

The genus *Laena* Dejean (Coleoptera: Tenebrionidae) in Pakistan and adjacent Kashmir and Ladakh, with descriptions of ten new species¹

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Abstract

This paper is a further part on the speciose tenebrionid genus *Laena* Dejean, 1821 (subfamily Lagriinae Latreille, 1825) from the Himalayas. In the present part, the species from mountainous northwestern Pakistan and the adjacent Indian Kashmir and Ladakh are treated. The known species are redescribed, diagnostic characters are figured, newly collected material is listed, and ten new species are described: *Laena chitralica* n. sp., *L. galyatica* n. sp., *L. hazaraca* n. sp., *L. kaghanica* n. sp., *L. ladakhica* n. sp., *L. lawaraica* n. sp., *L. miandamica* n. sp., *L. rupalica* n. sp., *L. swatica* n. sp., and *L. yusmargica* n. sp. A key to the species from Pakistan is added.

Key words: Coleoptera, Tenebrionidae, *Laena*, Pakistan, Kashmir, Ladakh, taxonomy, new species, distribution.

Zusammenfassung

Diese Arbeit ist ein weiterer Teil über die artenreiche Tenebrioniden-Gattung *Laena* Dejean, 1821 (Unterfamilie Lagriinae Latreille, 1825) aus dem Himalaya. Im vorliegenden Teil werden die Arten aus dem gebirgigen, nordwestlichen Pakistan behandelt, ebenso auch aus dem angrenzenden indischen Kaschmir und Ladakh. Die bekannten Arten werden wiederbeschrieben und die diagnostischen Merkmale abgebildet, neu gesammeltes Material wird aufgelistet und 10 neue Arten werden beschrieben: *Laena chitralica* n. sp., *L. galyatica* n. sp., *L. hazaraca* n. sp., *L. kaghanica* n. sp., *L. ladakhica* n. sp., *L. lawaraica* n. sp., *L. miandamica* n. sp., *L. rupalica* n. sp., *L. swatica* n. sp. und *L. yusmargica* n. sp. Ein Bestimmungsschlüssel für die pakistanischen *Laena*-Arten wird erstellt.

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1 Introduction

This paper is a further part on the speciose tenebrionid genus *Laena* Dejean, 1821 (subfamily Lagriinae Latreille, 1825) from the Himalayas. The previous parts dealt with the central Himalayas in Nepal (SCHAWALLER 2002), the western Himalayas in the Indian provinces Uttar Anchal and Himachal Pradesh (SCHAWALLER 2009), and the eastern Himalayas in the Indian provinces Darjeeling, Sikkim, Assam, Arunachal Pradesh, as well as Bhutan (SCHAWALLER 2012).

In the present part, the species from mountainous northwestern Pakistan are treated, as well as species of the adjacent Indian Kashmir and Ladakh (Fig. 1). Not included are the species, which were already published in the con-

tribution about Uttar Anchal and Himachal Pradesh. From the studied area only a few species were mentioned earlier (KASZAB 1961a, 1961b, 1962; NAKANE 1966; REITTER 1908; SCHUSTER 1916, 1935). Further ten species are described herein as new to science. Species of *Laena* are unknown from central and southern (lowland) Pakistan. Altogether, 19 species are now known from Pakistan, two of them remain doubtful. Only five species occur in adjacent Afghanistan (SCHAWALLER 2010).

Most of the specimens from northwestern Pakistan were collected between 1975 and 1998. Before that period, most of the area was completely forbidden for foreigners. After that period, zoological expeditions were hazardous or nearly impossible because of the political situation. In contrast, the Indian Kashmir was easier to reach

¹ Contributions to Tenebrionidae, no. 119. – For no. 118 see: Arthropod Fauna of UAE 5 (2014).

for entomologists and specimens were collected already during the British colonial time. In the present study, all names of regions are used in a geographical, not political sense, because some country borders are disputed.

Acronyms of depositories

BMNH	The Natural History Museum, London
CAPE	Collection ANDREAS PÜTZ, Eisenhüttenstadt
CRSW	Collection RUDOLF SCHUH, Wien
HNHM	Hungarian Natural History Museum, Budapest
MHNG	Muséum d'Histoire Naturelle, Genève
NHMB	Naturhistorisches Museum, Basel
SMNS	Staatliches Museum für Naturkunde, Stuttgart
ZSM	Zoologische Staatssammlung, München

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2 New species of *Laena* from Pakistan, Kashmir and Ladakh

Laena chitralica n. sp. (Figs. 9, 34–35)

Holotype (♂): Pakistan, Chitral, S Bumburet, 2500–2700 m, 25.V.1983, leg. C. BESUCHET & I. LÖBL, MHNG.

Paratypes: Same data as holotype, 3 ex. MHNG, 1 ex. SMNS.

Etyymology: Named after the province Chitral, where the type series was collected.

Description: Body length 4.0–5.5 mm. Eyes not prominent. Pronotum (Fig. 9) with large punctures, distance 2–4 puncture diameters, most punctures with long erect setae; surface flat and shining, disc without impressions; lateral margins bordered; propleura with similar punctation and setation as on pronotum. Elytra (Fig. 9) elongate parallel-sided with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, most punctures with long erect setae; intervals with a few extremely distinct punctures, each bearing a seta of same length as setae of rows, interval 9 without distinct setiferous pores, all intervals flat and shining. Apex of elytra finely prolonged, mucronate. All femora without teeth or angulations. Tibiae of both sexes without peculiarities. Apicale of aedeagus see Fig. 35.

Diagnosis: *L. chitralica* n. sp. can be recognized by elongate parallel-sided elytra, by the finely prolonged, mucronate elytral apex, and by the shape of the aedeagus with finger-like narrow apicale. *L. hauseri* Reitter, 1906 from the Ghissar Alai in Central Asia (redescription in SCHAWALLER 1995) has similar elongate parallel-sided elytra, but its lateral pronotal margins are unbordered and the elytral apex not mucronate (aedeagus unknown, only ♀ holotype is known). *L. ladakhica* n. sp. and *L. rupalica* n. sp. belong to the same group and are quite similar in external characters. In *L. ladakhica* n. sp. the punctures of the elytral rows are smaller than the pronotal punctures, and the setae of the punctural rows are shorter and adpressed (aedeagus unknown, only ♀ holotype is known). In *L. rupalica* n. sp. the aedeagus is distinctly different with spade-like broad apicale (Fig. 73).

Laena galyatica n. sp. (Figs. 5, 38–39)

Holotype (♂): Pakistan, Hazara, N Murree, Nathia Gali, 2300 m, 17.–22.IV.1984, leg. S. VIT, MHNG.

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

Etyymology: Named after the Galyat Mountain Range, where the type series was collected.

Description: Body length 6.3–6.7 mm. Eyes not prominent. Pronotum (Fig. 5) with coarse but not confluent punctures, distance 0.5–2 puncture diameters, all punctures with short adpressed setae; surface convex and shining, disc without or with a pair of shallow impressions; lateral margins bordered; propleura with somewhat sparser punctation and shorter setation than on pronotum. Elytra (Fig. 5) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, most punctures with microsetae; intervals with scattered very fine punctures, each bearing a microseta, interval 9 without distinct setiferous pores, all intervals feebly convex and finely shagreened. All femora without teeth or angulations. Tibiae of both sexes without peculiarities. Apicale of aedeagus see Fig. 39.

Diagnosis: *L. galyatica* n. sp. belongs to the species-group around *L. cribrella* Reitter, 1908, and *L. punctiventris* Schuster, 1926, because of similar body shape and size, coarse pronotal punctation, bordered or unbordered but marked lateral margins of pronotum, convex elytral intervals and lacking or very short dorsal setation. In *L. galyatica* n. sp. and *L. cribrella* the femora are without angulations or teeth, in *L. punctiventris* all femora have distinct angulations. *L. galyatica* n. sp. can also be recognized by the shape of the aedeagus with broad and short apicale, completely different from those of *L. cribrella* and *L. punctiventris* (Figs. 37, 71). See also under *L. kaghanica* n. sp.

***Laena hazaraca* n. sp.**

(Figs. 7, 40–41)

Holotype (♂): Pakistan, Hazara, Kaghan Valley, SE Shogran, 2500–3500 m, 28.VII.–4.VIII.1998, leg. J. KALÁB, SMNS.

Etymology: Named after the province Hazara, where the holotype was collected.

Description: Body length 7.0 mm. Eyes not prominent. Pronotum (Fig. 7) with small punctures, distance 1–4 puncture diameters, most punctures with short adpressed setae; surface convex and feebly shagreened, disc without impressions; lateral margins unbordered; propleura with sparser punctation and shorter setation than on pronotum. Elytra (Fig. 7) oval with rows of punctures without striae, rows diminishing posteriorly, punctures of rows of similar size as punctures on pronotum, punctures without setae; intervals with a row of fine punctures, each bearing a microseta, interval 9 with 3 indistinct setiferous pores, all intervals flat and feebly shagreened. All femora without teeth or angulations. Male tibiae without peculiarities. Apicale of aedeagus see Fig. 41.

Diagnosis: *Laena hazaraca* n. sp. is most similar to *L. himalayana* Schuster, 1915. Both share the general body size and form, punctation and setation, as well as the unbordered lateral margins of the pronotum. However, in *L. himalayana* the elytral intervals are convex, the anterior and middle femora have weak angulations, and the aedeagus is different with a longer and narrower apicale (Fig. 43). *L. jalaorana* Reitter, 1908 is also somewhat similar, but this species has the femora with distinct teeth, and also a different aedeagus with broad apicale (Fig. 45).

***Laena kaghanica* n. sp.**

(Figs. 13, 54–55)

Holotype (♂): Pakistan, Kaghan Valley, Sharan, 2400–2700 m, 1.–2.VII.1979, leg. W. WITTMER, NHMB.

Paratypes: Same data as holotype, 1 ♀ NHMB, 1 ♀ SMNS. – Pakistan, Hazara, Shogran, 2400 m, 3.VI.1983, leg. C. BESUCHET & I. LÖBL, 2 ♀♀ MHNG, 1 ♀ SMNS.

Etymology: Named after the Kaghan Valley, where the types were collected.

Description: Body length 5.3–6.5 mm. Eyes not prominent. Pronotum (Fig. 13) with rough and partly confluent punctures, distance 0.5–3 puncture diameters, all punctures with short adpressed setae; surface convex and finely shagreened, disc without impressions; lateral margins unbordered; propleura with somewhat sparser punctation and shorter setation than on pronotum. Elytra (Fig. 13) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, punctures without setae; intervals with a row of fine punctures, some bearing a long seta, interval 9 with 4 distinct setiferous

pores, all intervals flat and finely shagreened. All femora without teeth or angulations. Tibiae of both sexes without peculiarities. Apicale of aedeagus see Fig. 55.

