# The genus *Laena* Latreille (Coleoptera: Tenebrionidae) in the Indian Himalayas of Uttar Anchal and Himachal Pradesh, with descriptions of four new species<sup>1</sup>

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### Abstract

This study represents a revision of the species of the genus *Laena* Latreille, 1829 (Tenebrionidae: Lagriinae) from the Indian Himalayan provinces Uttar Anchal (= mountainous part of the previous province Uttar Pradesh) and Himachal Pradesh. All available types of known species are redescribed, diagnostic characters are figured, newly collected material is listed, and four new species are described: *Laena barclayi* **n. sp.** and *Laena simlaica* **n. sp.** both from Himachal Pradesh, and *Laena badrinathica* **n. sp.** and *Laena mussoorica* **n. sp.** both from Uttar Anchal. Moreover, an identification key is provided for the 32 recognized species from both Indian provinces. The status of additional five taxa remains doubtful.

K e y w o r d s: Coleoptera, Tenebrionidae, *Laena*, Uttar Anchal, Himachal Pradesh, taxonomy, new species, distribution.

### Zusammenfassung

Die Arten der Gattung Laena Latreille, 1829 (Tenebrionidae: Lagriinae) von den indischen Himalaya-Provinzen Uttar Anchal (= gebirgiger Teil der ehemaligen Provinz Uttar Pradesh) und Himachal Pradesh werden revidiert. Alle verfügbaren Typen der bekannten Arten werden wiederbeschrieben, diagnostische Merkmale werden abgebildet, neu gesammeltes Material wird aufgelistet und vier neue Arten werden beschrieben: Laena barclayi n. sp. und Laena simlaica n. sp., beide von Himachal Pradesh, sowie Laena badrinathica n. sp. und Laena mussoorica n. sp., beide von Uttar Anchal. Für alle 32 erkannten Arten dieser beiden indischen Provinzen wird ein Bestimmungsschlüssel aufgestellt, der Status fünf weiterer Taxa bleibt zweifelhaft.

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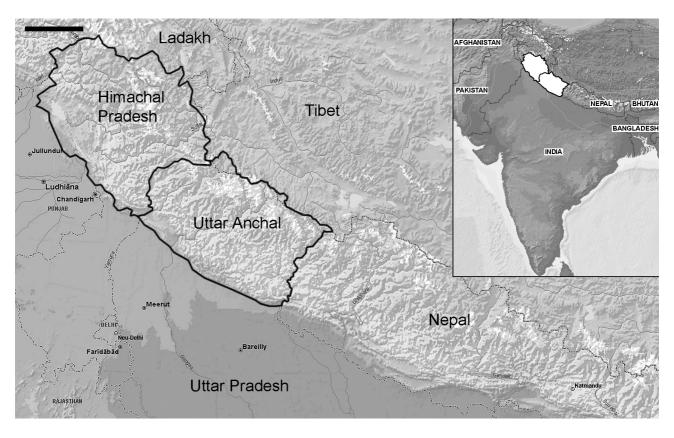
### 1 Introduction

While revising the genus *Laena* Latreille, 1829 (Tenebrionidae: Lagriinae) from the Nepal Himalayas (Scha-WALLER 2002), species of the adjacent Indian Himalayas (Uttar Anchal, Himachal Pradesh, Darjeeling, Sikkim) have also been studied, and additional newly collected specimens have been listed in that publication. However, in that revision of the Nepalese fauna the Indian species were not redescribed and figured. This is done in the present paper for all species recorded from the northwestern Indian Himalayan provinces Uttar Anchal (since 2007 new name Uttarakhand) and Himachal Pradesh (map Fig. 1), but not for the species from the northeastern provinces Darjeeling and Sikkim. Unfortunately, five taxa from that region remain doubtful, because the corresponding types could not be studied. Not included herein are all species and records from the more western situated Kashmir, Pakistan and Afghanistan (under preparation in a forthcoming study). The numerous species from China including adjacent Tibet were treated by Schawaller (2001, 2008).

There is certain confusion about the old province name "Uttar Pradesh", which was used in old species descriptions. This province was later divided in a Himalayan part "Uttar Anchal" (where the *Laena* come from) and a low-land part "Uttar Pradesh" (where no *Laena* species occur). In 2007 "Uttar Anchal" received a new name "Uttarkhand". In this paper, the well known name "Uttar Anchal" is consequently used for that region, even if the old types are labelled with "Uttar Pradesh". Fortunately, the name of the westernmore province "Himachal Pradesh" was never changed.

In contrast to Nepal, where most of the species (63) have been collected and described only in the last 30 years, the species from Uttar Anchal and Himachal

<sup>&</sup>lt;sup>1</sup> Contributions to Tenebrionidae, no. 74. – For no. 73 see: Koleopterologische Rundschau 79 (2009).



**Fig. 1.** The investigated area with records of *Laena* spp. in the Indian Himalayan provinces Uttar Anchal (since 2007 new name Uttarakhand) and Himachal Pradesh. – Scale line: 100 km.

Pradesh (now 32 and 5 doubtful taxa) have been mostly described already in previous decades (Schuster 1916, 1926, 1935). The different periods of descriptions reflect the different periods of access for fieldwork. This paper adds "only" four new species, however one with quite remarkably modified male tibiae. The species of *Laena* are wingless and most species populate only small areas in a restricted altitudinal belt. Not a single species from Nepal and Tibet occurs also in the adjacent Indian provinces Uttar Anchal and Himachal Pradesh.

# Acronyms of depositories BMNH The Natural History Museum, London, United Kingdom (Max Barclay) CRGT Private collection Dr. Roland Grimm, Tübingen, Germany CRSW Private collection Rudolf Schuh, Vienna, Austria HNHM Hungarian Natural History Museum, Budapest, Hungary (Dr. Ottó Merkl) SMNS Staatliches Museum für Naturkunde, Stuttgart, Germany

### Acknowledgements

Without the trustful loan of types by Max Barclay (London) and Dr. Ottó Merkl (Budapest) my studies about the Himalayan *Laena* would have remained fragmentary. I wish to thank them also for their kind hospitality during my visits for

comparative studies. Dr. Alexander Riedel (Karlsruhe) generously deposited the collected tenebrionids of his first travels in the Museum Stuttgart. Johannes Reibnitz (Stuttgart) scanned my drawings and combined them on plates. Dr. Roland Grimm (Tübingen) and Dr. Ottó Merkl improved the manuscript by their comments as referees.

# 2 The species of *Laena* in Uttar Anchal and Himachal Pradesh

Laena almorensis Schuster, 1926 (Figs. 2–4)

Studied type material: India, Uttar Anchal, W Almora Division, Sunderdhunga Valley, 8000-12000 ft. (2450-3660 m), VI.1919, leg. H.G. CHAMPION, 3 syntypes BMNH, 1 3 syntype designated as lectotype by SCHAWALLER (2002).

Redescription: Body length 3.8–4.2 mm. Eyes not prominent. Pronotum (Fig. 2) with small punctures, distance as 2–6 diameters, all punctures with long erect setae; surface flat and shining; lateral margin unbordered; propleura with similar punctation and same setation as on disc. Elytra (Fig. 2) with rows of punctures without striae, punctures of rows as large as punctures on pronotum,

most punctures with a short adpressed seta; intervals with an irregular row of small punctures bearing each a seta of same length; all intervals flat and shining. All femora without teeth or angulations (Fig. 3). All tibiae without distinct sexual dimorphism. Apicale of aedeagus see Fig. 4.

Distribution: India (Uttar Anchal).

# Laena badrinathica **n. sp.** (Figs. 5–7)

Holotype (3): India, Uttar Anchal, Chamoli Distr., Badrinath, 3200–3600 m, 1.VIII.1989, leg. A. RIEDEL, SMNS.

