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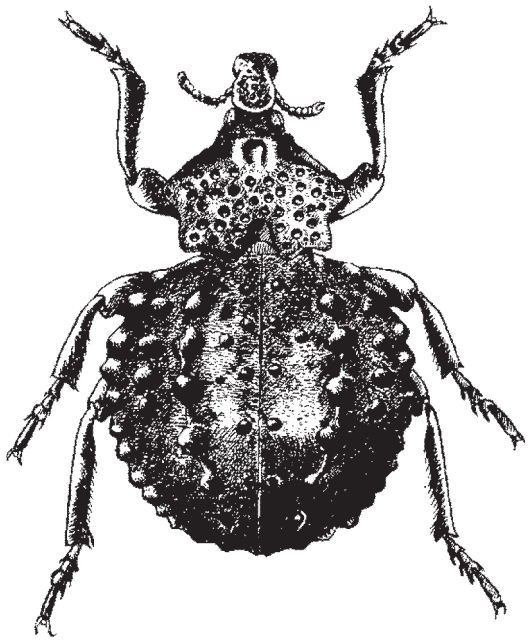

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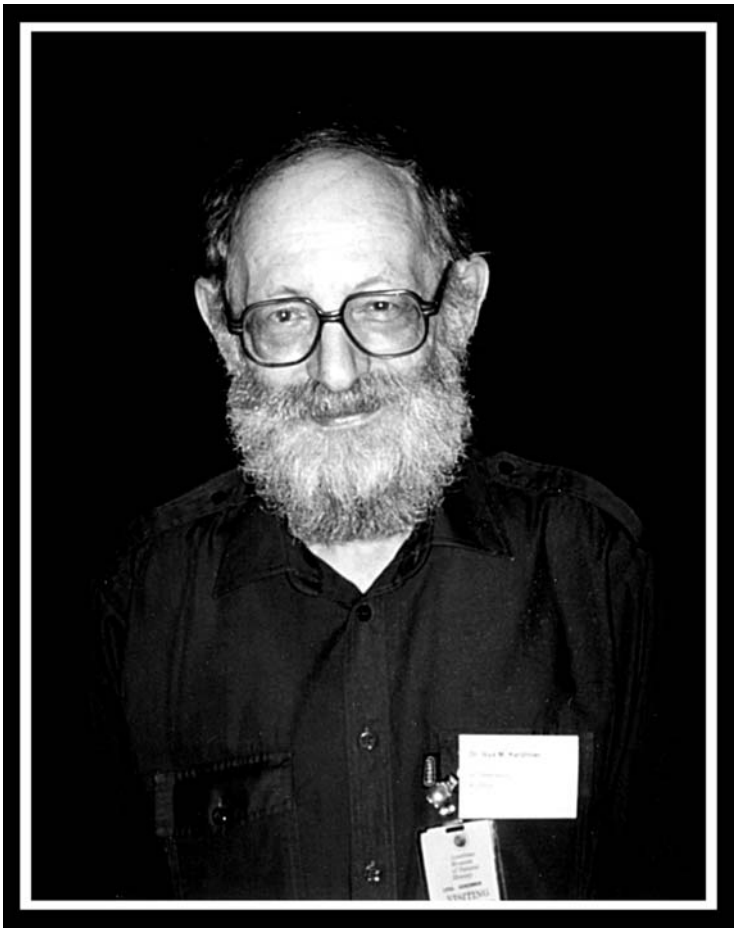

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# *Acmaeodera* (*Cobosiella*) *kerzhneri* sp. n. – a new species of Acmaeoderini from India (Coleoptera: Buprestidae: Polycestinae)

# *Acmaeodera* (*Cobosiella*) *kerzhneri* sp. n. – новый вид жуков-златок трибы Acmaeoderini из Индии (Coleoptera: Buprestidae: Polycestinae)

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***Key words:*** Coleoptera, Buprestidae, Polycestinae, Acmaeoderini, *Acmaeodera*, *Acmaeodera* (*Cobosiella*), new species, India.
***Ключевые слова:*** Coleoptera, Buprestidae, Polycestinae, Acmaeoderini, *Acmaeodera*, *Acmaeodera* (*Cobosiella*), новый вид, Индия.

