

A new species in the genus *Eoclivina* Kult, 1959 from Africa (Coleoptera: Carabidae: Scaritinae: Clivinini)

Petr BULIRSCH¹ & Paolo MAGRINI^{2,3}

¹Milánská 461, CZ-109 00 Praha 111, Czech Republic
e-mail: p.bulirsch@seznam.cz

²Museum of Natural History of the University of Florence,
Zoology Section “La Specola”, Via Romana 17, I-50125 Firenze, Italy

³via Gianfilippo Braccini 7, I-50141 Firenze, Italy
e-mail: duvalius@paolomagrini.it

Taxonomy, new species, key, faunistics, Coleoptera, Carabidae, Clivinini, *Eoclivina*, Africa, Ghana, Burkina Faso

Abstract. *Eoclivina rolciki* sp. nov. from Ghana and Burkina Faso is described, illustrated including the male and the external female genitalia and is compared with the most similar species. A key to known species of *Eoclivina* species is provided. New findings of two species of the genus are reported, including the recently described *Eoclivina basilewskyi* Balkenohl, 2023.

INTRODUCTION

The exclusively Afrotropical clivinini genus *Eoclivina* was established by Kult (1959) as a new subgenus in the genus *Clivina* Latreile, 1802 for two known and one newly described species; later Balkenohl (2022) based on the study of the female gonocoxites established the subtribe Thliboclivinina for four newly confirmed clivinini genera including *Eoclivina*, and finally, Balkenohl (2023) revised, (re)described and keyed all species of the genus, including two new ones.

MATERIAL AND METHODS

The study of dry-mounted specimens, including measurements and examination of microsculpture, was done at a magnification up to 98×. All specimens of the new species were measured. Measurements: length of body is measured from the anterior margin of the closed mandibles to the apex of the elytra along the suture; length of the pronotum along its midline; width of the pronotum at widest point; length of the elytra from its base to its apex along the suture; width of the elytra at its widest point. Length of the body is given with 0.05 mm accuracy; other measurements including ratios and means are down to two decimal places. Label locality data are quoted verbatim except standardized dates. The terms and style of the description are used as close as possible according to Balkenohl (2022, 2023).

Macrophotographs were taken by the second author using a Nikon D2X or D800 digital camera, applied to a Nikon Labophot II binocular optical microscope or a Nikon SMZ 1000 stereomicroscope, with diaphragmed lenses.

The following abbreviations are used to indicate the depository of specimens:
BMNH Natural History Museum, London, UK (M. Barclay, K. Matsumoto);
CMNC Canadian Museum of Nature, Gatineau, Québec, Canada (L. Leclerc, F. Génier);
PBPC Petr Bulirsch collection, Prague, Czech Republic;
PSHG Peter Schüle collection, Herrenberg, Germany;
USNM National Museum of Natural History, Washington D.C., U.S.A.

Other abbreviations:

SP: setiferous puncture(s); DSP: dorsal setiferous puncture(s); HT: holotype(s); PT: paratype(s); /, // by locality labels: end of line, label.

RESULTS

Genus *Eolivina* (Kult, 1959)

Eoclivina rolciki sp. nov.

(Figs. 1-7)

Type material. Holotype (♂): Burkina Faso Nahouri / Forêt de Nazinga, Naguio / 270 m, 11°07'52''N, 1°34'38''O[=west], 24.vii.2006, zone soudanienne savane boisée, piège lumineux, F. & S. Génier [leg.], 2006-66, (PBPC). Paratypes: (1 ♂, 1 ♀): with the same data as HT, (CMNC, PBPC); (2 ♀♀, one of them partially decayed): Ghana, Upper Est prov. / Navrongo env. / 11-14.vi.2006 / J. Rolčík leg., (PBPC); (1 ♀): Burkina Faso Nahouri / Forêt de Nazinga, Boulieselo / 310 m, 11°11'50''N, 1°35'9''O[=west], 27.vii.2006, zone soudanienne / savane boisée, piège lumineux, F. & S. Génier [leg.], 2006-82, (CMNC); (1 spec.): Burkina Faso: Nahouri / Tiakané 320 m / 11°11'37''N, 1°14'10''O[=west] / 20.viii.2005., F. Génier [leg.] / zone soudanienne sud / piège lumineux, 2005-29, (CMNC).