Diagnosis: *L. kaghanica* n. sp. belongs into the species-group around *L. cribrella* Reitter, 1908, and *L. punctiventris* Schuster, 1926 because of similar body shape and size, and coarse pronotal punctation. In *L. kaghanica* n. sp. and *L. cribrella* the femora are without angulations or teeth, in *L. punctiventris* all femora have distinct angulations. However, *L. kaghanica* n. sp. can be separated by the unbordered lateral margins of the pronotum, and by the shape of the aedeagus with broader rounded apicale. See also under *L. galyatica* n. sp.

Remarks: All paratypes are females and have a shining dorsal surface, the elytral intervals slightly convex without any punctures, the punctures of the elytral rows with short setae, and the elytral setiferous pores indistinct. I hope not to fail in assigning these females, partly from the type locality, to the holotype male.

***Laena ladakhica* n. sp.**

(Figs. 11, 58)

Holotype (♀): India, Ladakh, Mulbekh to Fatu La, 3050–3800 m, 2.VII.1976, leg. W. WITTMER, NHMB.

Etymology: Named after the region Ladakh (Little Tibet), where the holotype was collected.

Description: Body length 5.2 mm. Eyes not prominent. Pronotum (Fig. 11) with large punctures, distance 0.5–4 puncture diameters, most punctures with long erect setae; surface flat and shining, disc without impressions; lateral margins bordered; propleura with similar punctation and setation as on pronotum. Elytra (Fig. 11) elongate parallel-sided with rows of punctures without striae, punctures of rows smaller than punctures on pronotum, most punctures with short adpressed setae; intervals with a few extremely distinct punctures, each bearing a long seta, interval 9 without distinct setiferous pores, all intervals flat and shining. Apex of elytra finely prolonged, mucronate. All femora without teeth or angulations. Female tibiae without peculiarities (male unknown). Apicale of aedeagus unknown.

Diagnosis: *L. ladakhica* n. sp. is quite similar to *L. chitralica* n. sp. and *L. rupalica* n. sp., but the punctures of the elytral rows are smaller than the pronotal punctures, and the setae of the elytral rows are shorter and adpressed. See also under *L. chitralica* n. sp. and *L. rupalica* n. sp.

***Laena lawaraica* n. sp.**

(Figs. 15, 59–61)

Holotype (♂): Pakistan, Dir, Lawarai Pass, 2700 m, 21.V.1983, leg. C. BESUCHET & I. LÖBL, MHNG.

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

Etymology: Named after the Lawarai Pass, where the type series was collected.

Description: Body length 7.5–7.8 mm. Eyes not prominent. Pronotum (Fig. 15) with coarse and confluent punctures, distance 0.5 puncture diameters, all punctures with long adpressed setae; surface convex and shagreened, disc with a pair of shallow impressions; lateral margins unborded, but sometimes partly marked; propleura with similar punctation and setation as on pronotum. Elytra (Fig. 15) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, all punctures with long adpressed setae; intervals with several scattered large punctures, each bearing a seta of same length as setae of rows, interval 9 with 3 indistinct setiferous pores, internal intervals flat, intervals 5 and 7 slightly convex and elevated, surface shagreened and distinctly wrinkled. All femora without teeth or angulations. All male tibiae apically with distinct internal tooth, male posterior tibiae medially with internal dilatation (Fig. 61). Apicale of aedeagus see Fig. 60.

Diagnosis: *L. lawaraica* n. sp. shares with *L. simillima* Schuster, 1935 body shape and size, coarse and confluent dorsal punctation, unborded lateral margins of the pronotum, elevated elytral intervals 5 and 7, and the femora without teeth or angulations. However, in *L. simillima* all male tibiae are unmodified, and the aedeagus is completely different with distinctly shorter apicale (Fig. 79).

***Laena miandamica* n. sp.**
(Figs. 12, 62–63)

Holotype (♂): Pakistan, Swat, Miandam, 1800–2300 m, 3.VI.1978, leg. W. WITTMER, NHMB.

Paratypes: Same data as holotype, 2 ex. NHMB, 2 ex. SMNS. – Pakistan, Swat, S Miandam, 2400–2500 m, 17.V.1983, leg. C. BESUCHET & I. LÖBL, 2 ex. MHNG.

Etymology: Named after the village Miandam, where the type series was collected.

Description: Body length 6.0–7.0 mm. Eyes not prominent. Pronotum (Fig. 12) with coarse and partly confluent punctures, distance 0.5–3 puncture diameters, all punctures with short adpressed setae; surface convex and shining, disc with a pair of shallow impressions; lateral margins unborded; propleura with sparser punctation and shorter setation than on pronotum. Elytra (Fig. 12) oval with rows of punctures without striae, punctures of rows smaller than punctures on pronotum, some punctures with microsetae; intervals with irregular row of distinct punctures, most bearing a short seta, interval 9 with 3 indistinct setiferous pores, internal intervals flat, intervals 5 and 7 distinctly convex and elevated, surface shining. All femora without teeth or angulations. Tibiae of

both sexes without peculiarities. Apicale of aedeagus see Fig. 63.

Diagnosis: *L. miandamica* n. sp. shares with *L. simillima* Schuster, 1935 the general body size and shape, the coarse pronotal punctation, the unborded lateral margins of the pronotum, the elytra with flat internal intervals, and the elytral intervals with distinct punctures. However, *L. simillima* is somewhat larger in the average (7.0–8.5 mm), the dorsal surface is shagreened, the punctures of the elytral rows are of similar size as the pronotal punctures, the elytral intervals are not only with distinct punctures but also somewhat wrinkled, the elytral intervals 5 and 7 are somewhat elevated, and the aedeagus is different with shorter apicale (Fig. 79).

***Laena rupalica* n. sp.**
(Figs. 10, 72–73)

Holotype (♂): Pakistan, Gilgit, Babusar Pass, Chilas side, 3700 m, 13.VII.1986, leg. W. HEINZ, SMNS.

Paratypes: Pakistan, Nanga Parbat, Rupal, 3600 m, VI.1975, leg. E. HOFFMANN, 3 ex. SMNS.

Etymology: Named after the village Rupal, where a part of the type series was collected.

Description: Body length 5.4–5.7 mm. Eyes not prominent. Pronotum (Fig. 10) with large punctures, distance 2–4 puncture diameters, most punctures with long erect setae; surface flat and shining, disc without impressions; lateral margins bordered; propleura with similar punctation and setation as on pronotum. Elytra (Fig. 10) elongate parallel-sided with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, most punctures with long erect setae; intervals with a few extremely distinct punctures, each bearing a seta of same length as setae of rows, interval 9 without distinct setiferous pores, all intervals flat and shining. Apex of elytra finely prolonged, mucronate. All femora without teeth or angulations. Tibiae of both sexes without peculiarities. Apicale of aedeagus see Fig. 73.

Diagnosis: *L. rupalica* n. sp. is a further species of the *hauseri*-group with elongate parallel-sided elytra and with mucronate elytral apex, to be recognized by the shape of the aedeagus with spade-like broad apicale. See also under *L. chitralica* n. sp. and *L. ladakhica* n. sp.

***Laena swatica* n. sp.**
(Figs. 27, 80–81)

Holotype (♂): Pakistan, Swat, Malam Jabba, 2300–2400 m, 9.V.1983, leg. C. BESUCHET & I. LÖBL, MHNG.

Paratypes: Same data as holotype, 1 ex. MHNG. – Pakistan, Swat, Malam Jabba, 2500–2600 m, 18.V.1983, leg. C. BESUCHET & I. LÖBL, 7 ex. MHNG, 4 ex. SMNS. – Pakistan, Swat, S Miandam, 2400–2500 m, 17.V.1983, leg. C. BESUCHET & I. LÖBL,

3 ex. MHNG. – Pakistan, Hazara, S Naran, 2600 m, 1.VI.1983, leg. C. BESUCHET & I. LÖBL, 2 ex. MHNG, 1 ex. SMNS. – Pakistan, Hazara, Shogran, 2400 m, 3.VI.1983, leg. C. BESUCHET & I. LÖBL, 1 ex. MHNG.

Etymology: Named after the province Swat, where most of the types were collected.

Description: Body length 2.8–4.8 mm. Eyes not prominent. Pronotum (Fig. 27) with large punctures, distance 0.5–3 puncture diameters, most punctures with long adpressed setae; surface convex and shining, disc without impressions; lateral margins unbordered; propleura with somewhat sparser punctation and shorter setation than on pronotum. Elytra (Fig. 27) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, most punctures with microsetae; intervals with a row of distinct punctures, each bearing a microseta, interval 9 with 3 indistinct setiferous pores, all intervals nearly flat and shining. All femora without teeth or angulations. Tibiae of both sexes without peculiarities. Apicale of aedeagus see Fig. 81.

Diagnosis: *L. swatica* n.sp. shares with *L. edmundi* Schuster, 1915 the small body size, the convex pronotum, the dorsal punctation and the unarmed femora. However, *L. edmundi* has the lateral margins of the pronotum bordered, has a long erect dorsal setation, and a different aedeagus with broad spade-like apicale (Fig. 47). *L. barypithoides* Schuster, 1916 from Himachal Pradesh also has small body size, unbordered lateral margins of the pronotum, long erect dorsal setation, and unarmed femora, but in this species the punctures of the pronotum and the elytral rows are distinctly larger and the elytral intervals are slightly convex (aedeagus unknown, only ♀ holotype is known).

Laena yusmargica n. sp.
(Figs. 26, 56–57)

Holotype (♂): India, Kashmir, Yusmarg, 5.VII.1976, leg. W. WITTMER, NHMB.

Paratype: Same data as holotype, 1 ♀ SMNS.

Etymology: Named after the village Yusmarg, where the type series was collected.

Description: Body length 3.4–3.6 mm. Eyes not prominent, reduced. Pronotum (Fig. 26) with large punctures, distance 1–3 puncture diameters, most punctures with small adpressed setae; surface convex and shining, disc without impressions; lateral margins finely bordered; propleura with larger and sparser punctation than on pronotum and without setation. Elytra (Fig. 26) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, some punctures with microsetae not longer than puncture diameter; intervals without punctation and setation, interval 9 with 3 indistinct setiferous pores, all intervals flat and shining.

All femora without teeth or angulations. All tibiae without peculiarities. Apicale of aedeagus see Fig. 57.

Diagnosis: *L. yusmargica* n.sp. is unique in the Western Himalayas because of the small body size in combination with reduced eyes. *L. subcoeca* Kaszab, 1973 from Central Nepal is the only small species with similarly reduced eyes, but in this Nepalese species the anterior angles of the pronotum are rectangular and somewhat prominent (completely rounded in *L. yusmargica* n.sp.), the punctures of the elytral rows are somewhat larger and sparser, and the apicale of the aedeagus is longer and narrower than in *L. yusmargica* n.sp. (compare SCHAWALLER 2002: figs. 144–146).

3 Previously known species of *Laena* from Pakistan and Kashmir

Laena barypithoides Schuster, 1916
(Figs. 25, 29)

Studied type material: Himalaya occ., Jalaori (probably Jalori Pass, Himachal Pradesh, India), leg. Rost, ♀ holotype NHMB.