Paratype: India, Uttar Anchal, Chamoli Distr., Joshimath, Ghangaria, 2700 m, 4.VIII.1989, leg. A. RIEDEL, 1 ex. SMNS.

Etymology: Named after the village Badrinath, in whose vicinity the holotype has been collected.

Description: Body length 5.0–5.5 mm. Eyes not prominent. Pronotum (Fig. 5) with larger punctures, distance as 1–4 diameters, all punctures with longer erect setae; surface flat and shining; lateral margin bordered; propleura with sparser punctation and shorter setation than on disc. Elytra (Fig. 5) with rows of punctures without striae, punctures of rows as large as punctures on pronotum, most punctures with long seta; intervals with an irregular row of small punctures bearing each a longer erect seta, interval 9 with 4 indistinct setiferous pores; all intervals flat and shining. Anterior femur with a small sharp angulation (Fig. 6), middle and posterior femora with a pair of similar sharp angulations. All tibiae without peculiarities. Apicale of aedeagus see Fig. 7.

Diagnosis: Laena badrinathica n. sp. is characterized by the small body size, the bordered lateral margin of the pronotum, the shining dorsal surface with long setation, the elytral punctural rows without striae, the armed femora without teeth but with distinct angulations, and the shape of the aedeagus. L. bhatiai and L. gardneri possess similarly armed femora and also bordered lateral margins of the pronotum, but both species are larger (around 7 mm) and have a shagreened dull dorsal surface with shorter dorsal setation. Additionally in L. gardneri the elytral punctural rows are in feeble striae and the elytral intervals are convex.

# Laena barclayi **n. sp.** (Figs. 8–10)

Holotype (♂): India, Himachal Pradesh, Jalori Pass, Seraj, 10800 ft. (3300 m), without date, leg. H.G. Снамрю, ВМNН.

Etymology: Named in honour of Max Barclay (The Natural History Museum, London) for fruitful cooperation.

Description: Body length 7.3 mm. Eyes not prominent. Pronotum (Fig. 8) with larger punctures, distance as 0.5–4.0 diameters, most punctures with short adpressed setae; surface flat and shining; lateral margin unbordered; propleura with similar punctation and setation as on disc. Elytra (Fig. 8) with rows of punctures without striae, punctures of rows somewhat larger than punctures on pronotum, most punctures with short adpressed seta; intervals without punctation and setation, interval 9 without distinct setiferous pores; all intervals convex and shining. All femora without teeth or angulations. Anterior tibiae of males with a striking finger-like interior process (Fig. 9), middle and posterior tibiae without peculiarities. Apicale of aedeagus see Fig. 10.

Diagnosis: To be recognized by the longitudinal pronotum with unbordered lateral margin, unarmed femora, the shape of the aedeagus and particularly the male anterior tibia with a finger-like interior process. Such a structure of the male tibia (most probably a form of sexual dimorphism) does not occur in any of the numerous Himalayan species, but only in a single species from Sichuan, *Laena schusteri* (Heller, 1923). This species has a broader pronotum, broader elytra with the elytral punctural rows in striae and a completely different shape of the apicale of aedeagus (illustrated by Schawaller 2001: figs. 188–191).

### Laena beesoni Schuster, 1935 (Figs. 11–13)

Studied type material: India, Punjab, Simla, Kotkhai, Kalala F. (?Forest), 8000 ft. (2450 m), 14.–15.V.1924, leg. C. F. C. Beeson, 2 syntypes BMNH, 1 designated as lectotype by Schawaller (2002).

Redescription: Body length 3.4–4.3 mm. Eyes prominent. Pronotum (Fig. 11) with large punctures, distance as 1–3 diameters, all punctures with short adpressed setae; surface flat and shining; lateral margin distinctly bordered; propleura with sparser punctation than on disc and without setation. Elytra (Fig. 11) with rows of punctures without striae, punctures of rows very deep and larger than punctures on pronotum, most punctures without or some with a very short seta; intervals without punctures and setation; all intervals convex and shining. All femora without teeth or angulations (Fig. 12). All tibiae without distinct sexual dimorphism. Apicale of aedeagus see Fig. 13.

Distribution: India (Himachal Pradesh).

Laena bhatiai Schuster, 1935 (Figs. 14–15)

Studied type material: India, Uttar Anchal, Deh-

ra Dun, 16.VI.1926, leg. F. Z., holotype BMNH (sex not examined).

Redescription: Body length 7.0 mm. Eyes not prominent. Pronotum (Fig. 14) with larger punctures, distance as 2-5 diameters, most punctures particularly laterally with longer erect setae; surface flat and shagreened; lateral margin bordered; propleura with sparser punctation than and similar setation as on disc. Elytra (Fig. 14) with rows of punctures without striae, punctures of rows as large as punctures on pronotum, most punctures without seta; intervals with an irregular row of small punctures bearing each a longer erect seta, particularly laterally, interval 9 with 4 setiferous pores; all intervals flat and shagreened. Anterior femur with a pair of small sharp angulations (Fig. 15), middle femur with a pair of larger sharp angulations, posterior femur with a small angulation and one tooth. Sexual dimorphism of tibiae unknown. Apicale of aedeagus unknown.

Distribution: India (Uttar Anchal).

Laena blairi Schuster, 1926 (Figs. 18–20)

Studied type material: India, Uttar Anchal, Chakrata Distr., Kanasar, 7050 ft. (2150 m), 14.–22.V.1922, leg. S. N. Chatterjee, 1  $\circlearrowleft$  syntype BMNH, designated as lectotype by Schawaller (2002). — India, Deoban (?Deohan), Gaunsar, 8500 ft. (2600 m), 24.V.1915, leg. C. F. C. Beeson, 1  $\updownarrow$  syntype BMNH. — Without locality label, 1 syntype BMNH.

Redescription: Body length 5.0-5.5 mm. Eyes not prominent. Pronotum (Fig. 18) with large punctures, distance as 1–3 diameters, all punctures with long erect setae; surface flat and shining; lateral margin unbordered; propleura with similar punctation and same setation as on disc. Elytra (Fig. 18) on disc with rows of punctures without striae, lateral rows 3-8 irregular, punctures of rows as large as punctures on pronotum, all punctures with a long and erect seta; intervals with an irregular row of small punctures bearing each a seta of same length, punctures in lateral intervals as large as punctures of the rows; all intervals flat and shining. All femora in both sexes without teeth or angulations. Anterior tibiae of males with a feeble interior dilatation (Fig. 19), middle and posterior tibiae without sexual dimorphism. Apicale of aedeagus see Fig. 20.

Distribution: India (Uttar Anchal).

Laena cameroni Schuster, 1926 (Figs. 21–22)

Studied type material: India, Uttar Anchal, Mussoorie, Ringal Gad, 15.IV.1922, leg. M. Cameron,  $1 \subsetneq$  syntype BMNH, designated as lectotype by SCHAWALLER (2002).

Redescription: Body length 6.5 mm. Eyes not prominent. Pronotum (Fig. 21) with large punctures, distance as 1–4 diameters, all punctures with long erect setae; surface flat and shining; lateral margin distinctly bordered; propleura with similar punctation and same setation as on disc. Elytra (Fig. 21) with rows of punctures without striae, punctures of rows as large as punctures on pronotum, most punctures with a short seta; intervals with an irregular row of small punctures bearing each a seta of same length; all intervals slightly convex and shining. All femora without teeth or angulations (Fig. 22). Sexual dimorphism of tibiae unknown. Apicale of aedeagus unknown.

Distribution: India (Uttar Anchal).

