RICANOPSIS KINGAE SP. NOV. FROM AFRICA (HEMIPTERA: AUCHENORRHYNCHA: RICANIIDAE)

ADAM STROIŃSKI

Museum and Institute of Zoology PAS, Wilcza 64, 00-679 Warszawa, Poland e-mail: adam@robal.miiz.waw.pl

 $\textbf{Abstract.} - \textit{Ricanopsis kingae} \ \textbf{sp. nov} \ \text{from Central Africa, is described and illustrated.}$



 $\textbf{Key words.} \\ -- \text{Hemiptera}, \text{Auchenorrhyncha}, \text{Ricaniidae}, \\ Ricanopsis \\ kingae, \text{new species}, \text{Republic of Central Africa, Congo}, \\ \text{Cameroon}.$

The genus *Ricanopsis* Melichar, 1923, comprises 4 species and 1 variety, (Melichar 1923) distributed in the Ivory Coast and Central Africa. In the course of my studies of Ricaniidae from the Ethiopian Region I have found a new species. *Ricanopsis kingae* sp. nov., the fifth known species of the genus *Ricanopsis*.

Ricanopsis kingae sp. nov.

Etymology. This species is dedicated to Ms. Kinga Krawczyk.

Terra typica. Republic of Central Africa (La Maboke). *Distribution.* Republic of Central Africa, Congo, Cameroon.

Diagnosis. The new species is similar to *Ricanopsis* semihyalina Melichar, but differs in color pattern of the tegmina and wing, and male and female genitalia.

Description. Vertex, with delicate median carina, anteriorly about 10 times as broad as long; anterior margin straight, median portion slightly convex; lateral margin straight and parallel; posterior margin arcuate (Fig. 2).

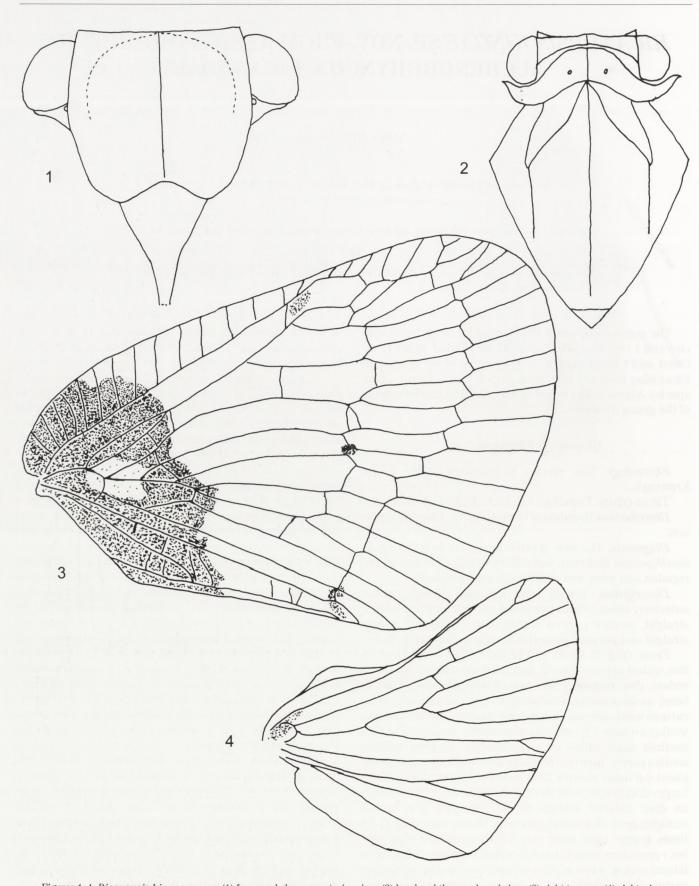
Frons (Fig. 1) about 1.15 broader than long in middle line, widest at level of ocelli, and at the top margin about 1.25 widest; disc rugose. Frons tricarinate; carinae joined at base; median carina extending to clypeal suture; lateral carinae weak, arcuate; top margin straight, lateral margins weakly arcuate. Clypeal suture distinctly arcuate. Eye with medium sized callus at lower margin. Clypeus without median carina. Rostrum reaching mid coxae, apical segment about 0.6 times shorter than subapical. Pronotum 3 times longer than vertex, with median carina and two impressions on disc; anterior margin arcuate, median part almost straight; posterior margin arcuate. Mesonotum (Fig. 2) 1.1 times longer than wide and 8.3 times longer than vertex+pronotum length; lateral carina meeting with anterolateral carina below middle, behind joint parallel to median carina; anterolateral carina, curved, as long as second part of lateral carinae. Pronotum and mesonotum moderately elevated about the level of vertex. Tegula ovoid, 1.4 times longer than wide.

