Two new species of the *Clivina semicarinata* group (Coleoptera: Carabidae: Scaritinae) from Asia, with notes on other species of this group

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Abstract

Two new species of the *Clivina semicarinata* group, belonging to the subgenus *Leucocara* Bousquet, 2009, are described: Clivina (Leucocara) martinbaehri sp.n. from Laos and North Vietnam and Clivina (Leucocara) pacholatkoi sp.n. from North India and Nepal. New distributional data for other species of this group are given: Clivina (Leucocara) donabaueri Dostal. 2012. Clivina (Leucocara) hoberlandti Kult. 1951. Clivina (Leucocara) kirschenhoferi Dostal, 2012, Clivina (Leucocara) legorskyi Dostal, 2012, and Clivina (Leucocara) semicarinata Putzeys, 1877. The previously unknown female genitalia of Clivina (Leucocara) kirschenhoferi Dostal, 2012 are described. The species of the Clivina (Leucocara) semicarinata species group are differentiated in a key.

Key words: Coleoptera, Carabidae, Scaritinae, Clivinini, Clivina, Leucocara, Clivina semicarinata group, India, Indonesia, Laos, Nepal, Vietnam, new species, distribution, key.

Zusammenfassung

Aus der Clivina semicarinata-Artengruppe der Untergattung Leucocara Bousquet, 2009 werden zwei neue Arten beschrieben: Clivina (Leucocara) martinbaehri sp.n. aus Laos und Nordvietnam sowie Clivina (Leucocara) pacholatkoi sp.n. aus Nordindien und Nepal. Für andere Arten aus dieser Artengruppe werden neue Verbreitungsdaten angegeben: Clivina (Leucocara) donabaueri Dostal, 2012, Clivina (Leucocara) hoberlandti Kult, 1951, Clivina (Leucocara) kirschenhoferi Dostal, 2012, Clivina (Leucocara) legorskyi Dostal, 2012 und Clivina (Leucocara) semicarinata Putzeys, 1877. Das bisher unbekannte weibliche Genital von Clivina (Leucocara) kirschenhoferi Dostal, 2012 wird beschrieben. Die Arten der Clivina (Leucocara) semicarinata-Gruppe werden in einem Bestimmungsschlüssel differenziert.

Introduction

The subgenus Leucocara Bousouet, 2009 is distributed worldwide and can be divided into six species groups (Bousouet 2009: 37 ff.). Two of them are distributed in the Oriental region: the Clivina (Leucocara) tranquebarica group (Kult 1951: 17 ff.) and the Clivina (Leucocara) semicarinata group (Dostal 2012: 33 ff.). The latter is easily recognizable by the shortened facial carinae which are not developed as a ridge in the anterior half and hardly extending forward beyond mid-eye level. After the first revision of this group

(Dostal 2012) additional material was examined, yielding two additional new species decribed herein

Material and methods

Preserved specimens, mostly from the authors' collections, are mounted on commercially available paper cards. Male and female genital organs were dissected and glued to the cards beneath the specimens from which they were removed. The following abbreviations are used to indicate the depository of specimens:

AADL collection of Alexander Anichtchenko, Daugavpils, Latvia

ADVA collection of Alexander Dostal (includes coll. K. Kult), Vienna, Austria

BMNH Natural History Museum, London, U.K.

NHMB Naturhistorisches Museum Basel, Switzerland

NKME Naturkundemuseum, Erfurt, Germany

PBPC collection of Petr Bulirsch, Prague, Czech Republic

The species descriptions are based on the most distinguishing external characters as defined by Baehr (2008: 9). Dorsal pores are counted including the preapical puncture. Label data for examined material are given verbatim, except for the date format, which is transcribed to the format "dd.mm.jjjjj". All investigations were performed with a Leica MZ16 binocular microscope with a Planapo 1.0× objective, drawings were performed with a Wild TYP 308700 drawing mirror.

Measurements were taken with a calibrated Leica ocular scale at absolute magnifications of $19.4 \times$ for pronotal length and width, and $6.9 \times$ for all other measurements.