Redescription: Body length 3.5 mm. Eyes not prominent. Pronotum (Fig. 25) with large punctures, distance 0.5–2 puncture diameters, all punctures with long erect setae; surface convex and shining, disc without impressions; lateral margins unbordered; propleura with similar punctation and setation as on pronotum. Elytra (Fig. 25) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, most punctures with long erect setae; intervals without punctation and setation, interval 9 without setiferous pores, all intervals slightly convex and shining. All femora without teeth or angulations. Female tibiae without peculiarities (male unknown). Apicale of aedeagus unknown.

Type locality: “Himalaya occ., Jalaori”.

Distribution: India (Himachal Pradesh).

Laena carolinae Schuster, 1935
(Figs. 2, 30–31)

Studied type material: Kashmir, Harwan, Pohru Valley, 6000 ft. (1830 m), 16.V.1928, leg. B. M. BHATIA, ♂ holotype BMNH.

Redescription: Body length 5.5 mm. Eyes not prominent. Pronotum (Fig. 2) with large but not confluent punctures, distance 1–2 puncture diameters, all punctures with long adpressed setae; surface flat and shining, disc without impressions; lateral margins bordered; propleura with sparser punctation and shorter setation than on pronotum. Elytra (Fig. 2) elongate oval with rows of deeply impressed punctures without striae, punctures of

rows somewhat larger than punctures on pronotum, most punctures with microsetae; intervals with a row of fine punctures, each bearing a long adpressed seta, interval 9 without distinct setiferous pores, all intervals strongly convex and shining. All femora without teeth or angulations. Male tibiae without peculiarities. Apicale of aedeagus see Fig. 31.

Type locality: "Harwan, Pohru Valley" (Srinagar Distr.).

Distribution: India (Kashmir).

Laena clypealis Fairmaire, 1896

New material: India, Mussoorie, VI.1933, leg. J. C. M. GARDNER, 1 ex. BMNH (det. SCHUSTER).

Remarks: The original description is too poor and the type could not be reexamined, thus this taxon remains unclear (SCHAWALLER 2009).

Type locality: "Simla".

Distribution: Pakistan (Murree, SCHUSTER 1916) (Islamabad, KASZAB 1961b under the name Rawalpindi), India (Himachal Pradesh).

Laena convexicollis Reitter, 1908

Studied type material: India, Kulu, leg. ROST, ♂ holotype HHNM.

New material: India, Himachal Pradesh, Kothi, 2500–2900 m, 15.V.1977, leg. W. WITTMER & M. BRANCUCCI, 1 ex. NHMB (det. Kaszab). – India, N Kashmir, Naranag, 16.–18.VIII.2007, leg. C. REUTER, 1 ex. SMNS. – Pakistan, Swat,

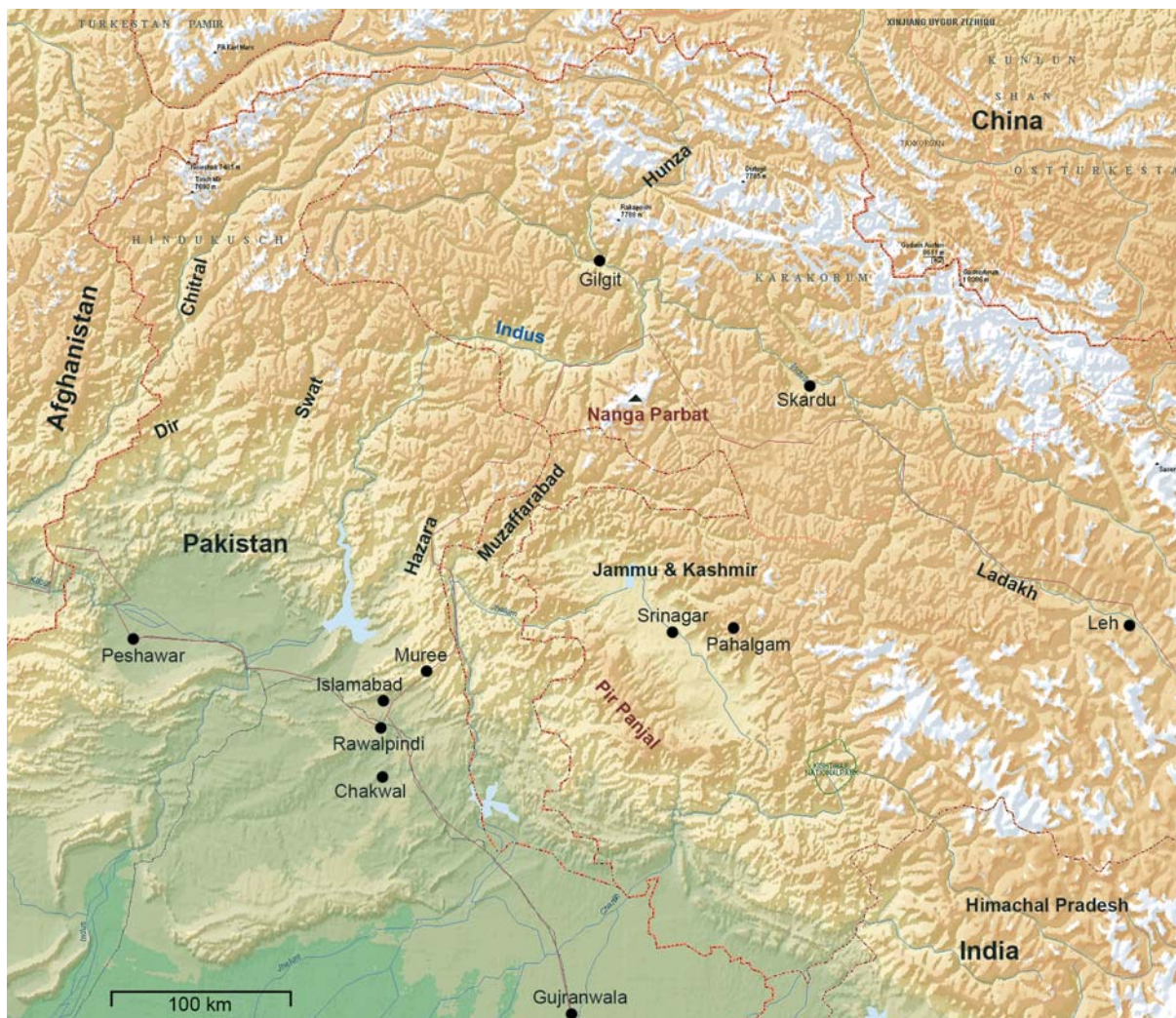


Fig. 1. The investigated area with records of *Laena* spp. in Pakistan and the Indian Kashmir. – Names of regions are used in a geographical, not political sense, because some country borders are disputed. – Modified Microsoft Encarta map.

Kalam, 2000–2400 m, 5.–12.VI.1978, leg. W. WITTMER, 5 ex. NHMB, 1 ex. SMNS. – Pakistan, Swat, Cabral, 2300–2450 m, 8.VI.1978, leg. W. WITTMER, 2 ex. NHMB (det. Kaszab). – Pakistan, Swat, Matiltan, 2250–2650 m, 15.VI.1978, leg. W. WITTMER, 1 ex. NHMB. – Pakistan, Hazara, Kaghan Valley, Shogran, 2300–2750 m, 17.VI.1977, leg. W. WITTMER & M. BRANCUCCI, 1 ex. SMNS.

Redescription: See SCHAWALLER (2009).

Type locality: “Kulu”.

Distribution: India (Himachal Pradesh, Kashmir), Pakistan (Hazara, Swat).

Laena corallipes Reitter, 1908
(Figs. 6, 32–33)

New material: India, Kashmir, Pahalgam, 2600 m, 16.V.1976, leg. J. MARTENS & W. SCHAWALLER, 2 ex. SMNS (det. KASZAB). – India, Kashmir, NE Pahalgam, Aru, 8.–15.VIII.2007, leg. C. REUTER, 1 ex. SMNS. – India, Kashmir, Naranag, 16.–18.VIII.2007, leg. C. REUTER, 1 ex. SMNS.

Redescription: Body length 6.0–6.5 mm. Eyes not prominent. Pronotum (Fig. 6) with small punctures, distance 2–5 puncture diameters, all punctures with long erect setae; surface convex and shining, disc without impressions; lateral margins bordered; propleura with sparser punctation and shorter setation than on pronotum. Elytra (Fig. 6) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, most punctures with short adpressed setae; intervals with a row of fine punctures, each bearing a seta of same length as setae of rows, interval 9 with 2 indistinct setiferous pores, all intervals flat and shining. All femora without teeth or angulations. Tibiae of both sexes without peculiarities. Apicale of aedeagus see Fig. 33.

Type locality: “Kashmir, Sintan”.

Distribution: India (Kashmir).

Laena cribrella Reitter, 1908
(Figs. 3, 36–37)

New material: India, Kashmir, Udhampur Distr., Batote, 5500 ft. (1680 m), 10.V.1928, leg. B. M. BHATIA, 1 ex. BMNH (det. SCHUSTER). – Pakistan, Hazara, Kaghan Valley, Makhair, 1800–2000 m, 30.VI.1985, leg. S. VIT, 2 ex. MHNG. – Pakistan, Kaghan Valley, Shogran, 2300–3000 m, 24.–25.VII.1982, leg. D. ERBER & W. HEINZ, 2 ex. SMNS. – Pakistan, Kaghan Valley, Shogran, 28.–30.VII.1998, leg. J. REJSEK, 2 ex. SMNS. – Pakistan, Hazara, Shogran, 2400 m, 3.VI.1983, leg. C. BESUCHET & I. LÖBL, 5 ex. MHNG, 2 ex. SMNS. – Pakistan, Hazara, Kaghan Valley, Shogran, 2300–2750 m, 17.VI.1977, leg. W. WITTMER & M. BRANCUCCI, 6 ex. NHMB. – Pakistan, Kaghan Valley, Sharan, 2400–2700 m, 1.–2.VII.1979, leg. W. WITTMER, 1 ex. NHMB.

Redescription: Body length 5.3–6.3 mm. Eyes not prominent. Pronotum (Fig. 3) with coarse and partly

confluent punctures, distance 0.5–1 puncture diameters, all punctures with short adpressed setae; surface convex and finely shagreened, disc with a pair of shallow impressions; lateral margins bordered; propleura with somewhat sparser punctation and shorter setation than on pronotum. Elytra (Fig. 3) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, most punctures with microsetae; intervals with a row of fine punctures, each bearing a short seta, interval 9 with 3 indistinct setiferous pores, all intervals convex and finely shagreened. All femora without teeth or angulations. Tibiae of both sexes without peculiarities. Apicale of aedeagus see Fig. 37.

Type locality: “Kashmir” (no detailed data).

Distribution: India (Kashmir), Pakistan (Hazara).

Laena dumialensis Nakane, 1966

Remarks: Unfortunately, all attempts to find the type in the Hokkaido University Museum as well as in the Kyoto University Museum by Prof. M. OHARA and Dr. K. MASUMOTO, respectively, were unsuccessful. Furthermore, no newly collected material from or near the type locality is available. Thus, this species cannot be redescribed and must remain doubtful.