Tegmina elongate-triangular about 1.65 times longer than wide (Fig. 3). Costal margin curved basad and at median portion; apical and claval angles rounded; apical margin slightly arcuate. Costal membrane basad 2.5 times wider than costal cell, tapering apicad, with scarce transverse veinlets. Costal cell parallel with single transverse vein. Basal cell about 2 times as long as wide. Sc+R leaving basal cell at the same point, producing fusiform cell about 6 times longer than wide. M₁+M₂ leaving basal cell at same point, sometimes united at base in short common stem and forking inmmediately. Cu forking distad to M fork, joining with claval suture by a single vein in apical part. Tegmina with 2 transverse lines; apical and subapical cells longer than wide; apical cells apical region shorter than subapical at this same level; apical cells at lower regions longer than subapical. Tegmina with few transverse veins. Claval suture curving at apex. Claval veins uniting at middle of clavus with transverse veinlets. Precostal cell of wing 7.5 times as long as high. ScA ends before the wing apex (Fig. 4). RA branches at apex. RA-RP and RP-MA, connected by single tranverse vein.

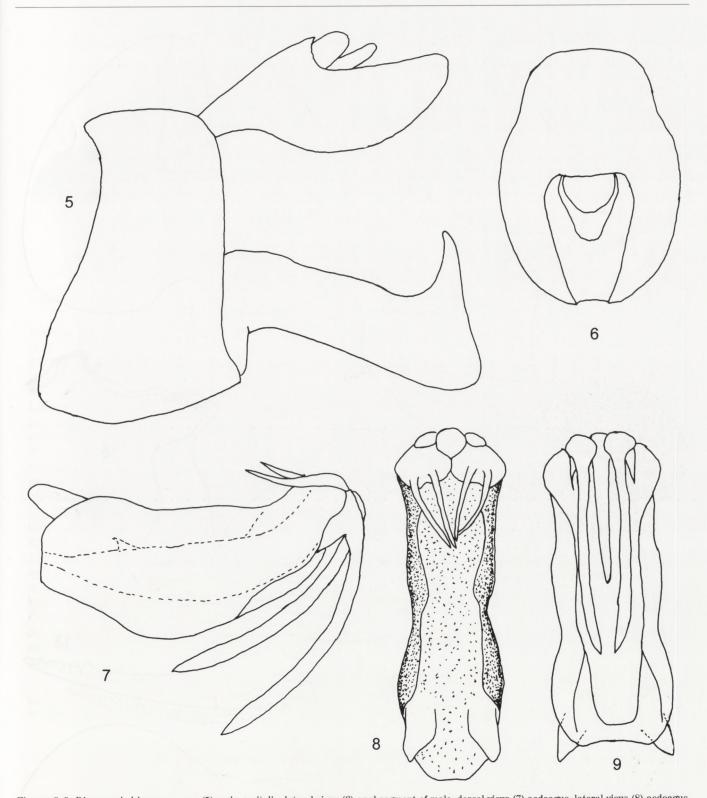
Abdomen short, pregenital part about 2 times shorter than thorax. Hind tibiae with 2 lateral and 6 apical spines, first tarsomere with 6 spines, 0.75 times shorter than cumulative length of 2 and 3.

