a g n o s i s:** *Laena kalabi* n. sp. shares with *L. tryznai* Schawaller, 2001 from the same region the general body shape and size, and also the shape of the aedeagus; in the latter, however, the dorsal side is dull and the pronotum is wider, and the male tibiae are only slightly modified (anterior and middle tibiae without modification, posterior tibiae with a few granules). *L. safraneki* Schawaller, 2001, also from the same region, possesses similarly modified male tibiae, but a smaller body size (5.0–7.5 mm) and an aedeagus with distinctly shorter, quadrate apicale. See also *L. nujiangica* n. sp.

***Laena lisuorum* n. sp.**  
(Figs. 65–68)

**H o l o t y p e** (♂): China, N Yunnan, Xue Shan 23 km S Zhongdian, 3675–3720 m, 2.VI.2005, leg. M. SCHÜLKE, SMNS.

**P a r a t y p e s:** Same data as holotype, 7 ex. SMNS. – China, N Yunnan, Xue Shan 23 km S Zhongdian, 3890 m, 5.VI.2005, leg. M. SCHÜLKE, 1 ex. SMNS. – China, N Yunnan, Xue Shan near lake, 23 km S Zhongdian, 3850 m, 6.VI.2005, leg. A. SMETANA, 2 ex. CASO, 1 ex. SMNS.

**E t y m o l o g y:** Named in honour of the Chinese minority Lisu settling in northern Yunnan, where the type series was collected.

**D e s c r i p t i o n:** Body length 4.8–6.0 mm. Eyes (Fig. 65) not reduced, not prominent. Shape of pronotum see Fig. 65, disc scattered with small punctures, distance between 2–5 diameters, all punctures bearing short adpressed setae, surface with a pair of indistinct discal impressions and slightly shagreened, lateral margins unbordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider and finer punctation and shorter setation than on disc. Elytra (Fig. 65) with rows of punctures without striae, punctures of rows distinctly larger than pronotal punctures, each puncture bearing a microseta, intervals with very few nearly indistinct punctures bearing a similar short seta; all intervals flat and shining, interval 9 with 3 setiferous pores. All femora in both sexes with distinct teeth. All tibiae of males without modifications (Figs. 66–67). Aedeagus see Fig. 68.

**D i a g n o s i s:** *Laena lisuorum* n. sp. belongs to a species group with *L. fengileana* Masumoto, 1996 and *L. qinlingica* Schawaller, 2001, from Shaanxi and Sichuan, sharing the general body size and shape, the laterally unbordered pronotum and the distinct armature of the femora. However, *L. fengileana* has a narrow trapezoid pronotum with a larger punctation and a completely different aedeagus, and *L. qinlingica* (with similar shape of the pronotum and similar aedeagus) has a striking dull surface of pronotum and elytra with dense, long and erect setation.

*Laena maowenica* n. sp.

(Figs. 45–48)

**Holotype** (♂): China, NW Sichuan, 20 km NW Maowen, Jiuding Shan, 2150 m, 7.–28.VI.2004, leg. R. FABBRI, SMNS.

**Paratypes**: Same data as holotype, 1 ex. SMNS. – China, Sichuan, road from Mao Xian to Beichuan, E Mao Xian, 1900–2350 m, 27.V.–3.VI.2006, leg. A. PUCHNER, 1 ex. CRSW.

**Etymology**: Named after the city of Maowen, in whose vicinity the types were collected.

**Description**: Body length 7.0–7.5 mm. Eyes (Fig. 45) not reduced, not prominent. Shape of pronotum see Fig. 45, disc with dense and partly confluent punctures, distance between 0.5–1 diameters, all punctures bearing short and adpressed setae, surface uneven, with a pair of distinct impressions on the disc and with an indistinct mediobasal impression, surface dull, lateral margins somewhat marked but unbordered, basal margin unbordered and not bent downwards, posterior angles completely rounded and indistinct, propleura with wider punctation than and similar setation as on disc. Elytra (Fig. 45) with rows of punctures without striae, punctures of rows distinctly larger than pronotal punctures, each puncture bearing a short and adpressed seta, intervals with several fine punctures bearing a similar small seta, internal intervals flat, interval 7 distinctly keel-like, in the humeral region knob-like, external intervals without any setiferous pores. All femora in both sexes without teeth. All tibiae of males without modifications (Figs. 46–47). Aedeagus see Fig. 48.

**Diagnosis**: *Laena maowenica* n. sp. shares with *L. schuelkei* Schawaller, 2001 (also from Sichuan) the general body size and shape, the dull surface with dense punctation and dense short setation, and the keel-like elytral interval 7. In *L. maowenica* n. sp., however, the pronotum is higher convex, the elytral disc between the keel-like intervals 7 is slightly convex (absolutely flat in *L. schuelkei*), the keel-like interval 7 is knob-like anteriorly, the external elytral intervals without setiferous pores (with two prominent pores in *L. schuelkei*), and the aedeagus is different. *L. mirabilis* Kaszab, 1970 from Sichuan belongs to the same group, but the body is slightly larger (7.8–9.0 mm), the elytral puncture rows are much finer, the elytral intervals are impunctate and without distinct setation, and the external elytral intervals besides the keel-like interval 7 are vertical in position and not visible dorsally, and the aedeagus is also different.

*Laena michaeli* n. sp.

(Figs. 33–36)

**Holotype** (♂): China, N Yunnan, 25 km E Zhongdian, 3300–4000 m, 12.–14.VII.1995, leg. L. BOLM, SMNS.

**Paratypes**: China, N Yunnan, Zhongdian County, Xue Shan, 23 km S Zhongdian, 3675–3725 m, 2.VI.2005, leg. M. SCHÜLKE, 1 ex. SMNS. – China, N Yunnan, Zhongdian County, Xue Shan near lake, 23 km S Zhongdian, 3895 m, leg. A. SMETANA, 1 ex. SMNS.

**Etymology**: Named in honour of MICHAEL SCHÜLKE (Berlin), who collected several species of *Laena* in China and generously deposited them in the Natural History Museum Stuttgart.

**Description**: Body length 6.0–6.5 mm. Eyes (Fig. 33) not reduced, not prominent. Shape of pronotum see Fig. 33, disc with dense but not confluent punctures, distance between 0.5–2 diameters, all punctures bearing short and adpressed setae, surface without impressions and dull, lateral margins bordered at least basally, basal margin unbordered and not bent downwards, posterior angles completely rounded and indistinct, propleura with similar punctation and setation as on disc. Elytra (Fig. 33) with rows of punctures arranged in feeble striae, not distinctly separate from the densely punctate intervals, punctures of rows slightly smaller in size than those of pronotum, each puncture with a short and adpressed seta, intervals with dense punctures of similar size to punctures of the rows bearing a similar short adpressed seta, internal intervals flat and dull, interval 7 somewhat convex but not keel-like, interval 9 with 4 setiferous pores. All femora in both sexes without teeth. Posterior tibiae of males interiorly with a few spines (Figs. 34–35). Aedeagus see Fig. 36.

**Diagnosis**: *Laena michaeli* n. sp. has a characteristic and extraordinary shape of the pronotum, armed posterior male tibiae and a dense dorsal punctation similar to *L. quinquagesima* n. sp. from the same region, but in that species the body is larger, the pronotum and elytra are flatter, the pronotum is completely unbordered laterally, and the aedeagus is different. See also *L. janatai* n. sp.

*Laena moxica* n. sp.

(Figs. 117–120)

**Holotype** (♂): China, Sichuan, Gongga Shan, Moxi, 1300 m, 11.VII.1996, leg. A. SMETANA, J. FARKAČ & P. KABÁTEK, NHMB.

**Paratypes**: Same data as holotype, 4 ex. NHMB, 4 ex. SMNS.

**Etymology**: Named after the village Moxi, where the types were collected.

**Description**: Body length 4.5–5.0 mm. Eyes (Fig. 117) not reduced, not prominent. Shape of pronotum see Fig. 117, disc scattered with large punctures, distance between 1–3 diameters, all punctures bearing long erect setae, surface without impressions and shining, lateral margins bordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation and shorter setation than on disc. Elytra (Fig. 117) with rows of punctures without striae, punctures of rows equal in size to pronotal punctures, each puncture bearing a long and erect seta, intervals with very few nearly indistinct punctures bearing a similar long seta, all intervals slightly convex and shining,

interval 9 with 4 setiferous pores. All femora in both sexes without teeth. All tibiae of males without modifications (Figs. 118–119). Aedeagus see Fig. 120.

**Diagnosis:** *Laena moxica* n. sp. belongs to the species-group containing *L. guizhouica* n. sp., *L. daliensis* Masumoto & Yin, 1994 and *L. watanabei* Masumoto & Yin, 1993 because of the the general body size and shape, the unarmed legs, the large dorsal punctation and the long and erect dorsal setation, but can be recognized by the long trapezoid pronotum (subquadrate in *L. daliensis* and *L. watanabei*, cordiform in *L. guizhouica* n. sp.) and by the shape of the aedeagus.

***Laena naxiorum* n. sp.**  
(Figs. 89–92)

**Holotype** (♂): China, N Yunnan, Xue Shan near lake, 23 km S Zhongdian, 3895 m, 5.–15.VI.2005, leg. M. SCHÜLKE, SMNS.

**Paratypes:** Same data as holotype, 4 ex. SMNS. – China, N Yunnan, Xue Shan near lake, 23 km S Zhongdian, 3895 m, 5.–15.VI.2005, leg. A. SMETANA, 3 ex. SMNS. – China, N Yunnan, Xue Shan near lake, 23 km S Zhongdian, 3895 m, 6.–15.VI.2005, leg. D. WRASE, 1 ex. CJTK. – China, N Yunnan, Xue Shan near lake, 23 km S Zhongdian, 3850 m, 6.VI.2005, leg. A. SMETANA, 2 ex. CASO. – China, N Yunnan, Xue Shan near lake, 23 km S Zhongdian, 3895 m, 6.VI.2005, leg. M. SCHÜLKE, 7 ex. SMNS. – China, N Yunnan, 23 km S Zhongdian, Xue Shan, 3675–3725 m, 2.VI.2005, leg. M. SCHÜLKE, 1 ex. SMNS. – China, N Yunnan, Xue Shan, 10 km SW Zhongdian, 3800 m, 20.VIII.2003, leg. A. SMETANA, 5 ex. SMNS. – China, N Yunnan, Xue Shan, 10 km SW Zhongdian, 3800 m, 20.VIII.2003, leg. D. WRASE, 1 ex. CJTK. – China, N Yunnan, Xue Shan near Zhongdian, 3900–4200 m, 23.–25.VI.1996, leg. A. SMETANA, J. FARKAČ & P. KABÁTEK, 7 ex. NHMB. – China, N Yunnan, pass 28 km ESE Zhongdian, 3700–3750 m, 22.VIII.2003, leg. M. SCHÜLKE, 2 ex. CJTK, 1 ex. SMNS. – China, N Yunnan, pass 28 km ESE Zhongdian, 3700–3750 m, 22.VIII.2003, leg. A. SMETANA, 1 ex. CASO.

