

CONTRIBUTIONS ON AFRICAN ARADIDAE (HETEROPTERA)

Genus *Oroessa* Usinger and Matsuda, 1959

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Usinger and Matsuda 1959 established the new genus *Oroessa* for an African species *Mezira lujae* Schouteden, 1919 by original designation from Tropical Africa (former Belgian Congo). At the same time the authors included in the genus *Oroessa* Usinger and Matsuda, in addition to African species, a further species *Oroessa laticeps* (Bergroth, 1896) from Java, described also in the genus *Mezira*.

In 1952 Schouteden described, on the basis of one female, *Mezira hulstaerti* Schouteden from tropical Africa. After examination of the holotype of this species it was realized that it is the second African species of the genus *Oroessa* Usinger and Matsuda.

Herewith I am giving the redescription of *Oroessa hulstaerti* (Schouteden, 1952) comb. n. and some additional notes on the African species of the genus *Oroessa* Usinger and Matsuda.

***Oroessa hulstaerti* (Schouteden, 1952) comb. n.**

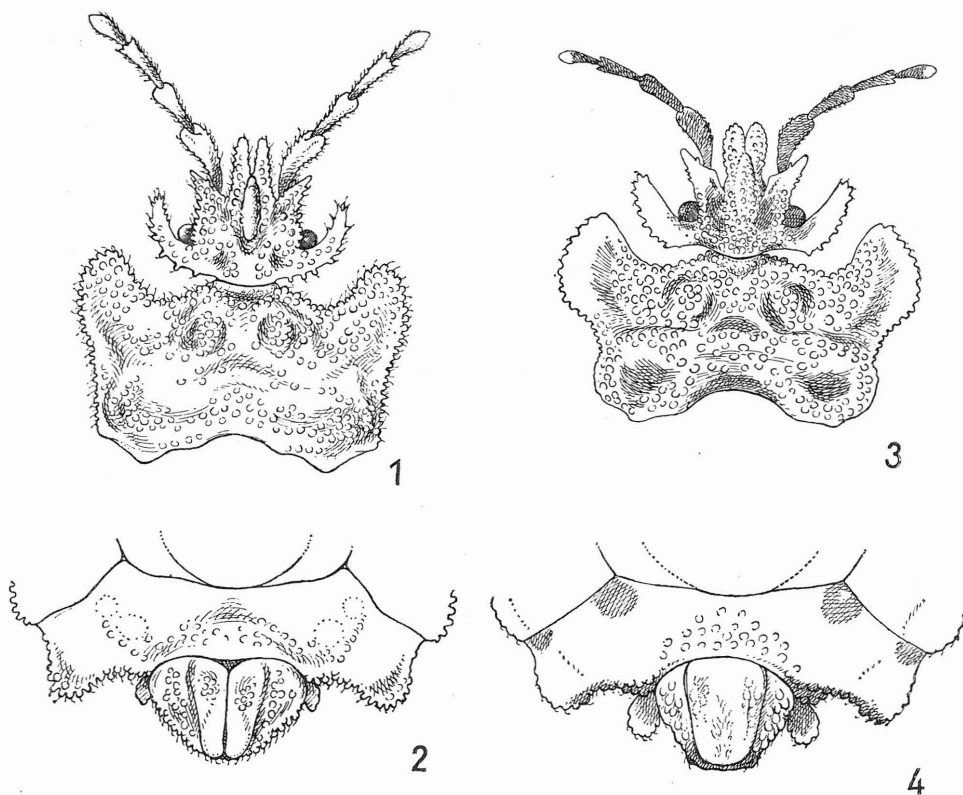
(Figs. 1—4)

Male. Length 12.42 mm., maximum width across abdomen 5.98 mm. Head: length 1.75 mm., width across eyes 2.21 mm., width across posterolateral processus 2.67 mm. Antennae: length of antennal segments 1.05 mm., 0.87 mm., 0.87 mm., 0.62 mm. Pronotum: length 2.53 mm., width across anterolateral lobes 4.46 mm. Scutellum: length 1.7 mm., width 2.57 mm.

Species of large size, body flattened 2.2—2.34 times as long as broad, elongate with nearly straight sides posteriorly slightly widened, abdomen slightly broader than maximum width of pronotum.