Colouration. Vertex black, lateral margin yellow. Disc black; median carina and all margins yellow. Lateral part of head over the eye and near anterior margin yellow, under the eye black; antenna yellow. Eye with dark streaks. Clypeus yellow-brown. Pronotum, mesonotum black; scutellum yellow. Tegula brown. Tegmina hyaline, basal part brown with hyaline patch and 3 brown little patches. Wing hyaline with brown patch in basal cell. Abdomen and genital segment yellow-brown. Legs yellow.

198 A. Stroiński



Figures 1–4. Ricanopsis kingae sp. nov. (1) frons and clypeus, anterior view; (2) head and thorax, dorsal view; (3) right tegmen; (4) right wing



Figures 5–9. Ricanopsis kingae sp. nov. (5) male genitalia, lateral view; (6) anal segment of male, dorsal view; (7) aedeagus, lateral view; (8) aedeagus, dorsal view; (9) aedeagus, ventral view

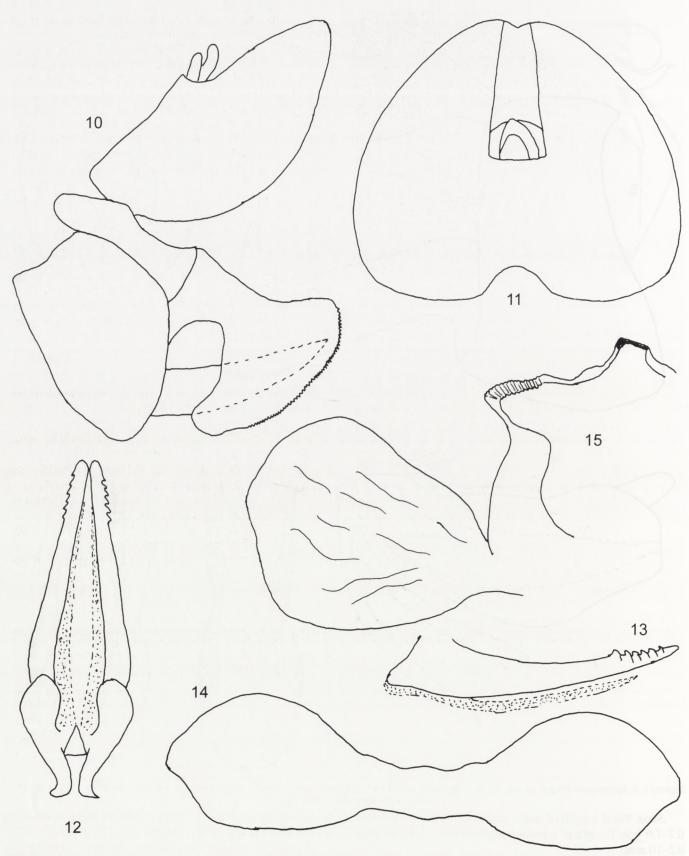
Size. Total length of body: males 5.5-5.7 mm, females 6.7-7.0 mm. Length of tegmina: males 8.6-9.1 mm, females 9.2-10 mm.

Male genitalia. Anal segment medium sized; 1.25 times longer than wide; smaller than anal segment of female;

posterior margin weakly arcuate; lateral margin strongly convex at 1/4 length (Figs 5 and 6).

Pygofer in lateral view almost as long ventrally as dorsally; posterior margin almost straight; anterior margin sinuate; dorsalposterior and ventralanterior angles rounded;

200



A. STROIŃSKI

Figures 10–15. *Ricanopsis kingae* sp. nov. (10) female genitalia, lateral view; (11) anal segment of female, dorsal view; (12) genital styles, ventral view; (13) genital styles, lateral view; (14) pregenital sternite, flatened (15) bursa copulatrix



Figure 16. Ricanopsis kingae sp. nov., female genitalia with wax, lateral

ventralposterior and dorsalanterior angle produced elongate (Fig. 5). Aedeagus stout, median portion almost straight, curved at lower margin. Phallobase dorsally with 4 short spines reaching 1/4 length of aedeagus; leaving phallic lobe as 2 separated groups, each containing 2 spines (Fig. 8). Lateral margin curved to middle, in basal part with two processes. Phallobase ventrally with 2 long spines reaching to 3/4 length of aedeagus; middle part strongly elevated (Fig. 9). Genital style about 4.2 times longer than wide in middle; ventral and dorsal margin almost parallel; dorsoapical angle produced in a blunt process; height of its apex equals height of the style in middle (Fig. 5).