Description. Body as in Figs. 1-2. Dorsal and ventral surface shiny; head (except laterally translucent supraantennal plates) and pronotum dark brownish, elytra and legs lighter brownish, mouthparts and antennae slightly lighter, yellowish. Measurement: total length 4.45-4.80 mm (mean 4.66 mm, HT 4.45 mm, n=7), width 1.19-1.24 mm (mean 1.22 mm; HT 1.19 mm); pronotum 1.07-1.12 times (mean 1.10; HT 1.11) as long as broad; pronotum 1.30-1.35 times (mean 1.33; HT 1.31) as broad as head; elytra 2.01-2.09 times (mean 2.05, HT 2.01) as long as broad; elytra 1.04-1.09 (mean 1.07; HT 1.08) times as broad as pronotum; length of aedeagus in HT 0.44 mm.

Head. Clypeus with central part almost indistinctly bilobed anteriorly; lateral lobes narrowly rounded, slightly projecting, wings rounded, not as advanced as central part; separated from supraantennal plates by almost right-angled notch, supraantennal plates laterally regularly, strongly convex, laterally almost as projecting as eyes; clypeus, wings, and supraantennal plates reflexed margined. Supraantennal plates overlapping eyes latero-anteriorly by a quarter (dorsal view), extended posteriorly into a keel, separated from wings by furrow. Clypeus transverse, convex, separated from frons by distinct sharp carina in form of broad, inverted V, followed just posteriorly by broad furrow and then by another sharp, rather narrow inverted V-shaped carina. Frons convex, without distinct impressions at middle, supraantennal plates continuing as irregular and narrow supraorbital carina up to posterior eyes-level. Clypeus smooth, frons with few punctures, latter more distinct latero-apically, separated from supraantennal plates and supraorbital carinae by deep and

