

Two new species of the genera *Antireicheia* Basilewsky, 1951 from South Africa and *Coryza* Putzeys, 1866 from Tanzania (Coleoptera: Carabidae: Scaritinae: Clivinini)

Petr BULIRSCH¹ & Paolo MAGRINI^{2,3}

¹Milánská 461, CZ-109 00 Praha 111, Czech Republic
e-mail: p.bulirsch@seznam.cz

²Museum of Natural History of the University of Florence, Zoology Section “La Specola”,
Via Romana, 17 - 50125 Firenze, Italy

³via Gianfilippo Braccini 7, I-50141 Firenze, Italy
e-mail: duvalius@paolomagrini.it

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Abstract. *Antireicheia tesinskyi* sp. nov. from Republic of South Africa (Western Cape) and *Coryza hanoti* sp. nov. from Tanzania are described, illustrated including its aedeagi and styli; both new species are compared with the most similar species of the respective genus.

INTRODUCTION

Species of the anophthalmic genus *Antireicheia* Basilewsky, 1951 (subtribe Reicheiina) are disjunctly widespread in southern, western and eastern Africa and eastern Madagascar. To date, 14 South African species and two subspecies have been described by Péringuey (1896), Basilewsky (1980) and Bulirsch & Magrini (2006, 2012, 2016, 2018). Basilewsky (1980) and later Bulirsch & Magrini (2006, 2012, 2016, 2018) reviewed and keyed all South African *Antireicheia* species. The articles by Bulirsch & Magrini (2006, 2012, 2016, 2018) are followed as closely as possible.

The clivinini genus *Coryza* Putzeys, 1866 was newly placed by Dostal (2017) to the subtribus Schizogeina and it occurs in Eurasia (especially in Middle East and South, Southeastern Asia) and Africa (incl. Madagascar). It is known in about valid 14 taxa, six of them from Eastern part of Afrotropical Region. The systematic position of some taxa remains uncertain because of the absence of appropriate revisions or keys. Some isolated descriptions of new species and remarks about *Coryza* species taxonomy or occurrence are quoted e.g. in Balkenohl (1994, 2001, 2003), Basilewsky (1952, 1956, 1961, 1962, 1973, 1976a, b, 1979), Britton (1948), Bruneau de Miré (1962), Burgeon (1935), Chaudoir (1876), Peyerimhoff (1907) and Putzeys (1866, 1873). Despite this fact we believe that the following description of a new species could be helpful for the next studies of the genus.

MATERIAL AND METHODS

The study of dry-mounted specimens, including measurements and examination of microsculpture, was done at a magnification up to 98×. Aedeagi and female styli were fixed

in Euparal or with water-soluble glue on a card and placed on the same pin below the beetle. Measurements: length of body is measured from the anterior margin of the closed mandibles to the apex of the elytra along the suture; length of the pronotum along its midline; width of the pronotum at widest point; length of the elytra from its base to its apex along the suture; width of the elytra at its widest point. Length and width of the body is given with 0.05 mm accuracy; other measurements including ratios and means are rounded to two decimal places. Label locality data are quoted verbatim except standardized dates.

Macrophotographs were taken by the second author using a Nikon D2X or D800 digital camera, applied to a Nikon Labophot II binocular optical microscope or a Nikon SMZ 1000 stereomicroscope, with diaphragmed lenses.

For comparison of a new *Coryza* species, the present authors studied all to date known Afrotropical taxa and several diverse specimens mostly loaned from MRAC, including samples of the type material as well as some type specimens from BMNH, the extensive material from the first authors collection, and finally, diverse material from several other collections. The new species of the genus *Antireicheia* was compared with the type specimens of all South African taxa from first author's collection as well as those loaned from MRAC or TMSA.

The following abbreviations are used to indicate the depository of specimens:

BMNH Natural History Museum, London, U. K;

MRAC Royal Museum of Central Africa, Tervuren, Belgium;

PBPC Petr Bulirsch collection, Praha, Czech Republic;

PMFI Paolo Magrini collection, Firenze, Italy;

TMSA Ditsong (= former Transvaal) Museum, Pretoria, South Africa.

