Taxonomic revision of the *Cercyon (Arcocercyon) dieganus* species group (Coleoptera: Hydrophilidae: Sphaeridiinae)

by Martin FIKÁČEK

Abstract

Species belonging to *Cercyon (Arcocercyon) dieganus* species group are revised, (re)described and illustrated, and their synonymy is resolved on the basis of type-specimen examination. The species group is found to consist of seven species, two of which are described as new: *C. circumcinctus* REITTER, 1889, *C. cludtsi* sp.nov., *C. dieganus* RÉGIMBART, 1903, *C. kykrion* sp.nov., *C. marshalli* KNISCH, 1924, *C. martialis* HEBAUER, 1997, and *C. putricola* WOLLASTON, 1867. Lectotypes are designated for *C. dieganus, C. marshalli* and *C. putricola*. Differential diagnosis of the species group and identification keys to all species are given. Characters important for diagnostic purpose are illustrated. Notes on the taxonomy of the subgenus *Arcocercyon* and the genera *Cercyon* and *Armostus* are added.

Zussamenfassung

Die Arten der *Cercyon (Arcocercyon) dieganus*-Gruppe werden revidiert, (neu)beschrieben und abgebildet, die Synonymie der Arten wird mit Hilfe von Untersuchungen der Typenexemplare gelöst. Die Artengruppe besteht aus sieben Arten, wovon zwei neu beschrieben werden: *C. circumcinctus* REITTER, 1889, *C. cludtsi* sp.nov., *C. dieganus* RÉGIMBART, 1903, *C. kykrion* sp.nov., *C. marshalli* KNISCH, 1924, *C. martialis* HEBAUER, 1997 und *C. putricola* WOLLASTON, 1867. Die Lectotypen von *C. dieganus*, *C. marshalli* und *C. putricola* werden festgelegt. Eine Differenzialdiagnose der Artengruppe und ein Bestimmungschlüssel für alle zu dieser Artengruppe gehörenden Arten, sowie Bemerkungen zur Taxonomie der Untergattung *Arcocercyon* und der Gattungen *Cercyon* und *Armostus* wird beigefügt. Wichtige Bestimmungsmerkmale werden illustriert.

Key words: *Cercyon*, subg. *Arcocercyon*, *C. dieganus* species group, *Armostus*, Afrotropical and Palearctic Region, revision, new species, lectotype designation.

Introduction

The subgenus *Arcocercyon* was recently described by HEBAUER (2003). Into this subgenus, this author included two Afrotropical species-groups, which were earlier classified as parts of the subgenus *Cercyon* s.str.: *C. lutosus* species group and *C. dieganus* species group. In the latter group HEBAUER (2003) included the species being so far part of *Cercyon* (s.str.) *marinus* group according to an earlier work (HEBAUER 1997): *C. dieganus* RÉGIMBART, 1903, *C. putricola* WOLLASTON, 1867, *C. marshalli* KNISCH, 1924 and *C. martialis* HEBAUER, 1997. One of these species was recorded also from Europe by this author – *C. putricola* from Yugoslavia.

During my studies of less known European *Cercyon* species, the description of *Cercyon circumcinctus* REITTER, 1889 was found to fit the specimens which HEBAUER (1997) identified as *C. putricola*. To confirm this fact, I have studied the type specimen of *C. flavocinctus* RÉGIMBART, 1903, which was considered as synonym of *C. putricola* in earlier literature (e.g. ORCHYMONT, 1942, 1948). By surprise, I found out that *C. flavocinctus* and *C. circumcinctus* are not conspecific. Therefore I decided to check type specimens of all species belonging to the *C. dieganus* species group and of synonymized species, as well as some additional material. As a result of these studies, taxonomical corrections, redescriptions of all species belonging to this species group, and descriptions of two new species together with an updated identification key and figures of all important distinguishing characters are included in this paper.

Material and Methods

All type specimens examined within this study are listed under ''Type material examined''; additional material is listed under ''Material examined''. Only the label data of the holotypes are given in full; the change of line of a label is indicated by a slash (/) and the change of labels by double slash (//); label data of other specimens are given as locality name, date(s) and name(s) of the collector, and are converted to a standard format. The contemporary geographic names and translations of the label data into English are added in brackets when needed. Material was examined using the stereomicroscope Olympus SD 30 and figures were prepared using an ocular grid mounted on the stereomicroscope MBS-10.

The morphological nomenclature follows the general morphology of beetles in using of ''preepisternal elevation of mesothorax'' instead of ''mesosternal tablet'', and ''meso-'' and ''metaventrite'' instead of ''meso-'' or ''metasternite''. See KOMAREK (2004) and FIKÁČEK & BOUKAL (2004) for details.

Acronyms

BMHN: British Museum of Natural History (Christine Taylor)
FHGC: coll. Franz Hebauer (Grafling, Germany)
HUMN: Museum für Naturkunde, Humboldt-Universität, Berlin (Manfred Uhlig)
IRSN: Institut Royal des Sciences naturelles de Belgique, Bruxelles (Alain Drumont, Paul Limbourg)
MFOC: coll. Martin Fikáček (Praha, Czech Republic)
MZMB: Moravské zemské muzeum, Brno (Vít Kubáň)
MNHN: Museum national d'Histoire naturelle, Paris (Heléne Perrin)
NMPC: Národní muzeum, Praha (Josef Jelínek, Jiří Hájek)
NHMW: Naturhistorisches Museum, Wien (Manfred Jäch, Albrecht Komarek, Heinrich Schönmann)
TMBC: Termeszettudományi Múzeum, Budapest (Gyözö Szél)

Diffential diagnosis of the species belonging to the *C. dieganus* species group

The following characters are adequate to distinguish the members of the *Cercyon dieganus* species group from the other representatives of the genera *Cercyon* and *Armostus*:

1) Head, pronotum and elytra without distinct microculpture in the interstices;
2) Metaventrite with distinct anterolateral ridges;
3) Metaventrite without femoral lines;
4) Preepisternal elevation narrow but never linear or nearly so, its length/width ratio equal or higher than 2;
5) Between preepisternal elevation of mesothorax and anterior margin of the metaventrite without distinct broad gap (preepisternal elevation contacting metaventrite in a single point or slightly overlapping its anterior margin);
6) General coloration dark (then pronotum with palered lateral margins, elytra with pale, usually sharply limited apical spot or with pale alternate elytral intervals) or pale (then head dark);
7) Epipleura and maxillary palpi pale.

Preparing a differential diagnosis is rather difficult because of the doubtful monophyly of the (sub)genera *Arcocercyon* and *Armostus* (see Discussion for details). The above mentioned characters distinguish the species of the *C. dieganus* group from other species of the genus *Cercyon* and *Armostus* without taking their generic or subgeneric position into consideration.

For easier distinguishing of species belonging to *C. dieganus* group this characteristics can be used: By general shape and coloration, usually similar to the European *C. marinus* or *C. bifenestratus*, in some cases with distinctly convex elytral intervals and impressed elytral series. All species of the *C. dieganus* species group differ from the latter European species by presence of anterolateral ridge on the metaventrite. Species belonging to this group are living commonly in Africa south of the Sahara, two species are living also in Eastern Mediterranean (Balkan Peninsula, Turkey, Israel, ?Iran, Egypt). They are aquatic species living in wet plant remains at the banks of stagnant waters and slowly running waters or near the mountain streams, frequently flighing at light.

Key to species of *C. (Arcocercyon) dieganus*-group

In the key, the coloration, external morphology and the morphology of the male genitalia are combined. It will not be possible to identify all specimens by external characters, on account to their variability described in this work. A positive identification is always possible by examination of male genitalia. Therefore an additional identification key based on the morphology of the male genitalia is added.

1a. Last elytral interval pale through its whole length, from apex to base **4**
1b. Last elytral interval pale at most in its apical half **2**
2a. Pale apical spot on each elytron horseshoe-shaped, extending basad mainly near elytral suture and along lateral margin (Fig. 31). Elytral intervals convex, punctural series deeply impressed. Aedeagus with parameres longer than phallobase. (Fig. 17). . . . . ***C. martialis***
2b. Pale apical spot on each elytron not horseshoe-shaped. Elytral intervals flat or convex at most laterally. Aedeagus with parameres shorter than phallobase (Figs. 7, 8), or with parameres c. as long as phallobase, but inserted deeply into phallobase and thus apparently shorter than it (Fig. 11) **3**
3a. Elytral intervals flat or only slightly convex in lateral parts of elytra. Parameres not inserted into phallobase, median lobe of the shape of a narrow long pointed tube (see Fig. 9). . . . . ***C. dieganus***
3b. Elytral interval moderately convex at least in lateral parts of elytra. Parameres with the basal projection inserted deeply into the phallobase, median lobe wide and flat (see Fig. 12) . . . . ***C. kykrion* sp.nov.**
4a. Coloration of pronotum and elytra fully pale, or only with darkened punctural series, elytral base and sometimes wih slightly darker vaguely limited spot in subapical areas of elytra (Fig. 23). Head dark **5**
4b. General coloration dark, with pale spot on elytral apex and pale lateral margins of pronotum **6**
5a. Male genitalia as in Figs. 20-22 . . . . . ***C. putricola***
5b. Male genitalia as in Figs. 14-16 . . . . ***C. marshalli***
6a. Pale apical spot on elytra reaching elytral base only on elytral interval 10, on interval 9 reaching at most to half of elytral length **7**

6b. Pale apical spot of elytra reaching elytral base on the last two to four lateral intervals; if the pale spot does not fully reach to the elytral base on the interval 9, then this spot overlaps the apical half of elytral length on this interval **10**

7a. Posterior part of the preepisternal elevation of mesothorax broad and abruptly narrowed into a blunty poited tip (Fig. 36). Punctation of elytral intervals near scutellar shield slightly denser than on pronotum, consisting of rasp-like punctures slightly smaller than those on pronotum. Elytral intervals flat near scutellar shield, moderately convex in lateroapical part of elytra. Pale elytral spot rather vaguely limited in some specimens. Male genitalia as in Figs. 11-13 . . . . ***C. kykrion* sp.nov.**

7b. Posterior part of preepisternal elevation of mesothorax continually narrowed into a pointed top. Punctation of elytral intervals near scutellar shield either sparser than on pronotum, consisting of distinctly smaller punctures, or c. as dense as those on pronotum, consisting of punctures of the size c. equal to those on pronotum. Elytral intervals flat to highly convex. Male genitalia of different morphology. **8**

8a. Punctures on elytral intervals distinctly smaller than on pronotum, elytral intervals convex, elytral series distinctly impressed. Male genitalia as in Figs. 20-22 . . . . ***C. putricola***

8b. Interval punctation on elytra c. as strong and dense as on pronotum, elytral intervals flat or only indistinctly convex basally **9**

9a. Apical spot on elytra with rather sharply limited and straight margins, reaching to apical 2/5 on intervals 6-9 and maximally to apical 1/5 on intervals 1-5 (Fig. 27) Elytral series not darkened inside of this spot. Male genitalia as in Figs. 7-10. . . . . ***C. dieganus***

9b. Apical spot on elytra rather vaguely limited, its margin lobate (Fig. 25). Elytral series darkened inside of this spot. Aedeagus as in Figs. 4-6 . . . . ***C. cludtsi* sp.nov.**

10a. Elytral intervals flat, punctural series on elytra not impressed basally. Elytral punctation near scutellar shield c. as strong and dense as on pronotum. The pale apical spot on elytra reaching the humeral area in the last two intervals (Fig. 24). Male genitalia as on Figs. 1-3. . . . . ***C. circumcinctus***

10b. Elytral intervals convex, punctural series on elytra at least feebly impressed basally. Elytral punctation near scutellar shield feebler and sparser than on pronotum. The pale apical spot on elytra reaching elytral base on the last two to four lateral intervals **11**

11a. Pale spot extending more anteriad on elytral intervals 2 and 4 than on the adjacent intervals, reaching to apical ¼ of elytral length. Laterally this spot reaches elytral base on the last three intervals. (Fig. 30) . . . . ***C. marshalli***

11b. Pale spot not extending more anteriad on the intervals 2 and 4 than on the adjacent intervals. Laterally this spot reaches elytral base on the last two to four elytral intervals . . . . ***C. putricola***

Key to distinguishing of species according to male genitalia

1a. Phallobase distinctly longer than parameres **2**

1b. Phallobase distinctly shorter than parameres, parameres measuring c. 2/3 of total length of phallobase and parameres combined **3**

2a. Phallobase c. 3 times as long as parameres, in a form of dark cylinder, basally with a strongly sclerotized dark hook-like projection. Parameres without long basal projection inserted into phallobase (Figs. 7-10). . . . . ***C. dieganus***

2b. Phallobase apparently c. 2 times as long as parameres, without any basal hook-like projection. In fact parameres are slightly longer than phallobase, but are deeply inserted into the phallobase by their basal parts. (Figs. 11-13) . . . . . ***C. kykrion*** sp.nov.

3a. Parameres distinctly divided through their whole length (Fig. 17) . . . . ***C. martialis***

3b. Parameres joint at least in basal third of their length dorsally. **4**

4a. Median lobe stalk-like, in apical part with club-like widenning, without distinct corona (Fig. 21). Parameres apicaly rather narrow and tapering (Fig. 20) . . . . ***C. putricola***

4b. Median lobe wider, flat, apically not distinctly wider, with or without distinct corona. **5**

5a. Apical part of medial lobe blunty tapering, with distinct corona. Sternite 9 with or without median tongue-like projection **6**

5b. Apical part of median lobe rounded, not tapering. Sternite 9 without median tongue-like projection **7**

6a. Phallobase c. 1.7-1.8 times as long as wide, parameres tapering apicad, median lobe with darker blunty pointed top and very distinct corona. Sternite 9 medially with narrow tongue-like projection. (Figs. 4-6) . . . . ***C. cludtsi* sp.nov.**

6b. Phallobase c. 2.4 times as long as wide, parameres slightly widening apicad, with their basal parts inserted deeply into the phallobase; median lobe apically with nearly indistinct corona. Sternite 9 rounded apically, without median projection. (Figs. 11-13) . . . . ***C. kykrion* sp.nov.**

7a. Sternite 9 widened medially, with apical margin straight or slightly concave. Median lobe with distinct corona. Parameres only with a few minute setae apically and subapically (Figs. 1-3) . . . . ***C. circumcinctus***

7b. Sternite 9 medially with convex apical margin, median lobe without distinct ejaculatory pore. Parameres with numerous minute setae apically and subapically (Figs. 14-16) . . . . ***C. marshalli***

Taxonomic part

Cercyon circumcinctus REITTER, 1889
Figs. 1-3, 24, 33, Map 3

Cercyon circumcinctum REITTER, 1889:254
Cercyon circumcinctus: HANSEN (1999)
Cercyon (*Cercyon*) *ostentum* SHATROVSKIY, 1999: 5, **supposed synonym**
Cercyon putricola: HEBAUER (1997), HANSEN (1999, partim.), not auctt.