**Etymology:** Named in honour of the Chinese minority Naxi settling in northern Yunnan, where the type series was collected.

**Description:** Body length 5.5–7.2 mm. Eyes (Fig. 89) not reduced, not prominent. Shape of pronotum see Fig. 89, disc with scattered punctures of somewhat different size, distance between 2–4 diameters, all punctures bearing short adpressed setae, surface with a pair of indistinct discal impressions and a feeble mediobasal impression and slightly shagreened, lateral margins bordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation and shorter setation than on disc. Elytra (Fig. 89) with rows of punctures without striae, punctures of rows smaller than pronotal punctures, each puncture bearing a short and adpressed seta, intervals with very few nearly indistinct punctures bearing a similar short seta, all intervals flat and shining, interval 9 with 4 indistinct setiferous pores. All femora in both sexes without teeth. Posterior tibiae of males with a distinct spine in the distal third (Figs. 90–91). Aedeagus see Fig. 92.

**Diagnosis:** See *Laena xueshanica* n. sp. from the same locality. See also *L. alesi* n. sp.

***Laena nujiangica* n. sp.**  
(Figs. 105–108)

**Holotype** (♂): China, N Yunnan, Nujiang Lisu Autonomous Prefecture, Gongshan County, Gaoligong Shan, 3000–3050 m, 21.VI.2005, leg. M. SCHÜLKE, SMNS.

**Paratypes:** Same data as holotype, 7 ex. SMNS, 2 ex. CJTK. – China, N Yunnan, Nujiang Lisu Autonomous Prefecture, Gongshan County, Gaoligong Shan, 3000–3050 m, 21.VI.2005, leg. A. SMETANA, 3 ex. CASO.

**Etymology:** Named after the Nujiang (= Salween) Lisu Autonomous Prefecture, where the type series was collected.

**Description:** Body length 6.0–7.8 mm. Eyes (Fig. 105) not reduced, not prominent. Shape of pronotum see Fig. 105, disc with scattered punctures, distance as 3–6 diameters, most punctures with longer erect setae, surface flat and shining, lateral margins bordered, basal margin unbordered and not bent downwards, posterior angles rounded, propleura nearly impunctate and without setation. Elytra (Fig. 105) with rows of punctures without striae, these rows partly extinguished in posterior part, punctures of rows larger than punctures on pronotum, punctures without setae, intervals with very few scattered smaller punctures bearing each a small erect seta, all intervals flat and shining, interval 9 with 3 indistinct setiferous pores. All femora in both sexes without teeth. Anterior tibiae of males with distinct mediobasal excavation, middle and posterior tibiae of males with dilatated apex, all male tibiae medially with long and dense setation (Figs. 106–107). Aedeagus see Fig. 108.

**Diagnosis:** *Laena nujiangica* n. sp. can be recognized by the modified male anterior tibiae with a distinct mediobasal excavation, by a subquadrate shining pronotum with fine punctation without impressions and bordered lateral margins, by nearly impunctate elytral intervals, and by the shape of the aedeagus with short quadrate apicale. *L. safraneki* Schawaller, 2001 from adjacent southeastern Tibet has similarly modified male anterior tibiae and a similar shape of the aedeagus, but in that species the dorsal surface is dull shagreened and the posterior male tibiae are differently modified with interior granules. *L. kalabi* n. sp. from Sichuan and *L. tuntalica* Schawaller, 2001 from Sichuan and Tibet have also similarly modified anterior male tibiae, but possess, besides other characters, different shapes of the aedeagus with distinctly longer apicale.

***Laena quinquagesima* n. sp.**  
(Figs. 21–24)

**Holotype** (♂): China, N Yunnan, pass 28 km ESE Zhongdian, 3700–3750 m, 22.VIII.2003, leg. M. SCHÜLKE, SMNS.

**Paratypes:** China, N Yunnan, pass 28 km ESE Zhongdian, 3700–3750 m, 22.VIII.2003, leg. D. WRASE, 2 ex. CJTK. –

China, N Yunnan, 36 km ESE Zhongdian, 3500–3550 m, 23.VIII.2003, leg. M. SCHÜLKE, 2 ex. SMNS. – China, N Yunnan, 36 km ESE Zhongdian, 3500–3550 m, 23.–24.VIII.2003, leg. D. WRASE, 3 ex. CJTK. – China, N Yunnan, 29 km ESE Zhongdian, Bitai Hai Lake area, 3540 m, 1.VI.2005, leg. D. WRASE, 1 ex. CJTK. – China, N Yunnan, 35 km ESE Zhongdian, 3450 m, 3.VI.2005, leg. M. SCHÜLKE, 1 ex. SMNS. – China, N Yunnan, 35 km ESE Zhongdian, 3450 m, 3.VI.2005, leg. D. WRASE, 3 ex. CJTK, 2 ex. SMNS. – China, N Yunnan, Xue Shan near Zhongdian, 3800 m, 26.VI.1996, leg. A. SMETANA, J. FARKAČ & P. KABÁTEK, 4 ex. NHMB. – China, N Yunnan, 17 km NW Zhongdian, 3500–4000 m, 15.–23.V.1999, leg. L. & R. BUSINSKÝ, 4 ex. CSBC, 1 ex. SMNS. – China, NW Yunnan, Zhongdian, Haxube Shan, W slope between Tuguancun and Xiaozhongdian, 3700–3900 m, 29.IV.1998, leg. M. JANATA, 2 ex. CKBB. – NW Yunnan, Haba Shan, Haba, 3200 m, 2.VII.2005, leg. M. JANATA, 1 ex. BMNH.

**E t y m o l o g y :** Named after the Latin “quinguesimus”, because this is the 50<sup>th</sup> new species of *Laena* from China treated by the author during the preparation of this manuscript.

**D e s c r i p t i o n :** Body length 7.5–9.5 mm. Eyes (Fig. 21) not reduced, not prominent. Shape of pronotum see Fig. 21, disc with dense and partly confluent punctures, distance between 0.5–1 diameters, all punctures bearing short and adpressed setae, surface somewhat uneven and dull, lateral margins unbordered, basal margin unbordered and not bent downwards, posterior angles completely rounded and indistinct, propleura with similar punctation and setation as on disc. Elytra (Fig. 21) with rows of punctures without striae not distinctly separated from the densely punctate intervals, punctures of rows equal in size to pronotal punctures, each puncture bearing a short and adpressed seta, intervals with dense punctures of similar size as punctures of the rows bearing a similar short adpressed seta, internal intervals flat and dull, interval 7 distinctly convex but not keel-like, interval 9 with 4 setiferous pores. All femora in both sexes without teeth. Posterior tibiae of males inferiorly with a few spines (Figs. 22–23). Aedeagus see Fig. 24.

**D i a g n o s i s :** The species is characterized by the shape of its wide pronotum with a completely rounded posterior part, protruding anterior corners and unbordered lateral margins, its dense confluent dorsal punctation, and also by its elytral intervals with short and adpressed setae, its convex but not keeled elytral interval 7, unarmed femora and armed posterior male tibiae, and the shape of its aedeagus. *Laena quinguesima* n. sp. belongs to the group of species with a flat elytral disc and keel-like elytral intervals, including *L. mirabilis* Kaszab, 1970 and *L. mulica* Schawaller, 2001, both from Sichuan, but can be immediately separated by the characteristic shape of the pronotum. *L. michaeli* n. sp. from the same region possesses a similar shape of the pronotum, similarly armed posterior male tibiae and a dense dorsal punctation, but in that species the body is smaller, pronotum and elytra are more convex, the pronotum is bordered laterally, at least in its basal part, and the aedeagus is different. See also *L. janatai* n. sp.

### *Laena sehnali* n. sp.

(Figs. 57–60)

**H o l o t y p e (♂):** China, SW Sichuan, NNE Eryizuxiang, SW slopes, V.2004, leg. M. HACKEL & R. SEHNAL, CJTK.

**P a r a t y p e s :** Same data as holotype, 4 ex. CJTK, 3 ex. SMNS. – China, Sichuan, San Ya (Eryizuxiang), 3800 m, 10.VI.2005, leg. R. SEHNAL & M. TRÝZNA, 1 ex. CJTK. – China, Sichuan, Daxue Shan, N San Ya, 3040 m, 6.–12.VI.2005, leg. R. SEHNAL & M. TRÝZNA, 1 ex. CJTK. – China, W Sichuan, Jiulong County, N Yalong Jiang great riverbend, 2300–3800 m, 12.–16.VII.2001, leg. L. & R. BUSINSKÝ, 1 ex. SMNS.

**E t y m o l o g y :** Named in honour of ROSTISLAV SEHNAL (Unhost, Czech Republic), one of the collectors of the type series.

**D e s c r i p t i o n :** Body length 7.0–9.5 mm. Dorsal side with feeble metallic shine. Eyes (Fig. 57) not reduced, not prominent. Shape of pronotum see Fig. 57, disc with scattered punctures, distance as 2–5 diameters, some punctures with longer adpressed setae, surface flat and shining, with a pair of feeble impressions on the disc and a distinct mediobasal impression, lateral margins bordered, basal margin unbordered and not bent downwards, posterior angles rounded, propleura with much finer and sparser punctation than on disc and without setation. Elytra (Fig. 57) with rows of punctures without striae, punctures of rows as large as punctures on pronotum, punctures without setae, intervals with a few scattered smaller punctures, also without setae, all intervals flat and shining, interval 9 posteriorly with 3 setiferous pores. All femora in both sexes with distinct teeth, anterior femur in males extraordinarily thick and with an additional tooth-like anterior corner. Anterior and middle tibiae of males without modifications, posterior tibiae of males slightly S-shaped (Figs. 58–59). Aedeagus see Fig. 60.

**D i a g n o s i s :** *Laena sehnali* n. sp. is characterized by its large body size, its weak dorsal metallic shine, its broad disc-like pronotum with bordered lateral margins, its distinct armature of the femora, particularly of the male anterior femora, and the shape of the aedeagus; the species cannot be confused with any other Chinese species.