Other abbreviations:

SP: setiferous puncture(s); BSP: basal setiferous puncture(s); DSP: dorsal setiferous puncture(s); HT: holotype(s); PT: paratype(s); /, // by locality labels: end of line, label.

RESULTS

Genus *Antireicheia* Basilewsky, 1951

Type species: *Antireicheia promontorii* (Péringuey, 1896) originally described in the genus *Reicheia* Saulcy, 1862.

Antireicheia tesinskyi sp. nov.

(Figs. 1-7)

Type material. Holotype (♂): South Africa, Western Cape / De Hoop NR, Potberg env.1, 34°23.15'S, 20°33.05'E / 13.xi.2021, P. Bulirsch lgt., (TMSA). Paratypes: (10 ♂♂, 10 ♀♀): with the same data as HT, (PBPC, PMFI).

Description. Habitus as in Fig. 1. Body rusty red-brown, legs and antennae slightly lighter, mouthparts yellowish. Length 1.75-1.95 mm (mean 1.87 mm, HT 1.85 mm, n=21).

Head. Moderately broad, neck broad; anterior margin of clypeus between slightly protruding, blunt lateral lobes slightly emarginate; impressions of clypeus oblique, broad and moderately deep, longitudinal carina short and broad. Genal posterior angles shortly

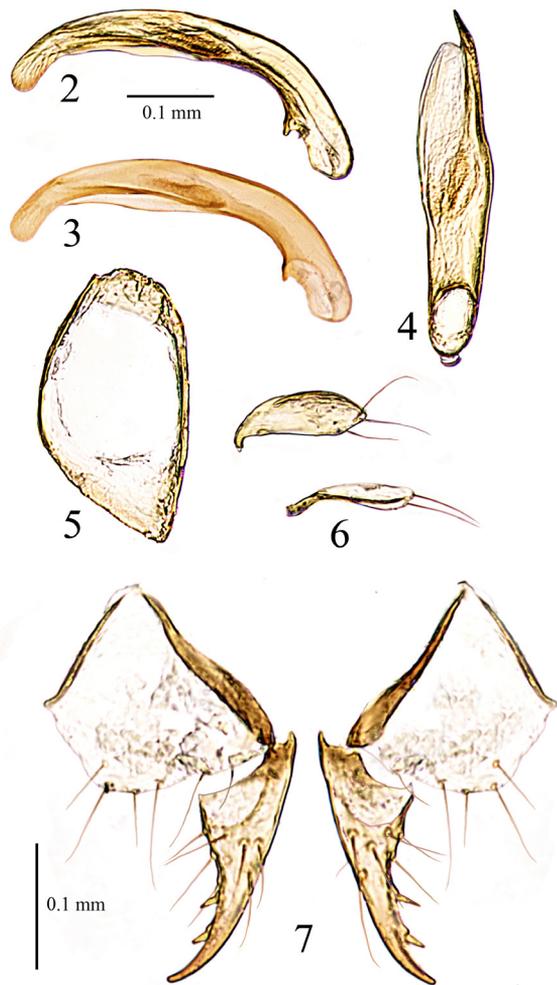
rounded; moderately vaulted supraantennal plates separated from genae by distinct and moderately broad furrow; carina of prolonged supraantennal plates long and moderately sharp. Eyes absent, genae moderately strongly, regularly vaulted. Vertex regularly, moderately deeply reticulated. Antennae with antennomere 2 about as long as 3 and 4 combined, antennomeres 6-10 distinctly transverse.

