# REVISION OF THE FULVIPES-, RUFICORNISAND VARIEGATA-GROUPS OF THE GENUS CEROPALES LATREILLE (HYM., CEROPALIDAE) 

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#### Abstract

This revisionary study treats the 12 species of the FULVIPES- RUFICORNIS- and VARIEGA-TA-group of Ceropales s. str. occurring in the Nearctic, Palearctic and in the Ethiopian regions. Ceropales tokyoensis and saltoensis are described as new species from Japan and from Mexico, respectively and the male of $C$. ruficollis CAMERON is described for the first time. Names are synonymized as follows: Ceropales ruficornis Gussakovskis $=$ C. gilvus Haupt jun. syn., C. variegata (Fabricius) $=$ C. impunctatus Yasumatsu jun. syn., C. picta Shuckard = C. ruficollis Cameron sensu Arnold jun. syn., and C. latifasciatus montivagus Arnold jun. syn.,. and C. ruficollis Cameron $=$ C. latifasciatus var. jucundus Arnold $?$ jun. syn. C. ruficollis Cameron is revalidated as bona species from the synonymy. Lecto- and paralectotypes are designated.


A revision of the large genus Ceropales s.1. has become necessary because the new systematic arrangement based chiefly on the claws (Priesner, 1969) and especially on account of the new descriptions prepared during the period of the Second World War, since at that period it was impossible to study the types, as well as the literature references were not avaliable, either. In this process the following names have been synonymized: Ceropales gilvus Haupt, C. impunctatus Yasumatsu, C. ruficollis Cameron sensu Arnold, C. latifasciatus var. jucundus. C. ruficollis Cameron has been revalidated from synonymy as bona species. Lecto and paralectotypes have been designated in the original series for a number of species. To facilitate future correct recognition of the type specimens, I give the exact data of the different labels of the investigated types in quotation marks. Similarly to Townes's (1957) FULVIPES-group, I combine some species known only sporadically today into the RUFICORNIS- and VARIEGATA-group. Recognition of these three groups is rather easy among the species of Ceropales s. str., howewer identification of the species is much more difficult in certain cases. Instead of the usual long and detailed descriptions I summarized the most typical characteristics in the key for the unambiguous recognition of the often rather variable species. This study treats 12 species, two among them being new to science, occuring in Nearctic, Palearctic and in Ethiopian regions. All references, which are absent from the Dalla Torre's (1897) catalogue have been listed as far as possible.

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## Key of the species ( $q \delta^{\circ}$ )

1 Surface of propodeum smooth only basally, or coarsely rugose (figs 1,3 ), or at least rugulose on its whole length. Propodeum strongly broken basally and in lateral view flat or concave on declivous part. Frons moderately, pronotum, especially mesonotum remarkably deeper and more densely punctured, sometimes partly shining. Claws of hind legs rectangularly curved

- Propodeum, frons, pronotum and mesonotum finely sculptured, coriaceous-granulated (fig. 4). pruinose, mat, never rugose or rugulose. In lateral view surface of propodeum moderately convex anteriorly or on its whole length. Tergite 2 or 3-6 often black. Hind claws rectangularly curved (ARIEGATA-group)
2 One-fifth of propodeum basally and often laterally remarkably more finely sculptured than on declivous part, usually smooth shining or partly wrinkled, often impressed medially, declivous part mostly rugulose. 2-4 joints of fore and middle tarsi very short and broad ( $\delta$ ), also claws of middle tarsi assymmetric, specialized ( $\delta$ ). Frons with minute punctures and also with scattered larger punctures. Largely black species with light spots and streaks on tergites (FULVIPES-group) . . 3 Whole surface of propodeum mat, coarsely rugose (figs 1,3 ), posteriorly sometimes only rugulose or with irregular rough surface, laterally often strongly punctured. Tarsi and claws normal. Usually largely, nearly entirely yellow, partly ferruginous, rarely a more or less black species (RUFICORNIS group)
3 Frons hardly punctured, larger punctures separated from one another by a distance of about 4.0 times their diameter on the average; the same on mesonotum by an average of about 1.5 times their diamater ( $\$ \$^{\circ}$ ). Male hind coxa with a large, internal, basal, obliquely truncate lobe that substends a large excavated area basally of coxa. Subgenital plate produced and in profile swollen apically $(\delta)$. The whole of the lower face $(\delta)$ or part of the labrum yellowish white and supraclypeal area with a black spot medially ( $)$ ), usual spots on thorax and posterior bands on tergites, except tergite 1, that with two large triangular spots $(\delta)$ or sometimes interrupted ( $\%$ ). Trochanters-tarsi yellowish red with some light spots. $q 6-8.3, \delta^{5} 4.7-6.5 \mathrm{~mm}$


Figs. 1-2. Ceropales saltoensis sp.n., $1=$ postscutellum, postnotum, propodeum and tergite 1 ; $2=$ pronotum in lateral view.


Figs. 3-4. Postnotums and propodeums, $3=$ Ceropales iokyoensis sp.n.; $4=\mathrm{C}$. ruficollis CAMERON.

- Frons distinctly punctured, larger and deeper punctures on frons separated from one another by a distance of about 2.0 times their diameter on the average; the same on mesonotum by an average of about 0.7 times their diameter $(\$ 5)$. Male hind coxa at most with a long-shaped ditch inside. subgenital plate triangular in profile, not so swollen apically. Mandible largely (\$) or basally ( 5 ) black. Lower face entirely ( $\xi^{\circ}$ ) or except the black spot on supraclypeal area, yellowish white ( $\$$ ). Thorax with the usual light spots ............................................................ 4
4 Fore and middle femora yellowish red with larger, apical yellowish streaks on outer side. Male hind coxa not specialized; subgenital plate not swollen apically ( ()$^{\circ}$. Labrum largely ( $($ ) or entirely $(\xi)$ yellowish. Outer orbit with continuous streak, above mandible broader, from middle narrower
yellowish white streak. Tergite 1-5 with apical light bands, 1 sometimes interrupted medially, 6 with medial spot (\%) or $1(2)-5$ with apical light bands or 1 with lateral and 6-7 with medial spots ( $\delta^{\circ}$ ). \& 6-8.3, $\delta^{8-11.9 ~ m m ~}$


## brevicornis Patton

- Fore and middle femora black or dark brown with ivory or yellowish white streaks apically. Male hind coxa with a rather deep, long-shaped ditch inside. Subgenital plate in profile somewhat swollen apically. Labrum entirely black (\%) or yellowish white ( $\delta^{\circ}$ ). The narrow ivory or yellowish white streak of outer orbit broadly interrupted into an upper and a lower half. Tergite 1 usually with lateral spots, 2-4 ( $\%$ ) or 2-5 ( $\delta^{\circ}$ ) with whitish bands, 5-6 $(\%)$ or 6-7 $\left(\delta^{\circ}\right)$ with medial spots. + 5.5-6.5. $3^{3} 7-8.5 \mathrm{~mm}$