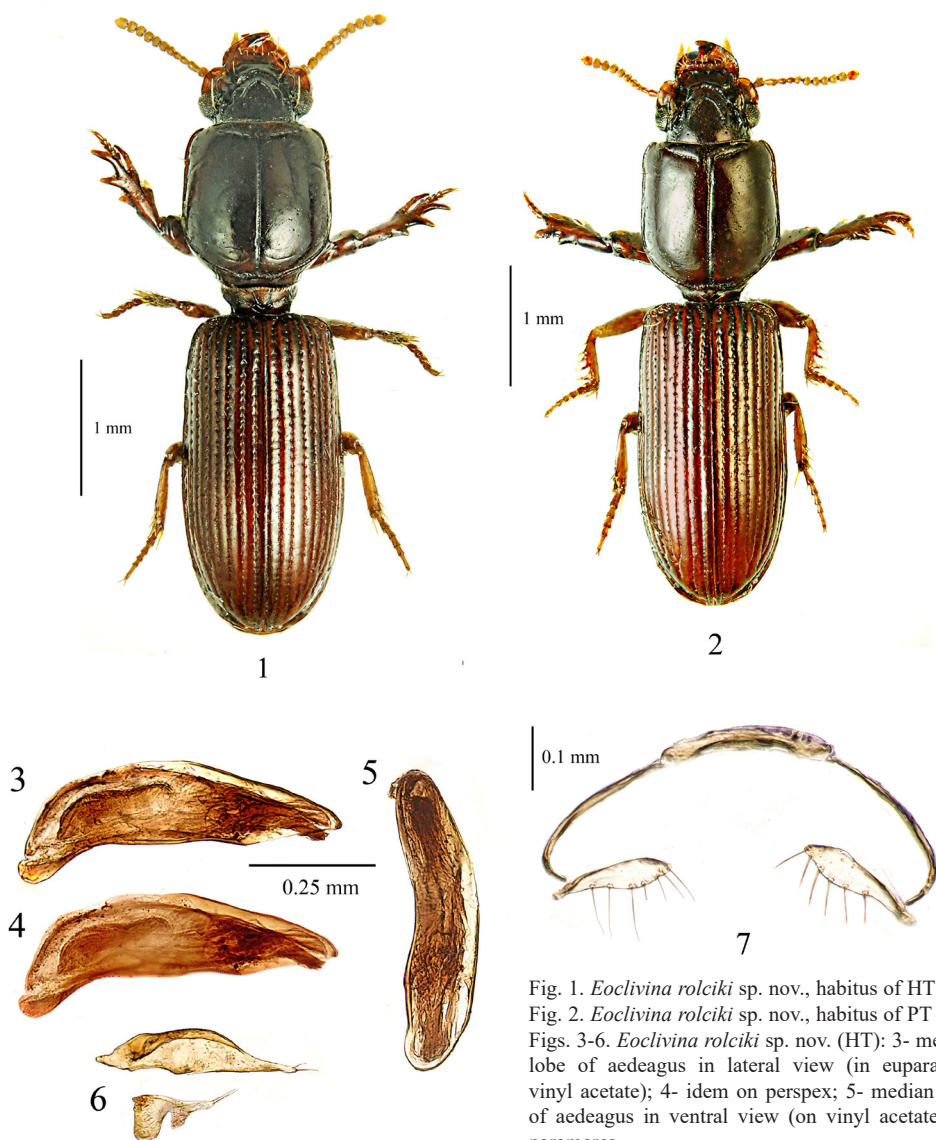


Fig. 1. *Eoclivina rolciki* sp. nov., habitus of HT (♂).
 Fig. 2. *Eoclivina rolciki* sp. nov., habitus of PT (♀).
 Figs. 3-6. *Eoclivina rolciki* sp. nov. (HT): 3- median lobe of aedeagus in lateral view (in euparal on vinyl acetate); 4- idem on perspex; 5- median lobe of aedeagus in ventral view (on vinyl acetate); 6- parameres.
 Fig. 7. Stylomeres of *Eoclivina rolciki* sp. nov. (PT).

wide furrow, with clypeal SP in front; with two supraorbital SP at middle and posterior end of eyes. Neck constriction missing. Eyes small, distinctly convex in dorsal view. Genae slightly distinct, covering less than posterior fifth of eyes in ventral view. Antennae short, not reaching middle of pronotum, antennomeres 6-10 distinctly transverse. Labrum nearly straight, with irregular reticulation, 6-setose. Mentum with lateral lobes flattened, roughly

reticulated, median tooth almost as long as lateral lobes, moderately wide and hollowed out at apex, with short and blunt carina at base.

Pronotum. Peltate; disc posteriorly convex in lateral view, distinctly convex in frontal view with increasing convexity laterally. Reflexed lateral margin almost smooth, with few blunt, almost indistinct notches, almost not attenuating anteriorly; in anterior third with almost indistinct concavity, widest distinctly behind middle; anterior angles barely distinct, rounded and very slightly projecting, posterior angles missing; lateral channel rather narrow, completely and regularly rounded off at posterior SP and continuing up to base. Median line moderately broad, deep, complete. Anterior transverse line similarly deep and broad, rather abruptly shortened medially and laterally, neither joining median line nor anterior margin. Surface smooth, with few micro punctures, with sparse and fine punctures especially in latero-basal half and along median line; base with few indistinct transverse wrinkles. Proepisterna not visible in dorsal view.

Elytra. Disc in lateral view flattened, indistinctly and very broadly concave in about anterior fourth, regularly convex in posterior third. Lateral margin subparallel in anterior two thirds, in posterior third convexly narrowed. Humeri narrowly rounded, distinct. Reflexed lateral margin almost smooth. Row of SP in lateral channel interrupted in middle by a gap of about two SP. Scutellar striae just traceable at basal declivity; base transverse; BSP with fine basal tubercle at base of stria 1, small tubercle at base of interval 3, very basal declivity with irregular isodiametric reticulation. Humeral teeth very small and blunt, situated at base of stria 4. Striae moderately deep, narrow, distinctly and regularly punctuate-striate, punctures slightly finer apically, striae 1-3 free at base, 4-6 reaching humeri, striae 1-2 free at apex, 3-4 distinctly, 5-6 irregularly joining apically. Intervals moderately convex, latero-apically barely more convex, interval 8 shortly (sub)carinate apically. Surface of intervals glossy.

Hind wings. Fully developed, capable of flight.

Lower surface. Proepisterna in lateral half with fine isodiametric reticulation, with few long parallel transverse wrinkles. Sternite 2 of abdomen roughly, regularly reticulated, sternite 3 reticulated latero-anteriorly, smooth medio-apically; sternites 4-6 shiny, with few moderately sized punctures baso-laterally; 4 with traces of isodiametric reticulation baso-laterally. Two marginal pairs of SP widely separated.