### *Laena septuagesima* n. sp.

(Figs. 73–76)

**H o l o t y p e (♂):** China, N Yunnan, pass 28 km ESE Zhongdian, 3700 m, 22.VIII.2003, leg. M. SCHÜLKE, SMNS.

**P a r a t y p e s :** Same data as holotype, 2 ex. SMNS. – China, N Yunnan, 36 km ESE Zhongdian, 3500–3550 m, 23.VIII.2003, leg. M. SCHÜLKE, 8 ex. SMNS. – China, N Yunnan, 36 km ESE Zhongdian, 3500–3550 m, 23.–24.VIII.2003, leg. D. WRASE, 6 ex. CJTK. – China, N Yunnan, 36 km ESE Zhongdian, 3500–3550 m, 23.VIII.2003, leg. A. SMETANA, 8 ex. SMNS, 2 ex. CASO, 2 ex. CJTK. – China, N Yunnan, 33 km ESE Zhongdian, 3200 m, 24.VIII.2003, leg. A. SMETANA, 1 ex. SMNS.

**E t y m o l o g y :** Named after the Latin “septuagesimus”, because this is the 70<sup>th</sup> new species of *Laena* from China treated by the author during the preparation of this manuscript.



**Description:** Body length 3.0–4.2 mm. Eyes (Fig. 73) not reduced, not prominent. Shape of pronotum see Fig. 73, disc with scattered punctures, distance between 1–4 diameters, all punctures bearing long erect setae, surface without impressions and shining, lateral margins marked but unbordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation and shorter setation than on disc. Elytra (Fig. 73) with rows of punctures without striae, punctures of rows equal in size to pronotal punctures, each puncture bearing a long and erect seta, intervals with a row of fine punctures bearing a similar long seta, all intervals flat and shining, interval 9 with 2 setiferous pores. All femora in both sexes with teeth. All tibiae of males without modifications (Figs. 74–75). Aedeagus see Fig. 76.

**Diagnosis:** *Laena septuagesima* n.sp. belongs to the group of small species with subquadrate pronotum and distinctly armed femora around *L. daxueica* Schawaller, 2001 from Sichuan and *L. farkaci* n.sp. from Yunnan. With *L. septuagesima* n.sp. *L. daxueica* shares the unbordered pronotal lateral margins, but *L. daxueica* has a shorter adpressed dorsal setation and a different aedeagus. *L. farkaci* n.sp. has bordered pronotal lateral margins, and also a shorter adpressed dorsal setation and a different aedeagus.

***Laena xueshanica* n.sp.**  
(Figs. 109–112)

**Holotype** (♂): China, N Yunnan, Xue Shan, near lake 23 km S Zhongdian, 3895 m, 5.–15.VI.2005, leg. M. SCHÜLKE, SMNS.

**Paratypes:** Same data as holotype, 10 ex. SMNS. – China, N Yunnan, Xue Shan, near lake 23 km S Zhongdian, 3895 m, 5.VI.2005, leg. A. SMETANA, 13 ex. SMNS, 4 ex. CRFL. – China, N Yunnan, Xue Shan, near lake 23 km S Zhongdian, 3895 m, 15.VI.2005, leg. A. SMETANA, 5 ex. CASO. – China, N Yunnan, Xue Shan, near lake 23 km S Zhongdian, 3850 m, 6.VI.2005, leg. A. SMETANA, 6 ex. NHNM. – China, N Yunnan, Xue Shan, 23 km S Zhongdian, 3675–3725 m, 2.VI.2005, leg. D. WRASE, 1 ex. CJTK. – China, N Yunnan, Xue Shan near lake, 23 km S Zhongdian, 3895 m, 6.VI.2005, leg. M. SCHÜLKE, 11 ex. SMNS. – China, N Yunnan, Xue Shan near lake, 23 km S Zhongdian, 3895 m, 5.–15.VI.2005, leg. D. WRASE, 8 ex. CJTK. – China, N Yunnan, Xue Shan, 10 km SW Zhongdian, 3800 m, 20.VIII.2003, leg. A. SMETANA, 14 ex. SMNS, 4 ex. NHMW, 4 ex. OUMNH, 1 ex. CASO. – China, N Yunnan, Xue Shan, 10 km SW Zhongdian, 3700–3800 m, 20.VIII.2003, leg. D. WRASE, 7 ex. CJTK. – China, N Yunnan, Mts. 15 km W Zhongdian, 3800–4200 m, 22.–24.VI.1994, leg. J. FARKAČ & D. KRÁL, 2 ex. NHMB. – China, N Yunnan, Xue Shan near Zhongdian, 3800 m, 23.–26.VI.1996, leg. J. FARKAČ, P. KABÁTEK & A. SMETANA, 1 ex. NHMB. – China, N Yunnan, Xue Shan near Zhongdian, 4000–4100 m, 23.VI.1996, leg. A. SMETANA, J. FARKAČ & P. KABÁTEK, 8 ex. NHMB. – China, N Yunnan, Xue Shan near Zhongdian, 4050 m, 24.VI.1996, leg. A. SMETANA, J. FARKAČ & P. KABÁTEK, 46 ex. NHMB, 3 ex. CJTK. – China, N Yunnan, Xue Shan near Zhongdian, 3900 m, 25.VI.1996, leg. A. SMETANA, J. FARKAČ & P. KABÁTEK, 23 ex. NHMB.

**Etymology:** Named after the Xue Shan, where the types were collected.

**Description:** Body length 4.5–6.5 mm. Eyes (Fig. 109) not reduced, not prominent. Shape of pronotum see Fig. 109, disc with scattered punctures of somewhat different size, distance between 1–4 diameters, all punctures bearing short adpressed setae, surface with a slight mediobasal impression and weakly shagreened, lateral margins bordered, basal margin unbordered and not bent downwards, posterior angles rounded and indistinct, propleura with wider punctation and shorter setation than on disc. Elytra (Fig. 109) with rows of punctures without striae, punctures of rows smaller than pronotal punctures, each puncture bearing a short and adpressed seta, intervals with very few nearly indistinct punctures bearing a similar short seta, all intervals flat and shining, interval 9 with 4 indistinct setiferous pores. All femora in both sexes without teeth. All tibiae of males with a few indistinct granules at the inner side (Figs. 110–111). Aedeagus see Fig. 112.

**Diagnosis:** *Laena xueshanica* n.sp., *L. naxiorum* n.sp. from the same locality and *L. cholanica* Schawaller, 2001 from adjacent southeastern Tibet are extremely similar and share the medium-sized body, the flat subquadrate and laterally bordered pronotum, the adpressed shorter setation and the unarmed femora. All three can be separated by distinctly different aedeagi (apical broad spade-like in *L. xueshanica* n.sp., long triangular in *L. naxiorum* n.sp., short triangular in *L. cholanica*) and by unmodified posterior tibiae in *L. cholanica* or differently modified posterior tibiae in *L. naxiorum* n.sp. with a single spine or with a few distinct granules in *L. xueshanica* n.sp. The elytra are long parallel in *L. cholanica* and of oval shape in *L. naxiorum* n.sp. and *L. xueshanica* n.sp. See also under *L. alesi* n.sp.

## 5 New records of previously known species of *Laena*

### *Laena alticola* Blair, 1923

**New material:** Tibet, N Mt. Everest, Rongbuk Valley (type locality), 5200 m, 9.–11.VII.1993, leg. T. SOLHBY, 5 ex. SMNS. – S Tibet, Monda La, 20 km from Lhodak, 5200 m, 16.VI.2001, leg. A. WRZECIONKO, 1 ex. CJTK, 1 ex. SMNS. – S Tibet, Karo La, 30 km E Nakatse, 5120 m, 1.VI.2005, leg. A. WRZECIONKO, 7 ex. CJTK, 2 ex. SMNS.

### *Laena angulifemoralis* Masumoto, 1996

**New material:** Yunnan, Jizu Shan, 2500–2700 m, 6.–10.VII.1994, leg. V. KUBÁŇ, 1 ex. CJTK, 1 ex. SMNS.

### *Laena baishuica* Schawaller, 2001

**New material:** N Yunnan, 30 km N Lijiang, E Yulong-xue Shan, 2800–2900 m, 13.VIII.2003, leg. A. SMETANA, 2 ex. SMNS.

*Laena becvari* Schawaller, 2001

New material: Yunnan, Haba Shan, 3150–3500 m, 6.–11.VI.2002, leg. S. BEČVÁŘ, R. & H. FOUQUÉ, 9 ex. CRFL, 3 ex. SMNS. – N Yunnan, 36 km ESE Zhongdian, 3500–3550 m, 23.VIII.2003, leg. A. SMETANA, 1 ex. SMNS, 1 ex. CASO. – N Yunnan, 36 km ESE Zhongdian, 3500–3550 m, 23.VIII.2003, leg. M. SCHÜLKE, 2 ex. SMNS. – N Yunnan, 36 km ESE Zhongdian, 3500–3550 m, 23.–24.VIII.2003, leg. D. WRASE, 1 ex. CJTK. – NW Yunnan, Haba Shan, Haba, 3200 m, 15.VII.2006, leg. M. JANATA, 1 ex. BMNH.

*Laena bifoveolata* Reitter, 1889

New material: W Henan, Funju Shan, Shiren Shan, 1400–1900 m, 9.VII.2006, leg. J. TURNA, 1 ex. CJTK. – Shaanxi, Daba Shan, 20 km SEE Zhenping, 1700 m, 26.VI.2002, leg. STARY, 1 ♀ CRSW. – Shaanxi, Qinling Shan, Zhouzhi to Foping, 2000 m, 1.VII.2002, leg. STARY, 1 ♀ SMNS. – S Shaanxi, Li Shan, SE slopes of Shun Wang Ping, 2040–2200 m, 13.V.–4.VII.2006, leg. J. TURNA, 1 ex. CJTK. – Hubei, Daba Shan, 13 km NW Muyuping, 1900 m, 16.VII.2002, leg. STARY, 1 ex. CRSW, 1 ex. SMNS. – W Hubei, Dashennongjia Mts., 2700 m, 20.V.–7.VI.2005, leg. J. TURNA, 2 ex. CJTK. – Sichuan, Gongga Shan near Moxi, around camp 3, 3000–3300 m, 25.–27.VII.1994, leg. W. HEINZ, 1 ex. SMNS. – Sichuan, Gongga Shan, Hailuogou, above camp 3, 3100 m, 8.VII.1996, leg. A. SMETANA, J. FARKAČ & P. KABÁTEK, 1 ex. NHMB. – Sichuan, Gongga Shan, Hailuogou, 2900–3200 m, leg. J. FARKAČ & D. KRÁL, 1 ex. NHMB.

*Laena brendelli* Schawaller, 2001

New material: N Yunnan, 33 km ESE Zhongdian, 3200 m, 24.VIII.2003, leg. M. SCHÜLKE, 2 ex. SMNS. – N Yunnan, 36 km ESE Zhongdian, 3500–3550 m, 23.VIII.2003, leg. M. SCHÜLKE, 5 ex. SMNS. – N Yunnan, 36 km ESE Zhongdian, 3500–3550 m, 23.–24.VIII.2003, leg. D. WRASE, 4 ex. CJTK. – Yunnan, Haba Shan, 3150–3500 m, 6.–11.VI.2002, leg. S. BEČVÁŘ, R. & H. FOUQUÉ, 3 ex. CRFL, 2 ex. SMNS.

