### New and poorly known Clytrinae (Coleoptera: Chrysomelidae) from Africa

## Новые и малоизвестные Clytrinae (Coleoptera: Chrysomelidae) из Африки

# L.N. Medvedev<sup>1</sup> & F. Kantner<sup>2</sup> $\Lambda$ .H. Medbedeb<sup>1</sup>, $\Phi$ . Kantnep<sup>2</sup>

<sup>1</sup>Institute for Problems of Ecology and Evolution, Russian Academy of Sciences, Leninsky prospect 33, Moscow 119071, Russia.

<sup>1</sup>Институт проблем экологии и эволюции РАН, Ленинский проспект 33, Москва 119071, Россия.

<sup>2</sup> Lipi u Ceskich Budejovic 90, CZ-37384 Dubne, Czech Republic.

KEY WORDS: Chrysomelidae, Clytrinae, Africa, new species, new subspecies. КЛЮЧЕВЫЕ СЛОВА: Chrysomelidae, Clytrinae, Африка, новые виды, новый подвид.

ABSTRACT. From Africa six new species: Peploptera brevipes, Aetheomorpha ruficollis, Smaragdina octolineata, Afrophthalina mimica, Afrophthalina antoniae, Coptocephala benina **spp.n.** and one new subspecies: Barybaena bryanti tanzaniae **ssp.n.** of leaf beetles from subfamily Clytrinae are described. Smaragdina aethiopica L.Medvedev is transferred in the genus Coptocephala. Additional data concerning distribution are given for a few species.

РЕЗЮМЕ: Из Африки описывается 6 новых видов: Peploptera brevipes, Aetheomorpha ruficollis, Smaragdina octolineata, Afrophthalina mimica, Afrophthalina antoniae, Coptocephala benina spp.n., и 1 новый подвид: Barybaena bryanti tanzaniae ssp.n. жуков-листоедов подсемейства Clytrinae. Smaragdina aethiopica L.Medvedev переносится в род Coptocephala. Приводятся дополнительные данные по распространению ряда видов.

This communication is based on the large and interesting material from the collection of Frantisek Kantner collected in Africa in the last years. Types are deposited in the collections of L.Medvedev (cLM) and F.Kantner (cFK).

### Peploptera brevipes Medvedev et Kantner sp.n. Figs 1–2, 5–6

MATERIAL. Holotype,  $\bigcirc$ , Tanzania occ., Kiaoma Prov., 45 km N of Uvinza, 4°56'S, 30°16'E, 1150m, 28.XII.2006, leg. F.Kantner (cLM). Paratype:  $\bigcirc$ , same locality (cFK).

DESCRIPTION. Head black, antennae black with fulvous segment 2–4 and underside of segment 1. Prothorax red with broad central black stripe, strongly narrowed to anterior margin. Elytra fulvous, elongate humeral spot and preapical band prolonged along suture to scutellum and along side margin almost to humeral spot black (Figs 1–2). Scutellum, pygidium, underside and legs black.

Male. Body elongate, narrowed anteriorly and posteriorly, very alike at *P. ertli* Weise, 1905. Head shining, strongly punctate on clypeus and frons, anterior margin of clypeus arcuately emarginated, frons broad and flat, vertex convex, with central furrow and a few longitudinal punctures. Antennae distinctly serrate from the 5<sup>th</sup> segment, 4<sup>th</sup> segment short triangular, much smaller than 5<sup>th</sup>, serrate segments distinctly broader than long. Prothorax 1.5 times as wide as long, moderately narrowed anteriorly, with acute hind angles and feebly rounded side margins, surface shining, strongly convex, with fine and sparse punctures, more large near base. Scutellum triangular, with a few punctures basally. Elytra 1.6 times as long as wide, shining, finely and not densely confusedly punctate, partly with irregular rows. Pygidium strongly convex. Tarsi short and broad, segment 1 and 2 of fore and mid tarsi strongly transverse. Aedeagus (Fig. 5-6) with triangular apex, underside without transverse preapical impression and grooves before apex, but with two feeble longitudinal impressions delimited more convex central area. Length of body 9.5 mm

**Female.** Elytra more parallel-sided, 1.65 times as long as wide. Pygidium less convex. Length of body 8.5mm.

DIAGNOSIS. Very alike at *P. ertli*, having almost same form of body and colour of upperside, but the last species has long tarsi with distinctly elongate segment 1 of fore tarsi, underside of aedeagus with two deep and round preapical grooves, divided basally with distinct transverse impression.

