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A NEW ELAPHODELPHAX, FURTHER SPECIES OF ASIRACINAE FROM AFRICA (HOMOPTERA AUCHENORRHYNCHA)

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Asiracinae, this phylogenetically oldest Delphacid subfamily, is represented in different geographical zones, mostly in tropical America by about 20 genera. These strange looking Delphacids are very easily distinguished from other subfamilies by their long spiniform, undenticulated calcar on the base of the hind tarsus.

There are also some other features which show the very simple and primitive degree of their morphology in phylogenetical sense, as it was recently pointed out by Wagner, 1963 in an excellent way in his generic revision of some palaearctic Delphacidae. With the aid of dynamic morphological method the named author has presented a new classification of the known Central European Delphacid genera in their phylogenetic hierarchy and in the most primitive position is the palaearctic (in Central Europe common) species, *Asiraca clavicornis* F., which is named by Wagner himself as a "living fossil". This species forms in regard to hind tibia spinulation a link with the phylogeneticaly lower family Cixiidae.

The genera and species of Asiracinae in Central and South America or from insular biotopes of the Indian Ocean are much more numerous than in other Continents. In Nearctic and Palaearctic region are very poorly represented. For more detailed zoogeographical data of this subfamily may be consulted General Catalogue of Hemiptera, vol. IV, 3. Here I give only a tentative generic key based on generic diagnoses in order to facilitate the identification for future students.

Studying the material received from my friend A. L. Capener's records some years ago, I have found the first representative of the named group from South Africa.

Therefore we have at present time 4 species of Asiracinae known from the African continent: *Asiraca clavicornis* F., which reaches to the northern regions of Europe, *Asiraca congoensis* Fennah, described from Congo as well as the first representative of the genus *Elaphodelphax* Fennah, which is strikingly differenciated from all other representatives of the subfamily Asiracinae. My specimen, recorded from Transvaal, where it was swept with a number of other leafhopper species, is not identical with *E. nigropictus* Fennah, 1949 and its morphology exhibits so many good characters, that I do not hesitate to describe it here from only one male specimen.

Elaphodelphax Fennah, 1949

This genus is well characterised by his denticulated basal part of antennae, which are laminated and prolonged as is usual in other representatives of this subfamily. By the antennal form this genus is near to *Asiraca,* but the fore legs are short, weak, not enlarged and laminated as in this palaearctic genus, only its femora strongly compressed. Postclypeal middle keel not differentiated along the whole length into two keels, but splits only on the upper part, where it is forked and on the top of the head is only poorly visible. Vertex much more emarginated to the fore margin, with middle keel and side keels nearly sharply laminated, well developed. The middle keel continues over the pronotum which bears 3 keels and mesonotum with 5 keels to the acuminated apex. The elytra longer than the abdomen, with claval vein forked in Y-like form, corial neuration simple, Sc and Cu shortly split nearer to the apex of the wings and M simple. On the fore margin near the apex of the elytra about 4—5 cross veins. All nerves granulate with well developed and coarsely swollen, brownish tubercles, armed with long setae. In comparizon for ex. with *Asiraca* the neuration is not so extensively split, cubitus-splitting is simple and the incissure in compound eyes in dorsal view only very small. Spinulation of the hind tibiae in the new genus well developed, 4 spines excl. comonly existing proximal spine and distal spinulation visible (in *Asiraca* on that place only 2!).

Elaphodelphax capenerinus, n. sp.

Total length 5.81 mm (the only specimen has both apices of elytra partly damaged, the length from the fore margin of head to the apex of mesonotum is 1.56 mm).

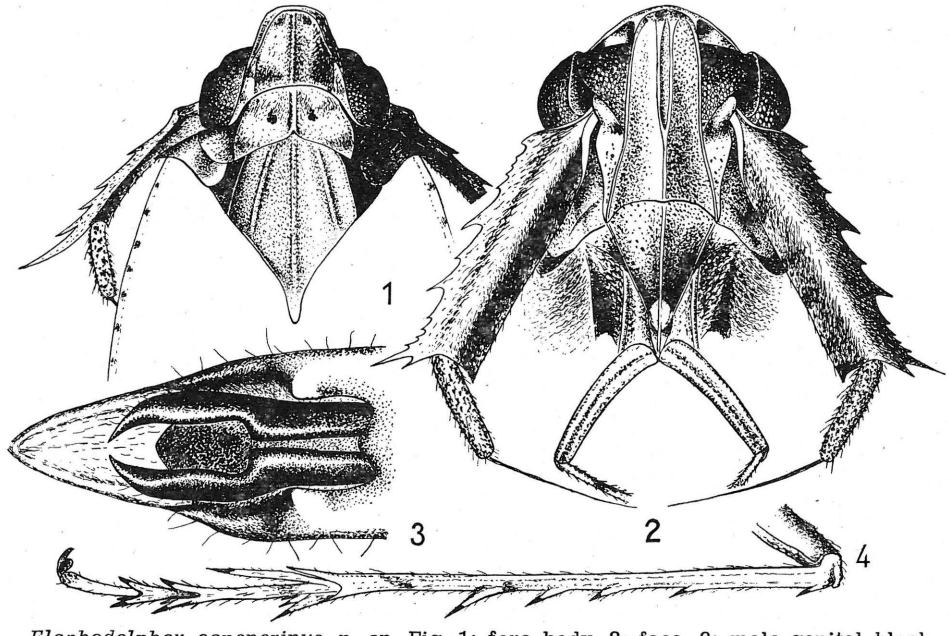
Body relatively large, but not so robust as for ex. *Asiraca clavicornis* and paler than *E. nigropictus* Fennah. The ground coloration uniformly testaceous, dull, with indistinct brown spotting and dark brown, long spinulation on the elytra. Body, feet, and antennae of the same colour as on the elytral venation dark brown, in regular rows arranged along the neuration, which is paler than the membrane. Ground colour of elytra testaceous. In contradistinction to *E. nigropictus* the piceous coloration of the face is not developed.