## neomexicana ROHWER

5 Basal part moderately bending into declivous part. Body black with more or less yellow spots and streaks, never ferruginous. Postnotum broader, nearly all coarse wrinkles running parallel and longitudinally

- Basal part in one-fifth part of length of propodeum strongly broken towards the fourth-fifths declivous part. Body largely yellow, sometimes partly ferruginous. Postnotum narrow, coarse wrinkles running mostly transversally
6 Tergites 1-5 with broad pale yellow posterior bands. Lower face, except black mandibles, outer orbit, posterior and lateral margins, callus of pronotum (fig. 2), spot on tegulae, postscutellum, lateral corners of propodeum, large spots on coxae pale yellow, tibiae and tarsi ferruginous, tibiae with yellow streaks or spots. Wrinkles of propodeum running regularly and longitudinally at basis and transversally on declivous part (fig. 1). Antenna black, 1-2 joints with yellowish spots below. Frons mat. 10 mm
saltoensis sp.n. 우
Tergite I with large lateral. 6 with medial yellow spots, 2 with posterior yellow band laterally broader than medially. Lower face, including clypeus with broad longitudinal and black band: one-third of clypeus laterally, inner orbit, a narrow and short streak on outer orbit, posterior margin of pronotum, postscutellum, postero-lateral corners of propodeum, yellow. Face coriaceous, with scattered larger punctures. Pronotum, mesonotum and scutellum deeply and densely punctured. Propodeum with conspicuously coarse rough surface (fig.3), basally and laterally with irregular, partly transversal, in declivous part with longitudinal wrinkles. 6.5 mm
tokyoensis sp.n. क
7 Vertex, antenna, occiput largely, mesonotum, propodeum and episternum largely or entirely,legs, tergites 1-3 basally ferruginous; black only round ocelli; lower face, frons between eyes and outer orbit broadly, pronotum entirely, tergula yellow; tergites $1-5$ with broadly yellow bands. mesonotum, postscutellum, propodeum laterally and legs with yellow spots. Surface of mesonotum shining with deep and dense punctures. Propodeum longitudinally rugose basally and transversal rugose on declivous part, only slightly impressed medially. Frons scatteredly punctured. Wings yellowish infuscated. $7-8.8 \mathrm{~mm}$
ornata SMITH
- Body largely yellow and black, legs yellow, partly ferruginous. Surface of mesonotum coriaceous. mat, with punctures. The large yellow spot extending between inner orbits from antennal socket nearly to lower ocellus, lower face, also mandible yellow ( $\ddagger \zeta^{\circ}$ ), with a black spot above antennal socket ( $q$ ). Propodeum coarse, longitudinally rugose basally, projecting or hamped more ( $\mathcal{F}$ ) or less $\left(\delta^{*}\right)$ between spiracles and corners, declivous part concave $(\xi)$ or flat $\left(\xi^{\circ}\right)$. Lower edge of last sternites convexe basally slightly concave and arcuately truncate apically (\%) (fig. 7) $9.5-10.5, ; 6-8.4 \mathrm{~mm}$
ruficornis Gussakovskis
8 Pronotum, propodeum black, tergite $1(2)$ often yellowish red, at most with light spots. Head, pronotum, mesonotum coriaceous, at most with moderate punctures, silky shining, at most with some shallow and fine larger punctures laterally and next to ocelli. Punctures of mesonotum shallower. Propodeum granulated with finer sculpture. Last sternites ( $\%$ ) truncate apically (fig. 8)


Figs. 5-7. Last abdominal sternites, $5=$ Ceropales saltoensis sp.n.; $6=$ C. tokyoensis sp.n.; $7=$ C. ruficornis Gussakovskis

- Pronotum largely, propodeum and tergite 1 often ferruginous, tergites usually with ivory or yellowish white bands. Head, pronotum, mesonotum dull granulated, mesonotum and episternum with scattered larger and deeper punctures superimposed. Propodeum hardly or anteriorly convex, at most excised to a small degree basally, rather coarser sculptured (fig. 4). Last sternites (\$) triangular apically (figs 9-10)
9 Tergites 1-2 yellowish red, 2 rarely only partly, tergite 2 with white lateral spots, 6 with medial${ }^{( }$() ) or with two white spots ( $\delta^{\circ}$ ). pronotum with two oblong white streaks. Postnotum with parallel sides. Mesonotum, episternum coriaceous, without punctures. Legs largely yellowish red, hind tibia blackish apically, spine yellowish red. Lower face white, with broad longitudinal black streak ( $\ddagger \delta^{\circ}$ ). Flagellum entirely black. Last tarsal joint of middle legs yellowish red. Lower edge of last sternites convex basally and truncate apically (fig. 8) $3.5-7 \mathrm{~mm}$


## variegata Shuckard

Abdomen black with ivory spots on tergite 1, 2-5 with narrow apical and medially interrupted bands. 7 with medial spot. Posterior white band of pronotum continuous, narrow, not reaching tegulae. Postnotum broadened medially in a slightly obtuse angle towards propodeum, surface finely cross wrinkled and interrupted by a deeper shiny line medially. Episternum moderately and sporadically punctured below tegulae. Mesonotum with scattered larger punctures. Femora 1-2 brownish, 3 rufous, hind tibia and tarsi entirely black, spine white. Lower face with inner orbit yellow, flagellum ferruginous below. Last tarsal joint of middle legs black. 4.5 mm

## turcomana Gussakovskis *

10 Mandible, labrum, clypeus largely, antenna, except the black last 2-3(4) joints, inner and outer orbit continuously ferruginous, sometimes paler or partly yellowish; supraclypeal area black or


Figs. 8-10. Last abdominal sternites, $8=$ Ceropales variegata (Fabricius), $9=$ C. picta Shuckard, $10=$ C. ruficollis Cameron
brownish below antennae and often the black spot below or around tentorial pit. Often two or four longitudinal streaks on mesonotum, tegula, middle of scutellum, postnotum only laterally. nearly whole propodeum, legs nearly entirely and usually tergite I before white band, in more or less extent, ferruginous. Postscutellum with white spot. Tergites 2 or 2-4 black and dark reddish narrowly translucent, preapical band of tergite I broader, of 3-7 narrower yellowish white. Labrum 2.3-2.7 times broader than long. Interocular distance on vertex 1.4-1.5 times wider than the least distance between eyes below antennae. POL:OOL $=7-8: 10-11$. Last sternites triangular apically (fig. 9) $\subset 6-10 . ; 6-8.5 \mathrm{~mm}$

## picta SHUCKARD

- At least sides of clypeus and supraclypeal area in a gradually narrowing line along inner eye margin up to sinus usually ivory white ( $\% \xi^{\circ}$ ), middle of lower face black ( $\%$ partly $j^{\circ}$ ). Sometimes posterior half of propodeum laterally ferruginous. Antenna largely black or ferruginous. Labrum twice as wide as long. Postscultellum with white streak

