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NERIIDÆ OF THE BELGIAN CONGO (DIPTERA, ACALYPTRATÆ),

by Martin L. Aczél. (Tucumán, Argentina).

(Avec 1 planche hors texte)

Flies of this small Acalyptrate family were surprisingly well represented in the collection of the Institut royal des Sciences naturelles de Belgique, it contained 388 specimens of 7 *Chaetonerius* species, of which *C. collarti* is described here as new to science. The majority of these species was described or redescribed, and figured in other works of the author (*Neriidae,* Diptera, — in Parc Nat. de l'Upemba, I. Miss. F. G. de Witte, and *Neriidæ* in the Collection of the Musée royal du Congo Belge, — in Rev. Zool. Bot. Afr.), but a key to, and a general review of, the *Chaetonerius* species of the Belgian Congo, found in the material of the mentioned institutions, are given in the present paper.

The writer is indebted to M. A. Collart, Chief Entomologist at the Institut royal d'Histoire naturelle de Belgique, for the privilege of studying this interesting material.

Before the publications of the author's papers, from the African continent there were described but a single species of *Neriini (Paranerius perstriatus* Speiser, 1910), and 14 species of *Telostylini* all belonging to the genus *Chaetonerius* Hendel. The writer is adding three further *Chaetonerius* species to this sum, and redescribing four old species.

The exact status of *Paranerius perstriatus* is unknown. ENDERLEIN (1922, 153) accepted it as *Paranerius,* HENNIG (1937, 272) stated that it is a *Chaetonerius* species. In the Ethiopian region apparently a single genus, *Chaetonerius* HENDEL represents the family and its tribe *Telostylini.* This genus with its typical species *C. inermis* (SCHINER, 1868), and another two species, were originally described from the Oriental region. If we consider that the tribe *Telostylini* is represented by 3 well characterized genera (*Telostylus* BIGOT, *Chaetonerius* HENDEL, and *Teloneria* ACZÉL) in the Oriental region, and only by a series of *Chaetonerius* species in the Ethiopian region, we have to assume that this tribe was originated in its actual centre of geographical distribution, in the Oriental region, from where it penetrated into the Ethiopian region.

Since the tribe *Telostylini,* distributed only in the Oriental and Ethiopian regions, demonstrates more primitive, or at least less differentiated characters than the *Neriini,* the primary center of distribution of the family *Neriidæ* most probably lies in the Oriental region. It seems to be certain furthermore that the connection between the primary and secondary (Neotropical region) centers never did run through the Ethiopian region.

The existence of a *Paranerius* species in the Ethiopian region would not change these considerations since this genus is represented by one species in the Oriental, and by another species in the Australian region.

Tribus Telostylini

Genus Chaetonerius HENDEL

1903. *Chaetonerius* HENDEL, *Wien. Ent. Ztg.,* **22**: 205.

1922. *Chaetonerius* ENDERLEIN, *Arch. f. Naturg.,* **88** A 5: 144.

1937. *Chaetonerius* HENNIG, *Stettiner Ent. Ztg.,* **98**: 270-271.

Typical species : *Nerius inermis* SCHINER.

The comparative morphology of the 7 species examined by the author (*apicalis* (WALKER), *brachialis* ENDERLEIN, *collarti* n. sp., *ghesquièrei* ACZÉL, *latifemur* ENDERLEIN, *niger* CZERNY *and wittei* ACZÉL) is as follows :

The length of the body of the examined species (females without ovipositor) has been 5.2-10.9 mm. The size order of the examined species from the smallest to the largest is the following : *niger, ghesquièrei, apicalis, wittei, collarti, latifemur* and *brachialis*.

Head as wide as, or slightly wider than, long (except in *wittei* and *inermis*, in which species it is slightly longer than wide), and distinctly longer or wider than high. Frons between the eyes more or less deeply impressed. The protruding region of the frons before the eyes and the middle third of the occiput in profile are as dark brown to brownish black as the more or less wide Y-shaped dark mark on the frontal vitta, the stalk of which continues through the ocellar plate into the cerebral plate of the occiput (or posteranium). The oval eyes in profile are slightly (1.1-1.3 times, on an avarage 1.2 times) longer than high.

Head bristles : 1-2 anterior pair of superior orbital bristles *(orsa)*, 1 posterior, or superior pair of superior orbital bristles *(orss)*, 1 inner vertical *(vti)*, 1 outer vertical *(vte)* bristles, 1 postvertical *(pvt)*, 1 genal *(ge)* and some more or less weak outer occipital *(occe)* bristles behind the eyes, are regularly present. The fore pair of *orsa* is lacking in *brachialis*, and sometimes present but microscopically small in *wittei*; it is the weakest and shortest head bristle in the other species. The *vti* pair is rather reduced in this genus and approximately only as long as the hind pair of *orsa* (in *apicalis, brachialis, collarti* and *wittei*) ; considerably shorter than the hind *orsa* in *niger*, slightly longer in *ghesquièrei* than, and more than twice as long as, the hind *orsa*, in *latifemur*. In *brachialis* the *vte* pair is also reduced, it is only slightly longer than the *vti* pair. The *pvt* pair always represents the longest and strongest head bristles, it is convergent in *latifemur* and *niger*, convergent and crossed in the other examined species.

Antennæ : The scape is nearly always longer than the body of the pedicel, but always considerably shorter than the whole pedicel, including the so called « inner » or « finger-like process » (figs. 9,16), which is really the distal, and usually the longer part of the second antennal segment. The ovoidal postpedicel is longer than the pedicel, bearing an apparently apically inserted long arista, covered with sparse short pubescence. All three antennal segment are blackish brown to brownish black; the inferior and interior regions of the pedicel, and basal region

of the postpedicel only in *brachialis* and *ghesquièrei* are yellowish. Arista entirely dark brown with short pubescence of the same color in *brachialis*, *latifemur*, *niger* and *wittei*, but in *apicalis* and *collarti* its basal fifth to third is yellowish in color with pale yellow pubescence; the thickened basal segments of the arista are dark brown, only in *brachialis* yellowish.

Thorax longer than wide (sometimes as high as long) and considerably higher than wide; it is dark brown, except a more or less wide vitta on both sides between mesonotum and pleuræ. Those vittæ are terminating at the wing base in *brachialis* and *latifemur*, are including the inferior pleurotergite in *collarti* and *wittei*, and both pleurotergites in *apicalis*, *ghesquièrei* and *niger*. The upper hind region of the sternopleurite is yellowish in *brachialis* and *wittei*, entirely brown in the other species. Mesonotum usually with a wide median vitta between the *dc* bristles, paler in color and pruinosity than the lateral regions.

Thorax bristles : 1 scapular *(scap)*, 1 propleural *(prpl)*, 1-4 dorsocentral *(dc)*, 2 notopleural *(npl)*, 1 supraalar *(sa)*, 1 postalar *(pa)*, and 2 scutellar *(sc)* bristles are present. The *scap* pair is short (much shorter than the *prpl*) but conspicuous in *apicalis*, *collarti* and *ghesquièrei*, not shorter than in these species but hair-like and inconspicuous in *niger*, practically absent in *brachialis*, *latifemur* and *wittei*. The number of the *dc* bristles originally is 4 but it may be variable individually and specifically in this genus. It is unusually variable individually in *apicalis*, in which species the reduction and desappearance of the three anterior *dc* bristles can be clearly observed. The postsutural pair disappears first, next the presutural pair, and later the pair before the prescutellar pair, the prescutellar pair seems to be the most persistent of all and it is well developed in all the examined species. The species *latifemur* usually has 2 pairs of *dc* bristles: the prescutellar pair, and a weak pair before this, never longer than one third of the prescutellar pair; this weak pair sometimes may be absent. *C. wittei* always has 2 pairs of *dc* bristles, the anterior pair is approximately 2/3 as long as the prescutellar pair. *C. alboniger* Hennig, *C. alluaudi* Giglio-Tos, *C. brachialis* Enderlein, *C. collarti* n. sp., *C. compeditus* Hennig, *C. echinus* Hennig, *C. fülleborni* Enderlein, *C. ghesquièrei* Aczél, *C. niger* Czerny, *C. nyassicus* Enderlein, *C. perstriatus* Speiser, *C. simillimus* Karsch, *C. spinibrachium* Enderlein and *C. spinosissimus* Karsch have always 4 pairs of *dc* bristles; the two anterior

pairs (presutural and postsutural) are shorter and weaker than the two posterior pairs. 2 *npl*, and 2 *sc*, the hind or basal pair of which is more or less stronger and longer.