DERIVATIO NOMINIS. A name is connected with short legs.

### Peploptera dollmani Bryant, 1948

MATERIAL EXAMINED. 3  $\circ$ , Tanzania centr.-occ., 1200 m, 3°25,5′ S; 31°47,1′ E, 100 km on Kahama road, 24.XII.2006, leg. F. Kantner; 1  $\circ$ , Tanzania occ., pr. Rukwa, 30 km NW of Mpanda, 5°54′ S; 30°56′ E, 1280 m, 30.XII.2006, leg. F. Kantner.

REMARK. Species was described from Zambia, firstly recorded from Tanzania.

### Peploptera latipes Pic, 1939

MATERIAL EXAMINED. 1 ♂, Tanzania centr.-or., Prov. Pwani, 70 km E of Morogoro, 300m, 6°38'S, 38°08'E, 12.XII.2006, leg. F. Kantner.

REMARK. Firstly found in Tanzania, was described from Italian Somali.



Fig. 1–4. Elytral pattern: 1–2 — Peploptera brevis **sp.n.**; 3 — Smaragdina octolineata **sp.n.**; 4 — Barybaena lurida. Рис. 1–4. Рисунок надкрылий: 1–2 — Peploptera brevis **sp.n.**; 3 — Smaragdina octolineata **sp.n.**; 4 — Barybaena lurida.

### Peploptera flavipennis Bryant, 1948

MATERIAL EXAMINED. 299, Tanzania, Iringa Prov., cca 50 km NW Iringa –Ruaha N.P. road, 1000 m, 7–9.I.2007, leg. A.Kudrna jr.;  $1^{\circ}$ , 19, Tanzania mer., Prov. Iringa, 80 km NE of Iringa, 7°37′ S, 36°17′ E, 650 m, 10.I.2007, leg. F. Kantner.

REMARK. Was described from Kenya, firstly recorded for Tanzania.

### *Aetheomorpha ruficollis* Medvedev et Kantner **sp.n.**

MATERIAL. Holotype, ♀, Tanzania, Iringa prov., near Mtandika, Iringa-Micuni road, 650m, 9–10.I.2007, leg. A.Kudrna (cLM).

DESCRIPTION. Metallic blue, labrum black with fulvous margin, mandibles and palpi black, antennae black with segments 2–4 fulvous, prothorax red fulvous.

Body robust, slightly widened to behind. Head shining, distinctly punctate, especially on frons, which has impressions and about twice as wide as transverse diameter of eye. Antennae serrate from the 5<sup>th</sup> segment, 4<sup>th</sup> segment triangular, but small, segments 5–10 about as long as wide or slightly transverse. Prothorax twice as wide as long, broadest before base, narrowed anteriorly, with rounded hind angles and feebly arcuate side margins, surface shining, with large sparse punctures. Scutellum triangular, pubescent in basal half, finely punctate. Elytra 1.65 times as long as wide, Pygidium and preceding segment not covered with elytra, abdominal tergites dark metallic. Prosternum pubescent on anterior margin, propleurae bare, Length of body 4.9 mm.

DIAGNOSIS. Just formally differs from all known African species of the genus with metallic colour of body with red prothorax. But in general this species is rather alike (except colour of prothorax) metallic blue *Smaragdina* Dejean, 1836, such as *S. martini* Clavareau, 1906, *S. subrugosa* Jacoby, 1900, which have transitional position between *Smaragdina* and *Aetheomorpha* Lacordair, 1848.

DERIVATIO NOMINIS. A name is connected with colour of prothorax.

### Smaragdina octolineata Medvedev et Kantner sp.n. Figs 3, 7–8

MATERIAL. Holotype, ♂, Tanzania, Dodoma prov., 40km N Dodoma, 1100m, 14–16.XII.2006, leg. A.Kudrna (cLM).

DESCRIPTION. Head fulvous with piceous labrum, partly blackish along inner margins of eyes. Antennae black

with 4 basal segments fulvous. Prothorax reddish fulvous. Scutellum black with fulvous spot in apical part. Elytra fulvous, each elytron with elongate humeral spot and four longitudinal stripes black; stripe 1<sup>st</sup> is parallel to suture and shortened on both ends, stripe 2<sup>nd</sup> more long, stripe 3<sup>rd</sup> looks as interrupted from elongate humeral spot, stripe 4<sup>th</sup> placed on side margin (Fig. 3), underside black, legs black with fulvous tibiae and tarsi, but apices of tibiae more or less darkened.

