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Criocerinae (Coleoptera: Chrysomelidae) from Ethiopia, with Descriptions of two New Species

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With 5 figures

Summary

A list of 20 species of Criocerinae (Coleoptera: Chrysomelidae) from Ethiopia is given, including the description of 2 new species (*Lema nigricollis* n.sp., *Lema aethiopica* n.sp.). Further 11 species are firstly recorded from Ethiopia.

Zusammenfassung

Eine Liste von 20 Arten der Criocerinae (Coleoptera: Chrysomelidae) von Äthiopien wird präsentiert, einschließlich der Beschreibung von 2 neuen Arten (*Lema nigricollis* n.sp., *Lema aethiopica* n.sp.). Weitere 11 Arten werden erstmals für Äthiopien nachgewiesen.

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1. Introduction

The African Criocerinae are rather well known thanks to the monographic revision published by HEINZE (1962, 1963) and finished after his death by PINS DORF (HEINZE & PINS DORF 1964). Nevertheless many regions are studied quite unsatisfactorily. Relatively well investigated are western, southern and southeastern Africa; in Ethiopia only the eastern parts east of Addis Ababa were studied, especially Eritrea (now separated from Ethiopia). The material used for this publications was col-

lected by the author in the years 1986–1990 in the northern (province Welo) and southwestern parts (a few localities in the province Illubabur) of this country. The list given below includes 3 genera and 20 species, among them 2 species are new for science; further 11 species are firstly found in Ethiopia. For many species the food plants were registered.

I follow here the system of Criocerinae proposed by SEENO & WILCOX (1982); for the distribution data the catalogue of MONROS (1959–1960) was also used.

Material

The treated material, including types, is deposited in the Staatliches Museum für Naturkunde, Stuttgart (SMNS).

Acknowledgements

I thank Dr. W. SCHAWALLER of the Museum of Natural History in Stuttgart for the help during the preparation of this article.

2. *Liliocerus* Reitter 1912

2.1. *Liliocerus lumbwensis* Weise 1926

Material: Ambo, 7.–22. XI. 1990, 1 ex.

Distribution: Known from Kenya and Cape, firstly recorded from Ethiopia.

3. *Criocerus* Geoffrey 1762

3.1. *Criocerus viridissima* Bryant 1922

Material: Ambo, 7.–22. XI. 1990, savanna, on *Asparagus*, 4 ex.

Distribution: Eritrea and Kenya, firstly found in Ethiopia.

3.2. *Criocerus nigropunctata* Lacordaire 1845

Material: Ambo, 7.–22. XI. 1990, savanna, on *Asparagus*, 1 ex.

Distribution: Eastern Africa, southward to Cape.

3.3. *Criocerus suturata* Heinze 1931

Material: Ambo, 7.–22. XI. 1990, savanna, on *Asparagus*, 2 ex.

Remarks: Possibly this „species“ is only a variation of *nigropunctata* with feebly punctured prothorax.

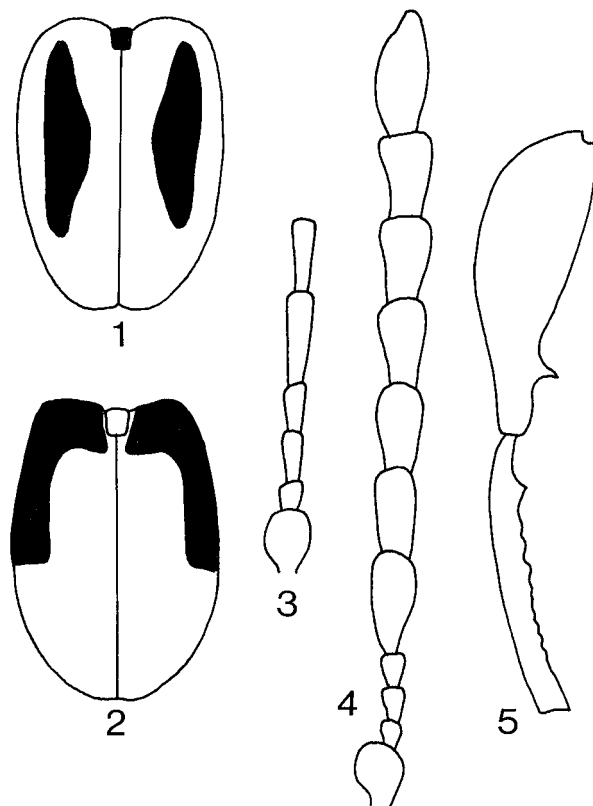
Distribution: Known from Kenya and Tanzania, firstly found in Ethiopia.

3.4. *Criocerus piceosuturalis* Heinze 1962

Material: Ambo, 7.–22. XI. 1990, savanna, on *Asparagus*, 1 ex.

Remarks: As in the previous case this taxon seems to be only a colour form of *nigropunctata*.

Distribution: Described from Tschad, firstly found in Ethiopia.



