

Two new species of Afrotropical Tingidae (Heteroptera)

JOSEF M. ŠTUSÁK

Department of Animal Physiology and Zoology, University of Agriculture, Praha

Whilst studying types and identifying large material of Afrotropical *Cantacader* species and whilst identifying Afrotropical Tingidae collected by the Hungarian zoological expeditions to West Africa, two new species were found among the rich material. The first species belongs to *Cantacader* Am. & Serv. and the second to *Sinuessa* Horv. Except the older references given in Drake & Ruhoff's (1965) catalogue, further important papers on this subject should be quoted. Schouteden (1965), Linnavuori (1973, 1977) and Štusák (1979) deal with Afrotropical *Cantacader* and Linnavuori (1977) also with *Sinuessa* species.

The author would like to express his sincere thanks to Dr. G. Schmitz (Musée Royal de l'Afrique Centrale, Tervuren, Belgium) and to Dr. T. Vásárhelyi (Hungarian National Museum of Natural History, Budapest) for their kind help in arranging loans of the material.

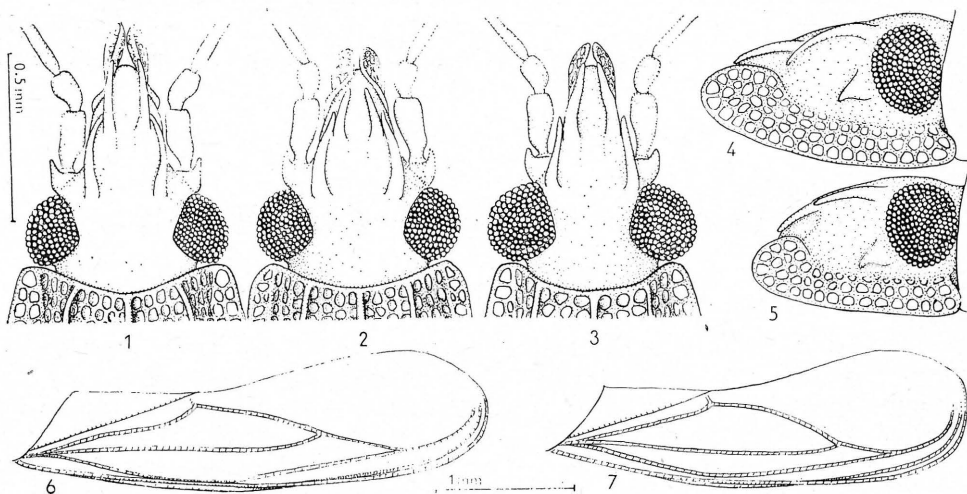
***Cantacader schoutedeni* sp. n.**

(Figs. 1, 4, 6, 8)

Derivation of name: The new species is named in honour of late Dr. H. Schouteden, the well known Belgian zoologist.

Description: Macropterous form. Shape considerably narrow, lateral margins of hemelytra almost parallel, body almost 3.4 times longer than wide. General colour whitish ochreous, eyes piceous, apices of clavi and middle of costal and subcostal area with darker (ochreous brown) spot. Ribs and network of hemelytra a little darker than the areolae.

Head about 1.3 times longer than wide; bucculae reaching beyond anteclypeus, touching in front, mostly triseriate, only anteriorly in their widest portion quadriseriate. Dorsal spines of head adjacent, anterior pair reaching a little beyond apex of anteclypeus but not reaching apex of bucculae. Eyes relatively small. Synthlipsis 1.61 times wider than dorsal width of an eye in male. Rostrum reaches middle of zygosternum IV. Pronotum indistinctly longer than wide (109:107), with five low longitudinal carinae bearing one row of rather small areolae. Outer carinae long beginning just behind callosities and reaching the posterior pronotal margin, almost touching lateral carinae in front. Anterior pronotal margin not narrower than width of head, anterolateral angles of pronotum rounded. Lateral margins of paranota almost straight, only inconspicuously convex at humeral angles. Paranota narrow, with two rows of small areolae anteriorly and with one row of tiny areolae in level of humeral angles. Pronotal disc convex and areolated as in related species. Hemelytra