Type locality: “Dumial, Chakwal Distr.” (S Islamabad).

Distribution: Pakistan.

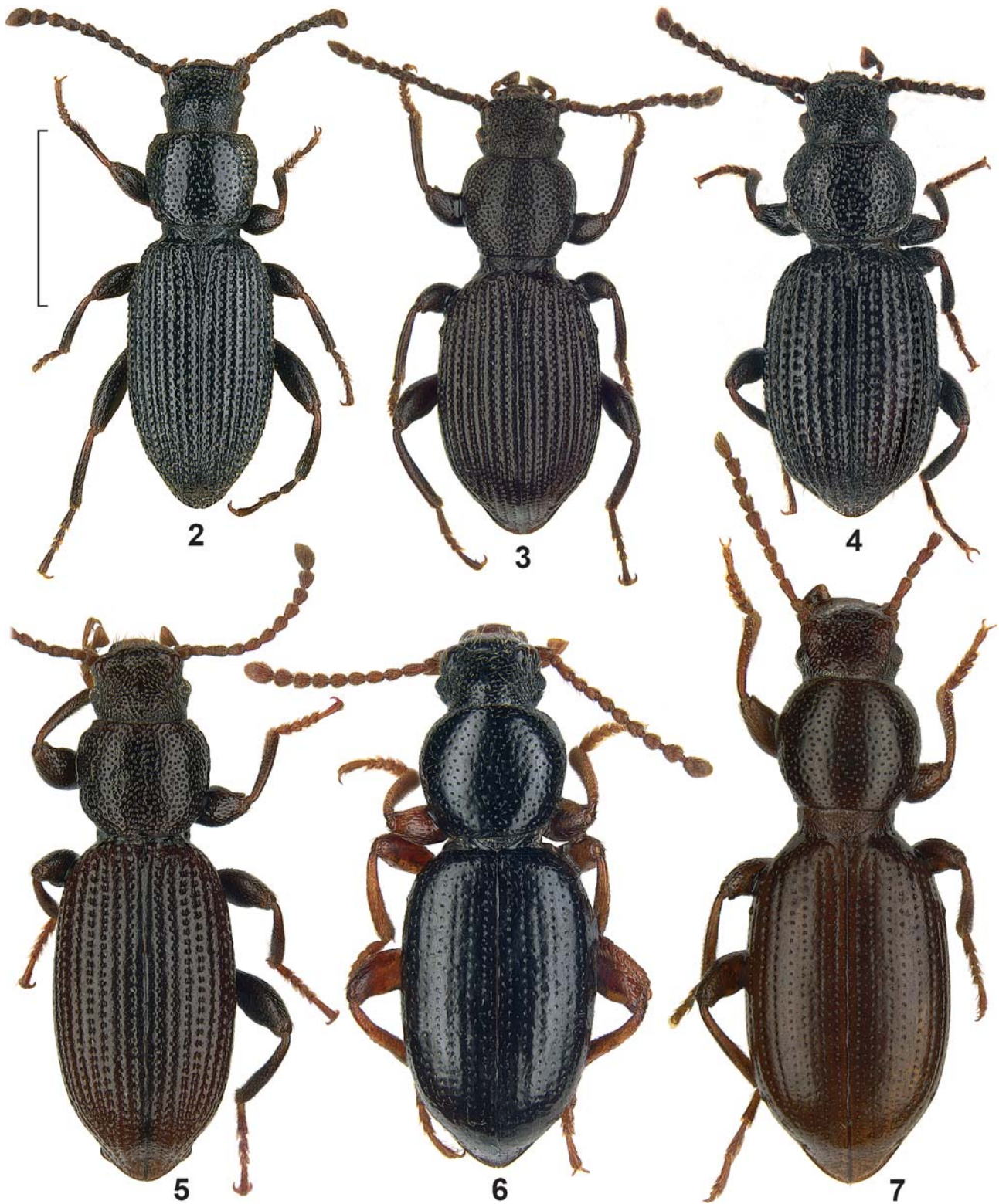
Laena edmundi Schuster, 1915
(Figs. 28, 46–47)

Laena nitida Schuster, 1935 **n. syn.**

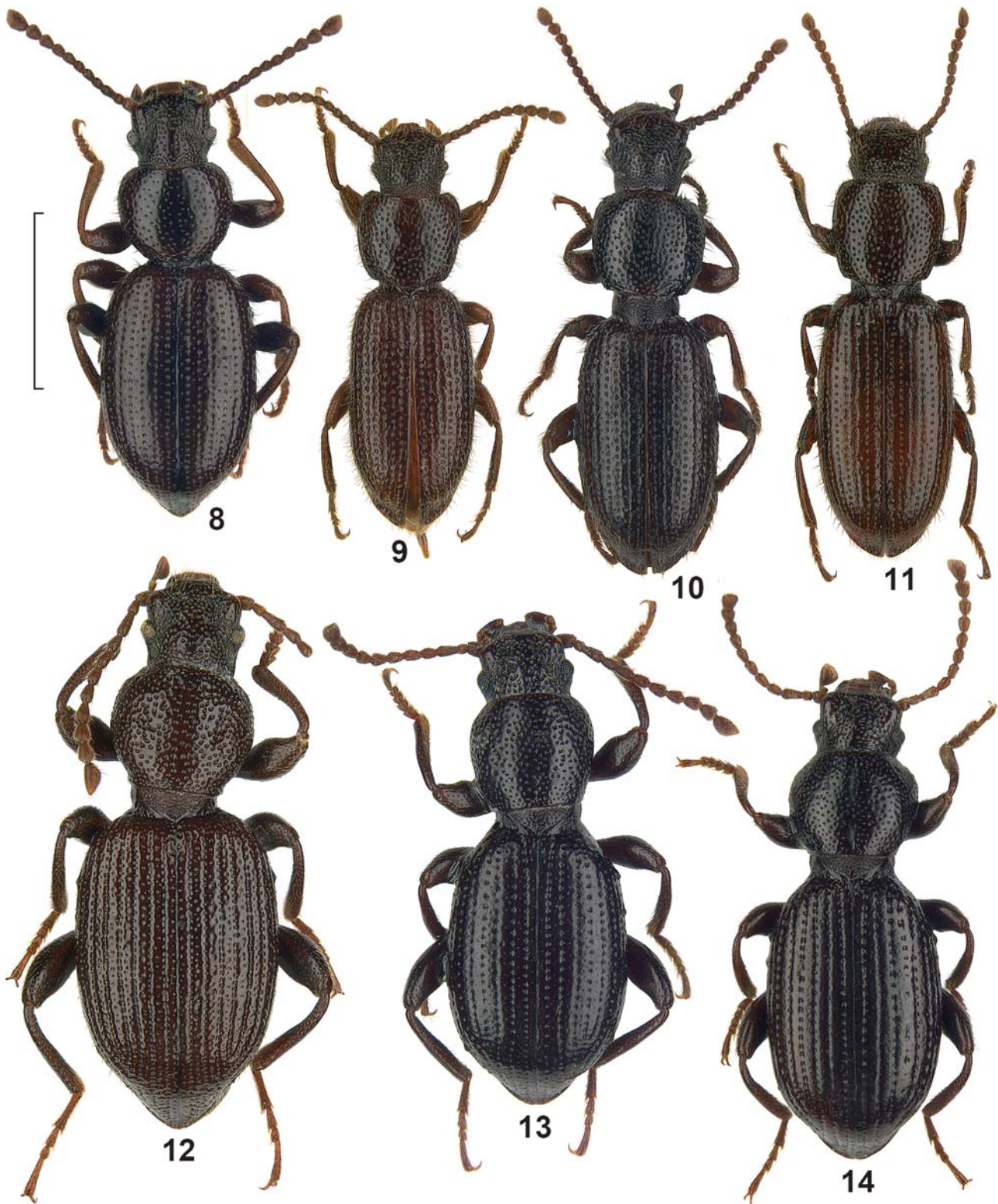
Studied type material: India, Kashmir, Gulmarg, Jhelum Valley, 5.VI.1928, leg. C. F. C. BEESON, 1 ♂ syntype of *nitida*, NHMB.

New material: India, Kashmir, Pir Panjal, Tangmarg, 2600 m, 21.–25.V.1976, leg. J. MARTENS & W. SCHAWALLER, 2 ex. SMNS (*L. edmundi* det. KASZAB). – Pakistan, Murree, 1 ex. HNHM. – Pakistan, NW Murree, Changla-Gali, 2400 m, 30.VII.–2.VIII.1982, leg. D. ERBER & W. HEINZ, 2 ex. SMNS. – Pakistan, Hazara, Nathia Gali, 2500 m, 5.VI.1983, leg. C. BESUCHET & I. LÖBL, 4 ex. MHNG, 3 ex. SMNS. – Pakistan, Hazara, Nathia Gali, 2300 m, 17.–22.IV.1984, leg. S. VIT, 4 ex. MHNG. – Pakistan, Hazara, Dunga Gali, 17.–22.IV.1984, leg. S. VIT, 1 ex. MHNG.

