Redescription of *Analeurops cuthbertsoni* Marshall, 1937 and notes on the genus *Leurops* Marshall, 1919 (Coleoptera: Curculionidae: Entiminae: Cneorhinini)

JAROSŁAW KANIA

Zoological Institute, University of Wrocław, Sienkiewicza 21, 50-335 Wrocław, Poland, e-mail: kaniajar@biol.uni.wroc.pl

ABSTRACT. Analeurops cuthbertsoni Marshall, 1937 is redescribed based on male specimen. Diagnostic characters of the genera Analeurops Marshall, 1937 and Leurops Marshall, 1919 are given. Lectotypes of Analeurops cuthbertsoni Marshall, 1937 and Leurops cana Marshall, 1919 are designated, and male genitalia for both species are described and figured for the first time.

Key words: entomology, taxonomy, Coleoptera, Curculionidae, Entiminae, Cneorhinini, *Analeurops, Leurops*, redescriptions, male genitalia, South Africa.

INTRODUCTION

The genus Analeurops Marshall, 1937 was proposed for Analeurops cuthbertsoni Marshall, 1937. This monotypic genus was classified within Cneorhinini (Alonso-Zarazaga & Lyal 1999). According to the original description Analeurops cuthbertsoni was described from 6 females collected in the vicinity of Salisbury, Rhodesia (now Zimbabwe). Another 6 females collected in Hartley were cited in additional material examined (Marshall 1937). By courtesy of Dr. C.H.C. Lyal (Natural History Museum, London) I had an opportunity to study one syntype from the type series. It proved to be a male, not a female as was indicated in the original description. Its redescription is given below.

Analeurops is closest to the genus Leurops Marshall, 1919 from the southern part of Africa. The genus Leurops comprises five species, with L. cana Marshall,

1919 as type species. Members of both genera have elongate-oval body, only slightly convex eyes, similar shape of head grooves and carinae (e.g. fine median frontal groove, present median groove of rostrum, and shortened transverse groove between head and rostrum never extending behind mid distance between middle of head and lateral edge of rostrum). The main synapomorphy of both genera is presence of long setae on apex of aedeagus, absent in all other members of the tribe Cneorhinini.

Analeurops cuthbertsoni differs from the members of the genus Leurops (I have studied two of five species of the genus, L. cana and L. obesa Marshall, 1919) by the following characters: hind margin of eyes emarginate (not emarginate in Leurops), antennal scrobes not visible from above (visible on whole length), lateral pronotal outline granulate (not granulate), base of pronotum laterally emarginate (not emarginate), 7th interval at base with tubercle (without tubercle), apex of fore tibiae explanate on both external and internal margin (only apex of internal margin explanate), and invisible scutellum (very small but perceptible).

The following abbreviations were used in the text:

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bl – body length;
rl – length of rostrum;
brw – width of base of rostrum;
pl – pronotum length;
mew – width of elytra;
mpw – width of pronotum;
el – length of elytral suture;
elm – length of elytra including tubercles;
tl – length of fore tibia;
sl – length of antennal scape.
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Analeurops cuthbertsoni Marshall, 1937

(figs 1, 3, 8-15)

Analeurops cuthbertsoni Marshall, 1937: 468, 469, pl. XII, fig. 2.

Analeucops [sic!] cuthbertsoni Marshall, 1937: error in genus name on pl. XII, corrected on p. 468.

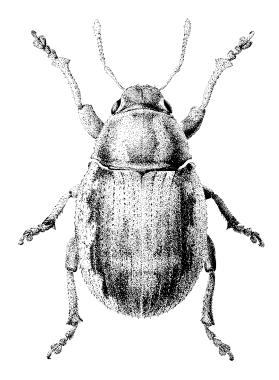
DESCRIPTION OF MALE

Measurements: bl - 4.20, mew - 2.50, bl/mew - 1.68, brw/rl - 1.76, mpw/pl - 1.48, pl/tl - 1.14, sl/rl - 1.22, el/mew - 1.04, elm/mew - 1.16.

Body elongate-oval (fig. 1), convex. Head and elytra black, pronotum brownish-black with paler anterior margin, antennae and legs reddish-brown with variegate adhering scales forming a pattern and white erect scales.