Laena carinata Schuster, 1926 (Figs. 16–17)

Studied type material: India, Uttar Anchal, Chakrata Distr., Konain, 24.–30.V.1922, leg. S. N. Chatterjee, 8000 ft. (2450 m), 1 syntype BMNH, designated as lectotype by Schawaller (2002) (sex not examined).

Redescription: Body length 11.0 mm. Eyes not prominent. Head with distinct ocular keel. Pronotum (Fig. 16) with large and confluent punctures, distance as 0.5–1.0 diameters, most punctures with short adpressed setae; surface somewhat uneven by the confluent punctures and shagreened; lateral margin bordered; propleura with similar punctation and same setation as on disc. Elytra (Fig. 16) with rows of punctures without striae, punctures of rows somewhat larger than punctures on pronotum, most punctures with a short adpressed seta; intervals nearly without punctures and setae; inner intervals flat, intervals 5, 7 and 9 distinctly convex, particularly posteriorly, shagreened. All femora without teeth or angulations (Fig. 17). Sexual dimorphism of tibiae unknown.

Remarks: Laena carinata Schuster, 1926 and Laena indica Fairmaire, 1896 are quite similar in body size and proportions, and share elevated elytral intervals 3, 5 and 7, but L. carinata has a dense and confluent pronotal punctation (sparser in L. indica), short adpressed setae on the elytra (naked in L. indica) and particularly oval and not prominent eyes with a distinct ocular keel (round and prominent and without ocular keel in L. indica). L. grandis Schuster, 1935 might belong to the same group but has the lateral margin of the pronotum unbordered and the punctures in the elytral rows small and in striae. The aedeagi cannot be compared, because the holotype of L. grandis is a female, and the sex of the lectotype of L. carinata has not been examined in these few old and fragile specimens.

Distribution: India (Uttar Anchal).

### Laena carinipennis Schuster, 1935 (Figs. 23–24)

Studied type material: India, Kulu, 1.-10.VI.1933, leg. R. N. Parker, ♀ holotype BMNH.

R e d e s c r i p t i o n : Body length 7.5 mm. Eyes slightly prominent. Pronotum (Fig. 23) with large punctures, distance as 1–3 diameters, most punctures with short adpressed setae; surface flat and shagreened; lateral margin finely bordered; propleura with similar punctation and same setation as on disc. Elytra (Fig. 23) with rows of punctures with feeble striae, punctures of rows as large as punctures on pronotum, punctures without or with a few very short setae; intervals with scattered distinct punctures bearing each a short adpressed seta of same length, interval 9 with 1 setiferous pore; inner intervals slightly convex, intervals 3, 5 and 7 broader and distinctly convex, particularly posteriorly, shagreened. All femora with a pair of acute corners (Fig. 24). Sexual dimorphism of tibiae unknown. Aedeagus unknown.

Distribution: India (Himachal Pradesh).

# Laena championi Schuster, 1926 (Figs. 25–26)

Studied type material: India, Uttar Anchal, W Almora Division, Kumaon, VI.1919, leg. H. G. CHAMPION, holotype BMNH (sex not examined).

Redescription: Body length 8.0 mm. Eyes slightly prominent. Pronotum (Fig. 25) with large punctures, distance as 1–5 diameters, most punctures with longer adpressed setae; surface flat and shining; lateral margin distinctly bordered; propleura with sparser punctation and shorter setation than on disc. Elytra (Fig. 25) with rows of punctures with striae, punctures of rows as large as punctures on pronotum, most punctures with a short seta; inner intervals with a few very large punctures (broken setae?), lateral intervals with a few longer erect setae; all intervals flat and shining. All femora with distinct teeth (Fig. 26). Sexual dimorphism of tibiae unknown. Aedeagus unknown.

Distribution: India (Uttar Anchal).

# Laena chatterjeei Schuster, 1935 (Figs. 27–28)

Studied type material: India, Himachal Pradesh, Simla, Matiana, 7900 ft. (2400 m), 30.IX.1921, leg. S. N. CHATTERJEE, holotype BMNH (sex not examined).

Redescription: Body length 4.8 mm. Eyes not prominent. Pronotum (Fig. 27) with small punctures, distance as 0.5–3.0 diameters, most punctures with short adpressed setae; surface flat and shagreened; lateral margin

bordered; propleura with similar punctation as and shorter setation than on disc. Elytra (Fig. 27) with rows of punctures without striae, punctures of rows larger than punctures on pronotum, punctures without seta; intervals without punctures and setae; all intervals slightly convex and shining. All femora without teeth or angulations (Fig. 28). Sexual dimorphism of tibiae unknown. Aedeagus unknown.

Distribution: India (Himachal Pradesh).

### Laena clypealis Fairmaire, 1896

Studied type material: None.

R e m a r k s: The original description is too poor and the type could not be reexamined, thus this taxon remains unclear. According to the description L. minuta is similar, but in L. clypealis the pronotum is rounder, the elytral striae are deeper and the elytral intervals are convex (flat in L. minuta). Body length 4.0 mm. Type locality Simla.

Distribution: Pakistan (Murree), India (Himachal Pradesh).

# Laena convexicollis Reitter, 1908 (Figs. 29–31)

Studied type material: India, Kulu, leg. Rost,  $\delta$  holotype HNHM (both antennae and right anterior leg missing).

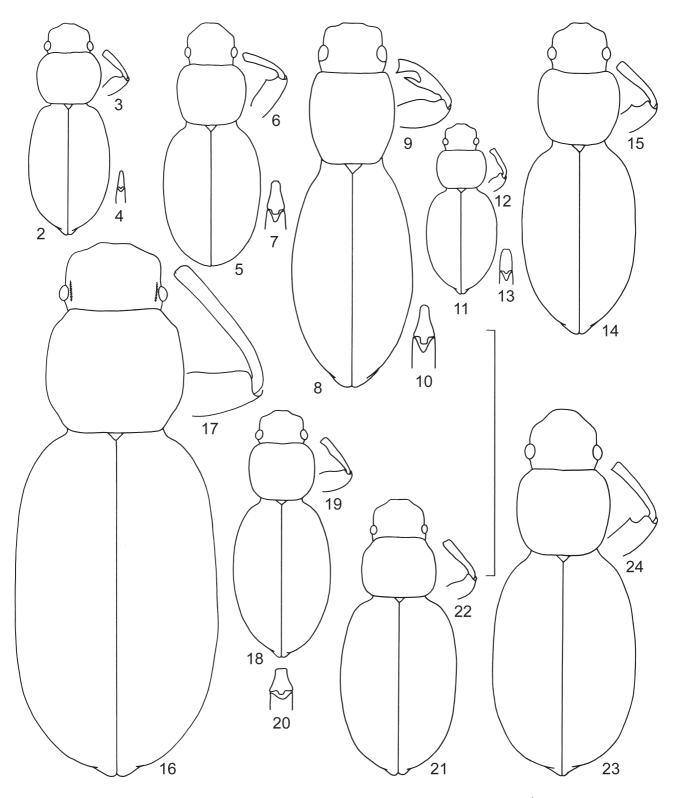
Redescription: Body length 7.0 mm. Eyes not prominent. Pronotum (Fig. 29) with large punctures, distance as 1–3 diameters, most punctures with short adpressed setae; surface with a pair of feeble impressions and shining; lateral margin marked but unbordered; propleura with larger punctation than on disc and without setation. Elytra (Fig. 29) with rows of punctures without striae, punctures of rows similar as punctures on pronotum, most punctures with small adpressed seta; intervals with an irregular row of small punctures bearing each a seta of same length, interval 9 basally with 1 distinct and posteriorly with 3 indistinct setiferous pores; all intervals flat and shining. All femora without teeth or angulations (Fig. 30). All tibiae without distinct sexual dimorphism. Apicale of aedeagus see Fig. 31.