Body cylindrical. Head dorsoventrally flattened, without distinct punctures, clypeus arcuately emarginated on anterior margin, frons with three impressions, as wide as transverse diameter of eye. Antennae serrate from the 5<sup>th</sup> segment, preceding segment triangular, but much smaller, segments 5–10 about as long as wide or feebly transverse. Prothorax 1.5 times as wide as long, broadest before base, hind angles broadly rounded, side margins very feebly arcuate, surface shining, very sparsely and finely punctate, with more distinct punctures near base. Scutellum triangular with apex narrowly truncate and elevated. Elytra 1.9 times as long as wide, surface shining, densely punctate. Segment 1 of all tarsi elongate, not widened. Aedeagus (Fig. 7–8) longitudinally grooved in the middle of underside. Length of body 4.0 mm.

DIAGNOSIS. Near *S. quadrilineata* L.Medvedev et Erber, 2003, differs with fulvous head, unspotted prothorax, other number of black lines on elytra, smaller size and different form of aedeagus.

DERIVATIO NOMINIS. A name is connected with number of elytral stripes.

### Smaragdina martini Clavareau, 1906

MATERIAL EXAMINED. 1  $\bigcirc$ , Tanzania centr.-or., prov. Pwani, 6°38'S; 38°08', 30 km E of Morogoro, 300 m, 12.XII.2007, leg. F. Kantner; 8  $\bigcirc \bigcirc$ , 3  $\bigcirc$ , Tanzania, Mamboya env., 9.III.2002, leg. Smrz.

REMARK. Was known from Zair and Uganda, firstly found in Tanzania. This species seems to be transitional between *Smaragdina* and *Aetheomorpha*.

## *Smaragdina quadrilineata* L.Medvedev et Erber, 2003.

MATERIAL EXAMINED. 5  $\circ$ , Tanzania centr., prov. Dodoma, 40 km N of Dodoma, 5°54′ S; 35°45′ E, 1100 m, 15.XII. 2006, leg. F. Kantner; 1  $\circ$ , Tanzania, prov. Dodoma, 120 km E of Dodoma, 6°07′ S; 36°32′ E, 1150 m, 13.XII. 2006, leg. F. Kantner; 1 $\circ$ , 1 $\circ$ , Tanzania, prov. Dodoma., 1100 M, 40 km N Dodoma, 14.-16.XII.2006,



Figs 5–10. Aedeagus: 5–6 — Peploptera brevis sp.n.; 7–8 — Smaragdina octolineata sp.n.; 9–10 — Afrophthalma mimica sp.n.; 11 — Afrophthalina antoniae; 12 — Coptocephala benina sp.n.; 13 — Coptocephala aethiopica; 5, 7, 9, 11–13 — dorsal view; 6, 8, 10 — lateral view.

Рис. 5–10. Эдеагус: 5–6 — Peploptera brevis sp.n.; 7–8 — Smaragdina octolineata sp.n.; 9–10 — Afrophthalma mimica sp.n.; 11 — Afrophthalina antoniae; 12 — Coptocephala benina sp.n.; 13 — Coptocephala aethiopica; 5, 7, 9, 11–13 — сверху; 6, 8, 10 — сбоку.

leg. A. Kudrna jr.; 3 ♂♂, Tanzania, Dodoma pr., 35 km N Dodoma, 1100 m, 14.XII.2006, 05°54′ S; 35°45′E, leg. J. Halada.

REMARK. Species was described from RSA and Zimbabwe, firstly recorded for Tanzania.

### Smaragdina schoutedeni Burgeon, 1942.

MATERIAL EXAMINED. 1  $\bigcirc$ , Tanzania centr.-occ., 100 km on Kahama road, 3°25'S; 31°47'E, 1200 m, 24.XII.2006, leg. F. Kantner; 1 $\bigcirc$ , Tanzania m. occ., prov. Mbeva, 70 km N Tanduma, 8°59'S; 32°25'E, 1500 m, 2.I.2007, leg. F. Kantner; 1  $\bigcirc$ , Tanzania, Dodoma prov., 70 km N of Dodoma, 1350 m, 17 XII 2006, leg. L. Halkova; 1  $\bigcirc$ , Zambia, Central prov., 100 km SW Serenje, 7.XII. 2002, leg. F. & L. Kantner.

REMARK. Was described from Ruanda, firstly found in Zambia and Tanzania.

