

New species of Chrysomelidae from Nepal in the collection of the Naturkundemuseum Erfurt (Insecta: Coleoptera)

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Abstract

Seven new species of Chrysomelidae: *Cryptocephalus chitwanus*, *Phratora (Chaetocera) tamangi*, *Goniocтена (Asiphytodecta) ornata*, *Macrima hartmanni*, *Sphaeroderma kolibaci*, *Luperomorpha schmidtii*, *Callispa weigeli* are described from Nepal.

Zusammenfassung

Sieben neue Blattkäfer-Arten (Chrysomelidae) werden aus Nepal beschrieben: *Cryptocephalus chitwanus*, *Phratora (Chaetocera) tamangi*, *Goniocтена (Asiphytodecta) ornata*, *Macrima hartmanni*, *Sphaeroderma kolibaci*, *Luperomorpha schmidtii*, *Callispa weigeli*.

Key words: Nepal, Chrysomelidae, new species

Introduction

Chrysomelidae of Nepal are comparatively well studied, 797 species were registered 10 years ago (MEDVEDEV & SPRECHER, 1999). Nevertheless each expedition in the last years adds a few new or unrecorded species. Below I describe 7 new species from Nepal found in the material of the Naturkundemuseum Erfurt.

I am grateful to my friend and colleague, Matthias Hartmann for the possibility to study this very interesting material.

Next abbreviations are used for depository places:

NME – Naturkundemuseum Erfurt, Germany.

NHMB – Naturhistorisches Museum Basel, Switzerland

LM – author's collection.

Taxonomical part

Cryptocephalus chitwanus sp. n.

Holotype (male): Nepal, P: Narayani, D: Chitwan, Sauraha Royal Chitwan National Park, 7.5 km NW

Sauraha, 27°33' N, 84°22'E, 180 m, 19.IV.2005, deciduous forest, leg. M. Hartmann (NME).

Description. Red fulvous, antennae black with 4 basal segments fulvous, prothorax with two round spots in middle and narrow basal margin black, scutellum pale fulvous, margined with black, elytra with basal band and large round spot behind middle black (fig. 1), abdominal tergites fulvous, but middle of preapical tergite and pygidium black, underside fulvous to reddish fulvous with sides of metasternum, abdominal sternites 2–5, apical halves of femora, tibiae and tarsi black.

Head distinctly punctuate, vertex between upper lobes of eyes as wide as internal space. Antennae reach humeral tubercle, segments 6–11 slightly thickened, about 3 times as long as wide. Prothorax conical with rounded anterior margin, 1.85 times as wide as long, strongly convex, shining, finely and not densely punctuate. Scutellum narrow, cordiform, not elevated above elytral surface. Elytra 1.25 times as long as wide, slightly narrowed posteriorly, with regular rows of punctures, more feeble behind middle, interspaces flat, with very sparse and fine punctures. Pygidium densely punctuate and pubescent. Prosternum trapeziform with rounded hind angles and concave hind margin. Segment 1 of fore tarsus moderately widened. Aedeagus – fig. 4. Length of body 3.9 mm.

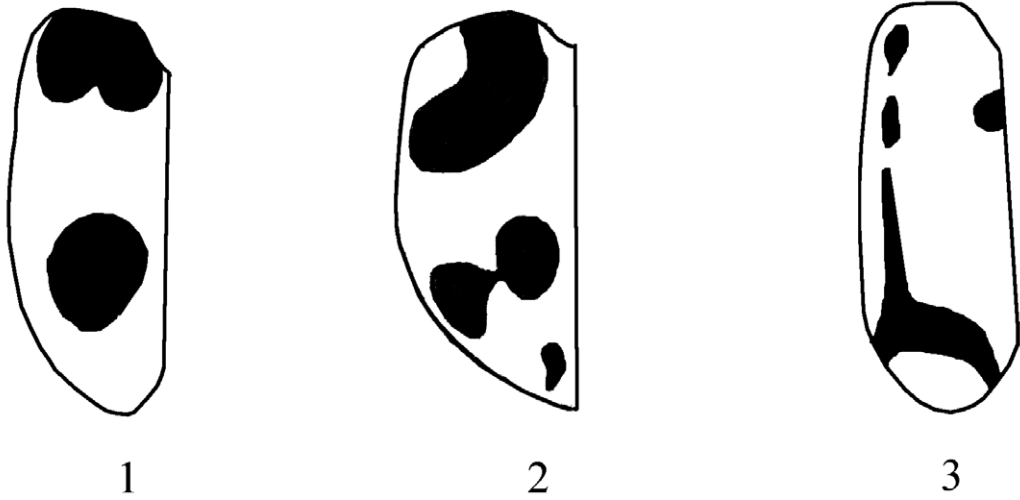
Diagnosis. This species differs well from all species known from Nepal and North India. It resembles *C. anceyi* Pic, 1929 from Indochina, but differs immediately with pattern of upperside, including fulvous apex of elytra and quite other form of aedeagus.