Pronotum. In lateral view below its middle part indistinctly, very broadly concave, surface rather dull, with fine, more or less transverse wrinkles and with almost regular, rough reticulation; 1.12-1.17 (mean 1.14, HT 1.14) times as long as wide, 1.37-1.45 (mean 1.42, HT 1.40) times as wide as head, widest in posterior third; outline between lateral SP very slightly rounded, barely attenuated anteriorly. Reflexed lateral margin entire, extended from blunt, not protruded anterior angles to base, thin in latero-basal part, especially above flange; posterior angles very broadly rounded. Median line distinctly impressed, abruptly diminishing before basal furrow, anterior transverse impression indistinct. Basal part (flange) very small, indistinctly produced posteriorly. Proepisterna very narrowly to indistinctly visible from above in apical third or fourth.

Elytra. Almost long oval, disc distinctly flattened in lateral view, 1.74-1.91 (mean 1.86, HT 1.86) times as long as wide, 1.16-1.23 (mean 1.18, HT 1.17) times as wide as pronotum, 1.86-1.99 (mean 1.93, HT 1.88) times as long as pronotum; surface with almost regular, deep reticulation; base slightly sloping to broadly rounded, moderately protruded humeri; outline slightly broadened on sides, in middle part almost parallel; lateral channel in middle part rather narrow, slightly broadened apically, its margin with 1-3 small and rather sharp humeral teeth and below them with several blunt, very small and long lateral teeth up to about half of its length; elytra broadest about or just below midlength; suture indistinctly depressed at base. Base without tubercle, with more or less rudimental, in HT and seven PT missing both, in two PT one BSP. Striae 1-7 formed by rows of rather rough, almost regular punctures, diminish just before base and postero-laterally in apical fourth to third. Intervals 1-4(5) in basal part slightly vaulted, latero-apically all intervals flattened. Third interval without anterior DSP, middle and posterior DSP very fine, especially middle one often rudimental, just recognisable.



Fig. 1. *Antireicheia tesinskyi* sp. nov. Habitus of HT.



Figs. 2-6. *Antireicheia tesinskyi* sp. nov. 2-6 (HT), 7 (PT): 2- median lobe of aedeagus in lateral view (in euparal on vinyl acetate); 3- median lobe of aedeagus in lateral view (on perspex); 4- median lobe of aedeagus in ventral view (on acetate); 5- urite IX; 6- parameres; 7- stylomeres.

Aedeagus (Figs. 2-6). Length in HT 0.39 mm; apex of median lobe in lateral view (Figs. 2-3) long and narrow, subparallel in median part, apex moderately strongly bent down, tip rather narrowly rounded; apical part in ventral view as in Fig. 4. Urite as in Fig. 5; parameres as in Fig. 6, trisetose.

Stylomeres (Fig. 7). Relatively short, apical spine rather short, regularly, rather slightly curved.

Differential diagnosis. *A. tesinskyi* sp. nov. has the body relatively small, roughly reticulated; the head without the eye remnants and the clypeus with the oblique impressions broad and rather deep, prolonged by the short, rather blunt longitudinal keel; the narrow pronotum with the outline slightly convex; the long elytra with fine humero-lateral teeth,

without anterior DSP; with rudimental or even missing BSP and with rather deep and regular striae 1-7 punctuation.

According to key and descriptions in Bulirsch & Magrini (2016, 2018), the above mentioned combination of characters is unique. It can be distinguished from the most similar species, *A. consoncia* Basilewsky 1980, the only eyeless species having the elytral margin in humeral half with distinct teeth, by the whole upper surface being dull, having rough reticulation; by the elytra without anterior DSP and by very different shape of the median lobe of the aedeagus. From other South African species it can be easily differentiated by the above mentioned combination of characters.

Name derivation. Named after Marek Těšínský (Prague) who significantly helped to the first author within his two collecting trips to South Africa including the type locality.

Distribution. It is known only from a small indigenous forest patch near Potberg in De Hoop Nature Reserve and have been collected by sifting of the forest litter.

Genus *Coryza* Putzeys, 1866

Type species: *Coryza maculata* (Nietner, 1856) originally described in the genus *Clivina* Latreile, 1802.