### Smaragdina triplagiata Jacoby, 1901

MATERIAL EXAMINED. East Tanzania, Pwani prov., 70 km E. Morogoro.

REMARK. Was known from Zambia, firstly found in Tanzania.

### *Barybaena bryanti tanzaniae* Medvedev et Kantner **ssp.n.**

MATERIAL. Holotype,  $\bigcirc$ , Tanzania, Dodoma prov., 40km N of Dodoma, 5°54'S, 35°45'E, 1100km, 15.XII.2006, leg. F.Kantner (cFK) Paratype: 1  $\bigcirc$ , same locality and date (cFK); 1  $\bigcirc$ , Tanzania or.-med., 30km NE of Utete, 7°46'S, 38°49'E, 100 m, 15.I.2007, leg. F. Kantner (cLM)

DESCRIPTION. Identical with nominative form in all characters, including form of aedeagus [Erber & Medvedev, 2003], differs only in colour: male has entirely reddish fulvous prothorax (nominative form has prothorax black with narrow fulvous margins), female has reddish fulvous prothorax with black ovate spot in middle (entirely fulvous in nominative form). Length of male 5.7–6.85 mm, of female 6.7 mm.

DIAGNOSIS. Differs from nominative form in colour of upperside.

DERIVATIO NOMINIS. A name is connected with country its distribution.

### Barybaena lurida Lacordaire, 1848 Fig. 4

MATERIAL EXAMINED: 1<sup>Q</sup>, RSA, Eastern Cape, Olifantskop Pass, WGS 84, 33°9'S, 25°57'E, 7–11.II.2003, leg. R. & H. Fouque.

REMARK. The specimen represented with unknown earlier aberration: elytra with small humeral spot and more large postmedian spot black (Fig. 4).

### Afrophtholma mimica Medvedev et Kantner sp.n. Fig. 9–10

MATERIAL. Holotype: ♂, Tanzania mer.-centr., Prov Irinoa, 50km NW of Irinoa, 7°40'S, 35°22'E, 950m, 7–9.I.2007, leg.F.Kantner (cFK). Paratype: 1♂, Tanzania, Prov Iringa, cca 50 km. NW Iringa Ruaha N.P. road, 70–9.I.2007, leg. A.Kudrna jr. (cLM).

DESCRIPTION. Fulvous, head including labrum, antennae except 6 basal segments, scutellum and breast black.

Body narrow, elongate. Head feebly convex, almost impunctate on clypeus and vertex, anterior margin of clypeus arcuately emarginated. Frons sparsely punctate, with deep central groove, 2.5 times as wide as transverse diameter of eye. Antennae serrate from the 5<sup>th</sup> segment, 4<sup>th</sup> segment triangular, but much smaller than 5<sup>th</sup>, segments 5–10 feebly transverse. Prothorax 1.5 times as wide as long, broadest behind middle, hind angles obtuse, but distinct, side margins feebly rounded, surface convex, impunctate apart a few punctures along base. Scutellum triangular, impunctate. Elytra 1.7 times as long as wide, parallel-sided, very finely punctate. Aedeagus (Figs 9–10) almost parallel-sided, with short triangular apex and longitudinal impression in middle part of underside. Length of body 3.4–3.6mm.

DIAGNOSIS. Only two species with black head and arcuately emarginated clypeus were known: *A. pygmaea* L.Medvedev et Erber, 2003 and *A. nigricapitis* L.Medvedev et Kantner, 2004 [Medvedev, 2006]. A new species is very alike at *A. pygmaea*, which however has venter and bases of femora black, aedeagus distinctly widened to apex, with two grooves and longitudinal ridge on underside [Medvedev & Erber, 2003]. *. nigricapitis* differs immediately with truncate apex of scutellum, fulvous labrum and black venter.

DERIVATIO NOMINIS. A name is connected with similarity to *A. pygmaea*.

### Afrophthalma antoniae Medvedev et Kantner sp.n. Fig. 11

MATERIAL. Holotype,  $\bigcirc$ <sup>1</sup>, Tanzania mer.-centr., Prov. Irinoa, 50km NW of Irinoa, 7°48'S, 35°22'E, 950m, 7–9.I.2007, leg. F. Kantner, Paratype: 1  $\bigcirc$  Tanzania, Dodoma prov., 40km N of Dodoma, 5°54'S, 35°45'E, 1100 m, 15.XII.2006, leg. F. Kantner (cFK).