Derivatio nominis. The name is connected with the country of the species distribution.

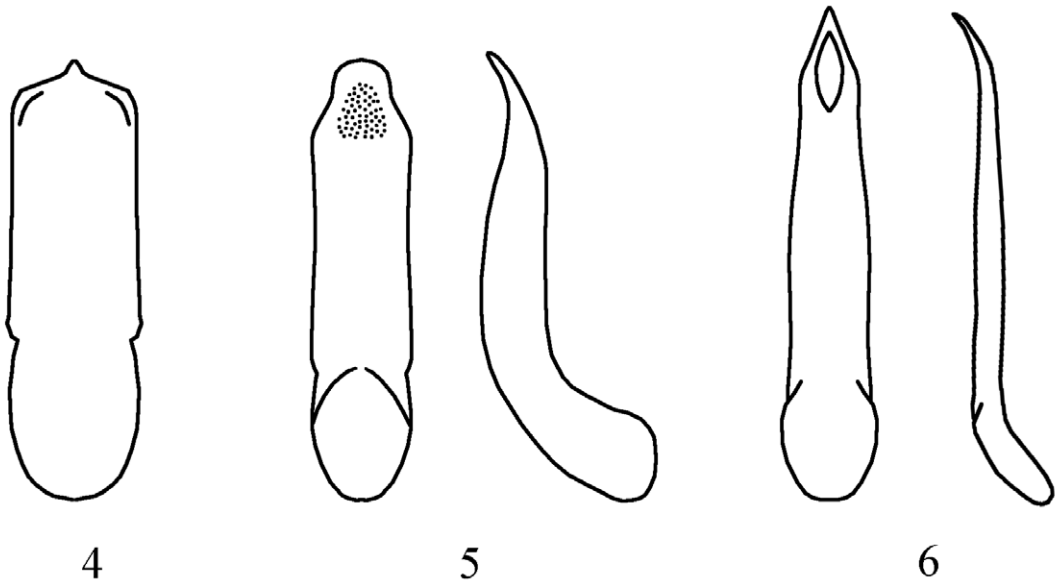
Phratora (Chaetocera) tamangi sp. n.

Holotype (male): Nepal, Manaslu Himal, Rupina La, S slope, 3600–3900m, 25v26.VI.2001, leg. S. Tamang (NME).

Description. Dark metallic green, underside and legs black with feeble metallic shine, antennae black, basal



Figs 1-3 - elytral pattern: 1 - *Cryptocephalus chitwanus*; 2 - *Gonioctena ornata*; 3 - *Callispa weigeli*



Figs 4-6 - aedeagus (d - dorsal, v - ventral, l - lateral): 4 - *Cryptocephalus chitwanus*, v; 5 - *Phratora tamangi*, v, l; 6 - *Luperomorpha schmidti* d, l.

segment with metallic shine, elytra violaceous, pygidium and apical part of last abdominal sternite fulvous. Body elongate, slightly widened to behind. Head distinctly punctate, labrum with a row of large punctures, clypeus microsculptured among punctures, divided from frons with arcuate impression, frons deeply impressed in middle. Antennae reach anterior quarter of elytra;

proportions of segments are as 9-10-10-10-7-7-9-9-9-12, preapical segments about 1.5 times as long as wide. Prothorax 1.7 times as wide as long, broadest in middle, sides slightly rounded, anterior angles acute, surface finely and not densely punctate, with more large punctures along base. Elytra 1.5 times as long as wide, confusedly punctate, with a few irregular rows in an-

terior half near suture. Segment 1 of fore and mid tarsi widened, triangular, about as long as wide. Aedeagus twice curved in lateral view, with elongate apical part, underside with impression in apical part and central ridge in middle part (fig. 5). Length of body 5.4 mm.