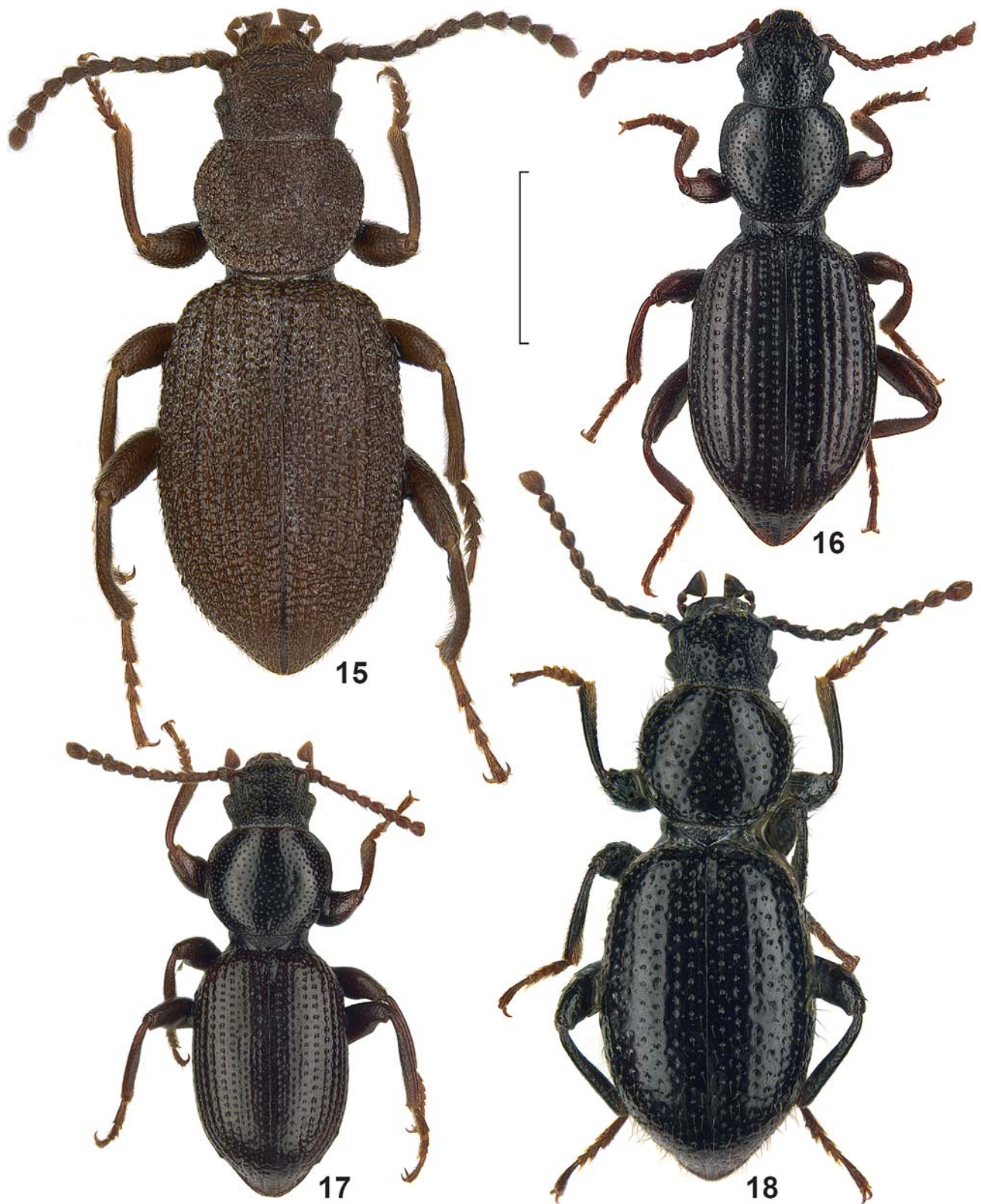
Redescription: Body length 3.5–4.5 mm. Eyes not prominent. Pronotum (Fig. 28) with large punctures, distance 1–5 puncture diameters, all punctures with long erect setae; surface convex and shining, disc without impressions; lateral margins bordered; propleura with sparser punctation and shorter setation than on pronotum. Elytra (Fig. 28) oval with rows of punctures without striae,



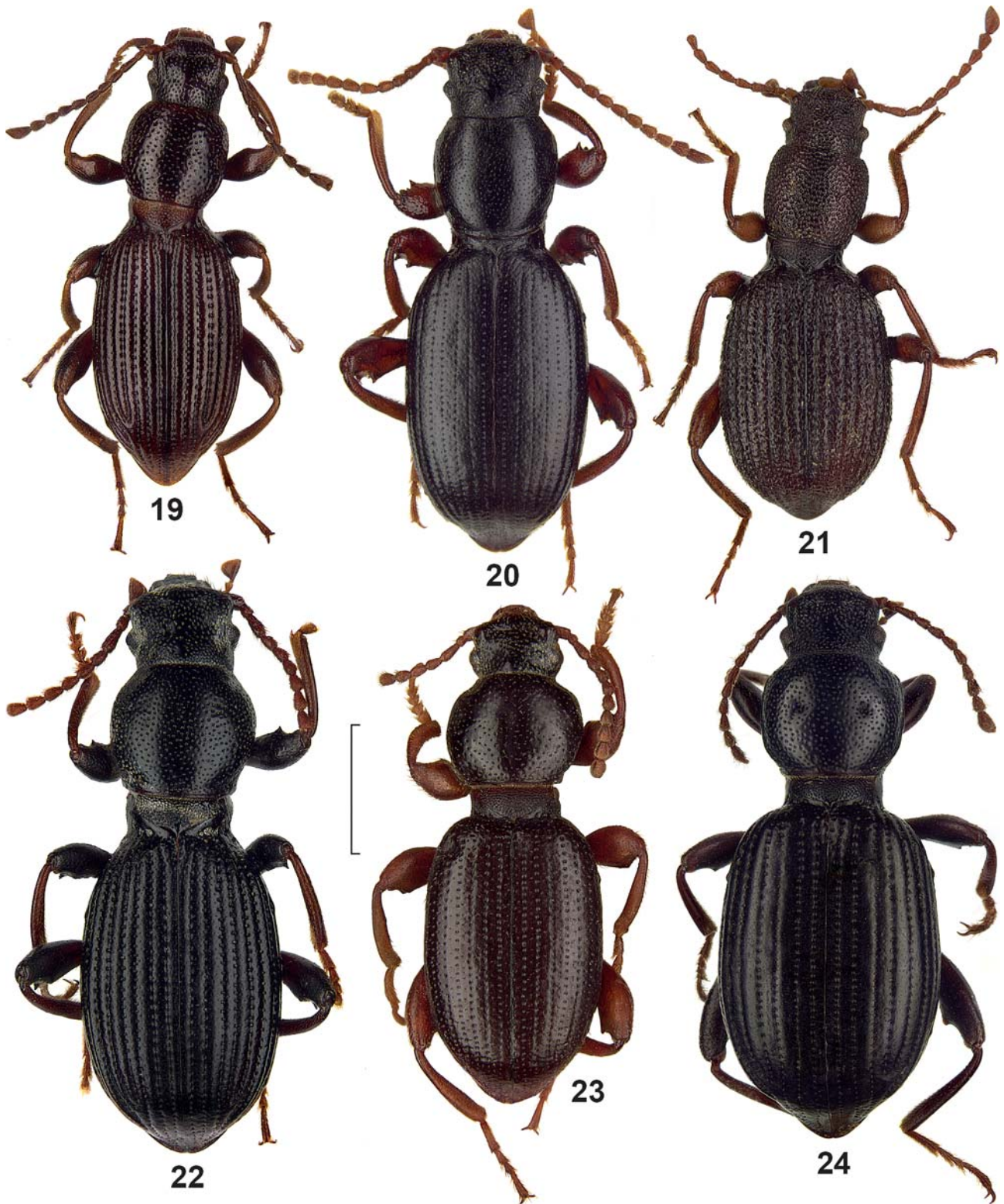
Figs. 2–7. *Laena* spp., dorsal view. – 2. *L. carolinae*, holotype, BMNH. 3. *L. cribrella*, non-type Shogran, SMNS. 4. *L. rugosa*, paratype, NHMB. 5. *L. galyatica* n. sp., holotype, MHNG. 6. *L. corallipes*, non-type Pahalgam, SMNS. 7. *L. hazaraca* n. sp., holotype, SMNS. – Scale: 2 mm.



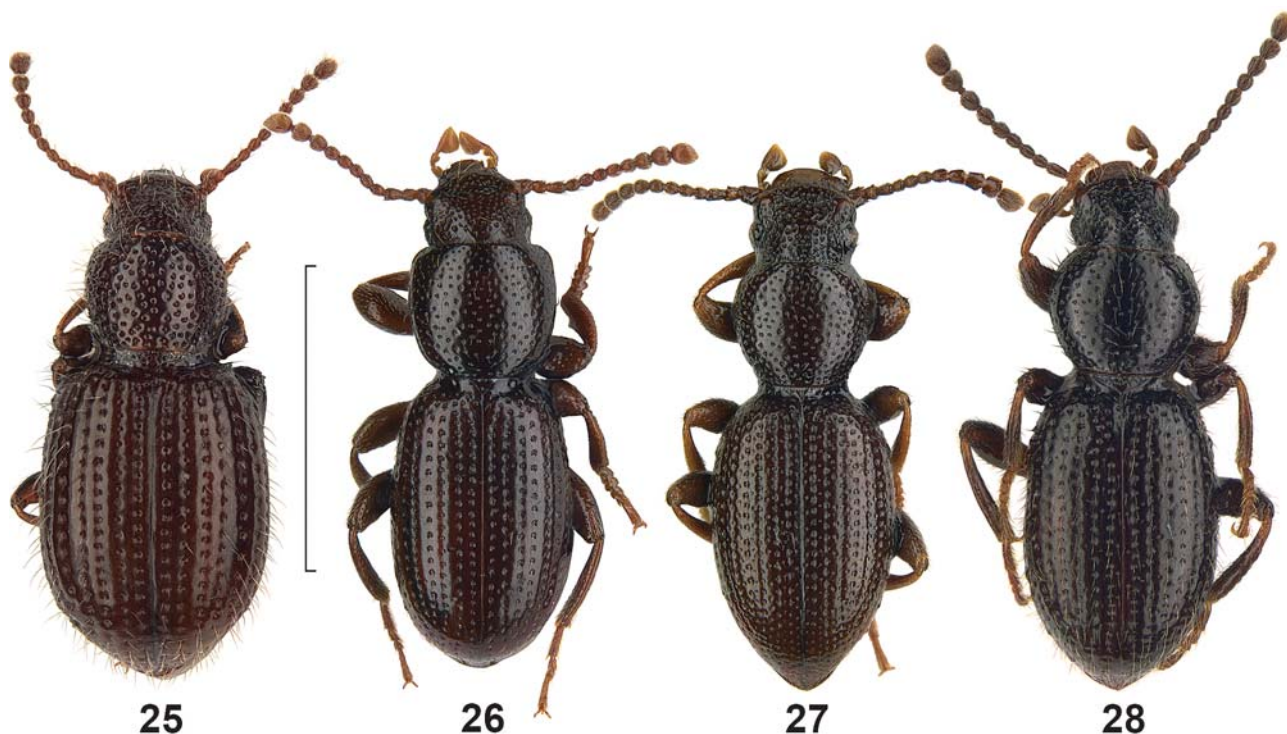
Figs. 8–14. *Laena* spp., dorsal view. – **8.** *L. kabakovi*, non-type Lawarai Pass, SMNS. **9.** *L. chitralica* n. sp., holotype, MHNG. **10.** *L. rupalica* n. sp., holotype, SMNS. **11.** *L. ladakhica* n. sp., holotype, NHMB. **12.** *L. miandamica* n. sp., holotype, NHMB. **13.** *L. kaghanica* n. sp., holotype, NHMB. **14.** *L. karakorumensis*, non-type Naran, SMNS. – Scale: 2 mm.



Figs. 15–18. *Laena* spp., dorsal view. – 15. *L. lawaraica* n. sp., holotype, MHNG. 16. *L. punctiventris*, paratype, NHMB. 17. *L. pakistanica*, non-type Utrot, SMNS. 18. *L. nigrissima*, non-type Gulmarg, SMNS. – Scale: 2 mm.



Figs. 19–24. *Laena* spp., dorsal view. – 19. *L. himalayana*, holotype, NHMB. 20. *L. jalaorana*, non-type Pahalgam, SMNS. 21. *L. simillima*, non-type Shogran, SMNS. 22. *L. sulcata*, holotype, NHMB. 23. *L. rubripes*, holotype, HNHM. 24. *L. laevigata*, paratype, NHMB. – Scale: 2 mm.