DESCRIPTION. Entirely fulvous, only apices of mandibles black. Head shining, with sparse and not very distinct punctures, anterior margin of clypeus with deep quadrangular emargination, frons narrowed to behind, with round groove in middle, about 1.5 times as wide in the narrowed place as transverse diameter of eye. Antennae serrate from the 5<sup>th</sup> segment, 4<sup>th</sup> segment triangular, but much smaller than 5<sup>th</sup>, serrate segments as long as wide, apical segment ovate with acute apex. Prothorax 1.5 times as wide as long, side margins rounded, hind angles obtusely angulate, surface moderately convex, shining with sparse, moderately strong punctures, more dense in middle. Scutellum triangular with truncate apex, finely punctate. Elytra 1.7 times as long as wide, slightly widened to behind, shining, finely punctate. Aedeagus (Fig. 11) with large triangular tooth on apex. Length of body 5.1–5.7 mm.

DIAGNOSIS. Very near to *A. neptunus* L. Medvedev et Regalin, 1998, from Kenya, differs only in form of aedeagus, which is distinctly tridentate on apex in *A. neptunus* [Medvedev & Regalin, 1998].

DERIVATIO NOMINIS. Species is dedicated to Mrs. Antonie Kantner mother of the second author in connection with her 75th birthday.

### Afrophthalma jucunda (Lefevre, 1877)

MATERIAL. 1 °, 1 °, Tanzania, Handeni env., 12–18. III.<br/>2002, leg. Smrz.

REMARK. Was known from Ethiopia, firstly recorded for Tanzania. One specimen has black head with fulvous labrum and clypeus, other one with fulvous head except black vertex.

### Coptocephala benina Medvedev et Kantner sp.n. Fig. 12

MATERIAL. Holotype, ♂, Africa, SE-Benin, 15km SE of Save, 8–11.IV.2000, leg. Z.Andrš (cLM).

DESCRIPTION. Fulvous, intermediate segment 5–8 partly, apical segments entirely black.

Body robust, parallel-sided. Head shining, practically impunctate except a few punctures near eyes, frons 1.2 times as wide as transverse diameter of eye, with two impression above antennal bases, anterior margin of clypeus arcuately emarginated. Antennae serrate from the 4<sup>th</sup> segment which is as large as at least two next ones, preapical segments a little smaller, segment 3<sup>rd</sup> very small and cylindrical, segments 4–10 triangular, about as long as wide. Prothorax 1.8 times as wide as long, broadest before base, but scarcely narrowed anteriorly, all angles rounded, side margins almost straight, surface shining and practically impunctate except a few punctures near base. Scutellum triangular, bore and impunctate. Elytra 1.35 times as long as wide, shining, finely punctate. Pygidium evenly convex, covered with elytra. Propleurae not pubescent. Segment 1 of fore and mid tarsi practically not widened. Aedeagus (Fig. 12) with truncate apex having small tooth in middle, underside with central ridge. Length of body 6.0mm.

DIAGNOSIS. Very near to *C. aethiopica* (L.Medvedev, 1975), having same type of aedeagus, differs with unicolorous elytra and broadly truncate apex of aedeagus.

DERIVATIO NOMINIS. A name is connected with country its distribution.

Coptocephala aethiopica (L.Medvedev, 1975), comb.n. Fig. 13

MATERIAL EXAMINED. 1♂, Ethiopia, prov. Ilubabor, Bedelé, 13–16.V.2003, leg. B.Molec.

REMARK. This species, described as *Smaragdina*, we transfer to the genus *Coptocephala* because of rather large head and broad prothorax. A specimen studied has entirely fulvous head and poorly developed preapical elytral band; a form of aedeagus (Fig. 13) is identical with the holotype of this species.

### References

- Erber D. & Medvedev L.N. 2003. A revision of the genus *Barybae-na* Lacordaire, 1848 // Entomologica Basiliensia. Vol.25. P.243–259.
- Medvedev L.N. 2006. A revision of the genus *Afrophthalma* L.Medvedev 1978 (Chrysomelidae, Clytrinae) // Entomologica Basiliensia. Vol.28. P.303–325.
- Medvedev L.N. & Erber D. 2003. New species of Afrotropical Clytrinae with new data on several new species // Annals of Transvaal Museum. Vol.40. P.73–90.
- Medvedev L.N. & Regalin R. 1998. Nuove o interessanti specie di Clytrinae afrotropicali e orientali (Coleoptera Chrysomelidae) // Boll. Zool. agr. Bachic. Ser.11. Vol.30. No.1. P.1–32.