Figs. 1—3. Heads of males, dorsal view. 1 — *Cantacader schoutedeni* sp. n. 2 — *C. tener* Bergr. 3 — *C. affzelii* Stål.
 Figs. 4, 5. Heads of males, lateral view. 4 — *C. schoutedeni* sp. n. 5 — *C. tener* Bergr.
 Figs. 6, 7. Left hemelytron, schematized. 6 — *C. schoutedeni* sp. n. 7 — *C. tener* Bergr.

narrow, apices broadly rounded. Stenocostal area strongly reflexed above the costal area, so that only its posterior portion (at level of distal end of discoidal area) is visible dorsally. Costal area narrow, bisertate at base, then uniseriate with very small areolae medially and biseriate posteriorly. Subcostal area quadriseriate in its widest portion medially and triseriate near distal end of discoidal area. Discoidal area rather narrow, its anterior portion (i. e. just in front of middle of discoidal area) narrower than subcostal area and here with three rows of areolae. Widest portion of discoidal area (at its middle) with five rows of areolae. Legs whitish ochreous, anterior femur reaching a little beyond level of anteclypeus.

Measurements in mm: Length of body 4.93, maximal width of body 1.46, width of head 0.60, length of head 0.78, length of pronotum 1.09, width of pronotum 1.07, length of antennal segments I : II = 0.18 : 0.09, length of hemelytron 3.48, width of hemelytron 0.98.

Holotype ♂: Zaïre, Léopoldville, I — 1947, leg. Dr. E. Darteville. In collections of the Musée Royal de l'Afrique Centrale, Tervuren (Belgium). Third and fourth antennal segments missing in the holotype.

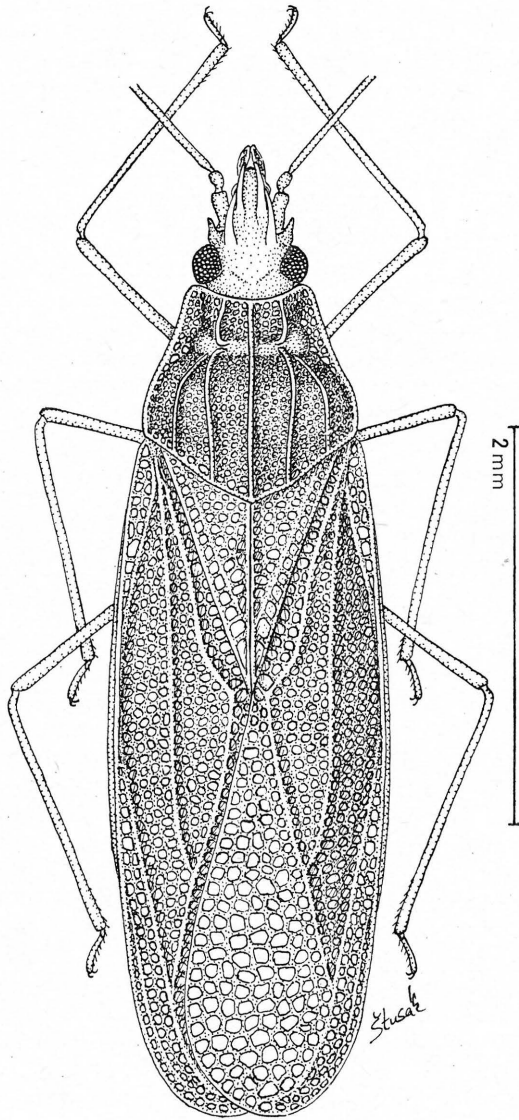
Distinguishing notes. The new species belongs to the group of *Cantacader* species having five longitudinal carinae on pronotum and having broadly rounded anterolateral angles of pronotum. The outer pronotal carinae are long, i. e. beginning just behind callosities and running to posterior pronotal margin. Two other species of this group are known from the Ethiopian region, namely *C. affzelii* Stål, 1873 (Sierra Leone, Guinea, Ivory Coast, Liberia, Ghana, Sudan, Ethiopia, Kenya, Zaïre, République du Congo, Angola, Mauritius) and *C. tener* Bergröth, 1894 described from Madagascar and later recorded from Kenya

(Drake 1958). The new species differs from *C. afzelii* in longer and narrower shape of body, in longer synthlipsis being 1.61 longer than width of an eye in male of the new species (and 0.8—1.14 in males of *C. afzelii*). The eyes are larger, more convex and more rounded in *C. afzelii* (Fig. 3) and anterior pronotal margin is a little narrower than head in this species. The new species is very similar to *C. tener* with which it agrees also in length of synthlipsis and in general body shape. It differs, however, from *C. tener* in longer head, in differently shaped eyes (Fig. 2) and especially in having very narrow discoidal area in its anterior half (Figs. 6, 7). Anterior half of discoidal area is wider than subcostal area in *C. tener* but distinctly narrower in the new species.