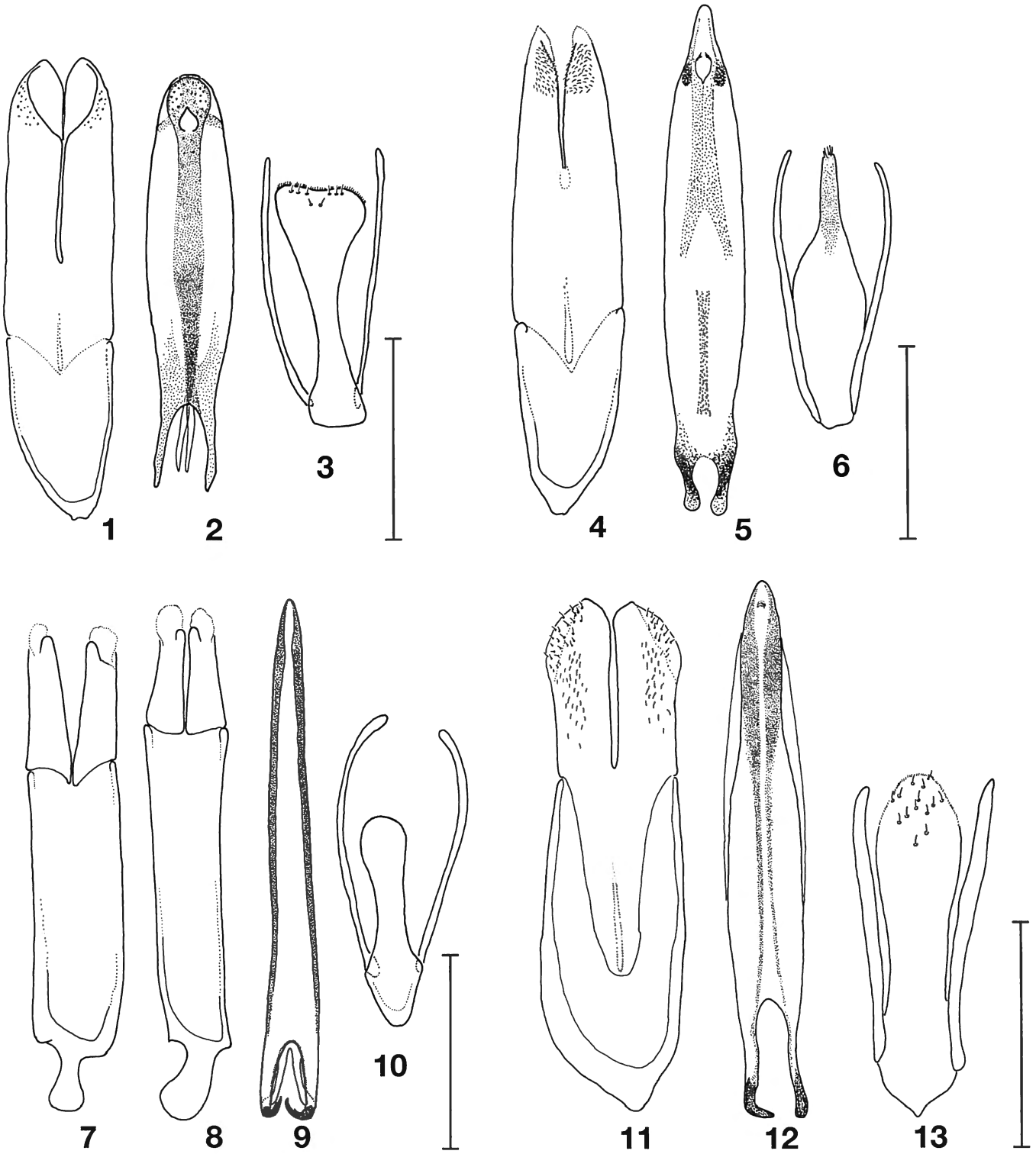
TYPE MATERIAL:
Cercyon circumcintus: Holotype: ''Euboea / See bei Dysthos / v. Oertzen // Paratypus 1889 / Cercyon circumcinctum Reitter'', female. Paratype: same label data as holotype; 1 male. Both type specimens stored in Reitter's collection (TMBC).
Cercyon ostentum: I have not seen the type specimen of this species, because it is not present in the collections of the Zoological Institute in St. Petersburg, as it is mentioned in the original description (A. Ryndevich pers. comm., D. Král pers.comm.). However, as the aedeagus illustated by SHATROVSKIY (1999) is completely similar to that of *C. circumcinctus*, I suppose *C. ostentum* as an younger subjective synonym of *C. circumcinctus*. The only striking character given by SHATROVSKIY (1999) is the coloration of elytra (without distinctly pale last elytral interval). This difference could be however caused by variability, or the apparently indistinct pale coloration is due to an unsuitable preparation of the specimen (in the not degreased specimens the pale spot is often less distinct than in the specimens degreased in petrol). As it is discussed by SHATROVSKIY (1999), only the collection date and the collector's name are given on the label of holotype. According to the data about N. A. Zarudniy's expedition mentioned by the same author, the locality data of the type specimen has to be as follows: IRAN: W Iran, Kârûm riv. basin, Shûshtar, 4. iii. 1904.

OTHER MATERIAL EXAMINED (24 spec.): MONTENEGRO: YU – Monte Negro, Vrajina env., ''Skadarsko jezero'' lake, 20. IX. 2001, Jiří Hájek lgt., 1 male, 2 females (MFOC), 1 spec. (BMNH); ALBANIA: Albania bor. occ., Shkoder [= Shkodër] env., 14. 7. 2000, < 400 m, Dr. R. Fencl lgt., 1 male, 1 female (MFOC); Bojana – Ufer [= bank of Bunë river], b., Shkroder [= Shkodër], Alb., without collector data, 1 spec. (NHMW); GREECE: Greece-Makedonia, Rentina-Modi, 3. – 20. VII. 2002, 2 male, 1 female, Zdeník Kraus lgt. (MFOC); Euboea/ See bei Dystos/v. Oertzen [= Greece, Dhistos, Evvoia], 1 male, 1 female (holotype and paratype)(TMBC); ISRAEL: Israel, 27.8.85, Hula, leg. Jäch, 2 spec.; N. Israel, 29. 3. 85, Hula Reserve, leg. Jäch, 2 spec..; Israel, 30.7.85, NW Hulo-eg, Bteha, leg. Jäch, 4 spec.; Israel, 13.4., Hula 100 Dun, leg. Jäch 1986, 1 spec.; Israel, 13.4., Hula 50 Dun, leg. Jäch 1986, 1 spec.; Israel, 30.7.85, en Agaria, Bteha / Jäch, 2 spec. (all NHMW); TURKEY: Adana, without collector data, 1 spec. (NMPC).

DIFFERENTIAL DIAGNOSIS: Pale apical spot on elytra reaching to the elytral base on the last two intervals, not extended more basad on intervals 2 and 5 than on adjacent intervals; elytral intervals flat or only slightly convex; elytral series not or only slightly impressed; pronotal punctation denser and composed of larger punctures than on the elytral base; median lobe of the aedeagus with distinct corona; parameres connected basally; anterior margin of the male sternit 9 straight or slightly concave. By the general coloration, *C. cirumcinctus* is rather similar to *C. putricola*; it differs from this species by nearly flat elytral intervals and the morphology of the aedeagus. The morphology of the aedeagus of *C. circumcinctus* is similar to *C. marshalli*; however from this species it is easily distinguishable by the apical elytral spot not reaching more basad on the intervals 2 and 5 than on the adjacent intervals.

REDESCRIPTION: Body moderately convex. Length: 2.7 – 3.2 mm; width: 1.5 – 1.8 mm.
Coloration: Piceous to black, head with very small paler spots in front of eyes. Pronotum with lateral margin widely and anterior and posterior margins narrowly paler. Elytra (Fig. 24) with large yellow or yellowish red, sharply limited apical spot, reaching to apical 1/5 on intervals 1-5, to apical 1/4 to 1/3 on intervals 6-8, nearly to elytral base on interval 9 and to elytral base on interval 10. Sutural interval dark. Ventral side dark, piceous-black to black, preepisternal elevation often a bit paler. Epipleura pale except of its lateral margin. Legs ferrugineous, tarsi slightly paler. Mounthparts pale; maxillary palpi yellowish, apical palpomeres often sligthly darkened. Antennae pale, yellowish to yellowish brown, with darker, piceous-black club.

Head with moderately strong but not very dense punctation, interstices shining, without microsculpture. Anterior margin of clypeus with fine but distinct rim, very slightly sinuate. Mentum slightly wider than long, with anterior margin slightly bisinuate, narrowly rimmed, its surface very indistinctly rugose.
Prothorax: Pronotum transverse, arcuately narrowed anteriad. Distinct rim on lateral margins reaching anterolateral corners. Punctation similar as on head, interstices shining, without microsculpture. Prosternum with median longitudinal carina, posteriorly with distinct notch. Antennal grooves distinct and well developed, trapezoid in shape.
Mesothorax: Scutellum longer than wide, shining, with punctures a bit finer than on pronotum. Elytron with 10 series of punctures (including sutural series). Series 1-5, 7 and 10 reaching almost elytral base, series 6 and 8-9 ending somewhat more distally. Series 10 reaching apically to 2/3 of elytral length. Serial punctures distinctly larger than on elytral intervals. Punctures on base of elytral intervals slightly smaller than on pronotum, becoming smaller and scarcerly distributed apicad and laterad. Interstices shining, without microsculpture. Series nearly unimpressed through whole length, intervals flat or slightly convex. Preepisternal elevation (Fig. 33) rather



Figs. 1-13 — Male genitalia. 1-3: *Cercyon circumcinctus*. **1**. phallobase and parameres; **2**. median lobe; **3**. sternite 9. 4-6: *C. cludtsi*. **4**. phallobase and parameres; **5**. median lobe; **6**. sternite 9. 7-10: *C. dieganus*. **7**. phallobase and parameres of central African specimen (Zaire: Mahagi Port); **8**. phallobase and parameres of the specimen from the Republic of South Africa (Wilderness NP); **9**. median lobe; **10**. sternite 9. 11-13: *C. kykrion*. **11**. phallobase and parameres; **12**. median lobe; **13**. sternite 9. Scale: 0.5 mm.

wide (lenght/width = 1.6-2.4; n=5), nearly drop-shaped, pointed anteriorly and posteriorly; surface flat, without microsculpture, bearing large and very distinct punctures, becoming finer towards anterior and posterior margins.
Metathorax: Metaventrite medially with elevated pentagonal area, its punctation scarcer than on preepisternal elevation, consisting of punctures smaller than on the elevation. Lateral parts of metaventrite covered with pubescent granulose sculpture. Femoral lines missing, anterolateral ridges present.

Legs: Meso- and metafemora with distinct setiferous punctures, interstices without microsculpture.
Male genitalia (Figs. 1-3): Parameres about 2 times longer than phallobase, in basal third connected, apically with sparsely distributed minute spines. Median lobe wide and flat, with rounded apical part and distinct corona. Abdominal sternite 9 widened anteriorly, with straight anterior margin bearing 8 setae.

VARIABILITY: Though *C. circumcinctus* is not very variable, there is a slightly variability in the coloration of elytra, the punctation of the elytral base, the impression of the elytral series and the shape of the preepisternal elevation. The apical elytral spot is slightly more extended basad in some specimens; the punctation of the basal parts of the elytral intervals is as strong and dense as on the pronotum in some specimens; the elytral series can be very slightly impressed in some specimens. The shape of the preepisternal elevation of the mesothorax is slightly wider, spindle-like rather than drop-like in some specimens. The morphology of the male genitalia is completely constant in all examined specimens.

BIONOMY: Most specimens examined were found in shallow well vegetated stagnant water (J. Hájek pers. comm.) or collected at light. The species seems thus to be aquatic, having probably the same or similar bionomy as the common European species *Cercyon marinus* THOMSON, 1853 and *C. bifenestratus* KÜSTER, 1851.

DISTRIBUTION: Here recorded from Montenegro, Albania, Greece, Turkey and Israel.

C. circumcinctus is distributed in the eastern Mediterranean area, occuring from Monte Negro to Israel. The occurence in Turkey was mentioned by HANSEN (1999) and adopted by INCEKARA et al. (2003)(in all cases the specimens were identified as *C. putricola*) but without any precise faunistic data, in this paper the occurence in Turkey is confirmed by examined voucher specimen. *C. ostentum*, taken here as the supposed synonym of *C. circumcinctus* (see Type material), was described from Iran. This indicates that the distribution of this species can reach farther eastwards than Israel.

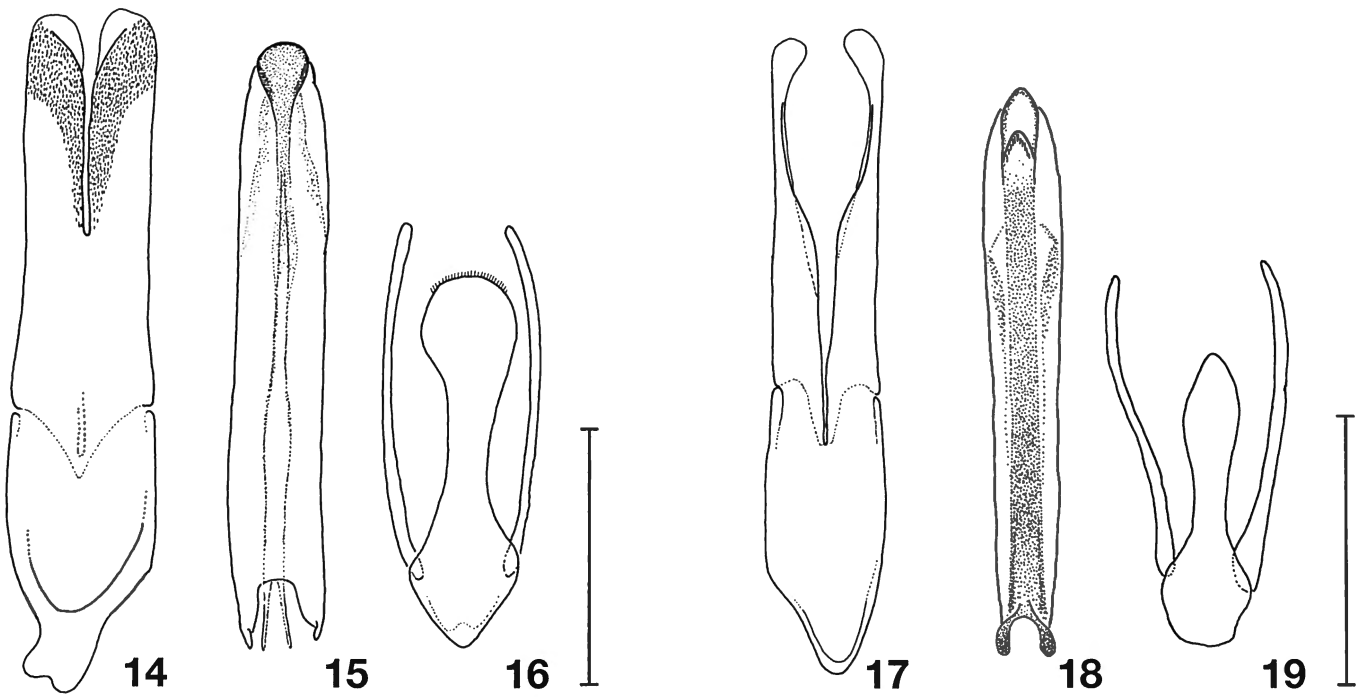
Cercyon cludtsi sp.nov.
Figs. 4-6, 25, 34, Map 4

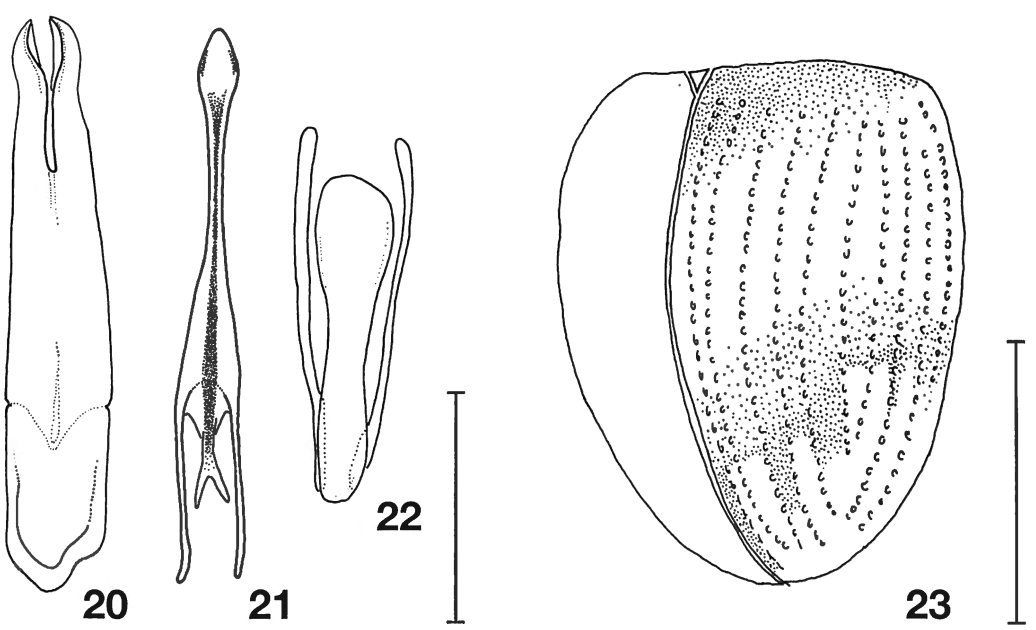
TYPE MATERIAL (230 specimens): Holotype: "Congo Belge. Lac / Edouard: Vitshumbi / 25. III. 1953 / J. Verbeke-KEA U.V. / 3033 (printed label, date, informations about UV collecting and locality number handwritten) // HOLOTYPE / Cercyon (Arcocercyon) / cludtsi sp.n. / des. M. Fikáček 2003 (red, printed label)"; male (IRSN). Paratypes: Congo Belge, Lac Edouard: Vitshumbi, U. V. 23.x.1953 (3057), lgt. J. Verbeke – KEA, 36 spec. (IRSN), 1 spec. (MFOC); same label data, 25.iii.1953 (3033), 57 spec. (IRSN), 2 spec. (MFOC), 1 spec. (BMNH); same label data, 21.i.1954 (3096), 1 spec. (IRSN); same label data, 31.iii.1953 (3037), 12 spec. (IRSN), 2 spec. (MFOC), 1 spec. (BMNH), 1 spec. (NHMW); same label data, 14.vii.1953 (3052), 6 spec. (IRSN), 1 spec. (MFOC); same label data; 27.xi.1953 (3091) 2 spec. (IRSN); same label data; 22.i.1954 (3039), 55 spec. (IRSN), 3 spec. (MFOC), 1 spec. (BMNH); same label data, 24.x.1953 (3059), 24 spec. (IRSN), 3 spec. (MFOC), 1 spec. (NHMW); Congo Belge, Lac Edouard: Vitshumbi, à la lumière, 30.xii.1952, lgt. J. Verbeke – KEA T., 1 spec. (IRSN); Congo Belge, Lac Albert: Kasenyi, U.V., 3.vii.1953 (4039d), lgt. J. Verbeke – KEA, 16 spec. (IRSN), 1 spec. (MFOC), 1 spec. (BMNH), 1 spec. (NHMW). All paratypes bear yellow printed label: "PARATYPE / Cercyon (Arcocercyon) / cludtsi sp.n. / des. M. Fikáček 2003".