According to the coloration of the legs, the species may be divided into the following groups :

1.) Femora without yellow distomedian rings; 1a.) femora uniformly dark brown : *alboniger* HENNIG, *apicalis* (WALKER) specimens with 4 *dc*, *echinus* HENNIG, *ghesquièrei* ACZÉL, *latifemur* ENDERLEIN, *niger* OZERNY; 1b.) mid and hind femora yellow (entirely : *nyassicus* ENDERLEIN, with the apical fourth or with the dorsal regions dark brown : *apicalis* [WALKER], *collarti* n. sp., *wittei* ACZÉL).

2.) Femora dark brown with conspicuous yellow distomedian ring; 2a.) all femora with a yellow distomedian ring : *alluaudi* GIGLIO-TOS, *brachialis* ENDERLEIN, *fülleborni* ENDERLEIN, *similimus* KARSCH, *spinosissimus* KARSCH; 2b.) fore femora without yellow distomedian ring : *brachialis* ENDERLEIN, *compeditus* HENNIG, *spinibrachium* ENDERLEIN; 2c.) only the hind femora with yellow distomedian ring : *uniannulatus* BRUNETTI ♀.

The presence or absence of a dorsal row of bristles or spines on the fore coxae, of an anteroventral and posteroventral row of spine-like to hair-like bristles on the fore femora, of 1-2 ventral rows of minute spinules on the fore tibiæ of the male, may be a specific character. The legs of the female specimens mostly or wholly lack these armatures, demonstrating in this regard a considerable sexual dimorphism.

The procoxa is in *latifemur* as dark brown as the meso and metacoxæ but in all other species examined it is considerably brighter in color (usually testaceous yellow to yellowish brown) than the two hind coxa pairs.

Name of the species	length of the fore leg			length of the mid leg			length of the hind leg		
	femur	tibia	tarsi (basitarsus)	femur	tibia	tarsi (basitarsus)	femur	tibia	tarsi (basitarsus)
C. apicalis ♂ ...	2.68-2.68	2.77-2.77	3.25-3.23 (1.70-1.70)	3.33-3.52	3.04-3.20	2.86-2.88 (1.70-1.68)	3.90-4.12	3.25-3.49	2.68-2.72 (1.43-1.38)
» ♀ ...	2.63-2.49	2.77-2.74	3.00-3.15 (1.59-1.58)	3.29-3.40	3.20-3.17	2.75-2.84 (1.59-1.41)	3.72-3.90	3.18-3.22	3.08-3.13 (1.59-1.59)
C. brachialis ♂ ...	6.24-7.44	4.52-6.40	4.02-4.04 (2.31-2.54)	6.61-6.74	5.68-5.61	3.81-3.91 (2.45-2.38)	6.88-7.49	5.31-6.06	3.70 (2.11-2.47)
» ♀ ...	5.75	5.02	3.58 (2.07)	5.68			6.20	5.11	(1.95)
C. collarti ♂ ...	2.95-2.79	3.00-2.93	3.20-2.97 (1.75-1.57)	3.29-3.15	3.08-3.06	2.63-2.59 (1.48-1.38)	4.24-4.40	3.22-3.47	2.57-2.47 (1.36-1.32)
» ♀ ...	2.31	2.43	2.68 (1.36)	2.84	2.79	2.47 (1.30)	3.52	2.90	2.29 (1.23)
C. ghesquièrei ♂	2.43-2.18	2.75-2.36	2.09-2.54 (1.04-1.27)	3.00	3.04	2.61 (1.50)	3.33-3.33	3.00-2.79	2.54-2.18 (1.41-1.18)
C. latifemur ♂ ...	2.81	2.83	2.36 (1.23)	3.27	2.84	2.18 (1.34)	3.75	2.86	2.20 (1.07)
» ♀ ...	2.70-3.88	2.77-3.75	2.04-3.22 (1.20-1.75)	3.11-4.22	2.95-4.00	2.16-2.97 (1.25-1.75)	3.59-4.63	2.97-4.00	1.95-2.79 (1.25-1.54)
C. niger ♂	2.57	2.54	2.45 (1.31)	2.93	2.86	2.31 (1.34)	3.49	2.95	2.20 (1.18)
» ♀	2.07	2.47	2.36 (1.23)	2.95	2.61	2.43 (1.30)	3.38	2.93	2.07 (1.18)
C. wittei ♂	3.17	3.52	3.29 (1.85)	3.86-3.52	3.52-3.28	3.02-2.93 (1.81-1.63)	4.49	3.65	3.07 (1.70)
» ♀	2.38	2.72	2.86 (1.61)	2.95	2.81	2.61 (1.50)	3.68	3.15	2.45 (1.41)

Name of the species	Whole length of the legs		
	fore leg	mid leg	hind leg
C. apicalis ♂ ...	8.70- 8.68	9.23- 9.60	9.83-10.33
» ♀ ...	8.40- 8.38	9.24- 9.41	9.98-10.25
C. brachialis ♂ ...	14.78	16.10	15.89
» ♀ ...	14.35		
C. collarti ♂ ...	8.69- 9.15	8.80- 9.00	10.34-10.03
» ♀ ...	7.42	8.10	8.71
C. ghesquièrei ♂	7.27- 7.08	8.75	8.87- 8.30
C. latifemur ♂ ...	8.00	8.29	8.81
» ♀ ...	7.51-10.85	8.22-11.19	8.51-11.42
C. niger ♂	7.26	8.10	8.64
» ♀	6.90	7.99	8.38
C. wittei ♂	9.98	10.40- 9.74	11.21
» ♀	7.96	8.37	9.28

On the fore legs the tibiæ are as long as, or slightly longer than, the femora, except in *brachialis,* which has the fore femora considerably longer than the corresponding tibiæ.

On the mid legs the femora are more or less longer than the tibiæ, the differecence is in the male usually more considerable than in the female.

On the hind legs the femora are always considerably longer than the tibiæ, in all the species examined.

There is also some variability in the number of the tibial spurs. The spur of the fore tibiæ are present (1:1:1) in *brachialis* and in the male of *latifemur*, entirely absent (0:1:1) in *latifemur* female and in the other examined species. The spur on the fore tibia of *brachialis* is conspicuously longer than the dorsoapical bristle, but it is much shorter than this bristle in the *latifemur* male.

Wings more or less shorter than the body (females without oviscape) except in *echinus* HENNIG. The relation of the length width of the wing in the examined species : 3.3 (times longer than wide) in *niger,* 3.3-3.7 in *ghesquièrei,* 3.4-3.7 in *collarti,*

3.5-3.7 in *apicalis* and *wittei*; 3.9-4.1 in *brachialis* and *latifemur*, which have the narrowest wings of all. The subcostal cell (*Csc* or stigma; its length is the first costal section) is very small, and as short as the fourth costal section at the wing apex. The marginal cell (*Cm* or R_1) is very long and narrow; the second costal section is 3 to nearly 5 times longer than the third. The first posterior cell (Cp_1) is considerably narrowed towards the apex. The anterior or small cross-vein (*ta*) is placed considerably before the middle of the discoidal cell (*Cd*) in *niger*, slightly before in *apicalis*, *collarti* and *ghesquièrei*; in *wittei* it is placed approximately in the middle of the *Cd*, and in *latifemur* slightly, in *brachialis* distinctly placed distad to the middle of this cell. The third longitudinal vein (r_{2+3}) is nearly straight in all examined species. The posterior or large cross-vein (*tp*) is placed proximad to the middle of the wing; its situation is normal or nearly so in *apicalis*, *ghesquièrei*, *latifemur*, *niger* and *wittei*, it is conspicuously oblique in *brachialis* and *collarti;* in *brachialis* it is as obliquely situated as in the Neotropical genus *Nerius* Fabricius. Anal cell (*Can*) very small; the petiole of this cell (or the sixth vein, a_2+cu_2) ceases abruptly, approximately halfway to the hind wing margin. The lower squamæ are rounded, small, the upper or thoracic squamæ reduced to a linear strip (frenulum squamulare).