Distribution: India (Himachal Pradesh).

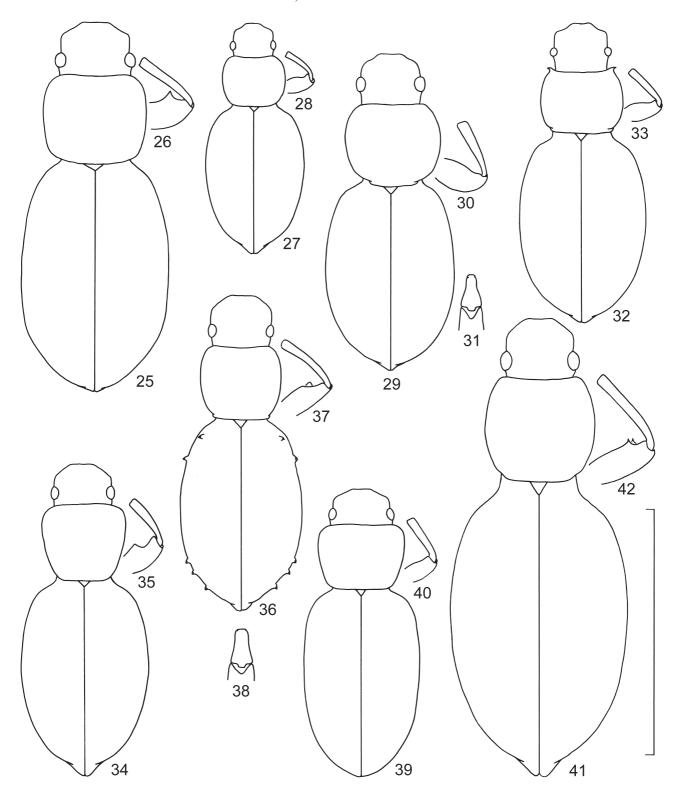
# Laena denticollis Schuster, 1926 (Figs. 32–33)

Studied type material: India, Uttar Anchal, Kumaon, W Almora, leg. H. G. CHAMPION, 1♀ syntype BMNH, designated as lectotype by SCHAWALLER (2002).

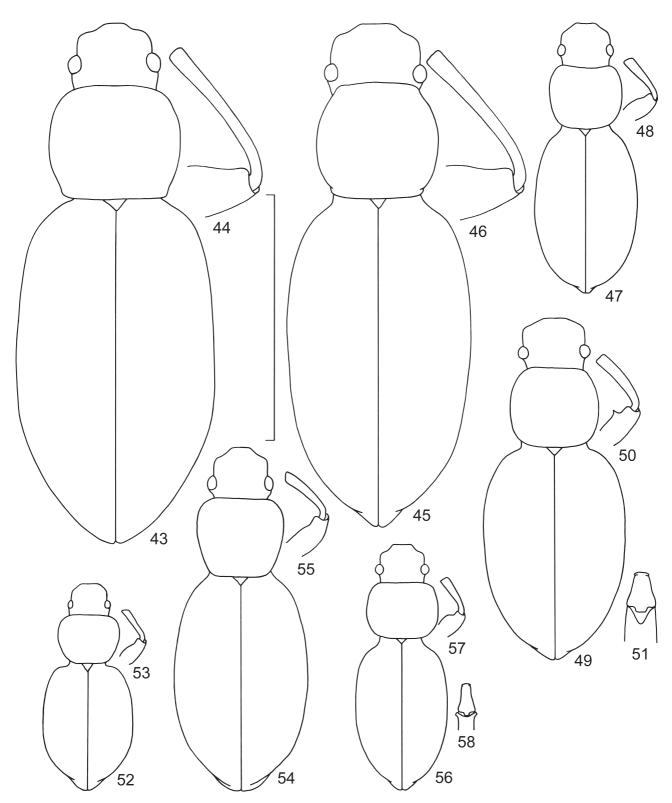
Redescription: Body length 6.0 mm. Eyes slight-



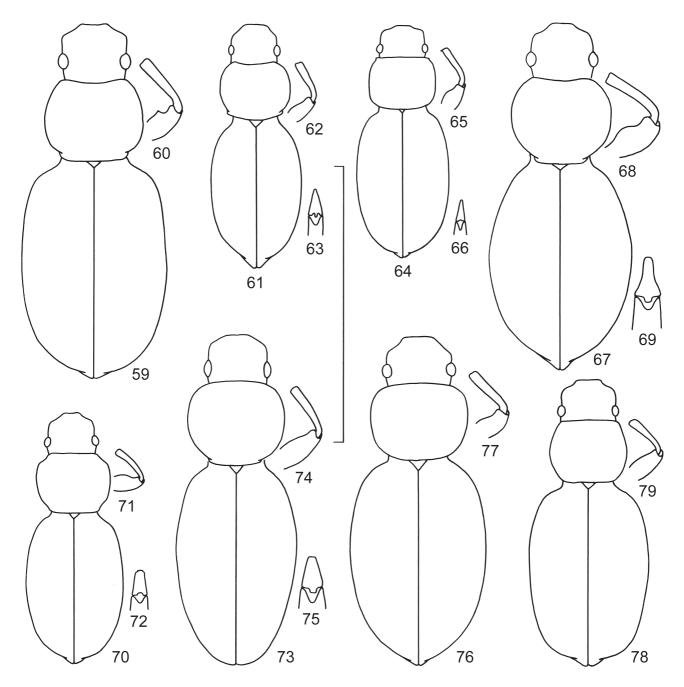
Figs. 2–24. Laena spp., body shape, anterior femur and tibia, apicale of aedeagus. – 2–4. L. almorensis, 3 lectotype. 5–7. L. badrinathica n. sp., 3 holotype. 8–10. L. barclayi n. sp., 3 holotype. 11–13. L. beesoni, 3 lectotype. 14–15. L. bhatiai, holotype, sex not examined. 16–17. L. carinata, lectotype, sex not examined. 18–20. L. blairi, 3 lectotype. 21–22. L. cameroni, 4 lectotype. 23–24. L. carinipennis, 4 holotype. – Scale line: 5.0 mm (body, legs), 2.5 mm (aedeagus).



Figs. 25–42. Laena spp., body shape, anterior femur and tibia, apicale of aedeagus. – 25–26. L. championi, holotype, sex not examined. 27–28. L. chatterjeei, holotype, sex not examined. 29–31. L. convexicollis,  $\Diamond$  holotype. 32–33. L. denticollis,  $\Diamond$  lectotype. 34–35. L. gardneri,  $\Diamond$  lectotype. 36–38. L. denticrus,  $\Diamond$  non-type. 39–40. L. irregularis,  $\Diamond$  holotype. 41–42. L. gebieni,  $\Diamond$  paratype. – Scale line: 5.0 mm (body, legs), 2.5 mm (aedeagus).



**Figs. 43–58.** *Laena* spp., body shape, anterior femur and tibia, apicale of aedeagus. - **43–44**. *L. grandis*, ♀ holotype. **45–46**. *L. indica*, non-type, sex not examined. **49–51**. *L. kuluana*, ∂ holotype. **52–53**. *L. minuta*, ♀ non-type. **54–55**. *L. mussoorica* n. sp., ♀ holotype. **56–58**. *L. orbicollis*, ∂ lectotype. − Scale line: 5.0 mm (body, legs), 2.5 mm (aedeagus).