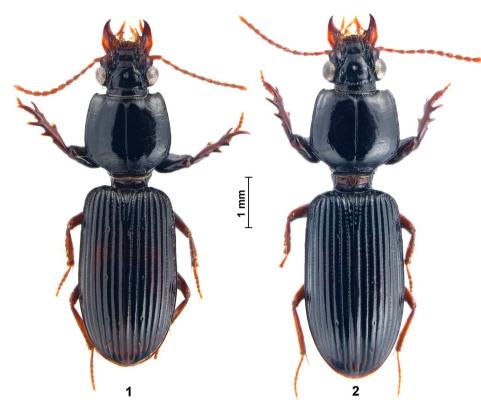
- L total body length in mm, from apex of mandible to apex of elytra.
- W maximum body width in mm (situated at apical third or near mid-length of elytra).
- PL maximum pronotum length in mm, measured along median line from base of anterior bristle fringe to base of posterior one.
- PW maximum pronotum width in mm, measured normal to midline (situated in most cases close behind middle).
- P-LW length-width-index of pronotum (PL: PW); if the value is smaller than 1, it means that the pronotum is wider than long, for values above 1, the pronotum is longer than wide.
- E-LW length-width-index of both elytra, calculation same as previous.

Digital photographs were taken with a Leica DFC camera attached to a Leica MZ16 binocular microscope with the help of Leica Application Suite V3, and stacked with Zerene Stacker 64-bit. Processing of images was performed with Adobe Photoshop 7.0.

Taxonomy

Clivina (Leucocara) martinbaehri sp.n. (Figs. 1, 3, 5, 8 – 13)

Type material: Holotype (male): Laos, centr., Khammouan prov., Ban Khoun Ngeun env., N18°07' E 104°29', alt. 250 m, 4–16.11., 25–30.11.2000, E. Jendek & P. Pacholatko leg. (PBPC).



Figs. 1 – 2: Habitus of (1) *Clivina martinbaehri* sp.n. (holotype, male) and (2) *C. pacholatkoi* sp.n. (holotype, male).

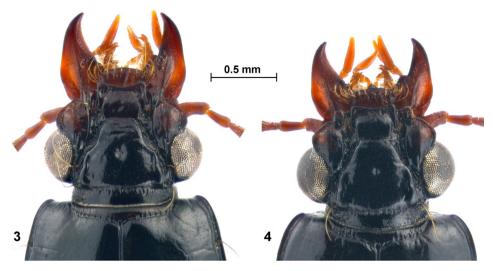
Paratypes: 9 °C, 8 °C, 12 ex., with the same data, (PBPC, ADVA); 1 °C, Tonkin [N-Vietnam], Bao-Ha (ADVA); 1 °C, 6 ex., Laos, S Udomxai Prov., Pak Beng, 450 m, N 19°53'37", E 101°7'51", 18–27.05.2001, Jiří Kolibáč leg. (NHMB, PBPC).

Recognition: A typical species of *Leucocara*, with antennomeres distinctly longer than wide, facial carinae of frons not developed as ridge in anterior half, elytra smooth and glossy, with few traces of microsculpture, striae of elytra impressed with fine puncturation and apex of aedeagus triangularly ligulate.

Description: Measurements (n = 43): $L = 6.38 - 7.69 \, \text{mm}$ (mean: 6.97 mm, holotype: 6.82 mm); $W = 1.79 - 2.17 \, \text{mm}$ (mean: 1.99 mm, holotype: 1.96 mm); $PL = 1.40 - 1.76 \, \text{mm}$ (mean: 1.59 mm, holotype: 1.63 mm); $PW = 1.61 - 1.86 \, \text{mm}$ (mean: 1.73 mm, holotype: 1.73 mm).

Colour: Unicolourous black; appendages lighter, reddish-brown; forelegs somewhat darker, especially profemora. Callow individuals different nuances of brown.

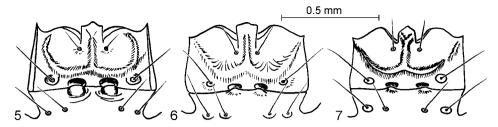
Microsculpture: Surface smooth and glossy. Head and pronotum with extremely fine, microscopic puncturation. Pronotum at base with fine, sometimes barely visible, more or less isodiametric microsculpture, also elytra at base, humeri, and interval 7-8, but still glossy.



Figs. 3 – 4: Head and anterior portion of pronotum of (3) *Clivina martinbaehri* sp.n. (holotype, male) and (4) *C. pacholatkoi* sp.n. (holotype, male).