Scales on dorsum of head, pronotum and elytra adhering and adjoining, round or ellyptical. On head below eyes adhering scales fusiform. Dorsal scales dull, variegate of cream-white, grey, brown, and black, form a characteristic pattern (fig. 1). Pale scales form spots along internal margin of eyes, four bands along pronotum, two along sides and two in mid distance between central line and sides, and bands along sides of elytra. Intervals 1-4 with grey and brown scales forming a marble pattern. Intervals 5 and 6 with black and dark brown scales forming irregular stripe. On legs scales smaller and sparser than on dorsum, white. Tibiae, except adhering scales, with slightly erect scales. Femora also with small setae. Tarsi and antennae only with setae. Erect scales on head, pronotum, and elytra white, on interval arranged in single row, approximately 1.5 times as long as adhering scales, ellyptical, with rounded or truncate apex (fig. 11).

Microsculpture: Head finely and densely punctate, punctures on head and rostrum slightly smaller than surrounding scales. Distance between punctures slightly smaller than puncture diameter. Along middle of rostrum and frontal groove punctures tend to form elongate rows. Interspaces smooth and shiny. On

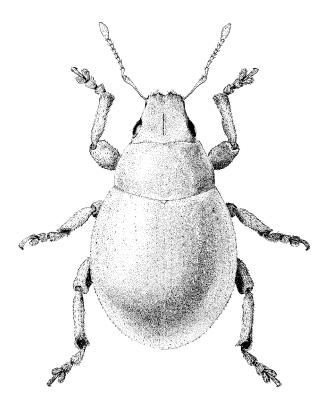


1. Analeurops cuthbertsoni Marshall, lectotype male, dorsal view

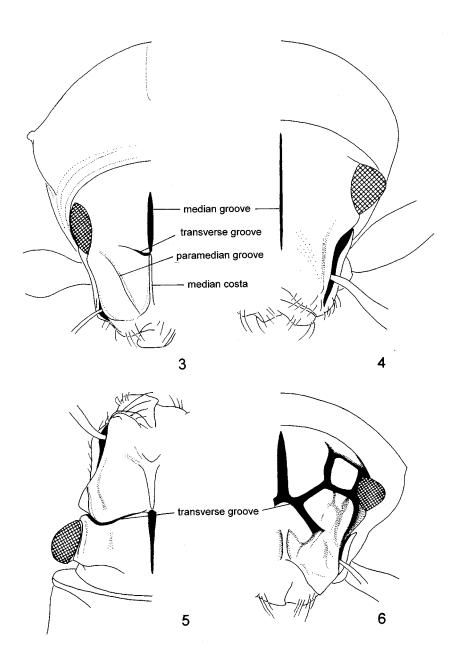
pronotum and elytra punctures as coarse as on head, disposed irregularly, interspaces with fine notched microsculpture.

Head with rostrum conical. Rostrum bordered from head by fine, slightly bent posterad groove, extending to mid distance between central line and internal margin of eyes. Frons and rostrum on the same plane. Median groove short and shallow, distinct anteriorly, vanished posterad. Eyes ellyptical, very slightly convex, with deeply emarginate posterior margin. Posterior eye canthus slightly protruding behind head outline. Antennal scrobe narrow, strongly bent anterad, behind antennal base straight, parallel-sided. Rostrum in lateral view short, slightly widened anterad. Dorsum of rostrum with fine median and submedian grooves running from epinotum to anterior margin of eyes. Antennae moderately long, thin. Scape almost straight, distinctly clavate, extending to hind margin of eyes. First antennomere elongate, clavate, remainder gradually wider, apex of 7th antennomere as wide as base of club, then border between funicle and club indistinct. Club elongate oval, acute apically.

Pronotum almost trapezoidal, widest before base, lateral outline distinctly granulate (in lateral view granules run slightly below mid height of pronotum),



2. Leurops cana Marshall, lectotype male, dorsal view



3-6. Head in the tribe Cneorhinini: 3 - Analeurops cuthbertsoni, 4 - Pseudopantomorus latifrons Champion, 5 - Oenassus sellifer (Pascoe), 6 - Pomphus kirschi (Faust) (Fig. 6 after Kania 1995, modified)

granules gradually larger from anterior to posterior part of pronotal side, at its base form tubercle. Base of pronotum emarginate laterally, fit to protruding anterad elytral humeri (fig. 1). Pronotal shield distinctly convex, more declivous anterad than posterad. Along anterior and posterior margin of pronotum runs a gutter, narrow and deep on sides, broad and shallow in the middle. Posterior gutter vanished before basal tubercle of pronotal side. Median groove of pronotum narrow and shallow, runs from 2/5 of pronotal length, vanished before basal gutter.