Diagnosis. Near *Ph. abdominalis* Baly, 1878, differs in having acute anterior angles of prothorax, more confused punctures on elytra and quite other form and sculpture of aedeagus. Very probably this species is distributed only in high altitude.

Derivatio nominis. Species is named after its collector.

Gonioctena (Asiphytodecta) ornata sp. n.

Holotype (female): Nepal, Manaslu Mts, Bara Pokhari Lekh above Bhachok Gaon village, ca. 28°4'28"N, 84°24'32"E, 1600–1800 m, 29.IV.2005, leg. J. Schmidt (NME).

Description. Red fulvous, apices of last segments of maxillar palpi black, elytra with black spots, partly connected: basal and subhumeral spots connected in curved band, two median spots, narrowly connected and comma-like spot on apical slope (fig. 2).

Body broadly ovate, 1.35 times as long as wide (without head). Head densely punctuate except middle of vertex, anterior margin of clypeus straight, frons flat and very broad, 3.8 times as wide as diameter of eyes. Antennae short, scarcely reach base of prothorax, with 6 apical segments widened, proportions of segments are as 17–10–12–9–10–10–10–10–10–11–18, preapical segments as long as wide. Prothorax 2.5 times as wide as long, broadest at base and distinctly narrowed anteriorly, with sides and anterior angles rounded, surface finely and sparsely punctuate, with a group of large and dense punctures along side margins. Scutellum semicircular, shining, with fine dense punctures. Elytra 1.15 times as long as wide, strongly convex, with irregular rows of punctures, entirely confused on apical slope, interspaces flat, not wide, with very fine punctures. All tibiae with acute external apical angle. Length of body 10.4 mm.

Diagnosis. Resembles a little *G. manipuria* Maulik, 1926 from Assam, but much larger, with entirely red fulvous head, prothorax and underside and other pattern of elytra.

Derivatio nominis. A name is connected with colour of elytra.

Macrima hartmanni sp. n.

Holotype (male): Nepal, Langtang Syabru, Bamboo Lodge, 28°9'N, 85°24'E, 1900–2160 m, 14.IX.1997, leg. Fabrici & Ahrens (NME).

Description. Fulvous, 3 stripes on prothorax, scutellum, narrow lateral and apical margin of elytron, epipleurae, large quadrangular spot on pygidium, transverse spot on preceding tergite, large spot on propleurae, meso- and metasternum, all abdominal sternites except sides and hind margins black.

Head impunctate, densely microsculptured on vertex, frontoclypeal area deeply impressed and modified, lateral parts of this impression delimited anteriorly with a pair of short ridges on each side and looking as deep grooves. Antennae reach a little behind middle of elytra, proportions of segments are as 13–5–8–12–12–12–12–12–12–14, preapical segments about 6–7 times as long as wide. Prothorax quadrangular, twice as wide as long, side margins straight and subparallel, anterior angles narrowly rounded, hind angles obtuse, surface shining and impunctate. Scutellum triangular, finely microsculptured. Elytra 1.5 times as long as wide, broadest in apical third, finely and densely punctuate. Last abdominal sternite broadly triangular. Length of body 8.6 mm.

Diagnosis. Differs well from *M. armata* Baly, 1878 and *M. pallida* Laboissiere, 1930 with black pattern of prothorax and elytra as well as impunctate and not microsculptured prothorax.

Derivatio nominis. I dedicate this interesting species to my dear friend Matthias Hartmann.

Sphaeroderma kolibaci sp. n.

Holotype (female): Nepal, Katmandu valley, Godawary, Mahabharat, 15.V–25.VI.1995, leg. J. Kolibac (NHMB).

Description. Metallic dark blue, underside almost black, antennae and legs flavous, labrum black.