Legs. Protibiae covered with fine barely longitudinal reticulation, with three spines of moderate length, not sulcate dorsally, movable spur nearly as long as apical spine, slightly arcuate in apical third. Intermediate tibiae with six lateral tubercles furnished with strong setae.

Male genitalia (Figs. 3-6). Median lobe in lateral view (Figs. 3-4) massive, broad and barely arcuate at middle, apex rather short and broad, slightly bent down, tip in ventral view (Fig. 5) broadly rounded. Parameres as on Fig. 6, both on tip with two long setae, smaller one with large and broad basal apophysis and smaller median one.

Female gonocoxite and epipleurite (Fig. 7): Gonocoxites typical to genus; foliform, widened, flattened, with 6-7 long nematiform setae positioned at lower margin. Epipleurites with narrow, rounded rod.

Sexual dimorphism. Not observed.

Differential diagnosis. According to the “Identification key to the genera of the subtribe Thliboclivinina” in Balkenohl (2022) the new species belongs to the genus *Eoclivina* although its habitus (especially by having almost parallel elytra and by the head with a posterior sharp, rather narrow inverted V-shaped carina) is a bit similar to species of the genus *Physoclivina* Kult, 1959. It differs from this genus by the epipleura being invisible in dorsal view; by the interval eight of elytron being carinate at the apex and the body being larger, less parallel. *Eoclivina rolciki* sp. nov. can be differentiated from all species of the genus by the combination of characters as follows: the head has a distinct second carina; the pronotum and the elytra are narrower and all elytral intervals are without reticulation. The differences from each species of the group are provided in the Key below.

Name derivation. Patronymic, in honour of Jakub Rolčík (Praha, Czech Republic), well known entomologist, collector of the type specimens from Ghana.

IDENTIFICATION KEY TO THE SPECIES OF THE GENUS *EOCLIVINA* (updated key published by Balkenohl (2023))

- 1(2) Elytra with all intervals opaque, completely and distinctly reticulated. Body length 5.45 mm. (Eala, Democratic Republic of the Congo). *E. burgeoni* (Kult, 1959)
- 2(1) Elytra with at least intervals 2-5 smooth.
- 3(4) Males: Elytra with interval 8 reticulated; abdominal sternites smooth, glossy. Females: Elytra with intervals 1 and 6-8 reticulated; abdominal sternites reticulated, opaque. Body length 5.1-5.5 mm. (Angola: Dundo; DR Congo: Kona). *E. machadoi* (Basilewsky, 1955)
- 4(3) Elytra with intervals 1-7 in both sexes smooth, glossy.
- 5(6) Elytra with interval 8 in both sexes reticulated; disc of pronotum glabrous. Body length 8.3-8.7 mm. (Tanzania). *E. schmidli* Balkenohl, 2023
- 6(5) Elytra with all intervals smooth, in both sexes glossy. Distinctly smaller species (3.8-4.8 mm).
- 7(8) Larger species (body length 4.4-4.8 mm); elytra (more than twice as long as broad) and pronotum (about 1.1 times as long as broad) distinctly narrower. (N Ghana and S Burkina Faso). *E. rolciki* sp. nov.
- 8(7) Smaller species (body length 3.8-4.2 mm); elytra (about 1.7-1.9 times as long as broad) and pronotum (about 1.0 times as long as broad) distinctly broader. (Nigeria or broadly distributed).
- 9(10) Abdominal sternites smooth, eyes distinctly convex. (broadly distributed in Tropical Africa from west coast to E and SE Africa). *E. dumolinii* (Putzeys, 1846)
- 10(9) All abdominal sternites densely reticulated, opaque; eyes less distinctly convex. (Nigeria, Congo).
..... *E. basilewskyi* Balkenohl, 2023

NEW DATA

Eoclivina dumolinii (Putzeys, 1846)

Literary data: Kult (1959) stated this species from: Angola, Burkina Faso, Cameroon, Congo, DR Congo, Equatorial Guinea, Gabon, Liberia, Sierra Leone, Senegal, Togo.

Balkenohl (2023) quoted this broadly distributed species from: Angola, Benin, Burundi, DR Congo, Equatorial Guinea, Gabon, Ghana, Guinea, Ivory Coast, Senegal, Tanzania, Zambia and Zimbabwe.