Preabdomen depressed, long oval in shape and composed of 6 normal segments in both sexes. The first two tergites form a syntergite as usual in the Acalyptrate flies. The tergites only in *niger* are entirely brown; in all other species examined and described they are dark brown with two wide, testaceous yellow to yellowish brown vittæ.

The male postabdomen is composed of two syntergites, of the 7+8 syntergite and of the epandrium (9+10 syntergite with the rests of the 11 th). The epandrium is situated more or less exactly in the continuation of the 7+8 syntergite in all the examined species, except *collarti*, in which the longitudinal axis of the 7+8 syntergite makes with that of the epandrium an obtuse angle of approximately 120°. The epandrium is considerably longer than the 7+8 syntergite in *apicalis* (1.4-1.5 times), *brachialis* (1.4+1.7 times), *ghesquièrei* (1.5-1.6 times) and *latifemur* (1.8 times) and but slightly longer in *collarti* (1.25-1.3), *niger* (1.25) and *wittei* (1.2 times longer than the 7+8 syntergite). The epandrium is typically shaped for the family, that is narrowing from both ends toward its middle

in *brachialis*, *latifemur*, *niger* and *wittei*, but in the *apicalis*-group (*apicalis*, *collarti* and *ghesquièrei*) it is modified, more or less bulky, with the lateroapical regions (which bear the surstyli) enlarged and folded together, and never narrowed towards the middle in dorsal aspect.

The surstyli of *wittei* are the longest and largest in the family *Neriidæ*, being nearly as long as the cerci. The surstyli of the other examined species are greatly reduced, as normal in this family.

The oviscape, or irretractible basal part of the ovipositor (sheath), which corresponds to the seventh segment, is depressed (dorsoventrally flattened). *C. niger* has the shortest oviscape of all the species examined, only 1.5 times longer than wide. The relation length/width of the oviscape (or sheath index) of the other examined species was : 2.1 *apicalis*, 2.5 *latifemur*, 2.5-3.2 *collarti*, and 2.7 *brachialis*.

The genus *Chaetonerius* HENDEL, including the Oriental species, represents a phylogenetically homogeneous group, which it would be unnatural to divide into more genera (v. g. on the basis of the *dc* bristles). There are, nevertheless various characters which closely connect some species; thus *apicalis*, *collarti* and *ghesquièrei* seem to be as closely related one to another as *brachialis* to *latifemur*; *C. niger* and *wittei* however cannot be placed in groups.

In this genus the following principal evolutional tendencies may be noted : 1.) towards the reduction of the *orsa*, *vti*, and *vte* bristles on the head; 2.) towards the reduction of the *scap*, *dc*, anterior *npl* and basal *sc* bristles on the thorax; 3.) towards the reduction of the surstyli on the male postabdomen.

Among the species which were submitted for identification from various localities in the Belgian Congo and collected by M. J. GHESQUIÈRE, there are adults which were bred from larvæ from the fruits of « *Solanum sp.* », from the fruits of *Rollinia Sieberi*, « ex baies mûres de Caféier », « éclos de fruit de Cucurbitacée », or « obtenus d'élevage de fruits de *Cola acuminata* », etc. The larvæ of the species are apparently saprophyta or fed in ripe fruits of various plants.

KEY TO THE AFRICAN SPECIES.

1. Femora without yellow rings.
   2. Surstyli of the male strikingly large and nearly as long as the cerci. Head slightly longer than wide; only 1 *orsa*.

Scap absent; both pleurotergites and the upper hind region of the sternopleurite are yellowish. Always 2 pairs of *dc* present, the anterior pair is more than half as long as the prescutellar. 6.1-7 mm. Belgian Congo.
... ... *C. wittei* ACZÉL.

2. Surstyli considerably reduced, minute and almost cylindrical, much shorter than the cerci.

3. Mid and hind femora yellow.

4. Femora entirely yellow. Apical fourth of the second vein (r_{2+3}) bordered with brown. 5.25 mm. East Africa : at the Lake Nyassa.
... ... *C. nyassicus* ENDERLEIN.

4. Apical fourths of the mid and hind femora blackish brown. Apical third to half of the r_{2+3} bordered with brown. Scapular bristles short but conspicuous. Epandrium considerably longer than the 7 + 8 syntergite, and bulky with the lateroapical regions enlarged and folded together. Basal fifth to third of the arista pale yellow.

5. 1-4 *dc;* epandrium in the continuation of the 7+8 syntergite, knee of the aedeagus concealed beneath the cerci. *tp* normally placed. Oviscape of the female wider (2.1 times longer than wide). 6.4-6.9 mm. Cameroon, Togo, Belgian Congo. ... ... *C. apicalis* WALKER.

5. Always 4 *dc*. Longitudinal axis of the epandrium makes with that of the 7+8 syntergite an obtuse angle of 120°; knee of the eadeagus projected before the cerci. Situation of the *tp* is considerably oblique. Oviscape narrower (2.5-3.2 times longer than wide). 5.9-7.6 mm. Belgian Congo.
C. collarti n. sp.

3. All femora uniformly dark brown.

6. Head and thorax bristles unusually long in relation to the small size (3.5 mm) of the body. Wings longer than the body (4 mm). Gold Coast: Ashanti; Cameroon. ... ... *C. echinus* HENNIG.

6. Relative length of the head and thorax bristles normal. Wings shorter than the body.

7. Abdominal tergites uniformly dark brown. 2 *orsa*, 4 *dc*. Epandrium typical, narrowed towards the middle. Oviscape short, only 1.5 times longer than wide. 5.2-5.9 mm. Cameroon, Belgian Congo.
... ... *C. niger* CZERNY.

7. Abdominal tergites dark brown with two wide yellow vittæ.

8. 1-2 usually 2 *dc;* the pair before the prescutellar *dc* is never longer than 1/3 of this pair. *Scap* bristles absent. All coxæ and both pleurotergites brown. Tibial spurs in the male 1:1:1, in the female 0:1:1. Epandrium typical, narrowed towards the middle, 1.8 times longer than the 7+8 syntergite. 6-10 mm. Cameroon; Spanish Guinea; W.-Africa; Fernando Poo Isl.; Togo; East Africa : Lake Albert; Belgian Congo.
... ... *C. latifemur* ENDERLEIN.

8. 4 *dc;* procoxæ yellow to yellowish brown.

9. 2 *orsa* bristles present; *scap* short but conspicuous. Tibial spurs 0:1:1. Epandrium of the male bulky, never narrowed towards the middle; apicolateral regions of the epandrium enlarged and folded together.

10. Apicolateral regions of the epandrium are prolonged, nearly attaining the tip of the cerci. 5.8-6.7 mm. Belgian Congo.
... ... *C. ghesquièrei* ACZÉL.

10. Apicolateral regions of the epandrium are not projected, but as long as the middle region. 6.4-6.9 mm. Cameroon, Togo, Belgian Congo.
... ... *C. apicalis* WALKER.

9. Only 1 *orsa*. 5 mm. Cameroon.
... ... *C. alboniger* HENNIG.

1. Femora dark brown with a conspicuous yellow distomedian ring. Abdominal tergites dark brown with two wide yellow vittæ.