Elytra oval, widest in mid length, sides regularly rounded. Intervals flat, broad, approximately six times wider than rows. Base of 1st interval emarginate, base of 7th interval forms a tubercle running anterad (fig. 1). Elytra with 10 narrow rows, 2.0-2.5 times wider than adhering scale, each row finely punctate. Punctures round, their diameter as wide as width of adhering scale, distance between punctures 1.5-2.0 times wider than puncture diameter. Rows 1-3 slightly bent laterally, row 4 at base bent medially, rows 5 and 6 almost straight. On slope rows 4 and 5, and 3 and 6 jointed. Scutellum invisible.

Legs moderately long. Fore and hind femora thick. Fore tibiae slightly shorter than pronotal length, before middle distinctly bent outwards, apex explanate on both external and internal margin (fig. 13). Mid and hind tibiae less bent than anterior tibiae and only slightly explanate apically. Corbels enclosed, squamose. Tarsi elongate, narrow, third segment emarginate almost to base. Lobes of the third segment asymmetrical, on fore tarsi external lobe distinctly (fig. 15), on mid and hind tarsi indistinctly larger than internal lobe. Claws fused in basal half, symmetrical.

Male genitalia as in figs 8, 10, 14.

Bionomy. According to MARSHALL (1937) it is a pest of young tobacco plants (*Nicotiana* sp.) and attacking young cowpeas and sunn hemp (*Vigna sinensis*).

MATERIAL EXAMINED

Lectotype male, here designated: "Type" [circle label with red margin]; "Crowborowgh / Salisbury / S. Rhodesia / Dept. Agric. / 30. XI. 1936" [white label]; "attacking / Tobacco / plants; / coll. T.C. Pascoe" [blue label]; "Analeurops / cuthbertsoni, Mshl. / TYPE [female symbol] 1937" [white label]; "Pres. by / Imp. Inst. Ent. / B.M. 1938 – 143" [white label]; "Lectotypus / Analeurops / cuthbertsoni / Marsall, 1937 / des. J. Kania 1993" [white label with red border]; [genitalia in glycerin] (preserved in Natural History Museum, London).

Other comparative material:

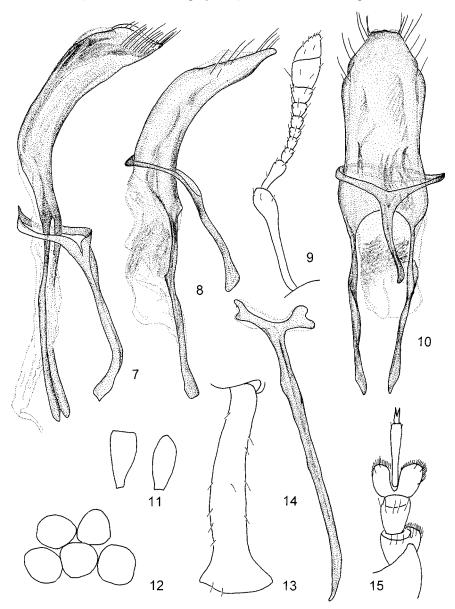
Leurops cana Marshall, 1919

(fig. 7)

Leurops cana Marshall, 1919: 19.

Leurops canus: Alonso-Zarazaga & Lyal 1999: 150 (unjustified emendation).

Type species for the genus *Leurops* Marshall, 1919 by original designation. Alonso-Zarazaga & Lyal (1999) wrongly emended the name to L. canus because gender of "*leurops*" is feminine, and the name "*cana*" refers to the grey dorsal colouration (Latin *cana* means grey hair). Described from 7 specimens collected



7-15. 7. Leurops cana Marshall: aedeagus. 8-15. Analeurops cuthbertsoni Marshall: 8, 10 – aedeagus, 9 - antenna, 11, 12 – scales on elytra, 13 – fore tibia, 14 – spiculum gastrale, 15 – fore tarsus

in Bothaville (RSA), originally deposited in British Museum. I have examined two syntypes, one deposited in Natural History Museum, London, here designated as lectotype, and another one (labelled "Cotype") delivered in exchange to Staatliche Museum für Tierkunde, Dresden:

Lectotype male (present designation): "Bothaville / O. Free St. / Dr. Brauns" [information on bottom side of the card with beetle]; "Type / H.T." [circle label with red border]; "Leurops / cana, Mshl. / TYPE" [white label]; "Orange R. Col. / 1918. 117" [white label with blue line across middle]; paralectotype female: "Bothaville / O. Free St. / Dr. Brauns" [white label]; "Leurops / cana, Mshl. / COTYPE" [white label]; "Cotypus / Leurops / cana / Marsh." [red label]; "1920 / 23" [blue label]; "Kapland / S. Afrika" "blue label".

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