Head (Fig. 3): Antennomeres 6 – 10 distinctly longer than wide. Mandibles slender triangular; left mandible broader than right one, its mesal edge straight, apex acute, shortly bent inwards; both mandibles in basal part with distinct ridge, ending at mid-length of mandibles; their lateral borders basally strongly bent inwards, below border with short, dilated plate. Anterior margin of labrum triangularly protruded. Middle part of clypeus more protruded than lateral wings; anterior margin of middle part with obtuse, triangular incision; margin weakly bordered in middle, more distinctly at sides; wings separated from middle part by deep facial carinae; wings unbordered, of triangular to rectangular shape, in middle with slight, transversal torus before border to frons; separated from frons by oblique suture; surface of clypeus glossy, without microsculpture. Supraantennal plates convex and distinctly bordered, as long as wide. Facial carinae broad and deep, extended from level of posterior eye margin to anterior border of clypeal wings; bottom coarsely wrinkled, bearing one pair of setae at posterior part of clypeus. Frons glossy, slightly convex, with traces of shallow transverse ridges in anterior part, separated from clypeus by distinct transversal furrow; central foveola distinct; above supraorbital setae with broad ridge, reaching to level of middle of eye. Neck distinctly constricted, with fine puncturation uninterrupted at middle, with dense puncturation at sides behind eye.

Ventral surface of head (Fig. 5): Submentum quadrisetose. Apex of median tooth of mentum rounded, sides more or less parallel, slightly constricted to base, at base with one pair of setae; sides of mental wings constricted anteriorly, their anterior margin convex, antero-laterally with conspicuous, long, and acute denticle; with oblique ridge beginning at denticle passing inwards and posteriorly, joining other side shortly before base, building massive torus in middle along base; basal suture with deep paramedian transversal, narrow fovea on each side; border of mental wings laterally sloped, wings with broad margin on inner side next to median tooth, surface glossy with distinct microreticulation; base of mentum bisetose. Glossa obtuse-triangularly incised with one seta in middle. Penultimate labial palpomere bisetose at inner edge; last labial palpomere straight on



Figs. 5 – 7: Mentum and submentum of holotypes, males, ventral aspect, of (5) *C. martinbaehri* sp.n., (6) *C. pacholatkoi* sp.n., and (7) *C. kirschenhoferi*.

outer side, strongly convex and constricted to base on inner side, widest before middle. Last maxillary palpomere straight on outer side, inner side convex and constricted to base, widest before middle.

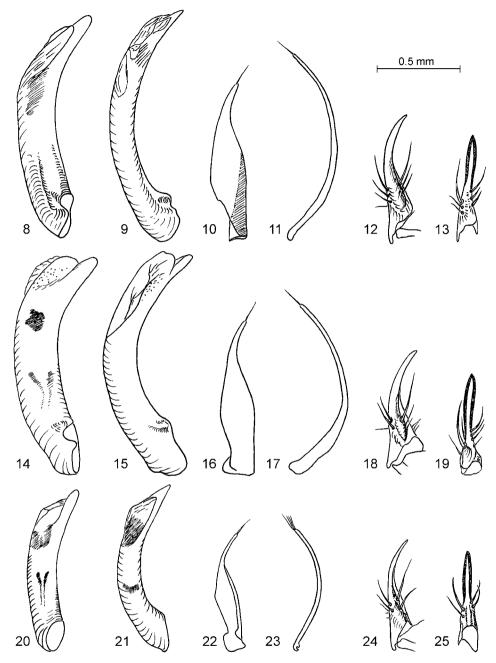
Pronotum (Figs. 1, 3): P-LW = 0.86 – 0.96 (mean: 0.92, holotype: 0.94); convex, surface glossy, without microreticulation except some traces around postangular seta, some transverse strioles in middle of disc, and distinct transverse wrinkles above base; anterior corner barely protruded forwards; posterior corner with sharp, small denticle, breaking through outline of pronotum; lateral channel broad, about twice as wide as width of basal channel between posterior angle and peduncle; basal channel above peduncle as wide as lateral channel; anterior transverse sulcus and median line both well impressed; anterior sulcus somewhat deeper and crenulated, short, sinuate, joining anterior edge at about lateral fourth of width. Prosternum smooth and glossy, with traces of margination before procoxa, with deep and crenulated transverse furrow along anterior margin, furrow interrupted in middle. Suture between prosternum and proepisternum fine, indistinct, interrupted in some specimens. Proepisternum glossy, with fine transverse strioles, with very fine traces of microreticulation along border with epipleura.