11. All femora with yellow distomedian ring.

12. Only 1 *orsa,* redescription in this paper. 10.4-11 mm. Kamerun, Togo, Belgian Congo.
... ... *C. brachialis* ENDERLEIN.

12. There is a brown spot at the tip of the second vein. Madagascar, Mascarena Isls., Seychelles Isls.
... ... *C. alluaudi* GIGLIO-TOS.

12. Procoxa with a row of 4-5 dorsal bristles. Fore tibiæ with a ventral row of tiny black spinules. 6.5 mm. East Africa : Nyassa Lake.
... ... *C. fülleborni* ENDERLEIN.

12. Procoxa with a dorsal row of 3-4 bristles. Fore tibiæ without ventral spinules. W.-Africa, Cameroon.
... ... *C. simillimus* KARSCH.

12. Procoxa with a dorsal row of 4 spines. Fore tibiæ with a ventral row of black spinules. Apical sixth of the second vein brown bordered. W.-Africa.
... ... *C. spinosissimus* KARSCH.

11. Only the mid and hind femora with yellow distomedian ring.

12. Only 1 *orsa*, redescription in this paper. 10.4-11 mm. Cameroon, Togo, Belgian Congo.
... ... *C. brachialis* ENDERLEIN.

12. Procoxa with a dorsal row of 3 spines. Apical half of the second vein bordered with brown. 6 mm. East Africa : Edward Lake, Ruwenzori.
... ... *C. spinibrachium* ENDERLEIN.

12. Fore tibiæ with a ventral row of tiny black spinules. 7 mm. Cameroon. ... ... *C. compeditus* HENNIG.

11. Only the hind femora with yellow distomedian ring. Male unknown. 5 mm. Uganda, Zanzibar.
... ... *C. uniannulatus* BRUNETTI.

It is impossible at present to give a better key before realizing a thorough revision of the types of the species of Karsch, Enderlein, etc., since the differentiation of the majority of the species having femora with conspicuous yellow distomedian, ring, characterized mostly by individually variable characters, is very unsatisfactory. The species *Paranerius perstriatus* Speiser is not included in this key.

Chaetonerius apicalis (WALKER)

More than 200 specimens were in the collection, bearing 1-4 *dc* bristles, from the following localities. With only 1 pair of *dc* : ♂ Eala I.1935 (J. GHESQUIÈRE), I. G., 10.482.

With 2 pairs of *dc* bristles; femora yellow with dark brown tips : 13 ♂♂ and 13 ♀♀ Eala 6-7.III.1935 (J. GHESQUIÈRE, 247), I. G., 10.482, « Fruits de *Rollinia Sieberi* » or « sur *Rollinia Sieberi* » ; from the same locality, collected by the same collector : 2 ♂♂ and 3 ♀♀, VII-VIII.1935 ; ♂♀ 26.VI.1935, 6 ♂♂ and ♀ I-IV., VII. 1935 ; 3 ♂♂, II., III., 1-23.IV.1936 ; 2♂♂, 18.VII. 1935 (J. GHESQUIÈRE, 739) ; ♂, II. 1936 (J. GHESQUIÈRE, 1105). ♀ Eala 20.V.1935 (J. GHESQUIÈRE), I.G., 10.482, « sur des excréments frais d'éléphant ». ♂ and 2 ♀♀ Rutshuru, XI. and 1.XII. 1937 (J. GHESQUIÈRE, 3787), I. G., 10482. ♂ Bambesa 15.XII. 1938 (J. VRIJDAGH), I. G., 12234. ♀ Kutu (Distr. Bangala), 18. VI.1935 (J. SETTEMBRINO), I. G., 10699.

With 3-4 pairs of *dc* bristles ; femora yellow with dark brown tips : 2 ♂♂ and 5 ♀♀ Eala VII.1935 (J. GHESQUIÈRE, 728) ; 4 ♂♂ and 2 ♀♀ from the same locality and by the same collector, 31.III., 21-27.IV. and 16.XI.1936. 15 ♂♂ and 22 ♀♀ Eala 5-10.III.1935 (J. GHESQUIÈRE, 247) I. G., 10482, « Fruits de *Rollinia Sieberi* » ; 4 ♂♂ and 3 ♀♀ Eala V., 7.VI.1935 (J. GHESQUIÈRE, 532) ; 7 ♀♀ Eala VII.-VIII.1935 (J. GHESQUIÈRE, 722) I. G., 10482. 2 ♂♂ and 3 ♀♀ Eala XI.-XII.1934 (J. GHESQUIÈRE, 159) I. G., 10482, « sur caféier et miellat des colonies de *Lecanium africanum* NEWST ». 10 ♂♂ and 4 ♀♀ Eala I., 15.I, III, 17.IV., V.1935 and 31.III., 21-27.IV, V.1936 (J. GHESQUIÈRE) I.G. 10482. ♀ Eala 6.III.1935 (J. GHESQUIÈRE, 226), « élevage baies caféier — 186 ». ♀ Eala XI.1936 (J. GHESQUIÈRE, 3274) I. G. 10482. ♂ Lukolela XI.1934 (J. GHESQUIÈRE, 159) I.G. 10482, « sur caféier et miellat des colonies de *Lecanium africanum* NEWST ». ♂ Gazi XII.1937 (BEIRNAERT) 11391, « sur les cacaoyers ». 3 ♂♂ and 6 ♀♀ Rutshuru I., XI., and 1-4.XII.1937 (J. GHESQUIÈRE, 5434, 3787 and without number) I. G. 10482.

With 4 *dc;* femora uniformly dark brown (= *C. alboniger* HENNIG ?). ♂ and 2 ♀♀ Eala 10.III.1935 (J. GHESQUIÈRE, 247) I.G. 10482, « éclos de fruits de *Rollinia Sieberi* ». 6 ♂♂ and 7 ♀♀ Eala I., 21.I., II., 15.III., III., 17-20.IV., V. 12-19.VII. 1935 (J. GHESQUIÈRE) I. G. 10482, « sous ombrage très dense, tronc pourri d'un *Ficus* ». ♂ Eala 7.VI.1935 (J. GHESQUIÈRE, 532) I. G. 10482. ♂ Eala V.1936 (J. GHESQUIÈRE, 2622) I. G. 10482. ♀ Eala 27.VII.1935 (J. GHESQUIÈRE, 722) I. G. 10482, « Fruits de *Borassus* ». 2 ♀♀ Eala 26.VI. and 16.VII.1935 (J. GHESQUIÈRE, 662) I. G. 10482. ♂ and 2 ♀♀ Eala VIII.1935 (J. GHESQUIÈRE, 644) I. G. 10482, « sur fruits de *Ficus mucosa* ».

2 ♂♂ and 4 ♀♀ Eala 21.III.1935 (J. GHESQUIÈRE, 297) I. G. 10482, « éclos de fruits de *Solanum* sp. ». 9 ♂♂ and 7 ♀♀ Eala 2-25.IV., 8.V., VIII., 1-22.IX.1936 (J. GHESQUIÈRE) I. G. 10482. ♂ Eala 22.II.1935 (J. GHESQUIÈRE, 222) I. G. 10482, « ex baies mûres caféier ». ♂♀ Eala XI.1934, and 2 ♂♂, 2 ♀♀ Eala III. 1936 (J. GHESQUIÈRE, 2219) I. G. 10482. 2 ♂♂ and 2 ♀♀ Rutshuru III. and V.1937 (J. GHESQUIÈRE, 3787). ♂ Usumbura V.1938 (J. GHESQUIÈRE, 6616) I. G. 10482.