Head moderately large, acutely carinated, vertex concave, triangulifform, with 2 pairs of darker spots. Face prolonged, frontoclypeus long, slightly emarginated up to the apex of head, broadest on the suture with the clypeus, its lower part paler than this part between eyes, where the middle keel is split. Antennae with both basal joints thick, especially the first enormously laminated, so that it is well visible in dorsal view. Their flagelae nearly of the same length as the first joint. Feet long and testaceous, brown maculated.

The form of the frons is in comparison to *E. nigropictus* little different: the maximal breadth is near to the clypeus, not between the eyes and the black line across the frons at the antennal base level is in this species

from Transvaal not developed, the clypeus not visibly darker than other parts of the face.

Locality: Transvaal — Rustenburg, 23.—30. XII. 1961 (A. L. Capener) 1 male, holotypus, coll. Dlabola.



Elaphodelphax capenerinus, n. sp. Fig. 1: fore body, 2: face, 3: male genital block, 4: hind tibia spinulation and tarsus.

African species of Asiracinae

1 (4) Fore legs foliaceously enlarged, I. segment of antennae not serrate.
2 (3) First segment of antennae foliaceous . . . **Asiraca clavicornis** Fabricius
3 (2) First segment of antennae cylindrical . . . . **Asiraca congoensis** Fennah
4 (1) Fore legs not enlarged, I. segment of antennae elongate and serrate on external margin.
5 (6) Frons broadest at level of eyes. Face with piceously marked stripe between antennal bases . . . . . **Elaphodelphax nigropictus** Fennah
6 (5) Frons maximaly broadened in its basal part, adjoined to clypeus. Face without delimited black markings . . . . . **Elaphodelphax capenerinus,** n. sp.

Genera of Asiracinae (after Berg, Crawford, Fennah, Muir and Stål)

1 (2) Anal angle of tegmina subquadrate, frons 1,5 times broader at widest part than at base . . . . . **Ostama** Walker
2 (1) Anal angle of macropterous tegmina deeply rounded, frons not as above.
3 (12) Frons tricarinate, lateral keels, at least in basal half near to clypeus visible.
4 (5) Scutellum tricarinate, antennae long, broadly foliaceous and flattened . . . . . **Copicerus** Swartz
5 (4) Scutellum with 5 keels.
6 (7) Elythra without darker colored stigma . . . . . **Epibidis** Fowler

7 (6) Elythra with a broadly developed stigma.
8 (9) Hind tibiae with 4 lateral spines . . . . . **Eucanyra** Crawford
9 (8) Hind tibiae with 3 lateral spines.
10 (11) Clypeus without keels . . . . . **Bergia** Kirkaldy
11 (10) Clypeus keeled . . . . . **Idiosystatus** Berg
12 (3) Frons with 1 or 2 keels or with the median keel forked.
13 (14) Fore feet broadly foliaceously enlarged, I. segment of antennae foliaceously flattened, II. segment shorter and cylindrical . . . . . **Asiraca** Latreille
14 (13) Fore feet normal, not broadly foliaceous.
15 (16) Frons with one shortened keel, clypeus tricarinate . . . . **Idiosemus** Berg
16 (15) Frons with two keels, with one keel forked or with one completely developed keel.
17 (18) Frons with one forked keel, I. segment of antennae strong, foliaceously flattened, serrate on the outer margin . . . . . **Elaphodelphax** Fennah
18 (17) Frons with one or two unforked keels, I. segment of antennae cylindrical and if foliaceous, not dentate.
19 (24) First segment of antennae cylindrical, much shorter than second, at least its base depressed, scutellum with 5 keels.
20 (23) Frons with two keels.
21 (22) Vertex rectangular, antennae not compressed . . . **Pentagramma** Van Duzee
22 (21) Vertex longer than broad . . . . . **Ugyopana** Fennah
23 (22) Frons with 1 keel, antennae laterally compressed . . . . . **Punana** Muir
24 (19) Both segments of antennae cylindrical or nearly so.
25 (30) Frons with two longitudinal submedian carinae, no median carina.
26 (39) Second segment of antennae more than three times length of first.
27 (28) Vertex quadrate, relatively short . . . . . **Perimececera** Muir
28 (27) Vertex three times as long as broad . . . . . **Jugodina** Schumacher
29 (26) Second segment of antennae less than three times length of first . . . . . **Ugyops** Guérin Méneville
30 (25) Frons with median carina only, forked or simple.
31 (34) First segment of antennae much shorter than second.
32 (33) Frons at most only little longer than broad . . . . . **Livatiella** Fennah.
33 (32) Frons much longer than broad . . . . . **Melanesia** Kirkaldy
34 (31) First and second segments of antennae subequal, cylindrical.
35 (36) Median carina of frons simple, mesonotum tricarinate . **Melanurgyops** Fennah
36 (35) Median carina of frons forked, if simple, mesonotum five carinate.
37 (38) R not forked at the same level as Cu . . . . . **Canyra** Stål
38 (37) R forked at the same level as Cu . . . . . **Ugyops** Guérin-Méneville

The genera *Consualia* Distant and *Tetrasteira* Muir are not included.

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