Female genitalia. Anal segment larger than male; longer than third valve, dorsal margin almost straight; ventral margin strongly convex; in dorsal view heart shaped (Fig. 10, 11). Third valve shoe-shaped, posterior margin strongly arcuate; apical margin with 3 rows of teeth. Vaginal sclerites with 6 teeth apically (Fig. 13); in lateral view ventralbasal angle elongate, in ventral view hook-shaped (Fig. 12). Pregenital sternite 9.3 times wider than long in middle; posterior margin with 3 weak prominences; posterior margin slightly arcuate (Fig. 14). Bursa copulatrix single poutch, membraneous without sclerites (Fig. 15).

Remarks. The females produce wax between the anal

Received: August 27, 1999 Accepted: September 23, 1999 segment and thirth valve (Fig. 16). This is the first record of wax production in the family Ricaniidae.

Type material. HOLOTYPE: male, "La Maboke, Rep. Centrafric., 2-I-1973, Michel Boulard". Deposited in MNHN. PARATYPES 28 specimens (10 males, 19 females). Republic of Central Africa: La Maboke - 11.I-1972, CM. A. UUE, Michel Boulard; Paul Kombo, S/Mongombe (MNHN); 23-II-1972, 22-IX-1972, Michel Boulard, S/Mongombe 1M 3F (MNHN); 3.III.1972, S/Kopavoka/Paul Kombo (MNHN); 4-VI-1972, P. Kombo rec., S/Mongombe 1M (MNHN); 2-I-1973, Michel Boulard, S/Home 1M (MIZPAN), 2F (MNHN) Boukoko 28-1-1970, Michel Boulard, Croton, Penduliflorus, Euphorbiacees 1F (MNHN), 1M (MIZPAN); 21-II-1970 Michel Boulard 1F (MIZPAN); Boulard 1M (ISBN); MBouloupambou, 14-02-80, 19/20H, Recolter C. Morin 1M (MNHN); Congo (Zaire): Kindu - Congo Belge Central, Prov. de Maniéma, L. Burgeon 1917 2M, 5F (MNHN), 1M 1F (MIPAN); Likengé (Mertedagh) 1M (MRAC); Uele: Dingilia – 5-VII-1933, J.V. Leroy 1F (MRAC); 15-VII-1933, H. J. Brédo 1F (MRAC); Mont Hoyo, Ituri, 1250 m. X-5-57, E.S. Ross & R. E. Leech collectors 1F (CASC); Cameroon: Victoria – I-16-1949, B. Malkin, at light 1F (CASC).

ACKNOWLEDGEMENTS

I am grateful to the following curators and institutions for the loan of specimens used in this work:

MNHN – Muséum National d'Histoire Naturelle, Paris, France (T. Bourgoin)

ISBN – Institut Royal des Sciences Naturelles de Belgique, Bruxelles, Belgium (R. Detry)

MRAC – Musée Royal de l'Afrique Centrale, Tervuren, Belgium (U. Dall'Asta)

CASC - California Academy of Sciences, San Francisco, USA, (N. Penny)

MIZPAN - Museum and Institute of Zoology, PAS, Warsaw, Poland

REFERENCES

Melichar, L. 1898. Monographie der Ricaniidae (Homoptera). Annalen des K.K. Naturhistorischen Hofmuseum, 13: 197–359.

Melichar, L. 1923. Homoptera Fam. Acanaloniidae, Flatidae et Ricaniidae. Genera Insectorum, 182: 1–185.

> Corresponding Editor: D. Iwan Issue Editor: M. Hołyńska