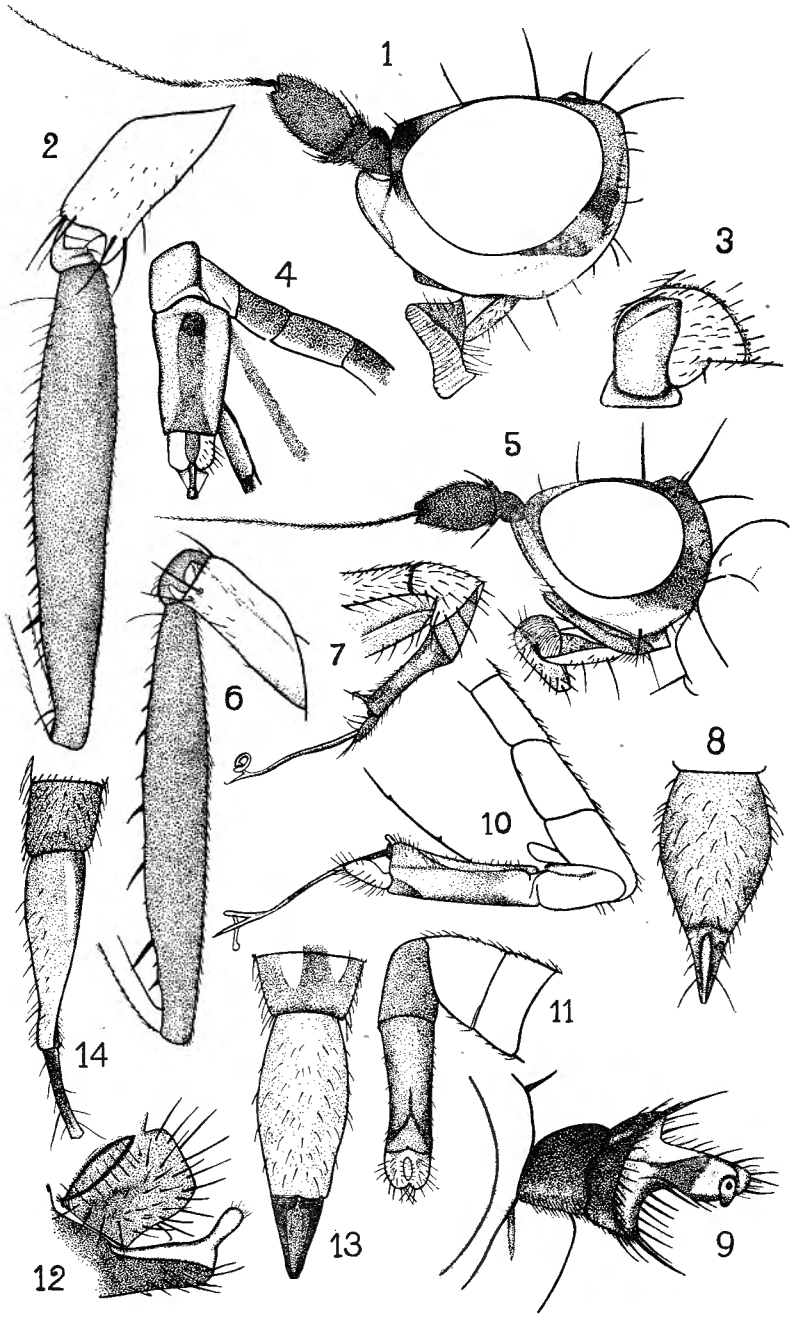
This species and *C. latifemur* are the most common of all in the Belgian Congo. It is a well distinguished and unusually variable species.

Male. Body 6.7-6.4 mm long; wing 5.6-5.3 mm long and 1.5-1.5 mm wide, 3.5-3.7 times as long as wide.

Head (fig. 15) 1.25-1.29 mm long, 1.36-1.36 mm wide and 1.07-1.02 mm high. In profil it is below the eye densely whitish dusted pale yellow; before the eye blackish brown; lower half of the 0.18-0.18 mm long occiput behind the eye dark brown, upper half brownish yellow. Frons between the eyes impressed. Frontal orbits (genovertical plates) subshining brownish yellow, sparsely yellowish dusted; frontal vitta dull reddish yellow with the usual Y-shaped black mark, but the basal half of both arms in this species is mostly obliterated and the oval black spots in front of the antennæ are separated from the stalk, which widens towards behind. Eyes in profil 0.91-0.93 mm long and 0.75-0.75 mm high. Mouth parts brownish yellow, labella brown, the long maxillary palpi blackish brown.

Antennæ (figs. 9 and 16) brownish black, scape 0.16-0.18, pedicel 0.34-0.31 (body 0.11-0.11, « inner process » 0.23-0.20) and postpedicel 0.41-0.45 mm long. Arista 1.5 mm long, with short brown pubescence, except for the basal fourth which has pale yellow pubescence.

Figs. 1-4. — *Chaetonerius collarti* n. sp. 1, head lateral view ; 2, left fore coxa and femur, anterior view ; 3, 7+8 syntergite of the male postabdomen, dorsal view; 4 epandrium, dorsal view. — Figs. 5-8. *Chaetonerius niger* CZERNY, 5, Head, lateral view ; 6, left fore coxa and femur, anterior view ; 7, male postabdomen, lateral view ; 8, oviscape, dorsal view. — Figs. 9-14. *Chaetonerius apicalis* WALKER, 9, right scape and pedicel, lateral view ; 10, male postabdomen with the aedeagus, lateral view ; 11, male postabdomen, dorsal view; 12, cercus and surstylus; 13, oviscape, dorsal view; 14, oviscape, lateral view. (Magnified 40×, excepting figs. 9 and 12, which are 100 × enlarged.)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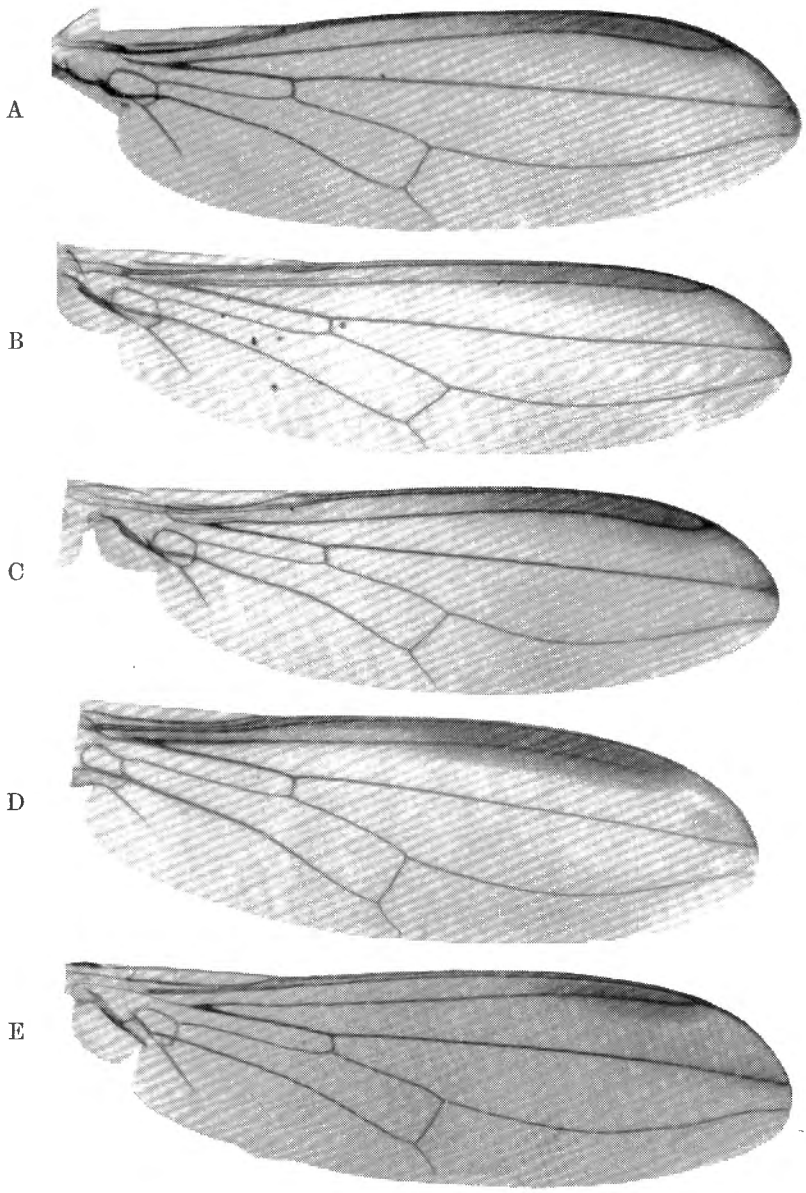
Head bristles black : 2 *orsa*, anterior pair very small, posterior pair approximately as long as the *vti;* 1 *orss* slightly shorter than the crossed *pvt* and approximately as long as the *vte; ge* strong. There are some short *occe* bristles behind eyes.