11
11 Coxe, trochantres and greater part of femora black, tibiae tarsi largely ferruginous. Lower face with a broad longitudinal and black line medially $\left(\xi^{\circ}\right)$, sometimes entirely black at most with two small white spots on clypeus laterally ( $\%$ ) or often entirely white ( $0^{\circ}$ ). Usually inner eye margin white and hardly ferruginous above, outer eye margin yellowish or brownish only narrowly. Labrum more or less black or yellowish white, lower margin brownish. Mandible largely black. Antenna black, anterior flagellar joints more or less ferruginous at least below. Preapical band of tergite I broadly white, 3-6(7) with a narrower bands or rarely abdomen entirely black. POL:OOL $=6: 9$. Thickened part on lateral corner of propodeum reaching not beyond middle of half posterior margin. \& 6, ; $5.2-7 \mathrm{~mm}$

## latifasciata Arnold

Legs including underside of coxae largely, or at least partly ferruginous. Lower face with a broad longitudinal and black line medially ( $\ddagger 5^{\circ}$ ). Inner eye margin white, hardly ferruginous in emargination of eye ( $\ddagger j^{\circ}$ ). Outer eye margin brownish and broad basally, narrowing about the middle and yellowish brown above. Labrum pale ferruginous ( $\%$ ) or white with ferruginous lower margin ( $\delta^{*}$ ). Mandible black only on basal half. Antenna ferruginous, only last flagellar joints partly black. Tergites 1, 3-6(7) with white or yellowish white bands, 2 black with very dark red posterior margin. Tegula, sometimes a narrow longitudinal streak on mesonotum laterally ferruginous. $\mathrm{POL}: \mathrm{OOL}=8: 10$. Thickened edge of propodeum reaching beyond middle of its half posterior margin (fig. 4). Last sternites triangular apically (fig. 10). \& $8-9.1, ; 5.8-7 \mathrm{~mm}$
ruficollis Cameron

## The FULVIPES-group

Frons shining or subshining with minute punctures and also with scattered larger punctures. Pronotum, mesonotum often deeper and denser punctured. Propodeum roundly curved on its one-fifth part basally, often impressed medially and flat on four-fifths declivous part posteriorly, smooth, shining or finely sculptured and subshining basally and laterally, rugulose posteriorly. Tarsi and claws normal $(\%)$ or second to fourth joints of fore and middle tarsi very short and broad ( $\delta^{*}$ ), last joint of fore tarsus with a rounded swelling on front side ( $\delta^{\circ}$ ). Outer claw of fore leg with a large triangular lobelike, appressed basal tooth, inner claw with a median appressed lobelike tooth $\left(\delta^{*}\right)$. Outer claw of middle leg with a large lobelike tooth that is strongly appressed to the claw, inner claw with a large, erect. triangular, subapical tooth $\left(\delta^{*}\right)$. Last sternites compressed and with a projecting apical part, apex of which rounded ( $\%$ ). Subgenital plate triangular, with an acute apical point $\left(\delta^{*}\right)$. Abdominal tergites with yellowish bands or spots.

This group includes the Nearctic fulvipes, brevicornis and neomexicana.

## Ceropales fulvipes Cresson

Ceropales fulvipes Cresson, 1872, Trans.Am.ent.Soc. 4:208 $q$
Ceropales fulvipes: 1892, Fox, Trans.Am.ent.Soc. 19:49,50,52 \&
( = C. brevicornis PAtton, 1879 of as a syn.)
Ceropales fulvipes:1895, Dalla Torre, Wien.ent.Ztg. 14:91
Ceropales fulvipes:1897, Dalla Torre, Cat.Hym.8.Fossor.: $342 \% \sigma^{\circ}\left(=C\right.$. brevicornis Patton, $1879{ }^{\circ}{ }^{\circ}$ as a syn.)
Ceropales fulvipes:1957, Townes, Bull.U.S.natn.Mus. 209:237, 271 fig. $1619{ }^{\circ}$
Ceropales fulvipes: 1979, Krombein, Cat. Hym.Am. N.Mex. 2:1569 of
Specimens examined: $4 \%$ and 11 §. U.S.A. = Alaska: Cordova coll. de Saussure $2 \delta$ (Genève and Budapest); Texas: 1 q. 1 \% (Budapest), Fredericksburg 18 Apr 1959 W.R.M. Masson 1 q. 1 of (Ottawa), Kerville 4, 15, 16 Apr W.R.M. Mason and J.F. McAlpine (swept ex Aesoulus sp.) 3 ö (Ottawa), 1 \&. 2 s (Budapest); and 22 Jan E. S. Ross $1 \mathrm{\delta}$, as well as Uvalde Co. Speir Rch, 1 Mai 1977 Mal. trap T. Eichlin M. Wasbauer 1 \& (Sacramento) N. Mexico: Gallup Mc Kinley Co. 6500 ft 21 Jul 1950 T. Cohn $1 \delta$ (New York).

Distribution. U.S.A. $=$ Texas (Cresson, 1872); Kansas, Montana (Fox, 1892); Alaska, North Mexico.

## Ceropales brevicornis Patton

Ceropales brevicornis Patton, 1879, Bull.U.S.Geol.Surv.5:368 §
Ceropales brevicornis: 1957. Townes, Bull.U.S.natn.Mus. 209:239, 268 fig. 159 q* ${ }^{*}$
Ceropales brevicornis: 1979, Krombein, Cat.Hym.Am.N.Mex. 2:1569 ${ }^{\circ}$
Specimens examined: 3 q, $4 \delta^{\circ}$, U.S.A. $=$ Colorado: 4 Mi.N.E.Idalia Yuma Co. 10. Aug 1964 J.G. and B.L. Rozen $2 \delta^{\circ}$ (New York and Budapest); Iowa: City Wickham $1+$ (Bruxelles), Sioux City 4 Aug 1922, 10 Sep 1930 C.N. Ainslie 1 \&, $1 \delta^{\circ}$ (Budapest); Kansas: Riley County Aug 1 \&, 1 o (Budapest).

Distribution. U.S.A. = Kansas (Patton, 1879); Luisiana, Texas, New Mexico north to Pennsylvania and Alberta, Rocky Mountains (Townes, 1957); Washington (Krombein, 1979); Iowa.

## Ceropales neomexicana ROHWER

Ceropales neomexicana Rohwer, 1915, Proc.U.S.natn.Mus. 49:236 ${ }^{\circ}$
Ceropales neomexicana: 1957, Townes, Bull.U.S.natn.Mus. 209:239, 270 fig. $160 \%{ }^{\circ}$
Ceropales neomexicana: 1979, Krombein, Cat.Hym.Am.N.Mex. 2:1570 ठ
Specimens examined: 5 9, 7 3. U.S.A. = California: Fresno, San Joaquin 1-5 Jul 19842 oै (Sacramento) and $1 \delta^{\circ}$ (Budapest); San Diego, Borego F.X. Williams $1 \delta^{\circ}$ (Sacramento);Vig.gland. hairs of vs. on Helianthus annuus 26 May 1912 J.C. Bridwell 1 §' (Budapest); Nevada: Logandale 12 Aug 1959 F.D. Parker $1 \delta^{\prime}$ (Sacramento); New Mexico Hidalgo Co. 29 Jul 1959 on Asclepias subverticillata E.G. Linsley 1 q and Aug 1978 on Baccharis glutinosa M.S. Wasbauer 1 of (Sacramento) and 1 of (Budapest); Mc Kinley Co. 19 mi.N. Gallup 14 Aug 1972 J.G. Rozen and Mc Ginley 1 ơ (New York). - Mexico $=$ Souosap 4 Jul 19271 \& (Budapest); 16.mi. W. Durango Dgo 7200' 28 Jun 1964 J.F. McAlpine 1 ơ (Ottawa).