DIFFERENTIAL DIAGNOSIS: Apical pale spot on elytra reaching elytral base on the interval only; border of the spot lobate in shape; elytral intervals at least slightly darkened inside of apical spot; elytral intervals flat; elytral series not impressed basally; median lobe of aedeagus with bluntly "tine" apically; parameres connected basally, longer than phallobase; median part of male sternite 9 with long projection on its anterior margin.

By the coloration *C. cludtsi* is similar to *C. putricola* and to some specimens of *C. dieganus*. By the flat elytral intervals it is similar to *C. dieganus* and *C. circumcinctus*. In contrast to *C. putricola*, the elytral interstices are flat, punctural series are not or only feebly impressed basally, and the pale spot on the elytral interval 9 reaches at most to the apical ¼ of the elytral length; in contrast to typically colored *C. dieganus* and to *C. circumcinctus*, the pale spot on elytra reaches the elytral base only on the last interval. In contrast to *C. dieganus* with pale last elytral interval, this species shows different shape of the apical elytral spot – the elytral series are usually very distinctly darkened through their whole length and the border of the spot is thus lobate (in *C. dieganus* the margin is staight, without darkened elytral series in apical parts of elytra). *C. cludtsi* is rather easily distinguishable from all other species by the morphology of the male genitalia. These are similar to *C. circumcinctus* and *C. marshalli*, but the median lobe bears a distinct blunty tine apically; the shape of the male sternite 9 differs from all other species of the *C. dieganus* group by the long projection on its anterior margin.

DESCRIPTION: Body moderatelly convex. Length: 2.2-3.3 mm (holotype: 2.85 mm); width: 1.4-1.8 mm (holotype: 1.6 mm).
Coloration: Dark brown, head with minute pale spots in front of eyes. Lateral margins of pronotum widely paler. Elytra (Fig. 25) with pale, sharply limited apical spot reaching apical 1/8 on intervals 3 and 5, apical 1/5 on intervals 1, 2, 4 and 8, apical ½ on interval 6, apical ¼ on intervals 7 and 9 and elytral base on interval 10. Sutural interval dark. Epipleura pale. Ventral side reddish brown; margins of preepisternal elevation of mesothorax and middle part of prosternum darkened. Femora and tibiae





Figs. 14-23 — 14-16: *Cercyon marshalli*. **14**. phallobase and parameres; **15**. median lobe; **16**. sternite 9. 17-19: *C. martialis*. **17**. phallobase and parameres; **18**. median lobe; **19**. sternite 9. 20-23: *C. putricola*. **20**. phallobase and parameres; **21**. median lobe; **22**. sternite 9; **23**. coloration of elytra in pale specimens (Zaire: Vitshumbi). Scale (0.5 mm): 14-22; (1 mm): 23.

reddish, tarsi slightly paler. Mouthparts and basal antennomeres pale, yellowish, antennal club slightly darker.

Head with moderately strong and not very dense punctation, punctures rasp-like; interstices shining, without microsculpture. Anterior margin of clypeus straight, distinctly rimmed. Mentum slightly wider than long, with anterior margin bisinuate, narrowly rimmed, its surface strongly rugose.

Prothorax: Pronotum transverse, arcuately narrowed anteriad, with punctation similar as on head, punctures distinctly impressed, becoming slightly smaller laterad. Interstices shining, without microsculpture. Lateral margins and both antero- and posterolateral corners of pronotum distinctly rimmed. Prosternum with median longitudinal carina, posteriorly with distinct notch. Antennal grooves distinct, trapezoid in shape.

Mesothorax: Scutellar shield longer than wide, with only a few minute punctures. Elytron with 10 punctural series (including sutural series), series 1 to 5, 7 and 10 reaching almost elytral base, series 6 and 8 to 9 arising slightly more distally. Series 10 reaching apical 2/5 of elytral length posteriad. Serial punctures distinctly larger than interval punctation both near suture and laterally. Interval punctures quite distinct and dense on elytral base, rasp-like in shape, becoming sparser and smaller laterad and apicad. Series not impressed basally, quickly becoming moderatelly impressed posteriad. Intervals flat, interstices shiny, without microsculpture. Preepisternal elevation (Fig. 34) in shape of very prolonged rhomboid (length/width = 2.2-2.5 (in holotype 2.3), n = 15), with sharp anterior and blunty rounded posterior tip; punctation consisted of large and closely standing rounded punctures. Interstices shiny, without microsculpture.
Metathorax: Metaventrite medially with elevated pentagonal area, punctation very sparse, consisted of small and loosely distributed punctures smaller than those on preepisternal elevation of mesothorax. Interstices without microsculpture. Lateral parts of metaventrite with granulate submicroscopical sculpture. Femoral lines missing, anterolateral ridges present.
Legs: Mesofemora with moderately large punctures ventrally; metafemora with only very sparse and minute punctures. All femora without microsculpture.
Male genitalia (Figs 4-6): Aedeagus with median lobe lanceolate, apically with blunty rounded darker tip, corona large, rounded, standing in apical 1/8 of median lobe. Phallobase and parameres combined slightly shorter than median lobe; phallobase flat; parameres 1.65 × longer than phallobase, connected dorsally in basal half; rounded apically, subapically with numerous backward-directed minute hairs. Sternite 9 longly lanceolate, median part prolonged in long projection with a few short setae on its top.

VARIABILITY: All specimen examined are quite uniform in most characters. Coloration varies a bit in a shape of the apical pale spots on elytra, this is often more or less extended on some intervals than in holotype. In most specimens, the elytral series are slightly darkened even distally (i.e. inside of the apical pale spot of elytra), in some specimens this darkening is so strong that the apical part of the elytron bears rather isolated longitudinal stripes on each interval rather than one continuous spot. Lateral pale stripe on elytra can be slightly darkened basally, and thus feebly seen on the first view in some specimen. Shape of the preepisternal elevation of the mesothorax is rather constant, in some specimens it can be slightly more elongated or drop-like than in holotype.

ETHYMOLOGY: This new species is dedicated to Mr. Marcel Cludts as a thank for his 30 years-long work in the Coleoptera collections of the Institut Royal des Sciences naturelles de Belgique, where he took and still takes care of the beetles including this *Cercyon* species described here.

BIONOMY: All material at my disposal was collected at UV light, thus nothing can be said about the bionomy of this species. However, it is probable that the bionomy of this species is similar to that of other species belonging to *C. dieganus* group.

DISTRIBUTION: So far known only from a small area around the lakes Edouard and Albert in Zaire.

Cercyon dieganus RÉGIMBART, 1903

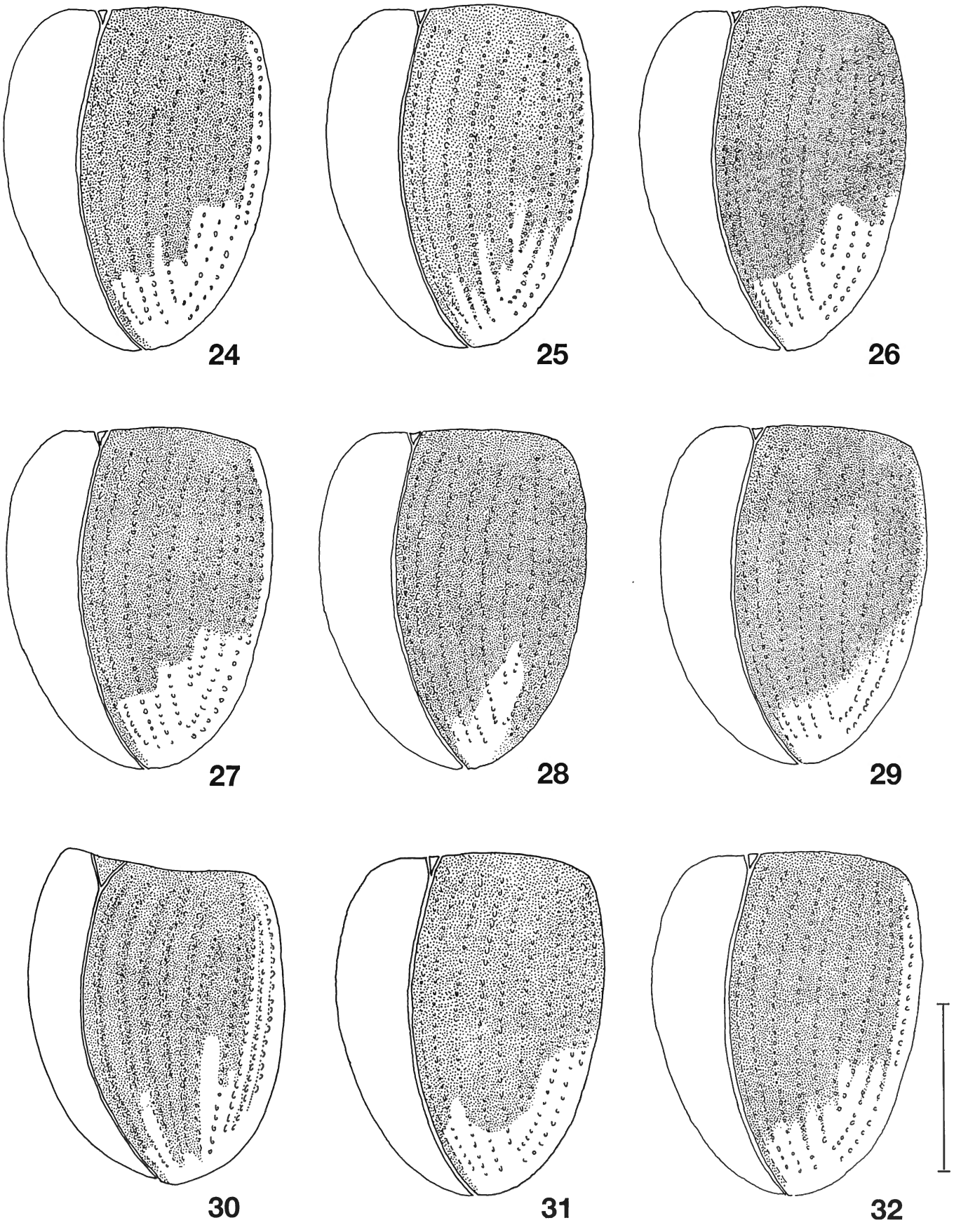
Figs. 7-10, 26-28, 35, Map 1

Cercyon dieganus RÉGIMBART, 1903: 48
Cercyon dieganus RÉGIMBART: ALFIERI (1976), BALFOUR-BROWNE (1950, 1957), HANSEN (1999), HEBAUER (1988, 1997, 2005), ORCHYMONT (1937, 1948 (partim.)).

TYPE MATERIAL EXAMINED:
Cercyon dieganus: Lectotype (here designated): ''Tananarive / Sikora (handwritten) // Museum Paris / coll Maurice Régimbart / 1908 (printed on blue label) // Dieganus / (Bed.) Rég.'', 1 female (MNHN). Paralectotypes (here designated): ''Madag. B / d'Antongil (handwritten) // Museum Paris / coll. Maurice Régimbart 1908 (printed on blue label)'', 2 females (MNHN). (Both paratype specimens are pinned on the same pin, the second one is pinned below the locality label). All specimens bearing the label: ''(PARA)LECTOTYPE / Cercyon dieganus / Régimbart, 1903 / des. M. Fikáček 2004''.

In the original description, these localities are mentioned without any specification of the number of specimens: ''Tananarive (Sikora); Diégo-Suarez, Fort-Dauphin (Alluaud); baie d'Antongil (Mocquerys)''. I have obtained six specimens of *C. dieganus* from the Régimbart's collection in MNHN, however only three of them bearing the locality data fitting at least partly the above mentioned localities; specimens from ''Fort-Dauphin'' are fully missing. No specimen is labeled as type, only that from Tananarivo bears the identification label in the Régimbart's handwritten. That is why it was needed to designate the lectotype of this species. Because the specimen from Tananarive bears the locality data completely fitting that mentioned by Régimbart (1903) along with the identification label which was without any doubt attached to it by Régimbart, I decided to designate just this specimen as lectotype. Other two specimens, including that pinned under the locality label were thus designated as paralectotypes. Both lectotype and paralectotypes were labeled as such by me.

In the collection of IRSN, there are 2 specimens bearing the locality data ''S. Baie, Antongil'' (see Other material examined). Even if the label data probably refer to the same locality as in paralectotypes, the locality data of these two specimens do not fit those of paralectotypes precisely. Thus, I do not consider these specimens as a part of the type series designated by RÉGIMBART (1903).



Figs. 24-32 — Coloration of elytra. **24**. *C. circumcinctus*; **25**. *C. cludtsi*; **26**. *C. dieganus*, coloration of lectotype; **27**. *C. dieganus*, coloration of south African specimen with pale last elytral interval; **28**. *C. dieganus*, coloration of specimen from Rwanda; **29**. *C. kykrion*; **30**. *C. marshalli*; **31**. *C. martialis*; **32**. *C. putricola*, most usual colouration. Scale: 1mm.