*Laena businskyorum* Schawaller, 2001

New material: NW Yunnan, 25–35 km SE Deqen, 3100–3900 m, 20.–22.VII.1996, leg. L. & R. BUSINSKÝ, 3 ex. CJTK.

*Laena chinensis* Kaszab, 1965

New material: N Yunnan, Diancang Shan 5 km SSW Dali, 2800 m, 26.VIII.2003, leg. A. SMETANA, 2 ex. CASO. – Yunnan, Jizu Shan, 2500–2700 m, 6.–10.VII.1994, leg. V. KUBÁŇ, 2 ex. CJTK. – N Yunnan, Diancang Shan W Dali, 2650–2800 m, 26.VIII.–1.IX.2003, leg. D. WRASE, 2 ex. CJTK.

*Laena Cholanica* Schawaller, 2001

New material: SE Tibet, pass 50 km S Markam, 4400 m, 24.–27.VI.1997, leg. J. TURNA, 5 ex. CJTK.

*Laena daliensis* Masumoto & Yin, 1994

New material: N Yunnan, Diancang Shan W Dali, 2650–3000 m, 28.VIII.–1.IX.2003, leg. M. SCHÜLKE, 25 ex. SMNS. – N Yunnan, Diancang Shan W Dali, 2650–2750 m, 17.VI.2005, leg. M. SCHÜLKE, 6 ex. SMNS. – N Yunnan, Diancang Shan 5 km SSW Dali, 2650–3000 m, 29.–31.VIII.2003, leg.

A. SMETANA, 10 ex. SMNS, 12 ex. CASO. – Yunnan, SE Dali, Weibao Shan, W slope, 2000–2800 m, 23.VI.2004, leg. R. & H. FOUQUÉ, 1 ex. CRFL.

*Laena daxueica* Schawaller, 2001

New material: W Sichuan, Ya'an Prefecture, Shimian County, Xiaoxiang Ling, Caluo, 11 km S Shimian, 1250 m, 7.VII.1999, leg. A. PÜTZ, 1 ex. CAPE. – W Sichuan, Ya'an Prefecture, Shimian County, Xiaoxiang Ling, 7 km S Liziping, 35 km S Shimian, 1600 m, 7.VII.1999, leg. A. PÜTZ, 1 ex. CAPE, 1 ex. SMNS.

*Laena diancangica* Schawaller, 2001

New material: N Yunnan, Diancang Shan W Dali, 2650–2750 m, 17.VI.2005, leg. M. SCHÜLKE, 1 ex. SMNS.

*Laena dickorei* Schawaller, 2001

New material: E Tibet, 90 km W Gyamda, Basum Tso (Tsongo), 4310 m, 7.VI.2005, leg. A. WRZECIONKO, 1 ex. CJTK. – E Tibet, 90 km W Gyamda, Basum Tso, 3700 m, 17.VI.2001, leg. A. WRZECIONKO, 1 ex. CJTK.

*Laena emeishana* Masumoto, 1996

New material: W Sichuan, W Zhier (= Zi'er), 4240 m, 5.VI.2006, leg. R. SEHNAL & M. TRÝZNA, 2 ex. BMNH.

*Laena fengileana* Masumoto, 1996

New material: Shaanxi, Qinling Shan, Zhouzhi to Foping, 2000 m, 1.VII.2002, leg. STARY, 8 ex. CRSW, 2 ex. SMNS. – S Shaanxi, Qinling Shan, pass on road Zhouzhi to Foping, 105 km SW Xi'an, 1990 m, 2.–4.VII.2001, leg. D. WRASE, 6 ex. DEI, 4 ex. SMNS, 3 ex. CJTK. – Shaanxi, Qinling Shan, pass on road Zhouzhi to Foping, 105 km SW Xi'an, 1990 m, 2.–4.VII.2001, leg. A. SMETANA, 6 ex. SMNS, 2 ex. CASO. – S Shaanxi, 45 km SSW Xi'an, Qinling Shan, W pass on road Xi'an to Shagoujie, 2600 m, 25.VII.2001, leg. A. SMETANA, 4 ex. SMNS. – S Gansu, Min Shan, 60 km NW Wudu, 2000 m, 10.–20.VI.2005, leg. V. PATRIKEEV, 2 ex. BMNH.

*Laena ganzica* Schawaller, 2001

New material: W Sichuan, Ya'an Prefecture, Tianquan County, W Erlang Shan pass, 2900 m, 20.–22.VI.1999, leg. A. PÜTZ, 3 ex. CAPE, 1 ex. SMNS.

*Laena gyamdaica* Schawaller, 2001

New material: E Tibet, 90 km W Gyamda, Basum Tso, 3700 m, 17.VI.2001, leg. A. WRZECIONKO, 2 ex. CJTK, 2 ex. SMNS. – E Tibet, 90 km W Gyamda, Basum Tso (Tsongo), 4312 m, 7.VI.2005, leg. A. WRZECIONKO, 2 ex. CJTK.

*Laena habashanica* Schawaller, 2001

New material: Yunnan, Haba Shan, 3150–3500 m, 16.–18.VI.2004, leg. R. & H. FOUQUÉ, 20 ex. CRFL. – Yunnan, Haba Shan, 3150–3500 m, 6.–11.VI.2002, leg. S. BEČVÁŘ, R. & H. FOUQUÉ, 90 ex. CRFL, 6 ex. SMNS, 4 ex. HNHM. – Yunnan, Haba Shan, Haba, 3200 m, 2.–3.VII.2005, leg. M. JANATA, 9 ex. BMNH. – Yunnan, Haba Shan, Haba, 3200 m, 15.VII.2006, leg. M. JANATA, 3 ex. BMNH.

*Laena haigouica* Schawaller, 2001

New material: S Gansu, Min Shan, Baima pass, 3500 m, 6.VII.2004, leg. V. PATRIKKEEV, 1 ex. cmLS. – S Gansu, Min Shan, 60 km NW Wudu, 2000 m, 10.–20.VI.2005, leg. V. PATRIKKEEV, 3 ex. BMNH. – N Sichuan, Min Shan, Baima pass, 3500 m, 12.VII.2004, leg. V. PATRIKKEEV, 1 ex. BMNH. – N Sichuan, Min Shan, Juijaigow, 2000 m, 10.–20.VII.2004, leg. V. PATRIKKEEV, 1 ex. BMNH.

*Laena heinzi* Schawaller, 2001

New material: S Tibet, 90 km E Lhasa, 3800 m, 4.–5.VI.1996, leg. A. WRZECIONKO, 3 ex. SMNS.

Remarks: The new material possesses a long setation on both pronotum and elytra in contrary to the types which have a long setation on the pronotum and only a very short setation on the elytra (setae here broken?). All other characters coincide, also the confused elytral punctation not arranged in rows.

*Laena hengduanica* Schawaller, 2001

New material: Sichuan, pass N Zhendu, 3700–3800 m, 25.VI.1996, leg. D. ERBER, 2 ex. SMNS. – N Yunnan, Baima Shan, pass 12 km SE Deqen, 4085 m, 10.VI.2005, leg. M. SCHÜLKE, 4 ex. SMNS. – N Yunnan, Baima Shan, pass 12 km SE Deqen, 4085 m, 10.VI.2005, leg. A. SMETANA, 2 ex. SMNS. – N Yunnan, Baima Shan, pass 25 km SE Deqen, 4225 m, 8.VI.2005, leg. A. SMETANA, 1 ex. SMNS, 2 ex. CASO. – NW Yunnan, 25–35 km SE Deqen, 3100–3900 m, 20.–22.VII.1996, leg. L. & R. BUISINSKÝ, 2 ex. CJTK. – N Yunnan, Baima Shan, pass 12 km SE Deqen, 4300 m, 10.VI.2005, leg. D. WRASE, 4 ex. CJTK.

*Laena houzhenzica* Schawaller, 2001

New material: S Shaanxi, Daba Shan, pass 22 km NW Zhenping, 2850 m, 13.VII.2001, leg. D. WRASE, 1 ♀ SMNS. – Shaanxi, Daba Shan, pass 22 km NW Zhenping, 2850 m, 14.VII.2001, leg. A. SMETANA, 4 ♀♀ SMNS, 2 ♀♀ CASO.

*Laena hubeica* Schawaller, 2001

New material: Hubei, Daba Shan, 13 km NW Muyuping, 1900 m, 16.VII.2002, leg. STARY, 1 ex. CRSW, 1 ex. SMNS. – W Hubei, Daba Shan pass E Mt. Dashennongjia, 12 km NW Muyuping, 1950 m, 16.–22.VII.2001, leg. A. SMETANA, 6 ex. SMNS, 2 ex. CASO. – W Hubei, Mt. Dashennongjia, 2100–2900 m, 10.–14.VI.2002, leg. J. TURNA, 2 ex. CJTK. – W Hubei, Mt. Dashennongjia, 2700 m, 20.V.–7.VI.2005, leg. J. TURNA, 2 ex. CJTK.

*Laena kangdingica* Schawaller, 2001

New material: W Sichuan, 20 km NNW Sabdé, 2000–3500 m, 18.–20.VI.1994, leg. J. KALÁB, 1 ex. CJTK. – SW Sichuan, Sabdé, 3400 m, 25.VI.2001, leg. M. JANATA, 1 ex. BMNH. – W Sichuan, Sa'de (= Sabdé), 3500–3800 m, V.2004, leg. M. HÄCKEL & R. SEHNAL, 4 ex. CJTK. – Sichuan, Ganzi Tibetan Autonomous Prefecture, 6 km WSW Yajiang, Shaluli Shan, 3250 m, 4.VII.1999, leg. A. PÜTZ, 1 ex. CAPE.

*Laena kubani* Schawaller, 2001

New material: Yunnan, Haba Shan, 3150–3500 m, 6.–11.VI.2002, leg. S. BEČVÁŘ, R. & H. FOUQUÉ, 15 ex. CRFL, 5 ex. SMNS. – Yunnan, Haba Shan, 3500–4000 m, 12.–

16.VI.2004, leg. R. & H. FOUQUÉ, 4 ex. CRFL. – N Yunnan, 33 km ESE Zhongdian, 3200 m, 24.VIII.2003, leg. A. SMETANA, 1 ex. CASO.