Figs. 59–79. *Laena* spp., body shape, anterior femur and tibia, apicale of aedeagus. – 59–60. *L. parkeri*, holotype, sex not examined. 61–63. *L. puncticollis*,  $\circlearrowleft$  holotype. 64–66. *L. punctatissima*,  $\circlearrowleft$  holotype. 67–69. *L. rosti*,  $\circlearrowleft$  holotype. 70–72. *L. similis*,  $\circlearrowleft$  holotype. 73–75. *L. simlaica* n. sp.,  $\circlearrowleft$  holotype. 76–77. *L. tibialis*,  $\circlearrowleft$  holotype. 78–79. *L. villosa*,  $\circlearrowleft$  holotype. – Scale line: 5.0 mm (body, legs), 2.5 mm (aedeagus).

ly prominent. Pronotum (Fig. 32) with large punctures, distance as 1–3 diameters, most punctures with adpressed setae; surface somewhat uneven and shining; lateral margin bordered; propleura with sparser punctation than and similar setation as on disc. Elytra (Fig. 32) with rows of punctures without striae, punctures of rows larger than punctures on pronotum, most punctures with a very short seta; intervals with an irregular row of very small punctures bearing each a very short seta, interval 9 with 3 setiferous pores; all intervals convex and shining. All femora without teeth or angulations (Fig. 33). Sexual dimorphism of tibiae unknown. Aedeagus unknown.

Distribution: India (Kashmir, Uttar Anchal).

### Laena denticrus Fairmaire, 1896 (Figs. 36–38)

Laena dentipennis Reitter, 1908 (syn.).

Studied type material: India, Simla,  $\bigcirc$  holotype of L. dentipennis HNHM.

Redescription: Body length 6.8-8.5 mm. Eyes not prominent. Pronotum (Fig. 36) with large and partly confluent punctures, distance as 0.5-1.0 diameters, most punctures with longer adpressed setae; surface flat and shagreened; lateral margin unbordered; propleura with sparser punctation than and similar setation as on disc. Elytra (Fig. 36) with rows of punctures without striae, punctures of rows as large as punctures on pronotum, most punctures with a microseta; intervals with irregular fine puncation, punctures with distinct adpressed setae, intervals 7 and 9 each basally with 1 and interval 9 distally with 3 distinct tooth-like setiferous pores); alternate intervals 5 and 7 distinctly convex, remaining intervals flat, all intervals shagreened. Anterior femur with a distinct tooth and with a weak opposite angulation (Fig. 37), middle and posterior femora with a distinct tooth. All tibiae without distinct sexual dimorphism. Apicale of aedeagus see Fig. 38.

R e m a r k s: The redescription is based also on 3 non-type specimens from Simla in the SMNS.

Distribution: India (Himachal Pradesh).

### Laena gardneri Schuster, 1935 (Figs. 34–35)

Studied type material: India, Uttar Anchal, Chakrata, Mundali, 29.V.1934, leg. J. C. M. Gardner,  $1 \subsetneq$  syntype BMNH, designated as lectotype by Schawaller (2002). – India, Uttar Anchal, Chakatra, Mundali, 14.IV.1933, leg. J. C. M. Gardner,  $1 \subsetneq$  syntype BMNH.

Redescription: Body length 6.7–7.3 mm. Eyes not prominent. Pronotum (Fig. 34) with small punctures, distance as 2–5 diameters, most punctures with longer

adpressed setae; surface flat and shagreened; lateral margin bordered; propleura with sparser punctation than on disc and without setation. Elytra (Fig. 34) with rows of punctures with feeble striae, punctures of rows as large as punctures on pronotum, punctures without seta; intervals with a few small punctures, longer erect setae only in the humeral region; all intervals convex and shagreened. Anterior and middle femora each with two distinct edges (Fig. 35), posterior femur with a broad tooth and an additional distinct edge. Sexual dimorphism of tibiae unknown. Aedeagus unknown.

Distribution: India (Uttar Anchal).

### Laena gebieni Reitter, 1906 (Figs. 41–42)

Studied type material: India, Kashmir, leg. Rost, 1♀ paratype HNHM.

Redescription: Body length 10.0 mm. Eyes not prominent. Pronotum (Fig. 41) with large punctures, distance as 1–3 diameters, some punctures particularly laterally with very short adpressed setae; surface flat and shagreened; lateral margin unbordered; propleura with distinctly sparser punctation than and with similar short setation as on disc. Elytra (Fig. 41) with rows of punctures without striae, punctures of rows distinctly smaller than punctures on pronotum, punctures without setation; intervals without punctation and without setation; all intervals flat (only interval 7 slightly convex) and distinctly shagreened. All femora with two opposite distinct teeth of similar size (Fig. 42). Sexual dimorphism of tibiae unknown. Aedeagus unknown.

Distribution: India (Kashmir, Himachal Pradesh).

### Laena grandis Schuster, 1935 (Figs. 43–44)

Studied type material: India, Uttar Anchal, Kali Valley, Almora, 8000 ft. (2450 m), 8.VII.1923, leg. R. N. PARKER, ♀ holotype BMNH.

Redescription: Body length 11.3 mm. Eyes not prominent. Pronotum (Fig. 43) with large punctures, distance as 0.5–4.0 diameters, some punctures with very short setae; surface somewhat uneven and shagreened; lateral margin unbordered; propleura with similar punctation as on disc and without setation. Elytra (Fig. 43) with rows of punctures with striae, punctures of rows as large as punctures on pronotum, most punctures with a very short seta; intervals with an irregular row of large punctures without setation; all intervals flat and shagreened. All femora without teeth or angulations (Fig. 44). Sexual dimorphism of tibiae unknown. Aedeagus unknown.

Remarks: See under *L. carinata* Schuster, 1926. Distribution: India (Uttar Anchal).

### Laena himalayana Schuster, 1915

Studied type material: None.

Remarks: According to the description, the type should be deposited in the BMNH, but it cannot be found there. Thus, the status of this species can be judged by the description only.

Distribution: India (Himachal Pradesh).

### Laena indica Fairmaire, 1896 (Figs. 45–46)

Studied type material: India, Simla, without further data, 1 syntype HNHM (without head, thorax and anterior pair of legs, therefore not designated as lectotype, sex not examined).

Redescription: Body length 11.5 mm. Eyes slightly prominent. Pronotum (Fig. 45) with large punctures, distance as 1–4 diameters, some punctures with short adpressed setae; surface flat and shagreened; lateral margin bordered; propleura with similar punctation and same setation as on disc. Elytra (Fig. 45) with rows of punctures without striae, punctures of rows as large as punctures on pronotum and without setation; inner intervals flat, intervals 5, 7 and 9 distinctly convex, particularly posteriorly, shagreened. All femora without teeth or angulations (Fig. 46). Sexual dimorphism of tibiae unknown. Aedeagus unknown.

R e m a r k s: The redescription is based on a non-type specimen from Simla in the HNHM, which was compared with the type by the late Dr. Kaszab. See under *L. carinata* Schuster, 1926.

Distribution: India (Himachal Pradesh).

# Laena irregularis Schuster, 1935 (Figs. 39–40)

Studied type material: India, Uttar Anchal, Chakrata Distr., Bodyar, 8300 ft. (2550 m), 3.–12.V.1922, leg. S. N. Chatterjee,  $\bigcirc$  holotype BMNH.

Redescription: Body length 5.5 mm. Eyes not prominent. Pronotum (Fig. 39) with large punctures, distance as 0.5–1.0 diameters, most punctures with long erect setae; surface flat and shagreened; lateral margin unbordered; propleura with similar punctation and same setation as on disc. Elytra (Fig. 39) with rows of punctures without striae and intervals with same punctures, so elytra with irregular punctation, punctures of rows somewhat larger than punctures on pronotum, most punctures with a

long erect seta; all intervals flat and shagreened. All femora without teeth or angulations (Fig. 40). Sexual dimorphism of tibiae unknown. Aedeagus unknown.