Figs. 25–28. *Laena* spp., dorsal view. – 25. *L. barypithoides*, holotype, NHMB. 26. *L. yusmargica* n. sp., holotype, NHMB. 27. *L. swatica* n. sp., holotype, MHNG. 28. *L. edmundi*, non-type Tangmarg, SMNS. – Scale: 2 mm.

punctures of rows of similar size as punctures on pronotum, most punctures with long erect setae; intervals with a row of fine punctures, each bearing a long erect seta, interval 9 with 3 indistinct setiferous pores, all intervals nearly flat and shining. All femora without teeth or angulations. Tibiae of both sexes without peculiarities. Apicale of aedeagus see Fig. 47.

Synonymy: The syntype of *L. nitida* shows no distinct differences to material of *L. edmundi* in HNHM, identified by SCHUSTER. Both type localities lie in the Pir Panjal Range. Obviously, SCHUSTER (1935), when describing *L. nitida*, overlooked his own species *L. edmundi* Schuster, 1915, or at least this species is missing in his identification key from 1935.

Type locality: “Pir Panjal” (*edmundi*), “Gulmarg” (*nitida*).

Distribution: India (Kashmir), Pakistan (Murree, Hazara).

Laena gebieni Reitter, 1906

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

New material: India, Kashmir, Aru NE Pahalgam, 8.–15.VIII.2007, leg. C. REUTER, 1 ex. SMNS.

Redescription: See SCHAWALLER (2009).

Type locality: “Kashmir”.

Distribution: India (Kashmir, Himachal Pradesh).

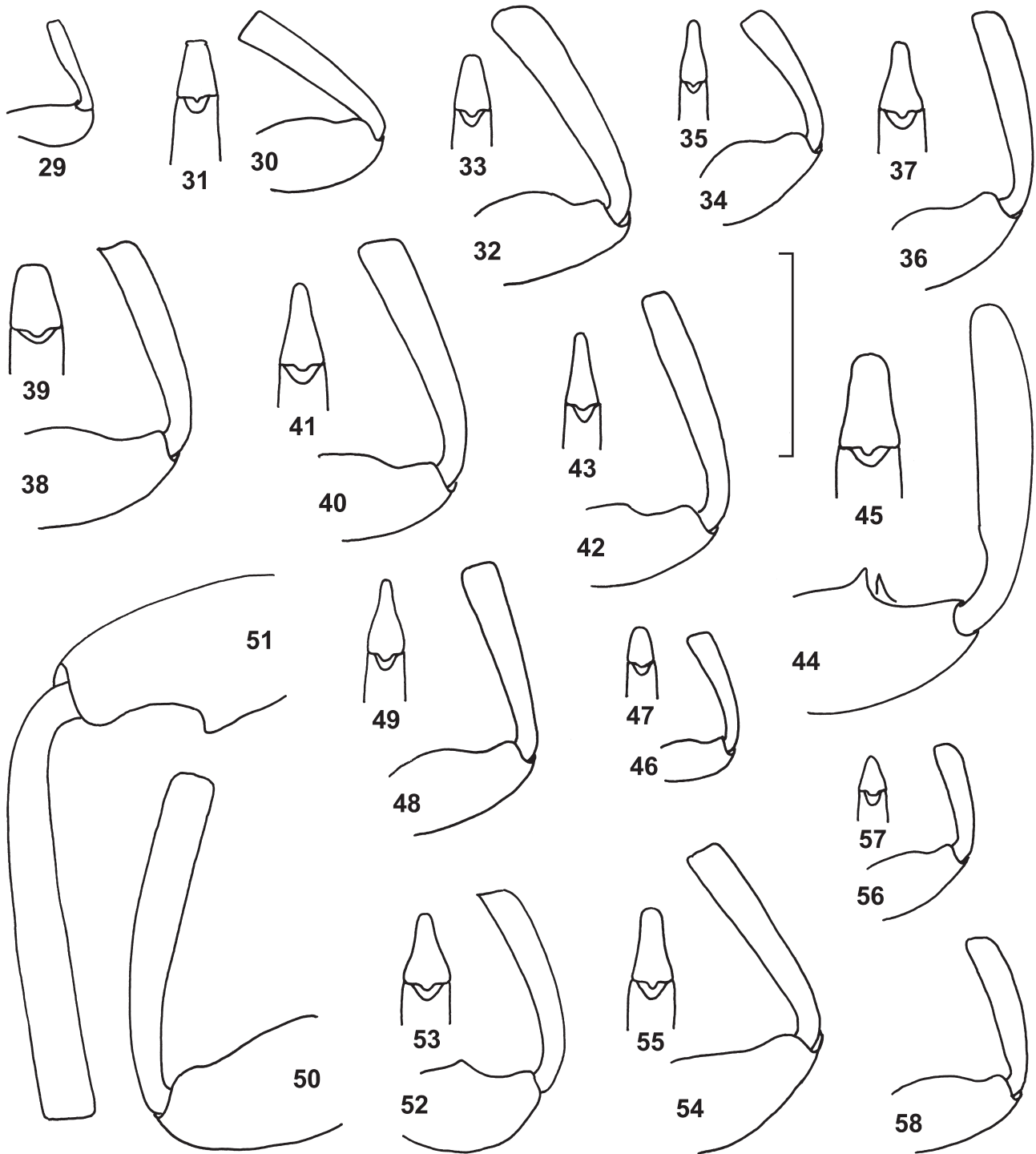
Laena himalayana Schuster, 1915
(Figs. 19, 42–43)

Studied type material: India, Himachal Pradesh, Simla Distr., ♂ holotype NHMB.

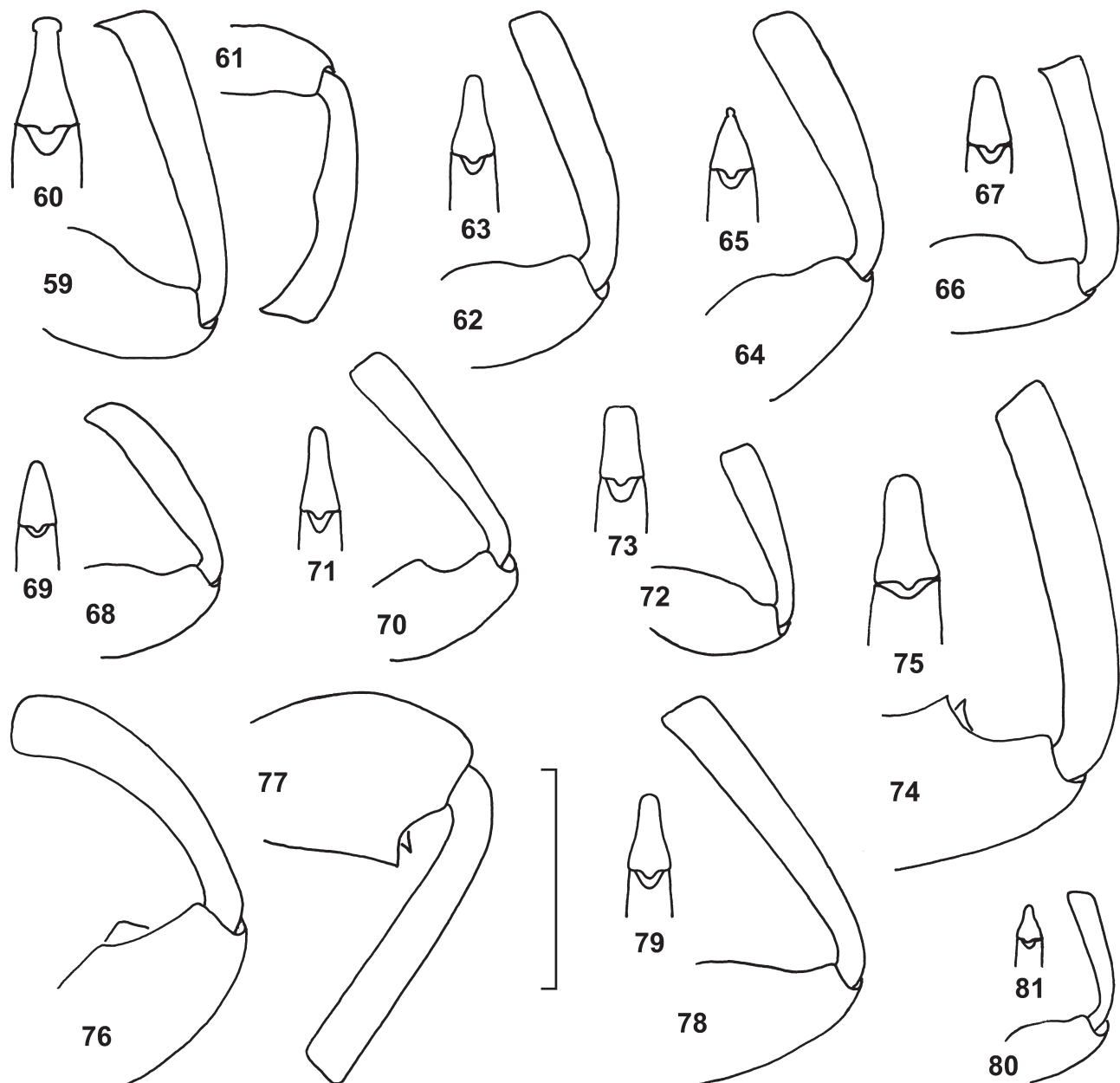
Redescription: Body length 7.2 mm. Eyes not prominent. Pronotum (Fig. 19) with large punctures, distance 1–3 puncture diameters, most punctures with long erect setae; surface convex and shining, disc without impressions; lateral margins unbordered; propleura with sparser punctation than on pronotum and without setation. Elytra (Fig. 19) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, punctures without setae; intervals with a row of extremely fine punctures, each bearing a microseta, interval 9 with 3 indistinct setiferous pores, all intervals convex and shining. Anterior and middle femora with weak angulations, posterior femora without angulations. Male tibiae without peculiarities. Apicale of aedeagus see Fig. 43.

Type locality: “Simla Distr.”.

Distribution: India (Himachal Pradesh).



Figs. 29–58. *Laena* spp., anterior (51 also posterior) femur and tibia, and aedeagus (missing if only females are available). – 29. *L. barypithoides*, ♀ holotype, NHMB. 30–31. *L. carolinae*, holotype, BMNH. 32–33. *L. corallipes*, non-type Pahalgam, SMNS. 34–35. *L. chitralica* n. sp., holotype, MHNG. 36–37. *L. cribrella*, non-type Shogran, SMNS. 38–39. *L. galyatica* n. sp., holotype, MHNG. 40–41. *L. hazaraca* n. sp., holotype, SMNS. 42–43. *L. himalayana*, holotype, NHMB. 44–45. *L. jalaorana*, non-type Pahalgam, SMNS. 46–47. *L. edmundi*, non-type Tangmarg, SMNS. 48–49. *L. kabakovi*, non-type Lawarai Pass, SMNS. 50–51. *L. laevigata*, ♀ paratype, NHMB. 52–53. *L. karakorumensis*, non-type Naran, SMNS. 54–55. *L. kaghanica* n. sp., holotype, NHMB. 56–57. *L. yusmargica* n. sp., holotype, NHMB. 58. *L. ladakhica* n. sp., ♀ holotype, NHMB. – Scale: 1 mm.