OTHER MATERIAL EXAMINED (1227 spec.): ANGOLA: Chiloango, M. Tschoffen lgt., 1 spec. (IRSN); Angola (A37), 5 mls. NE. Negola, 25.iii.1972, at light, without collector data, 2 spec. (BMNH); Angola (A41), Joao de Almmeida [= Chibia], 29.iii.1972, 1 spec. (BMNH); Angola (A40), Tundavala 8-10 mls. NW Sa da Bandeira [= Lubango], 27-29.iii.1972, 1 spec. (BMNH). BOTSWANA: Botswana 8.-9.iii.1993, 19°27'01''S/23°38'46''E, 5 km NW San-ta-Wani Safari Lodge, lux, M. Uhlig lgt., 1 spec. (HUMN); Botswana 26.xi.1993, 17°48'32''S/25°08'39''E, Kasane, Chobe Safari Lodge, lux, M. Uhlig lgt., 2 spec. (HUMN); same label data, 12.-14.iii.1993, 1 spec. (HUMN); Botswana 6.iv. 1998, Shakawe Fishing Camp, 18°27'S/21°56'E, J. & M. Deckert lgt., 1 spec. (HUMN); Botswana 11.iii.1993, 18°33'55''S/24°03'53''E, Chobe NP, Savuti Camp, lux, M. Uhlig lgt., 1 spec. (HUMN); Botswana 10.iii.1993, 19°14'22''S/23°21'24''E, Okavango-Delta, Moremi Wildlife Reserve, Third Bridge Campsite, lux, M. Uhlig lgt., 4 spec. (HUMN); Botswana 3.iii.1994, 18°22'S/21°49'E, Shakawe, Okavango-banks, sievings, Papyrus+-flood refuse, M. Uhlig lgt., 85 spec. (HUMN); Botswana 8.iii.1993, 20°04'33''S/23°21'16''E, Sitatunga Camp, sievings, rush+grass, river banks, M. Uhlig lgt., 1 spec. (HUMN). CHAD: Tschadseeufer bor., Bol., AEF, lg. Franz, 5 spec. (NHMW); Tschadsee,. AEF, Insel Iba, lg. Franz, 1 spec. (NHMW); Mangalme, Tschadgebiet, AEF, lg. Franz, 1 spec. (NHMW); Lac Tsad, Africa centr., kulina lgt., 1 spec. (NMPC). CONGO: Rép. Pop. Congo, Mosaka, xii.1980, 60 km NE Brazaville, Onobe lgt., 1 spec. (FHGF). EGYPT: Egypt (Lower), El-Manzata, 7.11.1993, leg Rowaida, 1 female (NHMW). ETHIOPIA: Ethiopia, Boher Dar [= Bahir Dar], Lichtfang [= at light], 8.x.1968, K.W. & H. Harde lgt., 2 spec. (BMNH); Abyssinia: 7,000ft., Hora Harsadi, Addas, 12.xii.1926, J. Omer-Cooper leg., 1 female (BMNH). GHANA: Ghana, Ashanti Reg., Umg. Kumasi, Hiermeier lgt., 1 spec. (NHMW); Ghana, Ashanti Region, Kumasi, Nhiasu, 330 m, N 6°43' – W 1°36', Dr. S. Endrödy-Younga lgt., 1 male (TMBC); Ghana, Northern Region, Tamale, N 8°25'- W 0°53', 184 m, light trap, 11.iii.1970, S. Endrödy-Younga lgt., 1 spec. (TMBC); Ghana, Western Region, Busna, N 4°48' W 1°56', 15 m, mercury vapour, 26.iii.1964, Dr. S. Endrödy-Younga lgt., 1 spec. (TMBC); Imperia College, Ghana Expdn., Kumasi, Ashanti, 29.vii.1960, 2 spec. (BMNH). GUINEA: Guinea, Kindia, 1.-22.6.1983, leg. Murzin, 1 spec. (NHMW); Afr. occ., Guinea, Kisidongau [= Kissidougou], Dr. K. Kry'sa lgt. 1 spec. (NMPC); Rep. Guinea, Seredou, lux, 7.-8. iv. 1975, lgt. Zott, 186 spec. (HUMN); Rep. Guinea, Seredou, lux, 18.iv.1975, A. Zott lgt., 102 spec. (HUMN). KENYA: Kenya, Naivascha, Crater Lake, 26.10.95, leg. Wewalka, (K4), 5 spec. (NHMW); Kenya, Nairobi (8), 6.XII., leg. Jäch 1989, 2 spec. (NHMW); Kenya Colony: Rift Valey, 18.vi.1929, B. M. [=British Museum] 1929-452, Miss P. M. Jenkin lgt., 2 spec. (BMNH); Kenya, L. Naivasha, 26.vi.1929, P.M. Jenkin lgt., 1 spec., 1 male (BMNH). MADAGASCAR: E-Madagascar, Fenerive, Forét Tampolo, 28.12.1998, leg. J. Moravec, 4 spec. (NHMW); Madagascar, Antananarivo, Tanjoarivo, ca. 1300m, Chutes de l'Onive, 40 km SE Ambatolamy, 22.10.2001, lg. Schuh (4b), 1 spec. (NHMW); Madagaskar Est, Ambatombe pr., Andilamena, 900 m, forét degradée, prairie second., lux, 17.1.1995, G. Dunay & J. Janák lgt., 3 spec. (HUMN); Madagascar, Tananarive, 1500 m, 28.+30.iv.1968, K. M. Guichard lgt., 1 spec. (BMNH); Madagascar, Tananarive, plant refuse by pond, 6.-13.x.1970, P. Hammond lgt., 1 spec. (BMNH); Annanarive, F. Sikora lgt., 5 spec. (IRSN); Antananarivo Mad., 1 spec. (IRSN); Madagascar, 17.iii.1894, P. Chamboué lgt., 1 spec. (IRSN); Madagascar, 1 spec. (IRSN); Madagascar, Tananarive, 6-13.x.1970, plant refuse by pond, without collectors data, 1 spec. (BMNH); same locality data, but without specification of habitat, 11 spec. (BMNH); Madagascar: Maroantsetra, 14.x.1970, at light, without collector data, 1 spec. (BMNH); S. Baie, Antongil, 2 spec. (IRSN). MAURETANIA: IFAN, 1953, Bafrechie (Mauretanie), 15.ix.-10.x.1953, A. Villiers lgt., 2 spec. (BMNH). MOZAMBIQUE: Xinavane, xi.1920, P.E.A., C. B. Hardenberg lgt., 2 spec. (BMNH); Mocambique: Changalane, Maputo, xi.1950, M.C. & G. V. Ferrevia lgt., 1 spec. (BMNH); Zambéze, Nova Choupagna prés Chemba, 1929, P. Lesne lgt., 1 spec. (IRSN). NAMIBIA: Namibia 30.iii.1999, 18°14.0'S/21°43'E, Mahango GR, Kwetche piknik site, banks of Okawango, shore, washing, M. + B. Uhlig lgt, 45 spec. (HUMN); Namibia 1.iii.1994, 18°14.0'S/21°43'E, Kavango, Mahango, Game Reserve: Piknik site, lux, M. Uhlig lgt., 7 spec. (HUMN); Namibia 24.xi. 1993, 18°13'S/21°45'E, Kavango, Mahango, Game Reserve, Piknik site, lux, M. Uhlig lgt., 14 spec. (HUMN); Namibia 28.ii.-1.iii.1992, 18°17'S/21°43'E, Kavango, Mahango, Game Reserve, J. Deckert lgt., 1 spec. (HUMN); Namibia 1.+4.iii.1994, 18°14'S/21°43'E, Kavango Mahango Game Res., Piknik site, Okavango banks, sievings, flood refuse, reed, leaf litter, grass, Uhlig lgt., 2 spec. (HUMN); Namibia 18.iv.1993, 17°56'S/19°49'E, 7 km E Rundu banks of Okawango, sievings, shore washings, B.+M. Uhlig lgt., 8 spec. (HUMN); Namibia –Exp., ZMB 1992, E Caprivi: Mudumu NP: Nakatwa, Kwando-Ufer, Phragmites, schlammig, 18°10'S/23°26'E, 8.-13.iii.1992, Uhlig lgt., 22 spec. (HUMN). NIGERIA: West Africa, Nigeria, Samaru, light trap, 20.i.1969, Dr. S. Endrödy-Younga lgt., 2 spec. (TMBC); Lagos, F. Müller lgt., 7 spec. (IRSN); Near Benin, 1.-12.v.1958, J. L. Gregory lgt., 4 spec. (BMNH); same locality, 19.-27.v.1958, J. L. Gregory lgt., 1 spec. (BMNH); Umuahia, xi.-xii.1960, J. L. Gregory lgt., 33 spec. (BMNH); same label data, 3.ix.-4.x.1960, 4 spec. (BMNH); Umudike, 10.-13.iv.1960, J. L. Gregory lgt., 18 spec. (BMNH). REPUBLIC OF SOUTH AFRICA: Maputoland, SW of EMANGUSI, 29. i. 2003, V. Křivan lgt., 2 males, 1 female (MFOC); Natal – NDUMO, 26°56'S - 32°14'E, swamp, 5. xi. 2001, Dr. R. Fencl lgt., 1 male (MFOC); R. South Africa, 28.xii.2002, 33°59.0'S/22°40.6'E, W Cape Prov., Wilderness NR, Lang-vlei, Malachite bird hide, Juncus+bush litter+Phragmites sievings, M. Uhlig lgt., 8 spec. (HUMN); Südafrika 2.xii.1995, KwaZulu-Natal, St. Lucia Park, Charter's

creek, 28°12'S/32°25'E, F. Koch lgt., 1 spec. (HUMN); Südafrika 29.xi.1995, KwaZulu-Natal, Mkuza Game Res., 27°36'S/32°13'E, F. Koch lgt., 1 spec. (HUMN); R. S. Africa 2.-3.ii.1994, 27°36'S/32°13'E, Natal, Nouze NP, lux, M. Uhlig lgt., 1 spec. (HUMN); R. S. Africa 30.xi.1996, 33°59.0'S/22°40.6'E, Cape Prov., Wilderness NP, Lang-vlei, Malachite bird hide, Juncus krausi+bush liter sievings, B.+M. Uhlig lgt., 75 spec. (HUMN); R. S. Africa 16.xi. 1996, 28°02'S/32°05'E, Natal, Hluhluwe NP, Maphulolo River edge, sievings, M. Uhlig lgt., 1 spec. (HUMN); R. S. Africa 29.xi.1996, 33°59.6'S/ 22°43.0'E, Cape Prov., Wilderness NP, Rondevlei, Phragmites belt sievings, M. +B. Uhlig lgt., 10 spec. (HUMN); R. S. Africa 14.xi. 1997, 33°59.0'S/ 22°40.6?E, Cape Prov., Wilderness NP, Lang-vlei, Malachite bird hide, Juncus+bush litter+Phragmites sievings, M. Uhlig lgt., 6 spec. (HUMN); R. S. Africa 16.-18.xi.1993, 34°27'S/20°24'E, Cape Province, De Hoop Nat. Res., lux, M. Uhlig lgt., 10 exs. (HUMN); R. S. Africa, 13.-14.xi. 1997, 33°59.4'S/22°36.6'E, Cape Prov., Wilderness NP, Ebb & Flow Camp, B.+K.+M. Uhlig lgt., 1 spec. (HUMN); R. S. Africa 22.iv. 1995, 34°04'S/ 20°27'E, Cape Prov., Bontebok NP, J. Deckert lgt., 1 spec. (HUMN); Südafrika 27.xi.1995, KwaZulu-Natal, Tembe Elephant Park, 27°02'S/32°25'E, F. Koch lgt., 1 spec. (HUMN); R. S. Africa 25.xi.1996, 33°24'S/ 25°45'E, Cape Province, Addo Elephant NP, pond shore sievings, M. Uhlig lgt., 1 spec. (HUMN); R.S. A. Natal, Sodwana Bay Nat. Park, 20.xii.1992, F. Koch lgt., 2 spec. (HUMN). RWANDA: Rwanda, Rusumo Ibanda Makera, x. 1993, Th. Wagner lgt., 2 males, 2 spec. (FHGC, MFOC); coll. Mus. Congo, Ruanda: Gitarama, 1850 m, terr. Nyanza, P. Basilewsky lgt., 1 female (BMNH). SENEGAL: N-Senegal, Djoudj-NP, in Schilfresten [= in the remains of reed], 28.ii.1993, St. Fischer lgt., 1 male (HUMN). TANZANIA: D. O. Afrika, lux, Gomba, 1912, leg. Inst. Amant, 1 spec. (HUMN); Tanganyika: Usa River, 3900 feet, Coll. Dr. J. Szunyoghy, 1 male (TMBC); Tanzania, Uluguru Mts., iv.1992, Werner lgt., 2 spec. (TMBC); Kilimandjaro, 1 spec. (HUMN). ZAMBIA: Zambia 29.iii.1993, 15°02'53''S/28°00'09''E, Kafue NP, Chunga Camp, lux, M. Uhlig lgt., 8 spec. (HUMN); Zambia 17.iii.1993, 15°53'S/26°11'E, Chinganganka Hills, lux, M. Uhlig lgt., 2 spec. (HUMN); Zambia 16.iii.1993, 15°49'07''S/28°12'03''E, Kafue River, Rimo-Marine Motel, lux, M. Uhlig lgt., 9 spec. (HUMN); Zambia 27.-30.iii.1993, 15°02'S/26°00'E, Kafue NP, Chunga Camp, Kafue River, river bank litter, M. Uhlig lgt., 1 spec. (HUMN); Rhodésie du Nord, Musosa, 3.vii.1939, H. J. Brédo lgt., 1 spec. (IRSN). ZAIRE: Congo Belge, Lac Albert, Mahagi-Port, U.V., 15.ii.1954 (4085), lgt. J. Verbeke – KEA, 40 spec. (IRSN); Congo Belge, Lac Albert: Mwita, prèforêt galeria, U.V., 22.xii.1953 (4083), lgt. J. Verbeke – KEA, 18 spec. (IRSN); Congo Belge – Ituri Sabe (Lac Albert), U.V., 16.xii.1953 (4060), lgt. J. Verbeke – KEA, 11 spec. (IRSN); Congo Belge, Lac Albert: Bezaha, U.V., 19.xii.1953 (4070), lgt. J. Verbeke – KEA, 1 spec. (IRSN); Congo Belge, Lac Albert: Kasenyi, U.V., 21.vi.1953 (4012), lgt. J. Verbeke – KEA, 14 spec. (IRSN); same data but 22.vi.1953 (4014), 3 spec. (IRSN); same data but 23.vi.1953 (4015), 6 spec. (IRSN); same data but 25.vi.1953 (4020), 7 spec. (IRSN); same data but 26.vi.1953 (4025), 13 spec. (IRSN); same data but 29.vi.1953 (4029), 3 spec. (IRSN); same data but 29.vi.1953 (4032), 12 spec. (IRSN); same data but 30.vi.1953 (4035), 1 spec. (IRSN); same data but 3.vii.1953 (4039d), 33 spec. (IRSN); same data but 11.xii.1953 (4049), 4 spec. (IRSN); same data but 13.xii.1953 (4055), 2 spec. (IRSN); same data but 15.xii.1953 (4058), 1 spec. (IRSN); Congo Belge, Lac Edouard: Mosenda, U.V., 24.i.1954 (3101), lgt. J. Verbeke – KEA, 1 spec. (IRSN); Congo Belge, Lac Edouard: Vitshumbi, U.V., 25.iii.1953 (3033), lgt. J. Verbeke – KEA, 92 spec. (IRSN); same data but 28.iii.1953 (3228), 1 spec. (IRSN); same data, but 31.iii.1953 (3037), 58 spec. (IRSN); same data but 7.v.1953 (3039), 28 spec. (IRSN); same data but 12.vi.1953 (3040), 1 spec. (IRSN); same data but 14.vii.1953 (3052), 20 spec. (IRSN); same data but 23.x.1953 (3057), 10 spec. (IRSN); same data but 24.x.1953 (3059), 32 spec. (IRSN); same data but 27.xi.1953 (3091), 2 spec. (IRSN); same data but 21.i.1954 (3096), 6 spec. (IRSN); same data but 22.i.1954 (3098), 18 spec. (IRSN); Congo Belge, Lac Kivu: Kirotche baie Kabuno, U.V., 17.ix.1953 (2091), J. Verbeke – KEA, 2 spec. (IRSN); Lac Kivu: Sake, U.V., 12.iii.1954 (2164), lgt. J. Verbeke – KEA, 1 spec. (IRSN); same data but 18.iii.1954 (2165), 4 spec. (IRSN); Congo Belge, Lac Tanganika: Albertville [= Kalenie], emb. Tubuy, U.V., 19. viii.1953 (5019), J. Verbeke – KEA, 9 spec. (IRSN); Congo Belge, Lac Tanganika: Albertville, U.V., 14.viii.1953 (5012), lgt. J. Verbeke – KEA, 6 spec. (IRSN); Kinchassa, 7.iii.1899, Waelbroeck lgt., 1 spec. (IRSN); Katanga, Kikondja, v.1925, G. F. de Witte lgt., 1 spec. (IRSN); Congo Belge (locality data not readable), A. Collart lgt., 1 spec. (IRSN); Eala, x.1935, J. Ghesquiére lgt., 1 spec. (IRSN); Foret de Kawa, 23.iv.1929, A. Collart lgt., 1 spec. (IRSN); Congo Belge: P. N. A. Bitshumbi, 912 m, Mission H. Damas, 13.i.1936, 1 spec. (IRSN). ZIMBABWE: Zimbabwe 11.-12.xii.1993, 17°53'S/25°49'E, Victoria Falls, Zambezi –NP-Camp, lux, M. Uhlig lgt., 1 spec. (HUMN); Zimbabwe 28.xi.-1.xii. 1993, 20°33'S/28°30'E, Matopos NP, lux, M. Uhlig lgt., 2 spec. (HUMN); Zimbabwe, Matabeleland, Matopos Nat. Park, ca 1300 m. a. s . l., 28.-30.xi.1993, 20°33'S/28°30'E, J. Deckert lgt., 1 spec. (HUMN); S. Rhodesia: Matopo Hills, Maleme Dam, 30.i.1963, J. Weir lgt., 1 spec. (BMNH); S. Rhodesia: Marandellas, 18°10'S, 31°36'E, ii.1962, M. V. light, J. S. Weir lgt., 3 spec. (BMNH). Without precise locality: Turu, VII. 11, 1 spec. (HUMN); Darenalau II. 12, 1 spec. (HUMN); Turu, VII./11, Methner lgt. 1 spec. (HUMN); D. O. Afr., ... Uruba [handwritten, badly readable], Methner lgt., 1 spec. (HUMN).