***Sinuessa parva* sp. n.**

(Fig. 9)

Description: Head short, about twice wider than long, piceous, covered with fine whitish hairs and armed with five long, slender, sharply pointed, suberect and yellowish ochreous spiniform processes. Anterior frontal processes as well as the median frontal process reaching beyond level of anteclypeus by more than half the length, occipital processes approximately reach level of apical points of antenniferous tubercles. Eyes piceous, synthlipsis 3.3 times wider than dorsal width of an eye. Antenniferous tubercles ochreous, with pointed apices prominently diverging anteriorly. Antennae about as long as $\frac{2}{3}$ of maximal body length, light brown including apices of fourth segments, covered with light and rather long hairs, the hairs of third and fourth joints being longer than widths of the segments. First segment about as long as head, second almost 1.8 times shorter than first, third segment only 1.7 times longer than fourth. Fourth segment relatively narrow, only gradually and moderately widening apically. Bucculae light ochreous, meeting in front, with two — three rows of small areolae. Rostrum reaching end of mesosternum (middle coxae). Pronotum broad, wider than its median length; paranota, anterior margin, vesicula, posterior triangular corner of pronotum and carinae light ochreous brown, pronotal disc light castaneous, callosities shiny blackish. Paranota large, their anterolateral angles obliquely produced forward and reaching beyond level of anterior margin of head, each angle armed with a sharply pointed spine. Lateral margins of paranota strongly arch-like convex, without any spines; paranota with four — five large areolae at their widest part. Anterior pronotal margin forward convexly produced medially. Vesicula rather small, not extending to centre of disc. Pronotal disc convex, coarsely punctured (with tiny areolae). Pronotum tricarinate, median carina running from vesicula to apex of posterior triangular corner of pronotum. Lateral carinae nearly parallel beginning at middle of disc. Pronotal carinae bearing one row of areolae disappearing on posterior pronotal corner; median carina almost twice as high as lateral carinae on pronotal disc. Posterior pronotal corner with areolae which are minimally as large as those of discoidal area. Hemelytra wider than pronotum, without distinct dark spots, almost unicolorous, reaching beyond apex of abdomen almost by $\frac{1}{3}$ of their length. Costal area very wide



8

Fig. 8. *Cantacader schoutedeni* sp. n., holotype.