Head plain, slightly (1.07 times) longer than broad across eyes, but 1.5 times broader across postocular lobes than the length of head. Ocular index 4.8, disc of head slightly arched with a longitudinal impression on each side near eyes, tylus narrow, distinctly delimited, short apically narrowed, jugae narrow, flat and outstandingly projecting over opex of tylus, divergent, apically subacute. Antenniferous tubercles sinuately divergent, apically subacute, attaining proximal third of the length of first antennal segment, postocular process flat, very

narrow, semicircular, directed anteriorly and projecting far beyond level of anterior margin of eyes, apically very narrowly roundish. Eyes very small, inserted in the margin of head and at the back closed by the postocular process. Surface of head with the exception of longitudinal impression with large setigerous globules which are more prominent on lateral margins of jugae. Head below with sparse tubercles and bristles, labial atrium distinctly bordered only anteriorly, with only a longitudinal slit-like opening in front, labium slender, reaching to the posterior margin of head, projecting from labial atrium. Antennae 1.2 times longer than the maximum width of head across postocular process. First antennal segment longest, stout, clavate and distinctly bent, second segment distally slightly widened, subapically clavate, third segment distally widened, fourth segment shortest and slenderest, subapically widened. Antennae with large globules and long suberect and



Figs. 1—2: *Oroessa hulstaerti* (Schouteden) — male holotype from Tshuapa, Flandria, Zaire (former Belgian Congo). 1: head and pronotum, 2: pygophore. Figs. 3—4: *Oroessa lujai* (Schouteden) — male from Maboke, Central African Republic. 3: head and pronotum, 4: pygophore.

twisted bristles, mainly on first three segments. Relative lengths of antennal segments 17:14:14:10.

Pronotum across anterolateral lobes 1.76 times broader than long in the middle, anterior margin broadly excavate, in the middle with a narrow, but distinct collar, anterolateral angles of pronotum flattened, distinctly divergently projecting anterolaterally, terminally narrowly roundish, reaching the middle of the length of postocular process, and posteriorly continues on pronotal margins which together form nearly straight pronotal border converging posteriorly; posterior pronotal margin broadly sinuate and with small subtriangular process opposite to lateral angles of scutellum. Surface of pronotum anteriorly slightly declivous, in the middle with pair of roundish glabrous elevations, posterior part of pronotum nearly plain, surface of pronotum with irregularly dispersed setigerous globules more densely accumulated on pronotal margins and anterolateral process. Scutellum triangular 1.5 times as broad as long, with elevated margins apically narrowly rounded, with similar structure to that on pronotum. Sternum very flattened with irregular globules, metathoracic scent gland opening long, obliquely situated along posterior margin of metathorax near the upper margin of the abdomen. Legs short, thick with numerous small globules and short twisted hairs. Hemelytra comparatively small, attaining the posterior margin of sixth abdominal tergite, hemelytra anteriorly moderately triangularly widened, only slightly wider than posterior pronotal angles. Membrane narrow, 1.2 times longer than corium, terminal border of membrane narrowly rounded, corium of similar structure as on pronotum with distinct elevated veins. Abdomen very flattened, posteriorly slightly widened, connexivum very broad with nearly straight margins, posterolateral angles of fifth to seventh connexival plates with lateral margins nearly straight, posteriorly slightly prominent, that of sixth and seventh plates nearly lobately, disc of seventh abdominal segment in the middle slightly elevated. Surface of connexivum coarse with only very sparse plain globules, exterior margin of connexival plates with more accumulated and more distinct setigerous globules. Abdomen below with fine sculpture and short adpressed hairs. Spiracles all ventral and remote from lateral margin of abdomen, lateral lobes of eighth abdominal segment very small, narrow, close to lateral margins of pygophore.

Pygophore 1.3 times as broad as long, regularly globular, terminal margin of the segment regularly rounded, medial longitudinal discal part of the segment anteriorly slightly widened and along the whole length on each side and apically distinctly determined by a deep depression, proximally widened in to distinct deep ovate impressions not reaching the anterior border of the segment, disc of the segment in the middle with longitudinal percurrent deep furrow. Segment when seen from side 0.9 times as high as long, posterior margin of the segment perpendicular, apical part of the discal part of the segment distinctly separated by the impression. Surface of pygophore rugous and with small globules and short erect bristles.

Colour of the body uniformly dark brown, corium slightly paler, membrane shiny.

Material examined: 1 ♂ — holotype: Zaire, Flandria, Tshuapa (former Belgian Congo), 1940 collected by R. Hulstaert (Musée Royal de l'Afrique Tropical, Tervuren).

Further material examined: 1 ♂ — Cameroons (ex coll. Breddin)

Distribution: Zaire, Cameroons.

Oroessa lujai (Schouteden, 1919)

Mezira Lujai Schouteden, 1919, Rev. Zool. Afr., 6: 132—133.

Oroessa lujae, Usinger and Matsuda, 1959, Classification of the Aradidae (Hemiptera-Heteroptera). British Museum (Nat. Hist.), p. 322. London.

Schouteden in 1919 based the description of *Mezira lujai* on a female specimen and Usinger and Matsuda 1959 completed the original description by male characters.