*Laena langmusica* Schawaller, 2001

New material: Gansu, Min Shan, Baima pass, 3500 m, 6.VII.2004, leg. V. PATRIKKEEV, 1 ex. cmLS. – N Sichuan, Min Shan, Baima pass, 3500 m, 12.VII.2004, leg. V. PATRIKKEEV, 2 ex. BMNH. – N Sichuan, Min Shan, Juijaigow, 2000 m, 10.–20.VII.2004, leg. V. PATRIKKEEV, 1 ex. SMNS. – N Sichuan, Jiuding Shan, 3300–3500 m, 31.VII.–1.VIII.1994, leg. M. TRONQUET, 1 ex. SMNS, 2 ex. CLSM. – N Sichuan, Songpan, Zhaga Waterfall, 3050 m, 5.VIII.1994, leg. M. TRONQUET, 1 ex. SMNS.

*Laena luguica* Schawaller, 2001

New material: Sichuan, Jinping Shan, W Mofanggou (Mo Fang Gou), 3350 m, 28.V.–4.VI.2005, leg. R. SEHNAL & M. TRÝZNA, 3 ex. CJTK, 1 ex. SMNS.

Remarks: These four specimens are somewhat larger (6.3–7.5 mm) than the five type specimens (4.8–6.0 mm), all other characters coincide, also the shape of the aedeagus. Additionally, the newly collected specimens originate from the same border region in Sichuan and Yunnan, where the types were collected.

*Laena mirabilis* Kaszab, 1970

(Figs. 41–44)

New material: W Sichuan, Jiabin Shan, 18 km E Jintang, 3550–3650 m, 11.–24.VI.2004, leg. R. FABBRI, 5 ex. SMNS. – Central Sichuan, Jiabin Shan, Jintang, 3400 m, 15.VI.2002, leg. M. JANATA, 4 ex. CHHR, 1 ex. SMNS. – NW Sichuan, between Sanggarmai and Sanggarpar, 3500 m, 8.–29.VI.2004, leg. R. FABBRI, 3 ex. SMNS. – W Sichuan, Qionglai Shan, Mou Pi Shan, Barkam, 15 km S Zhuokeji, 3100–3750 m, 10.–30.VI.2004, leg. R. FABBRI, 3 ex. SMNS. – W Sichuan, S Barkam, between Lianghekou and Fubian, 3450–3650 m, 10.–30.VI.2004, leg. R. FABBRI, 1 ex. SMNS. – N Sichuan, valley SW Barkam, 3000–3800 m, 22.VII.1995, leg. M. JANATA, 6 ex. CKBB.

Redescription: Body length 7.8–9.0 mm. Eyes (Fig. 41) not reduced, not prominent. Shape of pronotum see Fig. 41, disc with dense and partly confluent punctures, distance between 0.5–1 diameters, all punctures bearing short and adpressed setae, surface uneven, with a pair of distinct impressions on the disc and with an indistinct mediobasal impression, surface dull, lateral margins somewhat marked but unbordered, basal margin unbordered and not bent downwards, posterior angles completely rounded and indistinct, propleura with wider punctation than and similar setation as on disc. Elytra (Fig. 41) with rows of punctures without striae, punctures of rows smaller than pronotal punctures, each puncture bearing a short and adpressed seta, intervals without punctures but shagreened and dull, external intervals with a few microsetae, internal intervals flat, interval 7 distinctly convex but not keel-like, in the humeral region sometimes knob-like, external intervals with an indistinct or without any setiferous pores. All femora in both sexes without teeth.

All tibiae of males without modifications (Figs. 42–43). Aedeagus see Fig. 44.

**Remarks:** This species was previously only known by the holotype from Kangding (= Tatsienlu), not examined in SCHAWALLER (2001) and therefore not figured. The additional specimens were collected close to the type locality. In some specimens, the elytral interval 7 is knob-like in the humeral region and the dorsal surface is more shining, in other specimens the interval 7 is without knob-like shoulders and the dorsal surface is distinctly shagreened and dull. All other characters coincide, also the shape of the aedeagus, thus these differences are interpreted as infraspecific variations.

*Laena nyingchica* Schawaller, 2001

**New material:** E Tibet, Bomi, 3000 m, 9.–10.VII.1997, leg. M. TRÝZNA & O. ŠAFRÁNEK, 4 ex. CJTK. – E Tibet, Bomi, 3000 m, 9.–10.VII.1997, leg. J. TURNA, 1 ex. CJTK, 1 ex. SMNS. – E Tibet, road Bomi to Rawu, 30 km W Rawu, 3800 m, 11.VII.1997, leg. J. TURNA, 2 ex. CJTK, 1 ex. SMNS. – E Tibet, 25–35 km NE Nyingchi, 3300–3900 m, 30.VI.–1.VII.1996, leg. L. & R. BUSINSKÝ, 1 ex. CJTK. – E Tibet, SE Bomi, 2800 m, 6.VII.1996, leg. L. & R. BUSINSKÝ, 3 ex. CJTK. – E Tibet, N Rawu, 4200 m, 11.VII.1996, leg. L. & R. BUSINSKÝ, 3 ex. CJTK. – NW Sichuan, 20 km S Maeirma, 3800 m, 9.–29.VI.2004, leg. R. FABBRI, 3 ex. SMNS. – NW Sichuan, between Sanggarmai and Sanggarpar, 3500 m, 8.–29.VI.2004, leg. R. FABBRI, 2 ex. SMNS. – W Sichuan, W Zhier (= Zi'er), 4241 m, 5.VI.2006, leg. R. SEHNAL & M. TRÝZNA, 6 ex. BMNH.

**Remarks:** The above listed specimens from the Tibetan Bomi and Rawu originate close from the type locality near Nyingchi, however the other specimens from northwestern Sichuan were collected relatively far away from the Tibetan localities. The external morphology coincides in both series, only the shape and convexity of the pronotum varies in some extent between the populations.

*Laena paomaica* Schawaller, 2001

**New material:** W Sichuan, Ganzi Tibetan Autonomous Prefecture, Daxue Shan, 10 km S Kangding, 3150 m, 26.VI.1999, leg. A. PÜTZ, 4 ex. CAPE. – W Sichuan, Ganzi Tibetan Autonomous Prefecture, Daxue Shan, Mugecuo, 15 km NW Kangding, below the lowest lake, 3300 m, 27.VI.1999, leg. A. PÜTZ, 1 ex. CAPE. – W Sichuan, Ganzi Tibetan Autonomous Prefecture, 25 km NW Litang, Shaluli Shan, 4300 m, 1.VII.1999, leg. A. PÜTZ, 1 ex. CAPE. – W Sichuan, Ganzi Tibetan Autonomous Prefecture, 15 km W Yajiang, Shaluli Shan, 4300 m, 2.VII.1999, leg. A. PÜTZ, 2 ex. CAPE. – W Sichuan, Ganzi Tibetan Autonomous Prefecture, 55 km NE Batang, Shaluli Shan, 4200 m, 3.VII.1999, leg. A. PÜTZ, 1 ex. CAPE. – W Sichuan, 25 km N Jiulong, 3900 m, 13.–21.VI.2004, leg. R. FABBRI, 2 ex. SMNS. – W Sichuan, W Kangding, Zheduo Shan, 4300–4500 m, 12.–22.VI.2004, leg. R. FABBRI, 1 ex. SMNS. – S Sichuan, 30 km NW Muli (Bowa), 3500 m, 1.–2.VII.1998, leg. J. TURNA, 1 ex. CJTK. – W Sichuan, road Litang to Batang, pass 70 km WNW Litang, 4670 m, 21.–22.VII.1994, leg. J. KALÁB, 1 ex. CJTK. – SW Sichuan, pass Riwa to Lamuge, 4200 m, 28.VI.2006, leg. M. JANATA, 1 ex. BMNH.

*Laena puetzi* Schawaller, 2001

**New material:** W Sichuan, 20 km NNW Sabdé, 2000–3500 m, 18.–20.VI.1994, leg. J. KALÁB, 2 ex. CJTK. – W Sichuan, road Sabdé to Jiulong, pass 40 km N Jiulong, 24.–25.VI.1994, leg. J. KALÁB, 1 ex. CJTK, 1 ex. SMNS. – W Sichuan, Qionglai Shan, Mou Pi Shan, Barkam 15 km S Zhuokeji, 3100–3750 m, 10.–30.VI.2004, leg. R. FABBRI, 2 ex. SMNS. – NW Sichuan, 20 km W Luhua, 2750–3200 m, 8.–28.VI.2004, leg. R. FABBRI, 1 ex. SMNS. – Central Sichuan, Xuecheng Sammo, 3500 m, 1.VII.2004, leg. M. JANATA, 2 ex. BMNH. – W Sichuan, Ganzi Tibetan Autonomous Prefecture, 15 km NW Kangding, Daxue Shan, Mugecuo, 3300 m, 27.VI.1999, leg. A. PÜTZ, 1 ex. CAPE. – SW Sichuan, Yading reserve, 3750 m, 24.VI.2006, leg. M. JANATA, 1 ex. BMNH. – N Sichuan, valley SW Barkam, 3000–3800 m, 22.VI.1995, leg. M. JANATA, 8 ex. CKBB, 1 ex. SMNS. – W Sichuan, Kangding County, Gongga Shan, 3300–4800 m, 13.–19.VI.2001, leg. L. & R. BUSINSKÝ, 2 ex. CJTK.

*Laena qinlingica* Schawaller, 2001

**New material:** Shaanxi, Qinling Shan, pass on road Zhouzhi to Foping, 105 km SW Xi'an, 1990 m, 2.–4.VII.2001, leg. A. SMETANA, 3 ex. SMNS, 1 ex. CASO.

**Remarks:** This species possesses distinct femoral teeth as figured in the original description and as incorporated in the identification key, but in the text the femora are erroneously said to be without teeth.

*Laena safraneki* Schawaller, 2001

**New material:** N Yunnan, Baima Shan, pass 15 km SE Deqen, 4330 m, 12.VI.2005, leg. M. SCHÜLKE, 3 ex. SMNS. – N Yunnan, Deqen County, E Meili Xue Shan, 12 km SW Deqen, 2890 m, 9.VI.2005, leg. M. SCHÜLKE, 1 ex. SMNS.

*Laena schuelkei* Schawaller, 2001

**New material:** Sichuan, road between Kangding and Mugecuo, 2550–2580 m, 29.VII.–8.VIII.2006, leg. A. PUCHNER, 1 ex. CRSW.

*Laena smetanai* Schawaller, 2001

**New material:** Sichuan, road between Zhangla and Huanglong, westside, 3450–3850 m, 1.–7.VI.2006, leg. A. PUCHNER, 1 ex. CRSW.

*Laena tuntalica* Schawaller, 2001

**New material:** E Tibet, Markam, 3800–4000 m, 16.–18.VII.1996, leg. L. & R. BUSINSKÝ, 4 ex. CJTK. – E Tibet, Tuntala Shan, 40 km E Zogang, 4500 m, 29.VI.–3.VII.1997, leg. J. TURNA, 13 ex. CJTK.