***Abstract.*** *Acmaeodera* (*Cobosiella*) *kerzhneri* **sp. n.** from India (Chota Nāgpur) is described, illustrated, and compared with the closely related species *A.* (*C.*) *stictipennis* Laporte et Gory, 1835.

***Резюме.*** Представлено описание нового вида *Acmaeodera* (*Cobosiella*) *kerzhneri* **sp. n.** из Индии (Чота-Нагпур), проведено его сравнение с близким видом *A.* (*C.*) *stictipennis* Laporte et Gory, 1835.

The subgenus *Acmaeodera* (*Cobosiella*) Volkovitsh, 1979 (type species *Acmaeodera chotanica* Semenov, 1891) was originally established for 8 species distributed mainly in Oriental region with only one species, *A. chotanica*, occurring in the Middle and Central Asia from Turkmenistan to Northern-West China [Volkovitsh, 1979]. Later, two more species were described from Northern-East Africa [Levey, Volkovitsh, 1996] and Thailand [Ohmomo, 2004]; two subspecies of widely distributed Oriental species *A.* (*C.*) *stictipennis* Laporte et Gory, 1835 were separated by Holynski [1993]. No taxonomic revision of this subgenus was carried out so far and its composition as well as the status and synonymy of some species and subspecies need further clarification. A description of new species from India is presented below.

Acronym and abbreviation used throughout the text:
NMPC – National Museum, Prague, Czech Republic;
p – printed (for label).

*Acmaeodera* (*Cobosiella*) *kerzhneri* Volkovitsh, **sp. n.**
(Fig. 1–5)

**Material.** Holotype, ♂ [NMPC]: [INDIA] Chota-Nagpore, Nowatoli, R.P. Cardon, V–VI.1896 (p).

**Description.** Body (fig. 1, 3) of medium size, strongly elongate, 3.24 times as long as pronotum at base, slender, convex, with well defined dorsal curvature; black with inconspicuous bluish sheen; elytra rufescent with blackish-brown humeral calli, base, and sutural stripe on 1st and 2nd intervals in anterior 2/3, blackish-brown with weak bluish reflection in posterior 1/3; dorsally covered with fine, very short setiform and much longer lanceolate white scales, sides of pronotum, thoracic and abdominal segments with dense branched scales, sides of abdominal segments 1–5 with glabrous "mirrors"; length 8.1 mm, width 2.5 mm.

Head (fig. 1, 3) broad, flattened when seen from above; frons flat, without medial depression or line, with feebly arcuate subparallel sides. Vertex 1.9 times as wide as transverse diameter of eye and as wide as frons above antennal depressions. Clypeus narrow, with long curved lateral branches, and with broad, arcuate medial emargination anteriorly. Frons with ocellate changing to reticulate sculpture of large, round and oval, superficial umbilicate punctures with large flat granules and indistinct, excentric micropunctures; intervals less than 1/2 diameter of punctures; covered with long, recumbent setiform scales. Antennae of male relatively short, 1.41 times as long as height of eye, sharply expanded from antennomere 4; antennomere 2 irregularly oval, slightly swollen, not expanded apically; antennomere 3 subequal, slightly expanded apically; antennomere 4 transversely triangular, 1.6 times as wide as long; distal antennomeres 5–10 strongly transverse, 2–2.1 times as wide as long; antennomere 11 roundly rhomboid, widely rounded apically, 1.5 times as wide as long.