Herewith I am giving some additional characters of the pygophore in order to be compared with that of *Oroessa hulstaerti* (Schouteden).

Lobes of 8th male abdominal segment broad, rounded plain, projecting and attaining to the middle of pygophore.

Pygophore 1.3 times as broad as long, globular; distally slightly narrowed, then not so regularly rounded on terminal margin. Upper surface of pygophore with broad distinctly arched or nearly roof-like disc, anteriorly distinctly widened, laterally and apically distinctly delimited by deep impression, disc longitudinally wrinkled and in middle longitudinally sulcate, remaining part of pygophore with small globules. Terminal border of the pygophore, when seen from side, perpendicular, lower border running upwards.

Material examined: 1 ♀ — Zaire (former Belgian Congo), Kondus, Kassai, Luja coll. (Musée R. Afrique Trop., Tervuren).

1 ♀ — Zaire (former Belgian Congo), prov. de Maniema, Kindu, 1917, Burgeon coll. (Musée R. Afr. Trop., Tervuren).

1 ♀ — Zaire (former Belgian Congo), Stan., Yangambi, III. 1953, Decelle coll. ((Musée R. Afr., Trop., Tervuren).

1 ♀ — Zaire (former Belgian Congo), Tshuapa, Bamanian, XI. 1954, Hulstaert coll. (Musée R. Afr. Trop., Tervuren).

1 ♀ — Zaire (former Belgian Congo), Tshuapa, terr. Ikala, riv. Yalongo, IX. 1959, biot. No. 105 A — humus et forêt maracagense, Leleup coll. (Musée R. Afr. Trop., Tervuren).

1 ♂ — Central African Republic, Mabohe, 6.—9. III. 1973, Linnavuori coll. (Collection of R. Linnavuori).

1 ♂ — Nigeria (British Cameroons), Matute, Tiko pl., 1. V. 1949, Malkin coll. (Nat. Museum, Praha).

1 ♀ — Nigeria (British Cameroons), Manfe, 1. X. 1949 Malkin coll. (Nat. Museum, Praha).

1 ♀ — Cameroons, region littoral de Kribi, V.—VII. 1925, Cromieux coll. (Mus. Nat. Nat. Hist, Paris).