Thorax 2.1-2.1 mm long, 1.4-1.2 mm wide and 2.0-1.8 mm high ; brown except a conspicuous pale yellow vitta on both sides between mesonotum and pleuræ, occupying the major part of the humeral callus (postpronotum), notopleural region, wing base and both pleurotergites. Pleuræ sparsely whitish dusted. A wide median vitta of the mesonotum (between the rows of the *dc* bristles) is paler dusted than the lateral thirds. Thorax bristles shining black. The writer found that in this species the number of the *dc* bristles may vary from 1 to 4 pairs, which is a rather unusual feature in this family. Only one specimen has heen found bearing a single pair of *dc* (the prescutellar), many specimens have only the two posterior pairs, but the majority possesses 3 to 4 pairs, one of which always is presutural. In the specimens with 3 *dc* pairs, the postsutural pair is absent. A considerable part of the specimens with 4 pairs of *dc* have the femora uniformly dark brown ; apparently these characters are genetically coupled since specimens with less than 4 *dc* never have the femora darkened. There is no doubt however, that the mentioned variations belong to the same species since all demonstrate the same structural characters (male postabdomen, etc.). 1 weak but conspicuous *scap*, 1 *prpl;* 2 *npl*, the hind pair longer and stronger ; 1 *sa*, 1 *pa* and 2 *sc*, the apical pair 2 1/2 times longer than the basal.

Legs : Procoxa testaceous yellow, mesocoxa and metacoxa brown. The specimens with 1-4 *dc* have the femora testaceous yellow but the apical third to half of the fore femora and apical fifth to fourth of the mid and hind femora dark brown. Specimens with 4 *dc* may have entirely dark brown femora. Tibiæ brown, apex of the tibiæ and the tarsi black. Tibial spurs 0 : 1 : 1. Fore coxæ with the usual two dorsoapical bristles and sometimes also with a dorsal preapical one (fig. 17). Fore femora with an anteroventral row of short black bristles, there is only one spine present in the apical fourth.

Wings slightly brownish tinged, the membrane of the R_1 cell (=*Cm*) darker (plate, fig. A). The apical third to half of the second vein (r_{2+3}), and the costa between the tips of the second and third veins (r_{4+5}) is bordered with dark brown color. The third longitudinal vein is almost straight; *tp* but very slightly



Wings of A, *Chaetonerius apicalis* WALKER; B, *C. brachialis* ENDERLEIN; C, *C. collarti* n. sp.; D, *C. latifemur* ENDERLEIN, and E, *C. wittei* ACZÉL (foto: M. L. ACZÉL).

M. L. ACZÉL. — *Neriidæ* of the Belgian Congo *(Diptera, Acalyptratæ)*.

oblique. First costal section 0.27-0.25, second 3.27-3.31, third 0.63-0.61, and fourth 0.13-0.16 mm long. Prebasal section of the fourth vein (m_1) 0.93-1.0, median (between both cross-veins) 1.04-1.32, and ultimate 2.63-2.59 mm long. *ta* situated slightly proximad to the middle of the discoidal cell.

Preabdomen 2.9-2.4 mm long and 1.0-1.0 mm wide. Tergites subshining testaceous yellow, except for a linear median and two wider lateral vittæ, which are dark brown. Sternites linear, brown; lateral membranes brownish yellow.

Postabdomen shining yellowish brown. Epandrium 1.4-1.5 times longer (0.75-0.80 mm) than the 7+8 syntergite (0.54-0.52 mm) and in dorsal view has almost parallel sides (figs. 10-12); its width at the apex 0.27-0.27, at the base 0.32-0.32 mm. The lateroapical regions of the epandrium are considerably enlarged, to such a degree that the minute surstyli (fig. 12) are situated far from the basal part of the cerci, as in *collarti* n. sp. and *ghesquièrei* Aczél, species which together with *apicalis* form a closely related group. All in this species the enlarged lateroapical lobes of the epandrium are folded together.

Female. — Like the male. Body 6.5-6.9 mm; wing 5.9-5.6 mm long and 1.7-1.5 mm wide, 3.5-3.7 times as long as wide.

Head 1.29-1.38 mm long, 1.36-1.48 mm wide and 1.02-1.13 mm high; eyes 0.93-0.98 mm long and 0.73-0.79 mm high. Antennæ: scape 0.16-0.18, pedicel 0.31-0.34 (body 0.13-0.11, « process » 0.18-0.23) and postpedicel 0.43-0.45 mm long. Thorax 2.3-2.4 long, 1.3-1.4 mm wide and 2.0-1.9 mm high. There are 1-4 *dc* bristles as in the male. Color of the legs as in the male; procoxa with the 2 apical bristles and sometimes with a preapical one. Fore femora without anterodorsal row of black bristles, there is only one anteroventral bristle in the apical fourth. Tibial spurs 0:1:1 as in the male. Wing characters as in the male; first costal section 0.25-0.25, second 3.45-3.18, third 0.75-0.73, and fourth 0.20-0.18 mm long. Prebasal section of m_1 1.04-1.00, median 1.20-1.06, and ultimate 2.75-2.63 mm long. Preabdomen 2.5-2.7 mm long and 1.0-1.3 mm wide. Oviscape (figs. 13-14) 1.20-1.27 mm long and 0.56-0.61 mm wide, shining yellowish brown, with sparse scattered brown hairs.

Chaetonerius brachialis Enderlein

Wing photograph : plate, fig. B. A single specimen : ♂ Bambesa X.-XII.1938 (J. Vrydagh) I. G. 12234.

Chaetonerius collarti n. sp.

A well characterized species which may easily be separated from all the others by the structure of the male postabdomen and by the posterior cross-vein (*tp*) nearly as obliquely situated as in *brachialis*.

Male. — Body 7.1-7.6 mm long; wing 5.5-5.8 mm long and 1.5-1.7 mm wide, 3.4-3.7 times longer than wide.

Head : 1.36-1.43 mm long, 1.43-1.50 mm wide and 1.07-1.13 mm high; coloration of the head, thorax and abdomen similar to that of *apicalis*. Eyes 0.95-1.07 mm long and 0.82-0.86 mm wide. Mouth parts (fig. 1) brownish yellow, labella brown, the long maxillary palpi blackish brown.

Antennæ brownish black, scape 0.16-0.14, pedicel 0.31-0.34 (body 0.11-0.11, « process » 0.20-0.23) and postpedicel 0.43-0.45 mm long. Arista 1.6 mm long, with short brown pubescence, except for the basal fourth to third, which is pale yellow with pubescence of the same color.

Head bristles shining black : 2 *orsa,* anterior pair very small, posterior pair approximately as long as the *vti;* 1 *orsa*, subequal to the crossed *pvt* and the reclined divergent *vte,* or slightly shorter; *ge* strong and subequal to the posterior *orsa*. There are some 4-6 short *occe* bristles behind the eye.