Distribution. Northern N. Mexico (Rohwer, 1915). U.S.A.: California, Arizona, New Mexico and Sonora (Townes, 1957).

## The RUFICORNIS-group

Frons convex or hardly broken, moderately, mesonotum deeper and denser punctured. Propodeum strongly, rarely only moderately broken about on its one-fifth part basally and flat or concave on four-fifths declivous part when viewed from the side, and often punctured laterally. Surface of propodeum coarsely rugose, at least rugulose on its whole length or rather smooth, partly shining only basally. Hind claws rectangularly curved, tarsi and further claws normal with small subapical tooth ( $\ddagger \delta^{\circ}$ ), except inner claw of fore leg, which deeply emarginate ( $\delta^{\circ}$ ). Last sternites compressed laterally and with a projecting apical part, apex of which above roundly, below rectangularly truncate, rarely rounded both above and below ( $\%$ ). Subgenital plate flat, truncate posteriorly with rounded lateral corners ( $\delta^{*}$ ).

This group includes the species saltoensis, tokyoensis, ornata and ruficornis, sporadically known from the East Mediterranean, South-East Euro-Turanian and East Asian regions, as well as from East India fauna province and from Mexico.

## Ceropales saltoensis sp.n.


#### Abstract

Specimen examined: 1 \& holotype. Mexico: .. 3 mi.E.EI Salto, Dgo, Mex. $8400^{\circ}$ June 21. 1964 W.R.M. Mason" (deposited in Biosytematics Research Institute, Res.Branch, Ottawa, Canada), No. 19198(HT).

ㅇ. - Length 10 mm . Black, lower face, inner and outer orbit, small spots on scape and pedicel in front, posterior, lateral margins and callus of pronotum, spot on tegula and basis of fore wing, postscutellum largely, postero-lateral spots on propodeum, posterior broad bands on tergites $1-5$, underside of fore coxa, apical half of middle coxa, large spot apically and a line outside on hind coxa, small spots outside on fore and middle femora, on middle and hind tibiae, fore tibia in front, pale yellow; rest of tarsi ferruginous, except the last tarsal joints apically. Wings brownish infuscated, veins brown, pterostigma brown. Frons hardly broken below fore ocellus, surface finely granulate, mat, with scattered and shallow punctures, frontal sulcus distinct only above antennae. Ocelli in a distinct obtuse angle, $\mathrm{POL}: \mathrm{OOL}=9: 12$. Pronotum, mesonotum largely with deeper and denser punctures, pronotum between the yellow margin of lateral side and callus more or less diagonally wrinkled (fig. 2). Postnotum hardly broader medially than laterally, with stronger and parallel longitudinal wrinkles (fig. 1). Basal part of propodeum moderately bending into declivous part, with rather strong wrinkles, these running longitudinally at basis and transversally on declivous part, then again longitudinally on lateral side, lower half of lateral side of propodeum coriaceous, with scattered shallow punctures. Episternum with deeper, but only on ventral side denser punctures. Claws normal. Abdomen finely reticulated only moderately shining. Last sternites compressed laterally and with a short projecting apical part, apex of which rounded both above and below, viewed from the side (fig. 5).


## Ceropales tokyoensis sp.n.

Specimen examined: 1 q holotype. Japan: „Chichibu, Saitama Pref.near Tokyo", „ 1913 X.16" Type No. 2561 (deposited in Kyushu University, Entomological Laboratory, Faculty of Agriculture, Fukuoka, Japan).

ㅇ. - Length 6.5 mm . Black, inner eye margins, lateral one-third part of clypeus, a small and narrow streak on outer eye margin above, two minute spots on tubercle between antennae, a longitudinal streak on underside of scape, posterior margin of pronotum including the lateral corners below tegulae, callus of pronotum, postscutellum, postero-lateral corners of propodeum, two large spots on tergite 1 laterally, posterior band of tergite 2 laterally broader, medially narrower, a spot on tergite 6 medially, spot on underside of fore coxa, small spot on middle coxa apically, outer edge narrowly of hind coxa, yellow, femora apically and tibia basally and apically, underside of hind tibia largely, spurs and tarsi partly yellowish brown. Wings brownish infuscated, nervature similar to C. m. maculata (Fabricius). Head and thorax covered partly with fine silky toment.

Front subshining, coriaceous, with very small punctures and with scattered larger punctures separated from each another by about 2 to 3 times their diameter; ocelli in a rectangle, POL:OOL $=7: 9$; pedicel half as long as antennal joints 3,3 as long as 4, or as long as scape; frontal sulcus distinct medially, frons hardly concave above antennae and slightly broken below fore ocellus, viewed from the side. Pronotum, mesonotum and scutellum densely and deeply punctured, interspaces mostly narrower than punctures. Postnotum with coarse longitudinal wrinkles, hardly impressed medially. Propodeum conspicously rugose (fig. 3), the deep wrinkles irregular basally, running transversally below spiracles and rather longitudinally in the flat declivous part. Episternum densely but less deeply punctured than mesonotum. Lateral side of propodeum strongly wrinkled only medially, coriaceous partly and moderate shining. Hind coxae flattened inside. Abdomen polished, very finely reticulated. Last sternites compressed laterally, underside straight with apex above roundly, below nearly rectangularly truncate (fig. 6). Claws normal, with small subapical tooth, hind claws rectangularly curved.

## Ceropales ornata Smith

Ceropales ornata Smith, 1855, Cat.Hym.Brit.Mus.3:179 nr. 7 \&
Ceropales ornata: 1891, Cameron,Mem Proc.Manchr lit.phil.Soc.: 434
Ceropales ornata: 1892, Fox, Trans.Am.ent.Soc.19:62
Ceropales ornata: 1895, Dalla Torre, Wien.ent.Ztg. 14:92
Ceropales ornatus: 1897, Dalla Torre, Cat.Hym.8.Fossor. 344 \&
Ceropales ornata: 1897, Bingham, Fauna Brit.India Ceylon Burma I:174
Specimens examined: 2 ㅇ, 1 §. India: „Ind." 1 \& lectotype and 1 ot paralectotype (Oxford); „Nasik", „Bombay Presidency, pres. by E. Comber. 1910-255.", „Type WWS coll Oxford det M.C. Day 198 " WWS = W.W. Saunders, ..C.ornata Sm. det. M.C. Day 198 " 1 ¢ (London).