*Laena turnai* Schawaller, 2001

**New material:** W Sichuan, W Zhier (= Zi'er), 4241 m, 5.VI.2006, leg. R. SEHNAL & M. TRÝZNA, 1 ex. BMNH. – Sichuan, Jinping Shan, W Mofanggou, 3350 m, 28.V.–4.VI.2005, leg. R. SEHNAL & M. TRÝZNA, 2 ex. CJTK. – SW Sichuan, NNE Eryizuxiang, 3500–3800 m, V.2004, leg. M. HÄCKEL & R. SEHNAL, 1 ex. CJTK, 1 ex. SMNS. – Sichuan, San Ya (Eryizuxiang), 3800 m, 10.VI.2005, leg. R. SEHNAL & M. TRÝZNA, 1 ex. CJTK.

*Laena yajiangica* Schawaller, 2001

New material: Sichuan, Ganzi Tibetan Autonomous Prefecture, 6 km WSW Yajiang, Shaluli Shan, 3250 m, 4.VII.1999, leg. A. PÜTZ, 1 ex. CAPE.

*Laena yufengsi* Masumoto, 1996

New material: N Yunnan, 30 km N Lijiang, E Yulong-xue Shan, 2800–2900 m, 13.VIII.2003, leg. M. SCHÜLKE, 1 ex. SMNS. – Yunnan, pass 50 km W Judian, 11.–13.VI.2005, leg. I. JENIŠ, 6 ex. CJTK, 1 ex. SMNS.

*Laena yuzhuensis* Masumoto & Yin, 1994

New material: N Yunnan, Diancang Shan 5 km SSW Dali, 2800 m, 26.VIII.2003, leg. A. SMETANA, 5 ex. SMNS. – N Yunnan, Diancang Shan 5 km SSW Dali, 2800 m, 26.VIII.2003, leg. M. SCHÜLKE, 1 ex. SMNS. – N Yunnan, Diancang Shan 5 km SSW Dali, 2800 m, 26.VIII.2003, leg. D. WRASE, 2 ex. CJTK.

*Laena zongdianica* Schawaller, 2001

New material: N Yunnan, Xue Shan near Zhongdian, 4000–4100 m, 23.–24.VI.1996, leg. J. FARKAČ, P. KABÁTEK & A. SMETANA, 6 ex. NHMB. – N Yunnan, 15 km W Zhongdian, 3800–4200 m, 22.–24.VI.1994, leg. J. FARKAČ & D. KRÁL, 5 ex. NHMB. – N Yunnan, 55 km N Zhongdian, 3800 m, 18.VIII.2003, leg. M. SCHÜLKE, 3 ex. SMNS. – NW Yunnan/SW Sichuan border area, road Xiangcheng to Zhongdian, pass 35 km S Xiangcheng, 15 km N Wengshui, 3500 m, 10.–13.VII.1994, leg. J. KALÁB, 2 ex. CJTK, 1 ex. SMNS. – Yunnan, Haba Shan, 3150–3500 m, 7.–10.VI.2002, leg. S. BEČVÁŘ, R. & H. FOUQUÉ, 200 ex. CRFL, 12 ex. SMNS, 4 ex. HNHM. – N Yunnan, Xue Shan 10 km SW Zhongdian, 3800 m, 20.VIII.2003, leg. A. SMETANA, 4 ex. SMNS. – N Yunnan, 55 km N Zhongdian, 3800 m, 18.VIII.2003, leg. A. SMETANA, 2 ex. CASO. – N Yunnan, Xue Shan near lake, 23 km S Zhongdian, 3890 m, 15.VI.2005, leg. A. SMETANA, 1 ex. SMNS. – N Yunnan, Xue Shan near lake, 23 km S Zhongdian, 3895 m, 6.VI.2005, leg. M. SCHÜLKE, 1 ex. SMNS. – N Yunnan, Xue Shan near lake, 23 km S Zhongdian, 3895 m, 5.–15.VI.2005, leg. D. WRASE, 9 ex. CJTK. – NW Yunnan, Haba Shan, Haba, 3200 m, 2.VII.2005, leg. M. JANATA, 1 ex. BMNH.

6 Key to the species of *Laena* in China

This key is a new version of the previous key compiled by SCHAWALLER (2001), excluding the species now transferred to the genus *Hypolaenopsis* (see the separate key in chapter 3), but including the herein newly described species. The key is to be used only for identifications; it does not include all diagnostic characters, so it cannot be used for phylogenetical purposes. The key is suitable only for males because sexual characters have been used. Compare also the figures of the redescribed or newly described species by SCHAWALLER (2001), cited in the present new key as “Sch: figs.” in contrary to the new figures “Figs.” in this publication. The distribution of most species is restricted to limited areas and for the identification it is helpful to compare also the distributional data. Not included in this key, as in the first version, are *Laena leonardi* Schuster, 1916 from Xinjiang/Sin-kiang (belonging to the Middle Asian fauna, see SCHAWALLER 1995), *L. ovipennis* Schuster, 1926 from nearby Hongkong (not seen) and *L. chinensis* Jingke & Peng, 1993 from the Anhui Province (see Introduction).

- 1 Species from the southeastern provinces Guizhou, Guangxi, Jiangxi and Fujian. . . . . 2
- Species from the western and central provinces Xizang (= Tibet), Yunnan, Sichuan, Shaanxi, Hubei, Gansu and Henan. . . . . 6
- 2 All femora with distinct teeth. . . . . 3
- All femora without armature. . . . . 4
- 3 Lateral margins of pronotum unbordered. – Figs. 1–4. . . . .
- Lateral margins of pronotum bordered. – Figs. 5–8. . . . .
- Lateral margins of pronotum bordered. . . . . *hlavaci* n. sp.
- 4 Basal margin of pronotum nearly as wide as distal margin. – Figs. 9–12. . . . . *guangxica* n. sp.
- Basal margin of pronotum distinctly narrower than distal margin. . . . . 5
- 5 Pronotum widest anteriorly, aedeagus with triangular apicale. – Figs. 13–16. . . . . *jiangxica* n. sp.
- Pronotum widest in the middle, aedeagus with rounder tip of apicale. – Figs. 17–20. . . . . *guizhouica* n. sp.
- 6 Pronotum with distinctly protruding anterior corners, thus anterior pronotal margin with distinct convex excavation. 7
- Pronotum without protruding anterior corners, anterior pronotal margin straight or at most weakly excavated. . . . . 10
- 7 Pronotal lateral margins unbordered. – Figs. 21–24. . . . .
- Pronotal lateral margins bordered. . . . . *quingagesima* n. sp.
- 8 Pronotal surface with distinct impressions, elytral intervals flat with scattered fine punctures. – Figs. 25–28. . . . .
- Pronotal surface flat, without impressions, elytral intervals wrinkled with large and nearly confluent punctures. . . . . 9
- 9 Body length 7.0 mm, male posterior tibiae anteriorly without granules, aedeagus with broad, spade-like apicale. – Figs. 29–32. . . . . *janatai* n. sp.
- Body length 6.0–6.5 mm, male posterior tibiae anteriorly with granules, aedeagus with longer apicale with knob-like tip. – Figs. 33–36. . . . . *michaeli* n. sp.
- 10 Elytral interval 7 keel-like and pronounced, lateral intervals 8 and 9 not or indistinctly visible in dorsal view, internal intervals between these keel-like intervals flat or nearly flat. . . . . 11
- Elytral interval 7 not keel-like, sometimes interval 7 distinctly convex or sometimes intervals 3, 5 and 7 convex, but interval 7 not separating the joint elytra in a flat interior part and a vertical lateral part. . . . . 21
- 11 All femora in both sexes with distinct teeth or angles. . . . . 12
- All femora in both sexes completely without armature. . . . . 13
- 12 All femora with distinct angles but without teeth, lateral margins of pronotum unbordered and rounded. – Sch: figs. 21–24. . . . . *kubani*
- All femora with distinct teeth, lateral margins of pronotum bordered. – Figs. 37–40. . . . . *dabashanica* n. sp.
- 13 Elytral interval 7 keel-like, swollen and knob-like in the humeral region. . . . . 14
- Elytral interval 7 keel-like over its total length and not swollen in the humeral region. . . . . 16
- 14 Joint elytra about twice as long as wide; elytra with rows of fine punctures extinguishing in the posterior part; elytral intervals dull and without setation; aedeagus with long apicale. – Figs. 41–44. . . . . *mirabilis*
- Joint elytra about 1.6 times as long as wide; elytra with rows of large punctures; elytral intervals shining and with adpressed setation; aedeagus with broad apicale. . . . . 15
- 15 Body length 8.8–9.5 mm; elytral intervals wrinkled and with dense and coarse punctation; posterior tibiae of males armed with spines. – Sch: figs. 37–40. . . . . *mulica*
- Body length 7.0–7.5 mm; elytral intervals flat with fine