Pronotum (fig. 1, 3) convex, campaniform, transverse; 1.7 times as wide at base as long, widest at basal 1/4; sides shortly diverging toward basal 1/4 and then arcuately converging toward anterior corners. Anterior margin distinctly bisinuate with arcuately projecting medial lobe, basal margin nearly straight, slightly bisinuate laterally. Lateral carina sharp, entire, straight. Pronotal surface convex, slightly transversely depressed at base, without medial groove; basal fossae poorly marked, lateral ones surrounded with shallow depressions. Pronotal sides with ocellate sculpture of large, round umbilicate punctures with flat granules and indistinct setiferous micropunctures, toward disc changing to asperate sculpture of horseshoe-shaped umbilicate punctures; disc medially with simple punctate sculpture of sparse asperate punctures separated by intervals equal to 2 diameters of puncture. Pronotal sides with poorly marked reddish-brown areas at basal 1/3, not forming distinct spots and with branched scales along lateral carina; disc with sparse, recumbent lanceolate and setiform scales. Anterior prosternal margin nearly straight with two scarcely visible ledges at both sides of mentum, bordered by a fine sulcus extending anterior corners; prosternum evenly convex, covered with ocellate to punctate sculpture of small, dense punctures, sparser on process; prosternal process broad, indistinctly bordered laterally. Hypomeron with ocellate, nearly reticulate sculpture of very large, round, superficial umbilicate punctures. Mesosternum nearly completely divided at middle.

Elytra (fig. 1–3) strongly elongate, 2.57 times as long as wide

at base, convex, narrow; sides converging behind elongate humeri, subparallel toward the middle, and evenly converging to narrowly rounded apices. Subhumeral incisure deep, antero-lateral angles acute; epipleural serration formed by rather big, saw-like denticles at posterior 1/5, apical denticles claw-shaped. Strial punctures small, superficial, separated at anterior 2/3, completely merging, finely sulcate at posterior 1/3. Intervals flat, subequal, wide, at disc 4–7 times as wide as striae; covered with very fine, uniseriate at anterior half, confused bi- or multiseriate punctures at posterior half; background nearly smooth. Elytral surface covered with very short (about as long as diameter of interval punctures) setiform scales at anterior 2/3 and much longer lanceolate, multiseriate white scales at posterior 1/3. Elytra dull, rufescent with blackish-brown humeral calli, base, and sutural stripe on 1st and 2nd intervals in anterior 2/3, blackish-brown with weak bluish reflection in posterior 1/3 (elytral marking of "*A. cecropia* type").

Legs (fig. 1, 3) black; metacoxal plates with posterior margin arcuately emarginated, without lateral tooth. Tibiae slender, fore tibia sharply angularly enlarged apically, with poorly marked longitudinal depressions to receive tarsi; hind tibia bearing comb of short brownish setae externally. Tarsomeres subequal; 5th wide, weakly expanded apically; tarsal pads developed on tarsomeres 1–4, each larger toward distal end. Claws in male long, double, with internal tooth nearly extending apex of claw.

Abdomen black with weak bluish and violet reflection; sides of 1st sternite with ocellate sculpture of large umbilicate punctures changing to smaller horseshoe-shaped punctures on other sternites and simple sparser punctures on the sternal discs; sides of 1st–5th sternites with smooth glabrous areas ("mirrors"); anterior margins of 3rd–5th sternites also glabrous. Sides of thoracic and abdominal segments including metepisternites and laterosternites covered with dense branched scales; abdomen medially with sparse recumbent setiform white scales. Anal sternite in male narrowly rounded apically, bordered with fine sulcus, obliquely depressed at anterior corners.

Male. Aedeagus (fig. 4, 5) broad; basal piece of tegmen (fig. 4) with very wide and short, triangular ventral apodeme; penis (fig. 5) with narrow transverse central sclerotised band and wide medial lamina.

Female unknown.

**Diagnosis.** *A.* (*C.*) *kerzhneri* **sp. n.** comes closest to *A.* (*C.*) *stictipennis* Laporte Gory, 1835, particularly to subspecies *A. s. stictipennis* which also occurs in India. New species differs by elytral marking of "*Acmaeodera ceropia* type", non-metallic blackish body and elytra, flattened frons without any trace of medial depression or line, more transverse distal antennomeres (in *A. s. stictipennis* 8th–10th antennomeres 1.9–1.6 times as wide as long), obscure reddish-brown areas at basal 1/3 of pronotal sides, pronotum widest at posterior 1/4, broad ventral apodeme of basal piece of tegmen (fig. 4, 6), narrow transverse sclerotised band and wide medial lamina of penis (fig. 5, 7). From the other species of subgenus *Acmaeodera* (*Cobosiella*) it differs by elytral marking, strongly transverse distal antennomeres, well defined "mirrors" on abdominal sides and the structure of male genitalia.