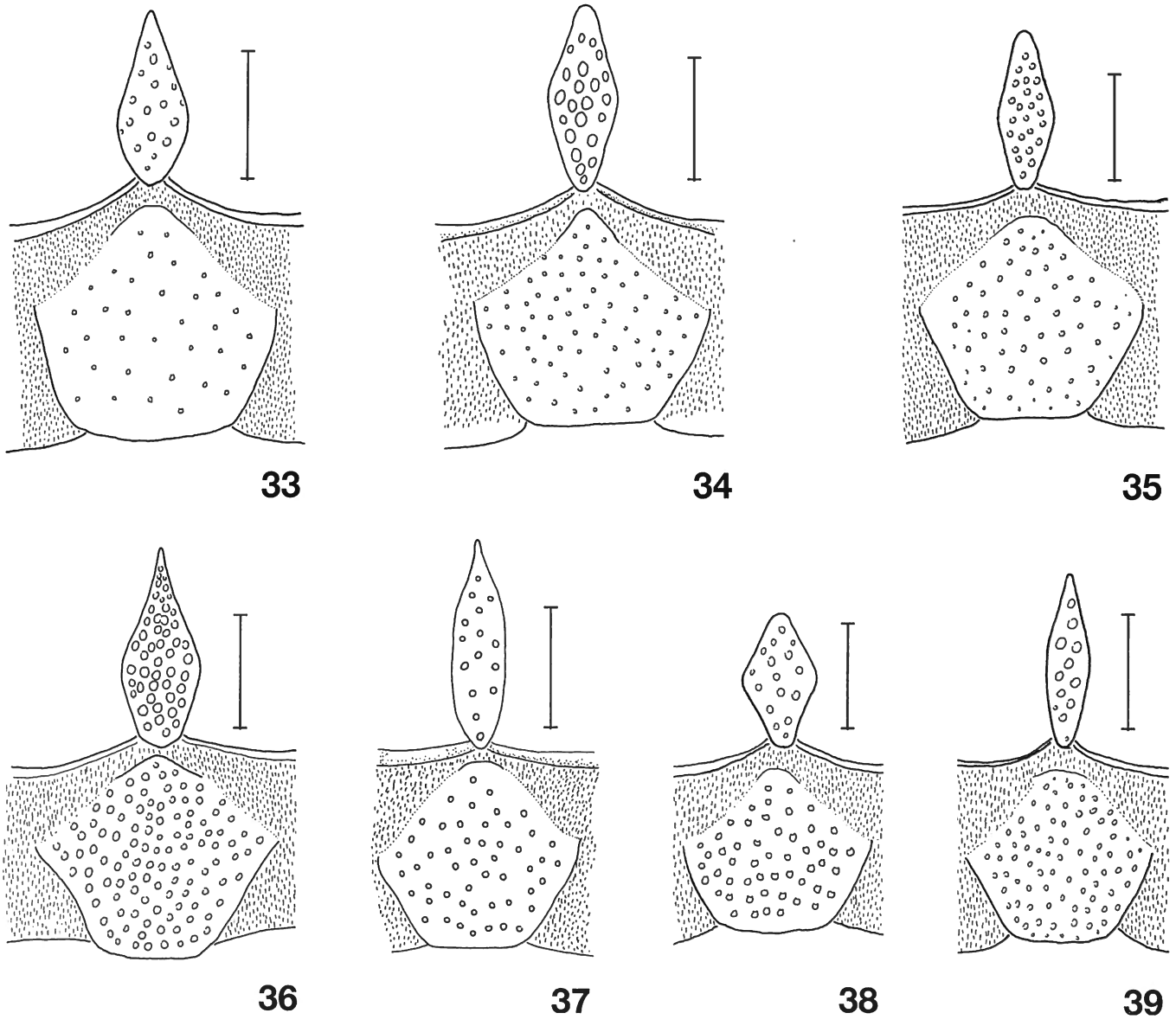
DIFFERENTIAL DIAGNOSIS: Elytral intervals flat or nearly so; punctural series on elytra not impressed basally;

interval punctation on elytral base similar as on pronotum; pale apical spot on elytra not reaching elytral base or reaching it on the last elytral interval only; elytral series not darkened inside of pale elytral spot; aedeagus with parameres much shorter than phallobase, completely divided from each other.

By coloration, the specimens of *C. dieganus* with the apical elytral spot not reaching the elytral base are most similar to *C. martialis* (which has distinctly convex elytral intervals); specimens with the pale last elytral interval are most similar to *C. cludtsi* sp.nov. and to some individuals of *C. putricola*. From *C. putricola* they can be distinguished by the flat intervals and basally not impressed elytral series; from *C. cludtsi* sp.nov. they differ by elytral series not darkened inside of the pale apical spot on elytra and by the non-lobate margin of this spot. In all cases easily distinguishable from all other species according to the shape of the aedeagus.

REDESCRIPTION: Body moderately convex. Length: 2.7 - 4.2 mm; width: 1.4 – 2.0 mm.

Coloration: Black to blackish brown, head with indistinct small paler spots in front of eyes. Pronotum laterally with rather wide and sharply limited paler margins. Elytra (Fig. 26) with distinct, sharply limited apical yellowish spot reaching apical 1/6 on intervals 1 to 5, apical ¼ on intervals 6 to 9 and apical ½ on interval 10. Sutural interval dark. Epipleura pale. Ventral side dark brown to black, mouthparts and basal antennomeres pale, antennal club darker, brownish. Femora and tibiae dark brown, tarsi paler.



Figs. 33-39 — Preepisternal elevation of mesothorax, and metathorax. **33**. *C. circumcinctus*; **34**. *C. cludtsi*; **35**. *C. dieganus*; **36**. *C. kykrion*; **37**. *C. marshalli*; **38**. *C. martialis*; **39**. *C. putricola*. Scale: 0.25 mm.

Head with rather strong but moderately dense punctation, interstices shining, without microsculpture. Clypeus with distinctly rimmed, straightly cut off anterior margin. Mentum slightly wider than long, anterior margin bisinuate and very narrowly rimmed, surface finely transversely rugose.

Prothorax: Pronotum transverse, arcuately narrowed anteriad, bearing punctation similar as on head. Intersices shining, without microsculpture; lateral margins and posterolateral corners narrowly rimmed. Prosternum with median longitudinal carina, posteriorly with small notch. Antennal grooves distinct, well developed, trapezoid in shape.

Mesothorax: Scutellar shield slighly longer than wide, bearing a few minute punctures, interstices flat and shiny. Elytron with 10 punctural series (including sutural series), series 1 to 5 and 7 to 10 reaching almost the elytral base, series 6, 8 and 9 arising slightly more distally. Series 10 reaching the 3/5 of elytral length apically. Serial punctures distinctly larger then those on elytral intervals. Interval punctation rather strong on elytra base, similar as on pronotum, composing of rather small but distinctly impressed and not very densely distributed punctures becoming scarcer both apicad and laterad. Series almost unimpressed basally, becoming shallowly but distinctly impressed apicad. Intervals flat both basally and apically. Preepisternal elevation (Fig. 35) rather long and narrow (length/width = 2.5 – 3.7, n=5), moderately narrowed anteriad and posteriad, posterior tip blunt; surface shiny, without microsculpture, with distinct but not very dense punctation.

Metathorax: Metaventrite medially with pentagonal elevated area, punctation similar as on preepisternal elevation of mesothorax, with punctures becoming smaller postriad and laterad. Interstices without microsculpture. Lateral parts of metaventrite with granulose submicroscopical sculpture. Femoral lines missing, anterolateral ridges present.

Legs: Meso- and metafemora with setiferous punctures, interstices without microsculpture.

Male genitalia (Figs 7, 9, 10): Aedeagus with phallobase very long, about 3 times longer than parameres. Parameres moderately narrowed apicad, membranous apically, only with sclerotized ''finger'' on their inner edge. Median lobe tube-like, extending into three projections forming ''a dog'' basally, median projection hooked. Sternite 9 tongue-shaped.

VARIABILITY: *C. dieganus* shows a wide range of the variability in the external morphology and partly also in the morphology of the aedeagus. Elytral intervals can be slightly convex and resembling specimens of *C. putricola* in some specimens. The elytral punctation is usually very strong basally, even denser and coarser than on pronotum in some specimens examined, whereas it is distinctly sparser and composed of rather small punctures in other specimens. The pale apical spot on elytra varies both in the size and the shape. The usual coloration present in most of the specimens examined is described above. In some specimens, the spot can be slightly reduced on intervals 7-9 (then the whole spot seems to be smaller) or a little bit more extended than in the typical case. Rarely, the apical spot can be very small going from sutural angle of elytra to the apical 1/6 on the elytral interval 6. Elytral interval 10 can be completely pale or nearly so in some specimens. The aedeagus is usually rather constant in shape in most specimens (Figs 7 and 9), but the parameres can be distinctly shortened in some specimens (Fig. 8).

The variability of the coloration of the elytral interval 10 and of the shape of the parameres seems to be distinctly influenced geographically. Specimens with the pale last elytral interval and at the same time with the shorter parameres occur nearly exclusively in South-African localities (especially in those in the Republic of South Africa). At the same time, usually colored specimens are rare in this area. This state could indicate the separate position of these specimens (as a separate subspecies or a separate vicariant species). However, in the material examined I have found some specimens with intermediate characters from both central and southern Africa: specimens with completely pale elytral interval 10 and usual shape of parameres occur rarely in Botswana, Ghana, Tanzania and Zaire; specimens with usual coloration and short parameres were found in Namibia. More, specimens with extremelly small apical spot found in Rwanda have the aedeagus with the shortened parameres similar to those of specimens found in the Republic of South Africa (which have extremelly large apical spot of elytra). Presence of these intermediate forms shows that it is not legitimate to separate the South-African specimens into a different taxon.

On his identification labels, A. d'Orchymont distinguished a few morphological forms of this species, probably based mainly on morphology and punctation of elytra. Except of ''forme d'Abyssinia'' representing a separate species described here as *C. kykrion* sp.nov., all these forms were found to fit the variability of *C. dieganus* described above.

BIONOMY: Very commonly collected at light, usually in a high number of specimens. Some label data indicate that this species lives similarly to the other species of this group in a wet plant litter on the banks of both stagnant water and rivers.

DISTRIBUTION: Here recorded from Angola, Botswana, Chad, Congo, Egypt, Etiopia, Ghana, Guinea, Kenya, Madagascar, Mauretania, Mozambique, Namibia, Nigeria, Republic of South Africa, Rwanda, Senegal, Tanzania, Zambia, Zaire and Zimbabwe.

C. dieganus is an African species distributed widely through the whole subsaharian Africa, reaching the Palearctic Region in northern Africa along the Nil River. South-African and some central African specimens are morphologically slightly different from those occuring in other localities – see Variability for details.

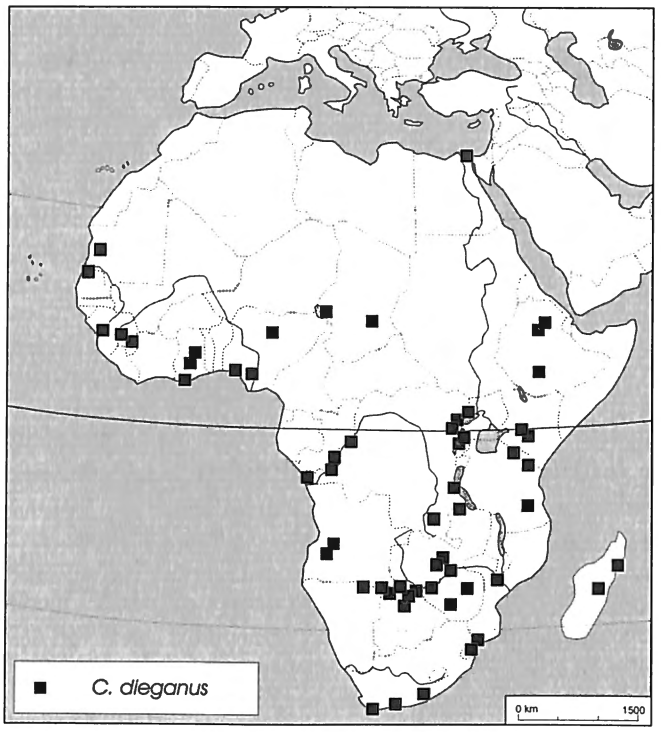


Fig. 40 — Distribution of *Cercyon dieganus*.

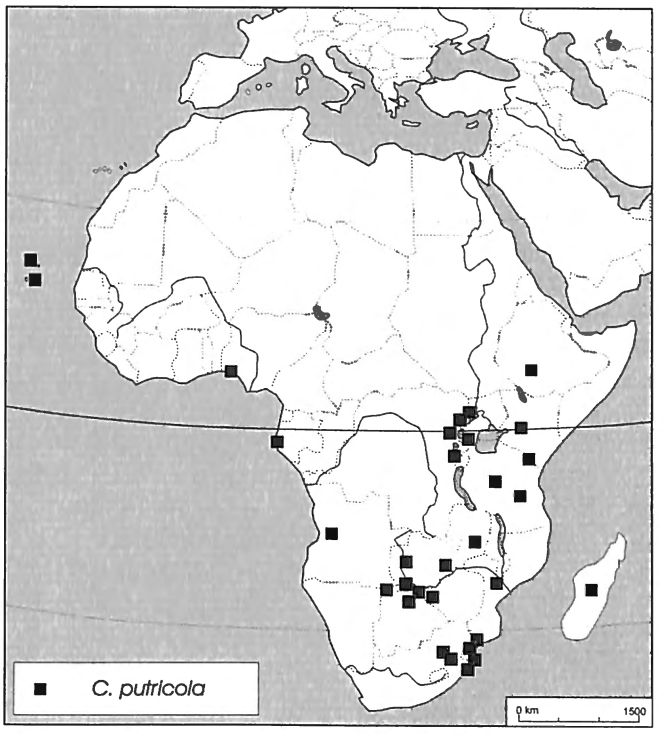


Fig. 41 — Distribution of *Cercyon putricola*.

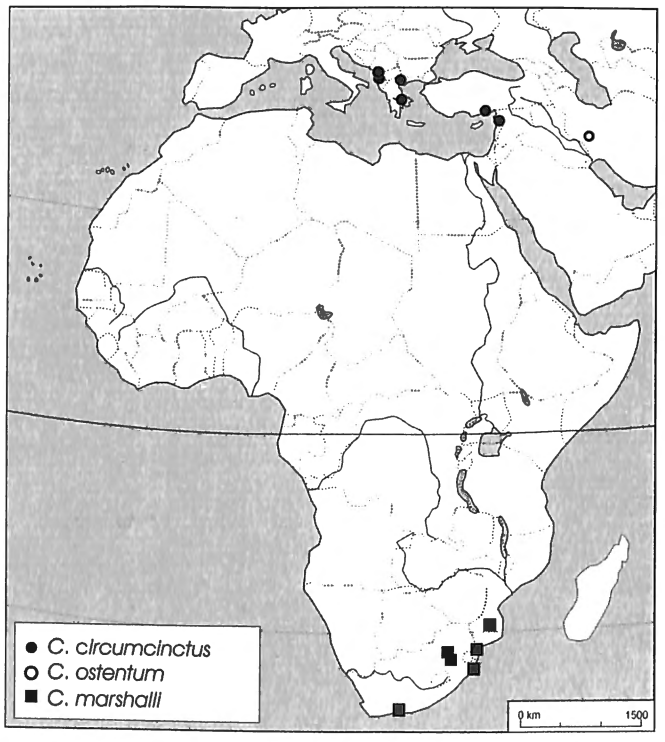


Fig. 42 — Distribution of *Cercyon circumcinctus*, *C. ostentum* and *C. marshalli*.

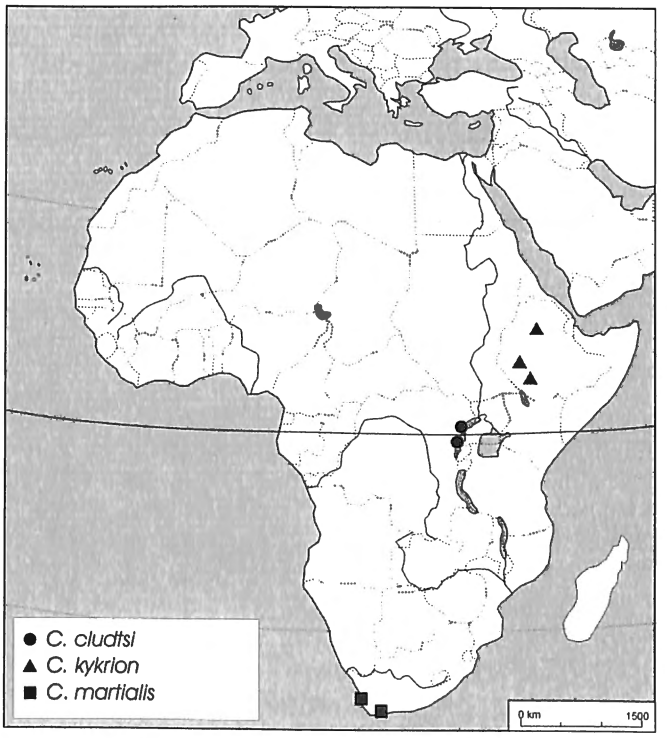


Fig. 43 — Distribution of *Cercyon cludtsi*, *C. kykrion* and *C. martialis*.

***Cercyon kykrion* sp.nov.**
Figs. 11-13, 29, 36, Map 4

Cercyon dieganus RÉGIMBART: ORCHYMONT (1948, partim.)