- punctuation; posterior tibiae of males without spines. – Figs. 45–48. . . . . **maowenica n. sp.**
- 16 Body length 4.7–5.2 mm; lateral margins of pronotum crenulated. – Sch: figs. 33–36. . . . . **yajiangica**
- Body length over 6.0 mm; lateral margins of pronotum smooth. . . . . 17
- 17 Pronotum besides impressions flat, so disc on the same level as lateral margins. . . . . 18
- Pronotum besides impressions more or less convex, so disc higher than lateral margins. . . . . 19
- 18 Base of pronotum with distinct impression (besides other impressions), this base distinctly narrower than anterior margin with protruding anterior corners; apicale of aedeagus broad, spade-like. – Sch: figs. 25–28. . . . . **yulongica**
- Base of pronotum without distinct impression, this base about as wide as anterior margin with rounded anterior corners; apicale of aedeagus longer, triangular. – Sch: figs. 29–32. . . . . **bowaica**
- 19 Pronotum and elytra shining; pronotum strongly convex with distinct lateral border, basal margin bent downwards; elytral rows with fine punctures. – Sch: figs. 41–44. . . . . **haigouica**
- Pronotum and elytra dull; pronotum feebly convex with marked but unbordered lateral margins, basal margin not bent downwards; elytral rows with large punctures. . . . . 20
- 20 Base of pronotum distinctly narrower than anterior margin; punctures of elytral intervals as large as punctures of the rows; apicale of aedeagus triangular. – Sch: figs. 45–48. . . . . **habashanica**
- Base of pronotum about as wide as anterior margin; punctures of elytral intervals distinctly smaller than punctures of the rows; apicale of aedeagus spade-like. – Sch: figs. 49–52. . . . . **schuelkei**
- 21 All femora or at least anterior femora in both sexes medially with teeth or distinct angles. . . . . 22
- All femora without distinct modifications. . . . . 48
- 22 Elytra (not pronotum) without any setation in the elytral rows and intervals. . . . . 23
- Elytra with long erect or short adpressed setae in the elytral rows and/or in the elytral intervals. . . . . 30
- 23 Only anterior femora with distinct angles, middle and posterior femora without armature. – Figs. 49–52. . . . . **jinpingica n. sp.**
- All femora with distinct teeth. . . . . 24
- 24 Posterior tibiae of males without distinct modifications. . . . . 25
- Posterior tibiae of males with modifications (hooked interior apex or medially with tooth or dilatation). . . . . 28
- 25 Lateral margins of pronotum unbordered. . . . . 26
- Lateral margins of pronotum bordered. . . . . 27
- 26 Body length 6.2–7.5 mm, aedeagus with longer apicale with rounded finger-like tip. – Sch: figs. 65–68. . . . . **smetanai**
- Body length 7.5–8.5 mm, aedeagus with broad apicale with blunt tip. – Figs. 53–56. . . . . **bohrni n. sp.**
- 27 Basal margin of pronotum distinctly narrower than distal margin, pronotum cordiform; aedeagus with longer triangular apicale; anterior femora of males of similar size as middle and posterior femora, anterior femora besides hook-like tooth with rounded anterior corner. – Sch: figs. 53–56. . . . . **chinensis**
- Basal margin of pronotum as wide as distal margin, pronotum subquadrate; aedeagus with broader spade-like apicale; anterior femora of males extraordinary thick and besides broad tooth with additional tooth-like anterior corner. – Figs. 57–60. . . . . **sehnali n. sp.**
- 28 Posterior tibiae of males with distinctly hooked inner apex, medial side with granules; apicale of aedeagus about twice as long as wide. – Sch: figs. 57–60. . . . . **turnai**
- Posterior tibiae of males medially dilatated or with teeth, without granules; apicale of aedeagus subquadrate. . . . . 29
- 29 Elytral intervals with distinct punctuation; male anterior tibiae with parallel inner side; male posterior tibiae medially with tooth. – Sch: figs. 61–64. . . . . **tabanai**
- Elytral intervals only with very fine and scattered punctures; male anterior tibiae medially with dilatation; male posterior tibiae medially with rounded dilatation. – Sch: figs. 69–72. . . . . **hubeica**
- 30 Only anterior femora with teeth, medial and posterior tibiae without modifications. – Sch: figs. 73–76. . . . . **yasuakii**
- All femora with teeth or at least with distinct angles. . . . . 31
- 31 Body length 9.3–9.6 mm; elytra with dense and large punctuation of the intervals, so the elytral intervals are indistinct. – Sch: figs. 77–80. . . . . **shaluica**
- Body length less than 8.0 mm; elytra with distinct elytral rows and separated intervals. . . . . 32
- 32 Lateral margins of pronotum distinctly bordered. . . . . 33
- Lateral margins of pronotum unbordered, sometimes feebly marked. . . . . 36
- 33 Eyes prominent; pronotum cordiform with the basal margin distinctly narrower than anterior margin; body length 6.6–7.9 mm. – Sch: figs. 85–88. . . . . **angulifemoralis**
- Eyes not prominent; pronotum subquadrate with the basal margin as wide as the anterior margin; body length 3.5–6.0 mm. . . . . 34
- 34 Pronotum and elytra with erect and long setation; apicale of aedeagus short and broad. – Sch: figs. 97–100. . . . . **luguica**
- Pronotum and elytra with short and adpressed setation; apicale of aedeagus long and triangular. . . . . 35
- 35 Pronotum widest in the middle. – Sch: figs. 101–104. – SW Tibet. . . . . **formaneki**
- Pronotum widest near the anterior corners. – Figs. 61–64. – N Yunnan. . . . . **farkaci n. sp.**
- 36 Pronotum with coarse, partly confluent punctuation, surface of pronotum wrinkled or uneven. . . . . 37
- Pronotum with fine punctuation, punctures always distinctly separated, surface of pronotum smooth. . . . . 40
- 37 Odd-numbered elytral intervals distinctly convex; all femora with distinct teeth. – Sch: figs. 121–124. . . . . **ganzica**
- All elytral intervals homogeneous, either all slightly convex or all flat; femora only with angles, the latter partly reduced. . . . . 38
- 38 Pronotum subquadrate with the basal margin as wide as the anterior margin; male anterior tibiae medially with distinct tooth. – Sch: figs. 117–120. . . . . **ludingica**
- Pronotum cordiform with the basal margin narrower than the anterior margin; male anterior tibiae without modification. . . . . 39
- 39 Elytral intervals densely scattered with large and confluent punctures; aedeagus with broad apicale with blunt tip. – Sch: figs. 105–108. . . . . **jizushana**
- Elytral intervals with a row of separated small punctures; aedeagus with triangular apicale. – Sch: figs. 125–128. . . . . **yufengsi**
- 40 Pronotum and elytra with dull shagreened surface and with long, dense and erect setation. – Sch: figs. 109–112. . . . . **qinlingica**
- Pronotum and elytra with shining surface and with sparser short and adpressed setation. . . . . 41
- 41 Pronotum with fine and sparse punctuation; pronotal punctures distinctly smaller than punctures of the elytral rows. – Figs. 65–68. . . . . **lisuorum n. sp.**
- Pronotum with larger punctures, which are of similar size as those of the elytral rows. . . . . 42
- 42 Pronotum cordiform, basal margin distinctly narrower than anterior margin. . . . . 43

- Pronotum either subquadrate or trapezoid, basal margin as wide as or only slightly narrower than anterior margin. . . . . 44
- 43 Joint elytra oval; aedeagus with longer triangular apicale. – Sch: figs. 81–84. . . . . *wolongica*
- Joint elytra longer and parallel; aedeagus with broad apicale with blunt tip. – Figs. 69–72. . . . . *barkamica* n.sp.
- 44 Pronotum widest in the middle. . . . . 45
- Pronotum widest before the middle (three quite similar species, compare body length, dorsal punctation, setation and shape of aedeagus and distribution). . . . . 46
- 45 Body length 3.7–3.8 mm; posterior tibiae of males only with finely hooked interior apex; aedeagus with longer triangular apicale. – Sch: figs. 93–96. . . . . *daxueica*
- Body length 5.0 mm; posterior tibiae of males with finely hooked interior apex and medially swollen in the middle; aedeagus with broader apicale with blunt apex. – Sch: figs. 113–116. . . . . *cylindrica*
- 46 Body length above 5.5 mm. – Shaanxi and N Sichuan. – Sch: figs. 129–132. . . . . *fengileana*
- Body length 3.0–4.2 mm. – S Tibet and Yunnan. . . . . 47
- 47 Punctures of elytral intervals smaller than pronotal punctures; punctures of elytral rows without setae, only elytral intervals with setae – S Tibet. – Sch: figs. 89–92. . . . . *gracilis*
- Punctures of elytral rows equal in size to pronotal punctures, each puncture bearing a seta, intervals with a row of fine punctures bearing a similar seta. – Yunnan. – Figs. 73–76. . . . . *septuagesima* n.sp.
- 48 Small species (4.2–6.0 mm) with distinctly dull surface and pronotum with coarse and confluent punctation. . . . . 49
- Small and large species; if body length below 6.0 mm then with shining surface and pronotum with separated punctation. . . . . 50
- 49 Elytral intervals 3, 5 and 7 distinctly but equally convex, other elytral intervals flat; lateral margins of pronotum marked and crenulated but unbordered; aedeagus with longer triangular apicale. – Figs. 77–80. . . . . *davidi* n.sp.
- Elytral intervals 3 and 5 slightly, 7 distinctly convex, intervals with rows of distinct granules; lateral margins of pronotum not bordered and not marked; aedeagus with broad spade-like apicale. – Figs. 81–84. . . . . *gaoligongica* n.sp.
- 50 Elytra (not pronotum) without any setation or with very short setation in the elytral rows and/or intervals (setae not distinctly longer than a diameter of the punctures in the rows). . . . . 51
- Elytra with distinct, adpressed shorter or erect longer setation in the elytral rows and/or intervals. . . . . 79
- 51 Punctuation of elytra confused, surface not distinctly separated in elytral rows and intervals. . . . . 52
- Elytra always with distinct elytral rows and punctate or impunctate intervals, sometimes punctures in the intervals as large as in the rows, sometimes the elytral rows extinguished in the posterior part of the elytra. . . . . 54
- 52 Body length 5.5–6.2 mm; punctuation on pronotum and elytra distinctly separated, surface shining. – Sch: figs. 133–135. . . . . *heinzi*
- Body length 6.5–8.0 mm; punctuation on pronotum and elytra confluent, surface dull. . . . . 53
- 53 Pronotum distinctly broader than long; elytra 1.5 times as long as wide, widest in posterior third. – Sch: figs. 140–143. . . . . *businskyorum*
- Pronotum nearly as wide as long; elytra 1.8 times as long as wide, widest in the middle; few differences, but no intermediate forms known. – Sch: figs. 144–147. . . . . *degenica*
- 54 Elytral intervals besides the puncture rows with distinct punctation, these punctures densely scattered and about half as large as punctures in the rows. – Sch: figs. 136–139. . . . . *safraneiki*
- Elytral intervals between the puncture rows without distinct punctation or only with an indistinct row of very fine punctures. . . . . 55
- 55 Small species (4.4–6.6 mm) from Tibet with a flat and subquadrate pronotum, pronotal disc smooth and without impressions, lateral pronotal margin bordered. . . . . 56
- Smaller and larger species with different structure of the pronotum; if with similar pronotum than not from Tibet, if from Tibet than with a different pronotum. . . . . 59
- 56 Male tibiae without secondary sexual characters. . . . . 57
- Anterior and/or posterior male tibiae with secondary sexual characters. . . . . 58
- 57 Pronotum with rounded lateral margins; elytral punctures larger, distance sometimes only about 1 diameter. – Sch: figs. 164–167. . . . . *alticola*
- Pronotum with parallel lateral margins; elytral punctures finer, distance always over 2 diameters; few differences, but no intermediate forms known. – Sch: figs. 168–171. . . . . *parallelocollis*
- 58 Anterior and posterior tibiae of males swollen medially; apicale of aedeagus broad with blunt tip. – Sch: figs. 156–159. . . . . *tuntalica*
- Anterior tibiae of males slightly excavated medially; apicale of aedeagus narrower and triangular. – Sch: figs. 200–203. . . . . *cholanica*
- 59 Large species (7.8–10.3 mm) with long and parallel elytra, with a flat subquadrate pronotum with bordered lateral margins, and with a row of distinct spines interiorly in the distal half of the male posterior tibiae. . . . . 60
- Larger or smaller species with a different combination of these characters. . . . . 63
- 60 Pronotum about 1.1–1.3 times as broad as long; apicale of aedeagus broad and with blunt tip. . . . . 61
- Pronotum about as wide as long; apicale of aedeagus triangular. . . . . 62
- 61 Pronotum widest before the middle; male anterior tibiae without modification. – Sch: figs. 180–183. . . . . *tryznai*
- Pronotum widest behind the middle; male anterior tibiae medially excavated. – Figs. 85–88. . . . . *kalabi* n.sp.
- 62 Pronotum with parallel sides; posterior tibiae of males besides spines distally somewhat swollen but without distinctly hooked inner apex. – Sch: figs. 176–179. . . . . *dickorei*
- Pronotum with rounded sides; posterior tibiae of males besides spines distally somewhat swollen and with distinctly hooked inner apex. – Sch: figs. 172–175. . . . . *gyamdaica*
- 63 Lateral margins of pronotum completely unbordered and also not marked. . . . . 64
- Lateral margins of pronotum completely or at least partly bordered. . . . . 66
- 64 Small body size (3.8–4.8 mm); pronotum cordiform, basal margin distinctly narrower than anterior margin. – Sch: figs. 148–151. . . . . *diancangica*
- Body medium-sized (6.5–8.8 mm); pronotum round. . . . . 65
- 65 Anterior tibiae of males medially with a distinct tooth; joint elytra of oval shape. – Sch: figs. 188–191. . . . . *schusteri*
- Anterior tibiae of males without modification; joint elytra long and parallel. – Sch: figs. 160–163. . . . . *hengduanica*
- 66 Posterior tibiae of males medially with a distinct hump-like dilatation shortly before apex. – Sch: figs. 192–195. . . . . *baishuica*
- Posterior tibiae of males with different modification or without secondary sexual characters. . . . . 67
- 67 Posterior tibiae of males medially with a single spine shortly before apex. – Figs. 89–92. . . . . *naxiorum* n.sp.
- Posterior tibiae of males with different modification or without secondary sexual characters. . . . . 68
- 68 All tibiae in male without distinct modifications. . . . . 69