Coryza hanoti sp. nov. (Figs. 8-13)

Type material: Holotype (♂): Coll. Mus. Congo / Tanganika: Musosa, 980 m / (à la lumière), xi.1953 / H. Bomans, (MRAC). Paratypes: (1 ♂, 1 ♀) with the same locality labels as HT, (PBPC, MRAC).

Description. Habitus as in Fig. 8; body length in HT 4.15 mm, in PT 4.30 mm, 4.25 mm. Body dark castaneous, upper surface without green-bronze lustre; legs, antennae and mouthparts red brownish.

Head. Mandibles short and broad with moderately sharp tip; median part of anterior margin of clypeus slightly, regularly concave, without teeth; its lateral edges blunt, separated from lateral wings (distinctly shifted backwards and formed as blunt to narrowly rounded tooth) by rounded notch; lateral wings separated from very strongly convex, broadly bordered supraantennal plates by obtuse notch. Clypeal field broad, smooth, laterally without distinct keel; clypeal suture deep, broad, irregularly broadened laterally. Central longitudinal carina diminish or almost so, indistinctly recognisable just below clypeal suture. Frontal sulci moderately wide and deep, its anterior part above clypeal suture moderately broad, directly, barely diverging anteriorly; posteriorly rather narrow, divergent around inner margin of eyes, diminish at level of neck constriction; its bottom in anterior part moderately reticulated and its inner margin partially divided from neck by irregular rests of vestigial keel. Neck constriction not interrupted, formed as narrow stria with few irregular, rather fine punctures. Surface (except frontal furrows) very shiny, without distinct pits, with few micropunctures and without microreticulation; clypeofrontal plates with rests of 1-2 irregular, subparallel keels. Eyes moderately small, convex and prominent, genae very slightly developed, covered very small part of posterior margin of eyes.

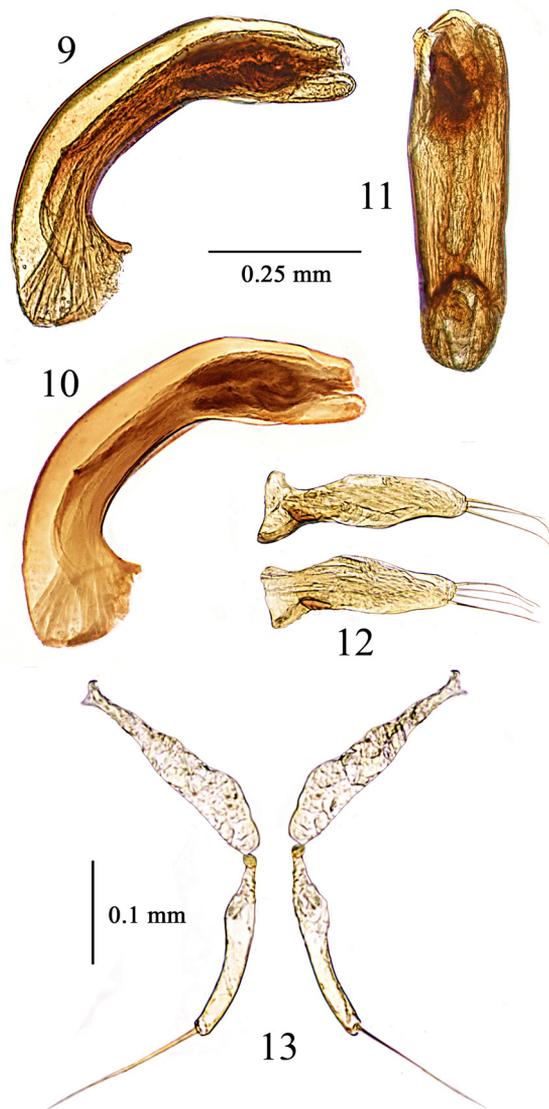
Antennae submoniliform, antennomeres 4-5 distinctly, 6-10 slightly longer than wide.