Elytra (Fig. 1): E-LW = 1.85 - 1.99 (mean: 1.92, holotype: 1.93); subparallel, slightly convex at sides; disc slightly convex, glossy, smooth, without microreticulation except traces of microsculpture at base, humeri, interval 8, and extreme apex of elytra. Elytral striae distinctly engraved from base to apex, with fine punctures at base, yet finer towards apex. Intervals slightly convex; bases of intervals 7 - 8 narrowed and elevated to keels for a very short section. Striae 1 - 3 free at base; scutellar striole present, joining scutellar pore inserted on a small tubercle; two further tubercles at base in middle of intervals 3 - 4; interval 3 with four dorsal pores.

Legs: Protibia with four teeth, proximal one very small, triangular; upper surface distally with traces of a longitudinal sulcus. Mesotibia without distal spur on upper edge.

Abdomen: Abdominal sterna III – VII without punctures at sides; sterna IV – VI finely transversely microreticulate, more isodiametrically at sides. Entire sternum VII with isodiametrical microsculpture, glossy; two pairs of marginal setae, in both sexes closely set together, without punctures at sides.

Male genitalia (Figs. 8-11): Median lobe of aedeagus cylindrical, dorso-ventrally flattened, bent ventrally. Apex of median lobe flattened, ligulate, slightly triangular, its tip rounded. Parameres long and slender, left one slightly more than $4\times$ broader than right one; both parameres with a broadly-based seta at apex, probably composed of two fused setae.



Figs. 8-25: Genitalia of males (holotypes) and females (paratypes, or in *C. kirschenhoferi* a nontype specimen from Nepal, Chitwan). (8-13) *C. martinbaehri* sp.n.; (14-19) *C. pacholatkoi* sp.n.; (20-25) *C. kirschenhoferi*. (8, 14, 20) Median lobe of aedeagus, left lateral view; (9, 15, 21) same, laterodorsal view; (10, 16, 22) left paramere; (11, 17, 23) right paramere; (12, 18, 24) right stylomere of ovipositor, lateral view; (13, 19, 25) same, dorsal view.

Female genitalia (Fig. 12, 13): Stylus 2 large, slender, distinctly bent mesad in distal third, saber-shaped, membranously attached to stylomere 1; laterally with six large setae and two rows, dorsally with six setae, including one lateral row; apex acute.

Geographical distribution: Laos, North Vietnam.

Specific epithet: Latinized noun, genitive case, an eponym based on the name of our friend Martin Baehr (Munich, Germany).

Differential diagnosis: Clivina martinbaehri sp.n. is closely related to C. kirschenhoferi Dostal, 2012 from Afghanistan, North India and Nepal. It can be distinguished by the striation punctures of the elytra. In C. martinbaehri sp.n. the fine punctures connected by the impressions of the striae become weak or even disappear in posterior half, whereas in C. kirschenhoferi the much coarser punctures in the basal half are not connected by the striae and remain distinct till second third of length. Moreover, in C. martinbaehri sp.n. the pronotum is much less convex than in C. kirschenhoferi, possesses a more prominent basal denticle, and the transversal ridges at base are more distinct and more extended to the discal area. The head of C. martinbaehri sp.n. has a distinctly constricted neck (Fig. 3), whereas in C. kirschenhoferi the neck is only slightly constricted. There are also differences in the median lobe of the aedeagus: the apex is triangular in C. martinbaehri sp.n. (Fig. 8) but narrow ligulate and parallel-sided in C. kirschenhoferi (Fig. 20). The new species is on average slightly larger: body length 6.83 – 7.34 mm versus 6.83 – 7.18 mm in C. kirschenhoferi.