- Anterior and/or posterior tibiae in male modified. . . . . 73
- 69 Basal margin of pronotum distinctly narrower than anterior margin, pronotum cordiform. . . . . 70
- Pronotum broad, subquadrate or round, basal margin not distinctly narrower than anterior margin. . . . . 71
- 70 Body length 4.6 mm; aedeagus with long triangular apicale. – Sch: figs. 152–155. . . . . *zogqenica*
- Body length 6.0–8.5 mm; aedeagus with spade-like apicale with blunt tip. – Figs. 93–96. . . . . *fouquei* n. sp.
- 71 Pronotum flat and subquadrate. . . . . 72
- Pronotum convex and round. – Sch: figs. 196–199. . . . . *langmusica*
- 72 Pronotum with large but sparse punctation; aedeagus with triangular apicale with acute tip. – Figs. 97–100. . . . . *alesi* n. sp.
- Pronotum with fine but dense punctation; aedeagus with spade-like apicale with blunt tip. – Sch: figs. 216–219. . . . . *nyingchica*
- 73 Elytral rows distinctly distinguished in the posterior part of the elytra; elytral intervals distinctly shagreened and dull. – Sch: figs. 204–207. . . . . *xuerensis*
- Elytral rows more or less complete; elytral intervals shining. . . . . 74
- 74 Pronotum cordiform, its base distinctly narrower than anterior margin. . . . . 75
- Pronotum round or subquadrate, its base more or less as wide as anterior margin. . . . . 76
- 75 Body length 10.0–11.5 mm; elytra with rows of punctures in distinct striae; posterior tibiae of males swollen interiorly in the middle; apicale of aedeagus thin and finger-like. – Sch: figs. 184–187. . . . . *gigantea*
- Body length 8.0–9.0 mm; elytra with rows of punctures without striae; posterior tibiae of males swollen interiorly at base; apicale of aedeagus broad spade-like. – Figs. 101–104. . . . . *baiorum* n. sp.
- 76 Basal margin of pronotum bent downwards, so this margin is on a distinctly deeper level than disc. – Sch: figs. 208–211. . . . . *kangdingica*
- Basal margin of pronotum not bent downwards, so this margin is more or less on the same level as disc. . . . . 77
- 77 All tibiae of males with a few indistinct granules at the inner side, but without excavations or dilatations; body length in the average smaller (4.5–6.5 mm). – Figs. 109–112. . . . . *xueshanica* n. sp.
- Anterior tibiae of males interiorly with excavation, posterior tibiae interiorly swollen or with hooked apex. . . . . 78
- 78 Pronotum round; posterior tibiae of males interiorly with hooked apex; apicale of aedeagus longer spade-like. – Sch: figs. 212–215. . . . . *zongdianica*
- Pronotum subquadrate; posterior tibiae of males interiorly with dilatation in the distal part; apicale of aedeagus very short and broad. – Figs. 105–108. . . . . *nujiangica* n. sp.
- 79 Eyes prominent; posterior tibiae of males medially swollen and interiorly with hooked apex. – Figs. 113–116. . . . . *baoshanica* n. sp.
- Eyes not prominent; posterior tibiae of males either differently modified or completely unmodified. . . . . 80
- 80 Elytral intervals between elytral rows either with distinct scattered punctures or with an additional row of large punctures (interval punctures about half as large as punctures of the rows). . . . . 81
- Elytral intervals without or only with a row of indistinct very fine punctures in the elytral intervals. . . . . 84
- 81 Elytral intervals with a single row of distinct punctures; posterior tibiae of males medially granulated. – Sch: figs. 220–223. . . . . *becvari*
- Elytral intervals with scattered dense and large punctation. . . . . 82
- 82 Posterior tibiae of males medially with a distinct tooth; apicale of aedeagus broad and spade-like. – Sch: figs. 224–227. . . . . *houzhenzica*
- Posterior tibiae of males only with finely hooked inner apex; apicale of aedeagus longer and triangular. . . . . 83
- 83 Pronotum and elytra dull, punctation of pronotum confluent; anterior femora of males medially granulated; anterior tibiae of males with a hooked inner apex. – Sch: figs. 231–234. . . . . *bifoveolata*
- Pronotum and elytra shining, punctation of pronotum separated; anterior femora of males smooth; anterior tibiae of males distinctly swollen medially. – Sch: figs. 235–238. . . . . *puetzi*
- 84 Pronotum and elytra with long and erect setae. . . . . 85
- Pronotum and elytra with short, adpressed setae. . . . . 88
- 85 Pronotum with rounded lateral margins, widest in the middle; base of pronotum indistinctly bordered and bent downwards; pronotum with fine punctation, these punctures distinctly finer than punctures in the elytral rows. – Sch: figs. 228–230. . . . . *hingstoni*
- Pronotum subquadrate or long trapezoid, widest before middle; base of pronotum unbordered and not bent downwards; pronotum with larger punctures of same size as punctures in the elytral rows. . . . . 86
- 86 Pronotum long, trapezoid; elytra longer and parallel. – Sichuan. – Figs. 117–120. . . . . *moxica* n. sp.
- Pronotum subquadrate; elytra shorter and oval. – Yunnan. . . . . 87
- 87 Apicale of aedeagus triangular with sinuated lateral margins and finger-like tip. – Sch: figs. 239–242. . . . . *watanabei*
- Apicale of aedeagus broad with blunt tip. – Sch: figs. 243–246. . . . . *daliensis*
- 88 Pronotum with coarse punctation, punctures often confluent, disc with distinct impressions, surface dull and shagreened. . . . . 89
- Pronotum with finer punctation, punctures never confluent, disc without impressions, surface shining. . . . . 91
- 89 Anterior margin of pronotum excavated and anterior corners protruding, lateral margins distinctly bordered. – Sch: figs. 247–250. . . . . *yuzhuensis*
- Anterior corners of pronotum not distinctly protruding, lateral margins unbordered or at least indistinctly marked. . . . . 90
- 90 Elytral inner intervals flat, intervals 5 and 7 convex; intervals about 3 times as wide as the punctures of the elytral rows; setae of elytral intervals distinctly longer than setae of the rows. – Sch: figs. 251–254. . . . . *luhuoica*
- Elytral intervals equally convex; intervals about 1–2 times as wide as the punctures of the elytral rows; setae of elytral intervals as long as setae of the rows. – Sch: figs. 259–262. . . . . *wrasei*
- 91 Pronotum widest in the anterior third, lateral margins bordered. . . . . 92
- Pronotum widest in the middle, lateral margins unbordered. . . . . 93
- 92 Elytral intervals with a row of fine punctures bearing short adpressed setae; elytra longer and parallel. – Sichuan. – Sch: figs. 255–258. . . . . *paomaica*
- Elytral intervals scattered with dense fine punctation, punctures bearing longer adpressed setae; elytra shorter and oval. – Yunnan. – Figs. 121–124. . . . . *gyalthangica* n. sp.
- 93 Apicale of aedeagus triangular with straight sides and with acute tip. – Sch: figs. 263–266. . . . . *brendelli*
- Apicale of aedeagus broad with sinuated sides and blunt tip. – Sch: figs. 267–270. . . . . *emeishana*



## 7 References

- JINGKE, L. & PENG, C. (1993): Studies on fauna and ecogeography of soil animals, 265 pp.; Jilin (Press of Northeast Normal University) [in Chinese].
- MASUMOTO, K. (2001): A new genus and species of the tribe Adeliini (Coleoptera, Tenebrionidae) from the upper hypogean zone of southwest China. – Journal of the speleological Society of Japan **26**: 44–49.
- SCHAWALLER, W. (1995): Revision der *Laena*-Arten Mittelasiens (Insecta, Coleoptera, Tenebrionidae). – Spixiana **18**: 65–73.
- SCHAWALLER, W. (2001): The genus *Laena* Latreille (Coleoptera: Tenebrionidae) in China, with descriptions of 47 new species. – Stuttgarter Beiträge zur Naturkunde, Serie A (Biologie) **632**: 62 pp.
- SCHAWALLER, W. (2002): The genus *Laena* Latreille in Nepal, with taxonomic and faunistic notes on species from the adjacent Himalayas (Coleoptera: Tenebrionidae). – Stuttgarter Beiträge zur Naturkunde, Serie A (Biologie) **641**: 69 pp.
- SCHAWALLER, W. (2006): New species of the genus *Laena* Latreille (Coleoptera: Tenebrionidae) from Southeastern Asia. – Zootaxa **1325**: 369–384.

### Author's address:

Dr. WOLFGANG SCHAWALLER, Staatliches Museum für Naturkunde, Rosenstein 1, 70191 Stuttgart, Germany;  
e-mail: schawaller.smns@naturkundemuseum-bw.de

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