No exact type locality was given by the author, only „Hab. India" and it was referred to "in other examples", consequently these above listed specimens can be regarded as the original material. As the writing, the form of the label, also the pin and the mounting of the specimens (Ind.) are the same as Smith's other types, e.g. on Ceropales flavopicta Smith. I designate as lectotype the female and as paralectotype the male with labels „Ind." (Oxford).

Smith's short diagnosis can be supplemented as follows. Lenght $\% 7.8$ (lectotype) -8.8 mm , o 7 mm . The dark spots extending larger on male than on female and reduced on other female (Nasik); basis of tergites 2-5 dark rufous black ( ${ }^{\circ}$ ); all the rest corresponding to those of the female. Frons convex between fore ocellus and antennae, viewed from the side. Propodeum rather strongly broken basally, declivous part flat, transversal rugulose. Subgenital plate long triangular pointed, with rather straight sides, broadly rounded with a sharp and long excision distally ( $\delta^{*}$ ). Claws normal, fore and middle claws with minute subapical tooth.

Distribution. India (Smith, 1855).

## Ceropales ruficornis Gussakovskij


#### Abstract

Ceropales ruficornis Gussakovskis, 1931, Ezheg.zool.Mus.32:4, $219{ }^{\circ}$ Ceropales gilvus Haupt, 1962, Bull.Res.Coun. Israel 11B:32 $90^{\circ}$ syn.nov. Ceropales gilvus: 1966, Priesner, Israel J.Ent.1:151,152 ${ }^{\circ}$ Ceropales ruficornis gilvus: 1978, Móczír, Acta biol.Szeged. 24 : 126 fig. $5 \%{ }^{\circ}$ stat.nov. Specimens examined: 79.9 5. Azerbaidzhan SSR: Kuru-tshaj 2 Jun 1927 Gussakovskis 1 os paralectotype (Hym. Typ. No. 3645 Budapest). - Turkmen SSR: Iman-baba 1932 Shestakov 1 3 (Budapest). - Israel: ,Jerusalem, Palestine I.VI. 1940 Bytinski-Salz", .,Holotype" and ."Type" red labels, ..Ceropales gilvus Haupt \& Haupt det 1952" with Haupt's writing 1 \& holotype (Tel Aviv); ,.Jericho, Palestine 11.6.1941 Bytinski-Salz", ,.Allotype", .,Typus" red labels, .,Ceropales gilvus HauPT © Haupt det 1952" I os paratype (Tel Aviv); ..Jerusalem Palestine 12.6.1941. BytinsKi-Salz". ..Ceropales gilvus Haupt $q$ Haupt det 1952". 2 q paratypes (Tel Aviv and Hym. Typ. No. 3646 Budapest); ,,Palestine Urim 3.6.19 leg. Bytinski-Salz", „Paratypus ex coll. Bytinski-Salz", ,.Ceropales gilvus Haupt \& Haupt det 1953" with Haupt's writing, 1 \& paratype (Tel Aviv): Palestine Urim 15 May 19 Bytinski-Salz 1 $\delta^{\circ}$ (Tel Aviv); Adulam 26 Aug 1970 Bytinski 13 (Tel Aviv) and 1 q. $1 \delta^{\circ}$ (Budapest); Sarafand 28 Apr Bytinski-Salz 1 \& (Tel Aviv); Hulda 1966 Kugler 1 ó (Tel Aviv). - Cyprus: Zakaki Jul, Aug I \& Io (Budapest). - Syria: Mezzé, near Damascus 27 May 1955 A. Mochi I s (Coll. Mochi). Jordania: Jericho (=El Riha) Schmiedeknecht 1 \&, 1 s (Frankfurt/M. and Budapest).


The gilvus specimens of the original material designated by the author and the other specimens, are remarkable differently coloured even in the same locality (Adulam). Body nearly entirely yellow, black only between the large yellow spots on vertex, occiput, median sternite of thorax, basis of segment 1 and of tergites narrowly or the yellow colouring distinctly retired, e.g.tergites black, 1 only with two large yellow spots laterally, the others with posterior yellow bands. Sculpturally difference less conspicuous, rugosity of basis of propodeum less pregnant on smaller specimens or wrinkles running partly longitudinally and diagonally, partly longitudinally on basis. Genitalia of gilvus corresponding to that of ruficornis. Also the slightly concave lower edge before the tip and the arcuately truncate end of the last sternites (fig. 7) of the two species agree with each other.

Distribution. Russian (Asia), Azerbaidzhan SSR (GussakovskiJ, 1931). Turkmen SSR, Cyprus, Palestine (MóczÁr, 1978). Israel, Syria, Jordania.

## The VARIEGATA-group

Frons convex, at most rarely slightly broken. Head, mesonotum, propodeum coriaceous-granulated, mat, hardly punctured not shining. Eyes less reniform, sinus on inner eye margin being shallow. Scutellum more or less gibbous, postscutellum normal, not raised. Postnotum with nearly parallel margins, at most slightly impressed posteriorly in middle. Propodeum moderately convex on anterior part or on its whole length. Propodeum without longitudinal sulcus basally, at most excised to a small degree. Claws normal. Body usually partly ferruginous or yellowish red. Last sternites compressed and with projecting apical part, apex of which above rounded and below pointed ( $¢$ )(fig. 8). Subgenital plate truncate apically and emarginate or deeply excised medially ( $\delta^{*}$ ). Tergite 2 or 3-6 usually black.

This group includes the species variegata, turcomana, picta, latifasciata and ruficollis, widely distributed in the Palearctic and the Ethiopian fauna regions.