TYPE MATERIAL (26 spec): Holotype: Abyssinia / Gamo Prov. / Chencha, / c. 8,900 ft / 30.xi.1948 (printed, first row blue underlined) // ETHIOPIA: / 1948-1949 / Hugh Scott. / B. M. 1949 – 184. (printed) / From two springs, / used as water-supply / in side of valley / N.E. of camp. (printed) // Cercyon / dieganus Rég / J. Balfour-Browne det. / XI. 1954 (first two rows and the month-number handwritten, remaining text printed) // HOLOTYPE / Cercyon (Arcocercyon) / kykrion sp.nov. / det. M. Fikáček 2004 (printed on red label), male (BMNH). Paratypes: Abyssinia: Gamo Prov., Chencha, c. 8,900ft., 30.ix.1948, from springs full of water-plants in valley N.E. of camp, Ethiopia 1948-1949, Hugh Scott, B. M. 1949-184, 1 male (MFOC), 3 females (BMNH); Abyssinia: Gamo Prov., Chencha, c. 8,900ft, 30.xi.1948, from two springs, used as water-supply, in side of valley N.E. of camp, Ethiopia 1948-1949, Hugh Scott, B. M. 1949-184, 1 male 1 female (BMNH); Abyssinia: Gamo Prov., Chencha, c. 8,900ft, 1,2.xii.1948, Ethiopia 1948-1949, Hugh Scott, B. M. 1949-184, 1 male (BMNH); Abyssinia: Gamo Prov., between Wubara and Dita, c. 8,500-10,000ft, 4.xii.1948, from open grassy hillside, Ethiopia 1948-1949, Hugh Scott, B. M. 1949-184, 1 male (BMNH); Abyssinia: Gamo Prov., Wubara [between Chencha and Dita], c. 8,500ft, 3.xii.1948, Ethiopia 1948-1949, Hugh Scott, B. M. 1949-184, 1 female (BMNH); Abyssinia: Gamo Prov., Chencha, c. 8,900ft, 27.xi.1948, beneath large boulders sunk deep in turf, on slope towards stream, facing N.E., Ethiopia 1948-1949, Hugh Scott, B. M. 1949-184, 1 female (BMNH); Ethiopia, Simien, Debarec, c. 9,800ft., 11.xi.1952, from streams with steep earth banks and small falls, N. Ethiopia, 1952-1953, Hugh Scott., B.M. 1953-335, 1 M, 3 F (BMNH); Abyssinia: Wouramboulchi., 9,000ft., 2-7.x.1926, J. Omer-Cooper, Brit. Mus. 1927 – 127, 1 female; same data but without the last label, 2 females (BMNH), 2 females (IRSN); same data but with identification label: dieganus forme d'Abyssinie, 1 male (IRSN); Coll. R. I. Sc. N. B., Wouramboulchi, 9,000ft., 2-7.x.1926, J. Omer-Cooper, A. d'Orchymont det. Cercyon dieganus Rég., 1 female (IRSN); Abyssinia: Serpent Lake, Wourlamboulchi, circa 9,000ft., 5.x.1926, J. Omer-Cooper, Brit. Mus. 1927 – 127, A. d'Orchymont det., Cercyon (s.str.) dieganus Rég., f. d'Abyssinie, 1 female (BMNH); same data but without Orchymont's identification label, 2 males (BMNH). All specimens bear the yellow label: PARATYPE, Cercyon (Arcocercyon) kykrion sp.nov., det. M. Fikáček 2004.

Note: Because I have not found the type locality (Ethiopia: Gamo Prov., Chencha) in any ordinary map at my disposal, I include here its geographic coordinates according to Randall (1982): Ch'ench'a – 6°15'N 37°34'E.

OTHER MATERIAL EXAMINED: ETHIOPIA: Abyssinia, Wouramboulchi, 9.000 ft, 2.-7.x.1926, J. Omer-Cooper lgt., 1 male (BMNH).

DIFFERENTIAL DIAGNOSIS: Last elytral interval pale or not throughout; punctation of elytral intervals slightly finer but denser near scutellum as on pronotum; elytral intervals flat basally, becoming distinctly convex in laterad and basad (the highly convex intervals distinct especially on lateral parts of elytra in ca second fourth from apex); preepisternal elevation of mesothorax rhomboid, usually with slightly concave sides, posterior top broad and abruoptly narrowed; punctation rather dense, punctures partly fused in some specimens; aedeagus with parameres having long basal part inserted into phallobase; male sternite 9 rounded apically, bearing a few setae.

By the elytral coloration and the convexivity of elytral intervals, *C. kykrion* is rather similar to *C. putricola*, it differs from this species accoriding to the much denser punctation of elytral intervals near scutellum and the shape of the preepisternal elevation of mesothorax (in *C. putricola* the posterior tip is usually narrower, and not abruptly narrowed). The specimens without fully pale last elytral interval are similar to *C. dieganus* and differ from it by highly convex intervals in lateral parts of elytra (but note that in *C. dieganus* the intervals can be also slightly convex in some specimens, see Variability under this species) and by the different shape of the preepisternal elevation of mesothorax (narrower and not abruptly narrowed in *C. dieganus*). From the other species of *C. dieganus* group, this new species differs according to the general coloration of elytra (see Fig. 29 and differential diagnoses under these species).

C. kykrion is easily distinguishable from the other species by the morphology of the male genitalia. These are unique within the *C. dieganus* species group by parameres being slightly longer than phallobase but inserted deeply into the phallobase and thus appearing much shorter than it.

DESCRIPTION: Body moderately convex. Length: 2.5 – 3.1 mm (holotype: 3.1 mm); width: 1.4 – 1.7 mm (holotype: 1.6 mm).

Coloration: Reddish brown to piceous, head slightly darker than remaining parts of body, with very small and nearly indistinct paler reddish spots in front of eyes. Pronotum laterally with vaguely limited pale margins and anterolateral cornes. Elytra (Fig. 29) with rather sharply limited pale apical spot, its border going continously from apical 1/6 on elytral interval 1 to apical half on elytral interval 9 and 10. Elytral series slightly darkened even inside of this pale apical spot. Sutural interval dark. Epipleura pale. Ventral side of body piceous, prosternum slightly paler, reddish brown. Mouthparts and basal antennomeres pale, reddish yellow; antenal club darker, reddish brown. Legs with femora reddish brown, tibiae and tarsi paler.

Head with rather strog and not very dense punctation; interstices shiny, without microsculpture. Anterior mar-

gin of clypeus slightly concave and distinctly rimmed. Mentum slightly wider than long, anterior margin convex and very narrowly rimmed; its surface slightly transversely rugose.
Prothorax: Pronotum transverse, arcuately narrowed anteriad, bearing punctation similar as on head; punctures becoming sligthly smaller laterad. Along posterior margin with a row of punctures smaller than those on the pronotal disc. Lateral margins and both anterio- and posterolateral corners of pronotum narrowly rimmed. Prosternum medially with longitudinal carina, bearing distinct notch posteriorly. Antennal grooves distinct, trapezoid in shape.
Mesothorax: Scutellar shield longer than wide, bearing only a few minute punctures. Elytron with 10 distinct series of punctures (including sutural series), series 1 to 5, 7 and 10 reaching almost elytral base, series 6 and 8 to 9 arising slightly more distally; series 10 reaching apical 2/5 of elytral length posteriad. Serial punctures distinctly larger than those of interval and pronotal punctation, laterad becoming slightly larger and closely aggregated than near suture. Interval punctures near scutellum slightly smaller than those on pronotum, shallowly impressed and rasp-like in shape, distributed somewhat densely than on pronotum, becoming sparsely distributed and smaller both laterad and apicad. Series nearly unimpressed basally, quickly becoming strogly impressed posteriad and mainly laterad. Intervals nearly flat in scutellar area, becoming rather strongly convex laterad. Interstices shiny, without microsculpture. Preepisternal elevation (Fig. 36) in shape of very prolonged rhomboid with slightly concave sides (length/width = 2.0 – 2.3 (holotype: 2.28), n = 5), anterior tip sharp, posterior tip wide and abruptly narrowed into a blunty point; punctation consisted of large and rather closely standing and in some specimens slightly fusing punctures. Interstices shiny, without microsculpture.
Metathorax: Metaventrite medially with elevated pentagonal area, punctation rather strong but not very dense. Interstices shiny, without microsculpture. Lateral parts of metaventrite with granulose submicroscopical sculpture. Femoral lines missing, anterolateral ridges present.
Legs: Mesofemora with very distinct setiferous punctures ventrally, between punctures uneven, forming slight shallow ridges. Metafemora with only very sparse and minute punctures, its surface without microsculpture.
Male genitalia (Figs 11-13): Aedeagus with median lobe distinctly narrowed apicad, apically with blunty rounded darker top, corona small and not very distinct, standing in apical 1/14 of the median lobe. Phallobase and parameres combined shorter than median lobe. Phallobase flat, slightly shorter than parameres, basally strongly darkened, hook-like projection on base missing,. However, because the basal parts of the parameres are partly inserted into the phallobase, reaching to basal 4/10 of it, on the first view the parameres seem to be distinctly shorter than phallobase, forming ca 1/3 of the length of phallobase and parameres combined. Parameres connedted dorsally in the basal 3/5, apically with poorly sclerotized blunty pointed top, on the lateral margins in the apical part with numerous setae. Sternite 9 rounded apically, bearing some setae on its apical part.

VARIABILITY: Because of rather lower number of specimens examined, the variability of this species cannot be discussed in detail here. Despite of that, material used for the description shows rather high variability in the coloration of elytra and in the shape and punctation of the preepisternal elevation of the mesothorax. The apical pale spot on elytra is rather vaguely limited in some specimens, then elytra seem to be continuously palered apicad. Last elytral interval can be fully pale or at least slightly palered in basal part in some specimens. Elytral intervals bear usually very dense and distinct punctation basally, however, this can be slightly scarcer than on pronotum in some specimens. The shape of the preepisternal elevation of the mesothorax slightly differs from that described above in some specimens, bearing slightly convex sides instead of slightly concave in most specimens.Punctation of the elevation is in not such strong and dense as in holotype most specimens, usually all punctures are distinctly divided from each other.

ETHYMOLOGY: The word ''kykrion'' is a distorted form of the generic name of *Cercyon*, used for this genus by my friend Matúš Soták (Sliepkovce, Slovak Republic).

BIONOMY: The data on the locality labels of some specimens collected during the Hugh Scott Expedition indicate that this species is living in the streams. However, only two specimens were collected in that habitat, so it is not possible accept this habitat as typical for this species. It is not impossible that both specimens came from drift plants deposited on the banks of these streams. It is more probable that the species is living in decaying plants laying on the banks of the mountain streams, however other data are needed to confirm this possibility.

DISTRIBUTION: All examined specimens were collected in a relative small area in the mountains in SW Ethiopia. The occurence in other parts of the Ethiopian Plateau is rather possible. All specimens were collected at rather high altitudes.

Cercyon marshalli KNISCH, 1924
Figs. 14-16, 30, 37, Map 3

Cercyon Marshalli KNISCH, 1924: 18
Cercyon marshalli: HANSEN (1999, partim.); not HEBAUER (1997)!!

TYPE MATERIAL: Lectotype (here designated): Coll. R. I. Sc. N. B. / Mozambique (bigger blue label with sticked smaller label with data as follows) // Xinavane / Nov. 1920, P. E. A. / C. B. Hardenberg (partly handwritten) // Coll. A Knisch / cotypus (red printed label) // Knisch det. 1922 / Cercyon s.str. / marshalli m; 1 male (IRSN).

Paralectotypes (here designated): same label data as lectotype, only identification label as follows: Knisch det. 1922 / Marshalli m. 1 female (IRSN); Potuguese E. Africa // Pres. by / Imp. Bur. Ent. / Brit. Mus. / 1922 – 433 // Xinavane / Nov. 1920, P. E. A. / C. B. Hardenberg (partly handwritten), 3 spec. (BMNH); Type (round printed label with red margin) // Potuguese E. Africa // Pres. by / Imp. Bur. Ent. / Brit. Mus. / 1922 – 433 // Xinavane / Nov. 1920, P. E. A. / C. B. Hardenberg (partl handwritten) // Knisch det. 1922 / Cercyon / Marshalli m. (partly handwritten), 1 spec. (BMNH); Paratype (round printed label with yellow margins) // Potuguese E. Africa // Pres. by / Imp. Bur. Ent. / Brit. Mus. / 1922 – 433 // Xinavane / Nov. 1920, P. E. A. / C. B. Hardenberg (partly handwritten) // C. marshalli Kn. (handwritten), 1 spec. (BMNH); Potuguese E. Africa // Pres. by / Imp. Bur. Ent. / Brit. Mus. / 1922 – 433 // Xinavane / Nov. 1920, P. E. A. / C. B. Hardenberg (partly handwritten) // Standing as marshalli in BM Coll., 1 spec. (BMNH). All specimens bear this label with (para)lectotype designation: (PARA)-LECTOTYPE / Cercyon marshalli / Knisch, 1924 / des. M. Fikáček 2004.

In the original description only these data about type specimens are mentioned: ''Patria: Portug. Ostafrika, Xinavane, November 1920 (C. B. Hardenberg leg.). Zwölf übereinstimmende Exemplare.''. There is no mention about the holotype designation and I do not know about any mention of the lectotype designation in the literature as well. From BMNH I have obtained 6 specimens standing as *C. marshalli* in the collection, one of them labeled as ''Type'' and the other as ''Paratype'' by the round labels used in BMNH. Dr. Christine Taylor informed me that these labels were sometimes pinned to the type specimens without taking respect to their real type status. Taking all these informations into consideration, I suppose the type and paratype designation indicated by labels in BMNH as invalid. That is why lectotype and paralectotypes are designated here.

OTHER MATERIAL EXAMINED (92 spec.): MOZAMBIQUE: Xinayane [= Xinavane], XI. 1920, P. E. A., lgt. C. B. Hardenberg, 1 male, 1 female (lectotype and paralectotype) (IRSN); Portuguese E. Africa, Xinavane, xi.1920, P. E. A., C. B. Hardenberg lgt., 6 spec. (paralectotypes)(BMNH); REPUBLIC OF SOUTH AFRICA: Kwazulu Natal NEE, S of EMANGUSI, 5. xii. 2002, lgt. M. Snížek, 1 female (MFOC); Maputoland, SW of EMANGUSI, 29. i. 2003, V. Křivan lgt., 1 male, 5 females (MFOC); Maputoland, SW of MBAZAWA [= Mbazawana], Mkuze NE, 1. ii. 2003, V. Křivan lgt., 1 male (MFOC); R. S. Africa, 33°59.0'S/22°40.6'E, Cape Prov., Wilderness NP, Lang-vlei, Malachite bird hide, Juncus+bush litter+Phragmites sievings, 14.xi.1997, leg. M. Uhlig, 5 spec. (HUMN); same label data, 28.xii.2002, 3 spec. (HUMN); R. S. Africa, 33°59.0'S / 22°40.6', Cape Province, Wildemess NP, Lang-viei, Malachite bird hide, Juncus krausi + bush litter, sievings, 30. xi. 1996, lgt. B. + M. Uhlig, 59 spec. (HUMN); R. S. A. Natal, Sodwana Bay Nat. P. 20.xii.1992, lgt. F. Koch, 9 spec. (HUMN).

DIFFERENTIAL DIAGNOSIS: Pale apical spot on elytra reaching to the elytral base on last three intervals; apical spot extended more basad on intervals 2, 4 and 6 than on adjacent intervals; elytral intervals strongly convex; punctation of elytral base distinctly sparser than on pronotum; aedeagus with median lobe flat and rounded apically, parameres connected basally, with densely distributed minute spines in apical part; anterior margin of male sternite 9 convex apically.

By the general habitus, *C. marshalli* is similar to *C. putricola*, it differs from this species by the pale apical spot on elytra extended more basad on intervals 2, 4 and 6 than on the adjacent intervals and by the morphology of the male genitalia. By the morphology of male genitalia it is most simlar to *C. circumcinctus*, but is distinguishable from this species by the densely distributed spines on the apical parts of the parameres and by indistinct corona on the median lobe, as well as by the coloration of elytra (in *C. marshalli* the pale elytral spot reachs elytral base on last three intervals).

REDESCRIPTION: Body moderately convex. Length: 2.6 – 3.0 mm, width: 1.5 – 1.8 mm.

Coloration: General coloration of dorsal side dark brown; head with minute paler spots in front of eyes; pronotum with lateral margins rather widely but indistinctly paler. Elytra (Fig. 30) with pale apical spot reaching apical 1/3-1/2 on intervals 2, 4 and 6 to 7, apical 1/6-1/4 on intervals 1, 3 and 5, apical ¼ on interval 6 and elytral base on intervals 8 to 10. Sutural interval dark. Epipleura pale. Ventral side dark, reddish brown, median part of preepisternal elevation of mesothorax slightly paler. Femora of the same color as ventral side, tibiae and tarsi paler. Mouthparts and basal antennomeres pale, yellowish, antennal club somewhat darker, brownish.

Head with moderately strong and not very dense punctation, punctures distinctly impressed. Interstices shining, without microsculpture. Clypeus distinctly rimmed anteriorly, anterior margin straightly cut off. Mentum slightly wider than long, with anterior margin slightly bisinuate and narrowly rimmed, its surface slightly rugose.

Prothorax: Pronotum transverse, arcuately narrowed anteriad. Punctation similar as on head, punctures becoming smaller and scarcer laterad. Interstices shining, without microsculpture. Distinct rim on lateral margins reaching posterolateral corners. Prosternum with median longitudinal carina, posteriorly without distinct notch. Antennal grooves distinct, well developed, trapezoid in shape.

Mesothorax: Scutellum longer than wide, flat, without microsculpture, with rather densely situated punctures smaller than on pronotum. Elytron with 10 punctural series (including sutural series), series 1 to 5, 7 and 10 reaching almost elytral base, series 6 and 8-9 arising slightly more distally. Series 10 reaching apical 2/3 of elytral length. Punctures of elytral series distinctly larger than on elytral intervals. Interval punctures very small, almost indistinct even on elytral base. Series distinctly impressed even basally, intervals distinctly convex through their whole length. Preepisternal elevation

(Fig. 37) elongated (index length/width = 2.75 – 3.3, n = 7), gradually narrowed from half of its length to both tips; anterior tip slightly prolonged and sharp, posterior tip blunt. Surface flat, without microsculpture, bearing large, not very densely distributed punctures.