**Distribution.** India: Chota Nāgpur.

**Etymology.** This species is dedicated to Dr. I.M. Kerzhner, a great scientist and superb person with whom I have had the honor to work side by side during 35 years.

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## References

Holynski R. 1993. Two new subspecies of *Acmaeodera stictipennis* C. G. (Coleoptera: Buprestidae) // Jewel Beetles. 2: 5–7.

Levey B., Volkovitsh M.G. 1996. Five new species of sub-Saharan and Arabian *Acmaeodera* (Coleoptera: Buprestidae) // Zoosystematica Rossica. 5: 139–148.

Ohmomo S. 2004. Notes on buprestid beetles (Coleoptera: Buprestidae) from Thailand, VI // Entomological Review, Japan. 59(2): 145–151.

Volkovitsh M.G. 1979. A review of Palaearctic groups of the tribe Acmaeoderini (Coleoptera, Buprestidae) // Entomologicheskoe Obozrenie 58(2): 333–354 [In Russian]. [English translation: Entomological Review, Washington, 1979 (1980). 58(2): 78–99].

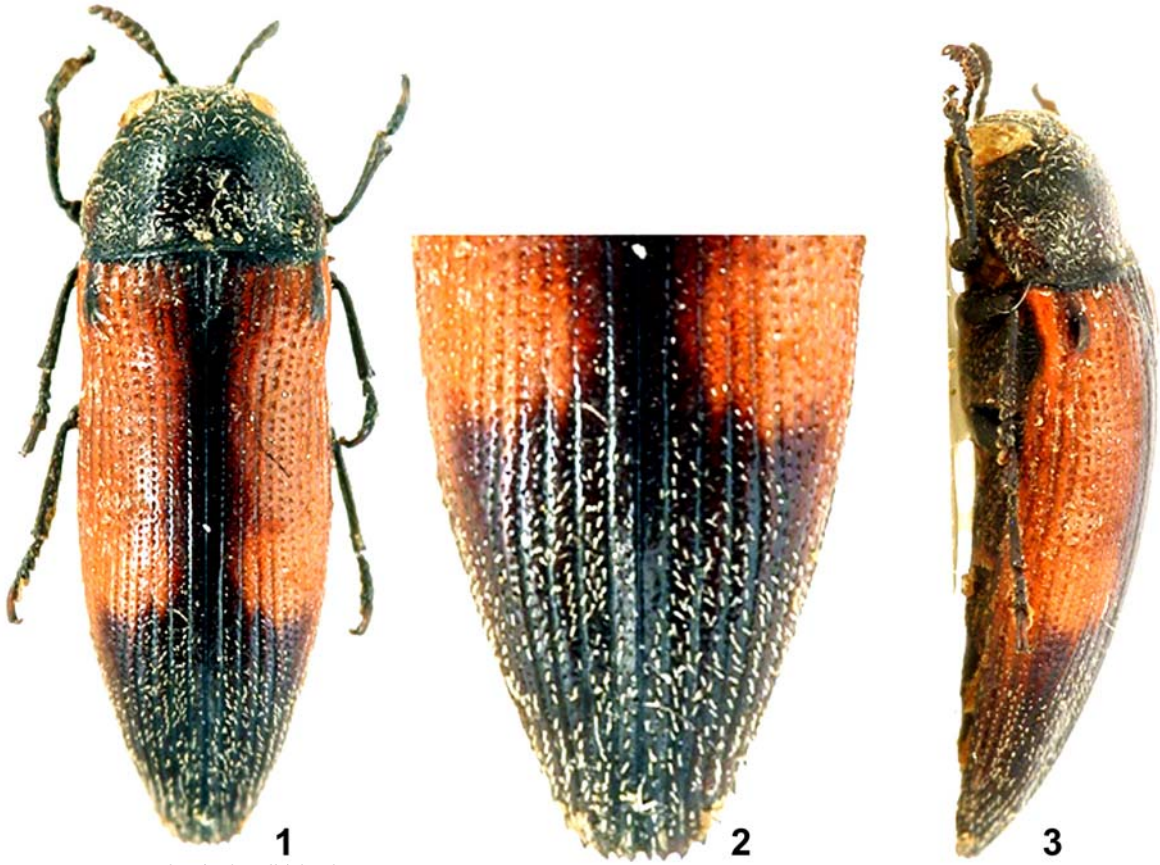


Fig. 1–3. *Acmaeodera* (*Cobosiella*) *kerzhneri* **sp. n.**
1, 3 – habitus (body length 8.1 mm): 1 – dorsal view, 3 – lateral view; 2 – posterior half of elytra, dorsal view.
Рис. 1–3. *Acmaeodera* (*Cobosiella*) *kerzhneri* **sp. n.**
1, 3 – габитус (длина тела 8.1 мм): 1 – вид сверху, 3 – вид сбоку; 2 – вершинная половина надкрылий, вид сверху.

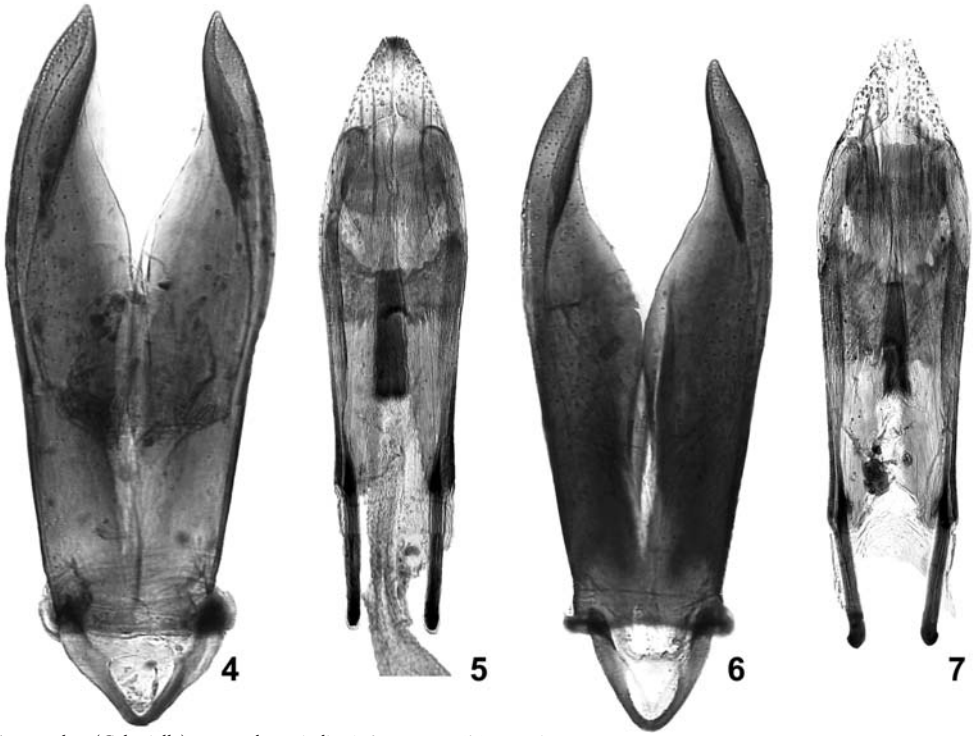


Fig. 4–7. *Acmaeodera* (*Cobosiella*) spp., male genitalia: 4, 6 – tegmen, 5, 7 – penis.
4, 5 – *A.* (*C.*) *kerzhneri* **sp. n.** (1.51 mm and 1.25 mm accordingly); 6, 7 – *A.* (*C.*) *stictipennis stictipennis* Laporte et Gory, 1835 (1.5 mm and 1.2 mm accordingly).
Рис. 4–7. *Acmaeodera* (*Cobosiella*) spp., гениталии самцов: 4, 6 – тегмен, 5, 7 – пенис.
4, 5 – *A.* (*C.*) *kerzhneri* **sp. n.** (1.51 мм и 1.25 мм соответственно); 6, 7 – *A.* (*C.*) *stictipennis stictipennis* Laporte et Gory, 1835 (1.5 мм и 1.2 мм соответственно).