## Ceropales variegata (FABRICIUS)

Evania variegata Fabricius, 1798, Suppl.ent.System.:241
Ceropales De Stefanii Costa (sic), 1887, Prosp.Imen.Ital.2:48 o T. 1 fig. 14 q (!)
Ceropales Destefanii: 1892, Fox, Trans.Am.ent.Soc.19:61
Ceropales variegata: 1892, Fox, Trans.Am.ent.Soc.19: 63
Ceropales Destefanii: 1895, Dalla Torre, Wien.ent.Ztg.14:91
Ceropales variegata: 1895, Dalla Torre, Wien.ent.Ztg.14:92
Ceropales Destefanii: 1897, Dalla Torre, Cat.Hym.8.Fossor.:342 ठ"
Ceropales variegatus: 1897, Dalla Torre, Cat.Hym.8.Fossor.:345 q0' (var.obscurus and var.notatus Tournier, 1889)
Ceropales variegatus: 1927, Haupt, Dt.ent.Z.(Beih.): 296, $299 \div \circ^{\circ}$
Ceropales destefanii: 1927, Haupt, Dt.ent.Z.(Beih.): 296, 300
Ceropales variegata: 1931, Gussakovski, Ezheg.zool.Mus.32:4, $159{ }^{\circ}$
Ceropales variegatus: 1938, Haupt, Ark.Zool.30A:11 O' $^{\circ}$
Ceropales impunctatus Yasumatsu, 1939, Trans.Kansai ent.Soc.9: 9 fig. 1 \& syn.nov.
Ceropales destefanii: 1947, Beaumont, Mitt.schweiz.ent.Ges.20: $517 \%^{\circ}$ as syn. of C.variegatus (Fabricius)
Ceropales variegatus: 1947, Beaumont, Mitt.schweiz.ent.Ges.20: 517 fig. 6, 17 \& ${ }^{\circ}$
Ceropales variegatus: 1954, Móczír, Folia ent. Hung. (S.n.) 7: 149, on Euph. gerardiana
Ceropales variegatus: 1955, Wahis, Bull.Inst.r.Sci.nat.Belg.31:8
Ceropales variegatus: 1956, Móczír, Fauna Hung. 13(5):76 $\ddagger 0^{\circ}$
Ceropales (Ceropales) variegatus: 1965, Wolf, Nachr.naturw.Mus. Aschaffenb. 72: $38 \%{ }^{\circ}$
Ceropales variegatus: 1969, Wolf, Opusc.ent. 34:14
Ceropales (Ceropales s.str.) variegatus: 1969, Priesner, Naturkundliches J.Stadt Linz: 115, $118 \not{ }^{\circ}{ }^{\circ}$
Ceropales variegatus: 1970, Wolf and Diniz, Mem. Estud.Mus.zool.Univ.Coimbra No 311:19
Ceropales variegatus: 1971, Wolf, Acta faun.ent.Mus.natn.Pragae (Suppl. 3): $59 \%{ }^{*}$
Ceropales (Ceropales) variegatus: 1972, Wolf, Ins.Helv.Fauna 5 Hym.: 166, 168 fig. $47690^{\circ}$
Ceropales variegatus: 1978, Móczír, Acta biol.Szeged.24:116 $90^{\circ}$
Ceropales variegatus: 1979, Waris, Bull.Rech.Agron.Gembloux 14(2): $19290^{\circ}$ on Angelica
Ceropales variegata: 1979, Day, Bull.Br.Mus.nat.Hist.38: 20 末
Ceropales (Ceropales) variegata: 1986, Wahis, Notes faun.Gembloux 12: 35

Specimens examined: 13 \&. 173.GDR: ..Type" red label, ..Halle Hübner". ..Ceropales variegata Hb.F Fab. type collect. (Hübneri) Germar", ..Lecto-Holotypus" H. Wolf det. 1983", ..Ceropales variegatus (FABR.)? H. Wolf det 1983" (abdomen missing) I \& paratype; and a male with the same labels except the third and instead of ..Lecto-Holotypus" a ".Lecto-Allotypus", I ${ }^{\circ}$ paratype (Berlin). - Italy: ..T. De-Stefani Sicilia". ..Ceropales De-Stefaniii "Costa" paralectotypes: $1 \delta^{\circ}$ and with the same data of the first label $1 \delta^{\circ}$ (Berlin). - China: ..(Manchuria) 1.VII. 1937 Hsinking, Z. Oono". ..Holotype Ceropales impunctatus Yasumatsu 1939" with Yasumatsu's writing. I q holotype (Fukuoka). - See Móczír (1978:116). - Spain: Salamanca, Parada de Rubiales 24 Jun 1961 J.v.d. Vecht on Thapsia villosa L. 1 ( (Leiden). - France: Hte Savoie 18 Aug 1929 J. de Beaumont $1 \delta^{\circ}$ (Lausanne). - Switzerland: Genėve, Allondon 8. Aug 1935, Cologny 1-9 Aug 1946 J. de Beaumont 2 \& (Lausanne): Martigny 20. 27 Aug, 4 Sep $19322 \% 3$ 3, 23 Jul $19353 \delta^{\circ}$. 29 Jun $19361^{\circ} \delta^{\circ}$ J. de Beaumont (Lausanne): Lavais les Follateres 9 Aug 1965 P. Bovey $1 \delta$ (Lausanne); Neuveville $1 \%$ (Lausanne). - Hungary: Ladảnyhalászi 28 Aug 19572 q. 1 § and Kisgéc 14, 24 Aug 1957 Lipthay 1 \&. 1 §. Sátor hgys. 21 Jul 1957 Ricz 1 \&, Szentgyörgyhegy 2 Sep 1958 F. Mitilıy 1 \&, Bükk hgys. 1 Jul 1957 Tóth S. $1 \delta^{\text {s }}$ and Siklós 29 Jun 1955 Glaser M. $1 \delta^{\circ}$ (Budapest). - Rumania: Transylvania, Cluj 8 Jun 1963 C. Nagy $1 \delta^{*}$ (Budapest). - Turkey: Bilecik 27 May 1964 J. Gusenleitner 1 \% (Coll.Gusenleitner). - Is rael: Kirj Gat 25 Apr 1970 Bytinski-Salz $1 \delta^{\circ}$ (Tel Aviv).

Day (1979) examined the holotype ( $\delta^{\circ}$ ) of Evania variegata Fabricius, for this reason the further specimens with the original data (Halle Hübner, Type-label) can represent the paratypes of variegata.

Beaumont (1947) designated the lectotype of C. destefanii from the $4 \delta$ of Costa's collection and synonymized it with variegatus. The 2 males preserved in Berlin and very probably from the same original material are designate now as paralectotypes. The light spots on one of the latter paralectotype distinctly reduced, on pronotum hardly discernible and only the hind legs partly reddish, fore and middle legs largely brown. On the other paralectotype the pronotal white streaks distinct, also legs largely yellowish red and only with minute basal spot white medially, similarly to the specimen originating from Habarovsk (East Siberia).

The holotype of impunctatus differs from variegata according to Yasumatsu in its reduced coloration, in the nervulus being oblique and POL shorter than OOL. The pronotal lateral streaks truly lacking, but spot of postscutellum and of tergite 2, 6 present, but hardly discernible, only transparent similarly to specimens e.g. from Switzerland or from some of Hungary. The characters of wing venation often vary. The relation of POL:OOL on impunctata is $5: 6.5$, on variegata $7-7.5: 8$. Head 1.06 times (impunctata), $1.15-1.19$ times (variegata) broader than long, measured from vertex to lower margin of clypeus. These small differences are not significant enough to represent a bona species.

Tergite 2 black partly (var. notata Tournier, 1889) or postscutellum black (var. obscura Tournier, 1889), but often also legs partly black.

Distribution. Sibiria meridionali usque ad oceanum Pacificum (GussakovskiJ, 1931). Austria (Priesner 1969). S.Sweden, S.England, E.Europe, Spain, Italy, Switzerland, Germany, Czecho-Slovakia, Hungary, Rumania, Yugoslavia, Greece, Morocco, Algeria, Russian SSR to Sibiria, Georgian SSR (Wolf, 1971), Turkey, Israel and China.

## Ceropales turcomana Gussakovskis

Ceropales turcomana Gussakovskis, 1926. Ent.Oboz. 20:251 \$
Ceropales turcomana: 1931, Gussakovskis, Ezheg.zool.Mus.32:4,14 S
Ceropales turcomana: 1978, Móczír, Acta biol.Szeged.24:117 figs 6-7 3
Specimen examined:Turkmen SSR: Kopet-Dag 29-30 Apr 1888
A.P. Semenov, $1 \leqslant$ holotype (Leningrad).