Metaventrite medially with pentagonal elevated area, punctation slightly denser than on preepisternal elevation of mesothorax, punctures c. of the same size as on the elevation. Interstices flat, without microsculpture. Lateral parts of metaventrite with granulate submicroscopical sculpture. Femoral lines absent, anterolateral ridges present.

Legs: Meso- and metafemora with setiferous punctures, interstices flat, without microsculpture.

Male genitalia (Figs 14-16): Parameres about 2 times longer than phallobase, in basal third connected together, apically with very densely distributed minute spines. Median lobe wide and flat, with rounded apical part, without distinct corona. Abdominal sternite 9 tongue-shaped, with sparse short setae on its apical edge.

VARIABILITY: Most examined specimens are rather uniform in coloration and structures of elytra, with pale coloration on elytral intervals 2 to 6 extending more or less basad in some specimens. In the material borrowed from HUMN a few unusually pale specimens have been found (3 males and 3 females from locality R.S.A, Wilderness NP collected at 30.xi.1996 – see material examined). Coloration of these specimens is as follows: Head uniformly dark brown; whole pronotum distinctly paler than head, reddish brown, laterally only feebly paler than on disc; elytra with intervals 3, 5 and 7 to 10 pale on their whole length, remaining intervals can be dark, palered or totally pale (then whole elytra pale, only with slightly darker narrow stripes on elytral series). Epipleura pale. Coloration of mouthparts and underside as in typically colored specimens, only preepisternal elevation of mesothorax and median elevated area of metaventrite paler, pale brown. Other characters (the shape of the elytral intervals, the punctation of elytra, the shape of the preepisternal elevation and the morphology of the male genitalia) are completely identical with typically colored specimens.

BIONOMY: According to the label data of the rich material borrowed from HUMN, most specimens were collected in the litter of the litoral vegetation (*Juncus* spp. and *Phragmites* spp.). This indicates that this species is probably hygropetric, living in wet plant remains on the banks of stagnant waters. Some specimens were collected at light.

DISTRIBUTION: This species was so far found only in the southernmost parts of Africa, here it is recorded from Mozambique and the Republic of South Africa. It seems not to reach the more northern areas.

Cercyon martialis HEBAUER, 1997

Cercyon martialis HEBAUER, 1997: 3
Cercyon martialis HEBAUER: HANSEN (1999), HEBAUER (2002)

TYPE MATERIAL:
Cercyon martialis: HOLOTYPE: R. S. Africa 17. xi. 1993 / 34°27'S 20°24'E leg Uhlig / Cape Province / De Hoop Nat. Res. / lake shore, reed sievings (blue printed label) // HOLOTYPUS / Cercyon / martialis sp.n. / des. HEBAUER, male (HUMN). PARATYPES: R. S. Africa 15. xi. 1993 / 34°04'S 20°27'E / Cape Province: / Bontebok NP; river bank / sievings, leg. M. Uhlig (blue printed label) // PARATYPUS / Cercyon / martialis sp.n. / des. HEBAUER (red printed label), 2 males (HUMN).

OTHER MATERIAL EXAMINED (57 spec.): REPUBLIC OF SOUTH AFRICA: R. S. Africa, 33°59.0'S / 22°40.6', Cape Province, Wildemess NP, Lang-viei, Malachite bird hide, Juncus krausi + nush litter, sievings, 30. xi. 1996, lgt. B. + M. Uhlig, 22 spec. (HUMN, MFOC); R. S. Africa, 17. xi. 1993, 34°27'S 20°24'E Cape Province, De Hoop Nat. Res., lake shore, reed sievings, 17.xi.1993 Uhlig lgt., 3 spec. (HUMN); R. S. Africa, 11.xi.1997, 34°22.8'S / 20°19.5'E, Cape Province, Potteberg River banks, Phragmites sievings, M. Uhlig lgt., 1 spec. (HUMN); R.S. Africa, 10.xi.1997, 34°27.2'S / 20°24.2'E, Cape Prov., De Hoop NP, Carex sievings, M. Uhlig lgt., 1 spec. (HUMN); R.S.Africa, 14.xi.1997, 34°59.0'S / 22°40.6'E, Cape Prov., Wilderness NP, Lang-Vlei, Malachite Bird Hide, Juncus+bush litter+-Phragmites sievings, M. Uhlig lgt., 12 spec. (HUMN); R.S.Africa, 4.iv.1998, 33°08.3'S / 18°05.1'E, Western Cape, West Coast NP, Langebaan Lagoon, stagnant water pool edge, M.+B. Uhlig lgt, 1 spec. (HUMN); R.S.Africa, 3.xii.1996, 34°27.2'S / 20°24.2'E, Cape Prov., De Hoop NP, DE Hoop Vlei, Phragmites sievings, M.+B. Uhlig lgt., 14 spec. (HUMN)

DIFFERENTIAL DIAGNOSIS: Pale apical spot on elytra not reaching elytral base, U-shaped; elytral intervals distinctly convex at least on lateral and apical parts of elytra; elytral series distinctly impressed; punctation of elytral base distinctly sparser than on pronotum; parameres completely divided, longer than phallobase.

By coloration *C. martialis* is similar to *C. dieganus*, from this species it is easily distinguishable by the convex elytral intervals, by the interval punctation on elytra sparser than on pronotum and by the shape of preepisternal elevation of the mesothorax. By convex elytral intervals and impressed series it is similar to *C. putricola* and *C. marshalli*, from these distinguished by coloration (both latter species have at least last elytral interval pale through the whole length).

REDESCRIPTION: Body moderately convex. Length: 2.5 mm; width: 1.5 mm.

Coloration: Black to blackish brown, head with minute

spots in front of eyes. Pronotum with vaguely limited pale lateral margins. Elytra (Fig. 31) with sharply limited apical pale spot reaching apical 1/5 on interval 2, apical ¼ on interval 3, apical 1/6 on intervals 4 to 6, apical 1/3 on intervals 7 to 9 and apical 1/3 to ½ on interval 10. Sutural interval black. Epipleura pale. Ventral side dark, black to blackish brown. Mouthparts and basal antennomeres pale, yellowish brown; apical palpomeres of maxillary palpi and antenal club usualy slightly darkened. Legs with femora brown to dark brown, tibiae and tarsi paler.

Head with moderately strong and dense punctation, interstices shiny, without microsculpture. Anterior margin of clypeus narrowly rimmed and weekly emarginate. Mentum slightly wider than long, anterior margin concave, narrowly rimmed, its surface flat and shiny.

Prothorax: Pronotum transverse, arcuately narrowed anteriad, punctation similar as on head. Interstices shiny, without microsculpture. Lateral margins and posterolateral corners of pronotum narrowly rimmed. Prosternum with median longitudinal carina. with very small shallow notch posteriorly. Antennal grooves distinct, well developed, trapezoid in shape.

Mesothorax: Scutellar shield longer than wide, with rather dense punctation composed of punctures smaller than on pronotum. Elytron with 10 punctural series (including sutural series), series 1 to 5 and 9 to 10 reaching almost elytral base, series 7 and 8 arising slightly more apically, serie 6 reaching to basal ¼ of elytral lenght. Series 10 reaching apically c. apical 1/3 (ending on level of beginning of pale apical spot). Serial punctures larger than on intervals. Interval punctation much weeker than on pronotum (even on the elytral base), consisted of minute punctures becoming rasp-like apicad and laterad. Series nearly unimpressed basally, quickly becoming impressed apicad and laterad. Intervals flat basally, distinctly convex apically and laterally. Preepisternal elevation (Fig. 38) rather wide (length/width = 1.73, n=1), rhomboid in shape, with weekly concave sides; punctation very strong, punctures large, densely situated, interstices without microsculpture.

Metathorax: Metaventrite medially with elevated pentagonal area, puncatation slightly looser than on preepisternal elevation of mesothorax, with rounded or slightly rasp-like punctures becoming smaller both laterad and posteriad. Intersices shiny, without microsculpture. Lateral parts of metaventrite with submicroscopical granulose sculpture. Femoral lines missing, anterolateral ridges present.

Legs: Meso- and metafemora nearly impunctated, punctures very small and weekly impressed. Intervals without microsculpture.

Male genitalia (Figs 17-19): Aedeagus with phallobase shorter than parameres, taking 2/5 of length of phallobase and parameres combined. Parameres long and relatively narrow, separated from each other, widened and membranous apically. Median lobe slightly shorter than phallobase and parameres combined, tubular, c. of the same width through whole length, apically with cleft-like corona, basally without strong projections. Sternite 9 tongue-like.

VARIABILITY: All specimens examined come from a few closely standing localities and do not show any important variability in elytral coloration and elytral and pronotal punctation. However, similarly as in other species, some variability in the size of the apical elytral spot and in the pronotal punctation can be expected.

BIONOMY: According to the label data, all specimens were collected by sievings in wet *Phragmites* sp., *Juncus* sp. and *Carex* sp. remains and bush litter laying on the banks of stagnant waters or rivers. Thus, bionomy of this species seems to be similar to the other species of *C. dieganus* group.

DISTRIBUTION: Occurence of *C. martialis* is restricted to the southernmost parts of Africa, all examined specimens were collected in southwestern part of the Republic of South Africa. HEBAUER (1999) mentions that he examined the specimens from Botswana and Zambia. In both cases the data concern more probably *C. putricola* (compare the aedeagus drawing published by HEBAUER (1999) with that published in this paper for *C. putricola*!) which surely occurs in these countries.

Cercyon putricola WOLLASTON, 1867

Cercyon putricola WOLLASTON, 1867: 49
Cercyon flavocinctus RÉGIMBART, 1903: 49
Cercyon (s.str.) *aethiops* KNISCH, 1922: 93
Cercyon aethiops KNISCH: ORCHYMONT (1937)
Cercyon putricola WOLLASTON: ORCHYMONT (1942, 1948), BALFOUR-BROWNE (1950), HANSEN (1999, partim.)
Cercyon marshalli KNISCH: HANSEN (1999, partim.), HEBAUER (1997), HEBAUER (2003, partim.), not auctt.

TYPE MATERIAL:
Cercyon putricola: LECTOTYPE (here designated): Type (round printed label with red margin) // putricola Woll. (handwritten) // Cape Verde Is. / S. Iago / T. V. Wollaston / B. M. 1867-82 (in computer print), male (BMNH); PARALECTOTYPES (here designated): Cape Verde Is. / S. Iago / T. V. Wollaston / B. M. 1867-82 (in computer print), 1 male, 1 female (BMNH). All specimens bearing the label: (PARA)LECTOTYPE / Cercyon putricola / Wollaston, 1867 / des. M. Fikáček 2004.

In the original description there is mentioned only the locality S. Iago (and the specification "in the Ribeira dos Orgaos and at Sta. Catharina"), without specification of number of type specimens. I have obtained three specimens from BMNH, all pinned on short pin and glued on the label with black right bottom edge, one of them labeled as type by round type label used in BMNH. No holotype and paratypes have been designated in the original description, thus the designation indicated by BMNH label have to be consider as invalid. That is

why I have designated the lectotype and paralectotypes from the specimens at my disposal, leaving the specimens labeled erroneously as type to be lectotype.

Cercyon flavocinctus: HOLOTYPE: Tananarive / (Sikora) // Museo Paris collectio Maurice Régimbart 1908 // flavocinctus Reg., 1 male (MNHN).

In Régimbart's collection (MNHN) there are 7 specimens identified as *C. flavocinctus* by Régimbart (H. Perrin, pers.comm.), without any specimen labeled as type. Except that mentioned above, they have these locality data: ''Cap Lopez (handwritten) // Museo Paris collectio Maurice Régimbart 1908'', 1 spec.; ''Is. Capo-Verde / S Nicolau 0- 300m / X – XII 1898 L. Fea // Museo Civ. Genova // Museo Paris collectio Maurice Régimbart 1908'', 5 spec., one specimens labelled as ''flavocinctus Rég.''. In the original description type locality: ''Tananarive (Sikora)'' is given and it is mentioned there that only one specimen was at disposal from this locality. That is why I suppose the specimen comming from this locality to be a holotype (as is given on my identification label under this specimen).

Cercyon aethiops: HOLOTYPE: ♂ // Coll. R. I. Sc. N. B. // Nigeria (bigger blue label with sticked smalled label with data as follows) // Lagos / L. Müller S // Kniž det. / Cercyon aethiops Kn. // Coll. A. Knisch / TYPUS // A. d'Orchymont det. / Cercyon putricola Woll.; 1 male (IRSN).

OTHER MATERIAL EXAMINED (405 spec.): ANGOLA: Angola (A24), 3 mls. N. Santa Comba [= Waku Kungo], 7-8.iii.1972, Southern Africa Exp., B.M. 1972-1, at light, 1 female (BMNH). BOSTWANA: Botswana, Maun, 2.-15.i.1994, Island Safari Lodge, leg. Snížek, 2 spec. (NHMW); Botswana, 11. iii. 1993, 18°33'55''S / 24°03'53''E, Chobe NP, Savuti-Camp, lux, leg. M. Uhlig, 1 spec. (HUMN); Botswana 12.-14.iii.1993, 17°48'32''S / 25°08'39''E, Kasane, Chobe Safari Lodge, M. Uhlig lgt., 51 spec. (FHGF, HUMN); Botswana 8. – 9.iii. 1993, 19°21'01''S / 23°38'46''E, 5 km SW San-ta-Wani Safari Lodge, lux, leg. M. Uhlig, 6 spec. (HUMN); Botswana, 3.iii.1993, 19°27'S / 23°38'E, Shakawe, Okawango-banks, sievings, Papyrus+flood refuse, M. Uhlig lgt., 2 spec. (HUMN); Botswana, 10.iii.1993, 19°14'22''S / 23°21'24''E, Okavango-delta, Moremi Wildlife Reserve, Third Bird Campsite, lux, M. Uhlig lgt., 2 spec. (HUMN); Botswana (Afr.), Chobe Riv. [Kwando Riv.], 8 km W Kasane, 27-29.xii.1987, Robert D. Ward lgt, 1 spec. (FHGF). CAPE VERDE IS.: Is. Capo Verde, S. Nicolau [= Ilha de São Nicolau], 0-300m, x.-xii. 1898, Fea, 5 spec. (MNHN); Cape Verde Is., S. Iago [= Santiago], 3 spec. (lectotype and paralectotypes) (BMNH). ETHIOPIA: Abyssinia, West Marsh., Lake Zwai [= lake Ziway Hayk'], 5500 ft, 2-3.xi. 1926, lgt. Omer-Cooper, 2 males, 2 females (IRSN); Abyssinia: Wouramboulchi, 9000 ft., 2.–7.x. 1926, lgt. Omer-Cooper, 1 male (IRSN); Abyssinia: Serpent Lake, Wouramboulchi, circa 9.000 ft, 5.x.1926, J. Omer-Cooper lgt., 1 spec. (BMNH); Abyssinia: Suc-Suci, Lake Zwai, 5.500 ft, 12.xi.1926, J. Omer-Cooper lgt., 1 female (BMNH). GABON: Cap Lopez, 1 female (MNHN). KENYA: Kenya, Naivascha, Crater Lake, 26.10.95, leg. Wewalka (K4), 2 spec. (NHMW); Afr. Orient. Angl. (Rift-valley), Naivasha, 1900m, St. 14, xii.1911, lgt. Alluaud and Jeannel, 1 female (IRSN). MADAGASCAR: Tananarive (Sikora), 1 male (typus of *C. flavocinctus*) (MNHN); Madagascar, Tananarive [= Antananarive], 1 female (IRSN). MOZAMBIQUE: Xinavane, XI. 1920, P. E. A., lgt. C. R. Hardenberg, 1 M (IRSN), 1 male, 1 spec. (BMNH); Zambéze, Nova Choupanga, prés Chemba, I. 1929, lgt. P.Lesne, 1 male, 1 female (IRSN); Mocambique: Changalane, Maputo, xi.1950, M. C. & G. V. Ferrevia lgt., 1 spec. (BMNH). NAMIBIA: Namibia – Exp. ZMB 1992, East Caprivi: Katima Mulilo, lux, 17°29'S 24°17'E, 3. – 8. iii. 1992, M. Uhlig leg., 3 spec. (HUMN); Namibia – Exp. ZMB 1992, East Caprivi, Mudumu NP, Makatwa, 18°10'S / 23°26'E, lux, 8. – 13. iii. 1992, M. Uhlig leg., 1 spec. (HUMN); Namibia – Exp. ZMB 1992, Kavango, Mahango Game Reserve 18°17'S 21°43'E, lux, 2. iii. 1992, M. Uhlig leg., 1 spec. (HUMN); Namibia – Exp. ZMB 1992, East Caprivi, Mudumu NP, Buffalo Trails Camp, lux, ca. 18°10'S 23°26'E, 12. iii. 1992, M. Uhlig leg. 2 spec. (HUMN); Namibia – Exp. ZMB 1992, E Caprivi, 30 km SE Katima Mulilo 17°31'S 24°25'E, Zambezi – Altwasserarm [old branch of Zambezi riv.], lux, 6. iii. 1992, M. Uhlig lgt., 10 spec. (HUMN); Namibia – Exp. ZMB 1992, E Caprivi, 3 km E Katima Mulilo, 17°29'S 24°18'E, Hippo-Camp, in swimming pool, 6.iii. 1992, M. Uhlig lgt., 2 spec. (HUMN); Namibia – Exp. ZMB 1992, East Caprivi, Katima Mulilo 17°29'S 24°17'E, Gesiebe, Gesschwemme, Tümpelufer [sieving, washing-out, edge of the pond], 7. iii. 1992. M. Uhlig lgt. 22 spec. (HUMN). NIGERIA: Lagos, lgt. Cl. Müller, 1 male (type of *C. aethiops*) (IRSN). REPUBLIC OF SOUTH AFRICA: Maputoland, SW of EMANGUSI, 29. i. 2003, V. Křivan lgt., 6M 4F (MFOC); Maputoland, SW of MBAZAWA, Mkuze NE, 1. ii. 2003, V. Křivan lgt., 1 male, 1 female (MFOC); Südafrika, KwaZulu-Natal: St. Lucia Park, Charter's Creek, 28°12'S 32°25'E, F. Koch leg., 1 female (HUMN); R.S.A. Natal, Sodwana Bay Nat. P., 20.xii.1992, lgt. F. Koch, 29 exs. (FHGF, HUMN). TANZANIA: Morogoro, light trap, 20.v.1970, T. Pócs lgt., 1 female (TMBC); Tanganyika: Usa River, 3900 feet, Coll. Dr. J. Szunyoghy, 1 male, 2 females (TMBC); Tanzania, Uluguru Mts., iv.1991, Werner lgt., 3 exs. (FHGF). UGANDA: Ankole, Nr. L. Nakivali, 4.300 ft, 11.ix.1925, Capt. C. R. S. Pitman lgt., 1 spec. (BMNH). ZAIRE: Congo Belge, Lac Edouard: Vitshumbi, U.V., 31.iii.1953 (3037), 21 spec. (IRSN); same locality data, 25.iii.1953 (3033), 24 spec. (IRSN); same locality data, 23.x.1953 (3057), 2 spec. (IRSN); same locality data, 21.i.1954 (3096), 1 spec. (IRSN); same locality data, 14.vii.1953 (3052), 2 exs. (IRSN); same locality data, 22.i.1954 (3098), 1 spec. (IRSN); Congo Belge, Lac Albert: Mahagi-Port, 15.ii.1954 (4085), lgt. J. Verbeke – KEA, 4 exs. (IRSN); same locality data, 24.x.1953 (3059), 12 exs. (IRSN); same locality data, 7.v.1953 (3039), 5 exs. (IRSN); Congo Belge, Lac Albert: Kasenyi, U.V., 13.xii.1953 (4055), lgt. J. Verbeke – KEA, 12 exs. (IRSN); same locality