Figs 1–5. Colour pattern of elytra, shape of antenna and male hind femur and tibia. – 1, 4. *Lema nigricollis* n.sp.; – 2, 3, 5. *Lema aethiopica* n.sp.

4. *Lema* Fabricius 1798

4.1. *Lema* (*Petauristes*) *nigricollis* n.sp. (figs 1, 4)

Holotype (sex not investigated): Ethiopia, Ambo, 7.–22. XI. 1990 leg. MEDVEDEV, SMNS.

Description: Fulvous; neck, prothorax, scutellum, longitudinal stripe on elytra (fig. 1) except two apical abdominal segments, rings on mid and hind femora (mostly interrupted above and beneath) and apices of all tarsal segments black. Head impunctate except triangular pubescent area near eye, clypeus longitudinally convex, frons strongly convex, distinctly delimited behind, with deep central furrow. Antennae short and thick, reaching the humeral area of elytra, segments 1–4 shining and sparsely pubescent, 5–11 distinctly widened, dull and densely pubescent; segment 1 thick, as long as wide, 2nd very short, feebly transverse, 3rd 1.4 times as long as 2nd, 4th a little shorter than 3rd, 5th twice as long as 4th and 1.8 times as long as wide; segments 6–10 subequal, a little shorter than 5th, about 1.3–1.4 times as long as wide; apical segment longer than 10th, with triangular apex (fig. 4). Prothorax 0.9 times as long as wide between anterior angles or at base, strongly constricted just in the middle, anterior angles rounded, surface finely and sparsely punctate, without longitu-

dinal rows in the middle, transversely grooved at base. Scutellum trapeziform, shining, finely punctate. Elytra 1.8 times as long as wide, slightly widened to posterior third, with very feeble basal elevation and regular rows of fine punctures, less pronounced posteriorly, but distinct throughout, without additional rows in the apical part; interspace flat, shining, smooth or very sparsely punctate. All femora not toothed, tibiae straight. Length of the body 9.4 mm, width 4.3 mm.

Discussion: This species belongs to the *erycina* group (see HEINZE 1963) without toothed femora in both sexes and is nearest to *subcastanea* Weise 1901, having distinctly thickened and stout antennae. These species group might be divided as follows:

- 1(4) Antennal segments 5–11 distinctly widened.
- 2(3) Preapical antennal segments almost subquadrate, not more than 1.1 times as long as wide. Antennae black (except segment 1), upperside entirely fulvous, legs black, abdomen fulvous. Frons moderately convex. Tanzania, Nyassaland, Zimbabwe *subcastanea* Weise 1901
- 3(2) Preapical antennal segments about 1.3–1.4 times as long as wide. Antennae fulvous, prothorax entirely black, elytra with black longitudinal stripe, legs fulvous with black patterns, abdomen black basally. Frons strongly convex. Ethiopia *nigricollis* n.sp.
- 4(1) Antennal segments 5–11 not widened, preapical segments about twice as long as wide. Prothorax fulvous, sometimes with black spots, but never entirely black *erycina* Baly 1859, *nigrifrons* Thompson 1858, *moseri* Heinze 1928.

4.2. *Lema (Petauristes) aethiopica* n.sp. (figs 2–3, 5)

Holotype (male): Ethiopia, Kolba, on *Zea mais*, 3. VI. 1977 (no collector's name), SMNS.

Description: Fulvous; occiput, a large spot on each side of the prothorax, occupying anterior angles and partly propleura and basal band of elytra, interrupted on scutellum, but prolonged posteriorly along the side margin (fig. 2) black. Head impunctate, clypeus with longitudinal elevation; frons more or less cordiform, moderately elevated, not sharply delimited behind, with a deep longitudinal groove. Antennae thin, segment 1 thick, slightly longer than broad, 2nd very short and subquadrate, 3rd about 1.5 times as long as 2nd, 4th almost same as 3rd, 5th about 1.7 times as long as 4th and more than twice as long as wide, not flattened (fig. 3); next segments broken. Prothorax as long as wide anteriorly, at base wider than between the anterior angles, strongly constricted just in the middle, anterior angles obtusely rounded, surface smooth and shining. Scutellum trapeziform. Elytra 1.7 times as long as wide, not widened posteriorly, with very feeble basal elevation and regular rows of rather small punctures, however distinct at apex, without additional rows in the apical part; interspaces flat, moderately shining, with extremely fine microsculpture. Mid femora with very small tooth, hind femora with much larger tooth on innerside before apex (fig. 5). Mid tibiae slightly incised on innerside at the base, hind tibiae curved at the base and serrate on the underside. Length of the body 9 mm, width 4.4 mm.