Figs. 59–81. *Laena* spp., anterior (61, 77 also posterior) femur and tibia, and aedeagus (missing if only females are available). – 59–61. *L. lawaraica* n. sp., holotype, MHNG (also male posterior tibia). 62–63. *L. miandamica* n. sp., holotype, NHMB. 64–65. *L. nigritissima*, non-type Gulmarg, SMNS. 66–67. *L. pakistanica*, non-type Utrot, SMNS. 68–69. *L. rugosa*, holotype, NHMB. 70–71. *L. punctiventris*, paratype, NHMB. 72–73. *L. rupalica* n. sp., holotype, SMNS. 74–75. *L. sulcata*, holotype, NHMB. 76–77. *L. rubripes*, ♂ holotype (aedeagus missing), HHNM. 78–79. *L. simillima*, non-type Shogran, SMNS. 80–81. *L. swatica* n. sp., holotype, MHNG. – Scale: 1 mm.

Laena jalaorana Reitter, 1908
(Figs. 20, 44–45)

New material: India, Kashmir, Pahalgam, 2600 m, 16.V.1976, leg. J. MARTENS & W. SCHAWALLER, 2 ex. SMNS (det. KASZAB). – India, Kashmir, NE Pahalgam, Aru, 8.–15.VIII.2007, leg. C. REUTER, 1 ex. SMNS. – India, Kashmir, Daksum, 2700 m, 28.VII.–2.VIII.1989, leg. W. HEINZ, 9 ex. CAPE, 2 ex. SMNS. – Pakistan, Hazara, Kaghan/Shogran, 2400–2700 m, 8.–10.VI.1983, collector unknown, 1 ex. SMNS. – Pakistan, Hazara, Kaghan Valley, SE Shogran, 2500–3500 m, 28.VII.–4.VIII.1998, leg. J. KALÁB, 2 ex. SMNS.

Redescription: Body length 7.5–8.0 mm. Eyes not prominent. Pronotum (Fig. 20) with small punctures, distance 1–4 puncture diameters, some punctures with short adpressed setae; surface convex and finely shagreened, disc with a pair of shallow impressions; lateral margins completely unbordered or partly bordered; propleura with sparser punctation and shorter setation than on pronotum. Elytra (Fig. 20) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, most punctures with microsetae; intervals with scattered fine punctures, each bearing a microseta, interval 9 with 2 indistinct setiferous pores, all intervals flat and shagreened. All femora with a pair of distinct opposite teeth of similar size, sometimes one tooth of each pair reduced. Tibiae of both sexes without peculiarities. Apicale of aedeagus see Fig. 45.

Type locality: “Jalaori” (probably Jalori Pass, Himachal Pradesh).

Distribution: India (Himachal Pradesh, Kashmir), Pakistan (Hazara).

Laena kabakovi Schawaller, 2000
(Figs. 8, 48–49)

Studied type material: Afghanistan, Nuristan, N Waygal, 2700 m, 6.VII.1972, leg. O. N. KABAKOV, ♀ holotype SMNS.

New material: Pakistan, Dir, Lawarai Pass, 2700–3000 m, 21.V.1983, leg. C. BESUCHET & I. LÖBL, 17 ex. MHNG, 5 ex. SMNS. – Pakistan, Swat, Ushu Valley, 2300 m, 15.V.1983, leg. C. BESUCHET & I. LÖBL, 1 ex. MHNG, 1 ex. SMNS.

Remarks: The holotype is a female, thus the aedeagus of a non-type male from the Lawarai Pass is figured (Fig. 49). The new records in Pakistan lie close to the adjacent type locality in Afghanistan.

Type locality: “Waygal”.

Distribution: NE Afghanistan, Pakistan (Dir, Swat).

Laena karakorumensis Kaszab, 1961
(Figs. 14, 52–53)

Studied type material: Pakistan, Gilgit, Satil, Tangir Valley, 2800 m, VII.1958, leg. E. PFIFFL, holotype and 1 paratype HHNM.

New material: Pakistan, Hazara, Naran, 2500 m, 31.V.1983, leg. C. BESUCHET & I. LÖBL, 1 ex. MHNG. – Pakistan, Hazara, S Naran, 2800 m, 1.VI.1983, leg. C. BESUCHET & I. LÖBL, 8 ex. MHNG, 4 ex. SMNS. – Pakistan, Kaghan Valley, Naran, 2400–2700 m, 26.–28.VIII.1982, leg. D. ERBER & W. HEINZ, 5 ex. SMNS. – Pakistan, Kaghan Valley, N Laran, Lalazar, 3000–3100 m, 13.–14. VII.2003, leg. W. HEINZ, 13 ex. SMNS. – Pakistan, Kaghan Valley, Sharan, 2400–2700 m, 1.–2.VII.1979, leg. W. WITTMER, 1 ex. NHMB. – Pakistan, Swat, Kalam, 2000–2400 m, 12.VI.1978, leg. W. WITTMER, 3 ex. NHMB, 1 ex. SMNS.

Redescription: Body length 5.0–7.0 mm. Eyes not prominent. Pronotum (Fig. 14) with small punctures, distance 1–3 puncture diameters, all punctures with short adpressed setae; surface convex and shagreened, disc with a pair of shallow impressions; lateral margins bordered; propleura with sparser punctation and shorter setation than on pronotum. Elytra (Fig. 14) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, most punctures with microsetae; intervals with extremely fine punctures, each bearing a microseta, interval 9 with 2 indistinct setiferous pores, all intervals flat and shagreened. All femora with distinct angulations. Tibiae of both sexes without peculiarities. Apicale of aedeagus see Fig. 53.

Remarks: See under *L. pakistanica* Kaszab, 1962.

Type locality: “Gilgit, Tangir Valley”.

Distribution: Pakistan (Gilgit, Hazara, Swat).

Laena kuluana Reitter, 1908

Studied type material: India, Himachal Pradesh, Kulu, ♂ holotype HHNM.

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. (1800–2400 m), leg. H. G. CHAMPION, 1 ex. BMNH. – India, Kulu, Seraj, Jalori Pass, 10800 ft. (3300 m), leg. H. G. CHAMPION, 2 ex. BMNH.

Redescription: See SCHAWALLER (2009).

Type locality: “Kulu”.

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

Laena laevigata Schuster, 1926
(Figs. 24, 50–51)

Studied type material: India, Uttar Anchal, Chakatra Distr., Bodyar, 8300 ft. (2350 m), 12.V.1922, leg. S. N. CHATTERJEE, ♀ paratype NHMB.

Redescription: Body length 8.5 mm. Eyes not prominent. Pronotum (Fig. 24) with large punctures, distance 1–4 puncture diameters, most punctures with long erect setae; surface convex and shagreened, disc with a pair of shallow impressions; lateral margins bordered; propleura with similar punctation and setation as on

pronotum. Elytra (Fig. 24) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, punctures without setae; intervals without punctures and setation, interval 9 with 3 indistinct setiferous pores, all intervals flat and shagreened. Anterior femora without teeth or angulations, middle and posterior femora each with a weak tooth. Female tibiae without peculiarities (male unknown). Apicale of aedeagus unknown.

Type locality: "Khedar Khud".

Distribution: India (Uttar Anchal).

Laena nigrissima Reitter, 1906
(Figs. 18, 64–65)

Studied type material: Kashmir, leg. ROST, ♀ holotype HNMB.

New material: India, Kashmir, Pir Panjal, Gulmarg, 2800 m, 21.–27.V.1976, leg. J. MARTENS & W. SCHAWALLER, 2 ex. SMNS. – India, Kashmir, Sonamarg, 2900 m, 9.VIII.1985, collector unknown, 2 ex. SMNS. – India, Ladakh, Kargil, 2800 m, VII.1984, leg. BRAUN, 1 ex. SMNS.

Redescription: Body length 7.0–7.5 mm. Eyes not prominent. Pronotum (Fig. 18) with small punctures, distance 1–5 puncture diameters, all punctures with long erect setae; surface convex and shining, disc without impressions; lateral margins bordered; propleura with sparser punctation and shorter setation than on pronotum. Elytra (Fig. 18) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, most punctures with long erect setae; intervals with a row of fine punctures, each bearing a seta of same length as setae of rows, interval 9 with 2 indistinct setiferous pores, all intervals flat and shining. All femora without teeth or angulations. Tibiae of both sexes without peculiarities. Apicale of aedeagus see Fig. 65.

Remarks: The collecting locality Kargil in Ladakh seems somewhat doubtful, because this place lies in a harsh semiarid area and trees are only present between irrigated fields, which is not an "usual" environment for *Laena* species.

Type locality: "Kashmir".

Distribution: India (Kashmir, Ladakh).

Laena pakistanica Kaszab, 1962
(Figs. 17, 66–67)

Studied type material: Pakistan, Gilgit, Satil, 1958, leg. E. PIFFL, holotype HNMB.

New material: Pakistan, Gilgit, Nomal, Naltar, 2900 m, 23.VI.1997, leg. K. STAVEN, 1 ex. CSBC, 1 ex. SMNS. – Pakistan, Gilgit, Naltar, 3000 m, 26.VII.1982, leg. RICHTER, 3 ex. ZSM. – Pakistan, Gilgit, Naltar, 3.–17.VI.1981, leg. P. LETELLIER, 2 ex. NHMB. – Pakistan, Gilgit, Rama, 3200 m, 1.–18.VI.1981,

leg. P. LETELLIER, 2 ex. NHMB. – Pakistan, Swat, Kalam, 2200–3000 m, 25.–28.VIII.1979, leg. W. HEINZ, 1 ex. SMNS. – Pakistan, Swat, S Utrot, 2500–2600 m, 13.–14.V.1983, leg. C. BESUCHET & I. LÖBL, 12 ex. MHNG, 4 ex. SMNS.

Redescription: Body length 5.0–6.0 mm. Eyes not prominent. Pronotum (Fig. 17) with small punctures, distance 1–3 puncture diameters, all punctures with short adpressed setae; surface convex and shining, disc with a pair of shallow impressions; lateral margins bordered; propleura with sparser punctation and shorter setation than on pronotum. Elytra (Fig. 17) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, most punctures with microsetae; intervals with a row of fine punctures, each bearing a short seta, interval 9 with 2 indistinct setiferous pores, all intervals flat and shining. All femora without teeth or angulations. Tibiae of both sexes without peculiarities. Apicale of aedeagus see Fig. 67.

Remarks: This species is quite similar to *L. karakorumensis* Kaszab, 1961 from the same type locality. In *L. karakorumensis*, all femora have distinct angulations, the dorsal surface is shagreened, the punctures of the elytral rows are somewhat larger and deeper, and the apicale of the aedeagus is narrower (Fig. 53) as in *L. pakistanica*.