Thorax 2.1-2.3 mm long, 1.4-1.5 mm wide and 1.9-2.0 high. Coloration as in *apicalis*. Thorax bristles long, shining black : on all the specimens examined there were 4 pairs of *dc* bristles, the last (prescutellar) pair is the longest, and the two anterior pairs (presutural and postsutural) are the shortest; 1 weak but conspicuous *scap*, 1 strong *prpl;* 2 *npl,* anterior pair two thirds as long as the posterior; 1 *sa*, 1 *pa*; 2 *sc*, basal pair one half as long as the apical.

Legs : Procoxa pale brownish yellow, mesocoxa and metacoxa brown. Fore femora uniformly dark brown, mid and hind femora testaceous yellow to brown with the apical fourth dark brown, or dark brown dorsally and reddish testaceous yellow ventrally. Tibiæ yellowish brown, tip of the tibiæ and tarsi black. Tibial spurs 0 : 1 : 1. Procoxa with the usual two dorsoapical bristles and nearly always with a preapical bristle (fig. 2). Fore femora with an anteroventral row of short black bristles which only in the basal half are hair-like, but in the apical half they are thicker, spinule-like.

Wings hyaline, brownish tinged (plate, fig. C). The membrane of the R_1 cell darker. The apical third to half of the second vein

(r_{2+3}) and the costa between the tips of the second and third (r_{4+5}) veins are bordered with dark brown color; r_{4+5} is almost perfectly straight. *tp* considerably oblique. First costal section 0.20-0.27, second 3.22-3.36, third 0.63-0.80, and fourth 0.25-0.25 mm long. Prebasal section of the fourth vein (m_1) 0.88-1.00, median 1.09-1.20, and ultimate 2.50-2.68 mm long; anterior cross-vein (*ta*) situated slightly proximad to the middle of the discoidal cell (*Cd*).

Preabdomen 2.9-3.2 mm long and 1.5-1.4 mm wide. Tergites dark brown with the two closely placed, wide testaceous yellow vittæ, as in *apicalis*. Sternites linear, lateral membranes brownish yellow, sometimes with blackish spots.

Postabdomen shining testaceous yellow to yellowish brown, very characteristically shaped. Epandrium (figs. 3-4, 18-20) only 1.25-1.3 times longer (0.82-0.81 mm) than the 7+8 syntergite (0.66-0.61 mm), and both form an obtuse angle of about 120°. The base of the epandrium is wider (0.57-0.54 mm) than the 7+8 syntergite, narrowing evenly towards the tip, where it is but 0.30-0.32 mm wide. This is the only known species with the knee of the aedeagus projected before the cerci. The lateroapical areas of the bulky epandrium are considerably enlarged, and the minute and reduced surstyli are situated far from the basal part of the cerci.

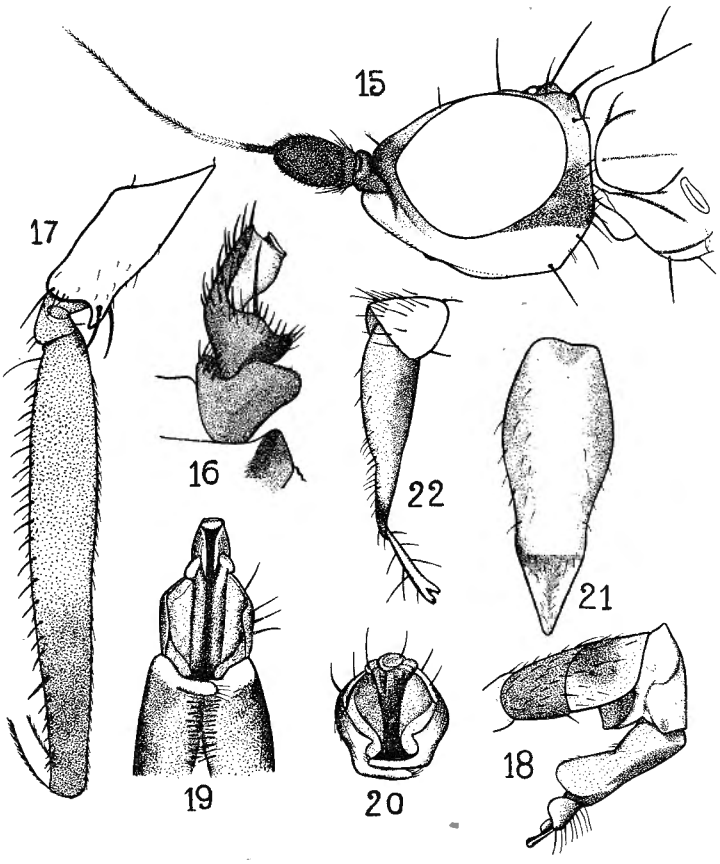
Female. — Like the male. Body 5.9 mm; wing 5.1 mm long and 1.4 mm wide, 3.6 times as long as wide.

Head 1.23 mm long, 1.31 mm wide and 0.93 mm high. Eyes 0.88 mm long and 0.70 mm wide. Antennæ : scape 0.14, pedicel 0.27 (body 0.09, « process » 0.18) and postpedicel 0.36 mm long. Thorax 1.9 mm long, 1.2 mm wide and 1.7 mm high. Head and thorax bristles as in the male. Procoxa almost always without a preapical dorsal bristle. Fore femora without an anteroventral row of short black bristles, there is on the apical fifth only a weak anteroventral bristle. Tibial spurs 0:1:1.

Wing characters as in the male; first costal section 0.23, second 2.83, third 0.61, and fourth 0.18 mm long. Prebasal section of m_1 0.91, median 0.91, and ultimate 2.34 mm long. Preabdomen 2.6 mm long and 1.3 mm wide. Oviscape (figs. 21-22) 1.48-1.70 mm long and 0.59-0.52 mm wide, shining testaceous yellow with sparse scattered brown hairs.

Holotype male, allotype female and ♂♀ paratypes: Eala III.-IV.1935 (J. Ghesquière) I. G. 10482. Paratypes : ♀ Eala 31.V. 1935 (J. Ghesquière, 575) I. G. 10482, « tronc d'Elaeis en

décomposition.» ; ♂ Eala XI.1934 and 8 ♂♂ Eala III., IV. and 9.V.1936 (J. Ghesquière) I. G. 10482. The types and 10 paratypes returned to the Institut des Sciences naturelles de Belgique, Bruxelles : 2 paratypes in the collection of the Instituto Miguel Lillo in Tucumán.



Figs. 15-17. — *Chaetonerius apicalis* Walker, 15, head, lateral view; 16, scape and pedicel, dorsal view; 17, left fore coxa and femur, anterior view. — Figs. 18-22. *Chaetonerius collarti* n. sp. ; 18, male postabdomen, lateral view; 19, apex of the epandrium with the folded aedeagus and surstyli, ventral view; 20, apical opening of the epandrium, with the reduced surstyli; 21, oviscape, dorsal view; 22, oviscape, lateral view (40 ×, excepting the figs. 16, 19-20, which are 100 × enlarged).

Chaetonerius ghesquièrei Aczél

A single male paratype specimen is present in the collection : Eala 23.III.1936 (J. Ghesquière, 2226) I. G. 10482.