New material: Only specimens from the countries not listed in Kult (1959) or Balkenohl (2023) are mentioned. All of them have been identified by the first author.

Ethiopia: 1 spec., Ethiopia, Illubabor / 20 km W of Abobo / 8.x.1987, (PBPC); **Malawi:** 1 spec., Malawi / 80 km E Liongwe / Selima env., 3-4.i.2002 / J. Halada leg., (PBPC); 1 spec., Malawi / Mulanje Mts. env. / Selima env. 23-26.xii.2001 / J. Halada leg., (PBPC); (1 spec.), Malawi / Nkhata Bay, 1.i.2002 / Lake Malawi / J. Halada leg., (PBPC); **Mozambique:** 1 spec., Mozambique, 9.xii.2006 / Zambezia prov. / Gurué env. Mt. Namuli, 870 m / P. Schüle leg., (PSHG); 3 spec., Mozambique NW / 100 km NE Tete, 910 m / 15°26'S 34°20'E / 7.xii.2005, leg. J. Halada, (PBPC); **Sudan:** 1 spec., Sudan / Sources / Yubo / Equatoria // 8.v.1948 / night trap / 49-5325 / NMSG#105, (USNM); **Uganda:** 2 spec., Uganda, Nakasongola distr., nr / Nakitoma, ZIWA Rhino Sanctuary / 1°28'11.29"N 32°3'55.24"E / 30-31.xi.2016 / P. & V. Schüle, G. Werner leg., (PSHG, PBPC).

Eoclivina basilewskyi Balkenohl, 2023

Literary data. Balkenohl (2023), p. 10: described it in series from a single locality in Nigeria (Ile - Ifè).

New material: 39 spec., Nigeria, Near Benin / 19.iv-27.v.1958 / J.L.Gregory / C.E.Tottenham Coll. BMNH{E}1974-587; (BMNH, PBPC); 190 spec., Nigeria, Umudike / 23.iii.-13.iv.1960 / J.L.Gregory / C.E.Tottenham Coll. / BMNH{E}1974-587, (BMNH, PBPC); 22 spec., Nigeria, Umuahia / 14-24.iv. (or 3.ix-4.x.) 1960 / J.L.Gregory / C.E.Tottenham Coll. / BMNH{E}1974-587, (BMNH, PBPC); 1 spec., Rep. of Congo, 375 m / Sangha Prov., Nouabale- / Ndoki N.P., Mbeli bai / (Swamp forest) / 2°15'30.4"N 16°24'39.5"E // 25.vi.2022 / Actinic light trap / Déroziér V. / ANHRT2022-9 / BMNH{E}2025-7, (BMNH); 1 spec., Rep. of Congo, 349 m / Sangha Prov., Nouabale- / Ndoki N.P., Makao Forest / 2°36'42.5"N 17°9'23.8"E // 15-21.v.2023 / LepiLED light trap / Déroziér V. / Kirk-Spriggs, A. / László, G., Mvouende, S. leg. / ANHRT:2023-6 / BMNH{E}2025-7, (BMNH). **New for the Republic of Congo.**

ACKNOWLEDGEMENTS. Our hearty thanks are due to Jakub Rolčík (Praha, Czech Republic), Ludovic Leclerc and François Génier (both CMNC, Gatineau, Canada) and other colleagues for loans / donation of unidentified specimens or types.

REFERENCES

- BALKENOHL M. 2022: On the female gonocoxites of Asian, Arabian, and African Clivinini with realignment of the *Thliboclivina*-, *Physoclivina*-, and *Eoclivina*-species groups, and notes on the higher systematics of the tribe Clivinini Rafinesque, 1815 (Coleoptera, Carabidae) *Zootaxa*: 5190 (1): 99-126. <https://doi.org/10.11646/zootaxa.5190.1.4>
- BALKENOHL M. 2023: The genus *Eoclivina* (Kult, 1959) from Africa with the description of two new species (Coleoptera, Carabidae, Clivinini). *Belgian Journal of Entomology* 138: 1-17.
- KULT K. 1959: Revision of the African Species of the old Genus *Clivina* LATR. (Col. Carabidae). *Revue de Zoologie et de Botanique Africaines* 60: 172-225.

Received: 3.5.2026

Accepted: 10.6.2026

Printed: 5.10.2026