Clivina (Leucocara) pacholatkoi sp.n. (Figs. 2, 4, 6, 14 – 19)

Type material: Holotype (male): NE India, Assam, Bhalukpong, $27^{\circ}02' N$ 92°35' E, 150 m, 26.05.–03.06.2006, P. Pacholatko leg. (PBPC). Paratypes: 1 Q, Nordindien, Rishikesh Umg., 07.1991, Richter leg. (PBPC); 1 ex., Nepal, nr. Birganj Lothar 450 ft., 12.09.1987, Can. Nepal Exped. (PBPC); 1 σ , Nepal centr., Gorkho, 26–31.05.1992, Jeniš Ivo leg. (ADVA); 1 ex., Myanmar (Kachin State), road Bhamo to Shwegu, Irrawady river, 157 m, at light, $24^{\circ}07'38,7''N$; 97°01'57,7'' E, 5.06.2006, M. Langer, S.Naumann & S.Löfler (PBPC); 1 σ , N-India, Uttarakhand, left side of Kosi River, 5 km N Ramnagar, N29.432 E 79.140, 19–23.06.2011, A. Anichtchenko leg. (AADL); 1 σ , 2 \circ Q, N-India, Uttarakhand, 5 km N Ramnagar, valley of Kosi riv., N 29°25'56.50" E 79°8'21.40", 23–26.04.2012, A. Anichtchenko leg. (AADL, PBPC).

Recognition: A typical species of *Leucocara*, with antennomeres distinctly longer than wide, facial carina of frons not developed as ridge in anterior half, proepisterna smooth and glossy, with fine but distinct puncturation.

Description: Measurements: (n = 9): L = 6.73 - 7.75 mm (mean: 7.33 mm, holotype: 7.54 mm), W = 1.85 - 2.19 mm (mean: 2.06 mm, holotype: 2.07 mm); PL = 1.53 - 1.82 mm (mean: 1.68 mm, holotype: 1.71 mm), PW = 1.63 - 1.95 mm (mean: 1.80 mm, holotype: 1.86 mm).

Colour: Unicolourous black. Appendages lighter, reddish-brown; forelegs somewhat darker, especially profemora.

Microsculpture: Surface smooth and glossy. Head and pronotum with extremely fine, microscopic puncturation. Pronotum at base with fine, sometimes barely visible, more or less isodiametric microsculpture, also elytra at base and apex but still glossy.

Head (Fig. 4): Antennomeres 6 – 10 distinctly longer than wide. Mandibles triangular; left mandible somewhat broader than right one, its mesal edge straight, apex acute, shortly

bent inwards; both mandibles in basal part with distinct ridge ending at mid-length; lateral border strongly bent mesad at base, below the border with short, dilated plate. Anterior margin of labrum convex to slightly triangularly protruded. Middle part of clypeus more protruded than lateral wings, its anterior margin markedly concave, anteriorly and laterally weakly bordered; clypeal wings unbordered, triangular, separated from middle part by facial carina; surface of clypeus glossy, without microsculpture. Supraantennal plates convex and distinctly and finely bordered, as long as wide. Longitudinal facial carina broad and deep, reaching from level of posterior eye margin to anterior margin of clypeal wings; bottom with oblique wrinkles bearing one pair of setae at posterior part of clypeus. Frons glossy, with distinct central foveola, above supraorbital setae with broad ridge, reaching level of middle of eye. Neck slightly constricted, with coarse puncturation in a single row, uninterrupted at middle; its sides behind eye densely and more finely punctured.

Ventral surface of head (Fig. 6): Submentum quadrisetose. Median tooth of mentum with roundly produced apex; sides subparallel, slightly constricted to base, at base with one pair of setae. Sides of mentum wings slightly constricted anteriorly, their anterior margin strongly convex, antero-laterally with distinct, short and acute denticle; with oblique ridge beginning at denticle passing inwards and posteriorly, joining other side shortly before base, building massive torus in middle along base; basal suture with pair of deep, paramedian, transverse, narrow foveae; mentum wings without border, except on inner side next to median tooth, surface glossy with distinct microreticulation; base of mentum bisetose. Glossa with obtuse, triangular apex, unisetose. Penultimate labial palpomere bisetose at inner edge; last labial palpomere straight on outer side, somewhat convex and constricted to base on inner side, widest before middle. Last maxillary palpomere straight on outer side, inner side convex and constricted to base, widest before middle.