Chaetonerius latifemur Enderlein

This is the second most common species in the Belgian Congo, it was represented by nearly 90 specimens in the collection :

♂♀ Eala 28-31.V.1935 (J. Ghesquière, 532) I. G. 10482, « *Rollinia Sieberi* »; 27 ♂♂ and 14 ♀♀ Eala 2-18.III.1935 (J. Ghesquière, 247) I.G. 10482, « fruits en décomposition » ; ♀ Eala VII.1935 (J. Ghesquière, 719) I. G. 10482, « fruits de *Murraya exotica* » ; 3 ♂♂ and 2♀♀ Eala 15-22.IV., 2-6.V.1936, 14 ♂♂ and 9 ♀♀ Eala I., II., III., 7.IV.1935, 3♀♀ Eala 6.VIII.1935, N° 762, ♂ Eala 2-9.VIII.1935, N° 772, ♀ Eala 2.VIII.1935, N° 723 (J. Ghesquière) I. G. 10482 ; 6 ♂♂ and 9 ♀♀ Eala 27. VII.VIII.1935 (J. Ghesquière, 722) I. G. 10482, « fruits de *Borassus* » ; ♂ and 2 ♀♀ Eala VII.2.VIII.1935 (J. Ghesquière, 723) I. G. 10482, « cabosses cacaoyer » ; ♂♀ Eala VII.1935 (J. Ghesquière, 733) I. G. 10482, « *Rollinia Sieberi* » ; ♂ Eala 29. V.1935 (J. Ghesquière, 539) I. G. 10482, « oranges » ; 3♂♂ Eala XII.1934 (J. Ghesquière, 39) I. G. 10482, « éclos de fruit de Cucurbitacée » ; ♀ Eala 28.V.1935 (J. Ghesquière, 538) I. G. 10482, « fruits *Areca Alicæ* ; ♀ Eala 18.XI.1934 (J. Ghesquière) I. G. 10482, « sur papaye pourrie » ; 2 ♀♀ Eala 13.XII.1934 (J. Ghesquière) I. G. 10482, « sur chenilles pourries » ; ♀ Eala 12.II.1935 (J. Ghesquière, 232) I. G. 10482, « obtenus d'élevage de fruits de *Cola acuminata* ». 8 ♂♂ and 12 ♀♀ Rutshuru XI.-13.XII.1937 (J. Ghesquière, 5434) I. G. 10482 ; 2 ♀♀ Ruthsuru VI.1937 (J. Ghesquière, 4552 B) I.G. 10482. 2♂♂ Bambesa X.-XII.1938 (J. Vrydagh) I. G. 12234. 2 ♂♂ Distr. Congo-Ubanghi (G. Settembrino) I. G. 10699. ♂ Likete (S/Lomela) 13.VI.1936 (J. Ghesquière) I. G. 10482.

Wing photograph : plate, fig. D.

Chaetonerius niger Czerny

There is a single male in the collection from Sinda (env. Ruthsuru) 1.1938 (J. Ghesquière, 5714) I.G. 10482.

This is the only African species which has the abdominal tergites in both sexes uniformly dark brown, without the usual pair of testaceous yellow vittæ.

Male. — Body 5.9 mm long ; wing 5.6 mm long and 1.7 mm wide, only 3.3 times as long as wide.

Head 1.09 mm long, 1.18 mm wide and 0.86 mm high (fig. 5) ; coloration darker than in the other examined species. The head in profile is densely white dusted pale yellow below the eye, and blackish brown before the eye; lower half of the occiput dark brown, upper half paler brown. Frontal orbits (genovertical plates) subshining dark brown, covered with whitish gray pruinosity; frontal vitta nearly entirely dull brownish black, only a small wedge-shaped spot on the middle of the anterior margin is yellowish brown, and the ocelli are clear yellow to brown. Eyes in profile 0.70 mm long and 0.66 mm high. Antennæ blackish brown, scape 0.18, pedicel 0.31 (body 0.11, « process » 0.20) and postpedicel 0.41 mm long. Arista 1.6 mm long, dark brown with short pubescence of the same color.

Head bristles black : 2 *orsa*, both shorter than the *orss*, *vte* and the convergent but not crossed *pvt*, which all are nearly equal in length; the anterior *orsa* is shorter, but the posterior one is considerably longer than the *vti*.

Thorax 1.8 mm long, 1.2 mm wide and 1.7 mm high, subshining dark brown, except the usual yellow vitta on both sides between mesonotum and pleuræ. Mesonotum sparsely dark brown, pleuræ whitish gray dusted. Thorax bristles long, shining black : 4 pairs of *dc*, the posterior (prescutellar) pair is the longest and the two anterior pairs are the shortest; 1 weak scapular, 1 strong *prpl*; 2 *npl*, the anterior pair three fourths as long as the posterior; 1 *sa*, 1 *pa*; 2 *sc*, the basal pair one half as long as the apical one.

Legs : Procoxa pale brownish yellow, mesocoxa and metacoxa dark brown. All femora uniformly dark brown, tibiæ slightly paler, tips of the tibiæ and tarsi blackish brown. Tibial spurs 0:1:1. Procoxa only with the usual two dorsoapical bristles (fig. 6) ; basal half of the fore femora with short, hair-like bristles and short spinules, apical half with 4 widely spaced long spines.

Wings brown tinged. Apical half of the second vein (r_{2+3}), apical third of the almost perfectly straight ultimate section of the third vein (r_{4+5}), and the costa between the tips of the second and third veins, bordered with dark brown color. The situation of the *tp* is almost straight. First costal section 0.20, second 3.45, third 0.66 and fourth 0.20 long. Prebasal section of the fourth vein (m_1) 0.93, median 1.23 and ultimate 2.45 mm long; *ta* situated considerably proximad to the middle of the discoidal cell.

Preabdomen 2.4 mm long and 1.0 mm wide. Tergites entirely subshining dark brown, without the usual two testaceous yellow vittæ. Tergites linear, as pale brownish in color as the lateral membranes. Postabdomen shining yellowish brown ; 7+8 syntergite paler in color and only slightly shorter (0.41 mm) than the epandrium (0.52 mm) ; epandrium typically shaped, narrowed towards the middle, at the base 0.20, at the apex 0.13 mm wide. The relatively long, yellow surstyli are very slender, almost cylindrical (fig. 7).

Female. — Like the male. Body 5.2 mm long ; wing 5.4 mm long and 1.6 mm wide, only 3.3 times longer than wide. Head 1.07 mm long, 1.18 mm wide, and 0.86 mm high. Eyes 0.81 mm long and 0.70 mm high. Antennæ : scape 0.14, pedicel 0.31 (body 0.11, « process » 0.20) and postpedicel 0.41 mm long. Thorax as long as high (1.6 mm) and 1.2 mm wide. Head and thorax bristles, legs, etc., as in the male.

Wing characteres as in the male. First costal section 0.27, second 3.31, third 0.70 and fourth 0.16 mm long. Prebasal section of m_1 0.93, median 1.25, and ultimate 2.54 mm long. Preabdomen 1.8 mm long and 1.0 mm wide. Oviscape relatively short (fig. 8), 1.02 mm long and 0.66 mm wide, shining brown with sparse scattered brown hairs.

Chaetonerius wittei Aczél

Two male paratypes in the collection from Rutshuru, 1.XII. 1937 (J. Ghesquière) I. G. 10482.

Index bibliographique.

Aczél, M.L., 1954, *Neriidæ* in the Collection of the Musée royal du Congo Belge. *(Rev. Zool. Bot. Afr. XLIX, pp. 161-166.)*

Brunetti, E., 1929, New African Diptera. (*Ann. Mag. nat. Hist. London (10)*, IV, pp. 1-35.)

Czerny, L., 1932, Tyliden und Neriiden des zoologischen Museums in Hamburg. (*Stettin. Ent. Ztg.*, XCIII, pp. 267-302.)

Enderlein, G., 1922, Klassifikation der Mikropeziden. (*Arch. f. Naturg.*, LXXXVIII A, 5, pp. 140-229.)

Hennig, W., 1937, Ubersicht über die Arten d. Neriiden und über die Zoogeographie dieser Acalyptraten - Gruppe. *(Stettin. Ent. Ztg.*, XCVIII, pp. 240-280.)

Karsch, F., 1887, Dipteren von Pungo-Andongo (Kamerun), Fortsetzung. (*Ent. Nachr.*, XIII, pp. 4-10.)

Speiser, P., 1910, *Cyclorhapha Aschiza*, in Sjöstedts Kilimandsaro-Meru-Expedition, Stockholm, X, (4), pp. 113-202.

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