Distribution: India (Uttar Anchal).

### Laena kaliensis Schuster, 1935 (Figs. 47–48)

Studied type material: India, Uttar Anchal, Kali Valley, Almora, 10500 ft. (3200 m), 15.VII.1923, leg. R. N. PARKER, holotype BMNH (sex not examined).

Redescription: Body length 6.0 mm. Eyes not prominent. Pronotum (Fig. 47) with small punctures, distance as 1–3 diameters, most punctures with short adpressed setae; surface flat and shining; lateral margin bordered; propleura with similar punctation and setation as on disc. Elytra (Fig. 47) with rows of punctures without striae, punctures of rows somewhat larger than punctures on pronotum, most punctures with a short adpressed seta; intervals with an irregular row of small but distinct punctures bearing each a seta of same length; all intervals flat and shining. Anterior femur without (Fig. 48), middle and posterior femora with an indistinct tooth. Sexual dimorphism of tibiae unknown. Aedeagus unknown.

Distribution: India (Uttar Anchal).

### Laena kuluana Reitter, 1908 (Figs. 49–51)

Studied type material: India, Himachal Pradesh, Kulu, 🖒 holotype HNHM.

New material: India, Himachal Pradesh, Kulu Valley, Manali, 1900–2100 m, V.1989, leg. R. Schuh, 3 ex. CRSW, 1 ex. SMNS. – India, Kulu, Parbatti Valley, 6000–8000 ft. (1850–2450 m), leg. H. G. Снамрюм, 1 ex. BMNH. – India, Kulu, Seraj, Jalori Pass, 10800 ft. (3300 m), leg. H. G. Снамрюм, 2 ex. BMNH.

Redescription: Body length 7.0–8.0 mm. Eyes slightly prominent. Pronotum (Fig. 49) with large punctures, distance as 1–3 diameters, some punctures particularly laterally with very short adpressed setae; surface with a pair of feeble impressions and shagreened; lateral margin bordered; propleura with sparser punctation than on disc and without setation. Elytra (Fig. 49) with rows of punctures in feeble striae, punctures of rows distinctly larger than punctures on pronotum, punctures without setation; intervals with scattered fine punctation and without setation; all intervals slightly convex and shagreened. All femora with distinct teeth and with an opposite smaller angulation (Fig. 50). Tibiae without distinct sexual dimorphism. Apicale of aedeagus see Fig. 51.

Distribution: Pakistan (Murree, Rawalpindi), India (Kashmir, Himachal Pradesh).

### Laena lacordairei Marseul, 1876

Studied type material: None.

Remarks: The original description is incomplete, no differential diagnosis was given and the type (in the Museum Paris) could not be reexamined. Therefore the status of this taxon remains uncertain at present. Body length 11 mm. Type locality "Landour", a village near Mussoorie.

Distribution: Northern India (Uttar Anchal).

### Laena laevigata Schuster, 1926

Studied type material: None.

Remarks: The type series is deposited in Dehra Dun (India) and could not be reexamined. This species is said to be related with *L. jalaorana* Reitter, 1908 from Punjab and *L. kuluana* Reitter, 1908 from Kulu. According to the description (Schuster 1926) *L. laevigata* is smaller (body length 7.5–9 mm) than *L. jalaorana* (9.0–10.5 mm), has larger punctures in the elytral striae, the anterior femora without any teeth and the middle and posterior femora with smaller teeth. *L. kuluana* (7.0–8.0 mm) has a finer pronotal punctation and distinct teeth on all femora.

Distribution: India (Uttar Anchal).

### Laena minuta Fairmaire, 1896 (Figs. 52–53)

Studied type material: None.

Redescription: Body length 4.0 mm. Eyes not prominent. Pronotum (Fig. 52) with large punctures, distance as 1–3 diameters, all punctures with short adpressed setae; surface flat and shining; lateral margin distinctly bordered; propleura with sparser punctation than on disc and without setation. Elytra (Fig. 52) with rows of punctures without striae, punctures of rows somewhat larger than punctures on pronotum, most punctures without or some with a very short seta; intervals without punctures and setation; all intervals flat and shining. All femora without teeth or angulations (Fig. 53). All tibiae without distinct sexual dimorphism. Aedeagus unknown.

Remarks: The redescription is based on a  $\bigcirc$  non-type specimen from the type locality Simla in the HNHM. This specimen was compared with the type by the late Dr. Kaszab.

Distribution: India (Himachal Pradesh).

# Laena mussoorica **n. sp.** (Figs. 54–55)

Holotype (♀): India, Uttar Anchal, Mussoorie, Dhanolt, 2250 m, 11.VII.1989, leg. A. RIEDEL, SMNS.

Etymology: Named after the village Mussoorie, in whose vicinity the holotype has been collected.

Description: Body length 7.5 mm. Eyes not prominent. Pronotum (Fig. 54) with large partly confluent punctures, distance as 0.5–1.0 diameters, all punctures with long erect setae; surface flat and shagreened; lateral margin unbordered; propleura with sparser punctation and shorter setation than on disc. Elytra (Fig. 54) without rows of punctures, with 3 feeble keels and between with irregular rough punctation, punctures as large as punctures on pronotum, most punctures with a longer erect seta; all intervals between keels flat and shagreened. All femora without teeth or angulations (Fig. 55). Sexual dimorphism of tibiae unknown. Aedeagus unknown.

Diagnosis: Laena mussoorica n. sp. shares with L. punctatissima the dorsal structure of the elytra without rows of punctures, but with three feeble keels and with irregularly punctured surface between these keels. However, L. punctatissima is distinctly smaller (body length 4.0 mm), the pronotum has a different subquadrate shape (compare Figs. 64–66), and the dorsal setation is adpressed. These differences, in particular those concerning the pronotal shape, are distinct enough, that I decided to describe L. mussoorica n. sp. as a new taxon, despite this description is based on a single female only.

### Laena orbicollis Schuster, 1926 (Figs. 56–58)

Studied type material: India, Uttar Anchal, Chakrata Distr., Kanasar, 7050 ft. (2150 m), 14.–22.V.1922, leg. S. N. Chatterjee,  $1 \, \text{\rotau}$  syntype BMNH, designated as lectotype by Schawaller (2002).

R e d e s c r i p t i o n : Body length 5.8 mm. Eyes prominent. Pronotum (Fig. 56) with large punctures, distance as 1–4 diameters, all punctures with long adpressed setae; surface flat and shining; lateral margin bordered; propleura with similar punctation as and shorter setation than on disc. Elytra (Fig. 56) with rows of punctures without striae, punctures of rows larger than punctures on pronotum, all punctures without seta; intervals nearly without punctures and only in the humeral region with a few long erect setae, interval 9 with 1 distinct setiferous pore; all intervals slightly convex and shining. All femora without teeth or angulations (Fig. 57). All tibiae without distinct sexual dimorphism. Apicale of aedeagus see Fig. 58.

Distribution: India (Uttar Anchal).

Laena parkeri Schuster, 1935 (Figs. 59–60)

Studied type material: India, Bashahr State, Chini, 9500 ft. (2900 m), V.-VII.1928, leg. R. N. PARKER, holotype BMNH (sex not examined).

Redescription: Body length 6.5 mm. Eyes slightly prominent. Pronotum (Fig. 59) with small punctures, distance as 2–4 diameters, most punctures with short adpressed setae; surface flat and shining; lateral margin feebly bordered; propleura with sparser punctation and shorter setation than on disc. Elytra (Fig. 59) with rows of punctures without striae, punctures of rows larger than punctures on pronotum, most punctures with a short seta; intervals with an irregular row of small punctures bearing each a seta of same length; all intervals flat and shagreened. Anterior femur with a distinct angulation (Fig. 60), middle and posterior femora with distinct tooth. Sexual dimorphism of tibiae unknown. Aedeagus unknown.