Distribution. Turkmen SSR (GusSakovskiJ, 1926).

## Ceropales picta Shuckard

Ceropales picta Shuckard, 1837, Trans.ent.Soc.London 2:70 \&
Ceropales picta: 1885, Smith, Cat.Hym.Brit.Mus.3:179 \&
Ceropales picta: 1892, Fox, Trans.Am.ent.Soc. 19:62
Ceropales picta: 1895. Dalla Torre, Wien.ent.Ztg. 14:92
Ceropales pictus: 1897, Dalla Torre, Cat.Hym.8.Fossor.: 345 q
Ceropales pictus: 1912, Turner, Ann.Mag.nat.Hist.10:361 क
Ceropales ruficollis Cameron, 1910 sensu Turner, 1912, Ann.Mag.nat.Hist.10:361 \&
Ceropales pictus: 1937, Arnold, Ann.Transv.Mus. 19:83,89 $9 \delta^{\circ}$
Ceropales ruficollis Cameron, sensu Arnold, 1937. Ann.Transv.Mus. 19:89 q syn. nov.
Ceropales latifasciatus montivagus Arnold, 1955, Occ.Pap.natn. Mus.SthRhod. 20:748 fig. 1595 syn. nov.
Specimens examined: 24 \%,12 3. Rep.S.Africa: ,,picta SkD.", .,Type", „Ceropales picta SHK.
C.G.Hope (Type)", .,type F.Sm.Coll. 79.22", .,B.M.Type Hym. 19.783", 1 s holotype (London); Cap.d.
guten Hoffnung Lichtenstein, Festiva N. (picta Shuckard Tr. Ent.Soc.II.70), I \& (Berlin); , Mamathes
Basutoland 18-XI-1951 C.Jacot Guillarmod", ..Type \& Ceropales latifasciatus r.montivagus G.
Arnold" red label, 1 \& holotype (Cape Town); ,,Tebetebeng Mill. Basutoland 13-XI-1948 J.JacotGuillarmod", ,,Allotype Ceropales latifasciatus r.montivagus G.Arnold" red label, 1 s paratype (Cape Town); further paratypes of montivaga:,.Mamathes Basutoland 26-XII-1951 C. Jacot Guillarmod", ..on Calpurnia intrusa (head lacking) 1 \& (Cape Town); ..Hensley's Dam, Leribe, Basutoland 6-1-1948 C. Jacot-Guillarmod" 2 \& (Cape Town and Hym.Typ.No. 3646 Hung.Nat.Hist.Mus. Budapest), the same data but ..29-II-1948", $1 \%$ and $1 \delta^{\circ}$ (strongly gnawed off by Anthrenus) and all 5 specimens still with labels: ..South African Museum ex National Museum Bulawayo 1981" and ..C.latifasciatus v.jucundus r.montivagus" (Cape Town); Cape Prov. Katberg 15-30 Jan I \&. 1 ; and Feb. 19334 \& (Cape Town), 1 \& (Budapest); Aliwal North Dec 1922 1 子. 1 ; (London). Somerset East 31 Dec 1930 (the all collected by R.E.Turner) 1 \& (Budapest); Estowe, Marley 1 \& (Cape Town): Steynsburg Div. 1 ; (Budapest); Buffalo River, Ladismith Div. I \& (Cape Town); Johannesburg 6000 ft 121898 J.P.Cregoe 1 \& (Budapest); Natal, Drakensberg Dec 1926 R.E.TURNER I \& (London) and 1 ; (Budapest), Umlazi Oct 1978 and Jan 1979 Miller 2 \& (London); Pietermaritzburg 26 Oct 1978 Ngome Forest. 1-3 Nov 1970 H. and M. Townes 1 ;. 33 (Coll. Townes) and $1 ;$ (Budapest); Wellington C.P. Rooshoek Jan 1960 A.M. Verhoeff 2 \&. 1 3 (Leiden) and 1 \&. 1 ; (Budapest). - Zaire: Elisabetville 25 Apr 1929 M. Bequert I $\delta$ and De Loose 1 \& (Tervuren).

According to Shuckard's diagnosis the description to this species was based on the female collected in „Cape of Good Hope", but the specimen proved to be a male, unfortunately the head is missing, notwithstanding it can be possible that this specimen represents the holotype. Therefore the character of the female are given on the basis of the specimen with the same locality conserved in Berlin. Naturally there are some differences between the Shuckard's description and the female, e.g.scutellum largely black, propodeum partly darker, the colour of orbits and clypeus (see in key),etc.

Concerning C.latifasciatus montivagus, Arnold labelled the first enumerated female (Mamathes, Basutoland 18-XI-1951) as a type in his diagnosis, so this female can be regarded as holotype and the further listed specimens as paratypes. From the original material I had opportunity to examine the ,Allotype" from Basutoland, as well as further paratypes from Leribe. On the basis of these females and males the separation of the ssp. montivaga from the form latifasciata is easy, but I could not distinguish montivaga and picta satisfactorily from one another. The characters indicate the transitional forms between picta and montivaga as follows.

| 1.Inner eye margin uniformly ferruginous |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2.Inner eye margin only pale ferruginous |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.Inner eye partly ferruginous, just along eye yellow |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.Inner eye yellowish white, clypeus pale ferruginous |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.Lateral angles of clypeus with black spot |  |  |  |  |  |  |  |  |  |  |  |  |
| 6.Clypeus uniform, without black spots |  |  |  |  |  |  |  |  |  |  |  |  |
| 7.Tergite 1 partly ferruginous |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. Tergite 2 not ferruginous |  |  |  |  |  |  |  |  |  |  |  |  |
| 9. "2 black (at most dark reddish translucent posteriorly) |  |  |  |  |  |  |  |  |  |  |  |  |
| 10.Tergites 2-3 black |  |  |  |  |  |  |  |  |  |  |  |  |
| 11.Tergites 2-4 black |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |
| picta ${ }^{\text {¢ }}$, | Cap d.g. Hoffn. | + |  |  |  | $+$ |  | + |  | $+$ |  |  |
| * | Aliwal | + |  |  |  | + | $+$ |  |  | + |  |  |
| . | Katberg |  | $+$ |  |  |  | + | $+$ |  | + |  |  |
| * | Somerset East |  | $+$ |  |  |  | $+$ | + |  |  | + |  |
| * | Johannesburg |  |  | $+$ |  |  | $+$ | + |  | $+$ |  |  |
| * | Drakensberg | $+$ |  |  |  |  | + |  | $+$ | + |  |  |
| * | Natal 1978 | $+$ |  |  |  | $\pm$ |  |  | $+$ | + |  |  |
| " | Natal 1979 | $+$ |  |  |  |  | $+$ |  | + | + |  |  |
| " | Wellington | $+$ |  |  |  | + |  | + |  | + |  |  |
| " | " | + |  |  |  | $\pm$ |  | $+$ |  | + |  |  |
| * | " |  |  | $\pm$ |  |  | $+$ | + |  | + |  |  |
| picta ${ }^{\text {S. }}$ | Drakensberg |  |  |  | $+$ |  | + |  | $+$ | $+$ |  |  |
| - | holotype |  |  |  |  |  |  | $+$ | + | $+$ |  |  |
| * | Katberg |  |  | $+$ |  | $+$ |  | $\pm$ |  |  | + |  |
| * | Aliwal |  | $+$ |  | $+$ |  |  | + |  | + |  |  |
| " | Wellington |  |  | $+$ |  | $+$ |  | $\pm$ |  | + |  |  |
| " | * |  | $+$ |  |  | $+$ |  |  | $+$ | $+$ |  |  |
| motivaga 9. | holotype |  |  | $+$ |  |  | $+$ | $+$ |  | + |  |  |
| motivaga ${ }^{\circ}$, | Tebetebeng |  | + |  |  | $\pm$ |  | $\pm$ |  |  |  | + |
| " | Mamathes | ? |  |  |  | ? |  | + |  |  | $+$ |  |
| * | jucund..Leribe |  |  | $+$ |  |  | $+$ |  | $+$ |  | + |  |
| " | * |  |  | $+$ |  |  | $+$ | + |  |  | $+$ |  |
| " | * |  |  | + |  |  | $+$ | + |  |  | + |  |