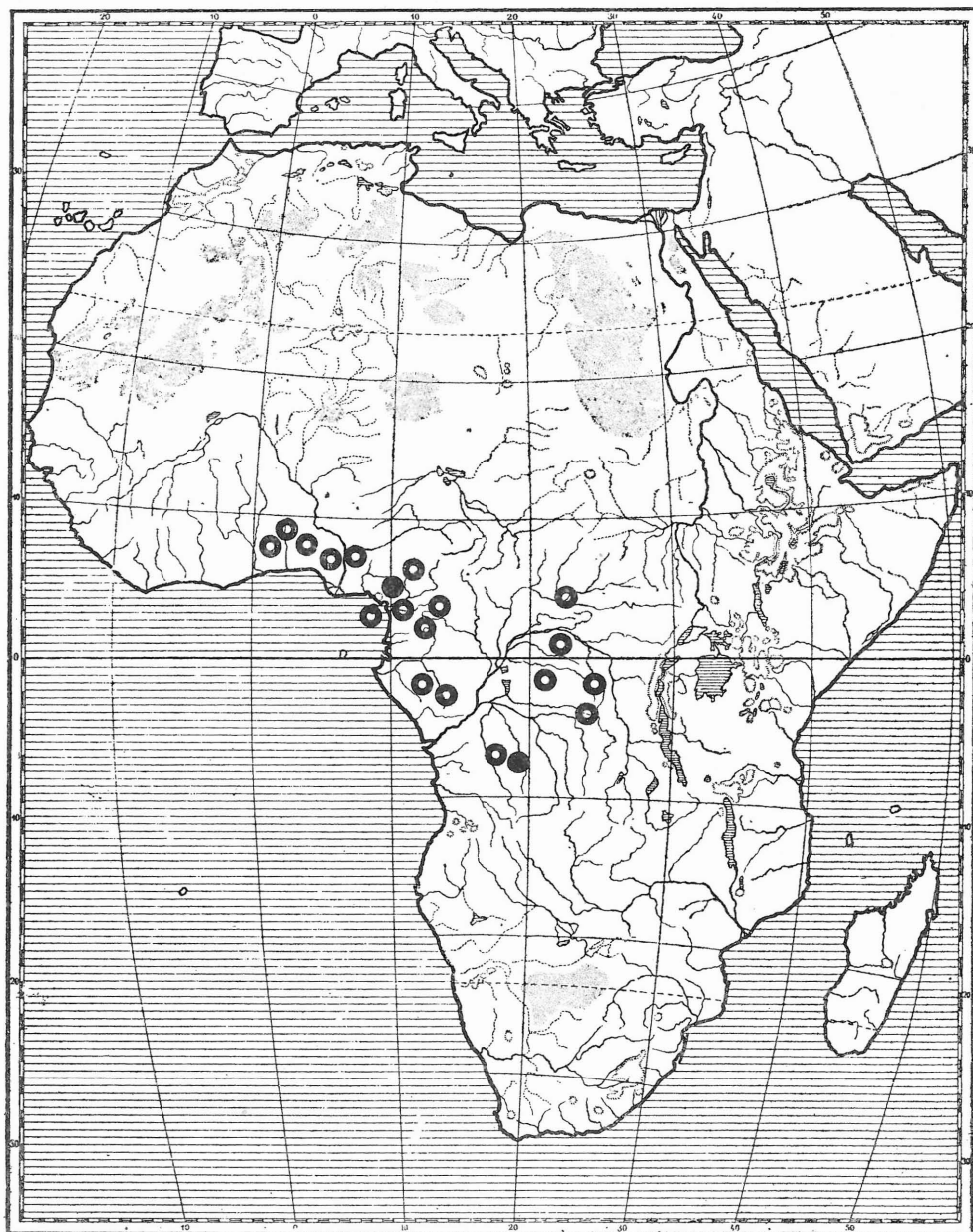


Fig. 5: Map showing distributional data of African species of the genus *Oroessa* Usinger and Matsuda: *Oroessa lujai* (Schoulteden) — o and *Oroessa hulstaerti* (Schoulteden) — ●

1 ♀ — Cameroons, Mamfe West, 1100 m., 5. II. 1966, Franke coll. (Senckenberg Mus., Frankfurt a. M.).

1 ♂ — Cameroons, N'Kongsambe, VII. 1957, Cantaboube coll. (Mus. Nat. Hist., Paris).

1 ♂ — Cameroons, N'Koanvone, VII. 1966, R. de Miré coll. (Mus. Nat. Hist., Paris).

2 ♀♀ — Cote d'Ivoire, Tonkoui, C. J. 900—1200 m., (forest prim.), 1.—20. IX. 1946, Villiers coll. (Mus. Nat. Hist., Paris).

1 ♀ — Gabon, Ogooué, Sam Kita, 1910, Ellenberger coll. (Mus. Nat. Hist., Paris).

1 ♂ — Gabon, Bilagone, X. 1946, De Mirizon coll. (IFAN, Dakar).

1 ♂ — Togo, Hegneprothers coll. (Mus. Nat. Hist., Bucuresti).

2 ♀♀ — Fernando Po, 1901, Conradt coll. (Mus. Nat. Hist., Paris).

1 ♀ — Ghana, Tafo, 21. XII. 1965 Leston coll. (Nat. Museum, Praha).

Distribution: Zaire (former Belgian Congo, Kondus, Kassai — type locality), Togo, Cameroons, Central African Republic, Ghana.

Key to the African species of the genus *Oroessa* Usinger and Matsuda

1. Jugae, antenniferous tubercles and postocular processes broad and their apices rather blunt, pronotal anterolateral angles projecting forward in more roundish lobes and posteriorly continue sinuately on pronotal lateral margin and then sinuately narrowed posteriorly. Second and third antennal segments along the whole length distally widened with sparse short bristles. Lateral lobes of 8th male abdominal segment broad, rounded, plain projecting and attaining the middle of pygophore. Discal delimited part of pygophore more broad, anteriorly distinctly widened *O. lujai* (Schouteden)

— Jugae, antenniferous tubercles and postocular processes narrow, slender with more or less pointed apices, pronotal anterolateral angles projecting in lobes terminally narrowly roundish and posteriorly continuing on pronotal margins and forming nearly straight pronotal margin convergent posteriorly. Lateral lobes of male eight abdominal segment small, tongue-like, close to the lateral margin of pygophore. Discal delimited part of pygophore narrow, anteriorly only slightly widened. Second and third antennal segment distally widened, second segment subapically clavate, antennae with large globules and long suberect and twisted bristles
 *O. hulstaerti* (Schouteden).

Distribution of both African species of the genus *Oroessa* correspond to the areas of Central and West humid floristic zones of Afrotropical region (map).

References

- Schouteden H., 1919: Aradides du Congo Belge. *Rev. Zool. Afr.*, **6**: 127—137.
Schouteden H., 1952: Aradidae novae africanae (Hem.). *Rev. Zool. Bot. Afr.* **46**:
: 210—220.
Usinger R. and Matsuda R., 1959: Classification of the Aradidae (Hemiptera-Heteroptera). British Museum (Nat. Hist.), London, 410 pp., 101 figs.