Distribution: India (Uttar Anchal).

Laena planipennis Schuster, 1926

Studied type material: None.

Remarks: The type depository is not stated in the description and the type could not be found in the BMNH. According to the description, *L. planipennis* is similar to *L. indica* and can be distinguished by the unbordered lateral margin of the pronotum and by the flat elytral interval 7 (distincly convex in *L. indica*).

Distribution: India (Uttar Anchal).

Laena punctatissima Schuster, 1926 (Figs. 64–66)

Studied type material: India, Uttar Anchal, Kumaon, W Almora Division, XI.1918, leg. H. G. Снамрюм, & holotype BMNH.

Redescription: Body length 4.0 mm. Eyes not prominent. Pronotum (Fig. 64) with large partly confluent punctures, distance as 0.5–1.0 diameters, all punctures with long adpressed setae; surface flat and shining; lateral margin unbordered; propleura with sparser punctation and shorter setation than on disc. Elytra (Fig. 64) without rows of punctures, with 3 feeble keels and between with irregular rough punctation, punctures as large as punctures on pronotum, most punctures with a longer adpressed seta; all intervals between keels flat and shagreened. All femora without teeth or angulations (Fig. 65). All tibiae without distinct sexual dimorphism. Apicale of aedeagus see Fig. 66.

Distribution: India (Uttar Anchal).

Laena puncticollis Schuster, 1935 (Figs. 61–63)

Studied type material: India, Uttar Anchal, Kumaon, W Almora Division, V.1919, leg. H. G. Champion,  $\circlearrowleft$  holotype BMNH.

Redescription: Body length 4.3 mm. Eyes not prominent. Pronotum (Fig. 61) with large punctures, distance as 1–5 diameters, all punctures with long adpressed setae; surface flat and shining; lateral margin unbordered; propleura with sparser punctation and shorter setation than on disc. Elytra (Fig. 61) with rows of punctures without striae, punctures of rows larger than punctures on pronotum, most punctures with a long erect seta; intervals nearly without punctures and setation; all intervals convex and shining. All femora without teeth or angulations (Fig. 62). All tibiae without distinct sexual dimorphism. Apicale of aedeagus see Fig. 63.

Distribution: India (Uttar Anchal).

Laena rosti Reitter, 1906 (Figs. 67–69)

Studied type material: India, Kashmir, leg. Rost, & holotype HNHM (left antenna missing).

Redescription: Body length 6.8 mm. Eyes not prominent. Pronotum (Fig. 67) with large punctures, distance as 1–3 diameters, most punctures with short adpressed setae; surface with a pair of feeble impressions and shining; lateral margin marked but unbordered; propleura with larger punctation than on disc and without setation. Elytra (Fig. 67) with rows of punctures without striae, punctures of rows similar as punctures on pronotum, most punctures with small adpressed seta; intervals with an irregular row of small punctures bearing each a seta of same length, interval 9 basally with 1 distinct and posteriorly with 3 indistinct setiferous pores; all intervals slightly convex. All femora without teeth or angulations (Fig. 68). All tibiae without distinct sexual dimorphism. Apicale of aedeagus see Fig. 69.

Distribution: India (Kashmir, Himachal Pradesh).

Laena similis Schuster, 1926 (Figs. 70–72)

Laena transversicollis Schuster, 1926 (syn.).

Studied type material: India, Mussoorie, Dhobi Ghat, 14.IV.1922, leg. M. Cameron, & holotype of *L. similis* BMNH. – India or., "81.19", leg. F. Bates, holotype of *L. transversicollis* BMNH (sex not examined).

Redescription: Body length 4.8 mm. Eyes slightly prominent. Pronotum (Fig. 70) with large punctures,

distance as 1–3 diameters, most punctures with long adpressed setae; surface flat and shining; lateral margin bordered; propleura with larger punctation than on disc and without setation. Elytra (Fig. 70) with rows of punctures without striae, punctures of rows larger than punctures on pronotum, punctures without or with a very short seta; intervals with an irregular row of very small punctures bearing each a longer adpressed seta; all intervals convex and shining. All femora without teeth or angulations (Fig. 71). All tibiae without distinct sexual dimorphism. Apicale of aedeagus see Fig. 72.

Distribution: India (Uttar Anchal).

# Laena simlaica **n. sp.** (Figs. 73–75)

Holotype (&): India, Himachal Pradesh, Simla, Kufri, 16.VII.1989, leg. A. Riedel, SMNS.

Paratypes: Same data as holotype, 3 ex. SMNS, 1 ex. HNHM. – India, Himachal Pradesh, 16 km from Simla, Kufri, 2500 m, 15.–17.VII.1989, leg. M. HIERMEIER, 1 ex. CRGT.

 $E\,t\,y\,m\,o\,l\,o\,g\,y$  : Named after Simla, in whose vicinity the type series was collected.

Description: Body length 5.0–6.3 mm. Eyes not prominent. Pronotum (Fig. 73) with large punctures, distance as 1–5 diameters, some punctures with long adpressed setae; surface flat and shining; lateral margin unbordered; propleura dorsally without and basally with similar punctation as on disc and without setation. Elytra (Fig. 73) with rows of punctures without striae, these rows vanishing in the posterior quarter of the elytra, punctures of rows as large as punctures on pronotum, without setae or microsetae; intervals without punctures and setation; all intervals slightly convex and shining. All femora without teeth or angulations (Fig. 74). All tibiae without peculiarities. Apicale of aedeagus see Fig. 75.

Diagnosis: L. simlaica n. sp. can be recognized by the shining dorsal surface, the sphaerical pronotum without any trace of a lateral border, the large but sparse pronotal punctation, the elytral rows vanishing in the posterior part of the elytra, convex elytral intervals without any punctation and setation, unarmed femora, and the shape of the aedeagus. L. himalayana, according to description and key of Schuster (1926), and L. minuta from the same region around Simla are similar, but both possess a bordered lateral margin of the pronotum and complete elytral rows. Furthermore, L. himalayana has prominent eyes (not prominent in L. minuta and L. simlaica n. sp.). Laena convexicollis also possesses a sphaerical pronotum, but the lateral margin is also bordered, the elytral rows are complete and the elytral intervals are punctured.

### Laena tibialis Schuster, 1926 (Figs. 76–77)

Studied type material: Without locality data, leg. Bowring "63.47\*",  $\, \bigcirc \,$  holotype BMNH.

Redescription: Body length 6.0 mm. Eyes not prominent. Pronotum (Fig. 76) with large punctures, distance as 1–4 diameters, all punctures with long setae; surface flat and shagreened; lateral margin bordered; propleura with larger punctation and shorter setation than on disc. Elytra (Fig. 76) with rows of punctures without striae, punctures of rows as large as punctures on pronotum, most punctures with a longer seta; intervals with an irregular row of small punctures bearing each a seta of same length; all intervals flat and shagreened. All femora without teeth or angulations (Fig. 77). Sexual dimorphism of tibiae unknown. Aedeagus unknown.

Remarks: This is a doubtful taxon because of the unclear type locality (see "data" of the type above). The collector, John Bowring, was a British economist, traveller and governor of Hong Kong, but not involved with any place in British India, thus the type might have been collected also in Tibet (in a wider historical sense). The single type is a female and not a male as given in the original description. It seems similar to *L. alticola* Blair, 1923 from Tibet north of the Everest with a broader pronotum (compare figures in Schawaller 2001), and also similar to *L. freudei* Kaszab, 1961 from Nepal, but the latter species has armed femora.