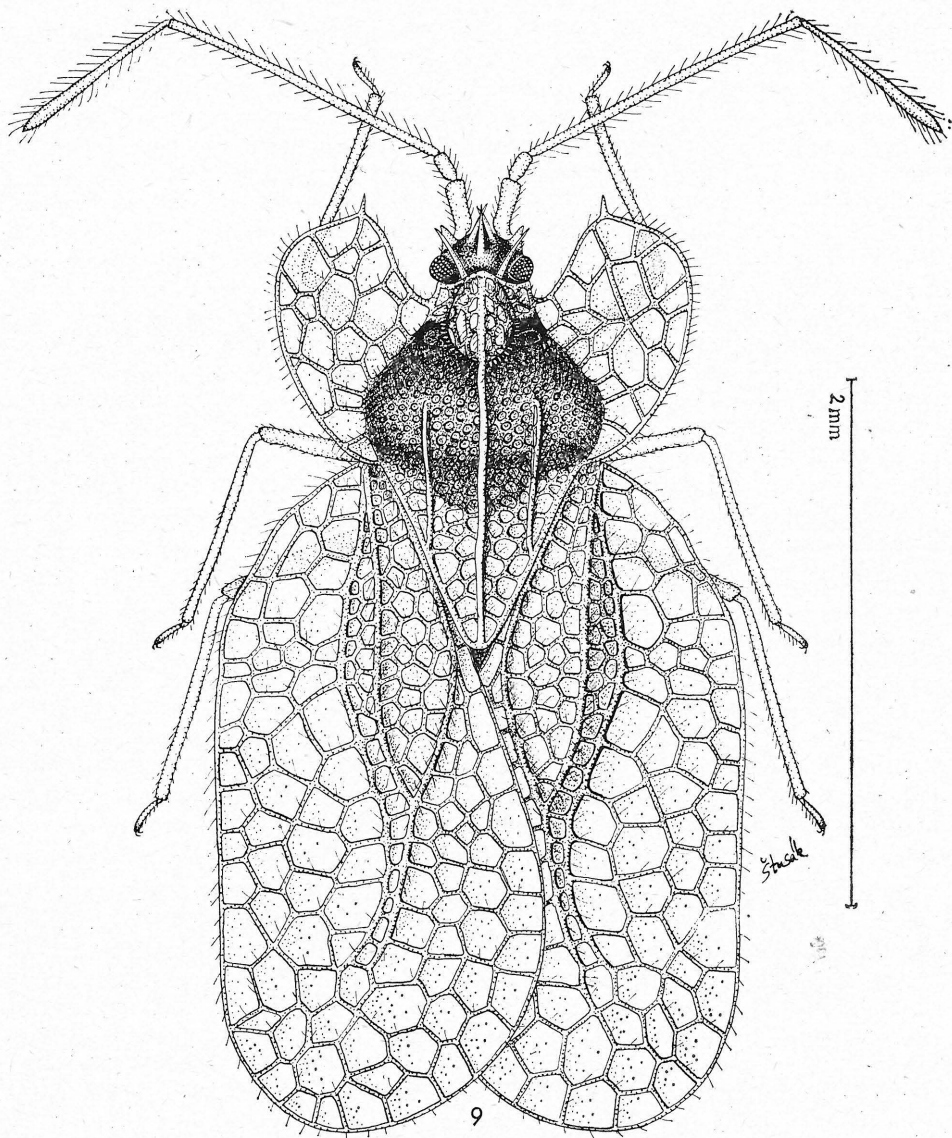


Fig. 9. *Sinuessa parva* sp. n., holotype.

occupying slightly more than half of hemelytral width, composed of very large irregularly angulate areolae, with three rows anteriorly and with four rows of areolae at its widest portion behind middle of discoidal area. Subcostal area rather narrow, with two rows of small areolae anteriorly and with only one row of larger areolae beginning from level of posterior third of discoidal area. Discoidal area more than twice as wide as subcostal area, about half the length of hemelytron and with three (four) rows of areolae at its widest portion. Sutural area with four rows of large, angulate areolae at its widest portion. Hypocostal lamina low, extending nearly to level of apex of abdomen, composed of one row of small elongate areolae. Thorax dark brown ventrally, rostral lamina very low, without areolae, rostral sulcus about three times wider than rostrum. Orificium distinct, perithreme of longitudinally oval shape, bordered with an ochreous hem. Legs covered with whitish hairs, coxae dark brown, femora, tibiae and tarsi ochreous, only apices of tarsi piceous. Abdomen dark brown with whitish hairs, posterolateral angles of eighth segment sharply pointed and somewhat outwardly produced in male. Pronotal carinae, vesicula, ribs and network of paranota and hemelytra including body margins with fine, long and light erect hairs. Head, pronotal disc and lateral portions of vesicula with whitish, short and erect hairs.

Measurements in mm: Length of body (from anteclypeus) 3.44, (from anterolateral angles of paranotum 3.48), width of body 2.04, width of head 0.42, length of antenna 2.21 (I:II:III:IV = 0.25:0.14:1.16:0.66), median length of pronotum 1.45, width of pronotum 1.60, length of hemelytron 2.55, width of hemelytron 1.23.

Holotype ♂: Republique du Congo (Congo-Brazzaville), Lefinie reservation, bungalow near Mpo, Jan. 8, 1964, on savannah, Soil. Zool. Exped. No. 604, leg. Balogh & Ziczi. Deposited in collections of the Hungarian National Museum of Natural History, Budapest. Left anterior tibia, right hemelytron, legs and distal portion of third antennal joint of right body side missing in the holotype.