data, 29.vi.1953 (4032), 14 exs. (IRSN); same locality data, 25.vi.1953 (4020), 10 exs. (IRSN); same locality data, 23.vi.1953 (4015), 5 exs. (IRSN); same locality data, 3.vii.1953 (4039d), 19 exs. (IRSN); same locality data, 21.vi.1953 (4012), 8 spec. (IRSN); same locality data, 2.vii.1953 (4038b), 1 spec. (IRSN); same locality data, 30.vi.1953 (4035), 4 exs. (IRSN); same locality data, 22.vi.1953 (4014), 13 exs. (IRSN); same locality data, 11.xii.1953 (4049), 16 spec. (IRSN); same locality data, 26.vi.1953 (4025), 30 exs. (IRSN); same locality data, 28.vi.1953 (4029), 3 spec. (IRSN); same locality data, 15.xii.1953 (4058), 4 exs. (IRSN); Congo Belge, Lac Albert: Kasenyi, mare I, 29. vi.1953 (4030), lgt. J. Verbeke – KEA, 2 exs. (IRSN); Congo Belge: Ituri Sabe (Lac Albert), U.V., 16.xii.1953 (4060), lgt. J. Verbeke – KEA, 9 exs. (IRSN); Congo Belge, Lac Albert: Bezaha, U.V., 19.xii.1953 (4070), lgt.J. Verbeke – KEA, 2 exs. (IRSN). ZAMBIA: Zambia, 23.iii. 1993, 13°06'03''S / 31°47'32''E, South Luangwa NP, Mtuwe Crocodile Farm, 450m, lux, leg. M. Uhlig, 4 spec. (HUMN); Zambia 17.iii.1993, 15°49'07''S/28°12'03''E, Rimo-Marine Motel, Kafue River banks, sievings leaf litter+reed+-grass, lgt. M. Uhlig, 1 spec. (HUMN); Zambia 30.iii.1993, 15°14'37''S / 23°18'31''E, 8 km E Mongu, lux, J. Deckert lgt., 1 spec. (HUMN). ZIMBABWE: S. Rhodesia: Wankie [=Hwange] Nat. Park, Pan 0.8, M. V. light trap, xi.1961, J. Weir lgt., 1 spec. (BMNH).WITHOUT PRECISE LOCALITY: Thadan, 22.v.1957, J. L. Gregory lgt., 1 spec. (BMNH).

DIFFERENTIAL DIAGNOSIS: Usually colored specimens can be distinguished on the basis of the combination of these characters: elytral interstices distintly convex; elytral series impressed even in basal part of elytra; preepisternal elevation of mesothorax rather narrow; pale apical spot of elytra reaching elytral base on last one to four intervals, not extending farther than to apical fifth on elytral intervals 2 and 4; border of apical elytral spot at least slightly lobate; median lobe of aedeagus stalk-like with the widened apex; parameres connected basally, with tongs-like projection apically.

By general habitus, *C. putricola* is most similar to *C. marshalli*, in which the pale elytral spot extends more basad on intervals 2, 4 and 6 than on the adjacent intervals in usually colored specimens. Specimens with variable coloration (see under Variability) are easily distinguishable by the morphology of male genitalia.

REDESCRIPTION: Body moderately convex. Length: 2.2 – 3.0 mm; width: 1.2 – 1.8 mm

Coloration: Dark brown to blackish, head with small paler spots in front of eyes, pronotum with more or less distinctly limited pale spots laterally. Elytra (Fig. 32) with pale apical distinctly limited spot, reaching apical 1/6 on intervals 1, 3 and 5, apical 1/5 on intervals 2 to 4, apical ¼ on intervals 6 to 8, half of elytral length on interval 9 and the elytral base on interval 10. Sutural interval dark. Punctural series darkened in their surrounding in some specimens, border of pale apical spot on elytra then lobate. Epipleura pale. Ventral side brownish black to black, femora dark brown, tibiae and tarsi paler. Mouthparts and basal antennomeres pale, yellowish; antennal club darker, brownish.

Head with moderately strong and not very dense punctation, punctures distinctly impressed. Interstices shining, without microsculpture. Clypeus narrowly rimmed on anterior margin, straightly cut off. Mentum slightly wider than long, with anterior margin bisinuate, narrowly rimmed; its surface slightly transversely rugose.

Prothorax: Pronotum transverse, arcuately narrowed anteriad. Punctation similar as on head, punctures becoming slightly smaller and scarcerly distributed laterad. Interstices shining, without microsculpture. Distinct rim on lateral margins reaching antero- and posterolateral corners. Prosternum with median longitudinal carina, posteriorly with distinct notch. Antennal grooves distinct, well developed, trapezoid in shape.

Mesothorax: Scutellar shield triangular, longer than wide, bearing a few distinctly impressed punctures. Elytron with 10 punctural series (including sutural series); series 1-5, 7 and 10 arising almost at elytral base, series 6, 8 and 9 arising slightly more distally. Serie 10 reaching 3/5 of elytral length apically. Serial punctures distinctly larger than interval punctation; interval punctation consisted of very small and almost indistinct scarcely distributed punctures (also on elytral base). Interstices shining, without microsculpture. All series moderately impressed through whole elytral length, intervals only weekly convex basally, gradually becoming more convex apicad. Preepisternal elevation (Fig. 39) drop-shaped to spindle-shaped (length/width = 2.0-3.0, n = 8); surface shining, without microsculpture, with distinct punctation composed of rather large and not very densely distributed punctures.

Metathorax: Metaventrite medially with elevated pentagonal area with punctures as large as and not as densely distributed as on preepisternal elevation of mesothorax, becoming smaller both laterad and posteriad. Lateral parts of metaventrite with granulose submicroscopical sculpture. Femoral lines missing, anterolateral ridges present.

Legs: Meso- and metafemora with setiferous punctures; interstices without microsculpture.

Male genitalia (Figs 20-22): Median lobe stick-like, apically widened into picked ''head'', extending into two lateral projection basally, with strong carina in the basal part dorsally. Parameres very long, about 3 times longer than phallobase, connected together dorsaly and ventraly in basal 2/3 of their length; apical parts tongs-like. Sternite 9 tongue-shaped.

VARIABILITY: *C. putricola* shows rather wide variability in the size and the shape of the pale apical spot on elytra, the form of the elytral intervals and the shape of the preepisternal elevation of mesothorax. Specimens with extremely large apical spot on elytra have the elytral coloration as follows: pale apical spot on elytron reaching apical 1/6 on intervals 1 and 3, apical 1/5 on interval 2,

apical ¼ on intervals 4 and 5, apical 1/3 on interval 6, apical 2/3 (or to the elytral base) on interval 7, and the base of elytron on the intervals 8, 9 and 10. Thus, lateral pale stripes are developed on the last three to four intervals of elytra. In many specimens, the punctural series are little bit darkened even in the apical part of elytra, apical spot is then visible as a group of longitudinal stripes, each laying on an elytral interval. In some specimens the general coloration is pale, without the sharply limited apical spot on elytra and the pale lateral margins of the pronotum, these specimens are colored as follows: head dark, brown to dark brown; pronotum and elytra yellowish red or reddish; base of elytra and surrounding of elytral series in median or apical parts of elytral length slightly darkened, this darkening is more extent and forms unsharply limited darker spot in subapical area of elytron in some specimens. Elytral intervals can be rather flat in some specimens, resembling the situation in *C. dieganus*. However, elytral series are always more or less impressed basally. Usually, the intervals are slightly convex at least laterally, but in some smaller specimens they can be rather highly convex. The shape of the preepisternal elevation of the mesothorax is usually narrowly drop-like, but in some specimens rather widely spindle-like. The identification has to be confirmed by examination of male genitalia in these variable specimens. The male genitalia are completely constant in shape and size in all examined specimens, without any trace of variability connected with that of external morphology.

BIONOMY: Most of specimens examined were collected on light or sifted from the litter of *Phragmites* spp. and *Papyrus* spp. on the banks of both stagnant waters and rivers. This indicates that bionomy of this species is similar to other species belonging to the *C. dieganus* group and *C. putricola* inhabits hygropetric habitats and lives amont plant remains on the banks of various water bodies.

DISTRIBUTION: *C. putricola* occurs in the whole subsaharian Africa, but the northern border of distribution lays disctincly more southern than in *C. dieganus*. In this paper it is recorded from Angola, Botswana, Cape Verde Isl., Ethiopia, Gabon, Kenya, Madagascar, Mozambique, Namibia, Nigeria, Republic of South Africa, Tanzania, Uganda, Zaire, Zambia and Zimbabwe. All records from the Palearctic Region mentioning this species (HEBAUER, 1997 and 2003; HANSEN, 1999; INCEKARA et. al., 2003) refer to *C. circumcinctus* (see Distribution under this species).

Discussion

The *Cercyon dieganus* species group seems to be rather well defined within the genus *Cercyon*. All species included into this group share some morphological as well as bionomical characters distinguishing them from other members of the genus (see Diffential diagnosis of the species belonging to *C. dieganus* species group above). On the other hand, the subgeneric attribution of the group is rather doubtful. Together with the *C. lutosus* species group, HEBAUER (2003) placed these species into the subgenus *Arcocercyon*. The following facts are in contradiction to a monophyly of this subgenus:

The designation of this subgenus is based on only one differential character, namely the presence of a distinctly shaped anterolateral ridge on the metaventrite.

The interpretation of this differential character is rather difficult. Even if the difference between the shape of the anterolateral ridge in the subgenera *Arcocercyon* and *Conocercyon* seem to be rather distinct according to the illustrations given by HEBAUER (2003), in some species of the genus *Cercyon* bearing the anterolateral ridges, the shape of these ridges is intermediate between these two states, rather than completely corresponding with one of them. On the other hand, in the species within the *C. dieganus* species group the shape of this ridge is rather constant and corresponds completely with Hebauer's illustrations.

Similar ridges as those found in the subgenera *Arcocercyon* and *Conocercyon* are also present in some species belonging to the nominotypical subgenus which were not included into these subgenera by HEBAUER (2003), e.g. in *C. depressus* STEPHENS, 1829 (Holoarctic and introduced in Australia and South America) and *C. abeillei* GUILLEBEAU, 1896 (Israel, Turkey). At least one species of the subgenus *Clinocercyon* also bears such anterolateral lines (however, the systematic position of the subgenus *Clinocercyon* seems to be chaotic and incorrect in many cases as well – FIKÁČEK, unpubl. data). The anterolateral ridge is either only weekly developed but distinct or very distinct in the above mentioned species. The shape of this ridge varies to a certain extent, being similar to those mentioned by HEBAUER (2003) for subgenera *Conocercyon* or *Arcocercyon* or being of rather different shape than in these two subgenera. The mentioned species do not seem to be closely related according to other morphological characters.

The presence of anterolateral ridges in the representatives of the genus *Cercyon* opens once more the question of the systematic position of the genera *Cercyon* and *Armostus*, because the presence of this ridge was supposed to be the most important character distinguishing both genera so far. Another character used for separation of these genera – the presence of a broad gap between the preepisternal elevation of the mesothorax and the metaventrite – is also present in both genera (in *Cercyon* e.g. in *C. tristis* (ILLIGER, 1801)).

The presence or absence of an anterolateral ridge on the metaventrite was thought to be of rather high taxonomic importance by HANSEN (1991, 1999), and the same author used it as one of the most important characters in his identification key to the genera of the tribe Megasternini (HANSEN 1991). Following this concept, HEBAUER (2003) based the description of the subgenera *Arcocercyon* and

Conocercyon of the genus *Cercyon* on this character. However, based on the doubtful findings mentioned above, the taxonomic importance of this character seems to be much less reliable at least in the genera closely alied to *Cercyon* and within *Cercyon*, than it was believed both by Hansen and Hebauer. The monophyly and the relationships of the subgenera as described by HEBAUER (2003) within the genus *Cercyon* seem to be thus questionable. At the same time, the generic limits of the genera *Cercyon* and *Armostus* seem to be unclear. This situation can be solved only by a detailed morphological study and phylogenetic analysis of higher number of species belonging to both genera. After such study, differential diagnoses of both genera will have to be adapted. For the time being, the position of the recent subgenera of *Cercyon*, as well as the position of all newly described subgenera or genera closely related to *Cercyon* or *Armostus* have to be considered as provisional and possibly in conflict with the phylogeny of the group.

Conclusions

In spite of distinctly unsolved taxonomical problems of the genus *Cercyon*, the *C. dieganus* group seems to be rather well defined within this genus, both morphologically and geographically. Most of the species are distributed in the subsaharian Africa, with the greatest diversity found in the southernmost parts of Africa – four of six treated species live there, including one endemic species. The remaining parts of subsaharian Africa are inhabitated by two widely distributed and rather common species, *C. putricola* and *C. dieganus*, only with the exception of the Great lakes in Zaire and mountains in SW Ethiopia, where other two species (*C. cludtsi* sp.nov. and *C. kykrion* sp.nov.) can be found. Two species reach the Palearctic region: *C. dieganus* occuring mainly in subsaharian Africa reaches the nothern African coast (Egypt) along the Nil river, while *C. circumcinctus* is a Palearctic species not reaching the African continent.

The relationships among the species of this group are not clear. Except *C. dieganus* and *C. martialis*, all species are characterized by their parameres connected at least in the basal third, two of these species (*C. circumcintus* and *C. marshalli*) have a very similar aedeagus despite they geographical distance (one lives in Europe and Near East, and the second only in south Africa). The morphology of the aedeagus of *C. kykrion* sp.nov. seems to be somewhat intermediate between the species with long and partly connected parameres and species with short and/or completely detached parameres. External characters (i.e. mainly the coloration and morphology of elytra) stand in contrast to the morphology of the male genitalia in some species, being often similar in species with completely different aedeagophores (e.g. *C. dieganus* and *C. cludtsi* sp.nov.).

The bionomy of all species seem to be identical – beetles are living in wet plant remains on the banks of various water bodies, only *C. kykrion* sp.nov. seems to inhabit decaying plants on the banks of mountain streams.

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