Distribution: Northern India (?), China/Tibet (?).

# Laena villosa Schuster, 1935 (Figs. 78–79)

Studied type material: India, S Garhwal, Akeswar, Gauri Dutt. (50–100 miles E Dehra Dun), 16.XII.1923,  $\bigcirc$  holotype BMNH.

Redescription: Body length 5.0 mm. Eyes slightly prominent. Pronotum (Fig. 78) with large punctures, distance as 0.5–2.0 diameters, all punctures with long erect setae; surface flat and shining; lateral margin somewhat marked but unbordered; propleura with similar punctation and same setation as on disc. Elytra (Fig. 78) with rows of punctures without striae, punctures of rows as large as punctures on pronotum, most punctures with a long erect seta; intervals with an irregular row of small punctures bearing each a long seta of same length or even longer; all intervals flat and shining. All femora without teeth or angulations (Fig. 79). Sexual dimorphism of tibiae unknown. Aedeagus unknown.

Distribution: India (Uttar Anchal).

## 3 Key to the species of *Laena* in Uttar Anchal and Himachal Pradesh

The key does not include all diagnostic characters, so it cannot be used for phylogenetic purposes. It is suitable only for males because sexual characters have been used. The types of five taxa (*L. clypealis*, *himalayana*, *lacordairei*, *laevigata*, and *planipennis*) from that region could not be reexamined, therefore these taxa remain unclear and are not included.

1	All or at least single femora (not tibiae) with distinct or fee-
	ble teeth or with angulations
_	
2	Pronotum with unbordered lateral margin
3	Body length 10 mm, elytral intervals 7 and 9 without distinct setiferous pores, all elytral intervals flat, all femora with
-	2 opposite distinct teeth. – Figs. 41–42
	(nearly keel-like) than intervals 2, 4, 6. – Figs. 23–24
-	All intervals on elytral disc of similar structure, sometimes slightly convex but not keel-like
5	Punctures of elytral rows in feeble or distinct striae, elytral
_	intervals flat or convex
6	ways flat
_	Punctures of the elytral rows as large as punctures of the
7	pronotum
	Body length 6.7–7.3 mm, pronotum trapezoid, all elytral in-
_	tervals convex, anterior and middle femora only with angulations, but not with distinct teeth. – Figs. 34–35 gardneri
8	Punctures of the elytral rows larger than punctures of the
_	pronotum9 Punctures of the elytral rows as large as punctures of the
9	pronotum
	rior femora with a distinct tooth, pronotum sphaerical and widest in the middle. – Figs. 59–60
-	Anterior femur without armature, middle and posterior femora with a quite indistinct tooth, pronotum trapezoid and
10	widest in the anterior third. – Figs. 47–48
-	15
11	badrinathica n. sp.
11	margin somewhat marked but not bordered12
12	punctation without any separation in rows and intervals, or
_	elytra with three fine keels and between them with roughly and irregularly punctured intervals

	finely punctured intervals, in a single case (simlaica n. sp.)
	elytral rows vanishing in the posterior part
13	
_	punctured intervals
	punctation without any separation in rows and intervals 15
14	Body length 4.0 mm, pronotum subquadrate with parallel
	lateral sides, dorsal setation adpressed. – Figs. 64–66
	punctatissima
_	Body length 7.5 mm, pronotum trapezoid and widest anteri-
	orly, dorsal setation long and erect. – Figs. 54–55
15	Elytra completely with irregular punctation, pronotum trap-
13	ezoid and widest anteriorly, dorsal surface dull shagreened,
	all tibiae without distinct sexual dimorphism. – Figs. 39–
	40 irregularis
_	Elytra only laterally with irregular punctation, inner rows 1
	and 2 regular, pronotum quadrate with parallel sides, dorsal
	surface shining, male anterior tibia medially swollen. – Figs. 18–20
16	All elytral intervals slightly or distinctly convex
_	All elytral intervals absolutely flat
17	Anterior tibiae of males with a finger-like interior process,
	pronotum long and narrow. – Figs. 8–10 <i>barclayi</i> n. sp.
10	All tibiae without peculiarities, pronotum sphaerical 18
18	Punctures of the elytral rows distinctly larger than punctures on pronotum, elytral intervals nearly without punctures, api-
	cale of aedeagus triangular with acute tip, body length
	4.3 mm. – Figs. 61–63
_	Punctures of the elytral rows similar as punctures on prono-
	tum, elytral intervals without or with punctures, apicale of
10	aedeagus with blunt tip, body length 5.0–6.8 mm 19
19	Elytral punctural rows vanishing in the posterior quarter of elytra, elytral intervals without punctation and setation, pro-
	notum without any impressions, apicale of aedeagus trian-
	gular with blunt tip. – Figs. 73–75 <i>simlaica</i> <b>n. sp.</b>
_	Elytral punctural rows reaching almost tip of elytra, elytral
	intervals with a row of fine punctures bearing a small ad-
	pressed seta, pronotum with a pair of feeble impressions, apicale of aedeagus fingerlike. – Figs. 67–69 rosti
20	Body length 11.3 mm, dorsal surface dull shagreened. –
	Figs. 43–44
_	Body length 3.8–7.0 mm, dorsal surface shining 21
21	Dorsal surface of elytra with long and erect setation, eyes
	slightly prominent, anterior corners of pronotum marked. – Figs. 78–79
_	Dorsal surface of elytra with short adpressed setation, eyes
	not prominent, anterior corners of pronotum rounded22
22	Body length 3.8–4.2 mm, pronotum without any impres-
	sions, apicale of aedeagus tongue-like with straight sides. –
	Figs. 2–4
_	Body length 7.0 mm, pronotum with a pair of feeble impressions, apicale of aedeagus finger-like with sinuated sides. –
	Figs. 29–31
23	All elytral intervals completely flat, or only inner intervals
	flat and intervals 5, 7, 9 convex
_	All elytral intervals slightly or distinctly convex 27
24	Only inner elytral intervals flat, intervals 5, 7, 9 convex,
_	body length 11.0–11.5 mm
_	4.0 mm
25	Head with distinct ocular keel, eyes oval and not prominent,
	pronotum with dense and confluent punctation Figs. 16-
	17
-	Head without ocular keel, eyes round and prominent, pronotum with large but separated punctation. – Figs. 45–46
	tum with large but separated punctation. – Figs. 45–46

26	Dorsal surface dull shagreened, pronotum transverse with
	parallel sides, punctures of elytral rows as large as punctures
	on pronotum. – Figs. 76–77
_	Dorsal surface shining, pronotum trapezoid and widest near
	anterior third, punctures of elytral rows somewhat larger
	than punctures on pronotum. – Figs. 52–53 <i>minuta</i>
27	Anterior corners of pronotum spine-like. – Figs. 32–33
	denticollis
_	Anterior corners of pronotum rounded or somewhat
	marked
28	Punctures of the elytral rows as large as punctures on prono-
	tum. – Figs. 21–22
_	Punctures of the elytral rows larger than punctures on pro-
	notum
29	Pronotum widest in the anterior third, punctures of elytral
2)	rows very deeply impressed. – Figs. 11–13beesoni
	Pronotum widest in the middle, punctures of elytral rows
_	
20	normally impressed
30	Lateral margin of pronotum slighty excavated near anterior
	and posterior margins. – Figs. 70–72 similis
_	Lateral margin of pronotum rounded without any irregulari-
	ties
31	Eyes distinctly prominent, elytral interval 9 with a distinct
	setiferous pore, body length 5.8 mmorbicollis
_	Eyes not prominent, elytral interval 9 without distinct seti-
	ferous pore, body length 4.8 mm chatterjeei

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