Type locality: "Gilgit, Satil".

Distribution: Pakistan (Gilgit, Swat).

Laena punctiventris Schuster, 1926
(Figs. 16, 70–71)

Studied type material: India, Kashmir, Gulmarg, Jhelum Valley, 8500 ft. (2590 m), 5.VI.1928, leg. C. F. C. BEESON, ♂ paratype NHMB.

New material: India, Kashmir, Gulmarg, 2650–3000 m, 1.–3.VII.1976, leg. W. WITTMER, 3 ex. NHMB, 1 ex. SMNS (det. KASZAB).

Redescription: Body length 6.0–7.0 mm. Eyes not prominent. Pronotum (Fig. 16) with large punctures, distance 2–4 puncture diameters, most punctures with short adpressed setae; surface convex and shagreened, disc with a pair of shallow impressions; lateral margins unbordered, but partly somewhat marked; propleura with sparser punctation and shorter setation than on pronotum. Elytra (Fig. 16) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, most punctures with microsetae; intervals with a row of fine punctures, most bearing a long and erect seta, interval 9 with 2 indistinct setiferous pores, internal intervals flat, external intervals slightly convex, and shagreened. All femora with distinct angulations. Tibiae of both sexes without peculiarities. Apicale of aedeagus see Fig. 71.

Type locality: "Gulmarg".

Distribution: India (Kashmir).

Laena rubripes Reitter, 1908
(Figs. 23, 76–77)

Studied type material: Kashmir, leg. ROST, ♂ holotype NHMB.

Redescription: Body length 8.0 mm. Eyes not prominent. Pronotum (Fig. 23) with small punctures, distance 2–5 puncture diameters, some punctures with long erect setae; surface convex and shining, disc without impressions; lateral margins marked in posterior part but unbordered; propleura with sparser punctation and shorter setation than on pronotum. Elytra (Fig. 23) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, most punctures with short adpressed setae; intervals with a row of fine punctures, each bearing a seta of same length as setae of rows, interval 9 with 2 indistinct setiferous pores, all intervals flat and shining. Anterior and middle femora with a pair of weak opposite teeth, posterior femora with a pair of distinct opposite teeth (Figs. 76, 77). Male tibiae without peculiarities. Apicale of aedeagus unknown (abdomen empty, aedeagus missing).

Type locality: “Kaschmir”.

Distribution: India (Kashmir).

Laena rugosa Schuster, 1916
(Figs. 4, 68–69)

Studied type material: India, Kulu, 5000 ft. (1520 m), leg. ROST, ♂ holotype NHMB. – India, Kashmir, Pir Panjal, leg. ROST, ♀ paratype NHMB.

Redescription: Body length 5.2–5.8 mm. Eyes not prominent. Pronotum (Fig. 4) with rough and partly confluent punctures, distance 0.5–2 puncture diameters, most punctures with long erect setae; surface convex and shining, disc with a pair of shallow impressions; lateral margins bordered; propleura with sparser punctation and shorter setation than on pronotum. Elytra (Fig. 4) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, most punctures with short adpressed microsetae; intervals with several scattered fine punctures, each bearing a long erect seta, interval 9 with 2 indistinct setiferous pores, all intervals convex and shining. All femora without teeth or angulations. Tibiae of both sexes without peculiarities. Apicale of aedeagus see Fig. 69.

Type locality: “Kulu”.

Distribution: India (Himachal Pradesh, Kashmir).

Laena simillima Schuster, 1935
(Figs. 21, 78–79)

Studied type material: India, Kashmir, Gulmarg, VII.1931, leg. M. CAMERON, ♀ holotype BMNH.

New material: India, Kashmir, Gulmarg, 2650–3000 m, 1.–3.VII.1976, leg. W. WITTMER, 1 ♀ NHMB (det. KASZAB). – Pakistan, Muzaffarabad Distr., Pass between Reshian and Leepa, 2700–3000 m, 20.VIII.–5.IX.1997, leg. W. HEINZ, 1 ex. SMNS. – Pakistan, Hazara, Kaghan Valley, Shogran, 2300–3000 m, 24.–25.VII.1982, leg. D. ERBER & W. HEINZ, 1 ex. SMNS. – Pakistan, Hazara, Kaghan Valley, Shogran, 2300–2750 m, 17.–22.VI.1977, leg. W. WITTMER & M. BRANCUCCI, 5 ex. NHMB.

Redescription: Body length 7.0–8.5 mm. Eyes not prominent. Pronotum (Fig. 21) with rough and confluent punctures, distance 0.5 puncture diameters, all punctures with short erect setae; surface convex and shagreened, disc with a pair of shallow impressions; lateral margins unbordered; propleura with sparser punctation and shorter setation than on pronotum. Elytra (Fig. 21) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, all punctures with long erect setae; intervals with several scattered large punctures, each bearing a seta of same length as setae of rows, interval 9 with 3 indistinct setiferous pores, internal intervals flat, intervals 5 and 7 distinctly convex and elevated, surface shagreened and sometimes wrinkled. All femora without teeth or angulations. Tibiae of both sexes without peculiarities. Apicale of aedeagus see Fig. 79.

Remarks: The holotype and the only non-type specimen from the type locality Gulmarg are females, thus the aedeagus of a male from Shogran is figured.

Type locality: “Gulmarg”.

Distribution: India (Kashmir), Pakistan (Muzaffarabad, Hazara).

Laena sulcata Schuster, 1915
(Figs. 22, 74–75)

Studied type material: India, Kashmir, Yongara, 1905, leg. ROST, ♂ holotype NHMB.

New material: India, Kashmir, Sonamarg, 3000 m, 8.VI.1976, leg. J. MARTENS & W. SCHAWALLER, 1 ex. SMNS (det. KASZAB). – India, Kashmir, Naranag, 16.–18.VIII.2007, leg. C. REUTER, 1 ex. SMNS.

Redescription: Body length 7.8–8.8 mm. Eyes not prominent. Pronotum (Fig. 22) with small punctures, distance 2–4 puncture diameters, most punctures with long adpressed setae; surface flat and feebly shagreened, disc without impressions; lateral margins completely unbordered (holotype) or unbordered but slightly marked (both above listed non-type specimens); propleura with larger and sparser punctation, and with shorter setation than on pronotum. Elytra (Fig. 22) oval with rows of punctures without striae, punctures of rows of similar size as punctures on pronotum, punctures without setae; intervals with scattered fine punctures, each bearing a microseta, interval 9 with 2 indistinct setiferous pores, all intervals

convex and shagreened. All femora with a pair of distinct opposite teeth. Tibiae of both sexes without peculiarities. Apicale of aedeagus see Fig. 75.

Type locality: "Kashmir, Yongara".

Distribution: India (Kashmir).

4 Key to the species of *Laena* from Pakistan

So far, 19 species of *Laena* are known from Pakistan. This key contains 17 species, and two species remain doubtful: *L. clypealis* Fairmaire, 1896 and *L. dumialensis* Nakane, 1966. The key is suitable for males only because male sexual characters are used.

- 1 All or at least single femora (not tibiae) with distinct or weak teeth or with angulations..... 2
 - All femora without teeth or other armatures..... 4
- 2 All femora with distinct angulations only, body length 5.0–7.0 mm. – Figs. 14, 52–53..... *karakorumensis*
 - All femora with a pair of opposite distinct teeth, body length 7.0–8.0 mm. 3
- 3 Pronotum with completely bordered lateral margins, elytra with rows of large punctures in shallow striae, elytral intervals weakly convex with distinct punctation. – SCHAWALLER 2009: figs. 49–51. *kuluana*
 - Pronotum with unbordered or partly bordered lateral margins, elytra with rows of small punctures without striae, elytral intervals flat and with fine punctation. – Figs. 20, 44–45. *jalaorana*
- 4 Pronotum with completely bordered lateral margins..... 5
 - Pronotum with unbordered, but sometimes with marked lateral margins.....10
- 5 Punctures of elytral rows and intervals with long erect setae, setae distinctly longer than puncture diameter..... 6
 - Punctures of elytral rows and intervals only with microsetae, setae about as long as puncture diameter..... 8
- 6 Pronotum convex, elytra oval, apex of elytra not mucro-like, body length 3.5–4.5 mm, apicale of aedeagus very short and broad. – Figs. 28, 46–47. *edmundi*
 - Pronotum flat, elytra elongate parallel-sided, apex of elytra prolonged and mucro-like, body length 4.0–5.7 mm, apicale of aedeagus long finger-like, or spade-like. 7
- 7 Body length 4.0–5.5 mm, apicale of aedeagus narrow and finger-like. – Figs. 9, 34–35..... *chitralica* n. sp.
 - Body length 5.4–5.7 mm, apicale of aedeagus broad and spade-like. – Figs. 10, 72–73. *rupalica* n. sp.
- 8 Pronotum with coarse and nearly confluent punctation, elytral intervals convex..... 9
 - Pronotum with fine and separate punctation, elytral intervals flat. – Figs. 17, 66–67..... *pakistanica*
- 9 Elytra elongate oval, apicale of aedeagus broad and spade-like. – Figs. 5, 38–39. *galyatica* n. sp.
 - Elytra short oval, apicale of aedeagus triangular with rounded tip. – Figs. 3, 36–37. *cribrella*
- 10 Surface of pronotum and elytra dull, elytral intervals somewhat or distinctly wrinkled, elytral intervals 5 and 7 elevated.11
 - Surface of pronotum and elytra shining, elytral intervals flat or convex but not wrinkled, elytral intervals 5 and 7 not elevated. 12
- 11 Pronotum elongate parallel-sided, widest in anterior part; posterior tibiae of males not modified; apicale of aedeagus shorter with rounded tip. Figs. 21, 78–79. *simillima*

- Pronotum broader with rounded sides, widest in the middle; posterior tibiae of males modified with medial interior dilatation; apicale of aedeagus longer with prominent, broadened tip. – Figs. 15, 59–61. *lawaraica* n. sp.
- 12 Elytral interval 7 distinctly convex, separating flat disc from vertical external intervals, elytral intervals with distinct punctation. – Figs. 12, 62–63. *miandamica* n. sp.
 - Elytra regularly convex, elytral intervals with finer punctation. 13
 - 13 Small species, body length 2.8–4.8 mm. – Figs. 27, 80–81... *swatica* n. sp.
 - Larger species, body length 5.0–7.0 mm.14
 - 14 Pronotum with coarse and partly confluent punctures. – Figs. 13, 54–55. *kaghanica* n. sp.
 - Pronotum with finer and separated punctures.15
 - 15 Pronotum cordiform, widest in anterior third. – Figs. 8, 48–49. *kabakovi*
 - Pronotum round, widest in the middle.16
 - 16 Punctures of elytral rows large, elytral intervals as wide as 2–3 diameters of row punctures. – SCHAWALLER 2009: Figs. 29–31. *convexicollis*
 - Punctures of elytral rows small, elytral intervals as wide as 4–5 diameters of row punctures. – Figs. 7, 40–41. *hazaraca* n. sp.

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