Pronotum. In HT 1.07, in PT 1.07, 1.11 times as wide as long, in HT 1.44, in PT 1.47, 1.48 times as wide as head, in lateral view disc slightly vaulted, more distinctly vaulted posteriorly just before basal inclination; slightly to very slightly converging anteriorly; slightly convexly, shortly narrowed just below barely protruding, narrowly rounded anterior angles; laterally outline subparallel between anterior SP and two third of distance between lateral SP, then slightly convex to posterior angles formed by moderately large, sharp lateral teeth (very well recognizable in dorsal view). Two pairs of standard, large lateral SP, posterior one on level of lateral teeth. Lateral channel laterally moderately broad, broadened up to lateral teeth; below them distinctly narrower above almost directly narrowed lateral margin of base, and deeper above flange; latter with few deep pits. Anterior transverse impression deep and sparsely, moderately finely punctured; median line deep and wide. Surface shiny, with very fine micropunctures and sparse fine micro-wrinkles; inner margin of lateral channel and basal parts of pronotum without reticulation. Base without basal foveae and without transverse waved wrinkles.

Elytra. In HT 1.74, in PT 1.73, 1.72 times as long as wide, in HT 1.20, in PT 1.20, 1.22 times as wide as pronotum, in HT 2.24, in PT 2.25, 2.28 times as long as pronotum; in lateral view very broadly and very finely concave in about anterior fourth; base slightly sloping to distinct, narrowly rounded humeri, with small, rather sharp humeral tooth; outline slightly broadened just below humeri, then almost parallel up to midlength, then barely, broadly rounded to moderately broad apex. Elytral striae 1-6 subequally deep throughout, 7 almost subequally deep, shortened basally, at apex all striae free, abruptly diminish just above lateral channel; in whole length striae very deeply and coarsely punctuate. Intervals narrow, strongly convex throughout. Base with moderately engraved suture, with BSP; basal border not connected with large, elongate tubercles in intervals 2-3. About 9-11 erected, rather long SP in / near striae 3 and 5 and few also in / near 7.



Fig. 8. *Coryza hanoti* sp. nov. Habitus of HT.



Figs. 9-13. *Coryza hanoti* sp. nov. 9-12 (HT), 13 (PT): 9- median lobe of aedeagus in lateral view (in euparal on vinyl acetate); 10- median lobe of aedeagus in lateral view (on perspex); 11- median lobe of aedeagus in ventral view (on acetate); 12- parameres; 13- stylomeres.

Thoracical wings. Fully developed.

Legs. Protibia with apical spine moderately curved backwards and slightly outwards, shorter than similarly curved apical spur; distal marginal tooth large and sharp, proximal rather short, moderately sharp.

Aedeagus. (Figs. 9-12). Median lobe in lateral view as in Figs. 9-10 short and broad, apical third abruptly, moderately strongly bent down, tip short, moderately broadly rounded; median lobe in ventral view as in Fig. 11. Parameres as in Fig. 12, with broadly rounded apex and with 3-4 apical setae.

Lower surface. Mentum irregularly wrinkled, surface with irregular reticulation; antero-lateral angles almost rectangular; median keel barely elevated, its tip broad and blunt, barely shorter than lateral wings. Proepisterna shiny, without distinct reticulation, laterally with few very fine transverse wrinkles.

Styli. As in Fig. 13, very thin, with single, apical and very long seta.

Differential diagnosis. Especially due to the peculiar structure of the head the new species is most (only) similar to *C. gerardi* (Burgeon, 1935). *C. hanoti* sp. nov. can be distinguished from the latter species by the head having slightly less concave anterior margin of the clypeus, slightly longer antennae; by the pronotum having less roughly punctured anterior transverse impression and not punctured media line; in average larger and sharper posterior lateral teeth, and finally, by the barely broader elytra having SP in striae 3, 5 and 7 (*C. gerardi* has SP only in stria 3).

Name derivation. Patronymic, in honour of Stéphane Hanot (MRAC, Tervuren, Belgium), for his help in my study of scaritins.

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