Body elongate ovate, 1.3 times as long as wide. Head impunctate, frontal tubercles narrow, transverse, sharply delimited posteriorly, interantennal space narrow and convex. Antennae reach middle of elytra, proportions of segments are as 8–6–3–3–5–5–6–6–6–8, preapical segments about twice as long as wide. Prothorax 1.8 times as wide as long, side margins rounded, pores of anterior angles placed in anterior quarter of side mar-

gins, surface with comparatively fine and not dense punctures. Elytra 1.3 times as long as wide, confusedly punctate on inner part and with 6–7 regular rows on outer part, weakened on apical slope. Tarsal segment three of fore and mid tarsi strongly widened, about three times as wide as segment 1; same segment of hind tarsus less broad, about twice as wide as segment 1. Length of body 2.1 mm.

Diagnosis. Near *S. nepalensis* Bryant, 1952, differs in entirely fulvous antennae and legs and broad tarsal segment 3.

Derivatio nominis. Species is named after its collector.

Luperomorpha schmidti sp. n.

Holotype (male): Nepal, Manaslu Mts, E Slope of Ngadi Khola valley, 28°22'N, 84°29'E, 2000–2300m, 14–16.V.2005, leg. J. Schmidt (NME).

Description. Head and prothorax red fulvous, antennae black with 5 basal segments fulvous, scutellum black, elytra fulvous with broad sutural stripe and more narrow lateral stripe piceous to black, underside black, legs fulvous.

Clypeus short, interantennal space with obtuse ridge, frontal tubercles convex, triangular, sharply delimited, vertex strigose, with a few punctures and impression in middle. Antennae reach middle of elytra, proportions of segments are as 10–8–6–9–10–10–10–10–9–15, preapical segments about 1.5–1.7 times as long as wide. Prothorax 1.3 times as wide as long, narrowed to base, with straight lateral margins, surface shining, strongly and unevenly punctate, without any microsculpture. Scutellum triangular. Elytra 1.6 times as long as wide, parallel-sided, surface shining, with dense and uneven punctures. Segment 1 of fore and mid tarsi feebly widened, a little broader than segment 3. Aedeagus narrow, parallel-sided, with acute apex, underside with broad and deep furrow, sharply delimited on sides, straight in lateral view (fig. 6). Length of body 2.3 mm.

Diagnosis. Near *L. birmanica* Jacoby, 1892, but much smaller, vertex and upperside without microsculpture and rather strongly punctate, antennal segment 2 distinctly longer than 3, furrow on underside of aedeagus long, deep and sharply delimited on sides. It might be placed in Scherer's key (Scherer, 1969) between *L. birmanica* Jacoby and *L. discoidea* Jacoby, 1887.

Derivatio nominis. Species is named after its collector.

Callispa weigeli sp. n.

Holotype (male): Nepal, Mahakali-Darchula, env. Makarighar, 29°47'N, 80°50'E, 1200–1400m, 3.VI.2005, leg. A. Weigel (NME).

Description. Fulvous; interantennal process, clypeus, labrum and all mouthparts, antennae, scutellum, spots on elytra, underside (with sides of abdomen narrowly fulvous) and legs black. Elytra have common round spot in anterior quarter, 4 spots along side margin, partly connected and poorly delimited preapical patch, connected with apical spot (fig. 3).

Body almost parallel-sided, twice as long as wide. Head shining with very thin microsculpture and fine sparse punctures, interantennal process narrowly triangular with moderately acute apex. Antennae reach basal third of prothorax, proportions of segments are as 8–10–8–6–7–6–6–6–5–4–9. Prothorax 1.6 times as wide as long, broadest at base, but very feebly narrowed anteriorly, with rounded anterior angles, surface very finely microsculptured, with large strong punctures on sides and fine sparse punctures in middle. Scutellum quadrangular with feebly rounded apex, a little longer than wide. Elytra 1.55 times as long as wide, slightly widened to behind, with regular rows of punctures, confused on apical slope, and flat interspaces. Length of body 5.8 mm.

Diagnosis. Near *C. arcona* Duvivier, 1892, which however smaller (4.5 mm), has fulvous underside including part of femora and other elytral pattern, with common sutural spot placed not basally, but on apical slope.

Derivatio nominis. Species is named after its collector.

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