On the basis of this colouring variation and also because of the identity of the details of the male genitalia in both species, I regard the ssp.monivaga as a syno ym of picta.

Distribution. Cape Colony (Shuckard, 1837). Brit. East Africa, Ethiopia (Turner, 1912). Zaire, Rep. of South Africa.

## Ceropales latifasciata Arnold

Ceropales latifasciatus Arnold, 1937. Ann.Transv.Mus. 19:83.92 figs 59, 59a-e qj
Ceropales latifasciatus: 1951, Arnold, Bull.Br.Mus.nat.Hist. 2: 183 j
Specimens examined: 4 \&. 15 S. Ethiopia: ..Abyssinia. (R.E. TURNER.) 1911-459", ..Type Ceropales latifasciatus G.Arnold" red label, .,B.M.Type Hym.19.785a" $1 \%$ and the same data and labels, except the $\%$ and No. with $\delta$ and the No. 19.785b, paralectotype (London); Cencia Apr 1948 and Le Kempti 6500 ft 25 May 1946 K.M. Guichard 2 ; (Cape Town and London); Asmara 1 \&, 1 j (Budapest); Addis Abeba, Filoualia Jun 1941 Patrızı 1 ; (Budapest). - Zaire: Tschiaberimu. Hintumo 2450 m 12 Mar 1953 1 3. Mt Kitwa 2840 m 29 Aug - 7 Sep 195313 and riv. Kalivina Talia Nord 2340-2350 m 28-29 Mar 1954 P.Vanschuytbroeck, H. Synave and V.Hendrick 1 q. $2 \circ^{\circ}$ (Tervuren), 1 q. $1 \delta^{*}$ (Budapest); SL Edouard-Katakunda Park Nat.Albert 5 Mar 1936 L. LiPPENS $3 \delta^{\circ}$ (Tervuren); Ruanda, Machembe 1400 m terr. Nyanza 13-15 Jan 1953 P. Basilewsky 1 of (Budapest); Massif Ruvenzori Kalonge 1840 m riv. Butahu P.Vanschuytbroeck 1 os (Tervuren).

From the original material I designate the $\rho$ as lectotype and the $\delta$ as paralectotype from „Abyssinia". Arnold's diagnosis can be corrected as follows. Labrum shorter than half width ( $12: 27$ on lectotype), not „half as wide again at the base as long"; OOL: $\mathrm{POL}=9: 6$ (lectotype), posterior ocelli not ,,half as far again from the eyes as from each other"; the interocular distance on the vertex 22: below antennae 15 , not ,,nearly half as long again as the least distance between the eyes below the antennae" ( ${ }^{*}$ ).

Distribution. Ethiopia (Arnold, 1937).

## Ceropales ruficollis CAMERON ${ }^{*}$ nov.

Ceropales ruficollis Cameron, 1910, Wiss.Ergebn.schwed.Exp. Kilimandj.2:260 q
Ceropales latifasciatus var. jucundus Arnold, 1950, Occ.Pap. natn.Mus.Sth. Rhod. 2:401 \& syn.nov.
Specimens examined: 5 q.5 3. Tanzania:„,Kilimandj. Sıöstedt", ..Kibonoto kulturz,", ., 7 maj" 1 lectotype and ..Kilimandj. SJöstedt", ..Kibonoto $1300-1900 \mathrm{~m}{ }^{\prime \prime}$, ..maj", ..Ceropales ruficollis CAM. Type" with Cameron's writing. 1 s paralectotype (Stockholm); Kilimandjaro, T.T. West side 8600 ft 26.XI.48 G Salt". ..Camp.I. Shira. on ground in early sunshine". ..Type Ceropales latifasciatus v. jucundus G.Arnold" red label, I \& holotype (Cape Town); Moschi F1 Rau Aug 1904 and Jul 1905. Africa or. Katona 1 \& and I 3 (nov.) (Budapest); Inter Marti et Arusha, Africa or Katona I 3 (Budapest); D.O. Afrika Kilimandscharo $3000-4000 \mathrm{~m}$ Jan 1906 SchröDer S. 1 S (Berlin); Expedt. Chyulu Hills July 1938 Alt. 56001 ; (London). -Kenia: 15 mls N.E. Kisumu (nr. Lake Victoria) Nov 1979 M.D. Croft 1 \& (Budapest); Naivasha 19 Feb 1940 H.J.A. Turner I (London).

In Cameron's original material there are two specimens ( $q \sigma^{\circ}$ ) and only the male bears Cameron's type label, whereas the female was mentioned in the diagnosis. Cameron had seen both specimens, therefore the locality also contains the data of the female (.,kulturz."). Cameron evidently had misregarded the small sexual dimorphism so put erroneously the new name on the male. The description agrees with both specimens, therefore I designate the female as lectotype and the male as paralectotype.

Arnold (1937) synonymized ruficollis Cameron with C. picta Shuckard. On the basis of the three types (picta, ruficollis and latifasciata var. jucunda) as well as on the basis of the unambiguously morphological and the colouring identity of
jucunda and ruficollis, jucunda is a synonym of ruficollis, differencies from picta being given in key.

ठ. - Lenght 6-7 mm. Very similar to female, differing from it as follows. Basal black spot on mandible larger than on female. Labrum yellowish white, at most lower margin pale ferruginous. Only the last antennal joints black, the last 2 and 3 only above, underside ferruginous, similar to the further joints. Pronotum entirely reddish ferruginous. Propodeum (fig.4) with smaller or larger (paralectotype) pale ferruginous spots. Postscutellum and thickened edge of propodeum as on female. POL:OOL $=6: 9$. Seventh sternite broadly ovate, hollowed out on ventral surface, apex truncate.

Distribution. Tanzania (Cameron, $1^{0} 10$ ). Kenia.
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