Distinguishing notes. Five other species of the Afrotropical genus *Sinuessa* Horváth, 1910 are known, namely *S. subinermis* (Horváth, 1910) (Tanzania, Kenya, Uganda, S. Rhodesia, Angola, Yemen (Aden Prot.), Erithrea, Ethiopia), *S. colens* (Drake, 1953) (S. Africa), *S. waelbroeckii* (Schouteden, 1905) (Zaire, Kenya, Angola, S. Africa), *S. nairobi* Drake, 1957 (Kenya, Zaire, Transvaal) and *S. deianira* Linnavuori, 1977 (Sudan, Equatoria). The new species differs from all of them in smaller size (3.4 mm) as others are 4.2–5.5 mm in length. It can be distinguished from *S. deianira* by short lateral pronotal carinae (as these carinae reach the posterior margin of callosities in *S. deianira*), by having narrower discoidal and subcostal areas (discoidal area 5 rows, subcostal 3 rows of areolae in *S. deianira*), in having only 4 (5) rows of areolae in paranotum (7 rows in *S. deianira*) and by having longer occipital processes of head. It differs from *S. subinermis* in having narrow subcostal and discoidal areas (subcostal 4 rows, discoidal area 6 rows of areolae in *S. subinermis*) and in having shorter lateral carinae of pronotum. The new species seems to be close to *S. waelbroeckii*, *S. nairobi* and *S. colens* in which the subcostal area is also narrow (2–3 rows of areolae), it differs, however, in having narrower discoidal area (4–5 rows of areolae in the other species) and much shorter third antennal joint which is more than three times in *S. waelbroeckii* and more

than 2.5 times longer than fourth in *S. nairobi* as well as in *S. colens*. It also differs from *S. colens* in not having lateral margins of paranota and hemelytra waved, in having only one spine on each paranotum and in having short discoidal area (which is $\frac{3}{4}$ of hemelytron length in *S. colens*). It also differs from *S. waelbroecki* in not having two small spines on the lateral margins of each paranotum, in shape of apex of triangular pronotal corner and in colour as the new species is almost unicolorous, without dark markings on hemelytra. It can be also distinguished from *S. nairobi* by having less areolae in paranotum (7 rows in *S. nairobi*) and by unspotted, almost unicolorous hemelytra.

References

- Drake, C. J., 1958: Quelques Tingidae Malgaches (Hemiptera). *Mém. Inst. Scient. Madagascar, ser. E*, 9: 315—333.
- Drake, C. J. & Ruhoff, F. A., 1965: Lacebugs of the world: A catalogue. Hemiptera: Tingidae. *U. S. Nat. Mus. Bull.*, 243: 1—634.
- Linnavuori, R., 1973: A collection of Heteroptera from Katanga, with remarks on some species from other parts of the Ethiopian Region. *Ann. Ent. Fenn.*, 39: 70—94.
- Linnavuori, R., 1977: Hemiptera of the Sudan, with remarks on some species of the adjacent countries. 5. Tingidae, Piesmididae, Cydnidae, Thaumastellidae and Plataspidae. *Acta zool. Fenn.*, 147: 1—81.
- Schouteden, H., 1965: Tingides africains nouveaux du genre *Cantacader* Amyot et Serville. *Rev. zool. bot. afric.*, 72: 168—172.
- Štusák, J. M., 1979: Cantacaderinae collected by the Hungarian Expeditions to West Africa, with some notes on Cantacaderinae (Heteroptera, Tingidae). *Opusc. zool.*, Budapest, 16: 141—149.

Abstract

Cantacader schoutedeni sp. n. (Cantacaderinae) is described and figured from Zaire. It belongs to the group of species having five longitudinal carinae on pronotum and anterolateral pronotal angles rounded. *Sinuessa parva* sp. n. (Tinginae) is described and figured from the République du Congo. Diagnostic characters distinguishing the new species from the related species are given.

Author's address: Dr. J. M. Štusák, CSC., Václavkova 26, 160 00 Praha 6, Czechoslovakia.

Acta faunistica entomologica Musei Nationalis Pragae, 17, No. 205.
Redaktor RNDr. Jiří Dlabola, CSc. — Vydává Národní muzeum v Praze.
Vyšlo 25. IV. 1984. — Náklad 1000.

Vytiskly Tiskařské závody, n. p., závod 6, provoz 75 Mladá Boleslav, nám. Míru 27.