Pronotum (Figs. 2, 4): P-LW = 0.90-0.97 (mean: 0.93, holotype: 0.92); convex; surface glossy, without microreticulation except some traces around postangular seta and along base, some transverse strioles in posterior half of disc, and a few shallow transverse ridges above base. Anterior corner barely protruded; posterior corner with sharp, small denticle, breaking through outline of pronotum. Lateral channel broad, about twice as wide as basal channel between posterior angle and peduncle; basal channel above peduncle as wide as lateral channel; anterior transverse sulcus and median line both well impressed, but anterior sulcus somewhat deeper and crenulated; anterior sulcus short, joining anterior edge at about lateral fourth of width. Prosternum smooth and glossy, with distinct border before procoxa, with deep and punctured transverse furrow along anterior margin, uninterrupted in middle. Suture between prosternum and proepisternum indistinct. Proepisternum glossy, with fine transverse strioles and with fine dispersed punctures, more restricted to inner two thirds.

Elytra (Fig. 2): E-LW = 1.91 - 1.98 (mean: 1.94, holotype: 1.93); subparallel, slightly convex at sides; disc slightly convex, glossy, smooth, without microreticulation except traces of microsculpture at base, humeri, interval 7-8, and extreme apex of elytra. Striae sharply engraved from base to apex, with distinct punctures at base, yet finer towards apex. Intervals slightly convex; bases of intervals 7-8 narrowed and elevated to keels for a very short section. Striae 1-3 free at base. Scutellar striole present; scutellar pore inserted at base of a small tubercle; two further basal tubercles in middle of intervals 3-4; interval 3 with four dorsal pores.

Legs: Protibia with four teeth, proximal one very small, triangular; upper surface with very shallow longitudinal sulcus. Mesotibia without distal spur on upper edge.

Abdomen: Abdominal sterna III – VII with fine punctures at side; sterna IV – VI with fine transverse microreticulation, more isodiametrical at sides; sternum VII isodiametrically microsculptured, glossy around apex, with two pairs of marginal setae, set close together in both sexes.

Male genitalia (Figs. 14 - 17): Apex of median lobe of aedeagus flattened, slender ligulate, its tip rounded. Parameres long and slender, left one about $4 \times$ as broad as right one; both with one seta at apex.

Female genitalia (Figs. 18, 19): Stylus 2 large, slender, distinctly bent mesad in distal third, saber-shaped, membranously attached to stylomere 1; laterally with five large setae and two groups, dorsally with seven setae, including one lateral row of three setae; apex acute.

Geographical distribution: Northern India (Uttarakhand, Assam), Nepal, Northern Myanmar.

Specific epithet: Latinized noun, genitive case, an eponym based on the surname of our colleague Petr Pacholátko (Brno).

Differential diagnosis: Clivina pacholatkoi sp.n. differs from all other species of the C. semicarinata species group by its punctured proepisterna in combination with glossy elytra lacking a microreticulation on disc (Fig. 2). The anterolateral corner of the mentum is obtuse-angled and bears a small acute denticle in C. pacholatkoi sp.n., whereas it is rectangular or acute-angled and bears a sharp, pronounced denticle in C. martin-baehri sp.n. and C. kirschenhoferi (comp. Figs. 5 – 7). Clivina pacholatkoi sp.n. shares the character of punctured sides of abdominal sterna with C. donabaueri.

Clivina (Leucocara) donabaueri Dostal, 2012

Additional material examined: 1 of, NW Thai. Mae Hong Son, Nupa-ah, 07.–09.05.1992, L. Dembicky leg. (PBPC).

Geographical distribution: Northern India, Northwestern Thailand.

Clivina (Leucocara) hoberlandti Kult, 1951

Additional material examined: 3 ex., Thailand, Nan Prov., Ban Bo Khua env., 13–26.05.2002, P. Prudek & M. Oboril leg. (PBPC, ADVA); 1 ex., Thailand, Nan Prov., Ban Huay Kon env., 27.05.–10.06.2002, P. Prudek & M. Oboril leg., (PBPC); 1 ex. Indonesia, 05.2004, Mentawai isls, Siberut isl, Bolikan, 105 m, St. Jakl, Clivina hoberlandti Kult, det M. Baehr, 2012 (PBPC).

Geographical distribution: Indonesia (Sumatra Isl. and adjacent Mentawai Isls.), Thailand.