Discussion: This species belongs to the *jolofa* group (see HEINZE 1963) with toothed femora. This species group might be divided as follows:

- 1(10) Prothorax strongly constricted in the middle, with the anterior angles obtuse.
- 2(3) Upperside entirely red or fulvous *parryi* Baly 1861, *ignota* Heinze 1963, *ruandana* Weise 1912, *jolofa* Lacordaire 1845, *subdentatipes* Heinze 1928, *subdepressa* Jacoby 1894, *alboflavescens* Heinze 1963

- 3(2) Elytra partly black.
- 4(5) Elytra black with fulvous suture and apex. Tooth of hind femora spine-like, long and curved. Head and prothorax entirely fulvous. Ivory Coast, Togo, Zaire *rufosuturalis* Heinze 1928
- 5(4) Elytra fulvous with black patterns.
- 6(9) Head and prothorax entirely fulvous.
- 7(8) Elytra with black stripe from the humerus to the apical part. Tanzania, Urundi *usambarica* Heinze 1928
- 8(7) Elytra with a large spot at the base. Sierra Leone *leonensis* Pic 1916
- 9(6) Neck of head, anterior angles of prothorax and propleures black. Elytra with black band at the base, prolonged along the side margin to the middle of the elytra. Tooth of hind femora triangular, not curved. Ethiopia *aethiopica* n.sp.
- 10(1) Prothorax strongly constricted before the middle, its anterior angles with small but distinct protuberance *goeckei* Heinze 1963, *tessmanni* Heinze 1928, *neavei* Heinze 1963, *kapangensis* Heinze 1963.

4.3. *Lema* (s. str.) *fuscitarsis* Jacoby 1897

Material: Ambo, 7.–22. XI. 1990, 2 ex.

Distribution: Widespread in eastern and southern Africa.

4.4. *Lema* (s. str.) *rubricollis* Klug 1835

Material: Prov. Illubabur, Dam site near Abobo, 10. XII. 1986, on *Commelina*, 2 ex.

Distribution: Widespread in western Africa southward to Angola, Uganda and Congo; firstly registered for Ethiopia.

4.5. *Lema* (s. str.) *acutangula* Weise 1901

Material: Ambo, 7.–22. XI. 1990, 2 ex.

Distribution: Eritrea, Uganda, Tanzania, Congo, Zambia; firstly recorded for Ethiopia.

4.6. *Lema* (s. str.) *erythraena* Clavareau 1912

Material: Ambo, 7.–22. XI. 1990, 1 ex.

Distribution: Guinea, Cameroon, Uganda, Eritrea; firstly registered from Ethiopia.

4.7. *Lema* (s. str.) *quadrifasciata* Heinze 1930

Material: Ambo, 7.–22. XI. 1990, 1 ex.

Distribution: Kenya, Tanzania, Ruanda, Zaire, Zambia; firstly recorded for Ethiopia.

4.8. *Lema* (s. str.) *armata* Fabricius 1801

Material: Ambo, 7.–22. XI. 1990, 1 ex.

Distribution: Widespread in western and central Africa, firstly registered in Ethiopia.

4.9. *Lema* (s. str.) *flavoterminata* Heinze 1963

Material: Ambo, 7.–22. XI. 1990, 1 ex.

Distribution: Zambia, firstly recorded for Ethiopia.

4.10. *Lema* (s. str.) *nigriventris* Gerstaecker 1871

Material: Prov. Illubabur, 30 km W Abobo, 22.–30. VIII. 1988 and 21. XI. 1986, on *Commelina*, 5 ex. – Prov. Illubabur, Dam site near Abobo, 10. XII. 1986, on *Commelina*, 3 ex. – Sabata, 25 km S Addis Ababa, 2000 m, 28. VII. 1988, 5 ex.

Distribution: Widespread in tropical Africa, southward to Transvaal.

4.11. *Lema* (s. str.) *tibialis* (Laporte 1840)

Material: Prov. Illubabur, Dam site near Abobo, 9.–10. XII. 1986, on *Commelina*, 2 ex. – Prov. Illubabur, Gambela, 17. XI. 1986, 1 ex.

Distribution: Widely distributed in the northern part of tropical Africa from Senegal to Eritrea, southward to Kenya.

4.12. *Lema* (s. str.) *viridimetallica* Heinze 1928

Material: Prov. Illubabur, Dam site near Abobo, 9.–10. XII. 1986, on *Commelina*, 2 ex.

Distribution: Described from Cameroon, firstly found in Ethiopia.

4.13. *Lema* (s. str.) *dregei* Lacordaire 1845

Material: Ambo, 7.–22. XI. 1990, 1 ex.

Distribution: Widely distributed in tropical Africa.

4.14. *Lema* (s. str.) *ustulata* Lacordaire 1845

Material: Prov. Illubabur, 30 km W Abobo, 22.–30. XIII. 1988, on *Commelina*, 2 ex.

Distribution: Widespread in tropical Africa north of the equator.

5. *Oulema* Gozis 18865.1. *Oulema pembanensis* (Weise 1910)

Material: Ambo, 7.–22. XI. 1990, 1 ex.

Distribution: Ethiopia, Kenya, Tanzania.

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