Clivina (Leucocara) kirschenhoferi Dostal, 2012 (Figs. 7, 20 – 25)

Additional material examined: 1 of, Nordindien, Rishikesh Umg. Juli 1991, Richter leg. (PBPC); 1 Q, C-Nepal, Chitwan (Roy. Nat. Park) Sauraha vill., 166 m, 27.35N 84.30E [GPS] env., 21–27.07.2000, Jan Schneider lgt., (PBPC); 1 of, 1 Q, 4 ex., Nepal, nr. Birganj Lothar 450 ft., 12.09.1987 (PBPC); 1 of, Nepal, Sauraha, Rapti River Ufer, 180 m, NN 27°34'80" N, 84°29'49" E, LF, 18.04.2000, leg. A. Weigel & A. Skale (NKME, PBPC); 3 ex., India, Arunachal pr., 8 km S Jamiri – Sessa vicinity, 27°07–09 N, 92°34 E, 350 m, 26.05.–4.06.2005, L. Dembický (BMNH, PBPC), 1 Q, 1 ex., India, Goa, Talpona river, 14°59'59.1" N, 74°4'56.6" E, 24–27.04.2013, A. Anichtchenko leg. (AADL, PBPC).

Supplement to description: Female genitalia (Figs. 24, 25): Stylus 2 large, conspicuously slender, distinctly bent mesad in distal third, saber-shaped, membranously attached to stylomere 1; laterally with four large setae in two groups, dorsally with four setae devided into two lateral groups, including the lateral row of two setae; apex acute.

Geographical distribution: Eastern Afghanistan, Northern India, Nepal.

Clivina (Leucocara) semicarinata Putzeys, 1877

Additional material examined: 19, India, Kalkutta, compared with type K. Kult 1946 (ADVA).

Geographical distribution: India. It is very likely that some locations that were listed for this species in the old literature may in fact refer to later described species.

Clivina (Leucocara) legorskyi Dostal, 2012

Additional material examined: 8 ex., Laos, S Udomxai Prov., Pak Beng, 450m, N 19°53'37", E 101°7'51", 18–27.05.2001, Jiří Kolibáč leg. (NHMB, PBPC); 1 ex., Laos, Khammouan Prov, Ban Khoun Ngeun, ca. 200 m, 18°7'N 124°29'E, 24–29.04.2001, P. Pacholátko leg. (NHMB).

Geographical distribution: Laos, Thailand.

Key to the species of the Clivina (Leucocara) semicarinata species group

1	Elytral intervals smooth and shiny, with traces of microsculpture at base, humeri, interval 8 and extreme apex of elytra; pronotum distinctly convex
_	Elytral intervals glossy, but entirely microsculptured; pronotum more flat
2	Proepisterna with fine, dispersed punctures; 6.7 – 7.8 mm. Northeastern India, Nepal, Myanmar
_	Proepisterna without punctures. 3
3	Antennomeres 6 – 10 moniliform, nearly as long as wide (Fig. 8a). Anterior margin of labrum slightly convex. Apex of median lobe of aedeagus more triangular (Fig. 3a). Body length 6.2–6.7 mm. North Thailand, North Laos
-	Antennomeres 6 – 10 distinctly longer than wide (Fig. 8b). Anterior margin of labrum triangularly produced
4	Abdominal sterna with distinct fine punctures at sides, smooth and glossy, with very fine microreticulation. Neck distinctly constricted. Body length 7.2–7.3 mm. Northern India (Uttar Pradesh), Northwestern Thailand, Nepal
-	Abdominal sterna without punctures at sides, smooth and glossy, with very fine microreticulation
5	Striae of elytra marked by coarse punctures in basal half, punctures not connected by impressed striae. Puncturation of striae distinct over anterior two thirds of length of elytra. Pronotum distinctly convex, with basal denticle less prominent, transverse basal ridges shallow and restricted to basal area. Neck slightly constricted. Apex of median lobe of aedeagus narrow ligulate, parallel sided (Fig. 6a). Body length 6.8–7.3 mm. Eastern Afghanistan
-	Striae of elytra marked by fine punctures in basal half, punctures connected by impressed striae. Puncturation of striae distinct in anterior half of elytra, posteriorly shallow and

- Pronotum distinctly wider than long. Elytra wider, sides more rounded; elytral striae coarsely punctate, intervals convex. Antennomeres longer than wide. Abdominal sterna laterally at most with very fine traces of wrinkles and scattered punctures. Anal sternum without wrinkles. Body length 6.0 7.4 mm. Indonesia (Sumatra), Thailand.
 C. hoberlandti

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